APPENDIX D

Stage 1 Archaeological Assessment

GANNETT FLEMING

Stage 1 Archaeological Assessment Stevenson Road North (Part of Lot 14 and 15 in Concession 3, 4 and 5, Geographical Township Whitby, County of Ontario) City of Oshawa Regional Municipality of Durham

Revised Report

Prepared for:

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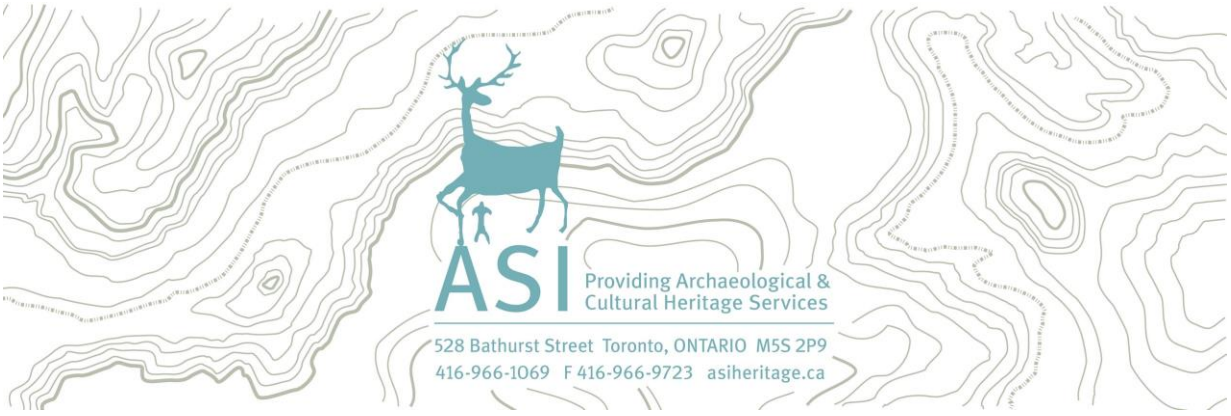

Executive Summary

Archaeological Services Inc. was contracted by Gannett Fleming Inc to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Stevenson Road North project. This project involves upgrades to the Stevenson Road North corridor from Taunton Road West to Conlin Road West.

The Stage 1 background study determined four previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Study Area exhibit archaeological potential and will require further archaeological assessment.

The following recommendations are made:

1. Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit and pedestrian survey at five metre intervals, where appropriate. Stage 2 is required prior to any proposed construction activities on these lands;
2. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, slopes in excess of 20 degrees or being previously assessed. These lands do not require further archaeological assessment; and,
3. Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

Project Personnel

- **Senior Project Manager**: Lisa Merritt, MSc. (P094) Partner, Director, Environmental Assessment Division
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Table of Contents

List of Tables

List of Images

List of Figures

1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Gannett Fleming Inc to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Stevenson Road North Environmental Assessment. This project involves upgrades to the Stevenson Road North corridor from Taunton Road West to Conlin Road West (Figure 1).

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (Ontario Heritage Act, R.S.O. c. O.18, 1990, as amended in 2019) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Tourism, Culture and Sport (MTCS 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act, RSO* (Environmental Assessment Act, R.S.O., 1990 as amended 2020) and regulations made under the Act, and are therefore subject to all associated legislation.

This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (Municipal Class Environmental Assessment, 2000, as amended 2015).

The *Archaeological Potential Model for Durham Region* (Archaeological Services Inc., 2013) was also consulted.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment and property inspection was granted by Gannett Fleming on September 28, 2022.

1.1.1 Treaties

The Study Area is within the Johnson-Butler Purchases and in the traditional territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations, including the Mississaugas of Alderville First

Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation and the Chippewas of Beausoleil First Nation, Georgina Island First Nation and the Rama First Nation (Williams Treaties First Nations, 2017).

The purpose of the Johnson-Butler Purchases of 1787/1788 was to acquire from the Mississaugas the Carrying Place Trail and lands along the north shore of Lake Ontario from the Trent River to Etobicoke Creek.

As part of the Johnson-Butler Purchases, the British signed a treaty, sometimes referred to as the "Gunshot Treaty" with the Mississaugas in 1787 covering the north shore of Lake Ontario, beginning at the eastern boundary of the Toronto Purchase and continuing east to the Bay of Quinte, where it meets the Crawford Purchase. It was referred to as the "Gunshot Treaty" because it covered the land as far back from the lake as a person could hear a gunshot. Compensation for the land apparently included "approximately £2,000 and goods such as muskets, ammunition, tobacco, laced hats and enough red cloth for 12 coats" (Surtees, 1984, pp. 37–45). First discussions about acquiring this land are said to have come about while the land ceded in the Toronto Purchase of 1787 was being surveyed and paid for (Surtees, 1984, pp. 37–45). During this meeting with the Mississaugas, Sir John Johnson and Colonel John Butler proposed the purchase of lands east of the Toronto Purchase (Fullerton & Mississaugas of the Credit First Nation, 2015). However, descriptions of the treaty differ between the British and Mississaugas, including the depth of the boundaries: "Rice Lake and Lake Simcoe, located about 13 miles and 48 miles north of Lake Ontario, respectively, were not mentioned as landmarks in the First Nations' description of the lands to be ceded. Additionally, original descriptions provided by the Chiefs of Rice Lake indicate a maximum depth of ten miles, versus an average of 15-16 miles in Colonel Butler's description" (Fullerton & Mississaugas of the Credit First Nation, 2015).

However, records of the acquisition were not clear regarding the extent of lands agreed upon (Surtees, 1984, pp. 37–45). To clarify this, in October and November of 1923, the governments of Canada and Ontario, chaired by A.S. Williams, signed treaties with the Chippewa and Michi Saagiig for three large tracts of land in central Ontario and the northern shore of Lake Ontario, the last

substantial portion of land in southern Ontario that had not yet been ceded to the government (Crown-Indigenous Relations and Northern Affairs, 2013).

The Williams Treaties were signed on October 31 and November 15, 1923, by representatives of the Mississaugas of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation and the Chippewas of Beausoleil First Nation, Georgina Island First Nation and the Rama First Nation. The purpose of the treaties was to address lands that had not been surrendered through previous treaties and no negotiations preceded the signing of the Williams Treaties in 1923, with a commission established by the Federal and Provincial governments led by Treaty Commissioner A. S. Williams. Through the Williams Treaties, the Crown received three tracts of land occupying approximately 52,000 square kilometres of land. The territory covered by the Williams Treaties stretched from the northern shore of Lake Ontario between Trent River and the Don River to Lake Simcoe and the eastern shore of Georgian Bay to the French River and Lake Nipissing and was bounded to the north and east by the Ottawa River. Specifically, the Williams Treaties include lands originally covered by the John Collins Purchase (1785), the Johnson-Butler Purchase (1787), the Rice Lake Purchase (Treaty #20 – 1818), and the Robinson-Huron Treaty (Treaty #61 – 1850). In exchange, the signing nations received a one-time payment of $25 for each band member as well as $233,425.00 to be divided amongst the four Mississauga nations and $233,375.00 to be divided amongst the three Chippewa nations. However, records of the acquisition were not clear on the extent of lands agreed upon (Surtees, 1984, pp. 37–45).

However, the seven signatory nations claimed that the original terms of the treaty were not honoured when it was written by the Crown, which included the right to fish and hunt within the treaty lands and did not include the islands along the Trent River (Surtees, 1986; Williams Treaties First Nations, 2017). In 1992, the seven Williams Treaties First Nations filed a lawsuit against the federal government — Alderville Indian Band et al v. Her Majesty the Queen et al — seeking compensation for the 1923 land surrenders and harvesting rights. This case went to trial in 2012 and in September 2018 the Federal and Provincial governments announced that they had successfully reached a settlement with the seven member nations. The settlement includes financial compensation of $1.11 billion to be divided amongst the nations as well as an entitlement for each First Nation to add up to 11,000 acres to their reserve lands and the

recognition by the Crown of the First Nation's Treaty rights to harvest on Crown lands within the treaty territories (Government of Canada, 2018).

1.2 Historical Context

1.2.1 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Brown, 1995, p. 13; Ellis et al., 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier

phytolithic evidence for maize in central New York State by 2,300 B.P. – it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By 1600 C.E., the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) led to the dispersal of the Huron-Wendat. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

1.2.2 Post-Contact Settlement

Historically, the Study Area is located in the Geographical Whitby Township, County of Ontario, in Lots 14 and 15 of Concessions 3, 4 and 5.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Whitby Township

Whitby Township, when first laid out in the 1790s, was designated Township 9 and the name was changed shortly thereafter to Norwich. The first survey of this township was made in 1791 and the first settler arrived in 1794 (Armstrong,

1985). The first settler was said to have been Benjamin Wilson, a Loyalist from Vermont, who settled along the lakeshore east of Oshawa (Farewell, 1907). Whitby was quickly settled by a mixture of Loyalists, disbanded troops, and emigrants from the United States, the United Kingdom, and Ireland. Two major settlements were soon established in the southern half of the township, Whitby and Oshawa. These communities were advantageously located where watersheds (such as that of Lynde Creek) were crossed by the Kingston Road. Whitby further benefited from its harbour and from the construction of the Grand Trunk Railway in the 1850s. On January 1, 1968 the township was erected into a town, and on January 1, 1974, the town of Whitby became part of the Regional Municipality of Durham (Mika and Mika 1983:279).

City of Oshawa

The City of Oshawa was one of two major settlements in the Township of Whitby. It was first known as Skae's Corners, named after popular merchant Edward Skae. The name was later changed when local trader Moddy Farewell invited two Mississauga friends from Rice Lake to propose a more original name around 1842. They suggested ajawi, signifying 'crossing to the other side' or 'shore of a river or lake', and the name Oshawa evolved from it (Rayburn, 1997). Edward Skae went on to become the first postmaster on October 6, 1842.

1.2.3 Map Review

The 1860 *Map of the County of Ontario* (Tremaine, 1860), the 1877 *Illustrated Historical Atlas of Ontario County* (Miles & Co., 1877), and the 1930 and 1994 topographic maps of Oshawa (Department of Energy, Mines and Resources, 1994; Department of National Defence, 1930) were examined to determine the presence of historic features within the Study Area during the nineteenth and twentieth centuries (Figures 2-5).

The 1860 and 1877 maps indicate that Stevenson Road North is an early historic transportation route and show that Oshawa Creek cuts through the most northern section of the Study Area. The 1860 map shows no buildings or structures within the Study Area while the 1877 map shows one house on the northwest side of Stevenson Road. The Stevenson Road North Study Area is

shown to have been situated in a rural, agricultural context. The 1930 topographic map shows more houses had been built along Stevenson Road and that the Canadian National Railway line cuts through the Study Area in a west to east direction north of Taunton Road West. The railway line connects with the north Oshawa Railway Station, east of Stevenson Road. The 1994 topographic map of Oshawa indicates that the rails of the Canadian National Railway are no longer in service and that a gas pipeline has been developed and placed within the same location and with the same orientation and alignment as the former rail tracks. The 1994 map also shows that west of the Stevenson Road North Study Area there is minimal infrastructure and an abundance of green space with low and wet areas. Durham College is located northeast of the Study Area. Cedar Valley Conservation Area is to the east. Directly south of the Stevenson Road North Study Area is the Oshawa Airport.

1.2.4 Aerial and Orthoimagery Review

Historical aerial imagery from 1954 (Hunting Survey Corporation Limited, 1954) indicates that the Study Area was within a rural, agricultural context (Figure 6). The Canadian National Railway lines are visible as well as Oshawa Creek.

A review of available Google satellite imagery from 2005 to 2021 shows:

- Between 2005 and 2009, 1560 Stevenson Road North expanded their parking lot and commercial area
- Between 2005 and 2009, a car dealership developed land on the northeast corner of Taunton Road West and Stevenson Road North
- Between 2016 and 2018, the same car dealership expanded their business further north along Stevenson Road

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous

archaeological research: the site record forms for registered sites available online from the MTCS through "Ontario's Past Portal"; published and unpublished documentary sources; and the files of ASI.

1.3.1 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 B.P. (Karrow & Warner, 1990, fig. 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskers, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials,

structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Study Area is located within both the South Slope and Iroquois Plain physiographic regions of southern Ontario (Chapman & Putnam, 1984).

The South Slope physiographic region (Chapman and Putnam 1984:172-174) is the southern slope of the Oak Ridges Moraine. The South Slope meets the Moraine at heights of approximately 300 metres above sea level, and descends southward toward Lake Ontario, ending, in some areas, at elevations below 150 metres above sea level. Numerous streams descend the South Slope, having cut deep valleys in the till.

The Iroquois Plain is a lowland region bordering Lake Ontario. This region is characteristically flat and formed by lacustrine deposits laid down by the inundation of Lake Iroquois, a body of water that existed during the late Pleistocene. This region extends from the Trent River, around the western part of Lake Ontario, to the Niagara River, spanning a distance of 300 kilometres (Chapman and Putnam 1984:190). The old shorelines of Lake Iroquois include cliffs, bars, beaches and boulder pavements. The old sandbars in this region are good aquifers that supply water to farms and villages. The gravel bars are quarried for road and building material, while the clays of the old lake bed have been used for the manufacture of bricks (Chapman and Putnam 1984:196).

Figure 7 depicts surficial geology for the Study Area. The majority of the Study Area is underlain by foreshore basinal deposits of sand, gravel, minor silt and clay while the northern tip of the Study Area is underlain by modern alluvial deposits such as clay, silt, gravel and possibly organic remains (Ontario Geological Survey, 2010).

Soils within the Study Area consist of Bottom Land, an alluvial with variable drainage, Tecumseth, a sandy loam with imperfect drainage and Brighton, a gravelly sandy loam with good drainage (Department of Agriculture, 1979). Figure 8 shows the soil drainage of the Study Area.

The Stevenson Road Study Area is located within the Oshawa Creek watershed. The Oshawa Creek and its tributaries drain an area of approximately 119 square kilometres. It begins with its headwaters in the Oak Ridges Moraine, travels south through Lake Iroquois Beach, and then drains into Lake Ontario. The Oak Ridges Moraine and the major Oshawa Creek valley lands are recognized as part of the Greenbelt Area. Oshawa Creek is a prime conveyance of stormwater to Lake Ontario and as such provides a necessary service to Oshawa as part of the city's stormwater management process. The entire length of Oshawa Creek is approximately 50 kilometres (Municipal Natural Assets Initiative, 2020).

1.3.2 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MTCS. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden block *AlGr.*

According to the Ontario Archaeological Sites Database, four previously registered archaeological sites are located within one kilometre of the Study Area, none of which are located within 50 metres (MTCS 2022). A summary of the sites is provided below in Table 1.

Table 1: Registered Sites within One Kilometre of the Study Area

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AlGr-142	Davey	Euro-Canadian	Homestead	ASI 2002

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AlGr-526	Site 2	Post-Contact	Unknown	The Central Archaeology Group Inc. 2021
AlGr-522	Site 1	Middle Archaic	Findspot	The Central Archaeology Group Inc.
NDFS-0142	Site 2	Indigenous	Findspot	The Central Archaeology Group Inc. 2021

1.3.3 Previous Archaeological Assessments

ASI reviewed previous archaeological assessments that detail fieldwork within 50 metres of the Study Area. Only those specific archaeological assessments of direct relevance to the present undertaking other will be included here:

(ASI, 1994) Archaeological Assessment of Proposed Taunton Road Trunk Sanitary Sewer and Watermain Extension, Thornton Road to Stevenson Road, City of Oshawa, Regional Municipality of Durham (94SE-01)

This project area overlaps with the current Study Area along the southern portion of the Taunton Road West right-of-way at the Stevenson Road North and Taunton Road West intersection. Within the overlapping areas, test pit survey was conducted at five metre intervals into subsoil. Despite careful investigation, no cultural material or archaeological features were encountered. No further work is recommended.

(Northeastern Archaeological Associates, 2002) Stage 1 and 2 Archaeological Assessment of Greek Community Property, 1490 Stevenson Road North, City of Oshawa, Municipality of Clarington (2002-049-004)

This project area overlaps with the current Study Area along the western portion of Stevenson Road North, adjacent to, and north of the pipeline route. The entire project area was assessed by test pit survey at five metre intervals into subsoil. Despite careful investigation, no cultural material or archaeological features were encountered. No further work is recommended.

2.0 Property Inspection

2.1 Field Methods

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection was conducted under the field direction of Caitlin Lacy (R303) of ASI, on October 19, 2022, in

order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area. It was a systematic visual inspection from public right-of-ways only and did not include excavation or collection of archaeological resources. Fieldwork was conducted when weather conditions were deemed clear with good visibility (sunny with seasonal temperatures), per S & G Section 1.2., Standard 2. Field photography is presented in Section 7.0 (Image 1-24), and field observations are overlaid onto the existing conditions of the Study Area in Section 8.0 (Figure 9-13).

2.2 Current Land Use and Field Conditions

The Stevenson Road North Study Area is located north of Taunton Road West and the Oshawa Executive Airport and, south of Conlin Road within the City of Oshawa. The Study Area is located primarily in a residential area with some commercial properties closer to Taunton Road West. Stevenson Road North is designated as a Type "C" Arterial Road. Stevenson Road North carries two lanes of undivided vehicular traffic in a north-south alignment within of the Study Area, and features gravel shoulders and ditches adjacent to the roadway. Hydro poles run along the west side of the road and on portions of the east side of the road. There is an abundance of green space and some agricultural fields between residential lots. Several driveways transect the Study Area's right-of-way. Along Stevenson Road North culverts and shallow ditches are visible as well as manicured lawns.

3.0 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Previously identified archaeological sites (See Table 1);
- Water sources: primary, secondary, or past water source (Oshawa Creek);
- Well-drained soils (Brighton); and
- Early historic transportation routes (Stevenson Road North)

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The Inventory of City of Oshawa Heritage Properties was consulted (Heritage Oshawa, 2015) and there are no properties within the Study Area that are Listed or Designated under the *Ontario Heritage Act*.

The *Archaeological Potential Model for Durham Region* (Archaeological Services Inc., 2013) was reviewed for background information and to help inform any indicators of archaeological potential not captured in other research. Generally speaking, archaeological management plans are high-level analyses of archaeological potential for non-specialists but cannot be considered a replacement for Stage 1 archaeological assessments. ASI's review of the above archaeological management plan indicates that the majority of the Stevenson Road North Study Area has archaeological potential.

The property inspection determined that parts of the Study Area exhibit archaeological potential. These areas will require Stage 2 archaeological assessment prior to any construction activities or other proposed impacts. According to the S & G Section 2.1.1, pedestrian survey is required in actively or recently cultivated fields (Images 4, 23; Figures 10, 11, 13: areas highlighted in orange). According to the S & G Section 2.1.2, test pit survey is required on terrain where ploughing is not viable, such as wooded areas, properties where existing landscaping or infrastructure would be damaged, overgrown farmland with heavy brush or rocky pasture, and narrow linear corridors up to 10 metres wide (Images 2, 6, 9-15, 17-19; Figures 10-13: areas highlighted in green).

Part of the Study Area has been previously assessed and does not require further archaeological assessment (Figure 13: areas highlighted in red).

A combination of property inspection and assessment of topographic mapping (ESRI 2022) determined that some of lands within the Study Area are sloped in excess of 20 degrees, and according to the S & G Section 2.1 do not retain potential (Image 1; Figure 10: areas highlighted in pink). These areas do not require further assessment.

A part of the Study Area is located within low lying wet areas, and according to the S & G Section 2.1 do not retain potential (Images 7, 8; Figures 10-11: areas highlighted in blue). These areas do not require further assessment.

Part of the Study Area has been subjected to deep soil disturbance events due to the construction of Stevenson Road North Road, terrain modifications associated with the deep excavation of roadside drainage ditches, culvert emplacements, buried utility installations, residential housing construction and associated utility lines, municipal infrastructure, railway development, and pipeline construction. According to the S &G Section 1.3.2 these areas do not retain archaeological potential (Images 1-6, 9-24; Figures 10-13: areas highlighted in yellow) and do not require further survey.

3.1 Conclusions

The Stage 1 background study determined four previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Study Area exhibit archaeological potential and will require archaeological assessment (Figures 10 - 13: areas highlighted in orange and green).

4.0 Recommendations

The following recommendations are made:

1. Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit and pedestrian survey at five metre intervals, where appropriate (Figures 10-13). Stage 2 is required prior to any proposed construction activities on these lands;
2. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions, slopes in excess of 20 degrees or being previously assessed. These lands do not require further archaeological assessment; and,

3. Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Archaeology Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified.

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

5.0 Legislation Compliance Advice

ASI advises compliance with the following legislation:

- This report is submitted to the Ministry of Tourism, Culture and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation, and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the Ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.

- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) *of the Ontario Heritage Act*.

- The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.

- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

6.0 Bibliography and Sources

Archaeological Services Inc. (1994). Archaeological Assessment of Proposed Taunton Road Trunk Sanitary Sewer and Watermain Extension, Thornton Road to Stevenson Road, City of Oshawa, Regional Municipality of Durham (94SE-01). Report on file with the Ministry of Tourism, Culture, and Sport.

Archaeological Services Inc. (2006). Historical Overview and Assessment of Archaeological Potential Don River Watershed, City of Toronto. Report on file with the Ontario Ministry of Tourism, Culture and Sport.

Archaeological Services Inc. (2013). Archaeological Potential Model for Durham Region [Final Report]. On file with ASI.

Armstrong, F. H. (1985). Handbook of Upper Canadian Chronology. Dundurn Press.

Birch, J., Manning, S. W., Sanft, S., & Conger, M. A. (2021). Refined Radiocarbon Chronologies for Northern Iroquoian Site Sequences: Implications for Coalescence, Conflict, and the Reception of European Goods. American Antiquity, 86(1), 61–89.

Birch, J., & Williamson, R. F. (2013). The Mantle Site: An Archaeological History of an Ancestral Wendat Community. Rowman & Littlefield Publishers, Inc.

Brown, J. (1995). On Mortuary Analysis – with Special Reference to the Saxe-Binford Research Program. In L. A. Beck (Ed.), Regional Approaches to Mortuary Analysis (pp. 3–23). Plenum Press.

Chapman, L. J., & Putnam, F. (1984). The Physiography of Southern Ontario (Vol. 2). Ontario Ministry of Natural Resources.

Crown-Indigenous Relations and Northern Affairs. (2013). Upper Canada Land Surrenders and the Williams Treaties (1781-1862/1923). https://www.rcaanc-cirnac.gc.ca/eng/1360941656761/1360941689121

Department of Agriculture. (1979). 1:63,360. Soils of Ontario County (Part of Regional Municipality of Durham) South Half, Ontario. Sol Survey Report No. 23. Department of Agriculture.

Department of Energy, Mines and Resources. (1994). Oshawa Sheet 30M/15 [Map].

Department of National Defence. (1930). Oshawa Sheet No. 108 [Map].

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650 (pp. 321–360). Ontario Archaeological Society Inc.

Edwards, T. W. D., & Fritz, P. (1988). Stable-Isotope Palaeoclimate Records from Southern Ontario, Canada: Comparison of Results from Marl and Wood. Canadian Journal of Earth Sciences, 25, 1397–1406.

Ellis, C. J., & Deller, D. B. (1990). Paleo-Indians. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650 (pp. 37–64). Ontario Archaeological Society Inc.

Ellis, C. J., Kenyon, I. T., & Spence, M. W. (1990). The Archaic. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650 (pp. 65–124). Ontario Archaeological Society Inc.

Ellis, C. J., Timmins, P. A., & Martelle, H. (2009). At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In T. D. Emerson, D. L. McElrath, & A. C. Fortier (Eds.), Archaic Societies: Diversity and Complexity across the Midcontinent. (pp. 787–837). State University of New York Press.

Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, and the GIS User Community. (2022). World Topographic Map [Map]. https://www.arcgis.com/home/webmap/viewer.html?webmap=98652eb8458a464fa95feb9bd812b29a.

Farewell, J. E. (1907). County of Ontario. Short Notes as to the Early Settlement and Progress of the County and Brief References to the Pioneers and Some Ontario County Men who have taken a Prominent Part in Provincial and Dominion Affairs. Gazette-Chronicle Press (Reprinted by Mika Publishing, Belleville, 1973).

Ferris, N. (2013). Place, Space, and Dwelling in the Late Woodland. In M. K. Munson & S. M. Jamieson (Eds.), Before Ontario: The Archaeology of a Province (pp. 99–111). McGill-Queen's University Press. http://www.jstor.org/stable/j.ctt32b7n5.15

Fullerton, K. A., & Mississaugas of the Credit First Nation. (2015). The Rouge River Valley Tract Unsurrendered Traditional Lands, Mississaugas of the New Credit First Nation (Formerly Known As Mississaugas of the New Credit Indian Band). Statement of Claim. Submitted to the Government of Canada and the Government of Ontario.

Heritage Oshawa. (2015). Heritage Oshawa—Inventory of City of Oshawa Heritage Properties. https://www.oshawa.ca/things-to-do/resources/heritageoshawa_inventoryofheritageproperties.pdf

Hunting Survey Corporation Limited. (1954). Digital Aerial Photographs, Southern Ontario 1954. http://maps.library.utoronto.ca/data/on/AP_1954/index.html

Karrow, P. F., & Warner, B. G. (1990). The Geological and Biological Environment for Human Occupation in Southern Ontario. In The Archaeology of Ontario to A.D. 1650 (pp. 5–36). London Chapter, Ontario Archaeological Society.

Mika, N., & Mika, H. (1983). Places In Ontario: Their Name Origins and History, Part III, N-Z. Mika Publishing Company.

Miles & Co. (1877). Illustrated Historical Atlas of Ontario County [Map].

Ministry of Heritage, Sport, Tourism and Culture Industries. (2022). Ontario's Past Portal. PastPortal. https://www.pastport.mtc.gov.on.ca

Environmental Assessment Act, R.S.O., (1990).

MTC, (Ministry of Tourism and Culture). (2011). Standards and Guidelines for Consultant Archaeologists. Archaeology Programs Branch, Ontario Ministry of Tourism and Culture.

Ontario Heritage Act, R.S.O. c. O.18, (1990).

Municipal Class Environmental Assessment, (2000).

Municipal Natural Assets Initiative. (2020). Cohort 2 National Project, Final Technical Report, Oshawa Creek Project, Ontario.

Northeastern Archaeological Associates. (2002). Stage 1 and 2 Archaeological Assessment of Greek Community Property, 1490 Stevenson Road North, City of Oshawa, Municipality of Clarington (2002-049-004). Report on file with the Ministry of Tourism, Culture, and Sport.

Ontario Geological Survey. (2010). Surficial geology of Southern Ontario. Miscellaneous Release—Data 128 – Revised. [Map]. http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV

Rayburn, A. (1997). Place Names of Ontario. University of Toronto Press.

Rogers, E. S. (1962). The Round Lake Ojibwa (Occasional Paper 5). Royal Ontario Museum.

Spence, M. W., Pihl, R. H., & Murphy, C. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650. Ontario Archaeological Society Inc.

Surtees, R. (1984). Indian Land Surrenders in Ontario 1763-1867. Research Branch, Corporate Policy, Department of Indian and Northern Affairs Canada.

Tremaine, G. C. (1860). Tremaine's Map of the County of Ontario, Upper Canada [Map]. George C. Tremaine.

Williams Treaties First Nations. (2017). About Williams Treaties First Nations. http://www.williamstreatiesfirstnations.ca/about/

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650 (pp. 291–320). Ontario Archaeological Society Inc.

7.0 Images

7.1 Field Photography

Image 1: Conlin Road and Stevenson Road; disturbed by deeply excavated drainage channel and elevated fill section of roadway, no potential.

Image 2: Stevenson Road North; test pit survey required beyond right-of-way.

Image 3: Stevenson Road North right-of-way; disturbed, no potential.

Image 4: Stevenson Road North; area beyond disturbed right-of-way requires pedestrian survey.

Image 5: Stevenson Road North right-of-way; disturbed, no potential.

Image 6: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 7: Stevenson Road North; area beyond disturbed right-of-way is low and wet, no potential.

Image 8: Stevenson Road North; area beyond disturbed right-of-way is low and wet, no potential.

Image 9: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 10: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 11: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 12: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 13: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 14: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 15: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 16: Stevenson Road North; disturbed, no potential.

Image 17: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 18: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 19: Stevenson Road North; area beyond disturbed right-of-way requires test pit survey.

Image 20: Stevenson Road North; disturbed, no potential.

Image 21: Stevenson Road North; location of former railway lines, disturbed, no potential.

Image 22: Stevenson Road North; disturbed right-of-way, no potential.

Image 23: Stevenson Road North; area beyond disturbed right-of-way requires pedestrian survey.

Image 24: Stevenson Road North and Taunton Road West intersection; disturbed, no potential.

7.2 Historical Imagery

Image 25: Between 2005 and 2009, 1560 Stevenson Road North expanded their parking lot and commercial area.

Image 26: Between 2005 and 2009, a car dealership developed land on the northeast corner of Taunton Road West and Stevenson Road North.

Image 27: Between 2016 and 2018, the same car dealership expanded their business further north along Stevenson Road North.

8.0 Maps

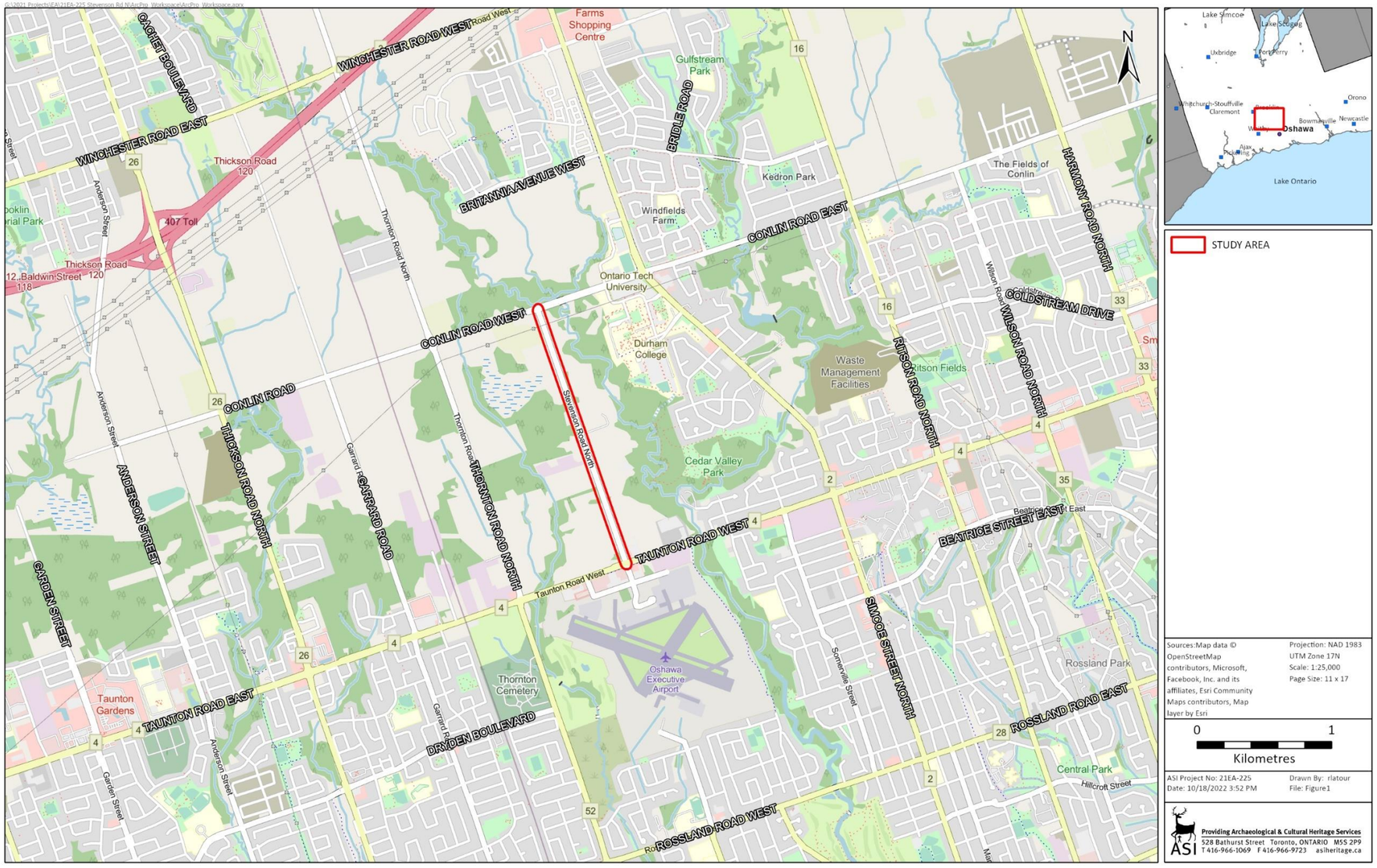

Figure 1: Stevenson Road North Study Area

Figure 2: Study Area (Approximate Location) Overlaid on the 1860 Tremaine's Map of Ontario County

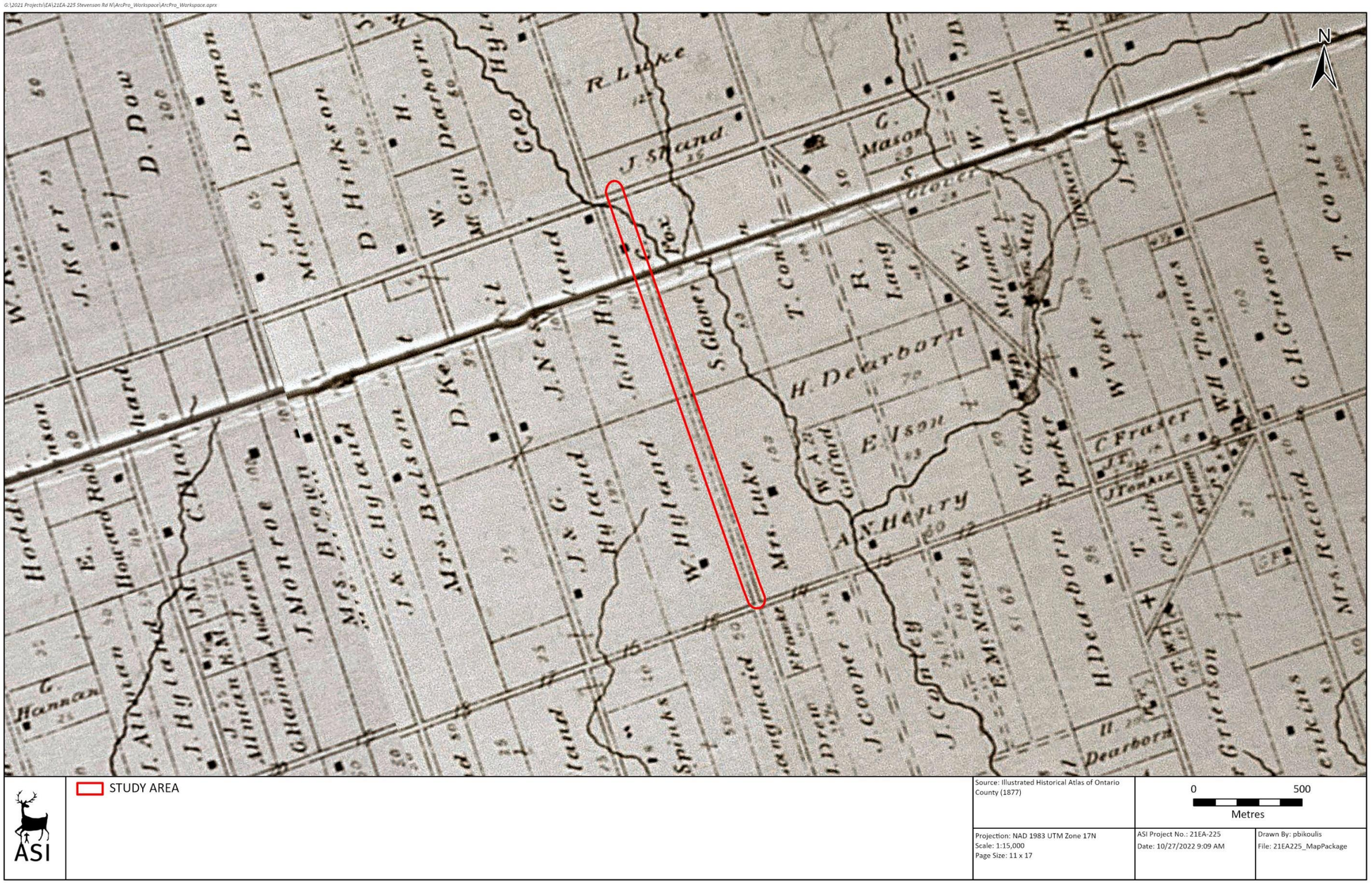

Figure 3: Study Area (Approximate Location) Overlaid on the 1877 Illustrated Historical Atlas of Ontario County

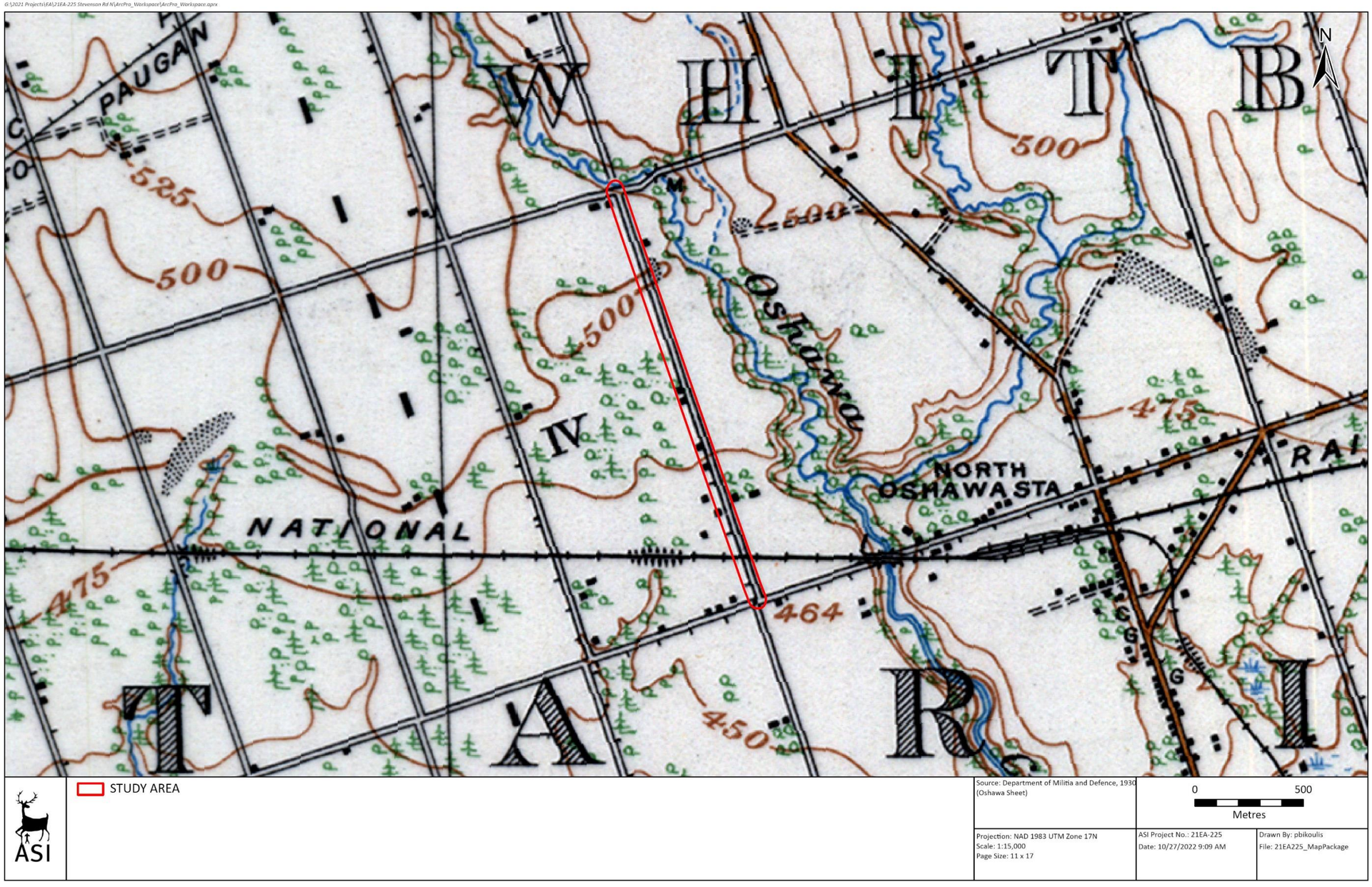

Figure 4: Study Area (Approximate Location) Overlaid on the 1930 NTS Oshawa Sheet

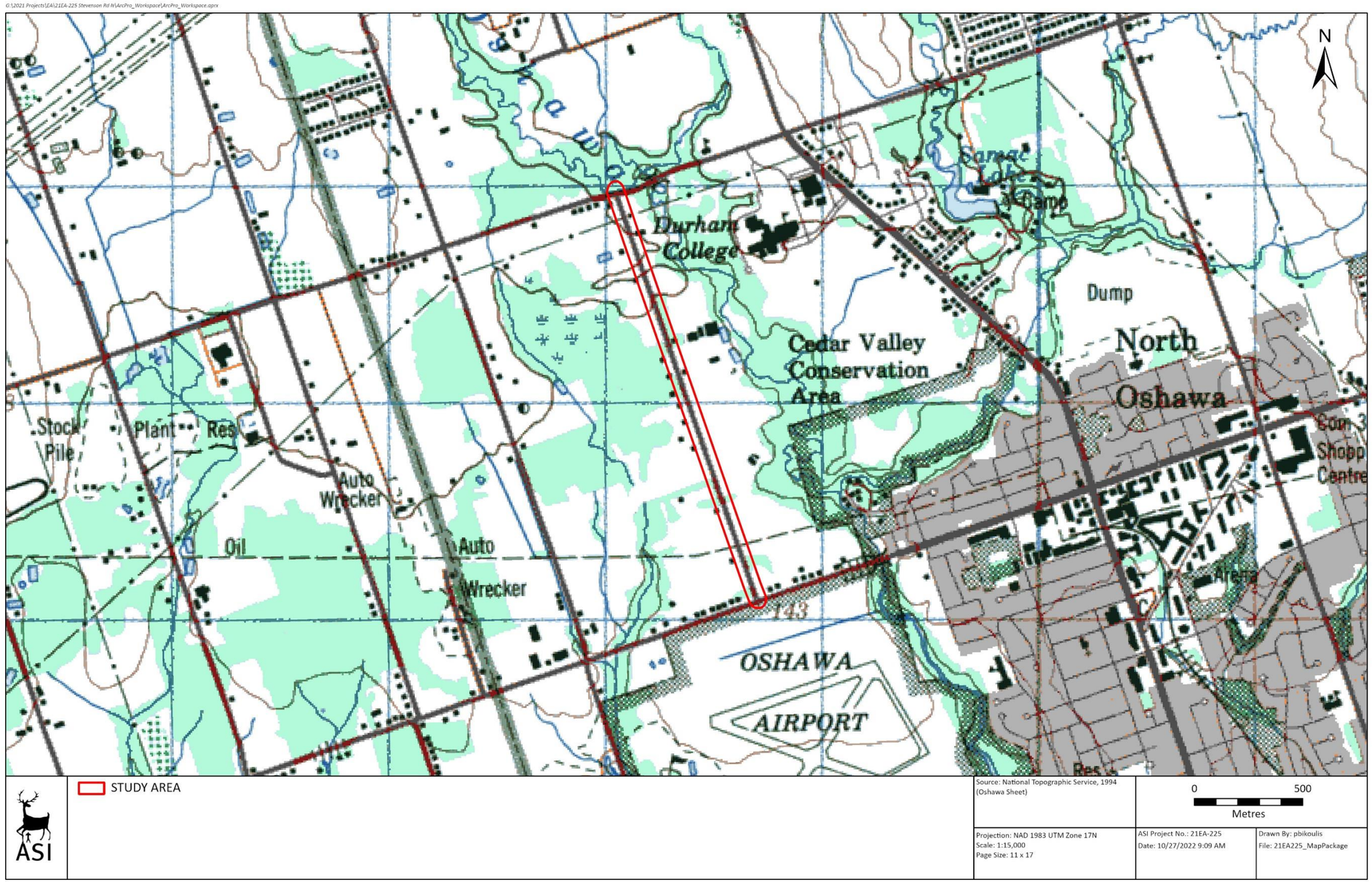

Figure 5: Study Area (Approximate Location) Overlaid on the 1994 NTS Oshawa Sheet

Figure 6: Study Area (Approximate Location) Overlaid on 1954 Aerial Photography

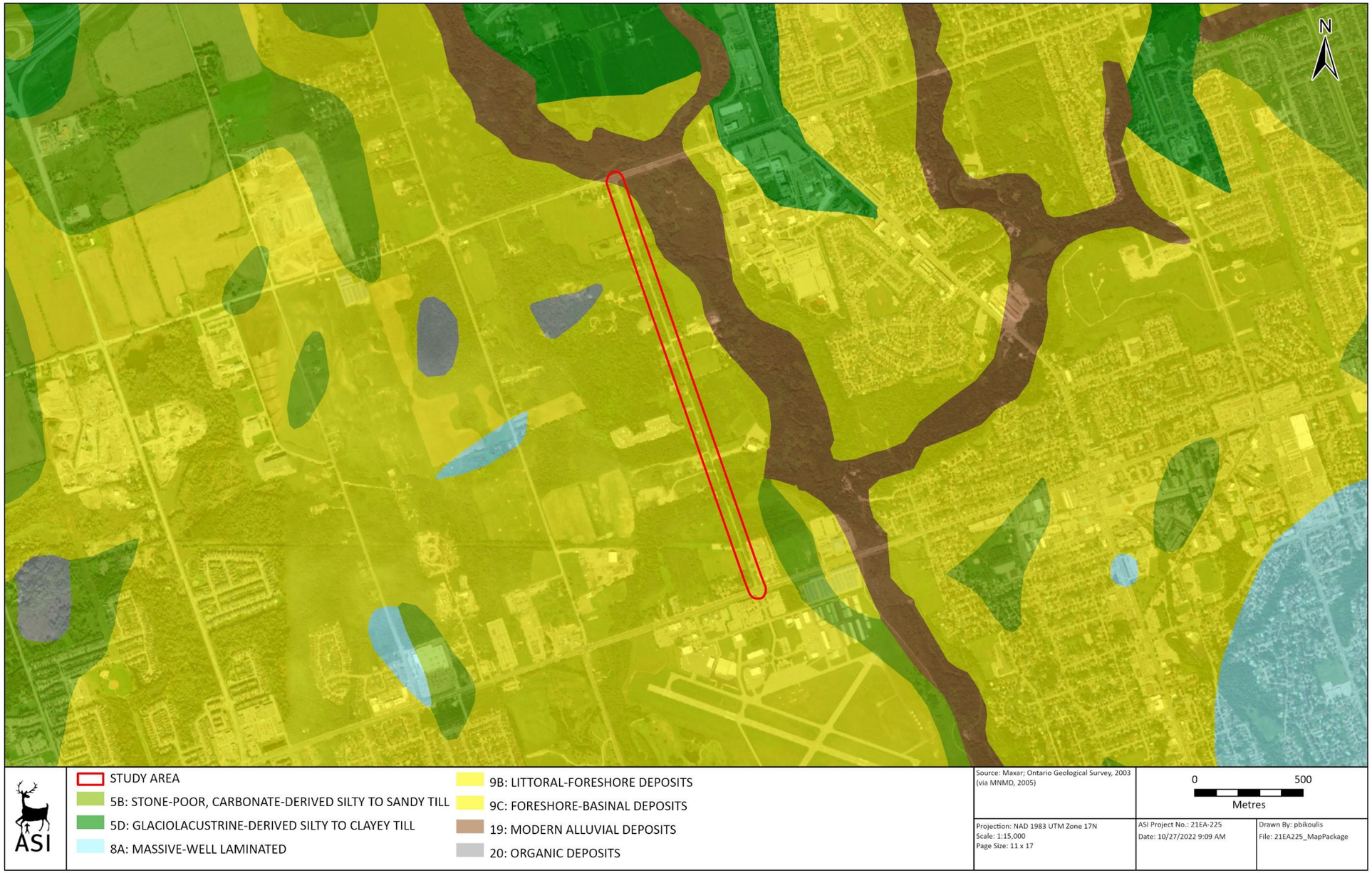

Figure 7: Study Area – Surficial Geology

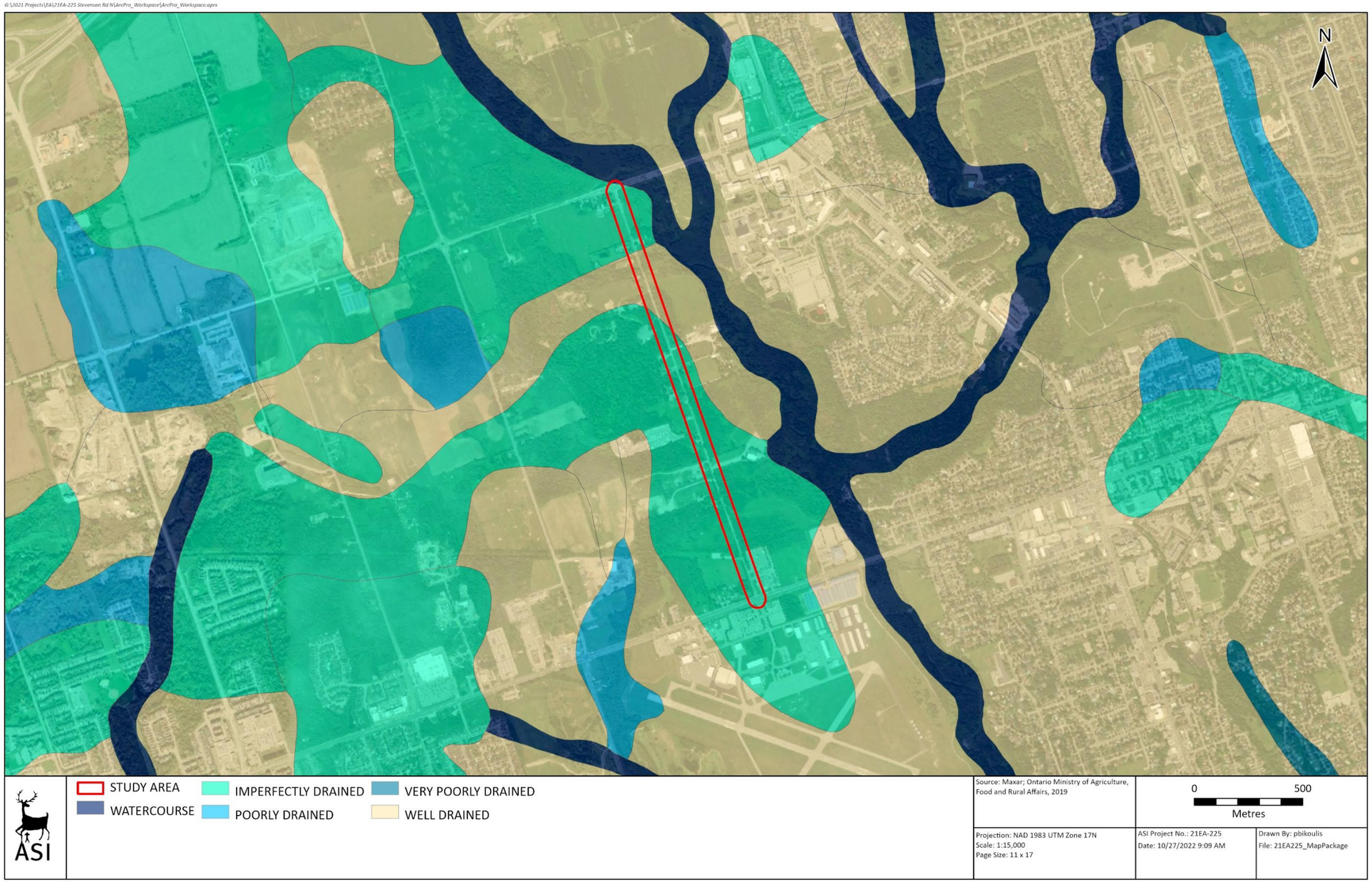

Figure 8: Study Area – Soil Drainage

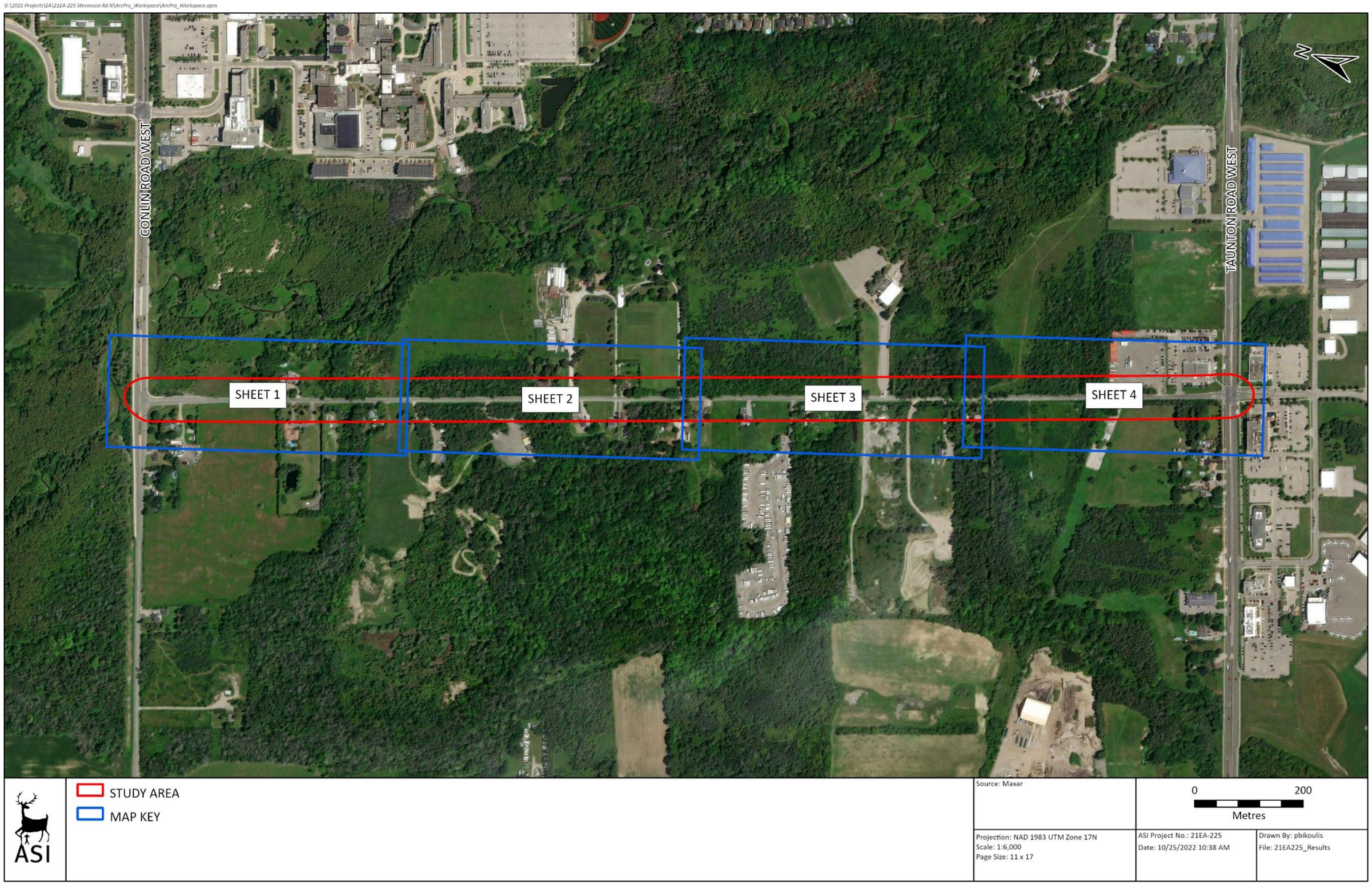

Figure 9: Stevenson Road – Results of Stage 1 (Key Map)

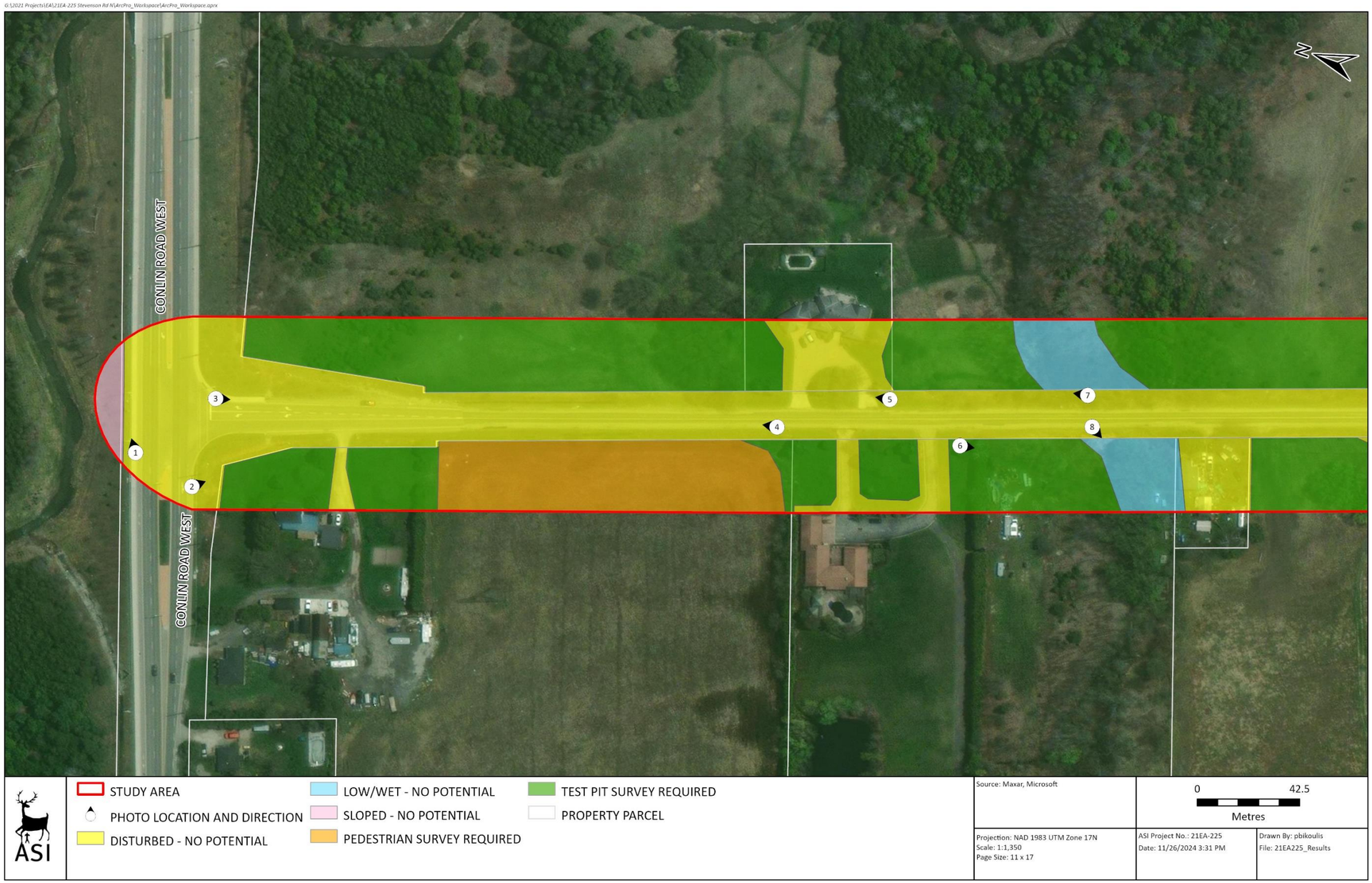

Figure 10: Stevenson Road – Results of Stage 1 (Sheet 1)

Figure 11: Stevenson Road – Results of Stage 1 (Sheet 2)

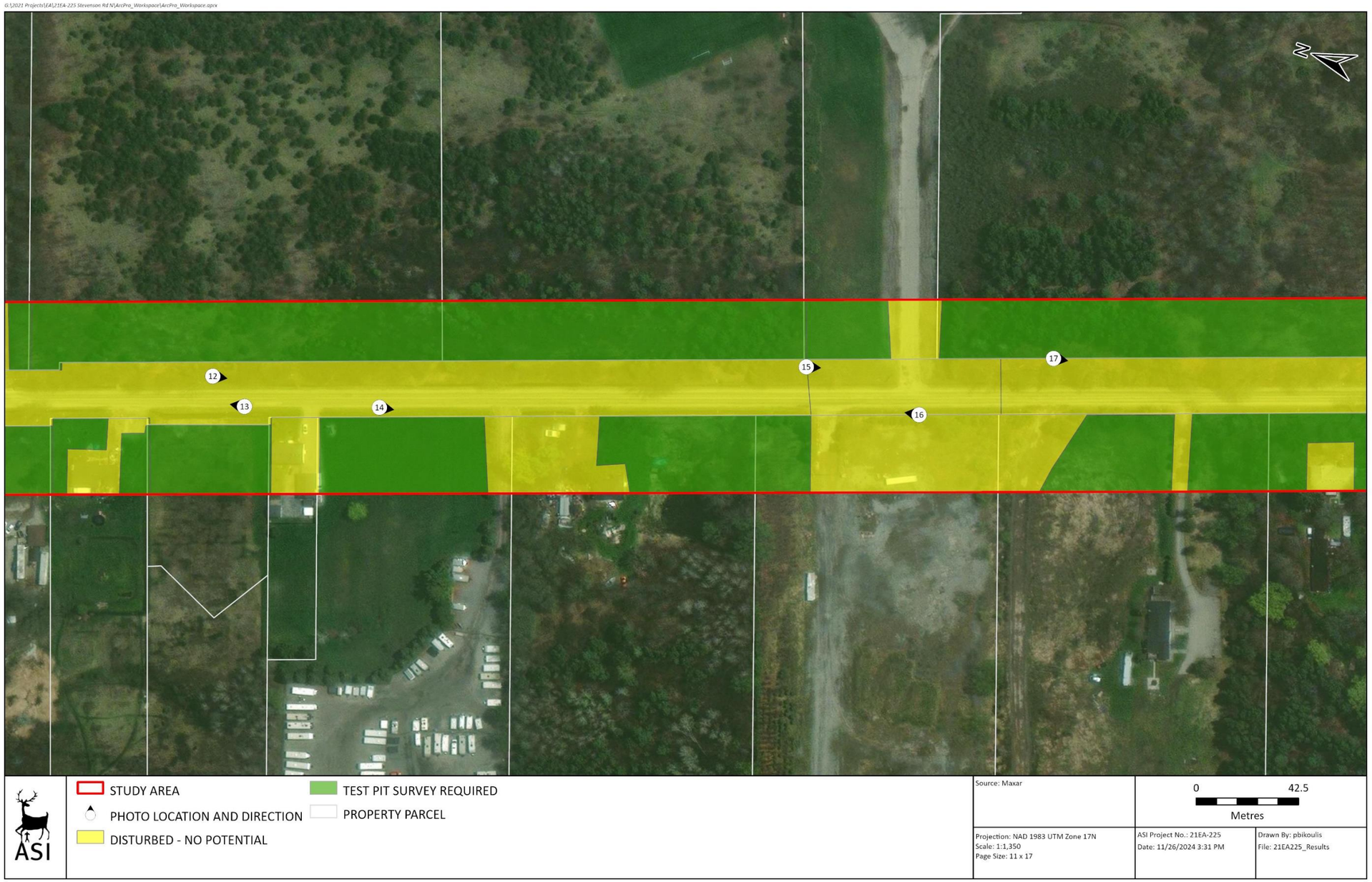

Figure 12: Stevenson Road – Results of Stage 1 (Sheet 3)

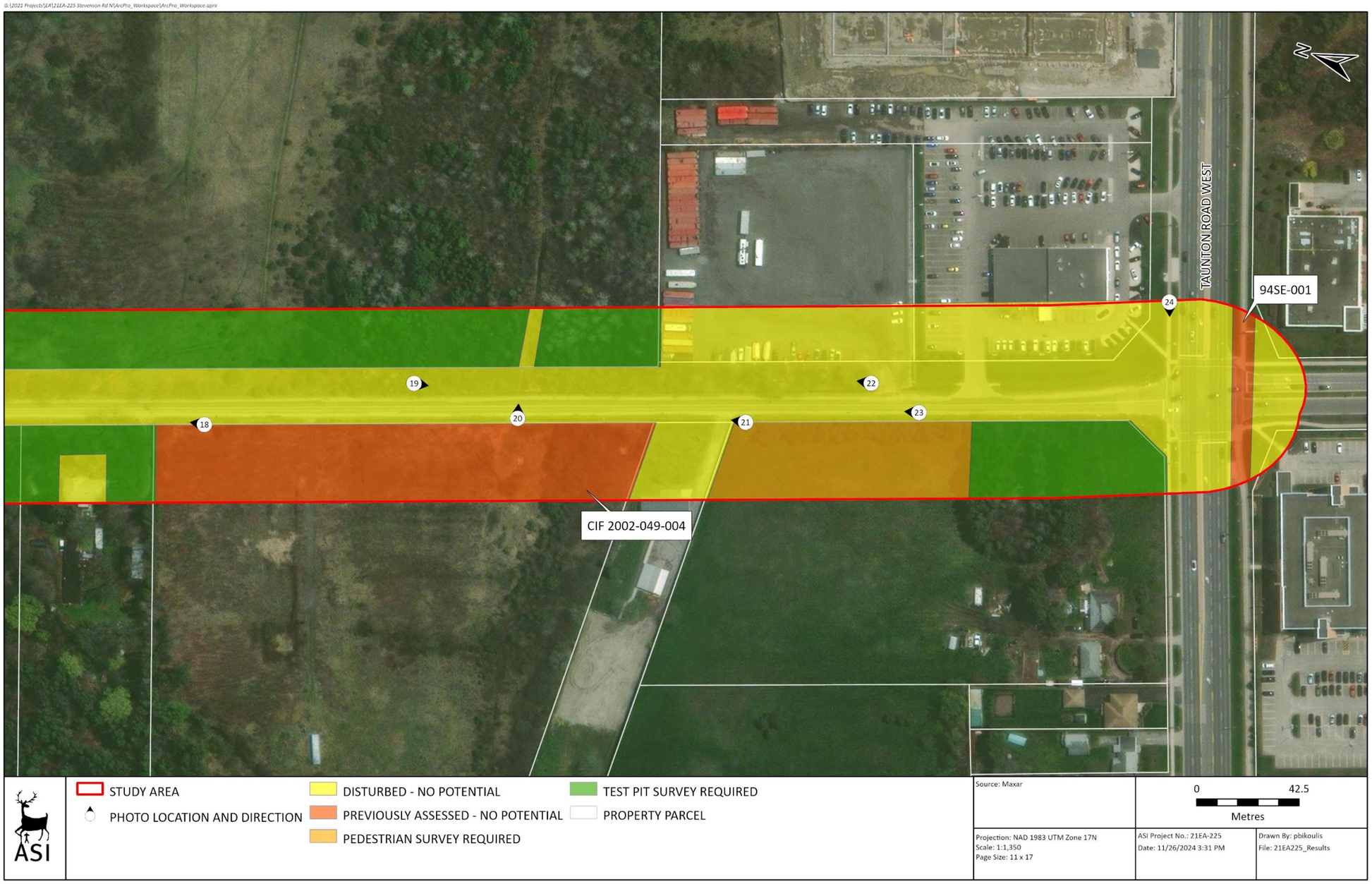

Figure 13: Stevenson Road – Results of Stage 1 (Sheet 4)