

STAGE 1 ARCHAEOLOGICAL ASSESSMENT
PROPOSED SHEA ROAD COMMUNITY
PART LOT 25, CONCESSION 10
GEOGRAPHIC TOWNSHIP OF GOULBOURN
CARLETON COUNTY
NOW CITY OF OTTAWA, ONTARIO



Past Recovery
Archaeological Services Inc.

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CARLETON COUNTY,
NOW CITY OF OTTAWA, ONTARIO**

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Original Report

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Mr. Matt Nesrallah provided background information, project mapping and site access permission on behalf of the property owners.

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EXECUTIVE SUMMARY

Past Recovery Archaeological Services Inc. was retained by 1384341 Ontario Ltd. to undertake a Stage 1 archaeological assessment of a c. 85 hectare (210 acre) parcel located within Part Lot 25, Concession 10 of the geographic Township of Goulbourn, now part of the City of Ottawa (see Maps 1 and 2). The Stage 1 archaeological assessment was required under the *Planning Act* as part of a subdivision application.

The purpose of the Stage 1 investigation was to evaluate the archaeological potential of the study area and present recommendations for the mitigation of any significant known or potential archaeological resources. To this end, historical, environmental and archaeological research was conducted in order to make a determination of archaeological potential. A site inspection was completed on July 19th, 2017. The results of this study indicated that much of the property had been deeply disturbed, though small sections flanking the severed lot at No. 5957 Fernbank Road appeared to retain some potential for both pre-Contact and post-Contact archaeological resources, in spite of localized disturbances.

This report forms the basis for the following recommendations:

- 1) A Stage 2 archaeological assessment should be completed on those portions of the property retaining archaeological potential (see Map 20) prior to the initiation of any soil disturbances or other alterations associated with the proposed development.
- 2) Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). A shovel test pit survey at five metre intervals would be the appropriate testing methodology, as per requirements outlined in Section 2.1.2 of the *Standards and Guidelines*.

The reader is also referred to Section 4.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

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1.0 INTRODUCTION

Past Recovery Archaeological Services Inc. (Past Recovery) was retained by 1384341 Ontario Ltd. to undertake a Stage 1 archaeological assessment of a c. 85 hectare (210 acre) parcel located within Part Lot 25, Concession 10 of the geographic Township of Goulbourn, now part of the City of Ottawa (Maps 1 and 2). The Stage 1 archaeological assessment was required under the *Planning Act* as part of a subdivision application.

The objectives of the Stage 1 archaeological assessment are as follows:

- To provide information concerning the study area's geography, history, previous archaeological fieldwork and current land condition;
- To evaluate the study area's archaeological potential; and,
- To recommend appropriate strategies for Stage 2 archaeological assessment in the event further assessment is warranted.

2.0 PROJECT CONTEXT

This section of the report provides the context for the archaeological work undertaken, including a description of the study area, the related legislation or directives triggering the assessment and any additional development related information.

2.1 Development Context

The study area is located within Part Lot 25, Concession 10 of the geographic Township of Goulbourn, now in the City of Ottawa (see Maps 1 and 2). It is a rectangular shaped parcel, the total size of which is approximately 85 hectares (210 acres), though it excludes a severed residential lot (No. 5957 Fernbank Road) that contains the remnants of the nineteenth century farmhouse for the farm that once spread across the northeast half of Lot 25. The proposed subdivision is bounded to the northeast by Shea Road, to the southeast by Fernbank Road and the existing private lot, to the northwest by the Goulbourn Recreation Centre and Sacred Heart Catholic High School and their associated recreation fields, and to the southwest by the wooded southwest half of Lot 25, Concession 10. The property has been extensively disturbed over the last ten years, involving the removal of both former woodlot and re-growth within former farm fields, the bull-dozing of the topsoil and some stripping to expose the underlying bedrock.

A new subdivision to be known as the Shea Road Community is proposed for these lands (Map 3). The development will include the construction of eight streets, four of which will connect to Shea Road and one to Fernbank Road. The development plan also includes 159 proposed residential lots, a park and a designated school lot.

Numbered company 1384341 Ontario Ltd. is preparing a plan of subdivision application for this property, pursuant to requirements contained within the *Planning Act*. A Stage 1 archaeological assessment was required by the City of Ottawa as part of the application, and Past Recovery was retained to complete the assessment.

2.2 Access Permission

Permission to access the subject property and complete all aspects of the archaeological assessment, including photography, was granted by the proponent.

2.3 Additional Project-Related Information

The study area lies within the boundaries of the City of Ottawa's *Archaeological Master Plan* (ASI and GII 1999a, 1999b). This study provided the trigger for requiring the present Stage 1 assessment. See Section 3.2.1 for further discussion of the findings and recommendations of this study.

3.0 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

3.1 Historical Context

This section of the report includes an overview of human settlement in the region with the intention of providing a context for the evaluation of known and potential archaeological sites, as well as a review of property-specific detailed archival research presenting a record of land use history.

3.1.1 Previous Historical Research

A number of resources exist which recount the history of Goulbourn Township. Limited early accounts of the historical development of the township are included in Belden's *Illustrated Historical Atlas of the County of Carleton including City of Ottawa, Ont.* (1879), *Carleton Saga* (Walker & Walker 1968), and in histories of the National Capital area, including *Where Rivers Meet: An Illustrated History of Ottawa* (Bond 1984) and *History of the Ottawa Valley* (Gourlay 1896). More specific to the early history of Goulbourn Township are *Goulbourn Memories* (Goulbourn Historical Society, 1996), and *The Heritage of Goulbourn: A Driving Tour* (Riedel 1990). The history of the village of Stittsville has been well documented in *Stittsville: A Sense of Place* (Bottrill 1998). *Country Tales* (Stittsville Women's Institute, Tweedsmuir History Committee 1973) contains accounts of the development of all the villages in Goulbourn Township, and its companion volume *Farms and Families – Reflections from the Changing Countryside* (Stittsville Women's Institute, Tweedsmuir History Committee c. 1969) documents many of the historic farmsteads in the rural areas of the township. Additional archival research was undertaken at Library and Archives Canada (LAC) and online at www.ancestry.ca.

3.1.2 Regional Pre-Contact Cultural Overview

It should be noted that our understanding of the pre-Contact sequence of human activity in the area is very incomplete, stemming from a lack of systematic archaeological surveys in the region, as well as from the destruction of archaeological sites caused by urban and sub-urban sprawl prior to legislated requirements for archaeological assessments to be completed in advance of development. It is possible, however, to provide a general outline of pre-Contact occupation in the Ottawa region based on archaeological, historical, and environmental research conducted in eastern Ontario.

The earliest human occupation of southern Ontario began approximately 11,000 years ago with the arrival of small groups of hunter-gatherers referred to by archaeologists as Palaeo-Indians (Ellis and Deller 1990:39). These groups gradually moved northward as the glaciers and glacial lakes retreated. While very little is known about their lifestyle; it is likely that Palaeo-Indian groups travelled widely relying on the seasonal migration of caribou as well as small animals and wild plants for subsistence in a sub-arctic environment. They produced a variety of distinctive stone tools including fluted projectile points, scrapers, burins and gravers.

Most archaeological evidence for the Palaeo-Indian period has been found in south-western and south-central Ontario at sites located on the former shorelines of glacial Lake Algonquin. First Nations settlement of eastern Ontario was late in comparison to these other parts of the province

as a result of the high water levels of the St. Lawrence Marine Embayment of the post-glacial Champlain Sea (Hough 1958:204). Palaeo-Indian find spots in this region include fragments of a Plano (Late Palaeo-Indian) point from the 1000 Islands, two fluted points from the Rideau Lakes, two lanceolate points from Lanark County, two sites with Palaeo-Indian components near the Yarker Training Area along the Napanee River and a late Palaeo-Indian point near Kingston Mills (Heritage Quest Inc. 2000; Watson 1999:35-38).

The Ottawa Valley remained very much on the fringe of occupation at this time. The ridges and old shorelines of the Champlain Sea and the Ottawa River channels would be the most likely areas to find evidence of Palaeo-Indian occupation. A number of lithic sites that may date to the Late Palaeo-Indian or Early Archaic period have been reported for the Ottawa area (eg. Swayze 2005; Swayze and McGhee 2011).

During the succeeding Archaic period (c. 7000 to 1000 B.C.), the environment of southern Ontario approached modern conditions and more land became available for occupation as water levels in the glacial lakes dropped (Ellis, Kenyon and Spence 1990:69). In the Ottawa region, the Ottawa and Rideau Rivers, initially much wider bodies of water, receded to their present configuration. Populations continued to follow a mobile hunter-gatherer subsistence strategy, although there appears to have been a greater reliance on fishing and gathered food (e.g. plants and nuts) and more diversity between regional groups. The tool kit also became increasingly diversified, reflecting an adaptation to environmental conditions similar to those of today. This included the presence of adzes, gouges and other ground stone tools believed to have been used for heavy woodworking activities such as the construction of dug-out canoes, grinding stones for processing nuts and seeds, specialized fishing gear including net sinkers and plummets and a general reduction in the size of projectile points. The middle and late portions of the Archaic period saw the development of trading networks spanning the Great Lakes, and by 6,000 years ago copper was being mined in the Upper Great Lakes and traded into southern Ontario. There is increasing evidence of ceremonialism and elaborate burial practices and a wide variety of non-utilitarian items such as gorgets, pipes and 'birdstones' were being manufactured. By the end of this period populations had increased substantially over the preceding Palaeo-Indian occupation.

By this time the Ottawa River system had developed and would have served as major transportation corridors for Native peoples. As a result, more extensive First Nations settlement of eastern Ontario began during this period, sometime between 5,500 and 4,500 B.C. (Kennedy 1970:61; Ellis, Kenyon and Spence 1990:93). Artifacts from Archaic sites in eastern Ontario suggest a close relationship to the Laurentian Archaic stage peoples of New York State. Laurentian peoples occupied the Canadian biotic province transition zone between the deciduous forests to the south and the boreal forests to the north. The Laurentian Archaic artifact complex contains large, broad bladed, chipped stone and ground slate projectile points, and heavy ground stone tools. This stage is also known for the extensive use of cold-hammered copper tools including "*bevelled spear points, bracelets, pendants, axes, fishhooks, and knives*" (Kennedy 1970:59). The first significant evidence for occupation in the Ottawa Valley appears at this time. Archaic sites have been located at Leamy Lake Park in Gatineau (Laliberté 2000; Laliberté et al. 1999) and on Allumette and Morrison Islands on the Ottawa River near Pembroke (Clermont, Chapdelaine and Cinq-Mars 2003). Over 1,000 copper artifacts and other exotic materials were recovered from the Allumette Island-1 Site (Kennedy 1966). Burial features excavated on the

Allumette Island-1 and Morrison Island-6 sites, dating to the Middle Archaic period, are some of the earliest recorded human burials found in eastern Ontario (Kennedy 1966, 1965, 1964, 1962). Late Archaic sites have also been identified to the west in the Rideau Lakes, and at Jessups Falls and in the Pendleton area along the South Nation River to the east (Watson 1982; Daechsel 1980). A few poorly documented finds of Archaic artifacts have been made within Gloucester Township (Jamieson 1989) and sites at Honey Gables and at the Albion Road and Rideau Road intersection may contain Early Archaic material (Swayze 2004, 2003). A small Archaic campsite was recently located during an archaeological assessment of land along the Carp River, just north of Highway 417 (Adams 2004).

The introduction of ceramics marked the beginning of the Woodland period (c. 1000 B.C. to A.D. 1550). These populations continued to participate in an extensive trade network that, at its zenith circa A.D. 200, spanned much of North America and included the movement of conch shell, fossilized shark teeth, mica, copper and silver. Social structure appears to have become increasingly complex, with some status differentiation evident in burials. It was in the Middle Woodland period (c. 300 B.C. to A.D. 900) that distinctive trends or ‘traditions’ evolved in different parts of Ontario for the first time, noted by archaeologists through variations in artifacts left behind. The Middle Woodland tradition found in eastern and south-central Ontario has become known as ‘Point Peninsula’ (Spence, Pihl and Murphy 1990:157). A greater number of excavated sites from this period has allowed archaeologists to develop a better picture of the seasonal round followed in order to exploit a variety of resources within a home territory. Through the late fall and winter, small groups would occupy an inland ‘family’ hunting area. In the spring, these dispersed families would congregate at specific lakeshore sites to fish, hunt in the surrounding forest and socialize. This gathering would last through to the late summer when large quantities of food would be stored up for the approaching winter.

Towards the end of the Woodland period (c. A.D. 800) domesticated plants were introduced in areas to the south of the Canadian Shield. Initially only a minor addition to the diet, the cultivation of corn, beans, squash, sunflowers and tobacco gained economic importance for late Woodland peoples. Along with this shift in subsistence, settlements located adjacent to the corn fields began to take on greater permanency as sites with easily tillable farmland became more important. Eventually, semi-permanent and permanent villages were built, many of which were surrounded by palisades, evidence of growing hostilities between neighbouring groups.

The proliferation of sites suggests an increase in the population of eastern Ontario, although the Ottawa area has yet to yield as many as other parts of south-eastern Ontario. Significant Middle Woodland components have been found at the Leamy Lake sites (Laliberté 2000) and at a site in Vincent Massey Park which also contained Late Archaic material (Fisher Archaeological Consulting 2012). Fragments of an early ceramic vessel were recovered from the Deep River Site (CaGi-1) on the Quebec side of the Ottawa River across from Chalk River (Mitchell 1963). The Meath Sites (BkGg 1-10), located on Mud Lake in the Muskrat River Basin south of Pembroke, have yielded a range of occupations from the Archaic through to the Middle Woodland (Robertson and Croft 1975, 1974, 1973, 1971; Croft 1986). The Wilbur Lake sites on the Bonnechere River near Eganville are centered around the Kant Site (BjGg-1), which is primarily related to aspects of the Middle Woodland cultural period, although they also contain elements spanning the Late Archaic to Late Woodland periods (Mitchell 1990, 1989, 1988, 1987;

Pendergast 1957). Middle Woodland sites have been noted in the South Nation Drainage Basin and along the Ottawa River including the northwest part of Ottawa at Marshall's and Sawdust Bays (Daechsel 1981, 1980). Late Woodland sites have been recorded throughout the Ottawa Valley. Of particular note is an ossuary burial identified in Ottawa in 1843 (Van Cortlandt 1853) which hints at a more permanent occupation of the area. Although ossuaries are a burial practice normally associated with Iroquoian speaking populations, especially the Huron, this interment may have been Algonquin.

Three pre-Contact stage tribal groups occupied eastern Ontario in the final decades prior to the arrival of Europeans. Agricultural villages, dating to A.D. 1400, of an Iroquoian people referred to as 'proto-Huron' have been found in southern Hastings and Frontenac Counties (Pendergast 1972). By A.D. 1500, however, the easternmost settlements of the Huron were located between Balsam Lake and Lake Simcoe. St. Lawrence Iroquois occupied the upper St. Lawrence River valley. Finally, various Algonquin groups occupied the Ottawa Valley (Day and Trigger 1978:793).

3.1.3 Regional Post-Contact Cultural Overview

Samuel de Champlain is credited with being the first European to document his explorations of eastern Ontario, travelling up the Ottawa River and exploring some of its tributaries in 1613 and again in 1615. He was preceded, however, by two of his emissaries, Etienne Brule around 1610, and Nicholas de Vignau in 1611. These French explorers encountered groups of people speaking different dialects of the Algonquin language throughout this region, including the Matouweskariini along the Madawaska River to the west, the Kichespirini at Morrison Island, the Otaguottouemin along the Ottawa River northwest of Morrison Island, the Onontchataronon in the Gananoque River basin to the southwest, and the Weskarini in the Petite Nation River basin to the north (Pendergast 1999; Trigger 1976). These loosely aligned bands subsisted by hunting, fishing and gathering, and undertook limited horticulture.

Since at least the late sixteenth century, all of these Algonquin peoples were at war with the Mohawk Iroquois, the easternmost Five Nations Iroquois group, over control of the St. Lawrence River trade. While prolonged occupation of the region may have been avoided as a result of hostilities with Iroquoian speaking populations to the south, at least the northern reaches of the South Nation River basin were undoubtedly used as hunting territories by the Algonquin at this time.

The endemic warfare of the age and severe smallpox epidemics in 1623/1624 and again between 1634 and 1640 brought about drastic population decline among all First Nation peoples (Hessel 1993:63-65). Between 1640 and 1650, French unwillingness to provide direct military support against their natural enemy, the Mohawk, led to the defeat and dispersal of the Algonquin and Huron by the Five Nation Iroquois of New York State (Trigger 1976:610, 637-638). Survivors of the various groups often coalesced in settlements to the north and west of the Ottawa Valley, and at the French posts of Montreal, Sillery and Trois Rivières.

In the wake of Champlain's travels, the Ottawa River (also known as the Grand River) became the principal route to the interior for explorers, missionaries, and fur traders. Throughout the seventeenth and eighteenth centuries this route remained an important link in the French fur

trade. The recovery of European trade goods (i.e. iron axes, copper kettle pieces and glass beads) from Native sites throughout the Ottawa River drainage basin provides evidence of the extent of contact between Natives and the fur traders during this period. Since the fur trade in New France was Montreal-based, Ottawa River navigation routes were of strategic importance in the movement of trade goods inland and furs down to Montreal. In 1630, Mattawa House, a Hudson's Bay Company post that would become an important centre of the fur trading and lumber businesses, was established on the Ottawa River (Morrison 2005:215). The English continued to use the Ottawa River as an important transportation corridor after they took possession of New France following the end of the Seven Years War in 1763. Although a seigneurie had been established to the northeast of the study area at L'Orignal by the French in 1674 and granted to Nathaniel Hazard Treadwell, there was little permanent European settlement in the Ottawa region at this early date.

With the end of the American Revolutionary War (1775-1783), an exodus of United Empire Loyalists and disbanded soldiers moving north across the St. Lawrence required the acquisition and settling of new lands. In response, the British Government sought to acquire the rights to lands along the north shore of the St. Lawrence River and Lake Ontario through hurried negotiations with their Mississauga military allies. Captain William Redford Crawford, who enjoyed the trust of the Mississauga chiefs living in the Bay of Quinte region, negotiated on behalf of the British government. In the so-called 'Crawford Purchase,' the Mississauga gave up Native title to most of eastern Ontario, including what would become the counties of Stormont, Dundas, Glengarry, Prescott, Russell, Leeds, Grenville and Prince Edward, as well as the front townships of Frontenac, Lennox, Addington and Hastings and much of what is now the City of Ottawa (Lockwood 1996:24).¹ There were numerous problems with this transaction as it ignored other Native groups' rights to some of the lands it purported to cover,² crucial documents were missing and the extent of compensation was never clear. Nevertheless, Major Samuel Holland, Surveyor General for Canada, began laying out these lands in 1784, with such haste that the newly established townships were assigned numbers instead of names. The westernmost surveyed township (Elizabethtown) was originally called Township No. 8, while the easternmost (Charlottenburg) was Township No. 1 (Leavitt 1879:17).

By the late 1780s the waterfront townships were full and more land was required to meet both an increase in the size of grants³ to all Loyalists and grant obligations to the children of Loyalists who were then entitled to 200 acres in their own right upon reaching the age of 21 or in the case of daughters, being married. Furthermore, in 1792 John Graves Simcoe offered free grants of land to anyone who would swear loyalty to the King, a policy aimed at attracting more American

¹ Although the Gananoque River forms the eastern limit of the Crawford Purchase, modern Mississauga communities identify the entirety of the Lake Ontario watershed as an area on which they assert territorial interests.

² At this time, there was also a significant Algonquin presence in eastern Ontario and Mohawk reservations had been established at Tyendinaga near Deseronto and at St. Regis near Cornwall.

³ Civilians now received 200 acres instead of 100 acres, with an additional 200 acres for each of their children. The size of grants for military veterans increased with rank with privates receiving 200 acres at the low end and, at the high end, field officers being granted 5,000 acres with an additional 200 acres for each member of their family. In 1784 a field officer had only received 1,000 acres and an additional 50 acres per family member (Lockwood 1996: 30-32).

settlers. As the government also dictated the setting aside of one-seventh of all the land for the Protestant Clergy and another one-seventh as Crown reserves, pressure mounted to open up more of the interior. As a result, between 1790 and 1800 most of the remainder of the Crawford Purchase was divided into townships (Lockwood 1994:30).

Settlement in the Ottawa area was thus not actively encouraged by the colonial government until the late eighteenth century. To this end, in 1793, two years after the division of the Province of Québec into Upper and Lower Canada, Deputy Surveyor John Stegmann was asked to undertake an initial survey of four townships (Gloucester, North Gower, Osgoode and Nepean) on both sides of the Rideau River near its junction with the Ottawa River.

At the beginning of the nineteenth century there had been an economic shift from the fur trade to the lumber industry as the Napoleonic blockades increased Europe's demand for quality pine. Settlement followed, and a large number of farms and lumber camps began to appear in the area. A mutually beneficial relationship soon developed between the lumber and farming industries: the former depended on the local farmers to supply food stuffs to shanties and lumber camps and the latter depended on the lumber industry for seasonal work in the winter (Mercer 1998:5). Philemon Wright, who had established a settlement at Hull on the north shore of the Ottawa River at the Chaudière Falls with five families and 33 men in 1800, is commonly acknowledged as the first permanent European resident in the Ottawa area (Bond 1984:24). Wright was drawn to the region by the rich timber resources along the Ottawa River and the immense water power provided by the falls. This community grew over the next few years and by 1805 Wright had established a significant lumber business, an industry that would continue to dominate the local economy through the nineteenth century. It would take several more years for permanent settlement to spread to the south side of the Ottawa River.

Goulbourn Township

Goulbourn Township took its name from Henry Goulbourn, the Undersecretary of State for War and the Colonies from 1812 to 1826. It is bordered by Nepean Township to the east, March and Huntley Townships to the north, Marlborough Township to the South and Beckwith Township (in Lanark County) to the west. It includes the communities of Richmond, Stittsville, Ashton and Munster.

The township was surveyed in 1817 and much of rural Goulbourn was settled between 1821 and 1824 (Walker & Walker 1968:489). The first permanent community in the township was established in the third concession near the southeast corner. In 1818 c. 400 members of the British 99th Regiment and their families constructed a road from Bytown (Ottawa) and settled in and around the carefully planned village of Richmond (Bond 1984:29). Though most of the settlers were disbanded military, a number were tradespeople who accompanied the expedition or arrived shortly thereafter to provide essential services for the community. By 1820 a grist mill and school house had been erected, by 1821 a sawmill, and in the next few years both an Episcopal and a Catholic church. Soon thereafter, the village may have had as many as twenty stores and a dozen breweries and distilleries (Belden 1879:xli). Though initially the most important settlement in the county, with the construction of the Rideau Canal and the shift in military focus to Bytown, the village went into a gradual but steady decline.

Another of the early communities was Stittsville, located on the 12th Line of Goulbourn Township at the crossroads of what is now Carp Road and Hazeldean Road. Though several families settled in the vicinity in the early 1820s, the small village that developed was unnamed until Jackson Stitt was given the job of post-master in 1854. By 1864 Stittsville had a population of about 100, together with all the businesses and social institutions necessary for a thriving settlement. With exception of one stone building, the village was swept away by the Great Fire of 1870 which began to the northeast of Pakenham. Strong winds carried it through Fitzroy, Huntley, Stittsville, Goulbourn, Bell's Corners, Nepean, Gloucester, Torbolton, Marlborough, Osgoode, Templeton, Hull, Chelsea and Aylmer, leaving little in its wake (Currie 2009:44-47). The devastation brought by the fire impacted the settlement patterns in Goulbourn Township. At the same time, the Canada Central Railway was constructed a little to the south of the original village site, and when the reconstruction was completed much of the business community had migrated to the new transportation route. This area came to be known as New Stittsville, and the original village became Old Stittsville. By 1879 the new community had two general stores, a hotel and a number of tradesmen's shops (Bottrial 1998: 22-28; Walker & Walker 1968:500; Belden 1879:xli).

Transportation through the region was provided mainly by a series of roads. At first no more than tracks through the bush, they were gradually improved to become passable for horse-drawn traffic. Richmond was already linked in 1818 to what was to become Bytown; in 1820 a trail was forced westward to Perth (Bottriall 1998:6). Large areas of swamp and bog in the township made laying a complete grid-system of roads impossible. In many cases trails were forced through at odd angles, wherever the ground allowed passage. As stated above, in 1870 an alternative mode of transportation, the Canadian Central Railway (later part of the Canadian Pacific Railway), was constructed across the township along the line between the tenth and eleventh concessions. Stations were erected at Stittsville and Ashton. By 1910, Stittsville was a busy rail centre with as many as 16 trains going through each day. The railway also provided employment for many local people (Goulbourn Township Historical Society, 2017).

The village of Stittsville has grown immensely in recent years. Development began to expand with new subdivisions following the installation of extensive sewer and water lines in 1984, with population growth ensured given the proximity to Kanata, and more recently as Stittsville has become a bedroom community for Ottawa. In the mid-1970s approximately 3,000 people were living in Stittsville, but by the year 2000 there were around 12,000. In 2001, Stittsville and Goulbourn Township were amalgamated into the City of Ottawa and the Township Council was replaced by one Councillor representing the Kanata West Stittsville Ward.

3.1.4 Property History

The following discussion will focus on the main developments of the nineteenth and early twentieth centuries, particularly as they relate to the archaeological potential of the study area. Documents reviewed in order to develop the land use history of the study area include the Land Registry Abstract Indices (LRAI) held at the Land Registry Office in Ottawa, census records available at Library and Archives Canada (LAC), and available nineteenth century maps including H.F. Walling's 1863 map of the County of Carleton and H. Belden's 1879 map of Goulbourn Township. Twentieth century topographic maps and aerial photographs were also consulted.

The Land Registry Abstract Index indicates that the Crown patent for the northeast 100 acres of Lot 25, Concession 10 was issued to James Malone in 1824 and the southwest 100 acres was awarded to Roger Foye in 1827. Although both of these names appear on a patent plan for Goulbourn Township dating to 1845 (Map 4), it is unclear whether either of them were residing on the lot at this time.

The H.F. Walling map of Carleton County, produced in 1863, does not record anyone on Lot 25 (Map 5). This may have been a result of the general inaccessibility of the area for the map enumerators rather than an indication of an absence of occupation. The McGuire homestead and a school house are shown on the southeast side of Fernbank Road, and the fledgeling village of Stitts Corners is visible to the northwest of the study area.

A number of rural directories published between 1864 and 1884 list Thomas R. Tennant as residing on some portion of Lot 25, Concession 10 (Mitchell & Co. 1864; Sutherland 1866, 1868 and 1869; Irwin & Co. 1873 and O. L. Fuller 1884). It is unclear how Tennant obtained ownership of the property, but it is possible that he purchased the rights from either Malone or Foye (one or the other possibly an absentee land owner), although this transaction was not recorded in the land registry records.

In 1870, the Canada Central Railway Company purchased a portion of both the southwestern and the northeastern halves of the lot to push the railway through along the Tenth Concession road allowance, now known as Abbott Road. At this time Thomas Tennant and his wife were listed as the owners of the northeastern half of the lot (suggesting, therefore, that the Tennant family was on this portion of the lot when listed in the earlier directories), while the southwestern half was owned by James McCaffery and his wife (LRAI Instruments GB 129 and GB140). The 1871 census confirms that Thomas Tennant, his wife Margret, and their children Robert, William, Agnes, George and Frances, as well as a servant named Mary McPherson, were residing on Lot 25, of which 45 acres had been improved with (LAC microfilm reels C-10015 and C-10016).

The 1879 map of Goulbourn Township produced by H. Belden shows John Kemp on the southwest half of Lot 25 with no structures on the property and Thomas Tennant on the northeast half with a house fronting on Fernbank Road (Map 6). This house is in the same approximate location of the extant property located at No. 5957 Fernbank Road. The Canada Central Railway line is also illustrated along the northeast border of the lot.

In 1894, Margaret Tennant passed the northeastern 100 acres to George Tennant (likely her son), for "*Natural Love and \$1.00*" (LRAI Instrument GB4828). Five years later, Robert Wallace and his wife, who had obtained ownership of the southwestern 100 acres, sold this land to George Tennant for \$1,000 (LRAI Instrument GB4354). When George Tennant died, all 200 acres of the lot passed to Frances E. Tennant in 1910 (LRAI Instrument GB6379). The land stayed with the Tennant family until 1952, when upon Frances' death the entire parcel was sold to James H. Finley (LRAI Instrument GB10730).

The first edition topographic map for this area, dating to 1906, shows one structure along the southwest boundary of the study area (Map 7). It is possible that this represents a locational error for the Tennant farmstead, which is not illustrated on this map. Little else is shown in the

area at this time. By 1925, a second topographic map illustrates two structures in the vicinity of the study area (Map 8). The dwelling set further back from Fernbank Road likely represents the Tennant homestead. A second structure in the southeast corner of the study area, fronting on Fernbank Road is also illustrated. The building that had been illustrated in the 1906 topographic map along the southwestern edge of the study area is no longer shown in that location.

A third topographic map dating to 1958 shows three structures within the vicinity of the study area (Map 9). The first appears in the same location as on the 1925 topographic map, and roughly correlates to the location of the Tennant homestead. Two large barns are illustrated in close proximity to the house. The building that had been located in the southeast corner of the study area, fronting on Fernbank Road, appears to have been removed.

A segment of an aerial photograph dating to 1960 shows the study area and the historic farm complex (Map 10). The southern half of the property appears as cleared fields, while most of the northern half remained wooded. There seems to be a small trail heading northwest from the farm complex into the study area and culminating at a small structure, possibly a storage outbuilding. Another aerial photograph dating to 1976 shows the study area much the same as the earlier 1960 aerial photograph; however the trail and small structure to the north of the farm complex are no longer visible (Map 11). Part of the field next to Fernbank Road had become overgrown. By the time of an aerial photograph dating to 1991, no new development had occurred within the study area (Map 12). Of note, a high-power transmission line had been erected to the northeast of the study area with a temporary road evident, and new housing developments were encroaching along the southwest side of Lot 25. The former farm fields had become extensively overgrown, indicating that the farmstead was no longer operating at the same capacity, with the farmhouse probably acting only as a residence at this time.

A satellite image taken in 2005 illustrates more changes (Map 13). Shea Road had been extended northward along the northeastern boundary of the study area, likely over the location of the second structure depicted on the 1925 topographic map (see Map 8). The development to the west of Lot 25 appears to be complete and the Goulbourn Recreation Centre and Sacred Heart High School had both been constructed immediately to the north of the study area. Within the study area itself, the fields, which in the previous aerial photograph had appeared as semi-open, had become wooded.

Sattellite imagery dating to 2008 shows that much of the property had been cleared of the brush and trees by this time, as well as stripped of the soil in many locations (Map 14). An access point from Shea Road is visible, as are numerous trails, push-piles of soil and brush and soil stripping scars across the majority of the property. A more recent orthographic image (see Map 2) shows that much of the clearing work within the study area has continued. The access route from Shea Road is more pronounced and some of the vegetation has started to regenerate where it had been previously cleared.

3.2 Archaeological Context

This section of the report describes the archaeological context of the study area, including known archaeological research, known cultural heritage resources (including archaeological sites), and environmental conditions. In combination with the historical context outlined above, this section

provides the necessary background information to evaluate the archaeological potential of the property.

3.2.1 Previous Archaeological Research

The property lies within the area covered by the *Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton* (ASI & GII 1999a, 1999b), better known as the *Ottawa Archaeological Master Plan* (Map 15).⁴ This mapping identified a small area along Shea Road as having archaeological potential, likely a result of being in proximity to water.

Archaeological work in the region has primarily consisted of cultural resource management studies related to specific properties or development projects. Of particular interest to the current study area is a previous Stage 1 archaeological assessment undertaken by Kinickinick Heritage in 2007 for the Fernbank Community Design Plan, which included an overview of Lots 25-30 in Concession 10 and Lots 28-30 in Concession 11. This report concluded that significant portions of Lot 25 contained archaeological potential for both pre-Contact and historic sites and deposits (Kinickinick 2007). This determination significantly expanded the area of archaeological potential indicated on the *Ottawa Archaeological Master Plan* discussed above. Since that time, however, significant changes to the site have taken place, resulting in a smaller area of potential (see Section 3.3.1).

Other projects undertaken in this part of Goulbourn Township include:

- Stage 1 through 4 archaeological work undertaken on lands associated with the Stittsville South Development Area (Part Lots 22, 23, 24 and 25, Concession 9, Geographic Township of Goulbourn) which resulted in the designation of both the McGuire Site (BhFx-54) and Mrs. McGuire's School House (BhFx-55) (Adams 2014; Patterson Group 2015a, 2015b, 2015c and 2015d);
- Stage 1 and 2 archaeological assessments undertaken by Adams Heritage for the proposed Fernbank Community Design Plan, Brookfield East Parcel located on Lot 28, Concession 10, approximately one kilometre to the north of the study area (Adams 2009 and 2012);
- A Stage 1 archaeological assessment undertaken by Adams Heritage for the proposed "Jordan Estates" on Part Lot 20, Concession 9 (Adams 2007);
- A Stage 1 archaeological assessment undertaken by Adams Heritage for the Trinity Development Group Lands - Kanata West, on Part Lots 28 and 29, Concession 12, Goulbourn (Adams 2005); and,
- A Stage 2 archaeological assessment undertaken by Adams Heritage for the Fernbank Road Development Lands – Phase 1 on Part Lot 27, Concession 10 (Adams 2010).

⁴ It should be noted that the *Archaeological Master Plan* mapping of archaeological potential has not been updated since the completion of the study 17 years ago, and therefore does not reflect either current standards for archaeological assessments established by MTCS, the locations of recently discovered archaeological sites, areas that have subsequently been the subject of archaeological assessment, or areas of more recent disturbances.

3.2.2 Previously Recorded Archaeological Sites

The primary source for information regarding known archaeological sites in Ontario is the *Archaeological Sites Database* maintained by the Ministry of Tourism, Culture, and Sport (MTCs). The database largely consists of archaeological sites discovered by professional archaeologists conducting archaeological assessments required by legislated processes under land use development planning (largely since the late 1980s). A search of the *Ontario Archaeological Sites Database* indicated that three registered sites are located within a one kilometre radius of the study area, with one (BhFx-55) lying within 300 metres of the study area:

BhFx-55: Mrs. McGuire's School House. This c. 1860s Euro-Canadian school house, located on the southeast side of Fernbank Road immediately across from the southeast corner of the study area, has been subject to Stage 1 through 4 archaeological assessment and mitigation. The cultural heritage value or interest (CHVI) of this site has been fully documented (Adams 2014; Patterson Group 2015a, 2015b).

BhFx-33: Holy Spirit. This pre-Contact campsite, located at the intersection of Abbott Street East and Shea Road, was the subject of Stage 1 and 2 assessments in 2005. During this process 215 artifacts (including many lithics and a pipe stem) were recovered which pointed to Late Paleo-Indian/Early Archaic designation. Additional CHVI was recommended (Swayze 2005b).

BhFx-54: McGuire 1. This early 1880s Euro-Canadian dwelling, located on the southeast side of Fernbank Road, has been subject to Stage 1 through 4 archaeological assessment and mitigation. The CHVI of this site has been fully documented (Adams 2014, Patterson Group 2015c and 2015d).

In addition to these three sites, ten others are located within a two-kilometre radius and provide an indication of both First Nations settlement in the Carp River watershed as well as Euro-Canadian settlement in Goulbourn Township.

3.2.3 Identified Cultural Heritage Resources

The recognition or designation of cultural heritage resources (here referring only to built heritage features and cultural heritage landscapes) may provide valuable insight into aspects of local heritage, whether identified at the local, provincial, national, or international level. As some of these cultural heritage resources may be associated with significant archaeological features or deposits, the background research conducted for this assessment included the compilation of a list of cultural heritage resources that have previously been identified within or immediately adjacent to the current study area. The following sources were consulted:

- Federal Heritage Buildings Review Office online Directory of Heritage Designations (<http://www.pc.gc.ca/eng/progs/beefp-fhbro/index.aspx>);
- Canada's Historic Places website (<http://www.historicplaces.ca/en/home-accueil.aspx>);
- Ministry of Tourism, Culture and Sport's List of Heritage Conservation Districts (http://www.mtc.gov.on.ca/en/heritage/heritage_conserving_list.shtml); and
- Inventories of heritage properties maintained by the City of Ottawa (the Heritage Register and the Heritage Reference List).

A search of on-line databases identified no designated built heritage properties within or adjacent to the study area, although the Village of Stittsville does have a designated historic section on its Main Street, located approximately one kilometre west of the study area. The property inspection described below also did not note any built heritage properties within the study area.

Of note, however, is the extant residential structure at No. 5957 Fernbank Road (Image 1). Currently this building appears as a sprawling complex with several additions, decks, a two-car garage and a swimming pool. The central portion, however, is brick; this section would have been the original Tennant farmhouse. A structure appears in this location on the Belden map dating to 1879 (see Map 6), but land registry records indicate that Thomas Tennant had been residing on the property at least as early as 1870, though quite possibly earlier from rural directories (the land the records do not indicate how or when he first acquired the northeast half of the lot). The property stayed in the Tennant family until 1952.

3.2.4 Heritage Plaques and Monuments

The recognition of a place, person, or event through the erection of a plaque or monument may also provide valuable insight into aspects of local history, given that these markers typically indicate some level of heritage recognition. As with cultural heritage resources (built heritage features and/or cultural heritage landscapes), some of these places, persons, or events may be associated with significant archaeological features or deposits. Accordingly, this study included the compilation of a list of heritage plaques and/or markers in the vicinity of the study area. The following sources were consulted:

- An extensive listing of Ontario's Heritage Plaques maintained by Alan Brown (<http://www.ontarioplaques.com/>); and,
- An extensive listing of historical plaques of Ontario maintained by Wayne Cook (<http://www.waynecook.com/historiclist.html>).

No heritage plaques or monuments were located in or around the current study area. The property inspection described below also did not note any plaques or monuments in the vicinity.

3.2.5 Cemeteries

The presence of historical cemeteries in proximity to a parcel undergoing archaeological assessment can pose archaeological concerns in two respects. First, cemeteries may be associated with related structures or activities that may have become part of the archaeological record, and thus may be considered features indicating archaeological potential. Second, the boundaries of historical cemeteries may have been altered over time, as all or portions may have fallen out of use and been forgotten, leaving potential for the presence of unmarked graves. For these reasons, the background research conducted for this assessment included a search of available sources of information regarding historical cemeteries. For this study, the following sources were consulted:

- A complete listing of all registered cemeteries in the province of Ontario maintained by the Consumer Protection Branch of the Ministry of Consumer Services;
- Field of Stones website (<http://freepages.history.rootsweb.ancestry.com/~clifford/>);

- Ontario Cemetery Locator website maintained by the Ontario Genealogical Society (<https://www.ogs.on.ca/indexes.php>);
- Ontario Headstones Photo Project website (<http://canadianheadstones.com/on/>); and,
- Available historical mapping and aerial photography.

No known cemeteries were located in or adjacent to the study area, although there is always the possibility of unrecorded burial plots on rural properties.

3.2.6 Local Environment

The bedrock below the study area is part of the Ottawa Formation, which consists primarily of Paleozoic limestones (MacDonald 1967:Map 1508A). Surficial deposits in this area are split between four types of deposits. In the southeastern corner Champlain Sea nearshore sediments are found, comprised mainly of gravel, sand and boulders that are generally well sorted. To the north of this is an area of till plain glacial deposits. The central portion of the property is characterized by Paleozoic Bedrock comprised of limestone, dolomite, sandstone and shale. Finally the northern border of the study area displays organic post-Champlain Sea deposits (Richard 1976:Map 1506A; Map 16).

Physiographic mapping shows the present study area within the Ottawa Valley Clay Flats, characterized by clay plains interrupted by ridges of rock or sand (Chapman & Putnam 1984:205). Detailed soils mapping of the region indicates that the property is split between three soil types (Map 17). To the northwest is an area of Huntley soils, which are characterized by 160 cm or more of moderately to well decomposed forest peat over loamy or sandy material. These soils have very poor drainage. The central portion of the study area is composed of Farmington soils, which are typically comprised of 10 cm to 50 cm of neutral to alkaline flaggy sandy loam, fine sandy loam, loamy fine sand or loamy sand. In general, this soil type is made up of undifferentiated drift material over Paleozoic limestone or dolomite bedrock. The soil also has good drainage, is moderately stoney and very gently sloping. The southeastern half of the property is composed of Reevecraig soils, which are alkaline very fine sand, loamy very fine sand, fine sand, or loamy fine sand marine or fluvial material, with poor drainage (Schut and Wilson 1987:46-47).

The study area lies within the Upper St. Lawrence sub-region of the Great Lakes - St. Lawrence Forest Region, a region characterized by a mix of coniferous and deciduous tree species. The upland forest of this region is comprised of sugar maple, beech, yellow birch, red maple, and hemlock, as well as white, red and jack pine which concentrate in areas with sandier soils. There are also smaller amounts of white spruce, balsam fir, aspen, white birch, red oak, and basswood. Cedars, tamaracks, black spruce, black ash, red maple and elm thrive in hardwood and mixed wood swamps. Much less common are butternut, burr oak, white ash and red cherry (Rowe 1977). Much of this area was cleared of original forest cover during the nineteenth century through both lumbering and agriculture, or by one of the extensive fires which ravaged this part of Carleton County in the latter part of that century.

Drainage in the area is provided by Poole Creek, which runs approximately 1.5 kilometers to the west of the study area. Poole Creek, located along the southeastern boundary of the Mississippi Valley Watershed, drains to the northeast through Stittsville and into the Carp River. In addition

to this, much of the central portion of the study area is illustrated as consisting of undesignated permanently wet areas on *Ministry of Natural Resources and Forestry* (MNRF) mapping (Map 18).

3.2.7 Optional Property Inspection

A site visit was conducted on July 19th, 2017, in order to gain firsthand knowledge of the current condition of the property and its periphery. The weather was mostly sunny with occasional cloud cover, providing good visibility. This inspection was conducted according to archaeological fieldwork standards outlined in *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011), with field conditions and features influencing archaeological potential documented through digital photography.

The site inspection confirmed the deep and extensive disturbance evident from the recent aerial photographs and satellite images (see Maps 13 and 14). The northwest third of the property had undergone fairly extensive regrowth since the c. 2007 clearing of the woodlot; the regrowth had recently been removed around the perimeter and through the centre (Images 2 to 5). Much of the western corner was low and wet, and there was evidence of older and more recent stockpiling of bull-dozer topsoil along the former fence lines (Images 6 and 7). The central third of the property had been stripped of topsoil and contained large piles of bull-dozer material; exposed bedrock and subsoil was evident on the surface throughout this area (Images 8 to 15). The southern third contained the push-piles evident in the 2008 satellite image (see Map 14), with the areas between having been stripped to subsoil (Images 16 to 18). The regrowth along Fernbank Road had recently been removed (Image 19). The area immediately southwest of the existing farmhouse at No. 5957 Fernbank Road, which did not appear to have been stripped in the 2008 satellite image, still contained some larger trees along the fence lines, though the ground was uneven, perhaps indicating previous disturbance (Images 20 and 21). The strip of land to the northeast of the extant residence (Block 165 on the subdivision plan) contained a small pine plantation at the northwest end, though there was uneven ground and poison ivy in places showing evidence of previous disturbance (Image 22). The rest of this parcel had regenerated with mixed deciduous and coniferous trees, but contained some pockets of uneven ground indicating previous disturbance (Image 23). The south portion was low and wet (Image 24).

The complete photographic catalogue from the site inspection is included as Appendix 1. The locations and orientations of all photographs taken during the inspection and used in this report are shown in Map 19. As per the *Terms and Conditions for Archaeological Licences* in Ontario, curation of all photographs generated during the Stage 1 archaeological assessment is being provided by Past Recovery pending the identification of a suitable repository. An inventory of the records generated during the assessment is provided below in Table 1.

3.3 Analysis and Conclusions

This section of the report includes an evaluation of the archaeological potential within the study area, in which the results of the background research and property inspection described above are synthesized to determine the likelihood of the property to contain significant archaeological resources.

Table 1. Inventory of the Stage 1 Documentary Record.

Type of Document	Description	Number of Records	Location
Photographs	Digital photographs documenting the subject property and conditions at the time of the property survey	114 digital photographs	On PRAS computer network – file PR17-32
Field Map	Printed high-resolution satellite image of the subject property	1 page	PRAS office - file PR17-32

3.3.1 Determination of Archaeological Potential

A number of factors are used to determine archaeological site potential. For pre-Contact sites criteria are principally focused on topographical features such as the distance from the nearest source of water and the nature of that water body or stream, areas of elevated topography including features such as ridges, knolls and eskers, and the types of soils found within the area being assessed. For post-Contact sites, the assessment of archaeological site potential is more reliant on historical research (land registry records, census and assessment rolls, etc.), cartographic and aerial photographic evidence, and the inspection of the study area for possible above ground remains or other evidence of a demolished historical structure. Also considered in determining archaeological potential are known archaeological sites within or in the vicinity of the study area.

Archaeological assessment standards established by MTCS (*Standards and Guidelines for Consultant Archaeologists*, 2011) specify factors to be considered when evaluating archaeological potential. Licensed consultant archaeologists are required to incorporate these factors into potential determinations and account for all features on the property that can indicate archaeological potential. If this evaluation indicates that any part of the subject property exhibits potential for archaeological resources, the completion of a Stage 2 archaeological assessment is required prior to the issuance of approvals for planned development in these areas.

Areas that are considered to have pre-Contact site potential include lands within 300 metres of water sources, wetlands, or elevated features in the landscape, including former river scarps. Areas of historic archaeological site potential include locations within 300 metres of sites of early Euro-Canadian settlement and within 100 metres of historic transportation corridors. Further, areas within 300 metres of registered archaeological sites, designated heritage buildings or structures/locations of local historical significance are considered to have archaeological potential. Conversely, areas within any of these zones shown to have steep slopes (greater than 20°) or to contain low-lying and permanently wet soils can be excluded on the basis that the potential for significant archaeological resources within these areas is extremely low. In addition, areas that can be demonstrated to have been the subject of recent, deep, and intensive ground disturbance (i.e. quarrying, major landscaping, building footprints, etc.) can be excluded from Stage 2 testing on the basis that any archaeological resources present would have been removed or destroyed as a result of this activity.

As noted above, the *Ottawa Archaeological Master Plan* indicated that there was archaeological potential within a small part of the study area, likely a result of being in proximity to water (ASI & GII 1999a, 1999b; see Map 15). It is important to state, however, that this document used the less stringent 1993 standards as a basis for determining archaeological potential rather than current (2011) standards. Further, in working with the *Archaeological Master Plan* over the past 18 years some weakness has been found in the mapping of site potential, especially with reference to historic period sites. The background research conducted for this assessment has found that much more of the property would have had potential for the presence of significant archaeological resources prior to the recent clearing activities.

In general, the study area exhibits characteristics that indicate potential for the presence of archaeological resources associated with pre- and post-Contact First Nations settlement and/or land uses. Specifically:

- Portions of the study area include or are located within 300 metres of modern water sources, specifically permanently wet areas, which would have provided potable water and a diversity of food resources; and,
- One registered Pre-Contact archaeological site is located within one kilometre of the study area (BhFx-33: Holy Spirit), and significant pre-Contact sites have been documented within the wider Carp River watershed.

The study area also exhibits characteristics that indicate potential for the presence of archaeological resources associated with Euro-Canadian settlement and/or land uses. Specifically:

- The Tennant homestead, as discussed in Section 3.2.3, is located immediately adjacent to the study area and likely dates to the nineteenth century. Early topographic mapping indicates that there were at least two large barns or outbuildings associated with the farm;
- Two historic period archaeological sites (BhFx-54: McGuire 1 and BhFx-55: Mrs. McGuire's School House) are located within one kilometre of the study area; and
- The southern boundary of the study area lies adjacent to Fernbank Road, which was opened in the nineteenth century and is therefore a historic transportation corridor.

Given the number of features of archaeological potential identified within or in the immediate vicinity of the study area, the evaluation of potential began from the assumption that all portions of the study area retained archaeological potential. Background research and the property inspection have, however, indicated that large portions of the study area have been subject to localized land alterations in recent years that have negatively impacted the integrity of any archaeological resources. Specifically:

- The clearing (and subsequent re-clearing) of the wood lot in the northern part of the study area and the regenerated former farm fields elsewhere, along with the bull-dozing of the topsoil into push-piles, undertaken after 2007 and again recently, have significantly disturbed soils over most of the property; and,
- The central portion of the property has been stripped to bedrock in places, as evidenced by the exposed bedrock seen both in the 2008 aerial photograph (see Map 14) and during the site visit.

In addition to the areas where the soils have been negatively impacted, much of the property was at one time low-lying and wet (see Map 18). This is especially true of the southern portion of the area to the northeast of the extant residence, which remains covered with vegetation suited to permanent water saturation. This area can be excluded from Stage 2 assessment on the basis that the potential for significant archaeological resources within them is extremely low.

The areas immediately adjacent to the severed farmhouse lot do not appear to have been stripped during the c. 2007 clearing activities, nor more recently. The small field to the southwest of the farmhouse still contains larger trees, though some of the ground was noted to be uneven during the site visit, perhaps indicating previous disturbance. The area to the northeast contains a small pine plantation opposite the buildings but gradually becomes mixed forest towards Fernbank Road - there was some uneven ground and poison ivy showing evidence of previous disturbance, though the extent was uncertain. Thus it is possible that portions or all of both areas could be disturbed, though this could not be verified during the site visit, nor could small pockets of obvious disturbance be mapped at the scale of the site plan. Both areas have therefore been mapped as retaining archaeological potential, though Stage 2 assessment may find part or all of both to have been subjected to deep and intensive disturbance.

The archaeological potential evaluation for the study area resulting from the research compiled in this report is illustrated on Map 20.

3.3.2 Stage 1 Recommendations

The results of the background research discussed above indicate that portions of the study area exhibit potential for the presence of significant archaeological resources. Accordingly, it is recommended that:

- 1) A Stage 2 archaeological assessment should be completed on those portions of the property retaining archaeological potential (see Map 20) prior to the initiation of any soil disturbances or other alterations associated with the proposed development.
- 2) Any future Stage 2 archaeological assessment should be undertaken by a licensed consultant archaeologist, in compliance with *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011). A shovel test pit survey at five metre intervals would be the appropriate testing methodology, as per requirements outlined in Section 2.1.2 of the *Standards and Guidelines*.

The reader is also referred to Section 4.0 below to ensure compliance with the *Ontario Heritage Act* as it may relate to this project.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In order to ensure compliance with the *Ontario Heritage Act*, the reader is advised of the following:

- 1) This report is submitted to the Minister of Tourism, Culture and Sport 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 Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- 2) 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 Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- 3) 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*.
- 4) 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.
- 5) 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.

5.0 LIMITATIONS AND CLOSURE

Past Recovery Archaeological Services Inc. has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied, is made.

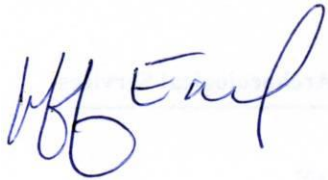
This report has been prepared for the specific site, design objective, developments and purpose prescribed in the client proposal and subsequent agreed upon changes to the contract. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sample and testing program may fail to detect all or certain archaeological resources. The sampling strategies in this study comply with those identified in the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (2011).

The documentation related to this archaeological assessment will be curated by Past Recovery Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to an approved and suitable repository can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture and Sport and any other legitimate interest group.

We trust that this report meets your current needs. If you have any questions of if we may be of further assistance, please do not hesitate to contact the undersigned.



Jeff Earl
Principal
Past Recovery Archaeological Services Inc.

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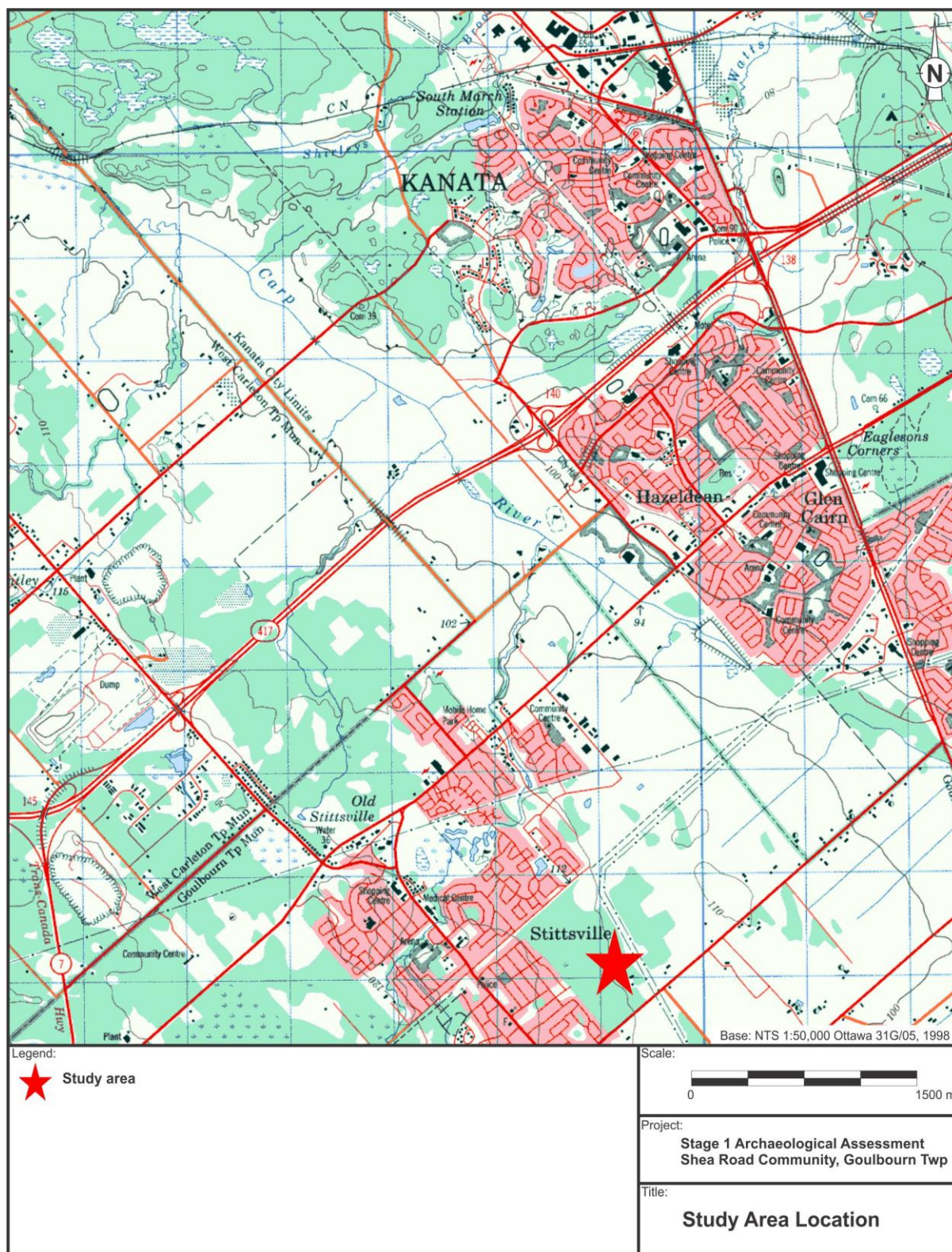
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7.0 MAPS



Map 1. Location of the study area.



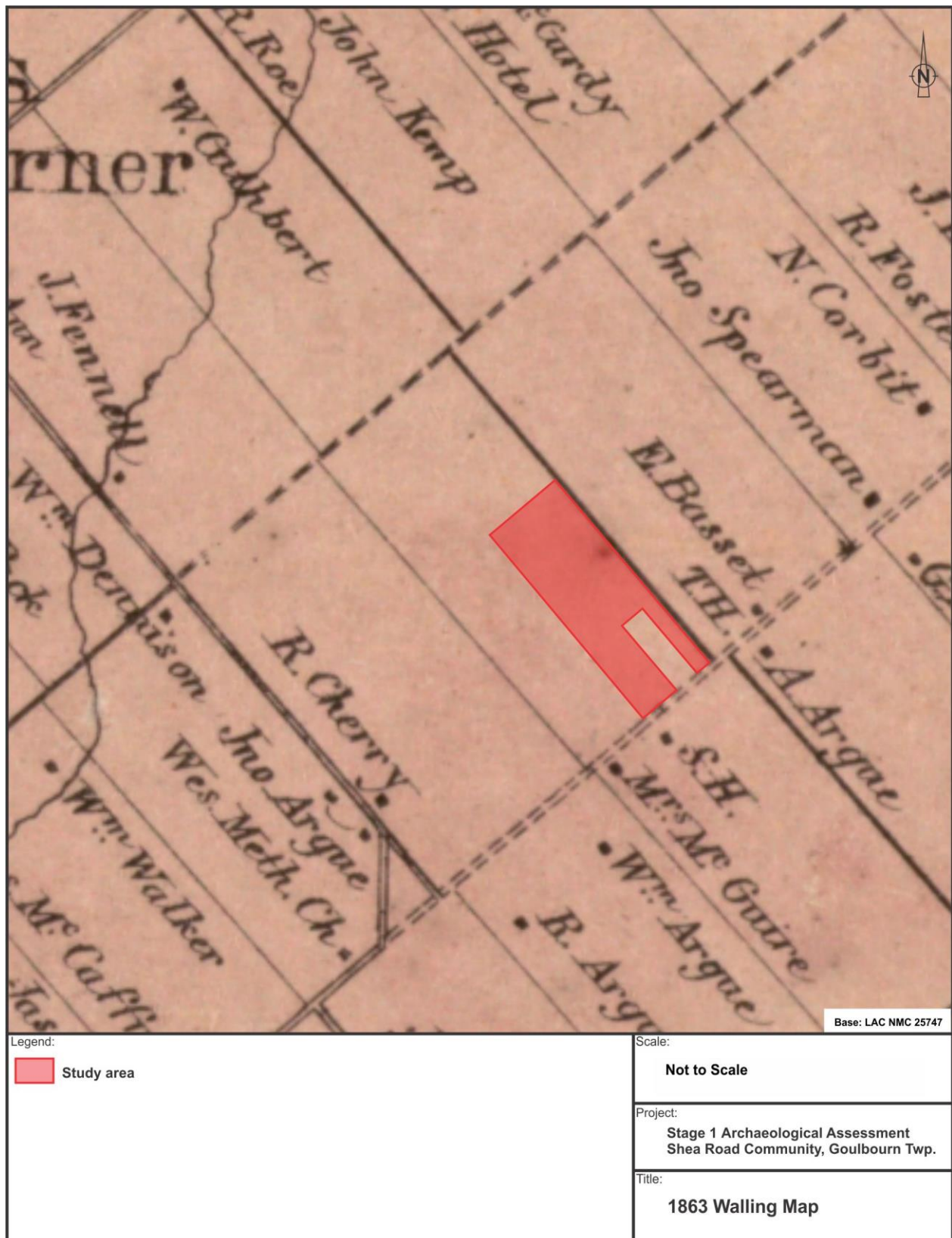
Map 2. Recent orthophotographic image showing the study area.

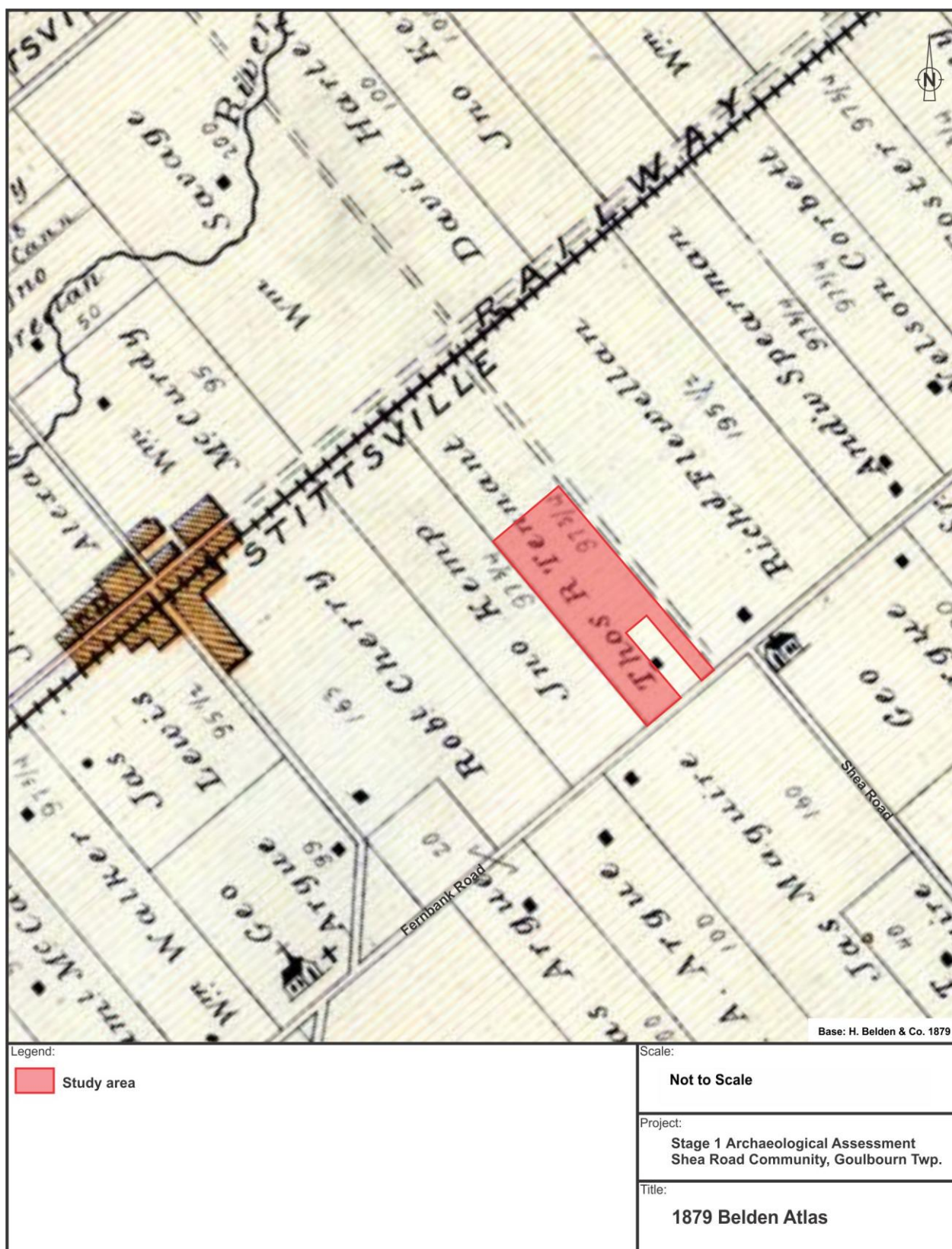




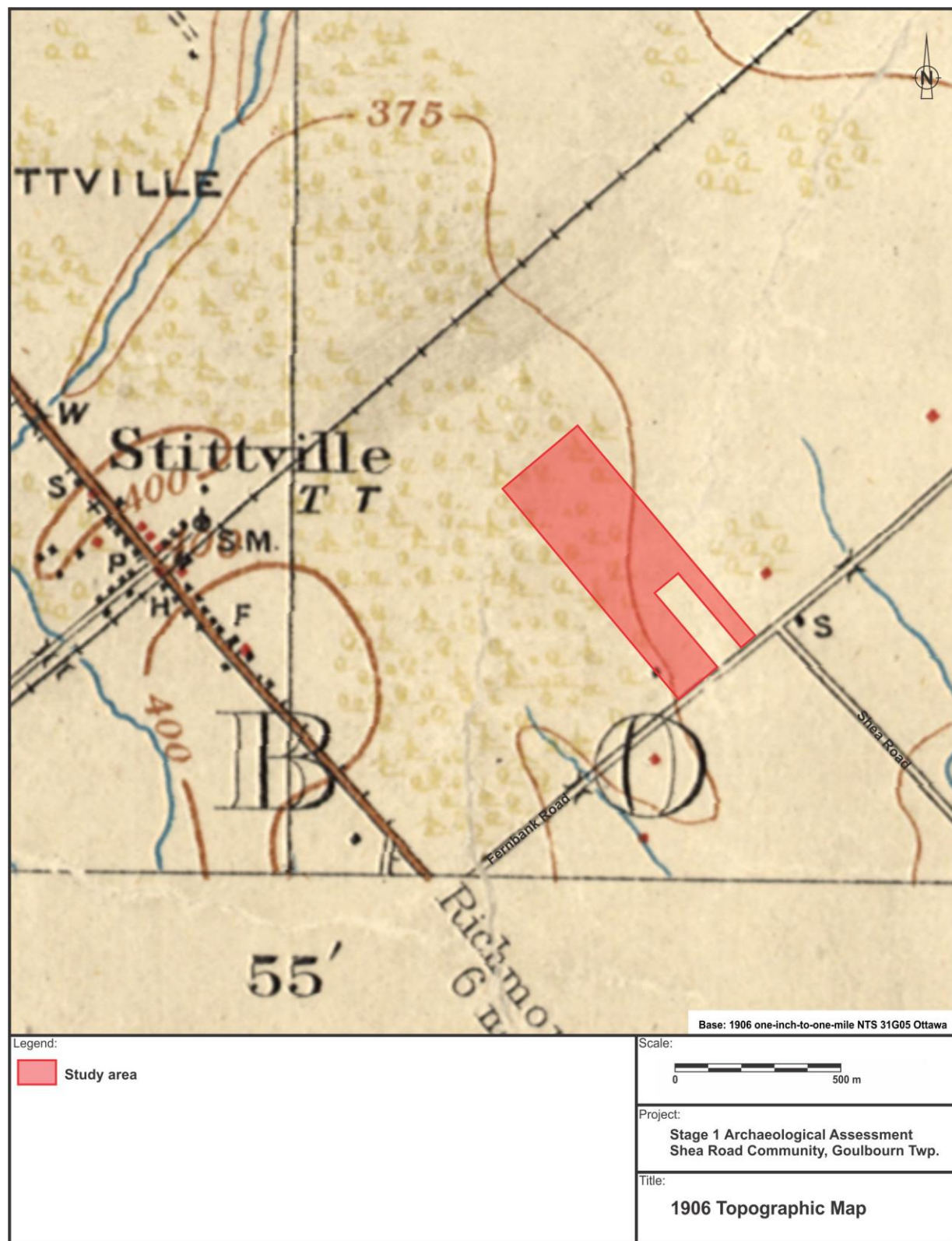
Map 4. Segment of a patent plan for Goulbourn Township showing the study area.⁵

⁵ The geo-referencing of historic maps is not always accurate owing to inconsistent mapping techniques. The placement of the study area on historic plans and maps should be considered approximate.

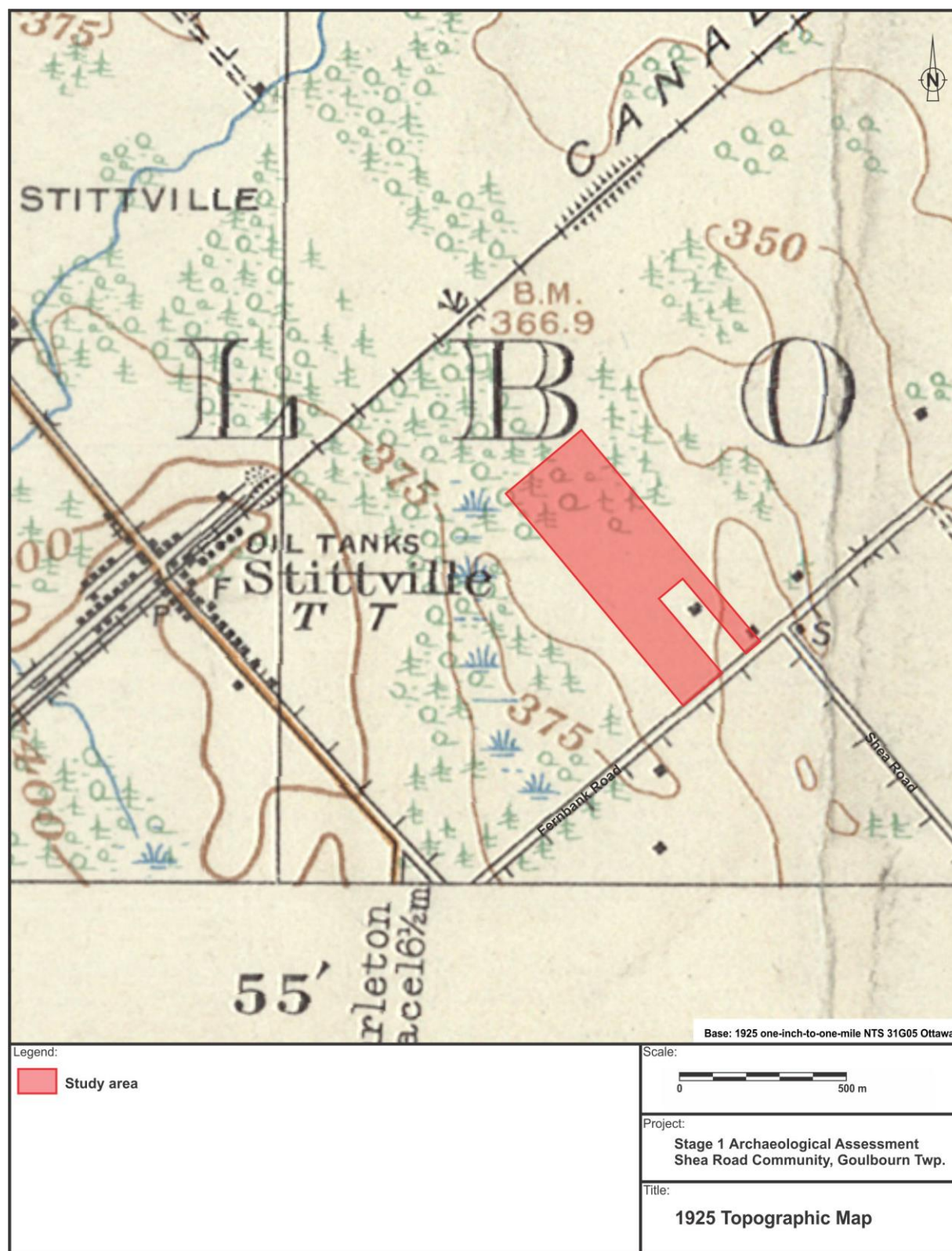




Map 6. Segment of the 1879 Belden map of Huntley Township showing the study area.



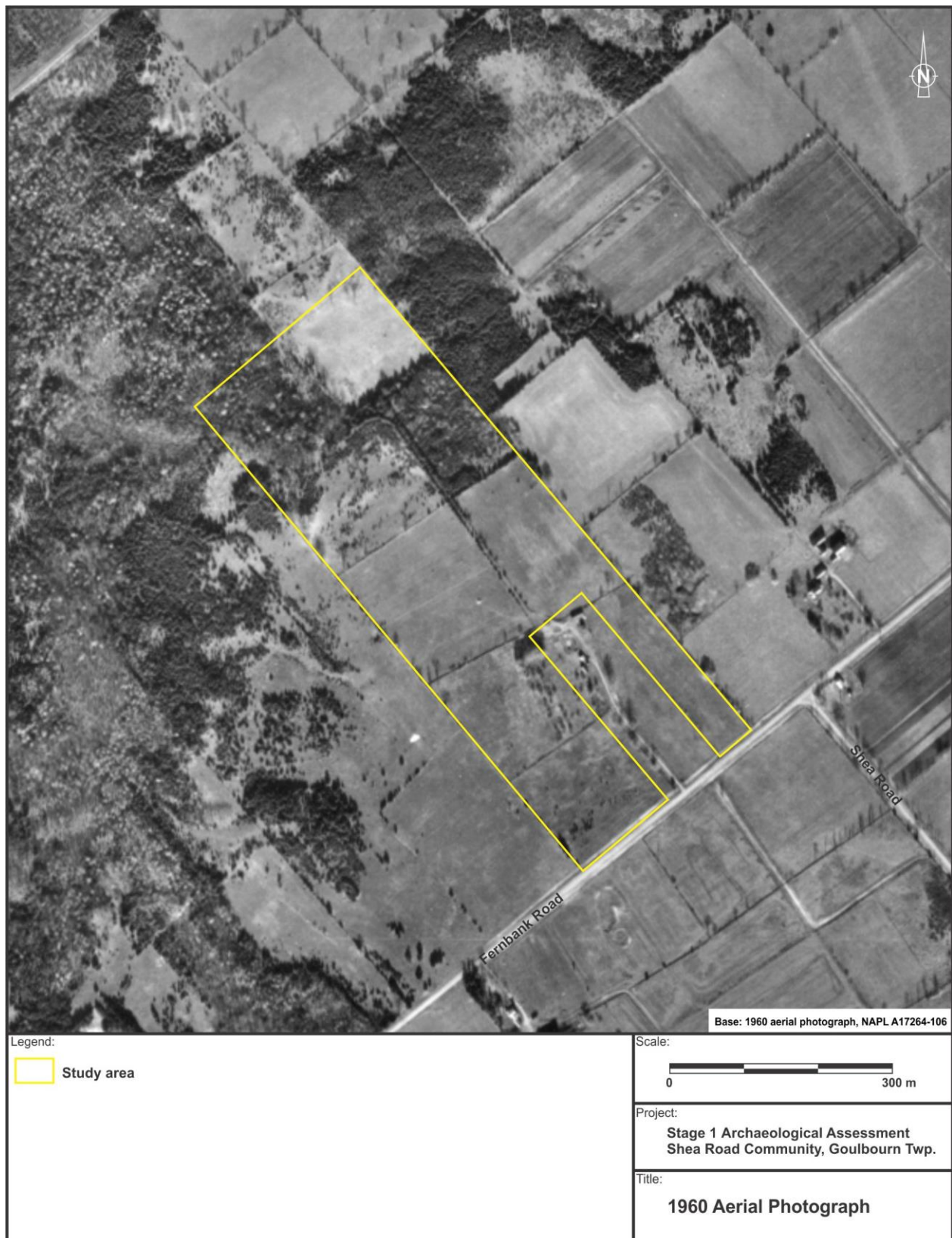
Map 7. Segment of the first edition one-inch-to-one-mile topographic map dating to 1906 showing the study area.



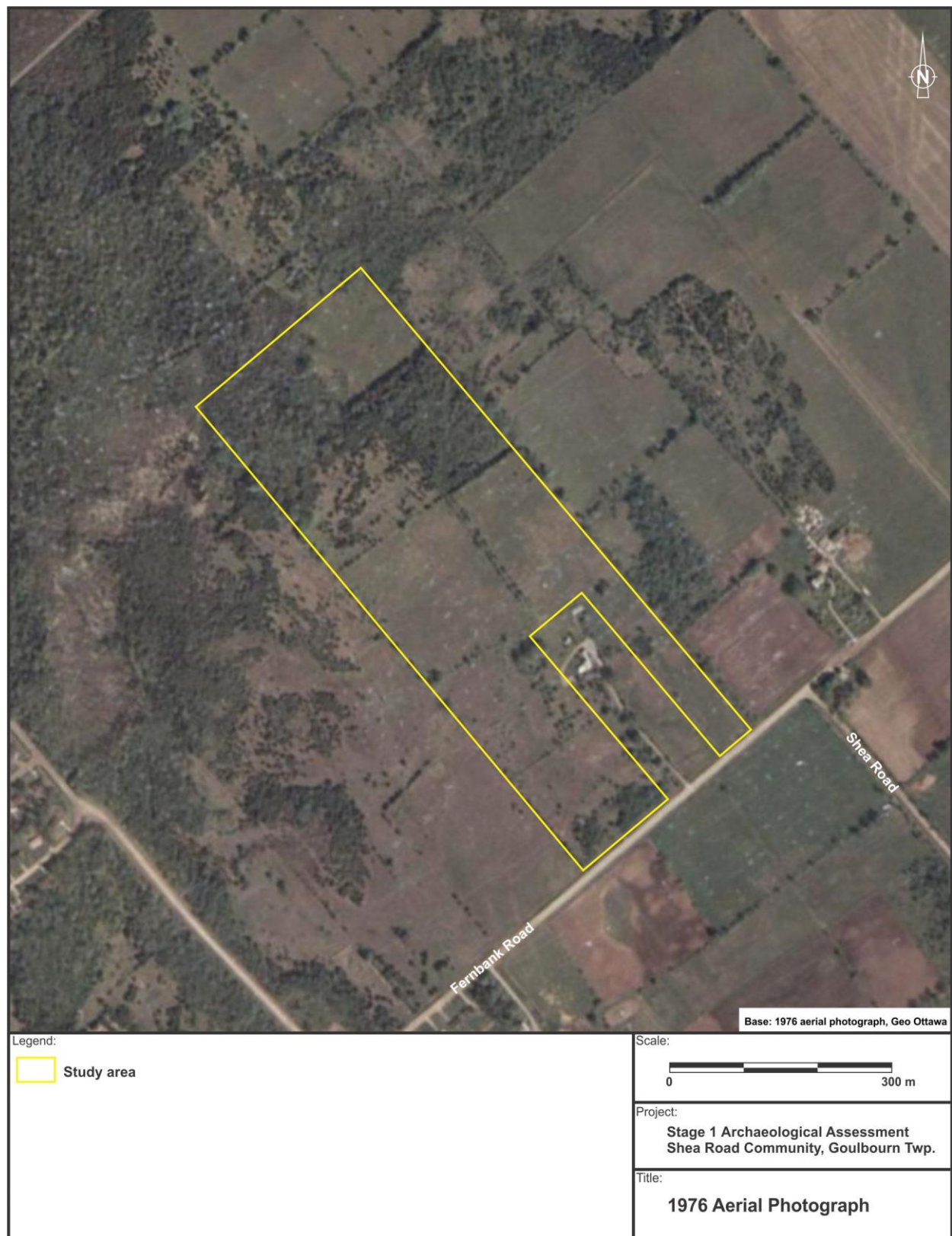
Map 8. Segment of the one-inch-to-one-mile topographic map dating to 1925 showing the study area.



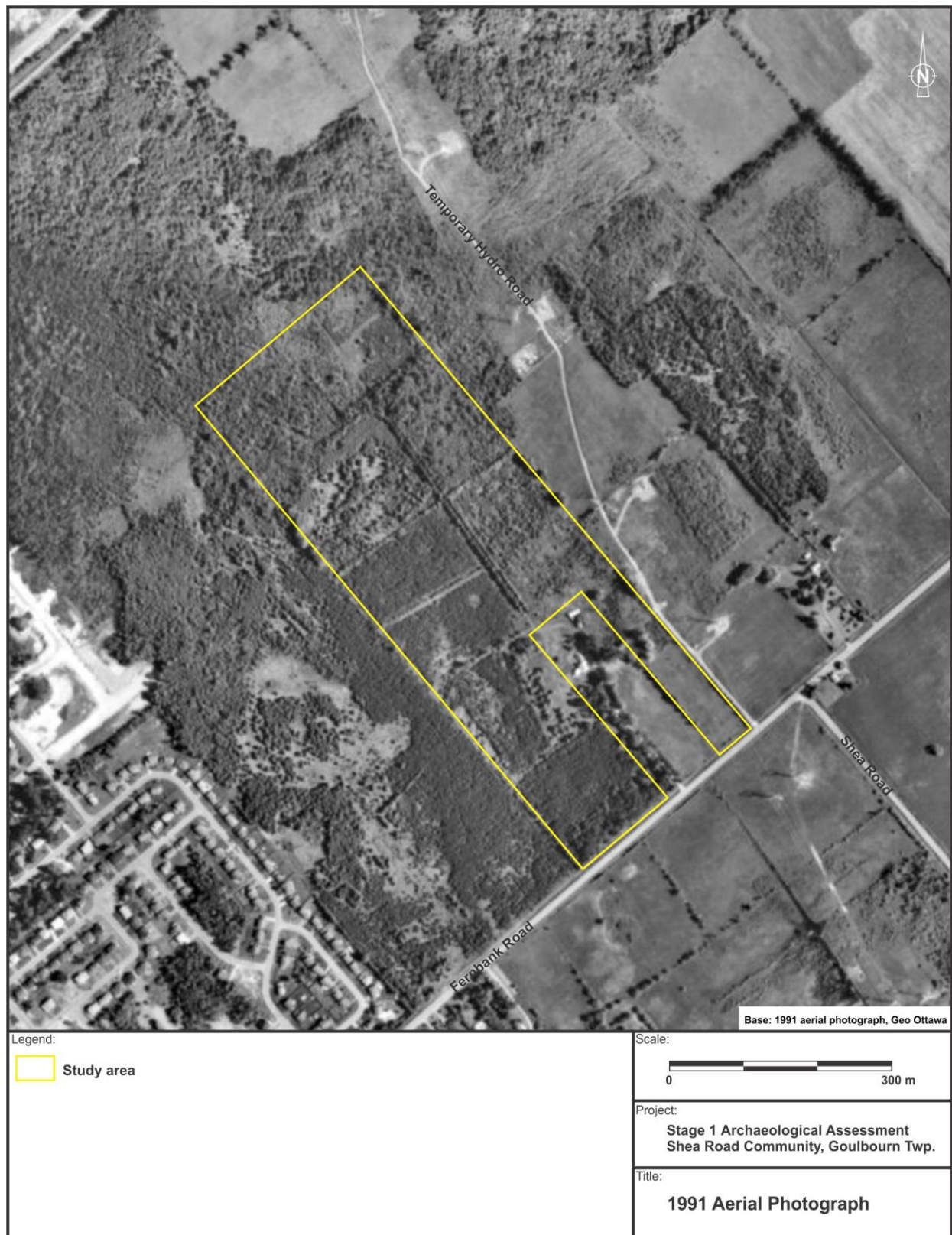
Map 9. Segment of the 1:50,000 topographic map dating to 1958 showing the study area.



Map 10. Segment of an aerial photograph dating to 1960 showing the study area.



Map 11. Segment of an aerial photograph dating to 1976 showing the study area.



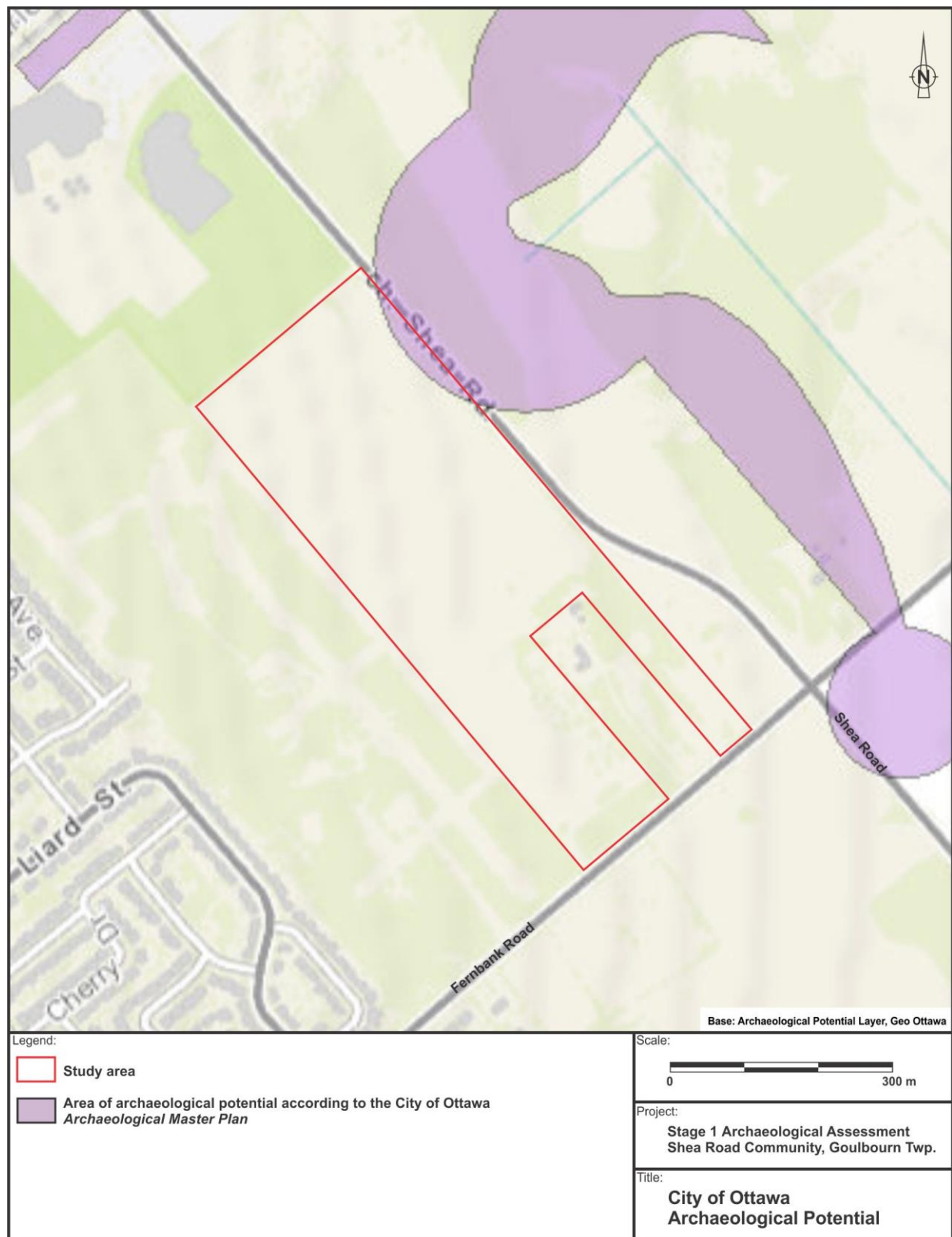
Map 12. Segment of an aerial photograph dating to 1991 showing the study area.



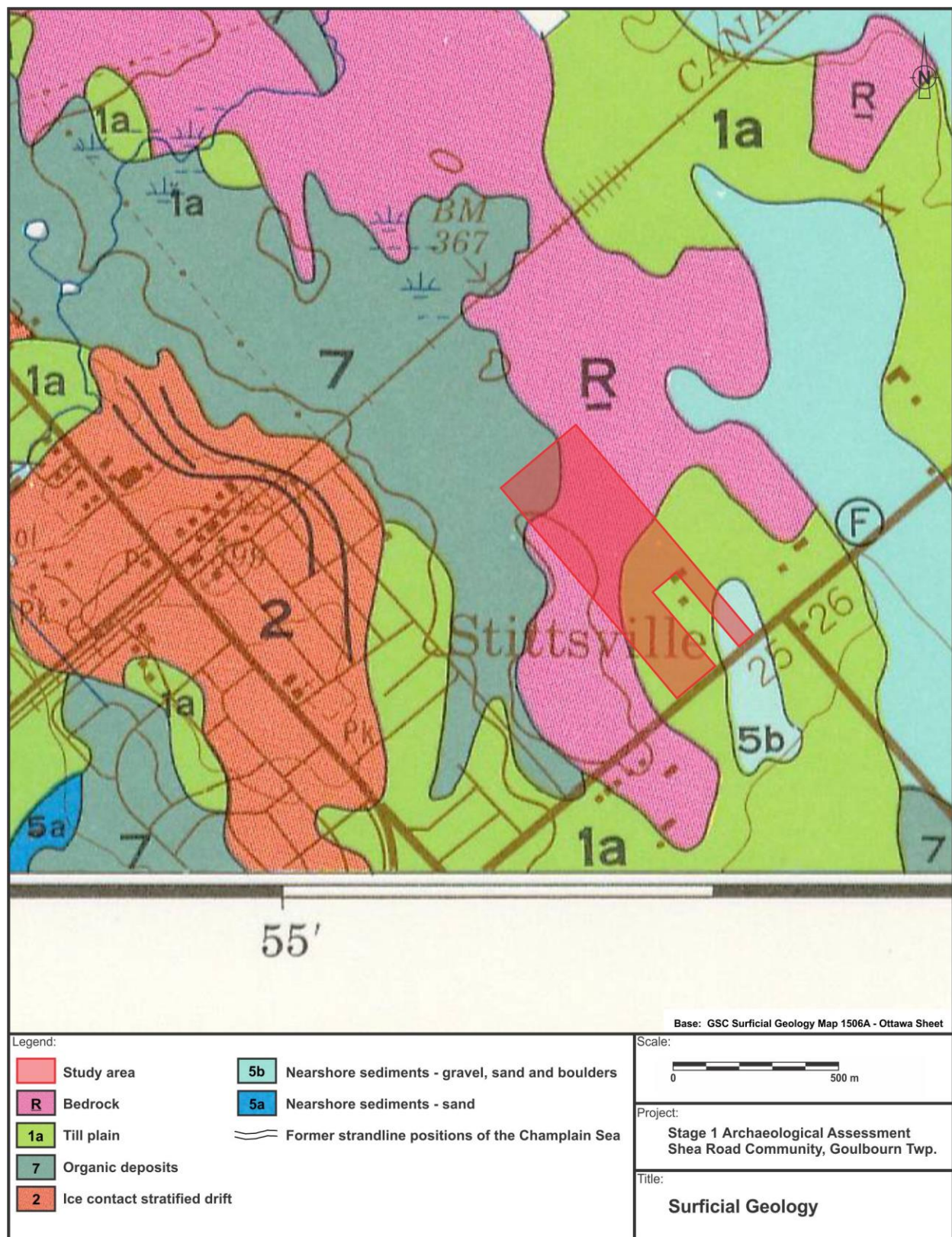
Map 13. Satellite imagery dating to 2005 showing the study area.



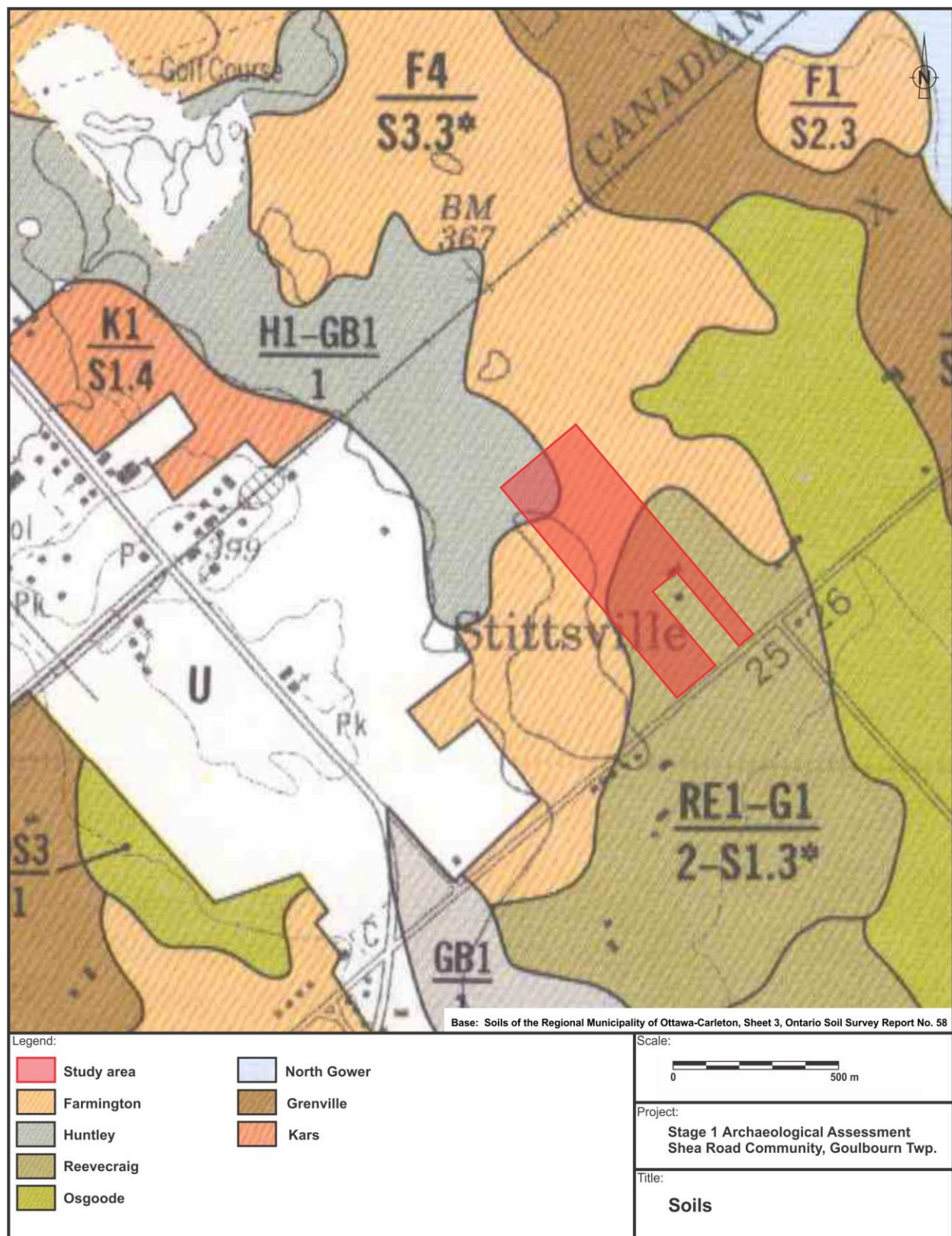
Map 14. Satellite imagery dating to 2008 showing the study area. Note the recently removed re-growth and bull-dozed surface.



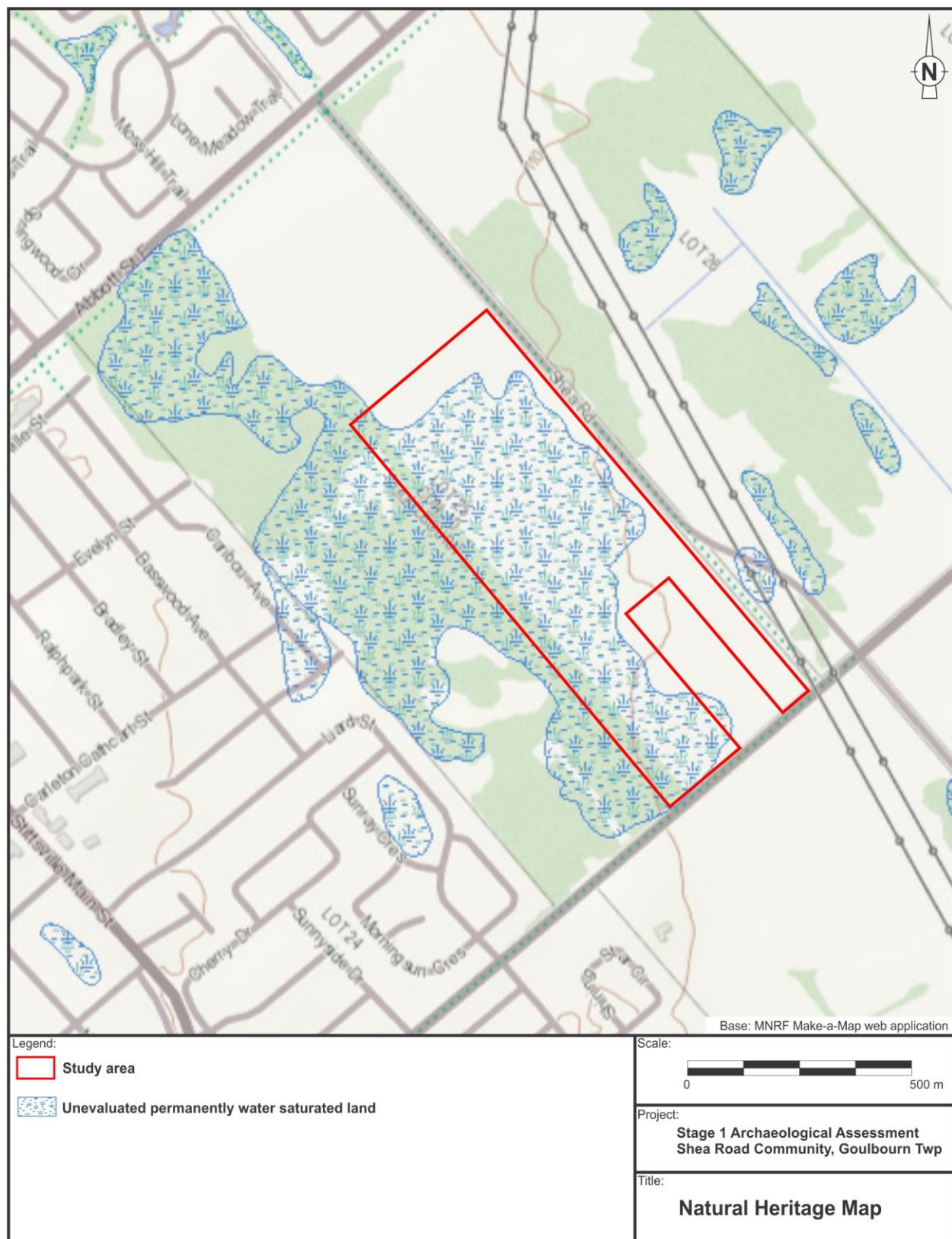
Map 15. Segment of the City of Ottawa's *Archaeological Master Plan* showing archaeological potential in the vicinity of the study area.



Map 16. Segment of the surficial geology map covering the study area.



Map 17. Segment of the soil survey map covering the study area.



Map 18. Segment of a natural heritage map showing the study area.



Map 19. Locations and orientations of all site visit photographs referenced in the body of this report.



Map 20. Recent image of the study area showing archaeological potential.

8.0 IMAGES



Image 1. The residence at No. 5957 Fernbank Road, facing east. (PR17-32D105) The central part of the building is brick and would have been the original farmhouse.



Image 2. The northern third of the study area showing recent regrowth in formerly stripped fields, facing northwest. (PR17-32D024)



Image 3. The northern third of the study area showing recent regrowth in formerly stripped fields, facing north. (PR17-32D027)



Image 4. The north end of the study area showing regrowth and the recently cleared northern boundary, facing southwest. (PR17-32D002)



Image 5. The north end of the study area showing regrowth and the recently cleared western boundary, facing southeast. (PR17-32D011) Note the wet soils.



Image 6. Regrowth in the northwest section of the study area showing wet soils, facing northeast. (PR17-32D019)



Image 7. Bull-dozed debris along a fence line in the northern third of the property with a recently scraped area to the rear, facing northeast. (PR17-32D045)



Image 8. The central part of the study area showing stripped and mounded topsoil and exposed subsoil or bedrock, facing east. (PR17-32D031)



Image 9. The central part of the study area showing stripped and mounded topsoil and exposed subsoil or bedrock, facing south. (PR17-32D043)



Image 10. The eastern half of the central part of the study area showing stripped topsoil and exposed bedrock, facing southeast. (PR17-32D049)



Image 11. The central part of the study area showing stripped and mounded topsoil, facing west. (PR17-32D061)



Image 12. The central part of the study area to the northwest of the severed farmhouse property showing stripped and mounded topsoil, facing southwest. (PR17-32D063)



Image 13. The central part of the study area showing stripped and mounded topsoil, facing northwest. (PR17-32D107)



Image 14. Typical exposed bedrock in the central part of the study area, facing south. (PR17-32D053)



Image 15. Typical exposed subsoil in the central part of the study area, facing northeast.
(PR17-32D057)



Image 16. The southern part of the study area showing the berms created c. 2007 and exposed subsoil, facing west. (PR17-32D095)



Image 17. The southern part of the study area showing the berms created c. 2007 and exposed subsoil, facing northeast. (PR17-32D091)



Image 18. The southern part of the study area showing the berms created c. 2007 and exposed subsoil, facing southeast. (PR17-32D097)



Image 19. The recently re-cleared area at the south end of the study area along Fernbank Road, facing north. (PR17-32D087)



Image 20. Section of the south end of the study area adjacent to the residence at No. 5957 Fernbank Road not stripped c. 2007, facing northwest. (PR17-32D101) Note the larger trees and the uneven ground.



Image 21. Section of the south end of the study area adjacent to the residence at No. 5957 Fernbank Road not stripped c. 2007, facing southeast. (PR17-32D109) Note the larger trees and the uneven ground.



Image 22. Pine plantation in the northwest end of Block 165, facing southwest. (PR17-32D069) Note the mounded soil and poison ivy.



Image 23. Southern section of Block 165 from the former Shea Road showing mixed forest regrowth a permanently wet area, facing west. (PR17-32D077)



Image 24. Southern section of Block 165 showing a permanently wet area, facing southwest. (PR17-32D080)

APPENDIX 1: Photographic Catalogue

Camera: Panasonic Lumix DMC-TS3, LG G4

Catalogue No.	Description	Dir.
PR17-32D001	The northern edge of the property	SW
PR17-32D002	The northern edge of the property	SW
PR17-32D003	The northern edge of the property	NE
PR17-32D004	The northern edge of the property	NE
PR17-32D005	The northern section of the property showing recent regrowth	SE
PR17-32D006	The northern section of the property showing recent regrowth	SE
PR17-32D007	Typical regrowth in the northern part of the property	S
PR17-32D008	Typical regrowth in the northern part of the property	S
PR17-32D009	Former field boundary at the north end of the property	SW
PR17-32D010	Former field boundary at the north end of the property	SW
PR17-32D011	The north end of the property from the western corner	SE
PR17-32D012	The north end of the property from the western corner	SE
PR17-32D013	The north end of the property from the western corner	E
PR17-32D014	The north end of the property from the western corner	E
PR17-32D015	The north end of the property from the western corner	NE
PR17-32D016	The north end of the property from the western corner	NE
PR17-32D017	Wet conditions in the northern part of the property	E
PR17-32D018	Wet conditions in the northern part of the property	E
PR17-32D019	Wet conditions and regrowth in the northern part of the property	NE
PR17-32D020	Wet conditions and regrowth in the northern part of the property	NE
PR17-32D021	Piled topsoil towards the centre of the property along the west boundary	SE
PR17-32D022	Piled topsoil towards the centre of the property along the west boundary	SE
PR17-32D023	Regrowth in the northern part of the property from the piled topsoil	NW
PR17-32D024	Regrowth in the northern part of the property from the piled topsoil	NW
PR17-32D025	Stripped central part of the property from the piled topsoil	E
PR17-32D026	Stripped central part of the property from the piled topsoil	E
PR17-32D027	Regrowth in the northern part of the property from the piled topsoil	N
PR17-32D028	Regrowth in the northern part of the property from the piled topsoil	N
PR17-32D029	Stripped central part of the property from the piled topsoil	SE
PR17-32D030	Stripped central part of the property from the piled topsoil	SE
PR17-32D031	Stripped central part of the property from the piled topsoil	E
PR17-32D032	Stripped central part of the property from the piled topsoil	E
PR17-32D033	Stripped central part of the property	SE
PR17-32D034	Stripped central part of the property	SE
PR17-32D035	Regrowth in the northern part of the property	N
PR17-32D036	Regrowth in the northern part of the property	N
PR17-32D037	Stripped central part of the property	S

Catalogue No.	Description	Dir.
PR17-32D038	Stripped central part of the property	S
PR17-32D039	Typical rutted and stripped soil in the northern part of the property	N
PR17-32D040	Typical rutted and stripped soil in the northern part of the property	N
PR17-32D041	Regrowth in the northeast quadrant of the property	N
PR17-32D042	Regrowth in the northeast quadrant of the property	N
PR17-32D043	Stripped central part of the property	S
PR17-32D044	Stripped central part of the property	S
PR17-32D045	Field boundary towards the centre of the property	NE
PR17-32D046	Field boundary towards the centre of the property	NE
PR17-32D047	Regrowth in the northeast quadrant of the property	NW
PR17-32D048	Regrowth in the northeast quadrant of the property	NW
PR17-32D049	Stripped east half of the central part of the property	SE
PR17-32D050	Stripped east half of the central part of the property	SE
PR17-32D051	Stripped east half of the central part of the property	SE
PR17-32D052	Stripped east half of the central part of the property	SE
PR17-32D053	Typical ground surface in the east half of the central part of the property	S
PR17-32D054	Typical ground surface in the east half of the central part of the property	S
PR17-32D055	Stripped east half of the central part of the property	NW
PR17-32D056	Stripped east half of the central part of the property	NW
PR17-32D057	Typical ground surface in the east half of the central part of the property	NE
PR17-32D058	Typical ground surface in the east half of the central part of the property	NE
PR17-32D059	Stripped east half of the central part of the property	NW
PR17-32D060	Stripped east half of the central part of the property	NW
PR17-32D061	Stripped central part of the property	W
PR17-32D062	Stripped central part of the property	W
PR17-32D063	Stripped central part of the property	SW
PR17-32D064	Stripped central part of the property	SW
PR17-32D065	Pine plantation at the north end of Block 165	SE
PR17-32D066	Pine plantation at the north end of Block 165	SE
PR17-32D067	Disturbance and poison ivy within Block 165	S
PR17-32D068	Disturbance and poison ivy within Block 165	S
PR17-32D069	Disturbance and poison ivy in the pine plantation within Block 165	SW
PR17-32D070	Disturbance and poison ivy in the pine plantation within Block 165	SW
PR17-32D071	Pine plantation within Block 165	SE
PR17-32D072	Pine plantation within Block 165	SE
PR17-32D073	Block 165 from the abandoned section of Shea Road	S
PR17-32D074	Block 165 from the abandoned section of Shea Road	S
PR17-32D075	Wet area within Block 165 next to the abandoned section of Shea Road	W
PR17-32D076	Wet area within Block 165 next to the abandoned section of Shea Road	W
PR17-32D077	Wet area at the south end of Block 165 from the abandoned section of Shea Road	W

Catalogue No.	Description	Dir.
PR17-32D078	Wet area at the south end of Block 165 from the abandoned section of Shea Road	W
PR17-32D079	Wet area at the south end of Block 165 from the abandoned section of Shea Road	SW
PR17-32D080	Wet area at the south end of Block 165 from the abandoned section of Shea Road	SW
PR17-32D081	Stripped area at the south end of the property	NW
PR17-32D082	Stripped area at the south end of the property	NW
PR17-32D083	Stripped area at the south end of the property	W
PR17-32D084	Stripped area at the south end of the property	W
PR17-32D085	Stripped area at the south end of the property	NW
PR17-32D086	Stripped area at the south end of the property	NW
PR17-32D087	Stripped area at the south end of the property	N
PR17-32D088	Stripped area at the south end of the property	N
PR17-32D089	Stripped area at the south end of the property	NE
PR17-32D090	Stripped area at the south end of the property	NE
PR17-32D091	Stripped area at the south end of the property showing subsoil	NE
PR17-32D092	Stripped area at the south end of the property showing subsoil	NE
PR17-32D093	Stripped area at the south end of the property showing subsoil	SW
PR17-32D094	Stripped area at the south end of the property showing subsoil	SW
PR17-32D095	Disturbance in the southern part of the property including former field boundary	W
PR17-32D096	Disturbance in the southern part of the property including former field boundary	W
PR17-32D097	Disturbance in the southern part of the property	SE
PR17-32D098	Disturbance in the southern part of the property	SE
PR17-32D099	Disturbance and regrowth in the southern part of the property	NW
PR17-32D100	Disturbance and regrowth in the southern part of the property	NW
PR17-32D101	Regrowth in the southern part of the property	NW
PR17-32D102	Regrowth in the southern part of the property	NW
PR17-32D103	The residence at 5957 Fernbank Road from the front	N
PR17-32D104	The residence at 5957 Fernbank Road from the front	N
PR17-32D105	The residence at 5957 Fernbank Road from the rear	E
PR17-32D106	The residence at 5957 Fernbank Road from the rear	E
PR17-32D107	Stripped central part of the property	NW
PR17-32D108	Stripped central part of the property	NW
PR17-32D109	Regrowth in the southern part of the property	SE
PR17-32D110	Regrowth in the southern part of the property	SE
PR17-32D111	Stripped central part of the property	SW
PR17-32D112	Stripped central part of the property	SW
PR17-32D113	Stripped central part of the property	NW
PR17-32D114	Stripped central part of the property	NW

APPENDIX 2: Glossary of Archaeological Terms

Archaeology:

The study of human past, both prehistoric and historic, by excavation of cultural material.

Archaeological Sites:

The physical remains of any building, structure, cultural feature, object, human event or activity which, because of the passage of time, are on or below the surface of the land or water.

Archaic:

A term used by archaeologists to designate a distinctive cultural period dating between 8000 and 1000 B.C. in eastern North America. The period is divided into Early (8000 to 6000 B.C.), Middle (6000 to 2500 B.C.) and Late (2500 to 1000 B.C.). It is characterized by hunting, gathering and fishing.

Artifact:

An object manufactured, modified or used by humans.

B.P.:

Before Present. Often used for archaeological dates instead of B.C. or A.D. Present is taken to be 1951, the date from which radiocarbon assays are calculated.

Backdirt:

The soil excavated from an archaeological site. It is usually removed by shovel or trowel and then screened to ensure maximum recovery of artifacts.

Chert:

A type of silica rich stone often used for making chipped stone tools. A number of chert sources are known from southern Ontario. These sources include outcrops and nodules.

Contact Period:

The period of initial contact between Native and European populations. In Ontario, this generally corresponds to the seventeenth and eighteen centuries depending on the specific area.

Cultural Resource / Heritage Resource:

Any resource (archaeological, historical, architectural, artifactual, archival) that pertains to the development of our cultural past.

Cultural Heritage Landscapes:

Cultural heritage landscapes are groups of features made by people. The arrangement of features illustrate noteworthy relationships between people and their surrounding environment. They can provide information necessary to preserve, interpret or reinforce the understanding of important historical settings and changes to past patterns of land use. Cultural landscapes include neighbourhoods, townscape and farmscapes.

Diagnostic:

An artifact, decorative technique or feature that is distinctive of a particular culture or time period.

Disturbed:

In an archaeological context, this term is used when the cultural deposit of a certain time period has been intruded upon by a later occupation.

Excavation:

The uncovering or extraction of cultural remains by digging.

Feature:

This term is used to designate modifications to the physical environment by human activity. Archaeological features include the remains of buildings or walls, storage pits, hearths, post moulds and artifact concentrations.

Flake:

A thin piece of stone (usually chert, chalcedony, etc.) detached during the manufacture of a chipped stone tool. A flake can also be modified into another artifact form such as a scraper.

Fluted:

A lanceolate shaped projectile point with a central channel extending from the base approximately one third of the way up the blade. One of the most diagnostic Palaeo-Indian artifacts.

Historic:

Period of written history. In Ontario, the historic period begins with European settlement.

Lithic:

Stone. Lithic artifacts would include projectile points, scrapers, ground stone adzes, gun flints, etc.

Lot:

The smallest provenience designation used to locate an artifact or feature.

Midden:

An archaeological term for a garbage dump.

Mitigation:

To reduce the severity of development impact on an archaeological or other heritage resource through preservation or excavation. The process for minimizing the adverse impacts of an undertaking on identified cultural heritage resources within an affected area of a development project.

Multicomponent:

An archaeological site which has seen repeated occupation over a period of time. Ideally, each occupation layer is separated by a sterile soil deposit that accumulated during a period when the site was not occupied. In other cases, later occupations will be directly on top of earlier ones or will even intrude upon them.

Operation:

The primary division of an archaeological site serving as part of the provenience system. The operation usually represents a culturally or geographically significant unit within the site area.

Palaeo-Indian:

The earliest human occupation of Ontario designated by archaeologists. The period dates between 9000 and 8000 B.C. and is characterized by small mobile groups of hunter-gatherers.

Prehistoric:

Before written history. In Ontario, this term is used for the period of Native occupation up until the first contact with European groups.

Profile:

The profile is the soil stratigraphy that shows up in the cross-section of an archaeological excavation. Profiles are important in understanding the relationship between different occupations of a site.

Projectile Point:

A point used to tip a projectile such as an arrow, spear or harpoon. Projectile points may be made of stone (either chipped or ground), bone, ivory, antler or metal.

Pvenience:

Place of origin. In archaeology this refers to the location where an artifact or feature was found. This may be a general location or a very specific horizontal and vertical point.

Salvage:

To rescue an archaeological site or heritage resource from development impact through excavation or recording.

Stratigraphy:

The sequence of layers in an archaeological site. The stratigraphy usually includes natural soil deposits and cultural deposits.

Sub-operation:

A division of an operation unit in the provenience system.

Survey:

To examine the extent and nature of a potential site area. Survey may include surface examination of ploughed or eroded areas and sub-surface testing.

Test Pit:

A small pit, usually excavated by hand, used to determine the stratigraphy and presence of cultural material. Test pits are often used to survey a property and are usually spaced on a grid system.

Woodland:

The most recent major division in the prehistoric sequence of Ontario. The Woodland period dates from 1000 B.C. to A.D. 1550. The period is characterized by the introduction of ceramics and the beginning of agriculture in southern Ontario. The period is further divided into Early (1000 B.C. to A.D. 0), Middle (A.D. 0 to A.D. 900) and Late (A.D. 900 to A.D.1550).