Appendix G

Stage 1 Archaeological Report

Stage 1 Archaeological Assessment Newtonbrook Creek Geomorphic Systems Master Plan (Lots 20-22 and Concessions 1 East of Yonge Street, Lots 17-20 and Concessions 2 East of Yonge Street, Geographic Townships of York and Scarborough, County of York) City of Toronto, Ontario

Original Report

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Executive Summary

Archaeological Services Inc. was contracted by Aquafor Beech Limited to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Newtonbrook Creek Geomorphic Systems Master Plan project. This project involves providing the City of Toronto with a comprehensive investigation of Newtonbrook Creek to derive a long-term approach for the mitigation of erosion that could potentially damage or create risk for Toronto Water Infrastructure. The Stage 1 scope for the Newtonbrook Creek GSMP project extends from the storm sewer discharge near Willowdale Avenue to its confluence with the East Don River and additionally includes Blue Ridge Creek from Bayview Avenue to its confluence with the East Don River.

The Stage 1 background study determined one previously registered archaeological site is located within one kilometre of the Study Area, which is within the Study Area. The property inspection determined that parts of the Study Area exhibit archaeological potential and will require Stage 2 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 at five metre intervals. Stage 2 is required prior to any proposed construction activities on these lands;

2 Part of the Study Area includes Site AkGu-88. The following recommendations made by Toronto and Region Conservation Authority (P303-0266-2013) still apply. Should future disturbance threaten the site, a Stage 3 investigation is recommended that will comprise of the following:

   a. A detailed documentary research of the land use and occupation history specific to the archaeological site;

   b. Controlled excavation of one metre units to (a) determine the presence of buried artifacts, structures, stratigraphy and cultural features and (b) collect a representative sample of artifacts;

c. Stage 3 investigation will be required for any portion of the site impacted by construction activities or those sites within 20 metres of the construction area;

3 The marine archaeological potential of the Don River is to be evaluated following the MHSTCI's *Criteria For Evaluating Marine Archaeological Potential* checklist if impacts to the riverbed are proposed;

4 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, slopes in excess of 20 degrees, or being previously assessed. These lands do not require further archaeological assessment; and,

5 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.

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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Aquafor Beech Limited to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Newtonbrook Creek Geomorphic Systems Master Plan (GSMP) project. This project involves providing the City of Toronto with a comprehensive investigation of Newtonbrook Creek to derive a long-term approach for the mitigation of erosion that could potentially damage or create risk for Toronto Water Infrastructure. The preliminary priority sites as shown in Figure 28 includes exposed sanitary sewers, storm outfall failures, and exposed chambers.

The Stage 1 scope for the Newtonbrook Creek GSMP project extends from the storm sewer discharge near Willowdale Avenue to its confluence with the East Don River and additionally includes Blue Ridge Creek from Bayview Avenue to its confluence with the East Don River (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 Heritage, Sport, Tourism and Culture Industries (MHSTCI, 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 *Master Plan of Archaeological Resources for the City of Toronto (Interim Report)* (Archaeological Services Inc. et al., 2004) 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 Aquafor Beech Limited on November 10, 2021.

1.1.1 Treaties and Traditional Territories

The Study Area is within Treaty 13, the Toronto Purchase. In 1787, representatives of the Crown met with members of the Mississaugas at the Bay of Quinte to negotiate the sale of lands along the shore of Lake Ontario near the settlement of York, the seat of the colonial government. Due to disputes over the boundaries, a new agreement, the Toronto Purchase, was signed on August 1, 1805, in which the Mississaugas ceded to the Crown 250,830 acres of land. Both the 1787 Purchase and its 1805 Indenture are known as Treaty 13. The Mississaugas claimed that the Toronto Islands and other lands were not part of the purchase, and a land claim settlement was reached for these areas in 2010 (Mississauga of the New Credit First Nation, 2001; Mississaugas of the Credit First Nation, 2017).

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 Former York Township, County of York in Lots 20-22 & Concessions 1 East of Yonge Street, and Lots 17-20 & Concessions 2 East of Yonge Street.

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 2006a).

Township of York

Between 1784 and 1792, this part of southern Ontario formed a part of the judicial District of Montreal in the Province of Quebec. Augustus Jones undertook the first township survey for York in 1791, when the base line, corresponding to present day Queen Street, was established (Winearls 1991:591; Firth 1962:11). The Township comprised part of the East Riding of York in the Home District, which, between 1792 and 1800, was administered from Niagara. York was planned to be the unofficial capital of Upper Canada in the winter of 1796. It was not, however, until February 1798 that it was selected as the "seat of Government on mature deliberation" by the Duke of Portland. On January 1, 1800, the Home District was elevated into a separated administrative district from Niagara. Following the abolition of the Districts in 1849, the Home District was succeeded by the United Counties of York, Peel and Ontario in 1850. Ontario and Peel were elevated to separate county status in 1851-52 (Firth 1962:24-47; Armstrong 1985:143).

In its first 30 years, York Township (as differentiated from the Town of York) was a rolling and well wooded countryside. The centre of the township was present day Yonge Street and Eglinton Avenue or Eglinton Village. Eglinton Avenue, which was surveyed as the township's baseline, was at that time known as Baseline Road, and the crossroads community had a number of services including four hotels and a Masonic Hall. Yonge Street was settled on both sides and one mile south of Eglinton the Davis family ran a pottery business (in the community later known as Davisville). A large number of suburban residences were constructed along the Davenport Ridge, an early Indigenous trail. Other villages in the township and their years of incorporation included Yorkville (1884) and North Toronto (Eglinton

and Davisville combined, 1889). The villages of Riverdale, Rosedale, the Annex, Seaton Village and Sunnyside were all annexed directly to Toronto during the 1880s.

The population of the Township increased steadily during the nineteenth century. In 1797, for instance, the total number of inhabitants "of Yonge Street" was estimated at 86 persons (i.e., 52 males and 34 females.) Within the space of one decade, the Township proper contained 502 men, women, children and "servants." At the outbreak of the War of 1812, York Township contained 756 inhabitants, and by 1823 this number had increased to 1,909 residents. In 1837, the population had reached 4,320, and by 1842 this number had increased again to 5,720 (Walton 1837:189; Smith 1846:335; Smith 1851:43; Mosser 1984:6, 93 and 156). This required the growing urban area to stretch its northern limits from Queen Street to Bloor Street. Outside of the core of the city, especially north along Yonge Street, Yorkville (above Bloor) was a prosperous village and some Torontonians settled between Bloor and Eglinton as new street railway services improved suburban to urban access.

New immigration and more land annexation, including North Toronto and Moore Park in 1912, resulted in strong population growth. The geographic area of the city doubled between 1891 and 1912 and the population grew from 181,000 to 378,000 during the same period. During the 1920s, a dramatic economic boom fueled the construction of new office towers: a total of fourteen between 1922 and 1928. Increased automobiles use necessitated improvements to local roads and crossings. Before the Second World War ended a post-war reconstruction plan was put together for the city and this represented the first overall approach to urban planning since Governor Simcoe envisioned plans for York in 1793. Residential lots were divided and subdivided as the city's density increased, new office buildings and manufacturing plants filled in open spaces, and public transportation networks were expanded.

Toronto is Ontario's capital city and Canada's largest municipality, after its amalgamation in 1998 of all the former cities of Toronto, North York, Scarborough, York and Etobicoke, and the former borough of East York.

City of Toronto

The etymology of 'Toronto' is most likely related to the Toronto passages (Archaeological Services Inc.) ASI et al., 2007). It is thought to be derived from the Mohawk word tkaronto which means "where there are trees standing in the water" or from the Huron-Wendat word toronton meaning "place of meetings"/ "place of plenty." Late seventeenth and early eighteenth century French sources refer to Lake Simcoe as Lac Taronto, which is thought to be on account of the fish weir at the Narrows between Lake Simcoe and Lake Couchiching (Natural Resources Canada, 2007). By 1670, Lake Simcoe is also found labeled on a number of early French maps as Lac de Taronto and in 1686, the Humber carrying place was known as the Passage de Taronto. In turn, that river became known as Riviere Taronto.

On the other hand, Nicolas Perrot, a 17th century explorer, interpreter, and fur-trader, used Toronto in his memoirs to apply to the Huron-Wendat territory evacuated in 1650. He also noted that Toronto was used by Cadillac in a letter at the turn of the seventeenth century and by the remnant populations of the exiled Huron-Wendat, Petuns and Neutrals as the name of the region from which they had been expelled fifty years before by the Iroquois. Thus, the use of the term is consistent with the most expansive sense of the term when we think of it connecting the lower and upper Great Lakes. The linear fabric of watercourses on the north shore of Lake Ontario would have provided a permanent system of landmarks to orient travelers. As canoe travel would have been limited to the lower portions of the waterways, these watercourses would also have tended to orient foot travel to parallel paths to avoid negotiating steep ravines, swampy lowlands, and troublesome water crossings. These systems linked Lake Ontario to the upper Great Lakes through Lake Simcoe. Perhaps the busiest and best documented of these routes was the Humber passage northward over the drainage divide to the East Branch of the Holland River.

Newtonbrook

This community, then spelled as "Newton Brook," was named in honour of the Reverend Robert Newton, a famous Methodist minister in Yorkshire, England,

during the first quarter of the nineteenth century. This place was described in 1873 as "a post village…it contains several stores and saw and gristmills" (Crossby, 1873). The population at that time was estimated at about 200 inhabitants. Newtonbrook did not have any formally established boundaries, being mainly centred on the intersection of Yonge Street and Drewry/Cummer Avenue. The village roughly extended between the Middle and West Don Rivers on either side of Drewry/Cummer, and on both sides of the intersection at Yonge Street. Drewry Avenue, which was originally known as "Pope's Lane," was opened for use in 1847. The village also contained a school, butcher (George Routliff), shoemakers (Daniel Flynn and James Agar), dentist (Dr. George H. Husband), pottery (Thomas Humberstone) and a blacksmith (Peter Weatherill). A frame general store was built at the northwest corner of Yonge and Drewry, where the first post office was opened on May 1, 1863. This building was burned in 1907 and replaced by a brick structure. The first post-master in Newtonbrook was named M. Richardson. The last post-master, before the office was permanently closed in May 1954, was Alex McGregor (Crossby, 1873; Hart, 1968).

Railway History

In 1887, the Canadian Pacific Railway was the first company to complete a line down the Don Valley to Toronto harbour and the downtown area (Andreae, 1997). The James Bay Railway, a subsidiary of the Canadian Northern Railway, followed suit in 1906, and it was this latter line that is now used by Metrolinx for the Richmond Hill Corridor.

William Mackenzie and Donald Mann, two former Canadian Pacific Railway employees, established the Canadian Northern Railway in 1899 by consolidating some of the branch-lines which had been servicing Manitoba and northwestern Ontario since the 1880s. By 1905, the company had rail lines connecting to Edmonton in the west and Port Arthur (present-day Thunder Bay) in the east. The following year, the Company was also operating in Quebec and Nova Scotia. Whether through acquisitions or construction, southern Ontario was also home to Canadian Northern Railway lines. The railway continued its expansion, and by 1915 the Canadian Northern was a transcontinental line connecting Quebec City

to Vancouver with a total of 16,093 kilometres of track (Library and Archives Canada, 2014; Peltenburg, 2019).

Strong competition with the Grand Trunk Railway and the Canadian Pacific Railway combined with heavy construction costs contributed to the company being taken over by a government board in 1918. With the incorporation of the Canadian National Railways in 1923, the Canadian Northern Railway ceased separate operations and was fully integrated into the new company (Andreae, 1997). Carrying both freight and passengers, the Canadian Northern Railway's former lines formed a major component of the new Canadian National Railway network, including what is now the Richmond Hill Corridor. In 1978, GO Transit began to offer commuter service along the line. Metrolinx acquired the track south of Doncaster Diamond (near the Bayview Golf and Country Club) from Canadian National Railways in 2009. North of Doncaster Diamond remains under Canadian National Railway ownership (AECOM, 2017).

1.2.3 Map Review

1860 *Map of the County of York* (Tremaine, 1860) and the 1878 *Illustrated Historical Atlas of the County of York* (Miles & Co., 1878), the 1914 topographic map Markham sheet (Department of Militia and Defence, 1914), 1943 topographic map Markham sheet (Department of National Defence, 1943), and 1994 National Topographic Systems Markham sheet (Department of Energy, Mines and Resources, 1994b, 1994a) were examined to determine the presence of historic features within the Study Area during the nineteenth and twentieth centuries (Figures 2-6).

The 1860 *Map* and the 1878 *Atlas* show very similar features, with the village of Newtonbrook shown northwest of the Study Area and branches of the East Don River flowing through the upper portion of the Study Area. The 1860 *Map* identifies the northwest arm of the creek as "Wilket Creek". The 1878 *Atlas* shows one historic structure, presumably a farmstead, on "Thos. Glue's" property in the southwest portion of the Study Area.

The 1914 topographic map indicates the steeply sloping Newtonbrook Creek and Don River valleys. No waterway is indicated for the Blue Ridge Creek area. All

topographic maps show the north-south oriented railway line along the eastern edge of the Study Area. The 1943 topographic map illustrates increased population settlement around the Study Area with the communities of Newton Brook, Northmont and Willowdale's expanding planned neighbourhoods. Blue Ridge Creek is shown to outlet into the Don River in part of the south half of the Study Area. The Willowdale Golf Course is shown to intersect with the northwest portion of the Study Area. An east-west aligned hydro corridor is also shown to cut across the Study Area. The 1994 topographic map shows the modern, dense streets of North York surrounding the Study Area, with some roads built through the Study Area within the recently created subdivisions.

1.2.4 Aerial and Orthoimagery Review

Historical aerial imagery from 1954 (Hunting Survey Corporation Limited, 1954), reveals the dense greenspace and meandering Don River East and tributaries within the Study Area as well as the increasing planned residential neighbourhoods (Figure 7).

A series of detailed aerial photography between 1947 and 1987 (Figure 8 through Figure 17) was also reviewed, presented from north to south along Newtonbrook Creek and then east to west along Blue Ridge Creek (City of Toronto Archives, n.d.). In the 1950s imagery shows residential development including the construction of housing subdivisions and new road such as Drive, Hawksbury Drive, Bayberry Crescent and Burbank Drive (Figure 15). Beginning in the mid-twentieth century, housing development and construction usually involved wholesale topsoil removal and grading that would eliminate archaeological resources.

In the 1960s, imagery shows evidence of topsoil removal and construction impacts (Figure 9, Figure 11, Figure 13, Figure 14) associated with the installation of the existing sewers that roughly follows Newtonbrook Creek and the east part of Blue Ridge Creek (see also Figure 28).

Significant earth-moving activities and the evolution of the creek courses are seen in the aerial imagery of the 1960s and 1970s showing the realignment and/or channelization for various segments through time of Newtonbrook Creek and

Blue Ridge Creek Figure 8, Figure 10, Figure 11, Figure 13, Figure 14, and Figure 16). Large culverts were built to carry Newtonbrook Creek under Forest Grove Drive, and trails have been constructed northwest and southeast from the roadway north of the creek.

During this process of channelization and sewer installation, the parklands of the Study Area were created. Construction of a pathway across the valley connecting neighbourhoods on Burbank Drive and Heathview Avenue is seen in (Figure 12). Bayview Village Park and that the Bayview Village Park Trail from the Bayview Avenue sidewalk along Millgate Crescent had been constructed in the 1960s, with a tennis court added in 1962 (Figure 16 and Figure 17).

A review of available Google satellite imagery shows land altering activities in 2014 and 2015 occurred east of Maxome Avenue and north of Laredo Crescent within the Study Area at the base of the hydro towers. The multi-use recreational trail was also widened, and a new bridge was added within the park (Image 30).

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 MHSTCI through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

The Study Area includes the Newtonbrook Creek extending from the storm sewer discharge near Willowdale Avenue to its confluence with the East Don River (near the east limits of Forest Grove Drive) and includes Blue Ridge Creek from Bayview Avenue to its confluence with the East Don River. The creeks are bound by greenspace and by mid-late twentieth century residential development. A hydro corridor and community gardens are within the Study Area north of Finch Avenue

East. Newton Park, Newton Park Trail, Newtonbrook Creek Park, Maxome Park, Clarina Park, Blue Ridge Park and Bayview Village Park are within the Study Area

Newtonbrook Creek Pathway follows Newtonbrook Creek between the intersection of Bayview Avenue and Finch Avenue East to the northwest and the East Don River to the southeast. Bayview Village Trail extends between Bayview Avenue and Bayberry Crescent.

Eight completed Toronto Water infrastructure crossings and one Imperial pipeline creek crossing have been positioned over Newtonbrook Creek to the west of Finch Avenue East. The extensive sanitary sewer system runs roughly parallel along Newtonbrook Creek and the Don River, with offshoots towards Bishop Avenue, Maxome Avenue, Wideford Place, Manorcrest Drive, Bayview Avenue, Farmingdale Road, Forest Grove Drive, Hi Mount Drive, Citation Drive, and Clarinda Drive. Storm outfalls and manholes are located along Newtonbrook Creek, East Don River and Blue Ridge Creek.

Parts of Newtonbrook Creek and Blue Ridge Creek have naturalized after creek alignment in the mid-late twentieth century. Parts of Newtonbrook Creek have been stabilized using gabion baskets (Images 3-4, 6, 9-10, 18), and riprap (Images 2, 5, 8-9). Parts of Blue Ridge Creek have been stabilized by various methods including armourstones (Images 20, 27-29), riprap (Image 23), and terrafix blocks (Image 26).

1.3.2 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 BP (Karrow & Warner, 1990, p. Figure 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 primarily within the Peel Plain physiographic region of southern Ontario. The Peel Plain is a level-to-undulating area of clay soil which covers an area of approximately 77,700 hectares across the central portions of the Regional Municipalities of York, Peel, and Halton. The Peel Plain has a general elevation of between 500 and 750 feet above sea level with a gradual uniform slope towards Lake Ontario. The Peel Plain is sectioned by the Credit, Humber, Don, and Rouge Rivers with deep valleys as well as a number of other streams such as the Bronte, Oakville, and Etobicoke Creeks. These valleys are in places bordered by trains of sandy alluvium. The region is devoid of large, undrained depressions, swamps, and bogs though nevertheless the dominant soil possesses imperfect drainage.

The Peel Plain overlies shale and limestone till which in many places is veneered by occasionally varved clay. This clay is heavy in texture and more calcareous than

the underlying till and was presumably deposited by meltwater from limestone regions and deposited in a temporary lake impounded by higher ground and the ice lobe of the Lake Ontario basin. The Peel Plain straddles across the contact of the grey and red shales of the Georgian Bay and Queenston Formations, respectively, which consequently gives the clay southwest of the Credit River a more reddish hue and lower lime content than the clay in the eastern part of the plain. Additionally, the region exhibits exceptional isolated tracts of sandy soil specifically in Trafalgar Township, near Unionville, and north of Brampton where in the latter location there is a partly buried esker. The region does not possess any good aquifers and the high level of evaporation from the clay's now deforested surface is a disabling factor in ground-water recharge. Further, deep groundwater accessed by boring is often found to be saline (Chapman and Putnam 1984:174-175).

The surficial geology of the Study Area consists of stone poor carbonate derived silty to sand till and modern alluvial deposits (Figure 18).

Soil types within the Study Area consist of Chinguacousey, a clay loam with imperfect drainage, Brady, a sandy loam with imperfect drainage, Bondhead, a loam with good drainage, Cashel, a clay with good drainage and Peel, a clay with good drainage (Figure 19). All belong to the Grey-Brown Podzolic group.

Newtonbrook Creek and Blue Ridge Creek are within the Study Area. Newtonbrook Creek extends from the storm sewer discharge near Willowdale Avenue to its confluence with the East Don River near the east limits of Forest Grove Drive. Blue Ridge Creek extends from Bayview Avenue to its confluence with East Don River. They are within the urbanized sub-watershed located in the City of Toronto. Within the past two decades, a number of significant storm events have caused major damage to the watercourse resulting in extensive creek erosion and exposure of Toronto Water infrastructure including maintenance holes and sanitary sewers in and adjacent to the creek. Stream channels such as Newtonbrook Creek have been identified as unstable and adjusting to a changed pattern of stream flow, primarily due to increased runoff from impervious surfaces associated with urban development and an absence of stormwater management controls.

The East Don River is located within the eastern portion of the Study Area near the Canadian National Railway. The Don River drains an area of approximately 370 kilometres squared. The watershed consists of two main branches: the east and west Don Rivers. These branches intersect the old Lake Iroquois beach and transit the Peel plain and South Slope physiographic regions intersecting the old Lake Iroquois beach and meeting their confluence approximately at the intersection of Don Mills Road and the Don Valley Parkway (Chapman & Putnam, 1984). Intense urbanization and the preponderance of paved surfaces throughout the Don River watershed means fewer opportunities for stormwater to seep into the soil or be taken up by vegetation. As a result, much of the stormwater runs off the surface into the Don River, resulting in streambank erosion and increased flooding during storm events (Toronto and Region Conservation Authority, 2019).

1.3.3 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.) maintained by the MHSTCI. 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 *AkGu.*

According to the O.A.S.D., one previously registered archaeological site (AkGu-88) is located within one kilometre of the Study Area, which is within the Study Area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2022). AkGu-88 is noted to have further cultural heritage value or interest. A summary of the site 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
AkGu-88	Not Applicable	Woodland	Unknown	Toronto and Region Conservation Authority, 2013

Site AkGu-88 (Toronto and Region Conservation Authority, 2014b), is within the Study Area (see *Supplementary Documentation*). Test pit survey encountered three lithics and one Woodland period ceramic sherd which were included with fill that was brought in during the construction and leveling activities of the hydro corridor in the 1950s. The exact nature of the site was unclear, and it was determined the presence of an in-situ site in the area should be considered. Stage 3 archaeological assessment was recommended.

1.3.4 Previous Archaeological Assessments

According to the background research, 12 previous reports detail fieldwork within 50 metres of the Study Area:

(ASI, 2006b) Stage 1 and 2 Archaeological Assessment of St. John's Rehabilitation Hospital Located at 285 Cummer Ave. Part of Lots 21 and 22, Concession 1, East of Yonge Street Geographic Township of York, County of York Former City of North York, Now the City of Toronto [P047-217-2006]

This project area overlaps with the Study Area west of Maxome Avenue and north of the Bishop Allotment Gardens. The overlapping portion was determined to have no archaeological potential due to slope of being previously disturbed.

(ASI, 2017) Stage 1 and 2 Archaeological Assessment of Proposed Improvements to Bayview Arena Park Part of Lots 21 and 22, Concession 1 East of Yonge Street Geographic Township of York, York County City of Toronto [P449-0030-2017]

One corner of this project area overlaps with the Study Area east of Bayview Avenue. The overlapping portion was determined not to have archaeological potential due to slope.

(ASI, 2021) Stage 1 Archaeological Assessment Metrolinx OnCorr Non-Priority Works – Richmond Hill Corridor Various Lots and Concessions (Former Townships of York, Markham, and Whitchurch, County of York) City of Toronto, Regional Municipality of York Ontario [P383-0182-2019]

One corner of this project area overlaps with the Study Area on the eastern edge of Clarinda Park. Within the overlapping areas there were two assessment results. One portion was recommended for test pit survey at five metre intervals while the other is identified as previously disturbed.

(Stantec Consulting Ltd., 2020) Stage 1-2 Archaeological Assessment: CWP 219 Proposed Temporary Access and Workspaces in the City of Toronto, Ontario 41 Enterprise Road, Toronto or part of Lot 23, Concession 1, Fronting the Humber and Part of Lot D, Plan 5210, Geographic Township of Etobicoke, Part of Lot 21, Concession 1 East of Yonge Street, York Township, and Part of Lot 33, Concession 4, Scarborough Township, former York County, now City of Toronto, Ontario [P1060-0049-2020]

This project area is within 50 metres of the Study Area and is located south of the Study Area west of Maxome Avenue. Stantec identified it in their report as GW 72870. The project area for GW 72870 consists of an access road and temporary workspace. The five-metre-wide access road begins at Maxome Avenue and traverses southwest for approximately 50 metres and turns to the southeast for an additional 19 metres. The entire GW72870 Study Area was subjected to a test

pit survey initiated at five metre intervals on July 12, 2019. No archaeological resources were identified within the GW 72870 Study Area.

(Toronto and Region Conservation Authority, 2011) Archaeological Assessment (Stage 1-2) in the City of Toronto Finch Hendon Bike Trail Lots 21 And 22, Concession 1 West of Yonge Street Lots 21 And 22, Concession 1 East of Yonge Street Lot 22, Concessions 2, 3, and 4 East of Yonge Street Historic York Township, York County [P303-117-2011]

This project area was assessing a proposed trail scheduled to be constructed primarily along the hydro corridor located north of Finch Avenue, between Yonge Street and Victoria Park Avenue in the former Borough of North York in the City of Toronto. TRCA's Archaeological Resource Management Services conducted the fieldwork in the fall of 2011. A test pitting assessment was conducted along the length of the proposed trail which extended for a distance of approximately nine kilometres. The entire project area was found to be disturbed and as a result it is recommended that no further archaeological assessment of the property be required. The project area overlaps with the current Study Area along the hydro corridor east of Willowdale Avenue through to Maxome Park.

(Toronto and Region Conservation Authority, 2014a) Archaeological Assessment (Stage 1-2) in the City of Toronto Blue Ridge Emergency Works Lot 17, Concession 2 East of Yonge Street Historic North York Township, York County [P303-0258-2013]

This project area overlaps with the Study Area west of Burbank Drive within Blue Ridge Park. It was triggered by emergency repairs required for an exposed sanitary pipe resulting from watercourse migration. 57 square metres were test pitted at five metre intervals. All tested areas were confirmed as disturbed. No artifactual material or cultural features were located during the archaeological investigation. Accordingly, the project area as tested requires no further archaeological assessment.

(Toronto and Region Conservation Authority, 2014b) Archaeological Assessment (Stage 1-2) in the City of Vaughan, York Region and the City of Toronto Erosion Control – Don Watershed Lot 4, Concession 3 Historic Vaughan Township, York County Lots 21 and 22, Concession 1 East Historic North York, York County [P303-0266-2013]

Part of this project area (Area B) overlaps with the Study Area between Maxome Avenue and Bayview Avenue. It was triggered due to repair of severe erosion and trail construction. The project area was assessed through test pit survey at five metre intervals and strategic test pit survey. Two lithics and one ceramic were recovered from Area B. The site was registered as AkGu-88. The test unit excavation revealed that the soil matrix consisted of fill beneath topsoil. The disturbance was present to a depth of at least 50 centimetres and continued below the depth of artifact recovery. Stage 3 archaeological assessment was recommended to determine the exact nature of the site and if an in-situ site is present.

(Toronto and Region Conservation Authority, 2016) Archaeological Assessment (Stage 1-2) in the Town of Richmond Hill, York Region and the City Toronto Erosion Control – Don Watershed Lots 39 and 40, Concession 1 West of Yonge Street Historic Vaughan Township, York County Lots 17 and 19, Concession 2 East Historic North York, York County Lot 20, Concession 3 from the Bay Historic South York, York County [P303-0346-2015]

Two portions of this project area (Area B2 and B3) overlap with the Study Area northwest of Clarinda Park. Area B was tested at five metre intervals. No artifactual material or cultural features were encountered during the archaeological investigation. The project areas as tested require no further archaeological assessment.

(Toronto and Region Conservation Authority, 2017a) Archaeological Assessment (Stage 1-2) in the City of Toronto Exposed Sun-Canadian Pipeline Bank Rehabilitation Lots 17 and 19, Concession II E Geographic Township of York (North), Historic York County [P303-0420-2016]

One portion of this project area (Area B) overlaps with the Study Area northwest of Clarinda Park. Area B was shovel tested at five metre intervals. No artifactual material or cultural features were encountered during the archaeological investigation. The project area as tested requires no further archaeological assessment.

(Toronto and Region Conservation Authority, 2017b) Archaeological Assessment (Stage 1-2) in the City of Toronto, Newtonbrook Creek Bank Stabilization, Lot 18, Concession 2, East of Yonge Street, Geographic Township of York, Historic York County [P303-0431-2016]

Portions of this project area overlap with the Study Area along the trail between Forest Grove Drive and north of Hi Mount Drive. The entirety of the project area was subjected to shovel test pit survey at five metre intervals. No artifactual material or cultural features were located during the archaeological investigation. Accordingly, the project area as tested requires no further archaeological assessment.

(Toronto and Region Conservation Authority, 2020) Stage 1 Archaeological Assessment, 73-95 Clarinda Drive Slope Stabilization and Erosion Control, Lot 17, Concession II East of Yonge Street, Geographic Township of York, Historic York County in the City of Toronto [P303-0562-2020]

This Stage 1 project area is within the Study Area behind the houses on the northwest side of 73-95 Clarinda Drive within Blue Ridge Park. The review of geographic and cultural features, with careful consideration of available aerial photography, has indicated that the Clarinda Drive Study Area has the potential for buried cultural resources. Therefore, areas determined to hold potential must

be subject to archaeological test pit survey at five-metre intervals prior to any ground disturbing activities, in accordance with the 2011 Standards and Guidelines for Consultant Archaeologists.

(WSP, 2019) Stage 1 Archaeological Assessment Oriole GO Station, Metrolinx, Part of Lots 13, 14, 15, 16, Concession 2 East of Yonge Street, in the Historic Township of York, Former County of York, now the City of Toronto, in the Province of Ontario [P1078-0013-2018]

One corner of this project area overlaps with the Study Area on the eastern edge of Clarinda Park. The overlapping portion was determined to have no archaeological potential due to being previously disturbed.

2.0 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 Martin Cooper (P380) of ASI, December 3rd, 2021, 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 publicly accessible lands only and did not include excavation or collection of archaeological resources. Fieldwork was conducted when weather conditions were deemed clear with good visibility (partly cloudy with seasonal temperatures), per S & G Section 1.2., Standard 2. Field observations are compiled onto the existing conditions of the Study Area in Section 8.0 (Figure 21 through Figure 27) and associated photographs are presented in Section 7.0 (Images 1-28).

3.0 Analysis and Conclusions

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. Results of the analysis of the Study Area property inspection and background research are presented in Section 3.1.

3.1 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 (Don River);
- Early historic transportation routes (now Bayview Avenue);
- Proximity to early settlements (Newtonbrook); and
- Well-drained soils (Bondhead, Cashel, Peel)

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 Toronto Municipal Heritage Register was consulted and there are no properties within the Study Area that are Listed or Designated under the Ontario Heritage Act.

The *Master Plan of Archaeological Resources for the City of Toronto (Interim Report)* (Archaeological Services Inc. et al., 2004) was reviewed for background information and to help inform any indicators of archaeological potential not captured in other research. ASI's review of the above archaeological management plan indicate several areas with archaeological potential within the Study Area (Figure 20). Generally speaking, archaeological management plans are high-level analyses of archaeological potential for non-specialists but cannot not be considered a replacement for Stage 1 archaeological assessments.

These criteria are indicative of potential for the identification of archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

The background research and property inspection found that parts of the Study Area exhibit archaeological potential. 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 12, 19, 20, 24, 27; Figure 22 through Figure 27: areas highlighted in green).

Part of the Study Area has been previously assessed and does not require further archaeological assessments (Figure 22 through Figure 26: areas highlighted in red).

Stage 3 archaeological assessment was recommended for AkGs-88 (see *Supplementary Documentation).* Should future disturbance impact the site, Stage 3 investigation is recommended in accordance with the recommendations made under P303-0266-2013.

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 (Images 1, 2, 4, 5, 7, 10, 11, 16, 20-23; Figure 22 through Figure 26: areas highlighted in pink). These areas do not require further survey.

The Don River is located within the Study Area. The marine archaeological potential of the river is to be evaluated following the MHSTCI's *Criteria For Evaluating Marine Archaeological Potential* checklist if impacts to the riverbed are proposed (Figure 25 and Figure 26: areas highlighted in light blue).

The remainder of the Study Area has been subjected to deep soil disturbance events due to construction from Toronto Water infrastructure crossings, an Imperial pipeline creek crossing, an extensive sewer system and storm outfall infrastructure, realignment and channelization of Newtonbrook Creek and Blue Ridge Creek, and the residential subdivisions. According to the S & G Section 1.3.2 these areas do not retain archaeological potential (Images 1, 2, 4-11, 14-18, 20, 21, 23, 25-29; Figure 22 through Figure 27: areas highlighted in yellow) and do not require further survey.

3.2 Conclusions

The Stage 1 background study determined one previously registered archaeological site (AkGu-88) is located within one kilometre of the Study Area, which is within the Study Area and requires further archaeological assessment. The property inspection determined that the Study Area exhibits archaeological potential and will require Stage 2 assessment.

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 at five metre intervals (Figure 22 through Figure 27). Stage 2 is required prior to any proposed construction activities on these lands;

2 Part of the Study Area includes Site AkGu-88. The following recommendations made by Toronto and Region Conservation Authority (P303-0266-2013) still apply. Should future disturbance threaten the site, a Stage 3 investigation is recommended that will comprise the following:

d. A detailed documentary research of the land use and occupation history specific to the archaeological site;

e. Controlled excavation of one metre units to (a) determine the presence of buried artifacts, structures, stratigraphy and cultural features and (b) collect a representative sample of artifacts.

f. Stage 3 investigation will be required for any portion of the site impacted by construction activities or those sites within 20 metres of the construction area.

3 The marine archaeological potential of the Don River is to be evaluated following the MHSTCI's *Criteria For Evaluating Marine Archaeological Potential* checklist if impacts to the riverbed are proposed (Figure 25 and Figure 26).

4 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, slopes in excess of 20 degrees, or being previously assessed. These lands do not require further archaeological assessment; and,

5 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 Cultural Programs Unit of the Ministry of Heritage, Sport, Tourism and Culture Industries 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 Heritage, Sport, Tourism and Culture Industries concurrence. No grading or other activities that may result in

the destruction or disturbance of any archaeological sites are permitted until notice of MHSTCI approval has been received.

5.0 Legislation Compliance Advice

ASI advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries 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 Heritage, Sport, Tourism and Culture Industries, 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.

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7.0 Images

7.1 Field Photography

Image 1: Area is disturbed and sloped, no potential.

Image 2: Area is disturbed and sloped, no potential.

Image 3: Area opposite the creek requires test pit survey

Image 4: Area is disturbed and sloped, no potential.

Image 5: Area is disturbed and sloped, no potential.

Image 6: Area is disturbed, no potential.

Image 7: Area is disturbed and sloped, no potential.

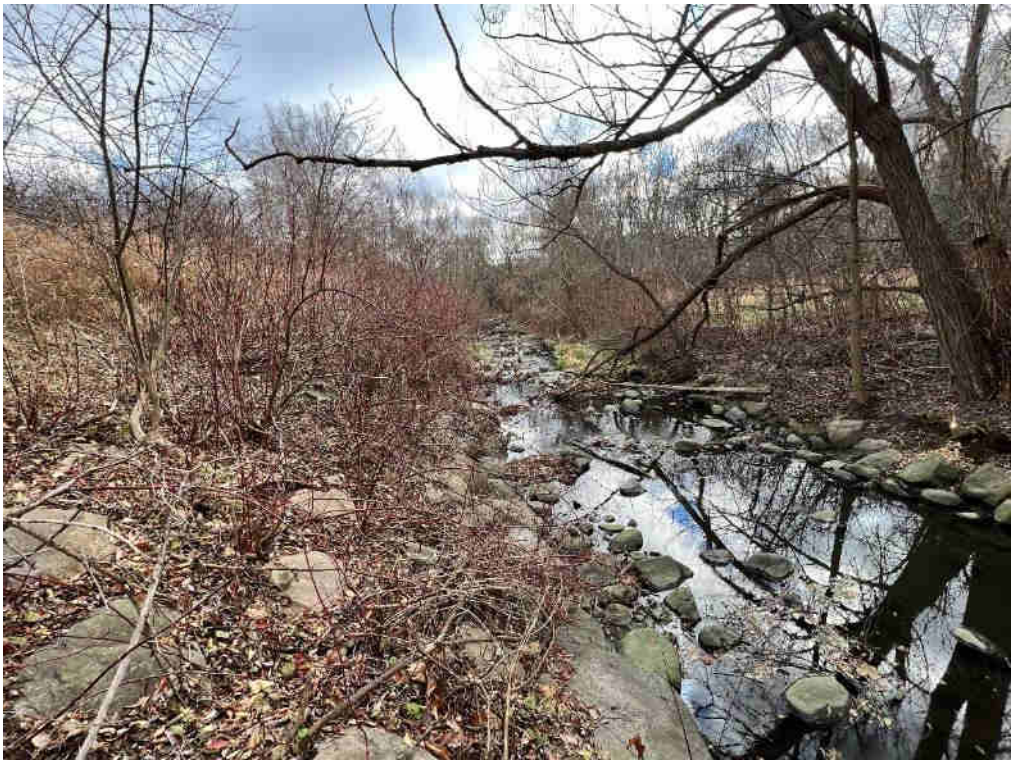

Image 8: Area is disturbed, no potential.

Image 9: Area is disturbed, no potential.

Image 10: Area is disturbed and sloped, no potential.

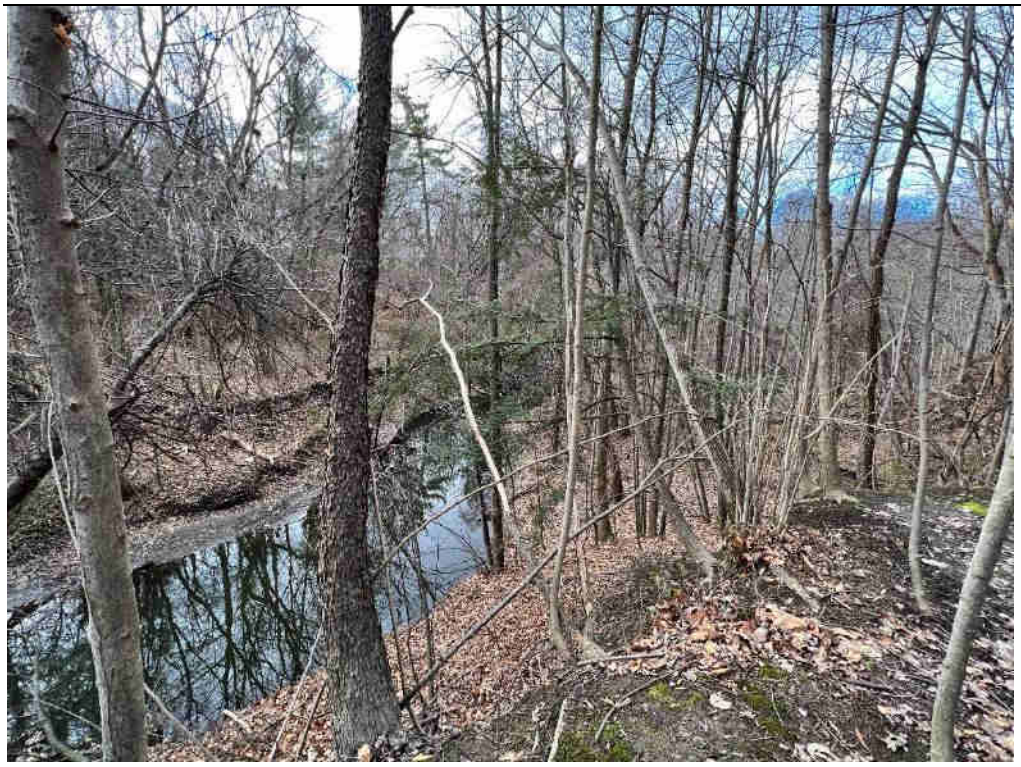

Image 11: Area is disturbed and sloped, no potential.

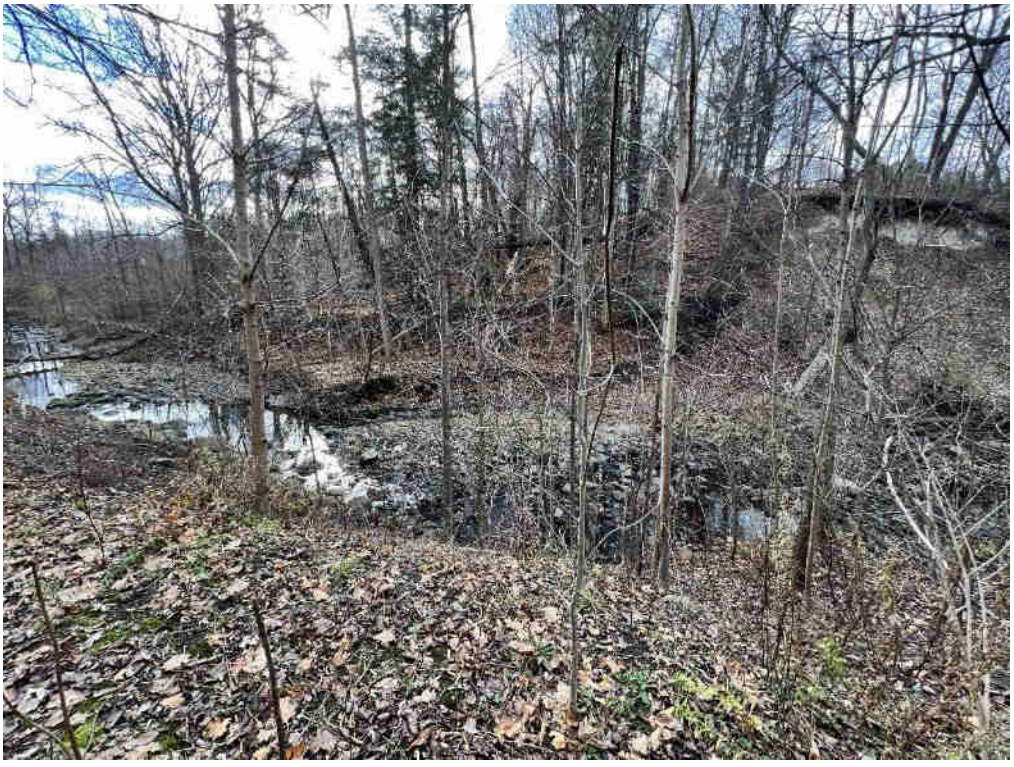

Image 12: Area requires test pit survey.

Image 13: Area requires test pit survey.

Image 14: Area is disturbed, no potential.

Image 15: Area is disturbed, no potential.

Image 16: Area is disturbed and sloped, no potential.

Image 17: Area is disturbed, no potential.

Image 18: Area is disturbed, no potential.

Image 19: Area requires test pit survey.

Image 20: Area is disturbed and sloped, no potential.

Image 21: Area is disturbed and sloped, no potential.

Image 22: Area is sloped, no potential.

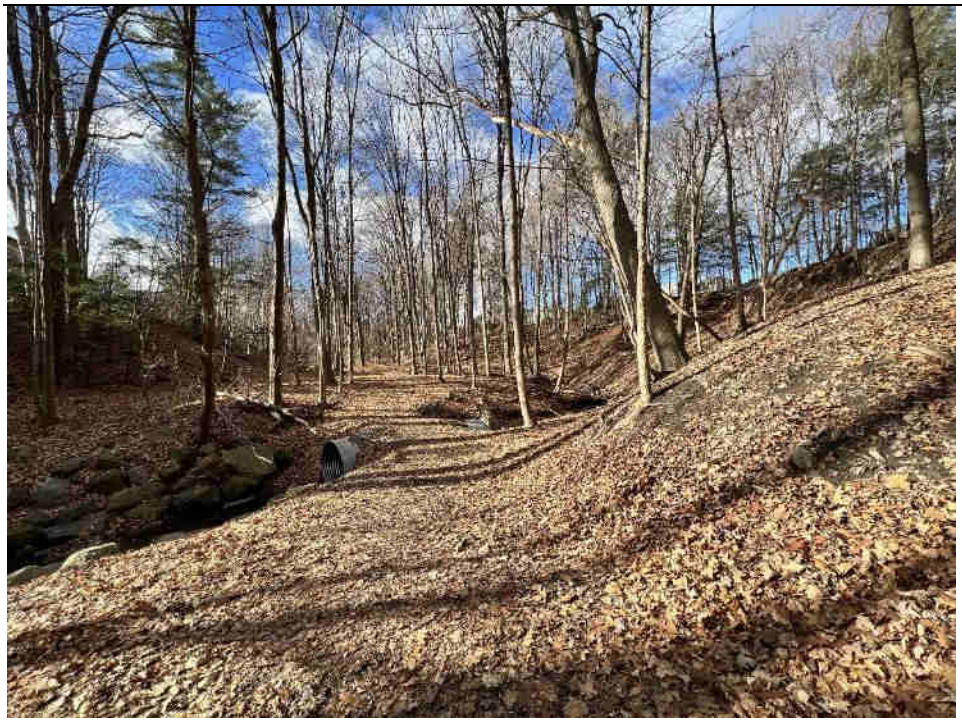

Image 23: Area is disturbed and sloped, no potential.

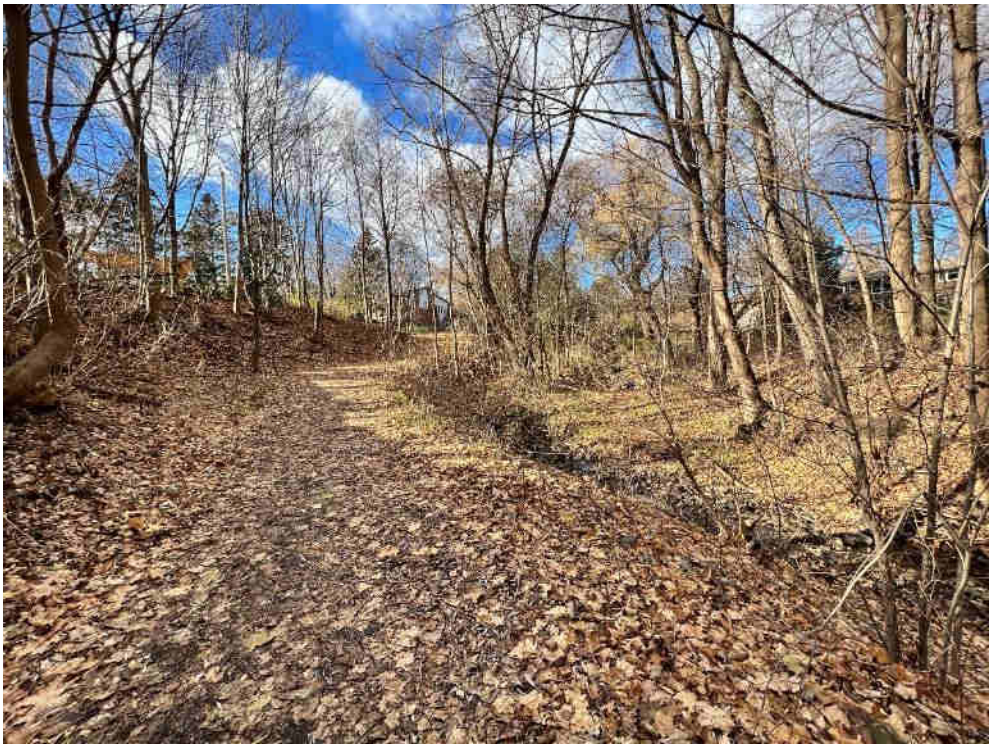

Image 24: Area requires test pit survey.

Image 25: Area is disturbed, no potential.

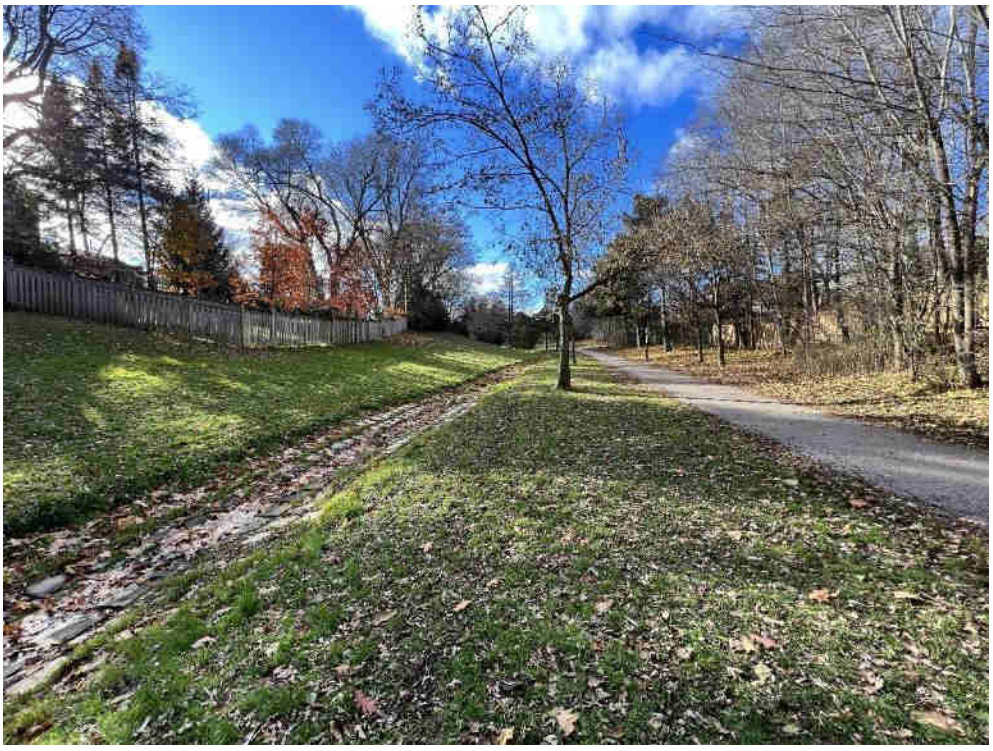

Image 26: Area is disturbed, no potential.

Image 27: Area beyond disturbed creek channel and trail require test pit survey

Image 28: Area is disturbed, no potential.

Image 29: Area is disturbed, no potential.

7.2 Historical Imagery

Image 30 East of Maxome Avenue in 2015 showing path construction (Google Earth Pro, 2021)

8.0 Maps

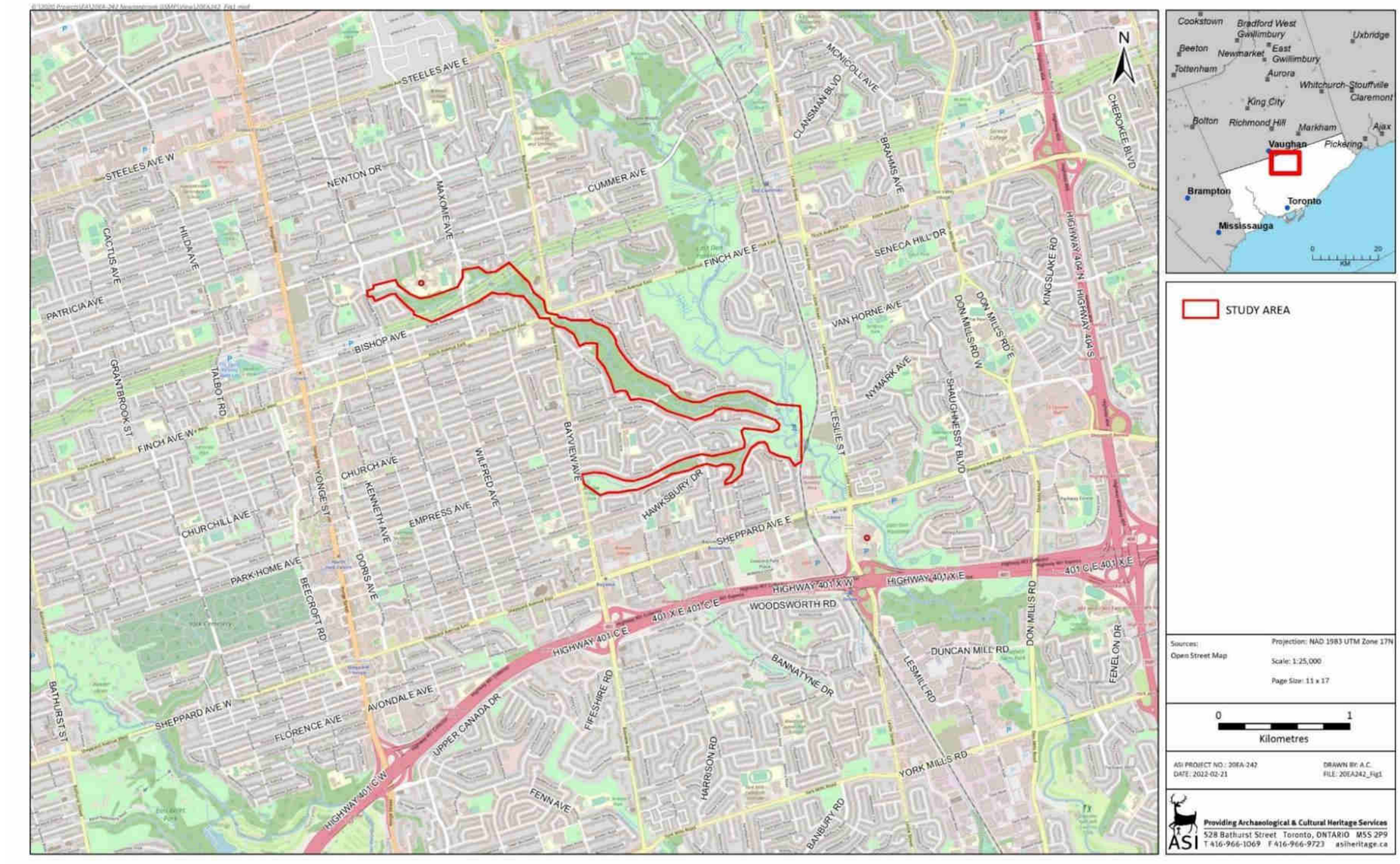

Figure 1: Newtonbrook Creek Geomorphic Systems Master Plan Study Area.

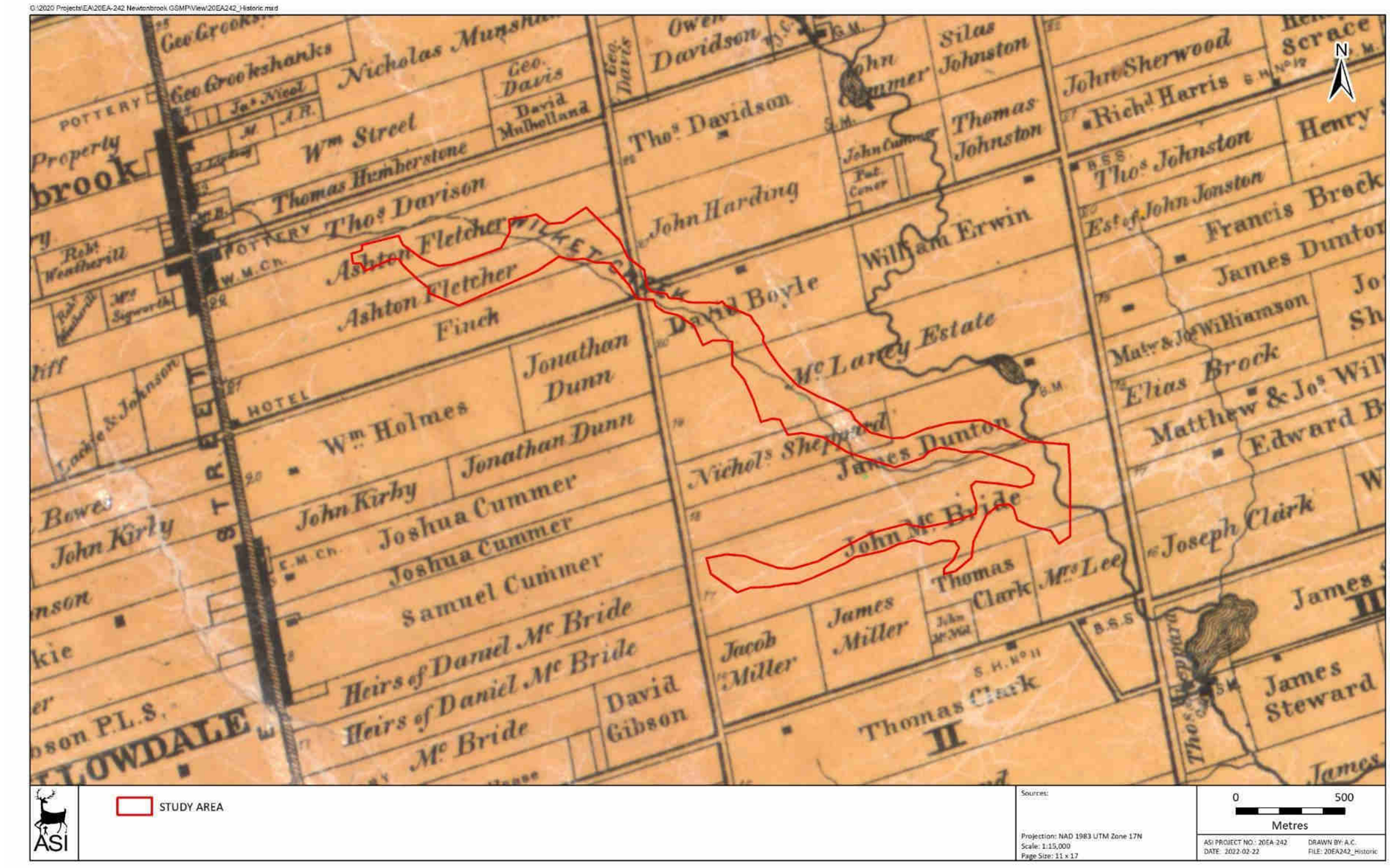

Figure 2: The Study Area overlaid on the 1860 Tremaine Map of the County of York (Base Map: (Tremaine, 1860).

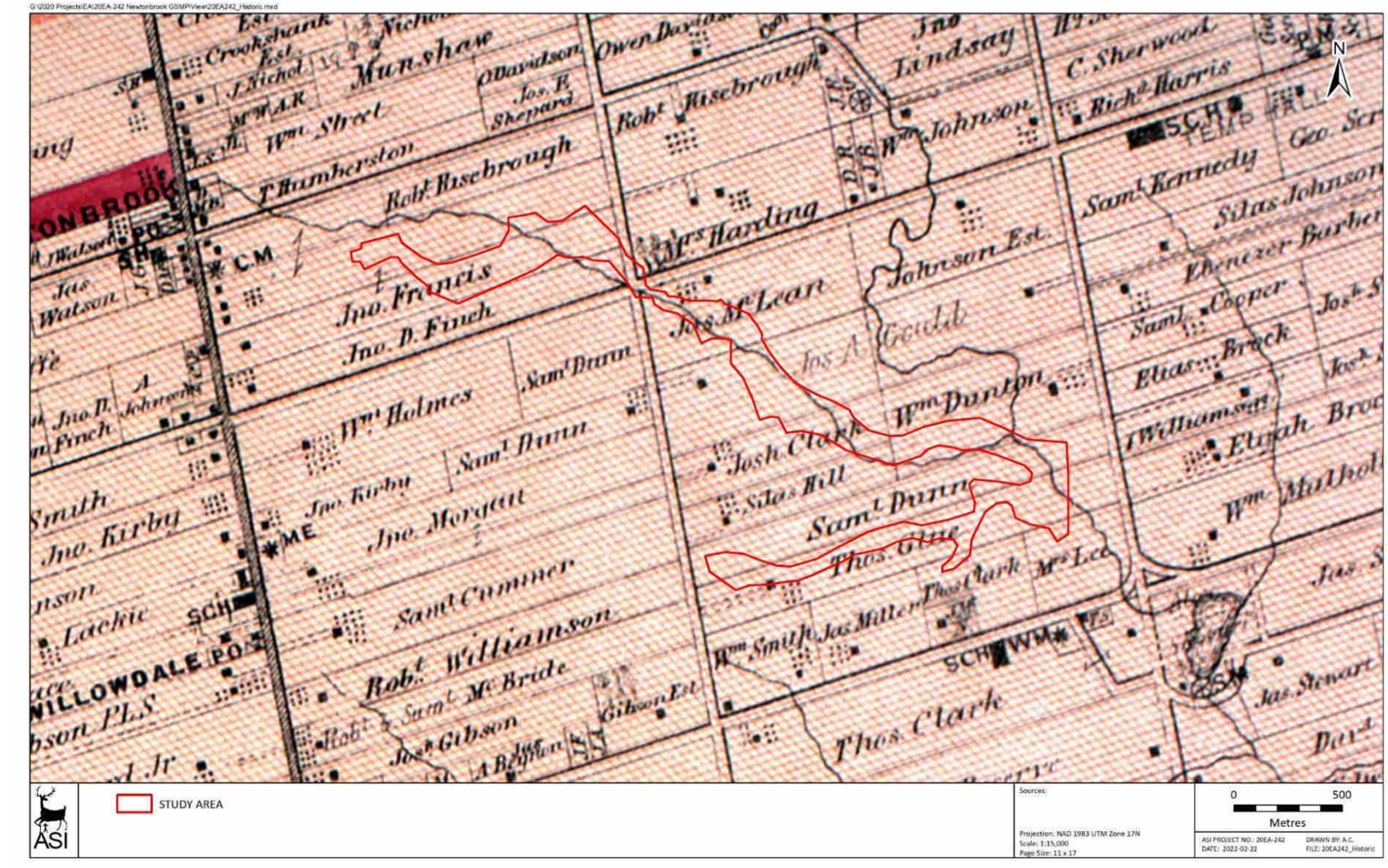

Figure 3: The Study Area overlaid on the 1878 Historical Atlas of the County of York (Base Map: (Miles & Co., 1878).

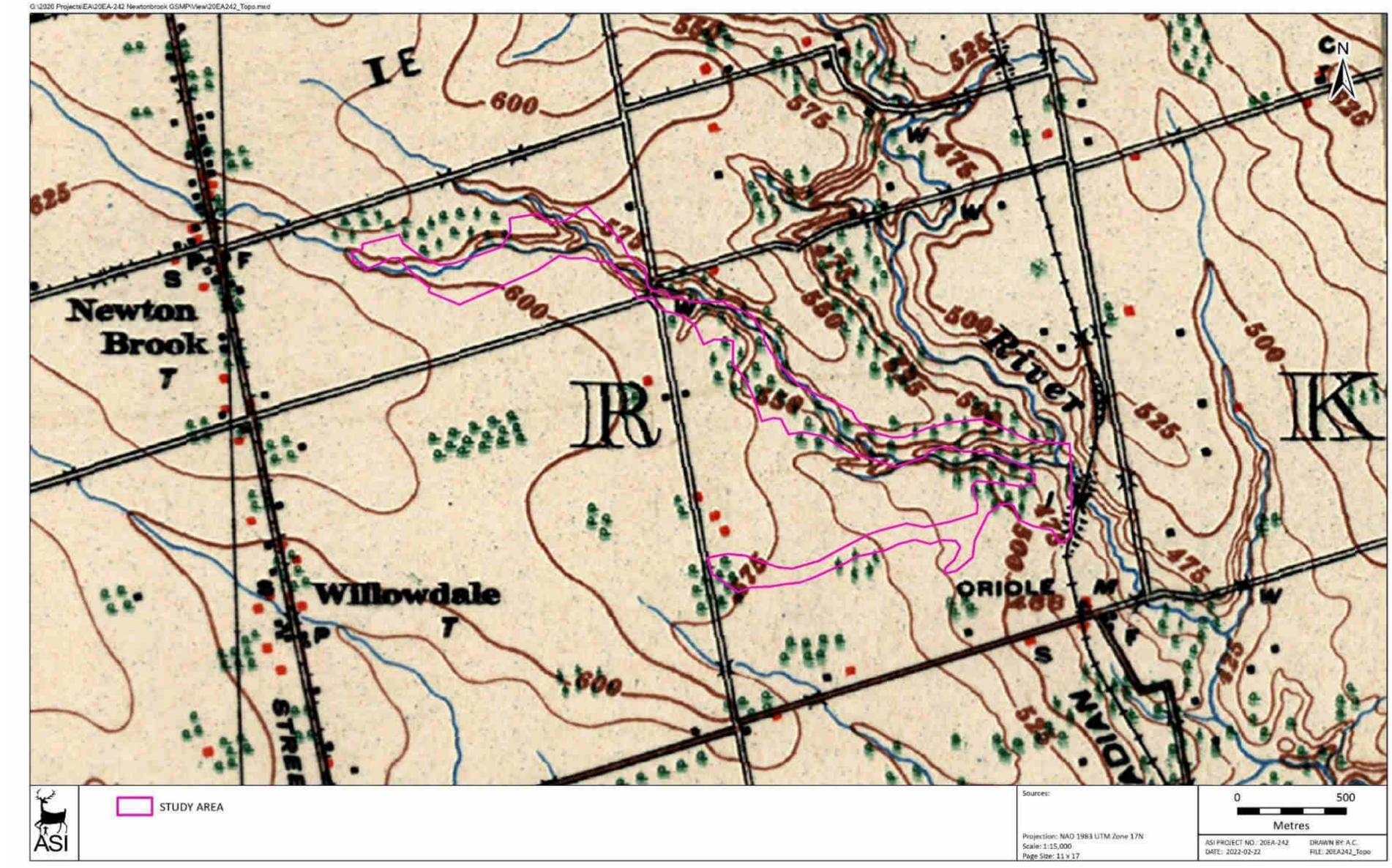

Figure 4: The Study Area overlaid on the 1914 topographic map of Markham sheet (Base Map: (Department of Militia and Defence, 1914).

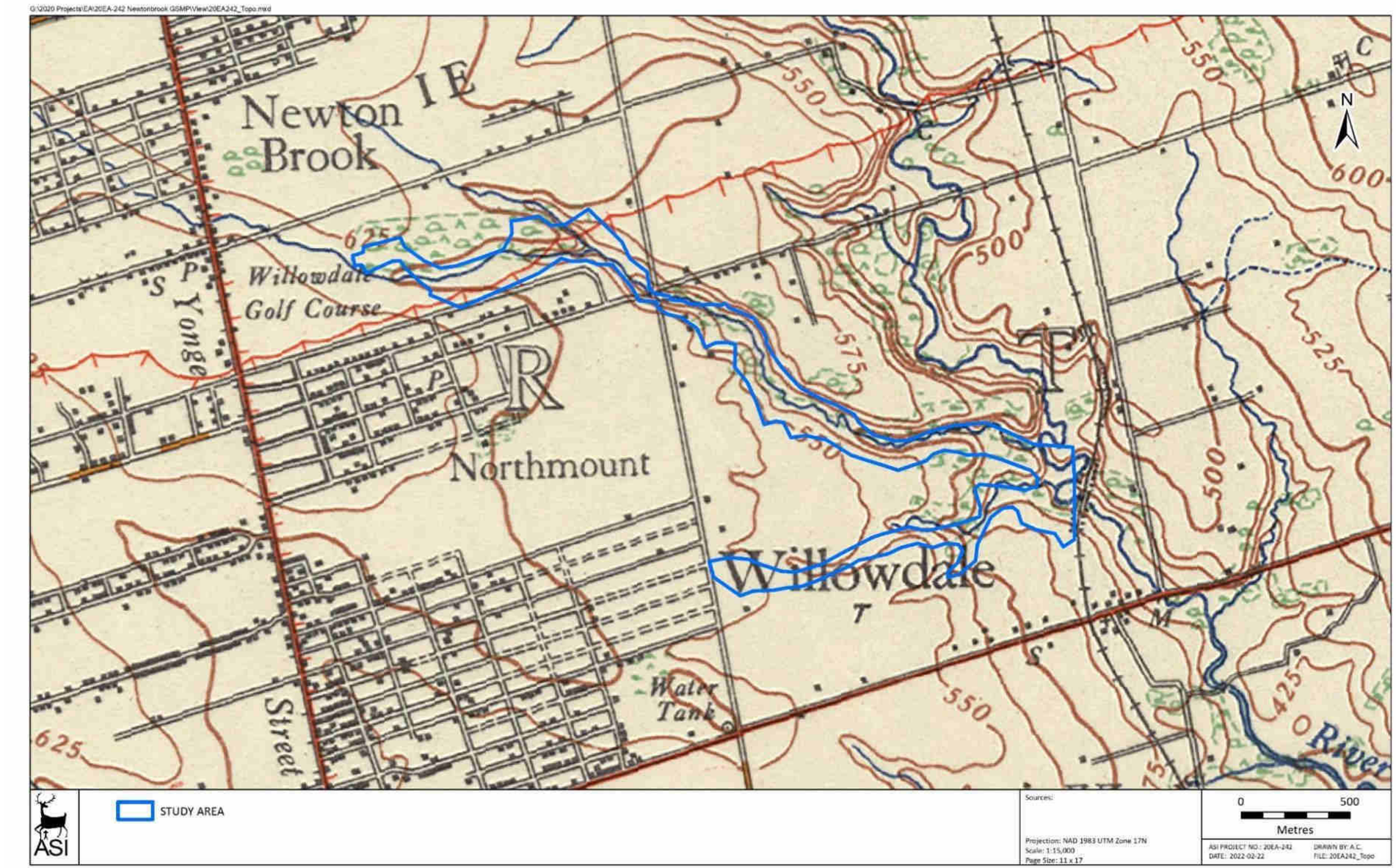

Figure 5: The Study Area overlaid on the 1943 topographic map of Markham sheet (Base Map: (Department of National Defence, 1943).

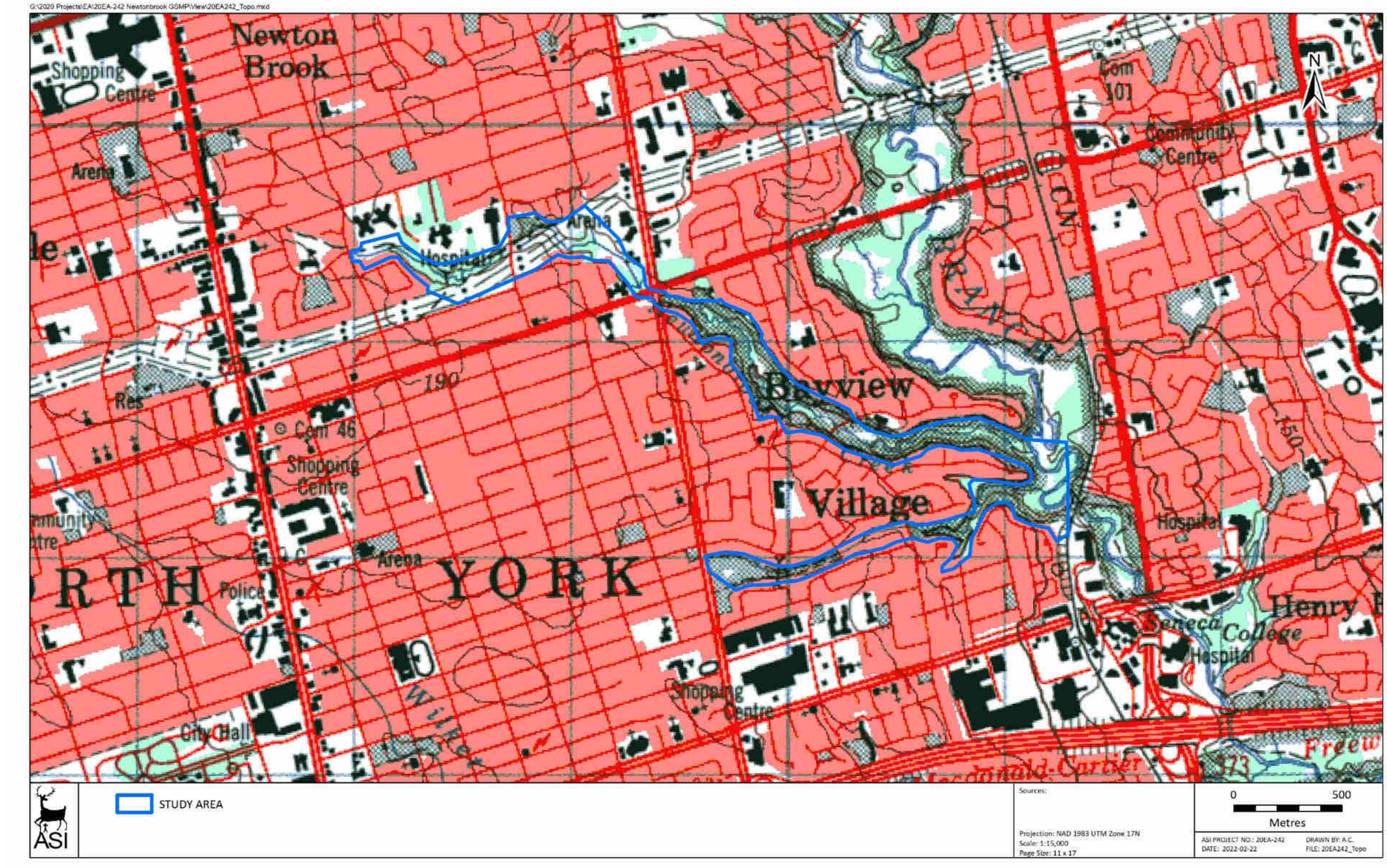

Figure 6: The Study Area overlaid on the 1994 topographic map of Markham sheet (Base Map: (Department of Energy, Mines and Resources, 1994a).

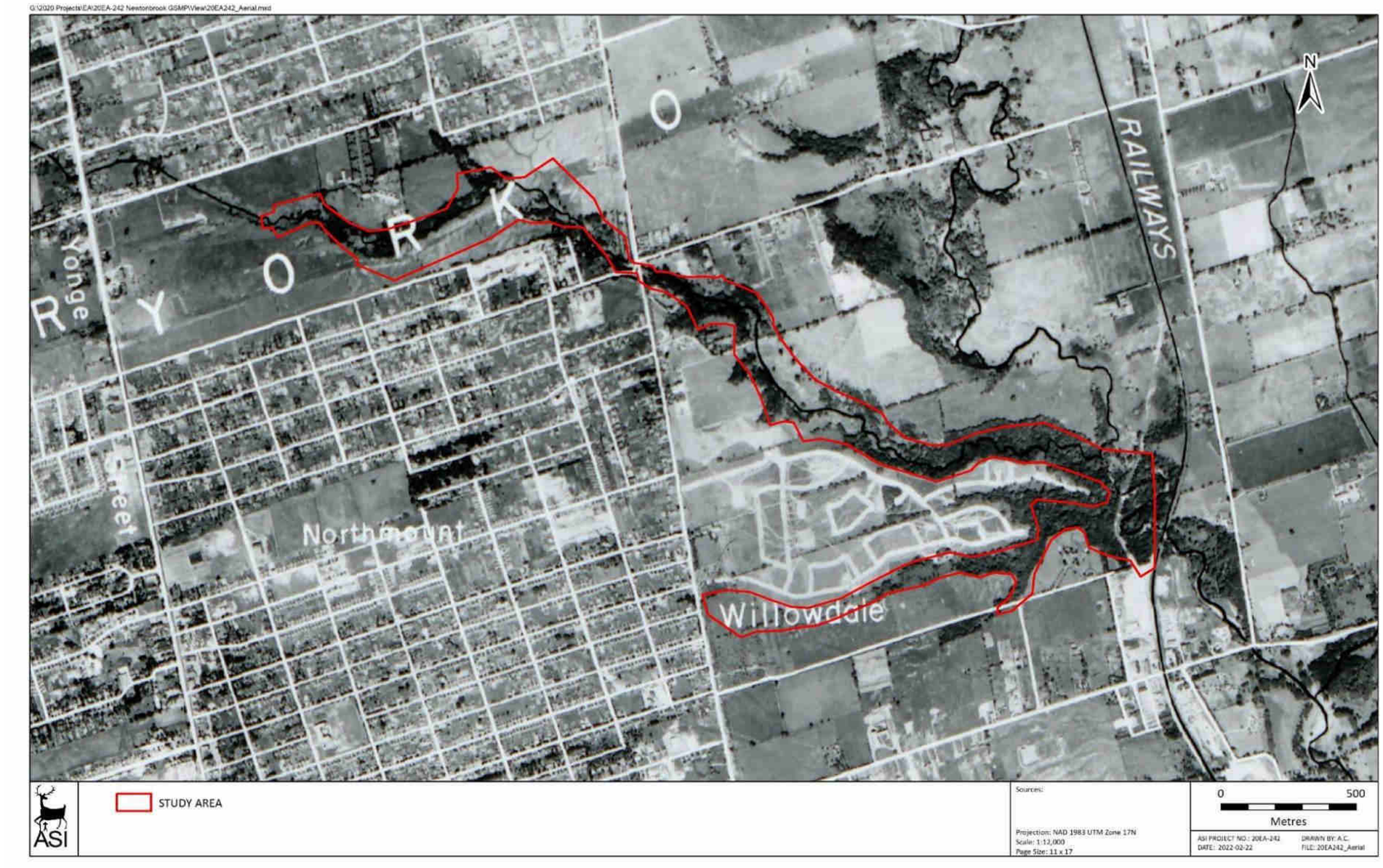

Figure 7: The Study Area overlaid on the 1954 aerial photograph of Markham (Base Map: (Hunting Survey Corporation Limited, 1954).

Figure 8: Aerial imagery of Newtonbrook Creek at Willowdale Avenue during creek realignment in 1961

Figure 9: Aerial imagery of Newtonbrook Creek at Maxome Avenue during sewer construction in 1961

Figure 10 Aerial imagery of Newtonbrook Creek realignment northwest of the Finch Avenue East and Bayview Avenue intersection in 1987

Figure 11: Aerial imagery of Newtonbrook Creek south of Finch Avenue and Bayview Avenue during sewer construction and creek realignment in 1961

Figure 12 Aerial imagery of a pathway created from Burbank Drive to Heathview Avenue across from Oscar Court in 1966

Figure 13: Aerial imagery of Newtonbrook Creek realignment and construction of Forest Grove Drive and existing sewers in 1964

Figure 14 Aerial imagery of Newtonbrook Creek realignment between Forest Grove Drive and the East Don River in 1975

Figure 15 Aerial imagery of residential development east of Bayview Avenue in 1957

Figure 16: Aerial imagery of Blue Ridge Creek channelization at Bayberry Crescent in 1977

Figure 17 Aerial imagery of tennis court construction in 1962

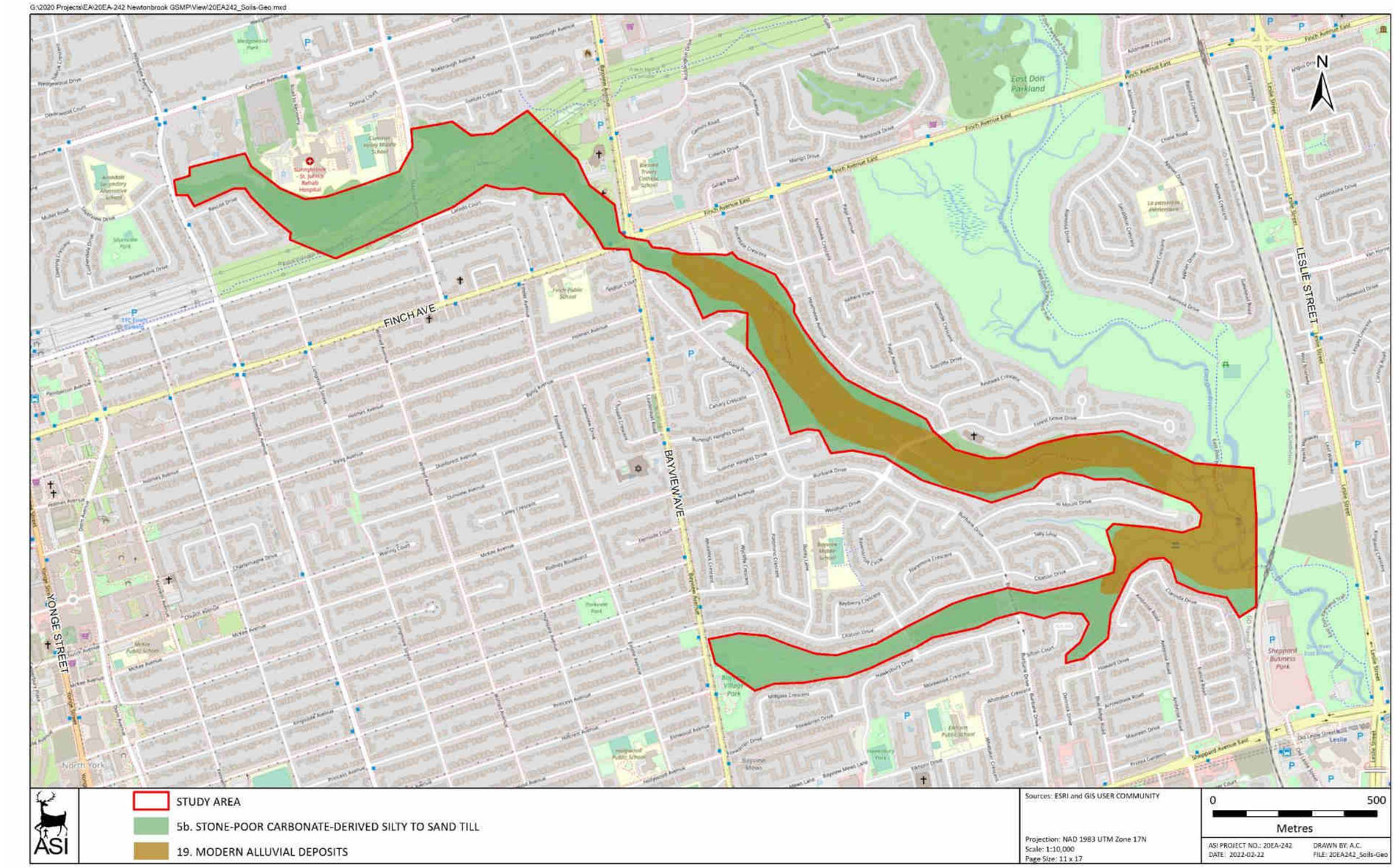

Figure 18: Study Area – Surficial Geology

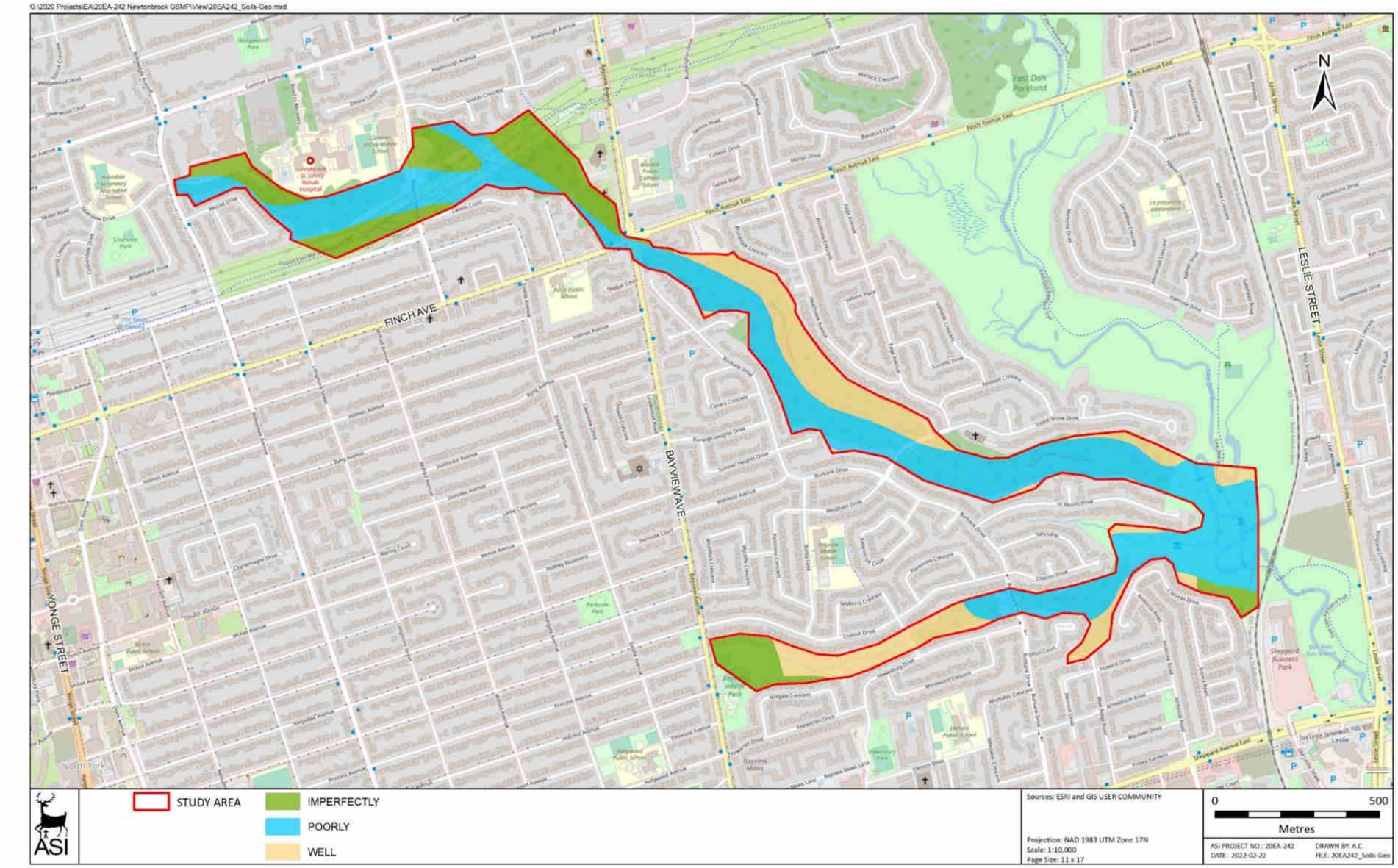

Figure 19: Study Area - Soil Drainage

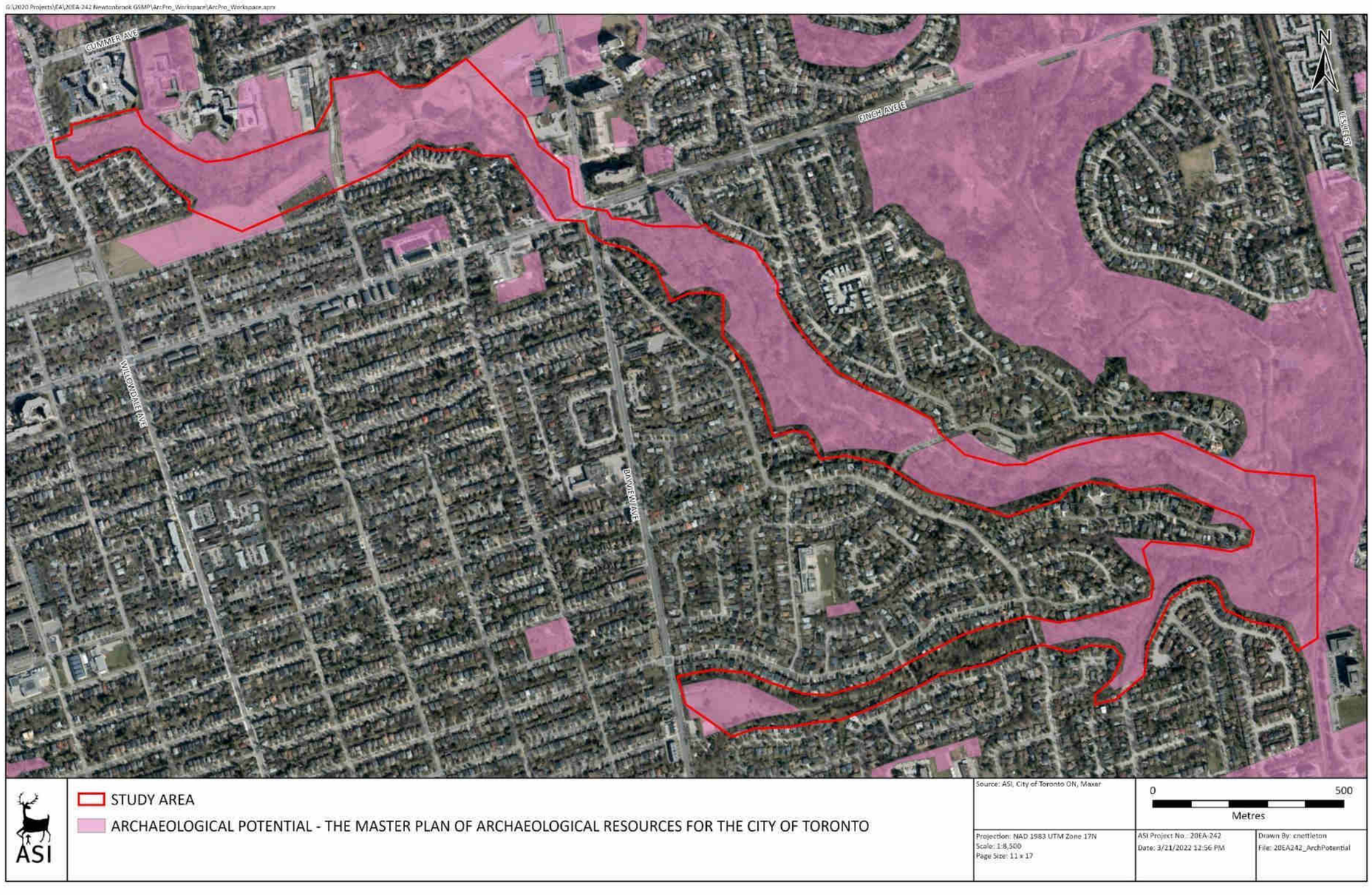

Figure 20: Archaeological Potential from the City of Toronto Archaeological Management Plan (Archaeological Services Inc. et al., 2004).

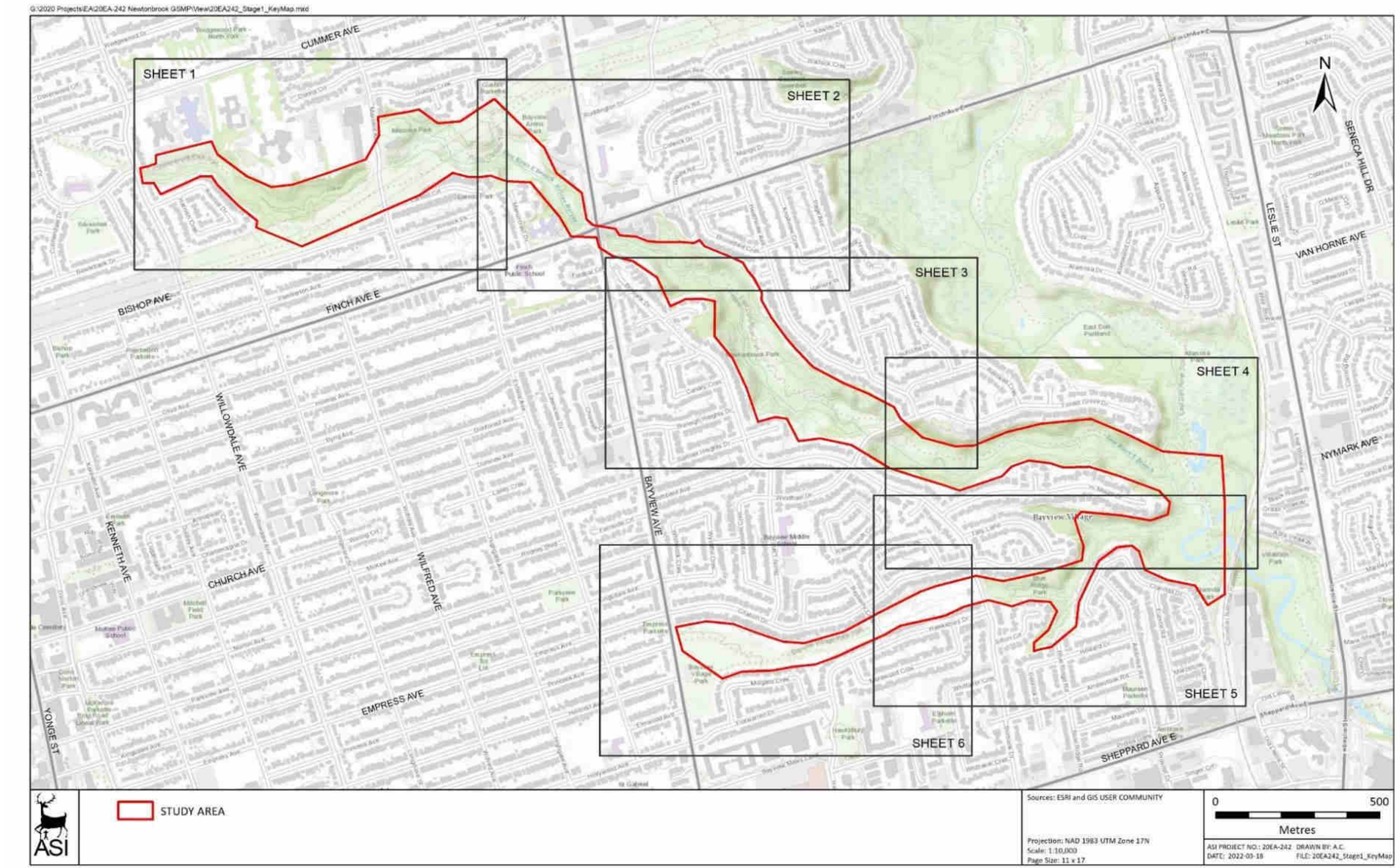

Figure 21 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Key Map)

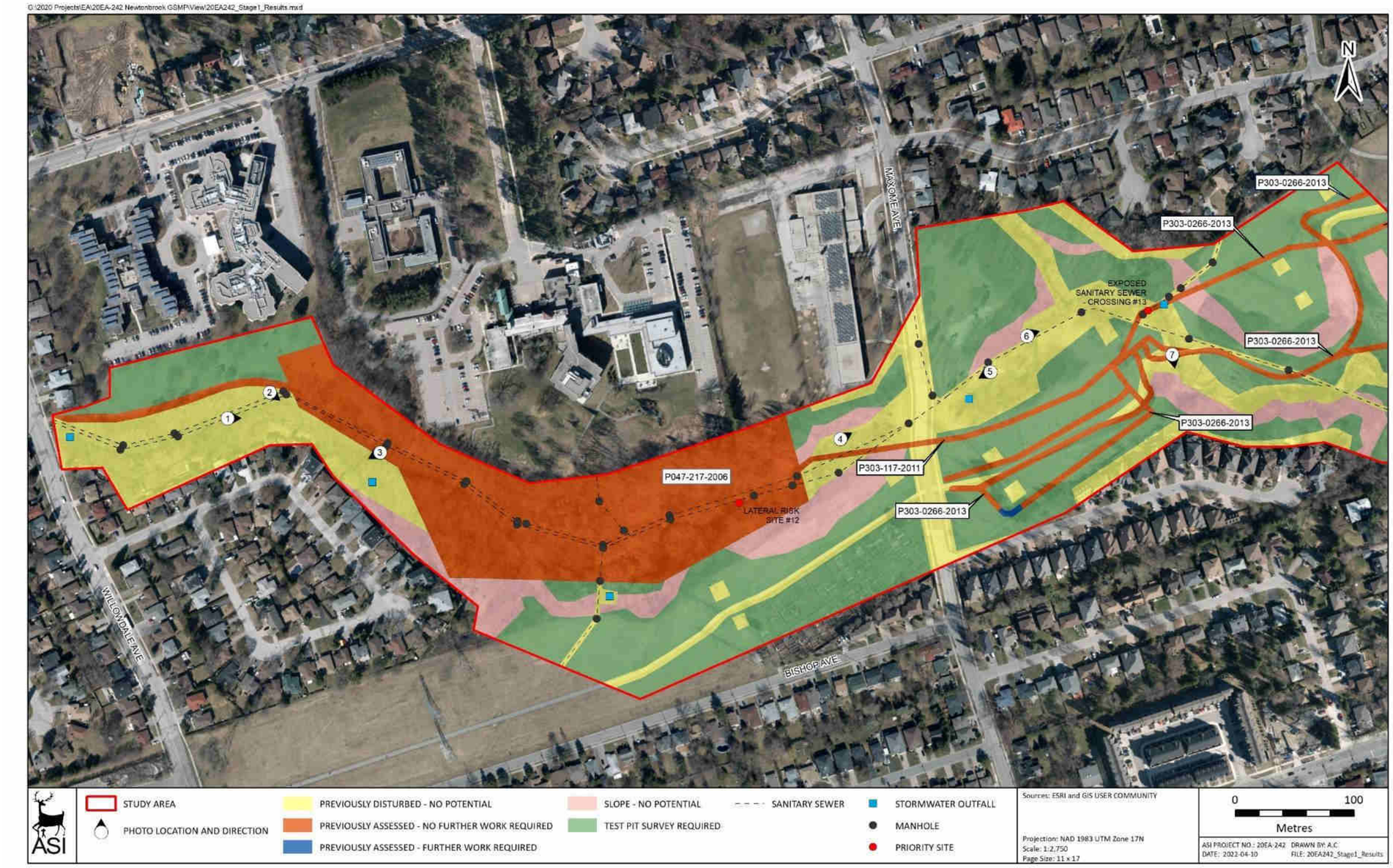

Figure 22 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 1)

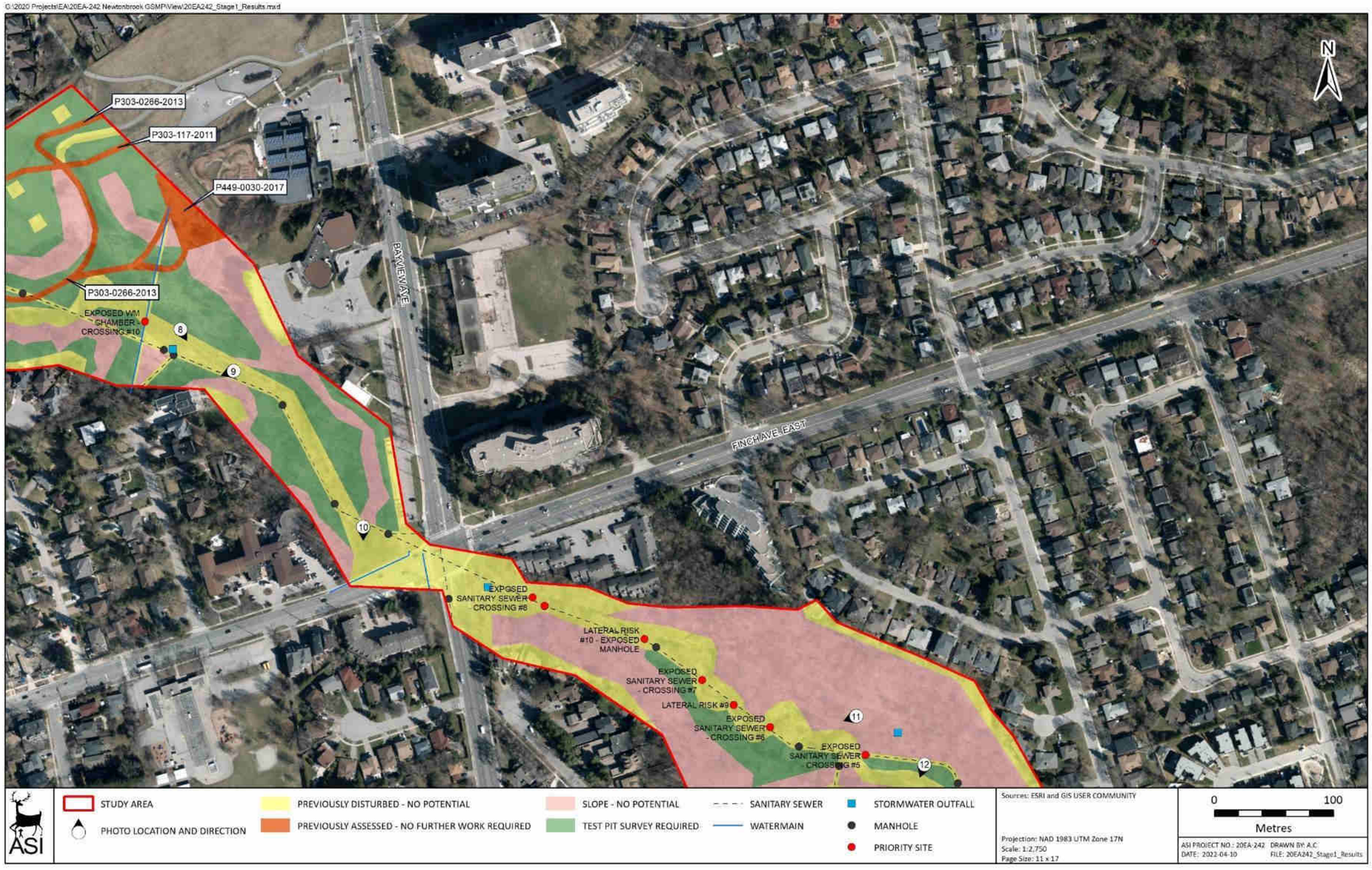

Figure 23 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 2)

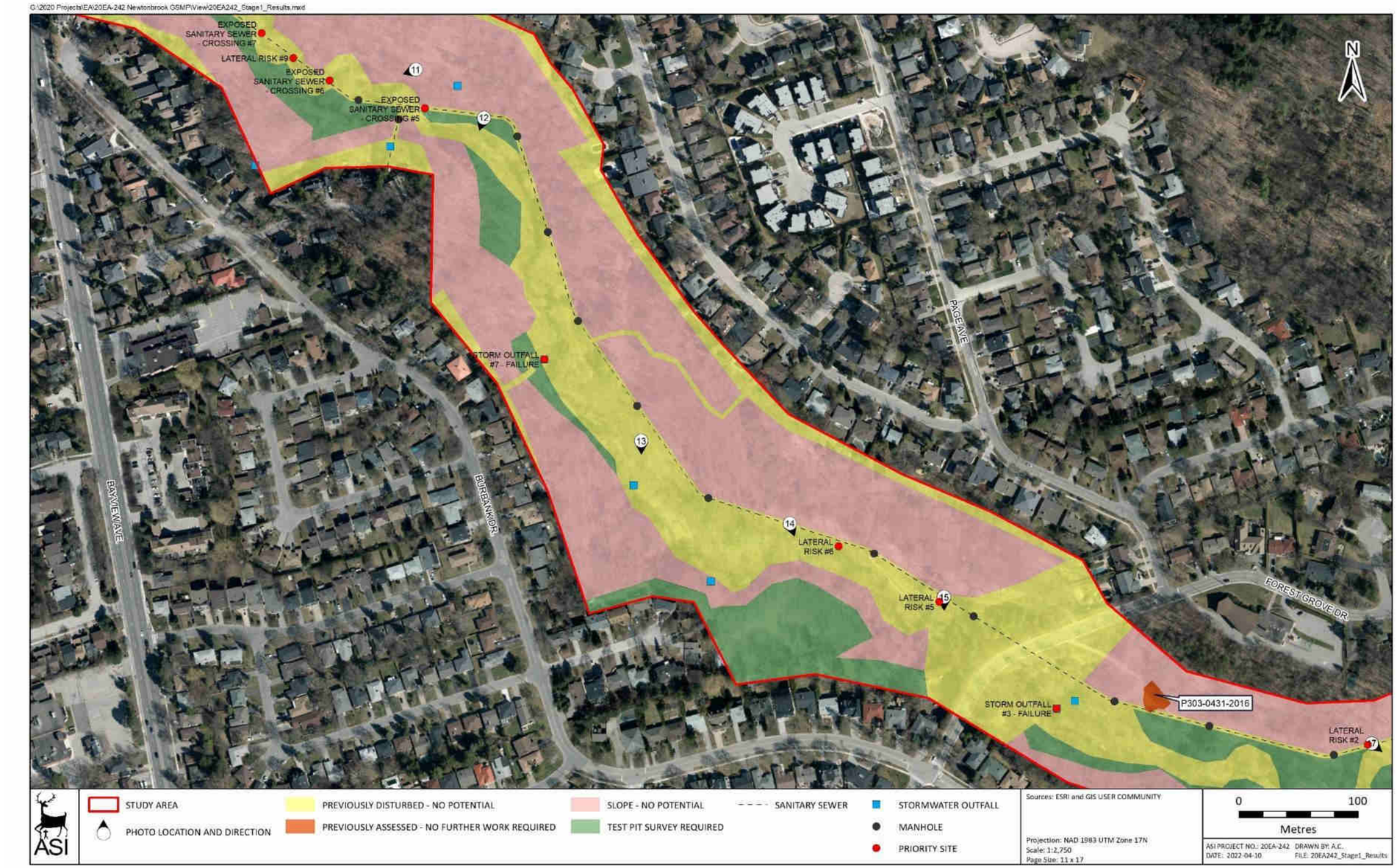

Figure 24 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 3)

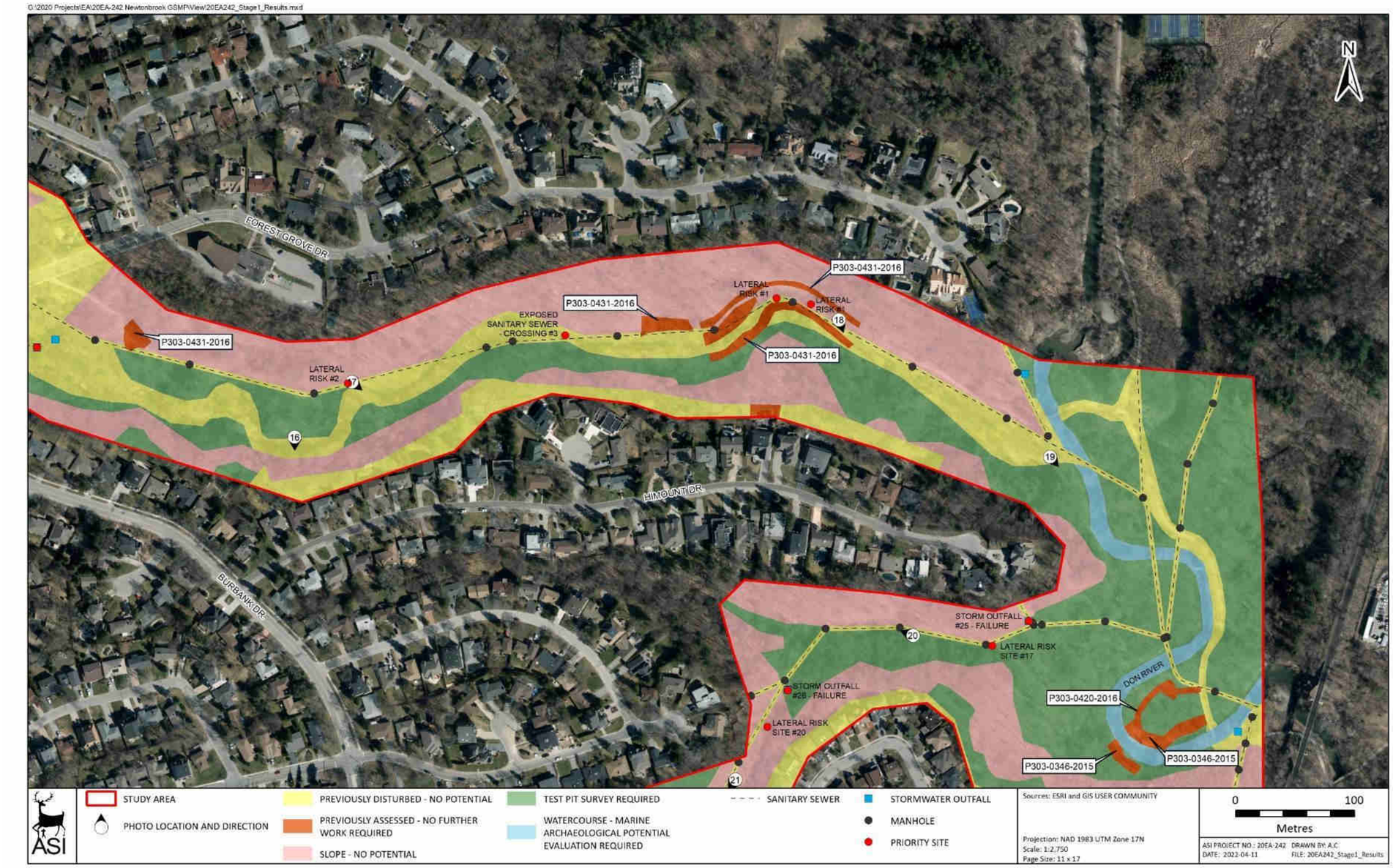

Figure 25 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 4)

Figure 26 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 5)

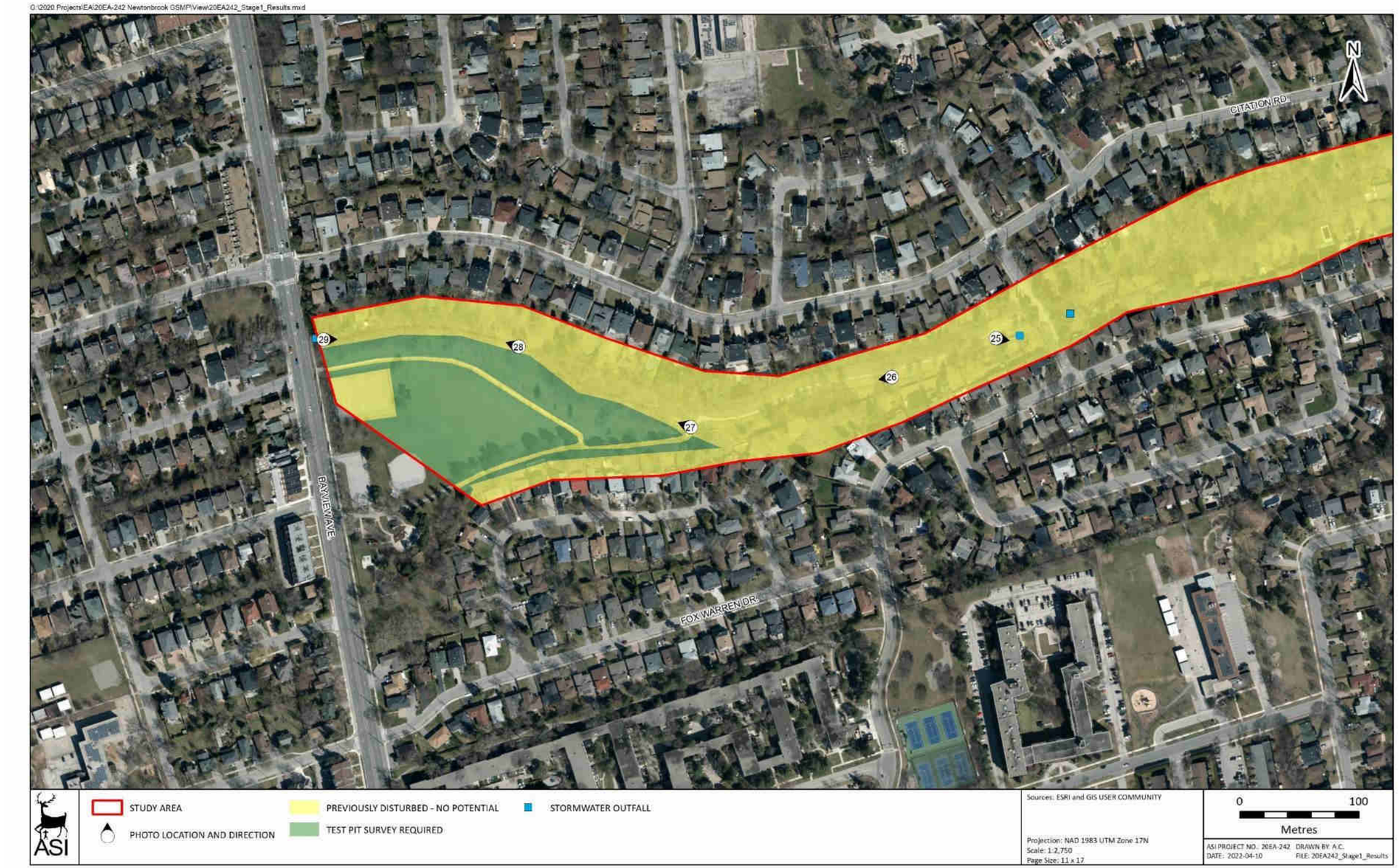

Figure 27 Newtonbrook Creek Geomorphic Systems Master Plan – Results of Stage 1 (Sheet 6)

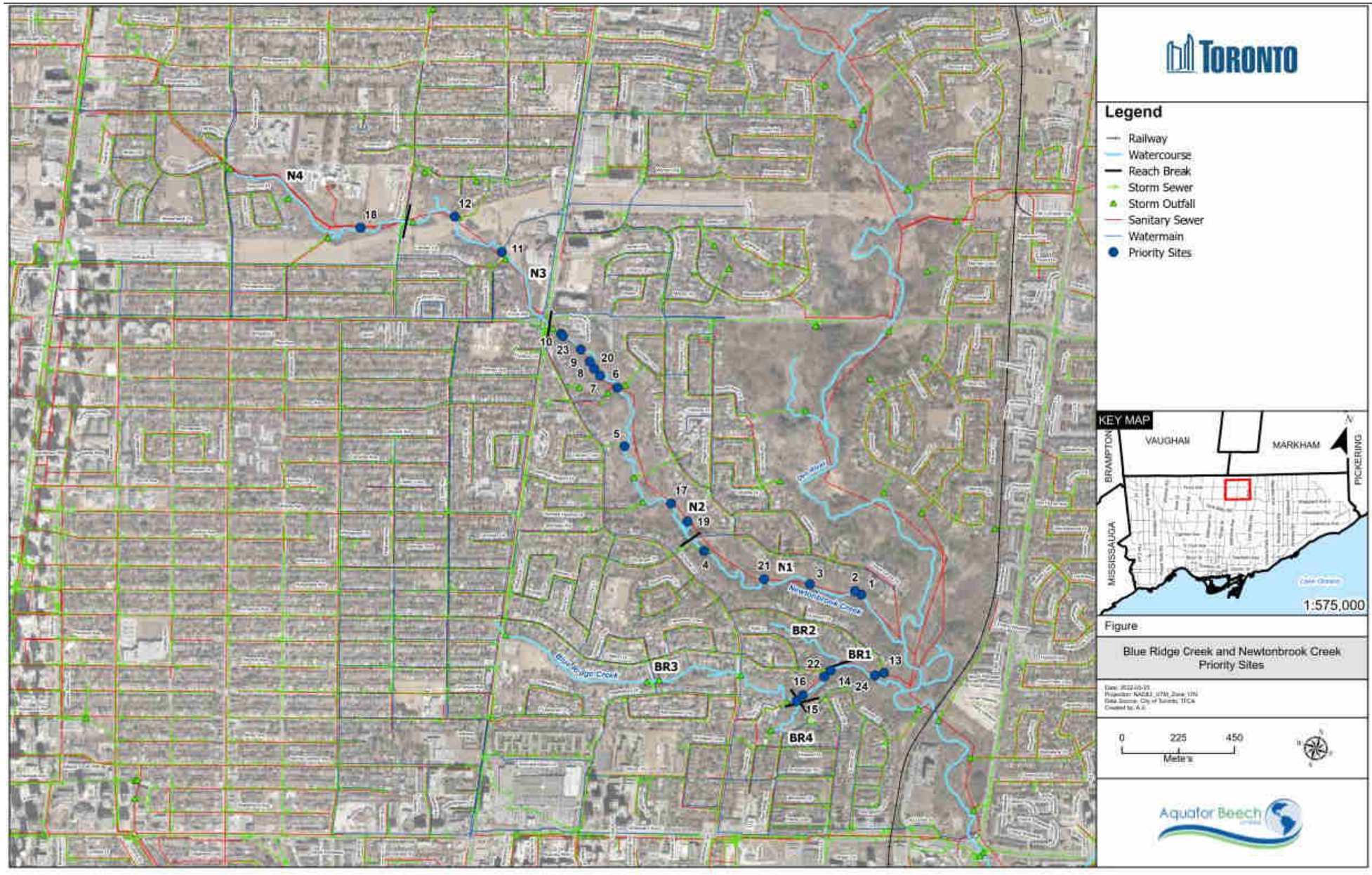

Figure 28: Preliminary Priority Sites in Newtonbrook Creek and Blue Ridge Creek

9.0 Previous Assessment Mapping

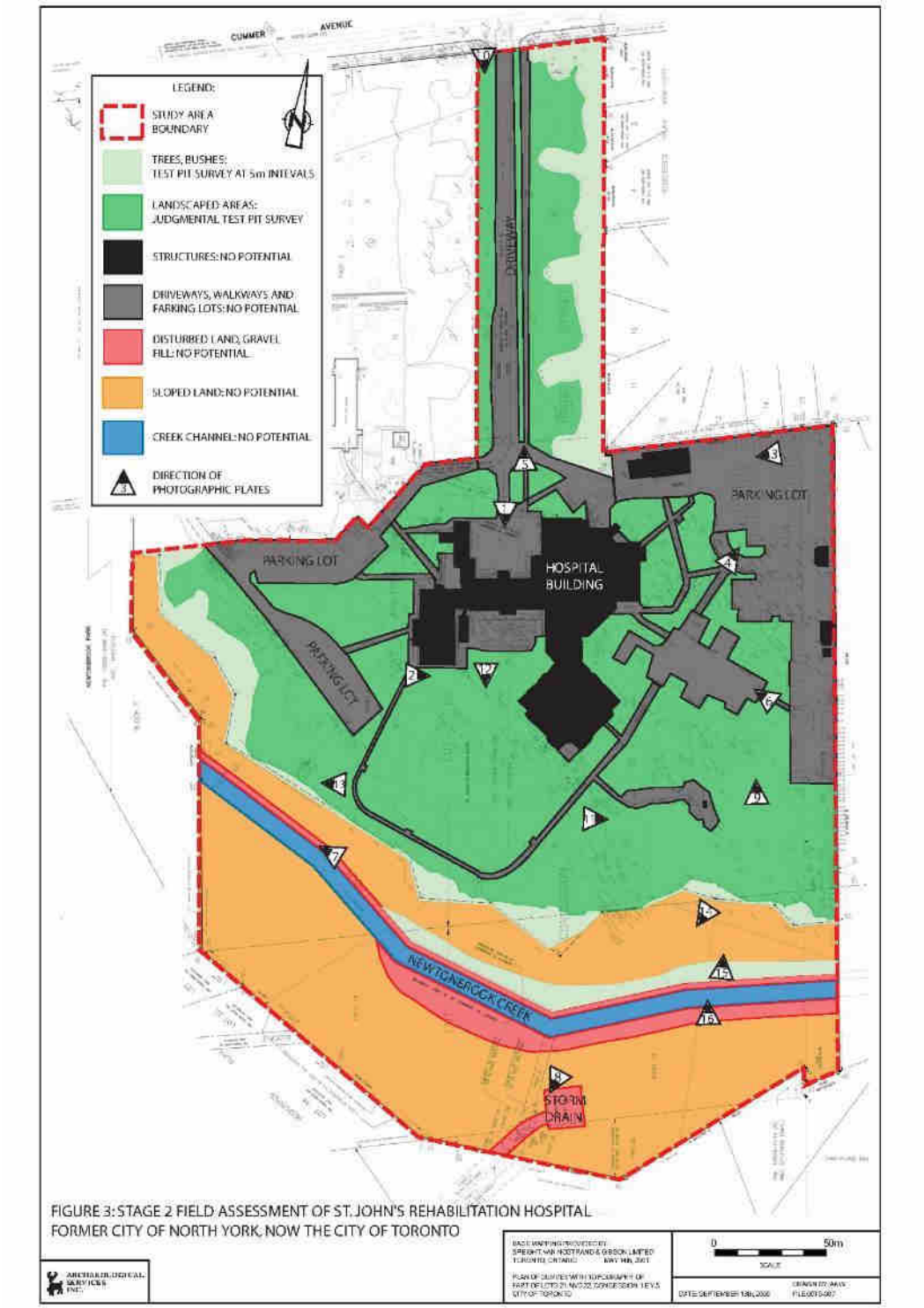

FIGURE 3: STAGE 2 FIELD ASSESSMENT OF ST. JOHN'S REHABILITATION HOSPITAL
FORMER CITY OF NORTH YORK, NOW THE CITY OF TORONTO

Figure 29: P047-217-2006 results

Figure 9: Results of the Stage 2 Archaeological Assessment

Figure 30: P449-0030-2017 Results

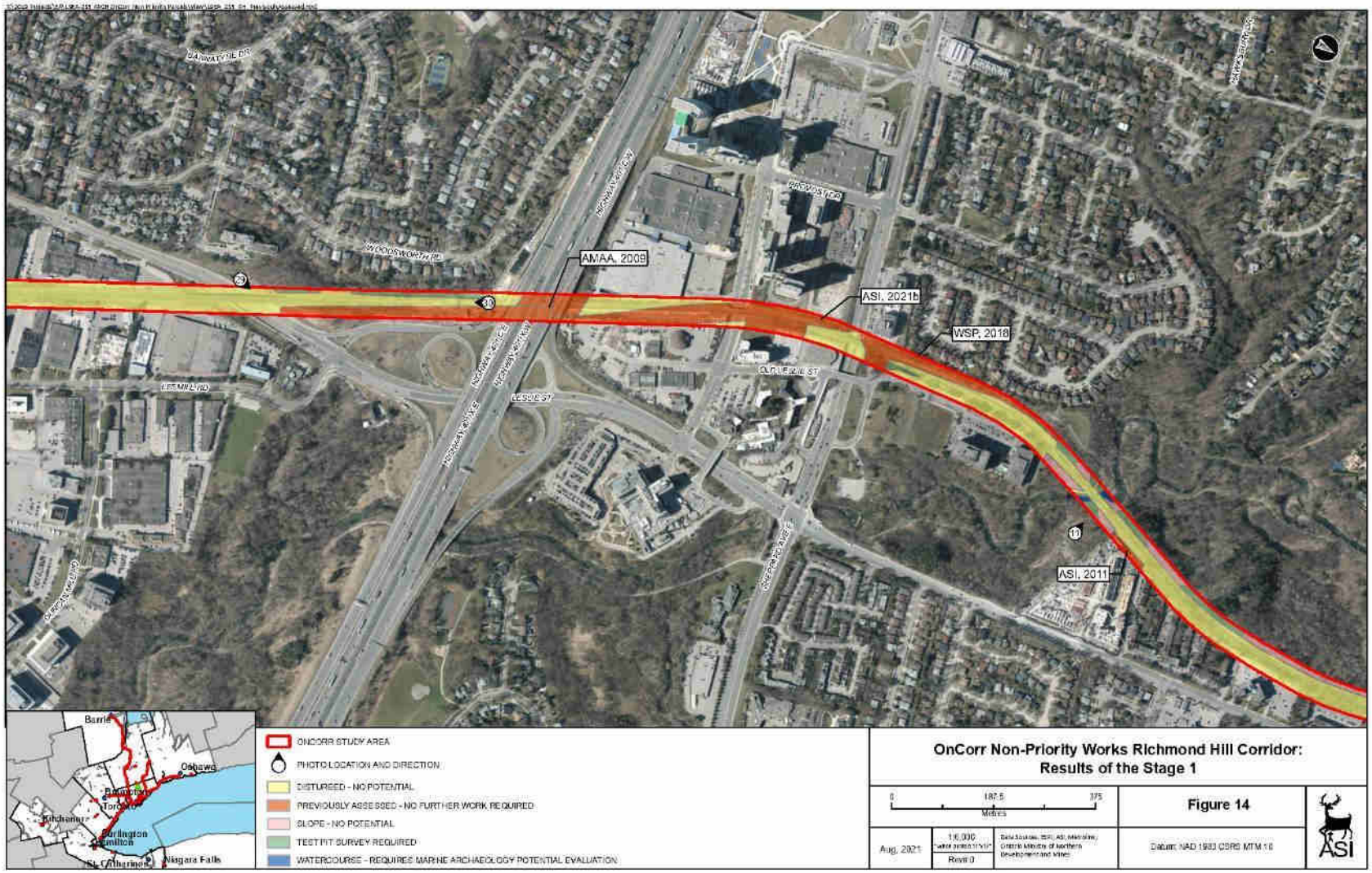

Figure 31: P383-0182-2019 Results

Map 23 Assessed Project Area

Figure 32: P303-117-2011 Results

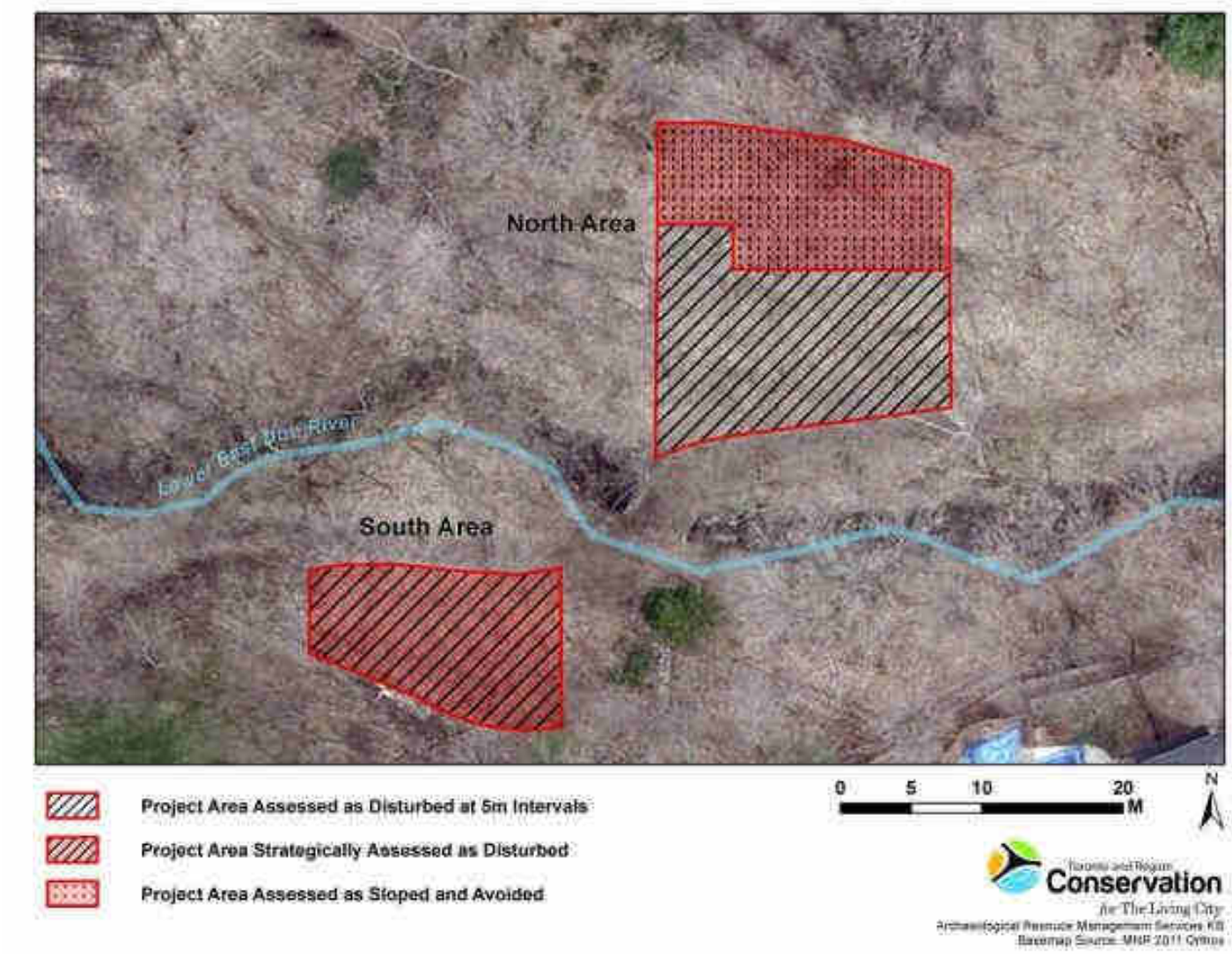

Figure 33: P303-0258-2013 Results

Figure 34: P303-0266-2013 Results (Sheet 1)

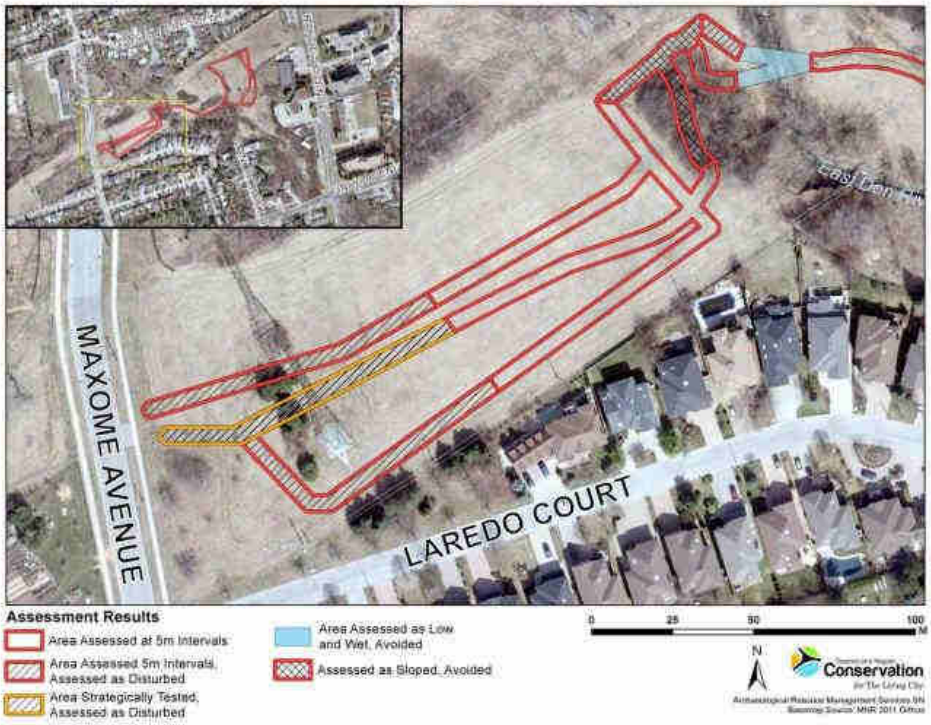

Figure 35: P303-0266-2013 Results (Sheet 2)

Figure 36: P303-0346-2015 Results

Map 8 Assessment Methodology

Figure 37: P303-0420-2016 Results

Figure 38: P303-0431-2016 Results

Figure 39: P303-0562-2020 Results

Stage 1 Archaeological Assessment Newtonbrook Creek Geomorphic Systems Master Plan (Lots 20-22 and Concessions 1 East of Yonge Street, Lots 17-20 and Concessions 2 East of Yonge Street, Former Townships of York and Scarborough, County of York) City of Toronto, Ontario

Supplementary Documentation

Prepared for:

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Archaeological Licence: P1017 (Kelly)

PIF P1017-0035-2021

Archaeological Services Inc. File: 20EA-242

19 April 2022

Table of Contents

List of Figures

1.0 Maps

According to Section 7.6 of the *Standards and Guidelines for Consultant Archaeologists* (S & G) administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI 2011), any information that pinpoints the location of an archaeological site (e.g., detailed assessment results mapping, tables of Global Positioning System (GPS) coordinates for site locations) must not be included in the project report and should only be provided in the Supplementary Documentation. This allows the MHSTCI to exclude it from the Ontario Public Register of Archaeological Reports, if necessary. Archaeological site location information is considered by the MHSTCI to be confidential and/or sensitive information that cannot be made public.

The following maps show the location of previously registered sites within one kilometre of the Study Area available from the Ontario Archaeological Sites Database (OASD). Also provided is the map of Stage 2 results at AkGu-88 (Toronto and Region Conservation Authority, 2014), which requires further work and is within the current Study Area. The site description and other relevant information relating to all archaeological work conducted for the project are contained in our accompanying Stage 1 assessment report.

Figure 1: Sites within One Kilometre of the Study Area

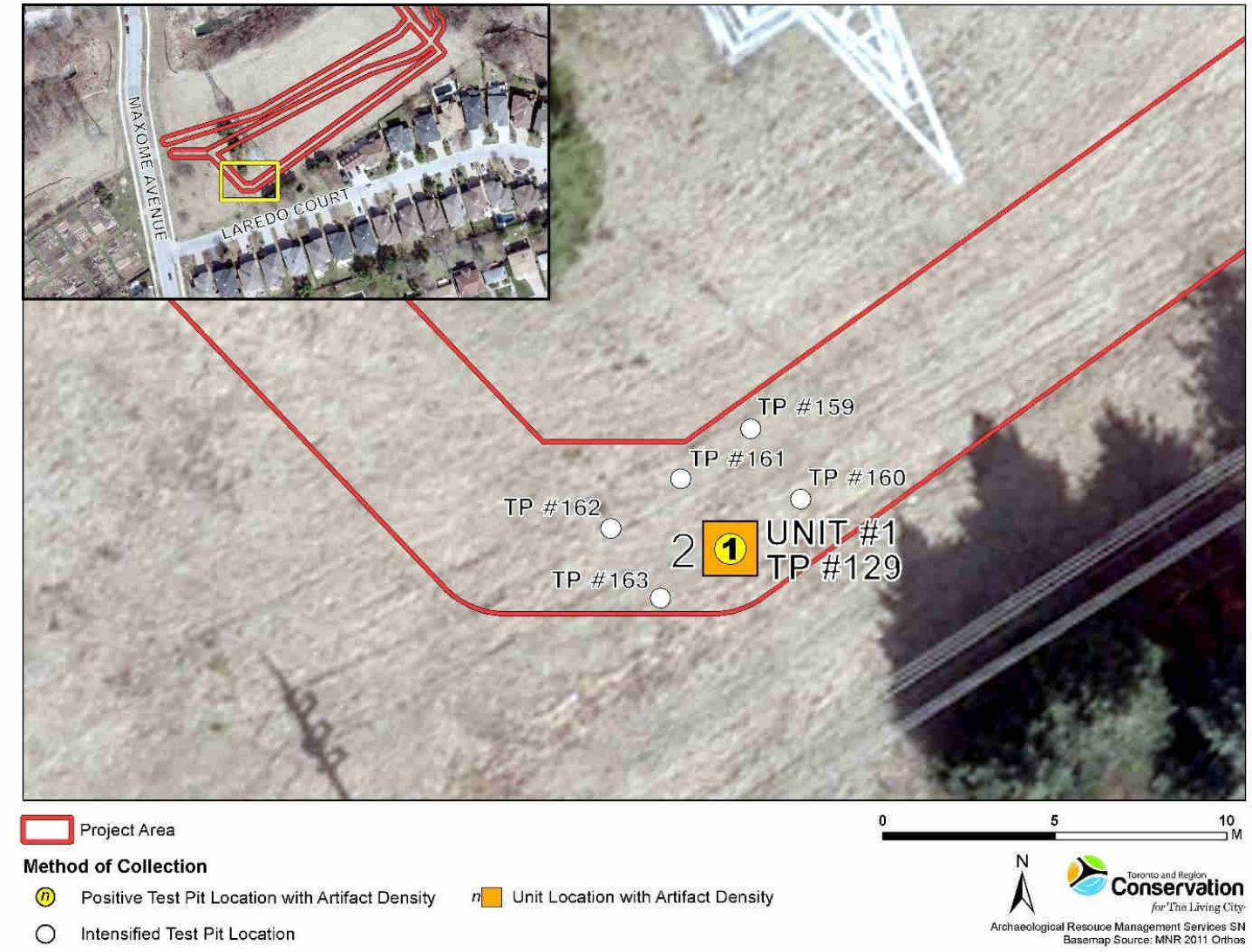

Figure 2: Detailed Site Location of AkGu-88

2.0 Detailed Site Location

2.1 AkGu-88

Site AbHb-11 is located within the hydro corridor east of Maxome Avenue and north of Laredo Court. Two lithics and one ceramic bodysherd were recovered from one test pit and the test unit excavated over the positive test pit, determined to date to the Woodland Period.

3.0 Bibliography and Sources

ASI, (Archaeological Services Inc.). (2021). Stage 1 Archaeological Assessment Cavan Monaghan Water and Wastewater Master Servicing Study (Part of Lots 10-13, Concession 5, Former Township of Cavan, County of Durham) Township of Cavan Monaghan, County of Peterborough, Ontario.

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

Toronto and Region Conservation Authority. (2014). Archaeological Assessment (Stage 1-2) in the City of Vaughan, York Region and the City of Toronto Erosion Control – Don Watershed Lot 4, Concession III Historic Vaughan Township, York County Lots 21 and 22, Concession I East Historic North York, York County.