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Nov 10, 2021

William Finlayson (P059)
This Land Archaeology Inc.
PO BOX 280 Moonstone ON L0K 1E0

**RE: Review and Entry into the Ontario Public Register of Archaeological Reports:
Archaeological Assessment Report Entitled, "Final Report on the Stage 4
Mitigation of Norval Site 3 (AjGx-263) located on Part of Lot 11, Concession 11,
Geographic Township of Esquesing, Now in the Town of Halton Hills, Regional
Municipality of Halton, Ontario ", Dated Oct 27, 2021, Filed with MHSTCI Toronto
Office on Nov 3, 2021, MHSTCI Project Information Form Number P059-0934-2020,
MHSTCI File Number 0004568**

Dear Dr. Finlayson:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the mitigation of the study area as depicted in Figures 5a, 5b, 6a, 6b, 6c and 7 of the above titled report and recommends the following:

As Stage 4 mitigation is complete, recommendations are therefore as follows:

o Norval Site 3 (AjGx-263) has been subjected to a full site excavation and documentation in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* holds no further CHVI. As such, no further archaeological work is required.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Zeeshan Abedin
Archaeology Review Officer

cc. Archaeology Licensing Officer
Maria Herrera, Fieldgate Land Developments Limited
Jeff Markowiak, The Town of Halton Hills

¹ *In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

27 October 2021

Final Report on the Stage 4 Mitigation of
Norval Site 3 (AjGx-263) located on
Part of Lot 11, Concession 11,
Geographic Township of Esquesing,
Now in the Town of Halton Hills,
Regional Municipality of Halton, Ontario

Submitted to: The Proponent

And to: The Ministry of Heritage, Sport, Tourism and Culture Industries

Licensee: William D. Finlayson (P059)

PIF Number: P059-0934-2020 (Stage 4)

Related PIFs: P379-0015-2015 (Stage 1-2) and P379-0035-2015 (Stage 3)

Report Type: Original

Executive Summary

This Land Archaeology Inc. (TLA) was contracted by the proponent to conduct the Stage 4 mitigation of developmental impacts on Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), and Norval Site 6 (AjGx-264) all of which were located within their property holdings on Part of Lot 11, Concession 11, in the Town of Halton Hills, Ontario.

This report documents the Stage 4 mitigation of Norval Site 3 (AjGx-263).

Originally, in 2015, TLA was contracted to conduct a Stage 1-2 study that encompassed part of their property across Lots 11-12, Concession 11, including the current study area.

The Stage 1 assessment indicated that the property retained potential for the recovery of archaeological resources, as such Stage 2 was recommended.

Subsequently, TLA conducted the recommended Stage 2 assessment at which time 4 isolated Indigenous findspots were identified, which did not require further archaeological work; and six Euro-Canadian scatters of artifacts were found and registered as archaeological sites: Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), Norval Site 4 (AjGx-265), Norval Site 5 (AjGx-266) and Norval Site 6 (AjGx-264).

Of the six sites, Norval Site 1, Norval Site 2, Norval Site 3, and Norval Site 6 met the criteria to require a Stage 3 site specific assessment. Due to the paucity of artifacts found at Norval Site 4 and Norval Site 5, no further work was recommended. Report accepted into the Public Register under PIF Number: P379-0015-2015.

The 2015 Stage 3 site specific assessment proceeded first with a Controlled Surface Pickup (CSP), followed by unit excavations across the core extent of each site.

Analysis of the artifacts recovered along with the in-depth archival research indicated all four sites represented a domestic occupation from the mid to late 19th century. With over 80% of the artifacts indicating a pre-1870 occupation, these sites met the criteria to require Stage 4 mitigation of development impacts which was recommended. Report accepted into the Public Register under PIF Numbers: P379-0028-2015, Norval Site 1 (AjGx-261); P379-0029-2015, Norval Site 2 (AjGx-262); P379-0035-2015, Norval Site 3 (AjGx-263); P379-0036-2015, Norval Site 6 (AjGx-264).

This is the Final Mitigation report on Norval Site 3.

Stage 4 mitigation included the recovery of 1,089 artifacts, the mechanical topsoil removal (MTR) of 923 square metres, no cultural features were uncovered.

Ultimately, in-depth archival research, in tandem with the results of Stage 4 mitigation, indicates that only Norval Site 1 was representative of a domestic occupation based on the cellar and well features discovered. The cellar is likely all that remains of the 1 ½ storey wood home noted in the 1891 Census as the residence of the Russell family, which was also potentially occupied by various tenant farmers before them. Norval Site 2 contained

cultural features such as pits, a drain, and a faunal deposit, which indicates that this site may have constituted a refuse area for the Russell homestead (Site 1).

In conclusion, Norval Site 3 did not result in the discovery of any cultural features. The artifacts recovered ought to be attributed to the occupation of the Russell family due to the site's proximity of the extant brick home.

As Stage 4 mitigation is complete, recommendations are therefore as follows:

- o Norval Site 3 (AjGx-263) has been subjected to a full site excavation and documentation in accordance with the 2011 Standards and Guidelines for Consultant Archaeologists holds no further CHVI. As such, no further archaeological work is required.

It is recommended that this report be entered into the Ontario Public Register of Archaeological Reports and a letter of confirmation be issued by the Ministry of Heritage, Sport, Tourism and Culture Industries supporting these recommendations.

Project Personnel

Project Director:	William D. Finlayson, Ph.D. (P059)
Field Director	William D. Finlayson Theresa (Gwynne) Carlos, MA. (P1206)
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Faunal Analysis:	Theresa (Gwynne) Carlos
Report Production:	William D. Finlayson William Jake Harper Corey Ramsbottom Janine Stroud

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1.0 Location and Environment

The Current Study Area is the Norval Site 3 (AjGx-263) located within an active agricultural field and a manicured lawn located on Lot 11, Concession 11 in the Town of Halton Hills, Ontario (Figure 1).

The Norval 3 Site is located within a larger Subject Property located on Lot 11 and Lot 12, Concession 11, Town of Halton Hills, Ontario. It is bordered to the north by agricultural fields, to the south by 10th Line, and to the northeast and northwest by agricultural fields and wood lots.

The northeastern corner of the property is located within the Peel Plain physiographic region while the balance of the property is located within the South Slope region. Norval Site 3 straddles the border of the Peel Plain and South Slope physiographic regions.

2.0 Project Context

2.1 Project Context: Development Context

This Land Archaeology Inc. (TLA) was contracted by the proponent to conduct the Stage 4 mitigation of developmental impacts on Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), and Norval Site 6 (AjGx-264) all of which were located within their property holdings on Part of Lot 11, Concession 11, in the Town of Halton Hills, Ontario. This report documents the Stage 4 mitigation of Norval Site 3 (AjGx-263).

Originally, TLA was contracted in 2015 to conduct a Stage 1-2 Archaeological Assessment (AA) of the Subject Property which is comprised of part of Lots 11 and 12, Concession 11 in the Town of Halton Hills.

The 2015 Stage 2 AA identified six Euro-Canadian sites, and four isolated Indigenous findspots. Recommendations at the conclusion of the Stage 2 assessment asserted that four of the Euro-Canadian sites met the criteria to require a Stage 3 site specific assessment, whereas the other 2 Euro-Canadian sites (Norval Site 4 and 5) and the isolated Indigenous findspots did not meet the criteria to require further archaeological work. Report accepted into the Public Register under PIF Number: P379-0015-2015

The subsequent 2015 Stage 3 assessment resulted in the determination that the four sites subject to Stage 3 assessment (Norval Site 1, Site 2, Site 3, and Site 6) met the criteria to require mitigation of developmental impacts through excavation as preservation was not viable. Reports accepted into the Public Register under PIF Numbers: P379-0028-2015, Norval Site 1 (AjGx-261); P379-0029-2015, Norval Site 2 (AjGx-262); P379-0035-2015, Norval Site 3 (AjGx-263); P379-0036-2015, Norval Site 6 (AjGx-264).

AAs were required as a condition of Draft Plan approval by the Approval Authority, and the Planning Act legislation. The Proponent is planning on developing the Subject Property for residential purposes. The development of residential lands is governed by the Planning Act (R.S.O. 1990) and the Ontario Heritage Act (R.S.O.1990).

The assessment was conducted before Draft Plan submission.

2.2 Project Context: Study Area Determination

The Norval Site 2 limits were verified through the maps and UTM coordinates detailed in the completed TLA Stage 3 reports.

Permission to conduct an AA, including collecting and curating artifacts was given by the proponent.

2.3 Project Context: Historical Context

The original Stage 1-2 report under PIF Number: P379-0015-2015, accepted into the Public Register, provided a Stage 1 background study. The original historical summary has been augmented as is presented below.

2.3.1 Pre-Contact History

Table 1: Chronology of the Occupation of South-Central Ontario

Time Period	Date Range
Paleo-Indian	9,000 – 8,000 B.C.E.
Archaic	8,000 – 1,000 B.C.E.
Initial Woodland	1,000 B.C.E. – A.D. 800
Terminal Woodland	A.D. 800 – 1700 (Time of Colonial Contact)

The Paleo-Indian period (circa 9,000 to 8,000 B.C.E.) marks the first occupation of Southern Ontario. As the glaciers retreated, a Lichen Woodland environment evolved, and these new areas were occupied by the earliest Indigenous peoples.

The first occupants, known as Paleo-Indian peoples, made spear points, some of which were fluted and some not. They occupied the shores of glacial Lake Algonkian as well as other areas such as around Rice Lake. These people hunted caribou and other now-extinct Pleistocene animals such as mammoth and mastodon. Following these early Paleo-Indians there is an occupation by Plano Peoples (8,500-6,000 B.C.E.), the occupation at times being contemporaneous with Early Archaic Peoples. Our knowledge of these early occupations of southern Ontario is limited due to an artifact assemblage comprised of chipped stone tools of chert and the absence of ground stone and bone artifacts as well as other organic material.

Following the Paleo-Indian period is the Archaic period (circa 8,000 to 1,000 B.C.E.), a time of transition to the modern environment of southern Ontario of today's Great Lakes-St. Lawrence Forest region. The Indigenous occupants continued to hunt but there was a greater emphasis on smaller animals, fishing, and gathering for subsistence. These subsistence strategies involved a seasonal pattern of occupying different areas throughout the year as different foodstuff became locally available. Among the new technologies and ideas which appeared during the Archaic was the manufacturing of lance and spear

points from ground slate, the adoption of spear throwers with stone weights (atlatls), and the use of native copper for ornaments and tools. Ground stone woodworking tools such as gouges, axes, and adzes were used as well as bone tools such as harpoons and fish hooks. Stone smoking pipes appeared for the first time in the Late Archaic period. Towards the end of the period there is evidence of an increase in the variety of mortuary ceremonialism.

One of the distinctive characteristics of the Initial Woodland period (circa 1,000 B.C.E. to A.D. 800) was the adoption of pottery vessels. Hunting, fishing, and gathering continued to provide the mainstays of the diet and these peoples continued to follow a seasonal pattern. The bow and arrow were introduced in the early part of this period, facilitating more effective hunting techniques. After about A.D. 600, there is evidence of the cultivation of some plant species like wild rice and corn (maize). Existing trade networks were expanded to allow for access to a wider variety of exotic raw materials, and finished goods from both the Northern and Southern regions. The development of a more complex society in which **selected individuals became 'high status' as reflected by the burial practices.** This included changes in mortuary ceremonialism involving the construction of burial mounds, especially in the Rice Lake area.

The Terminal Woodland (circa A.D. 800 to 1700) marked the gradual introduction of agriculture with the cultivation of corn, beans, squash, sunflower, and tobacco, paired with an increase in the sedentary lifestyle needed to produce crops. Most of southcentral Ontario was occupied by Algonquian-speaking peoples who continued to occupy their territories into the 18th century, with an economy based largely on hunting, fishing, and gathering. Recently published Algonkian oral traditions document the occupation of this **and adjacent parts of southern Ontario since 'time immemorial'.** These oral traditions tell of alliances with other Indigenous groups, which allowed the early Iroquoian people to settle in their territory to grow their crops for periods of the year. These alliances were maintained by trade with the Iroquoians, which involved the Algonquians obtaining food in exchange for goods such as furs. These alliances also involved the exchange of marriage partners among the allied groups.

The Miller site, located on the Duffin Creek drainage, is the earliest Terminal Woodland Iroquoian village found to date within southcentral Ontario. Occupied by the Pickering People and dating to approximately A.D. 800, it was comprised of a minimum of six short longhouses, with the potential for as many as ten longhouses. The settlement was surrounded by a single row of palisades, with an estimated population of 120 people or more and the site was likely occupied for longer than a century.

Over the next 750 years, the Late Woodland Iroquoian peoples expanded their occupation North of the shores of Lakes Ontario and Erie, as far west as the London area, and as far East as Prince Edward County. In the 15th century, some groups moved northward, and occupied historic Huronia while the Late Woodland Iroquoian occupation of southwestern Ontario focused on those **lands'** east of the Grand River. They lived in longhouses in villages that were occasionally palisaded, and on a seasonal basis occupied fishing stations, cabins in corn fields, and/or hunting camps. During this time, the original Algonquian-speaking peoples continued to occupy large parts of south-central Ontario while continuing to live in seasonally occupied camps, which allowed for the exploitation of various local food resources. In some parts of southcentral and southwestern Ontario the Algonquian-

speaking Princess Point people – who were early agriculturalists – evolved into the Glen Meyer people, who were dispersed by a conquest by the Pickering Iroquoian-speaking people around A.D. 1300.

The artifacts recovered from the Late Woodland sites reveal improvements to the pottery vessel manufacturing, resulting in large vessels with more sophisticated decoration. The evolution of pipe smoking became more complex, featuring clay and occasionally stone pipes that were very elaborately decorated. There was an increase in the number and new kinds of stone tools, decorative items made by grinding stone, and the appearance of tools and decorative made of bone, antler, and shell. In the early 16th century, trade goods of copper, brass, and glass beads, along with perishables such as woolen blankets were obtained through trade with Europeans who were exploring and ultimately settling the St. Lawrence Valley.

With the arrival of the Europeans in 1615, the Huron population was ultimately devastated, first by disease and then by the successful attacks by the New York State Iroquois, similar to the earlier dispersal of the other Iroquoian-speaking groups such as the Neutral. In 1650, part of the surviving Huron people fled to Wendake near Quebec City, while others fled westward.

As Europeans settled into the southern Ontario region, the 18th century saw a series of treaties that were negotiated with the resident Algonquian-speaking peoples. This ultimately resulted in the creation of the Williams Treaty First Nations. Those lands which were the focus of this historical summary are part of the 1923 Williams Treaty Clause 2 Lands signed by four Mississauga First Nations (Scugog, Curve Lake, Hiawatha, and Alderville), three Chippewa First Nations (Georgina Island, Rama, and Beausoleil), and the Canadian Government. The Williams Treaty covered 20,000km² of land, in exchange for a one-time cash payment to all Indigenous signatories.

Previously, portions of the lands had been obtained by the Government of Upper Canada through the Gunshot Treaty of 1788, which was supposed to include all those lands in which a gun fired at the North shore of Lake Ontario could be heard inland. The Williams Treaty also included lands obtained from the Rice Lake Treaty. In 1818, a treaty known as the Rice Lake Treaty #20 was signed between the Anishinabek people. The treaty covered approximately 1,951,00 acres, and included lands occupied by the Mississaugas of the Rice Lake and Rideau River areas. All men, women, and children were to be given 10 dollars of goods annually. West of the Williams Treaty lands, there are also treaty lands of the Mississaugas of New Credit and the Six Nations of Grand River. These treaties allowed for the settlement of southcentral and southwestern Ontario to European settlers through the displacement of the Indigenous groups.

2.3.2 General Post-Contact History

Norval is located in the town of Halton Hills. There are a few possibilities and different narratives for how the name came to be. In 1836, Alexander McNab named the area Norval after John Hume's Scottish play called *Douglas*, as it contains the line "My name is Norval; on the Grampian Hills." However, in 1820, the McNab family may have hailed from Greenock, Scotland on a ship known as the *Young Norval*. Norval was initially named

McNabsville, after James McNab who constructed mills, during the 1820s, along the Credit River (Rayburn, 1995).

According to *Places in Ontario Vol. III*, James McNabb and his parents, John and Janet McNabb emigrated to the area. James McNabb soon after founded the village of Norval. He constructed a dam on the Credit River in 1820, and was known for his various saw, flour and flax mills. In addition, Peter Laird, Captain James Currie, Samuel Currie and Thomas Broadbent were some of Norval's earliest settlers. In 1840, Colonel William Clay owned a general store in which a post office was opened, and he became postmaster. At this time, the name Norval may have come from Norval Creek in Vermont, the originating Stage for many of the early settlers (Mika, 1983).

Norval was located along Toronto-Guelph stage line, and was a common stopping area, as it was known for being a milling hub. Business declined in the 1850s when the Grand Trunk Railway bypassed the town. Eventually Norval station was erected where the rail line crossed the town line, it handled shipment of grain and grain products until its closure in 1926 (Mika, 1983).

Norval became an expansive village, as it included a broom factory, three blacksmiths, saddleries, harness shop, bakeshop, carriage shop, cobbler shops, and various mills (saw, flour, flax and woolen). There were also multiple churches. The new Presbyterian Church replaced an earlier one in 1878, which was constructed outside the village in 1839. St Paul's Anglican Church was a frame building built in 1846. Methodists built a brick church in 1853, which was later replaced by a new Gothic brick building in 1889. After the church union of 1925, it became known as Norval United Church (Mika, 1983).

In 1915, Toronto-Guelph Radial Electric Suburban Railway was established, with its line running through Norval. Five years later, in 1920, Highway 7 was established as a route of travel through the village, and in 1930, the electric railway was dismantled (Mika, 1983).

With the intention of relocating Upper Canada College (Toronto), the College in 1916 purchased a large tract of land in Norval. The land remains vacant, and the College was never relocated (Mika, 1983).

The author Lucy Maud Montgomery, of popular novel series, *Anne of Green Gables*, lived in Norval from 1926 – 1935 (Quaile, 2006).

2.3.3 Study Area Post-Contact History

A review of historic resources for the Subject Property assessment resulted in the discovery of two relevant historic maps:

- o 1858, George Tremaine, *Illustrated Historical Atlas of the County of Halton* (Figure 2): Illustrates Lots 11 and 12, Concession 11 were within Norval Village. The map indicates various roads and a potential town square which suggests that the area may have been densely developed. No buildings or structures are shown within the overall Subject Property, or the current Study Area (Norval Site 1).

- o 1877, Walker & Miles, Illustrated Historical Atlas of the County of Halton (Figure 3): This illustrates that Lots 11 and 12, Concession 11 illustrates additional streets within Norval Village. No buildings or structures are shown within the overall Subject Property, or the current Study Area (Norval Site 1). It is possible that the Study Area was planned for development which never took place.

It should be noted that only the structures of those who paid a prime subscription rate were illustrated on some historical mapping. As such, a structure may have been present on the property but was excluded from depiction.

The Study Area in question is located within portions of Lots 11 and 12, Concession 11. Little is known about these specific lots; however, a review of historical documents indicates the following:

- The 1848 Journal of the House of Assembly of Upper Canada states that a road was ordered constructed in 1836 through a portion of Lot 11 and 12 in Concession 11. It is unknown if this was to be a dirt road or a plank road (Ontario Parliament 1848).
- An 1839 edition of the Georgetown Herald included an advertisement for a livestock auction within Lot 12 Concession 11 by Mr. S.J. Lyons Auctioneer. It is unknown if this was the auctioneers place of business, or more likely this area was an active farm and the owner hired the auctioneer (Georgetown Herald 1839).
- A review of historic mapping (Walker & Miles 1877 Illustrated Historical Atlas of Halton County, Figure 2) indicates that the Study Area was fully within the established limits of Norval Village. The historic atlas map clearly indicates various roads and a potential town square which suggests that the area may have been densely developed. However, no evidence of this development can be seen within the aerial images or other historic records. It is possible that the area in question was not densely developed as indicated and that the historic map is indicating a planned Norval expansion which never took place.

Given the historic occupation of Norval, the location of the study area to the existing village and the historic maps, it is clear that there is elevated potential for historic archaeological resources within the Subject Property.

A search conducted on October 31, 2018 (during a subsequent Stage 2 assessment) indicated there are no Historical Plaques or markers placed by the Ontario Heritage Trust Provincial Plaque Program within or within a close proximity to the Subject Property (OHT Plaque Database). Please note this search does not account for municipal or heritage group plaques which maybe present but cannot be found without a physical inspection of the property and surrounding area.

Additionally, a search conducted with the Ministry of Consumer Services on October 31, 2018 (during a subsequent Stage 2 assessment), confirmed the Subject Property contains no registered cemeteries. Nor did it contain any structures designated under Section IV of the Ontario Heritage Act. A church exists adjacent to the Subject Property; as such, personnel communication with the Minister confirmed that no cemeteries or burials existed on the church property.

According to the historical sources consulted, the current Study Area has been used for agricultural purposes since the onset of Euro-Canadian settlement in the area.

2.4 Project Context: Archaeological Context

TLA conducted a review of the Ontario Sites Database to determine the nature of any known archaeological sites within a 1 km radius of the current Study Area, Norval Site 3. A centroid of the Study Area was selected at UTM 17T 591769.32E; 4832922.34N, in conjunction with the Norval Site 2 dimensions along cardinal axis from this centroid was used to conduct the search in the Sites Module.

This search established that there are currently 19 registered archaeological resources, including Norval Site 3, the subject of this report within 1 kilometre of this site. These sites are shown in the table below. No sites or previous work occurred within 50 metres of this site. Sites located within part of Lot 11, Concession 11 are addressed below. Other sites located on this property are noted below.

Table 2: Sites within 1 kilometre of the Current Study Area (Norval Site 3)

Borden Number	Site Name	Time Period	Affinity	Site Type
AjGx-11	-	-	-	-
AjGx-14	-	-	-	-
AjGx-20	NORVAL 1	Post-Contact	Iroquoian	Othercamp/ campsite
AjGx-21	NORVAL 2	Archaic	Aboriginal	Othercamp/ campsite
AjGx-261	Norval 1	Post-Contact	-	Unknown
AjGx-262	Norval 2	Post-Contact	-	Unknown
AjGx-263	Norval Site 3	Post-Contact	-	homestead
AjGx-264	Norval 6	Post-Contact	-	homestead
AjGx-265	Norval Site 4	Post-Contact	-	agricultural, farmstead
AjGx-266	Norval Site 5	Post-Contact	-	Unknown
AjGx-60	Norval	Pre-Contact	Aboriginal	Othercamp/ campsite
AjGx-61	Silver Creek	Pre-Contact	Aboriginal	Othercamp/ campsite
AjGx-7	LAIRD	Woodland, Early	Aboriginal	Othercamp/ campsite
AjGx-77	Norval 1	Woodland, Middle	Aboriginal	Othercamp/ campsite
AjGx-78	Norval 2	Archaic, Middle	Aboriginal	findspot
AjGx-79	Norval 3	Pre-Contact	Aboriginal	findspot
AjGx-80	Norval 4	Pre-Contact	Aboriginal	findspot
AjGx-81	Norval 5	Pre-Contact	Aboriginal	findspot
AjGx-9	-	-	-	-

Previous archaeological fieldwork conducted within 50 metres of the Current Study Area, Norval Site 3 has been detailed below.

2.4.1 Previous Archaeological Fieldwork

This Land Archaeology Inc. (TLA, 2016). Report on the Stage 1 And 2 Archaeological Assessment of Fieldgate Developments Land, Part of Lots 11 And 12, Concession 11, Town of Halton Hills, Regional Municipality of Halton, Historic Halton Region, Geographic Township of Esquesing North, Ontario. Report accepted into the Public Register under PIF Number: P379-0015-2015.

TLA conducted the Stage 1-2 assessment at which time 4 isolated Indigenous finds were found, which did not require further archaeological work; and six Euro-Canadian scatters of artifacts were found and registered as archaeological sites: Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), Norval Site 4 (AjGx-265), Norval Site 5 (AjGx-266) and Norval Site 6 (AjGx-264).

Of the six sites, Norval Site 1, Norval Site 2, Norval Site 3, and Norval Site 6 met the criteria to require a Stage 3 site specific assessment. Due to the paucity of artifacts found at Norval Site 4 and Norval Site 5, no further work was recommended. Report accepted into the Public Register under PIF Number: P379-0015-2015.

This Land Archaeology Inc. (TLA, 2016). Report on the Stage 3 Archaeological Assessment of: Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), Norval Site 4 (AjGx-265), Norval Site 5 (AjGx-266) and Norval Site 6 (AjGx-264). Located on Russell Pines **Property Corp.'s Property**, Part of Lots 11 And 12, Concession 11, Town of Halton Hills, Regional Municipality of Halton, Historic Halton Region, Geographic Township of Esquesing North, Ontario. Report accepted into the Public Register under PIF Numbers: PIF Numbers: P379-0028-2015, Norval Site 1 (AjGx-261); P379-0029-2015, Norval Site 2 (AjGx-262); P379-0035-2015, Norval Site 3 (AjGx-263); P379-0036-2015, Norval Site 6 (AjGx-264).

The 2015 Stage 3 site specific assessment proceeded first with a Controlled Surface Pickup (CSP), followed by unit excavations across the core extent of each site.

Analysis of the artifacts recovered along with the in-depth archival research indicated that all four sites represented a domestic occupation from the mid to late 19th century. With over 80% of the artifacts and occupation indicating a pre-1870 occupation, these sites met the criteria to require mitigation of development impacts through excavation, which was recommended.

As the four sites subject to Stage 4 mitigation located on Lot 11, Concession 11, and the Stage 4 final reports are in progress, the analysis and conclusion section of this report addresses the results and interpretations of each site.

The distance between Norval Site 3 and the other sites is as follows: to Norval Site 1: 428 metres; to Norval Site 2 – 355 metres; to Norval Site 6 – 453 metres.

Current Report

Norval Site 3 is located in partially in an active agricultural field, and within a manicured lawn behind the standing brick home.

The surficial geology indicates the Subject Property is comprised of sand, sand and diamicton (poorly sorted materials) and rests on relatively flat terrain at around 225 to 235 metres above sea level. Norval Site 3 is in an area comprised of sand.

Historically, the study area would have been an appropriate area for resource procurement by both pre and post-contact cultural groups.

3.0 Stage 3: Historical Documentation

The original crown patent for 100 acres of the southwest half of Lot 11, Concession 11 was issued to James Byrne on May 17, 1824. Byrne did not maintain ownership of the land for long and on June 5, 1827 he sold it to James McNabb (Looking Back Research Services, 2015). The McNabb family had originally emigrated from Scotland to Barnet, Vermont in 1785 and then to Upper Canada in 1805 where they settled in York (Looking Back Research Services, 2015). In 1814, James McNabb married Sarah Marsh and together they moved to Norval in 1827 where they purchased a number of lots, including the study area (Looking Back Research Services, 2015). Upon their arrival to Norval, James McNabb opened a saw and grist mill on the Credit River. Although maintaining ownership of the study area, it seems the McNabb's never came to occupy the land (Looking Back Research Services, 2015).

On November 13, 1835, James McNabb sold the southwest half of Lot 11, Concession 11 to William Allan. Allan, a prominent 19th century Canadian businessman and politician, never occupied the study area and sold it to Peter Adamson four years later on October 3, 1839 (Looking Back Research Services, 2015). Peter Adamson also never came to reside on the study area but maintained ownership for the next twenty-five years. Throughout this period, Norval was in the early stages of development. Adamson himself commissioned a survey of Norval in the early 1860's. This survey, carried out by 'Winter and Abrey', laid out an extensive plan of streets and residential blocks within the village. Although some roads within the plan were constructed, the survey was never registered, and it appears only a fraction of the planned roadways were built (Looking Back Research Services, 2015). Presumably, Adamson was retaining ownership of the study area during this time with hopes that development would take place in Norval. Unfortunately, Adamson ran into financial trouble shortly after the survey of Norval was completed and the study area was seized by the Ontario Bank on June 20, 1864 (Looking Back Research Services, 2015).

On October 1, 1868, the bank sold the land to William Clay (Looking Back Research Services, 2015). Clay was another significant player in the early development of Norval. Among many things, he served as postmaster for the Hamlet and was on the Esquesing Township Council for many years (Looking Back Research Services, 2015). The directory of 1870 indicates William Clay was a freeholder of the Study Area (a portion of Lot 11, Concession 11) however it appears he was residing on a different lot (Government of Canada, 1861; Government of Canada, 1870). While Clay was not living on the study area, the directory of 1870 indicates five other individuals were residing as tenants on Lot 11, Concession 11 each in their own homestead (Government of Canada, 1870). The location

and nature of these homesteads is not specified however, it is likely some were located within the study area as the 1878 Historical Atlas displays this area shaded with colour (Figure 2). This shading approach was commonly used on historic mapping to indicate the existence of multiple roads and structures within a small area.

On May 2, 1881, William Clay sold his portion of Lot 11, Concession 11 to William Russell (Looking Back Research Services, 2015). Born on November 19, 1845 in Erin Township, William Russell married Margaret Jane Anderson in 1882, shortly after his purchase of the Study Area (Looking Back Research Services, 2015). As with the previous owners, it does not appear that William Russell came to reside on the Study Area. The Halton County Directory of 1885 does not list Russell on Lot 11, Concession 11 (Government of Canada, 1885). Instead, it appears a series of tenants continued to live and farm the land. By 1891 however, William Russell had come to reside on the Study Area after his wife, Margaret, had passed away in 1890. The census of 1891 indicates Russell, his two young children, a farm laborer and housekeeper, were living in a 1 ½ storey wood home (Government of Canada, 1891). One uninhabited homestead is also recorded on the premises (Looking Back Research Services, 2015). The subsequent directories of 1896 and 1899 indicate William Russell continued to live on the Study Area with his family (Government of Canada, 1896; Government of Canada, 1899). Between 1891 and 1909, the Russell family constructed a new brick homestead presumably to replace the wood homestead shown on the 1891 census. This structure still stands today and is located just outside the Study Area to the north. After his first wife passed away, William Russell remarried in 1899. He would go on to have four more children with his new wife, Margaret McEachern, and remain on the Study Area with them until his death in 1917 (Looking Back Research Services, 2015). After his death, Margaret and her sons continued to run the farm. The 1921 census records them as residing in a six-room brick homestead (Looking Back Research Services, 2015). This structure is presumably the homestead located just outside the Study Area built between 1891 and 1909 to replace the earlier 1 ½ storey wood home.

In conclusion, although an original patent for the Study Area was issued in 1824, it appears the land was not actively inhabited or farmed until the 1870's. The directory from 1870 indicates a number of individual's were residing in homesteads on Lot 11, Concession 11. The directory does not specify the location or nature of these structures however, it is likely some were located within the current Study Area. Alongside this, the Study Area was shaded in on the 1878 Historical Atlas map indicating a number of structures and roads were present. In the 1890's the owner, William Russell, came to live on the land with his family. The 1891 census shows Russell and his family residing in a 1 ½ storey wood home with a single uninhabited structure located elsewhere on the property. The uninhabited structure present could have been a homestead previously occupied by a tenant. The Russell family continued to reside on the Study Area and between 1891 and 1909 they constructed a new brick homestead which still stands today to the northeast of the Subject Property.

4.0 Stage 4 Mitigation

4.1 Stage 3 Recommendations for Stage 4 Mitigation

Stage 4 mitigation of development impacts was approved in the 2016 Stage 3 report to be conducted with block excavation conducted around 2 Stage 3 units which produced higher than average artifact counts, Unit 499N-230E and 450N-220E followed by MTR over the extent of the site as delineated through the Stage 2 test pit assessment and CSP (Figure 20 in the Stage 3 Report). However, in October 2020, following a second review of the artifacts recovered during the Stage 3 assessment, a request was made to the MHSTCI to reduce the extent of MTR, and to focus on the core of the site, only around the portions of land to be subject to block excavation as these areas contained 19th century versus later date artifacts. A second request for this modification was approved by the MHSTCI and shown in Figure 5a, email documentation has been provided as “Other” documentation in PastPort.

Block Excavation

- Block excavation was recommended to be conducted around Units 499N-230E and 450N-220E.

Mechanical Topsoil Removal (MTR)

- Stage 4 mechanical topsoil removal (MTR) will be conducted and monitored by a licensed archaeologist using a tracked Gradall or excavator with a smooth edge bucket. MTR focus on the core of the Site. MTR must be supplemented by hand ‘shovel shining’ if soil conditions warrant (As per the MHSTCI Stage FAQ dated March 2016).
- All identified features will be recorded using a D-GPS accurate to 10 centimetres. Features will be sectioned, and hand excavated with soils being screened through 6 millimetre mesh screen (3 millimetre mesh screen will be employed if required by the MHSTCI 2011 Standards and Guidelines and/or the archaeological licensee’s professional judgment). Features will then be appropriately recorded in plan view via a scaled drawing and photographs. All identified cellar features will have a minimum of two quadrants excavated, with further excavation being conducted based upon the professional judgement of the archaeological licensee.
- Soil samples for flotation will be collected by stratum for all identified privies and root cellars as required by the 2011 *Standards and Guidelines*.

4.2 Stage 4: Site Specific Methods

Stage 4 excavations were conducted over the 19 October 2020 and the 11 November 2020. Weather ranged from warm to cold, with clear to cloudy skies. On 19 October 2020, there was a slight drizzle. However, at all times, lighting conditions were acceptable for the identification of land features, artifacts, and cultural features. The Field Director was Theresa (Gwynne) Carlos (P1206) on 19 October and William D. Finlayson (P059) on 11 November.

Block Excavation

As recommended, block excavations were conducted around one Stage 3 units which were of archaeological interest given the higher than average artifact count in Stage 3 Units 499N-230E and 450N-220E (Figure 5a, 5b, 6a, 6b, 6c).

Units were relocated using coordinates from the Stage 3 assessment (georeferenced to 10 centimetre accuracy using a Trimble Geo-7x GPS unit). Block excavation units were installed to the accuracy of tape and transit around the original Stage 3 units. Soils were unfrozen and well drained soils under weather and lighting conditions which permitted appropriate visibility.

Units were 1 metre x 1 metre in size, excavated by hand to a minimum of 5 centimetres into subsoil; all soils were screened through 6 millimetre wire mesh to facilitate artifact recovery. Artifacts were recovered and retained by provenience.

The recommended 8 units around each of the two Stage 3 units were excavated resulting in the excavation of 16 units, resulting in the recovery of 1,089 artifacts (Plates 1-3 north area, Figure 6b; and 7 and 8 south area, Figure 6c).

Block excavation did not continue outwards as a sufficient number of artifacts had been retrieved (Stage 2 – 123 artifacts, Stage 3 units – 2,343 artifacts, Stage 4 block 1,089 artifacts). No evidence of features was found within the area subject to block excavation.

In the northern area of block excavation, a large tree stump was present with roots extending into the area of block excavation. Given the size of the stump and roots, and lack of noting cultural features, trowelling was conducted around and under the roots as possible to ensure the area was appropriately investigated.

Mechanical Topsoil Removal

A tracked Gradall with a smooth edge bucket monitored by a Licensed Archaeologist was used to mechanically remove the topsoil from the core of the site as had been recommended (Plates 4-5).

The Gradall removed the topsoil at the subsoil interface, which resulted in excellent subsoil visibility; as such, systematic shovel shining was not required, but was conducted where topsoil remnants formed small piles of earth between Gradall passes and was conducted on stains and potential cultural features (Plate 6 and 12).

Two areas were subject to MTR, an area to the north, near the extant home and to the south in the agricultural field.

To the north, near the extant home, MTR started at the west and moved northeast to southwest starting at the fence and moving southeast.

In the northern area (Figure 6a), a doghouse was removed in order to facilitate MTR, a structure to the east (an in use modern day privy) was not moved. Gradall stripping skirted this structure leaving a 1 metre buffer. To the west of the northern area of block excavation large trees were present; as they could not be removed, MTR was conducted to the base of

the trees and supplemented by hand excavation to ensure the area had been adequately investigated.

To the south, MTR started at the west and moved eastward. Gradall passes went north to the south, starting at the fence and moving south.

No cultural features were uncovered. The area subject to MTR was enlarged from the accepted minimum MTR extent to ensure the area was intently investigated (Figure 6a).

4.3 UTM Coordinates

The UTM coordinates are presented below as the site has been subject to complete removal through excavation and documentation in accordance with the 2011 Standards and Guidelines.

All GPS data was collected using a Trimble Geo-7x GPS, UTM grid zone 17, NAD 83 datum with a differential correction method accurate to 10 centimetres.

Table 3a: UTM Coordinates - North Block

Norval Site 3 - North Block 5 Site Reference Points		
Figure 6b		
Point	UTM X	UTM Y
N	591765.40	4832965.01
S	591765.56	4832937.02
E	591780.58	4832953.37
W	591753.01	4832940.93
C	591767.92	4832949.96

Table 3b: UTM Coordinates - South Block

Norval Site 3 - South Block 5 Site Reference Points		
Figure 6b		
Point	UTM X	UTM Y
N	591787.39	4832935.04
S	591791.21	4832908.39
E	591802.85	4832919.44
W	591776.05	4832923.40
C	591788.98	4832921.88

4.4 Stage 4 Record of Finds

The Stage 4 mitigation of Norval Site 3 resulted in the recovery of 1,089 artifacts, and mechanical topsoil removal (MTR) of 923 square metres (North Portion – 573 square metres; South Portion – 350 square metres). A summary of all artifacts recovered is presented below.

Table 4: Total Artifact Assemblage by Class

Artifact Class	Number of Artifacts	% of Total Assemblage
Architectural	494	45.4%
Ceramic	381	35.0%
Faunal	23	2.1%
Glass	115	10.6%
Other	76	7.0%
Total	1,089	100.0%

Architectural Class Artifacts

The architectural class artifacts numbered 494 accounting for 45.4% of the total assemblage. Diagnostic artifacts provide for a production date range from as early as the pre-1830s to the 20th century. Within this portion of the assemblage, red brick (n=31) and mortar (n=1) held no diagnostic attributes. Nails and window glass provide an indication of production time frames.

Table 5: Architectural Class Artifacts

Architectural Artifacts	Number of Artifacts
Machine Cut Nails	393
Thick Window Glass	33
Red Brick	31
Thin Window Glass	25
Common Wire Nails	10
Hand Made Nails	1
Mortar	1
Total	494

Temporally diagnostic artifacts from the architectural class:

- Machine cut nails (n=393) 1830 to 1890s.
- Handmade nails (n=1) pre-1830.
- Common wire nails (n=10) 1890s to present.
- Thick window glass (>1.5mm) (n= 33) post 1850.
- Thin window glass (<1.5mm) (n= 25) pre-1850.

Source: Kenyon 1980; Nelson 1986

Ceramic Class Artifacts

The ceramic artifacts numbered 381, accounting for just 35.% of the total assemblage. Diagnostic artifacts provide for a production date range from the 1830s into the 20th century. Ironstone, RWE, and Coarse Red Earthenware represented close to 98% of the ceramic assemblage. These ceramic categories have a long production period extending into the early 20th century. No maker's marks were found.

Table 6: Ceramic Class Artifacts with Production Date Range

Ceramic Artifacts	Production Date Range	Number of Artifacts
Ironstone	1840s - 1900 +	245
Refined White Earthenware	1830 - 1880 +	83
Coarse Red Earthenware	1830s - 1910	44
Buff Stoneware	19th Century	7
Porcelain	19th / 20th Century	2
Total		381
Source: Samford, P & Miller G.L. 2015		

Floral Specimens

No floral specimens were found.

Faunal Specimens

Faunal specimens numbered 23, accounting for a mere 2.1% of the total assemblage. These specimens were small and highly fragmented, as such only 1 could only be identified to the common class. No evidence of thermal alteration of butchering was noted.

Table 7: Faunal Specimens

Class	Common Name	Total Specimens	Percent of Total
Mammalia	Mammal undetermined	22	95.7%
Bos taurus	Cow	1	4.3%
Total		23	100.0%

Glass Class Artifacts

Glass class artifacts numbered 115, accounting for 10.6% of the overall assemblage. Body glass sherds, with no diagnostic attributes, accounted for the majority of artifacts in this classification. An additional 11 artifacts indicated production date ranges from the late into the 20th century.

Table 8: Glass Class Artifacts by Production Date Range

Glass Artifacts	Production Date Range	Number of Artifacts
Bottle Glass (BG) Body Sherds	N/A	104
Pressed Glass	19th / 20th century	4
BG Finish Tooled	1875 - 1905	2
Chimney Glass	19th / 20th century	2
Tumbler Clear	19th / 20th century	2
Milk Glass	Post- 1875	1
Total		115
Source: Lindsey, B. 2016		

“Other” Class Artifacts

Artifacts categorized as “other” numbered 76 accounting for 7.0% of the total assemblage. Within this classification, artifacts noted as “general” (indeterminate metal objects), followed by hardware (wire, screws, rivets etc.) were the highest contributors to this category representing close to 83% of the total. Further detail can be found in the catalogue.

Table 9: Other Class Artifacts

"Other" Class Artifacts	Number of Artifacts
General	41
Hardware	22
Personal	5
Fastener	4
Smoking	3
Food/Storage/Prep	1
Total	76

Artifact Summary

The area within the manicured lawns, near the extant home (Northern Area) resulted in the recovery of 242 artifacts, most which were ceramic and glass class artifacts; the ceramics a long production date range extending into the 20th century, and bottle glass sherds which have no diagnostic attributes. These findings are similar to the Stage 3 results in the northern portion of the site where there were pockets of 20th century (75% of the Stage 3 northern assemblage) and or non-diagnostic artifacts (10.9% of the Stage 3 northern assemblage). Artifacts dating from the 19th century represented a mere 13.8% of the Stage 3 northern assemblage.

The agricultural field, which is the Southern Area of Norval Site 3, resulted in the recovery of 847 artifacts, most of which were architectural and ceramics in nature. As with the Stage 3 unit excavation there was a higher quantity of 19th century artifacts, due to the recovery of a large quantity of machine cut nails, whereas the ceramic artifacts had a long production date range.

Table 10a: Artifact Summary by Class

Artifact Class	Artifacts Recovered			% of Total
	Northern Area	Southern Area	Total	
Architectural	30	464	494	45.4%
Ceramic	124	257	381	35.0%
Faunal	13	10	23	2.1%
Glass	52	63	115	10.6%
Other Class Artifacts	23	53	76	7.0%
Total	242	847	1,089	100.0%

Table 10b: Artifacts by Production Date Range

Date Range	Artifacts Recovered			% of Total
	Northern Area	Southern Area	Total	
N/A	87	133	220	20.2%
20th Century	10	0	10	0.9%
19th Century	98	641	739	67.9%
Pre- 1830	0	1	1	0.1%
1831 - 1870	45	65	110	10.1%
1871 - 1900	2	7	9	0.8%
Total	242	847	1,089	100.0%

Details on the Stage 4 assessment are presented as follows:

- o Figures illustrating the assessment:

Figure 5a:	Stage 3 Recommendations for Stage 4 MTR, including MHSTCI accepted revised MTR extent and actual extent.
Figure 5b:	Results of previous assessments and Stage 4 mitigation showing the location of block excavation, and extent of MTR.
Figure 6a:	Results of Stage 4 mitigation on current land use with area of block excavation illustrated, MTR actual extent, five site reference points and photo points.
Figure 6b:	Stage 4 block excavation with number of artifacts recovered- Northern area.
Figure 6c:	Stage 4 block excavation with number of artifacts recovered- Southern area.
Figure 7:	Norval Site 3 on survey.

- o Plates 13-14 - samples of artifacts recovered.
- o Table 12 -Artifact Catalogue.

Below is an inventory of the documentary records generated in the field for the Stage 4 Mitigation of the Norval Site 3 (AjGx-263) which are stored at the TLA Head Office, 372 Moonstone Road East, Moonstone, Ontario.

Table 11: Inventory of Records

Inventory of Records
Field notes, drawings and paper records are in a file titled "Stage 4 Mitigation of the Norval Site 3 (AjGx-263), under PIF #P059-0934-2020."
Field photography, digital images, research, analysis and reporting materials are stored on TLA computers and external back up media.
The complete assemblage is packaged in one box measuring 30.5 cm W, 30.5 cm D and 45.75 cm L.

The artifact catalogue identifies the box number where each artifact is housed. Artifacts can be pulled from storage by catalogue and box number.

Artifacts will be held in trust for the People of Ontario by This Land Archaeological Inc. at its headquarters in Moonstone, Ontario until such time as it can be permanently transferred to a public institution.

4.5 Stage 3: Analysis and Conclusions

Four archaeological sites were investigated on Lot 11, Concession 11 in the Town of Halton Hills: Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), and Norval Site 6 (AjGx-264). Except for Norval Site 3, which is located to the northeast of the subject property near a standing brick home built circa 1891 to 1909, the other three sites are located on the western boundary of the property adjacent to, or near the 10th Line. The geographic location of each site on Lot 11 is somewhat relevant as it provides some sense as to the origin, function, and time period of occupation for each site.

Although the Crown Patent for the land containing the four sites (on Lot 11) was granted in 1824, in-depth archival research reveals that the land in question changed ownership several times yet was not inhabited for many decades. Indeed, the 1861 Agricultural Census states that the entire property containing the four sites was still uncleared land by that time. Sometime between 1861 and 1870 the land must have been cleared for agriculture, since an 1870 directory attributes several tenant farmers to Lots 11 and 12, though this directory does not specify the location or nature of the tenancies within these lots. In 1881, William Russel purchased the land containing the four sites though seemingly did not move there initially—instead continuing to rent the land out to tenant farmers like the prior owner. However, after his wife's passing in 1890, the 1891 Census indicates that William Russell relocated to Lot 11, Concession 11 and occupied a 1 ½ storey wood home. By the time Russel moved onto the land, it is possible that this wood house had already been constructed and lived in by tenant farmers. Between 1891 and 1909, Russell remarried and constructed an upgraded brick home, which still stands in the vicinity of Norval Site 3 (AjGx-263). After William Russel's death in 1917, his widow and family continued to reside in the six-room brick home on the property, as evidenced by the 1921 Census. Topographic maps released by The Department of National Defence that date from 1915 to 1942 show only the extant brick structure on the property, indicating that the wood structure had since been demolished.

Artifacts recovered from each site were generally similar when comparing the quantity of **architectural and ceramic artifacts, which represented the lion's share of artifacts** recovered. The only exception was Norval Site 6, which contained few architectural artifacts and overall, the least number of artifacts, which indicates the site may have originated from a one-time refuse deposit by a tenant farmer. In terms of production date range of the site assemblages, artifacts that were clearly diagnostic from 1830 to 1870 ranged depending on the site from 10% to 32% of the overall assemblage, with non-diagnostic or 20th century artifacts accounting for 20% to 34% of the overall assemblage.

Ultimately, in-depth archival research, in tandem with the results of Stage 4 mitigation, indicates that only Norval Site 1 was representative of a domestic occupation based on the cellar and well features discovered. The cellar is likely all that remains of the 1 ½ storey wood home noted in the 1891 Census as the residence of the Russel family, which was also potentially occupied by various tenant farmers before them. Norval Site 2 contained cultural features such as pits, a drain, and a faunal deposit, which indicates that this site may have constituted a refuse area for the Russel homestead (Site 1). Refuse with a high food bone content was discarded away from the home due to the smell, which explains the presence of the faunal deposit and location of Norval Site 2 to the northeast of the homestead (Ontario Archaeology No. 64, 1997, p. 60). Similarly, the cultural features encountered at Norval Site 6 were all identified as refuse pits, which indicates that Site 6 was also a refuse area for the homestead located to the south. Lastly, it should be noted that the excavation of Norval Site 3 did not result in the discovery of any cultural features. The artifacts recovered from Site 3 ought to be attributed to the occupation of the Russel family **due to the site's proximity of the extant brick home.**

Artifact analysis, based on the production date range, reveals that close to 68% of the assemblage dates into the 19th century, while only 11% is clearly diagnostic from the early to late 19th century. An additional 21% of the artifacts contain no diagnostic attributes or originates from the 20th century.

In conclusion, Norval Site 3 did not result in the discovery of any cultural features. The artifacts recovered ought to be attributed to the occupation of the Russell family due to the **site's proximity of the extant brick home.**

4.6 Stage 4: Recommendations

As Stage 4 mitigation is complete, recommendations are therefore as follows:

- o Norval Site 3 (AjGx-263) has been subjected to a full site excavation and documentation in accordance with the 2011 Standards and Guidelines for Consultant Archaeologists holds no further CHVI. As such, no further archaeological work is required.

5.0 Advice on Compliance of Legislation

1. 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, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and

report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

2. It is an offence under Sections 48 and 69 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological 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 Reports referred to in Section 65.1 of the Ontario Heritage Act.
3. Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological field work, in compliance with Section 48 (1) of the Ontario Heritage Act.
4. The Cemeteries Act, R.S.O. 1990 c. C. 4 and the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 (when proclaimed in force) require any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.
5. Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the Ontario Heritage Act and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

6.0 Bibliography

Ancestry.ca

- o *Canada Home and District Directories (1870)*. Retrieved from <http://search.ancestry.ca/>
- o *Canada Home and District Directories (1885)*. Retrieved from <http://search.ancestry.ca/>
- o *Canada Home and District Directories (1896)*. Retrieved from <http://search.ancestry.ca/>
- o *Canada Home and District Directories (1899)*. Retrieved from <http://search.ancestry.ca/>

Birks, S. (2005). Ceramic marks. In Stoke-on-Trent. Retrieved from <http://www.thepotteries.org/mark/index.html>

Chapman, L.J. and Putnam, D.F. (1984). *The Physiography of Southern Ontario*. Toronto: Ontario Ministry of Natural Resources.

ESRI Canada. (2015). Digital Globe, GeoEye, I-Cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS user Community [software]. Available from <http://www.esri.ca/en>

Finlayson, William D. (1998). *Iroquoian People of the Land of Rocks and Water, A.D. 1000 – 1650: A Study in Settlement Archaeology*. London, Ontario: London Museum of Archaeology.

First Base Solutions. (2015). Ontario Base Mapping [software]. Available from <http://www.firstbasesolutions.com/>

Government of Canada, (1861). *Census of 1861*. Retrieved from <http://www.bac-lac.gc.ca/eng/Pages/home.aspx>

Government of Canada, (1891). *Census of 1861*. Retrieved from <http://www.bac-lac.gc.ca/eng/Pages/home.aspx>

Government of Ontario:

- o Ministry of Heritage, Sport, Tourism and Culture Industries. (2011). *Standards and Guidelines for Consultant Archaeologists*. Toronto: Queen's Printer.
- o Ontario Geological Survey. (n.d.). Surficial Geology Data for Southern Ontario
- o [Computer software]. Sudbury: Ontario Ministry of Northern Development and Mines.

Kenyon, I. (1980). *Nineteenth Century Notes: Window Glass Thickness*. London, ON: London Chapter Ontario Archaeological Society.

Lindsey, B. (2016). *Society for Historical Archaeology*. Retrieved from <https://sha.org>

Looking Back Research Services. (2015). *Historical Background Report Part of Lots 11 and 12, Concession 11, Town of Halton Hills*. Gina Martin: Brampton.

MacDonald, Eva M. "The Root of the Scatter: Nineteenth Century Artifact and Settlement Patterns in Rural Ontario." Ontario Archaeology No. 64, 1997, pp. 56-79.

Nelson, H. L. (1968). Nail Chronology as an Aid to Dating Old Buildings. *American Association for State and Local History Technical Leaflet 48, History News, Volume 24*(Number 11).
http://files.umwblogs.org/blogs.dir/7608/files/nail_chronology.pdf

Ontario Geological Survey. (n.d.). Surficial Geology Data for Southern Ontario [computer software]. Sudbury: Ontario Ministry of Northern Development and Mines.

Samford, P. & Miller G. L. (2015). *Post-Colonial Ceramics*. Retrieved from
<http://www.jefpat.org/diagnostic/Post-Colonial%20Ceramics/index-PostColonialCeramics.htm>

Schmid, Elisabeth (1972). *Atlas of Animal Bone: For Prehistorians, Archaeologists, and Quaternary Geologists* Elsevier Publishing Company, Amsterdam.

Smith, H. R. (1986). Analysis of The Clay Tobacco Pipe assemblage from the Front Street Site (AjGu-15). Toronto: Ontario Archaeology.

This Land Archaeology Inc. (TLA, 2016). Report on the Stage 1 And 2 Archaeological Assessment of Fieldgate Developments Land, Part of Lots 11 And 12, Concession 11, Town of Halton Hills, Regional Municipality of Halton, Historic Halton Region, Geographic Township of Esquesing North, Ontario. Report accepted into the Public Register under PIF Number: P379-0015-2015.

This Land Archaeology Inc. (TLA, 2016). Report on the Stage 3 Archaeological Assessment of: Norval Site 1 (AjGx-261), Norval Site 2 (AjGx-262), Norval Site 3 (AjGx-263), Norval Site 4 (AjGx-265), Norval Site 5 (AjGx-266) and Norval Site 6 (AjGx-264). Located on Russell Pines Property Corp.'s Property, Part of Lots 11 And 12, Concession 11, Town of Halton Hills, Regional Municipality of Halton, Historic Halton Region, Geographic Township of Esquesing North, Ontario. Report accepted into the Public Register under PIF Numbers: PIF Numbers: P379-0028-2015, Norval Site 1 (AjGx-261); P379-0029-2015, Norval Site 2 (AjGx-262); P379-0035-2015, Norval Site 3 (AjGx-263); P379-0036-2015, Norval Site 6 (AjGx-264).

This Land Archaeology Inc. (TLA, 2021).

- Final Report on the Stage 4 Mitigation of Norval Site 1 (AjGx-261) located on Part of Lot 11, Concession 11, Geographic Township of Esquesing, now in the Town of Halton Hills, Regional Municipality of Halton, Ontario. Report on file with the MHSTCI under PIF P059-0933-2020.
- Final Report on the Stage 4 Mitigation of Norval Site 6 (AjGx-264) located on Part of Lot 11, Concession 11, Geographic Township of Esquesing, now in the Town of Halton Hills, Regional Municipality of Halton, Ontario. Report on file with the MHSTCI under PIF P059-0939-2020.

- o Final Report on the Stage 4 Mitigation of Norval Site 2 (AjGx-262) located on Part of Lot 11, Concession 11, Geographic Township of Esquesing, now in the Town of Halton Hills, Regional Municipality of Halton, Ontario. Report on file with the MHSTCI under PIF P059-0933-2020.

Tremaine, George. (1858). [Historic Mapping] *Illustrated Historical Atlas of the County of Halton, Ontario*. <http://digital.library.mcgill.ca/countyatlas>

Walker and Miles. (1877). [Historic Mapping] *Illustrated Historical Atlas of the County of Halton, Ontario*. <http://digital.library.mcgill.ca/countyatlas>

Williams, Doug. (2018). *Michi Saagiig Naishnaabeg: This is Our Territory*, ed. Leanne Betasamosake Simpson. Winnipeg, Manitoba: ARP Books.

Wright, James V. (1995). *History of the Native People of Canada* (Vol. I, II, III). Gatineau, Quebec: Canadian Museum of History

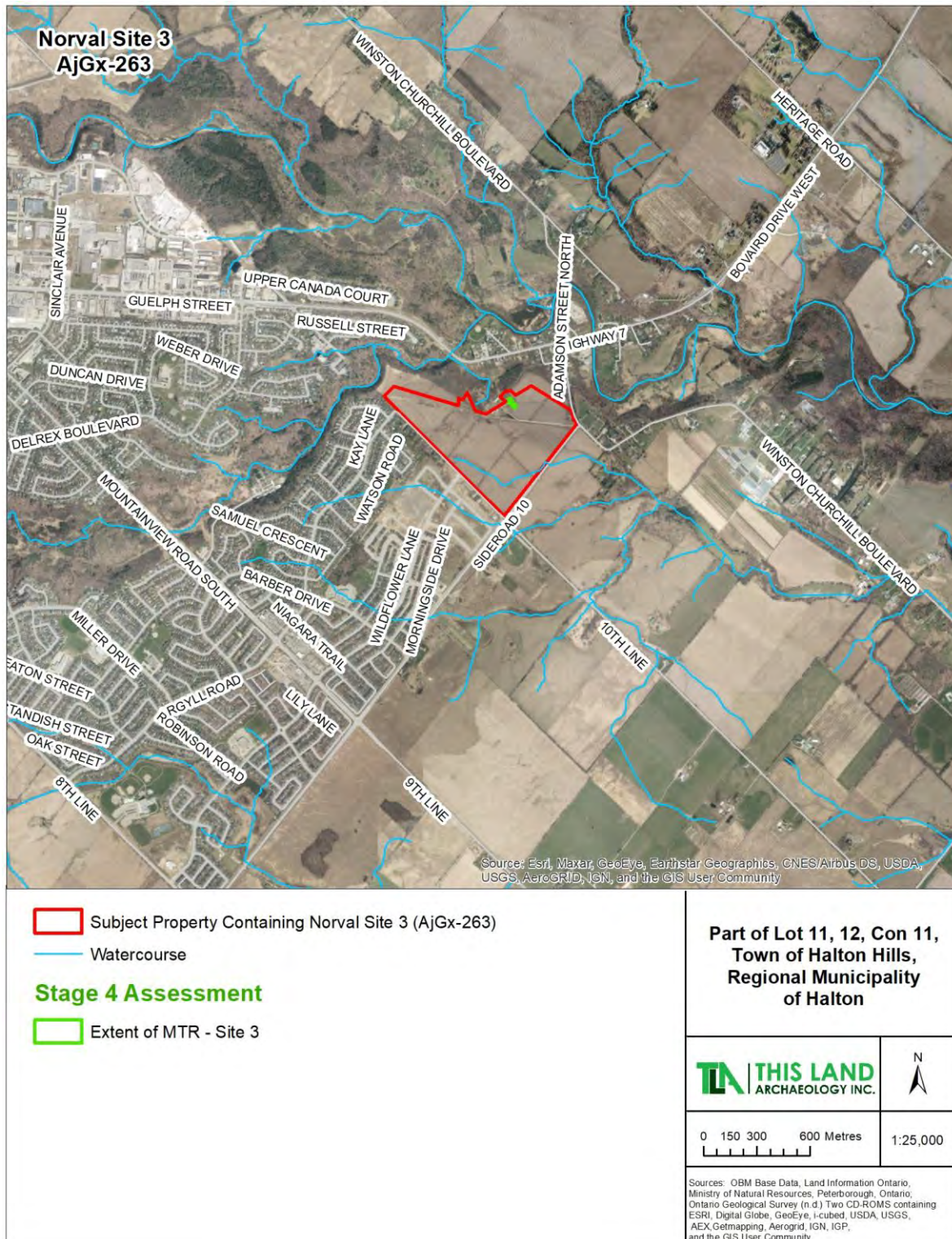


Figure 1: Location of subject property containing Norval Site 3.

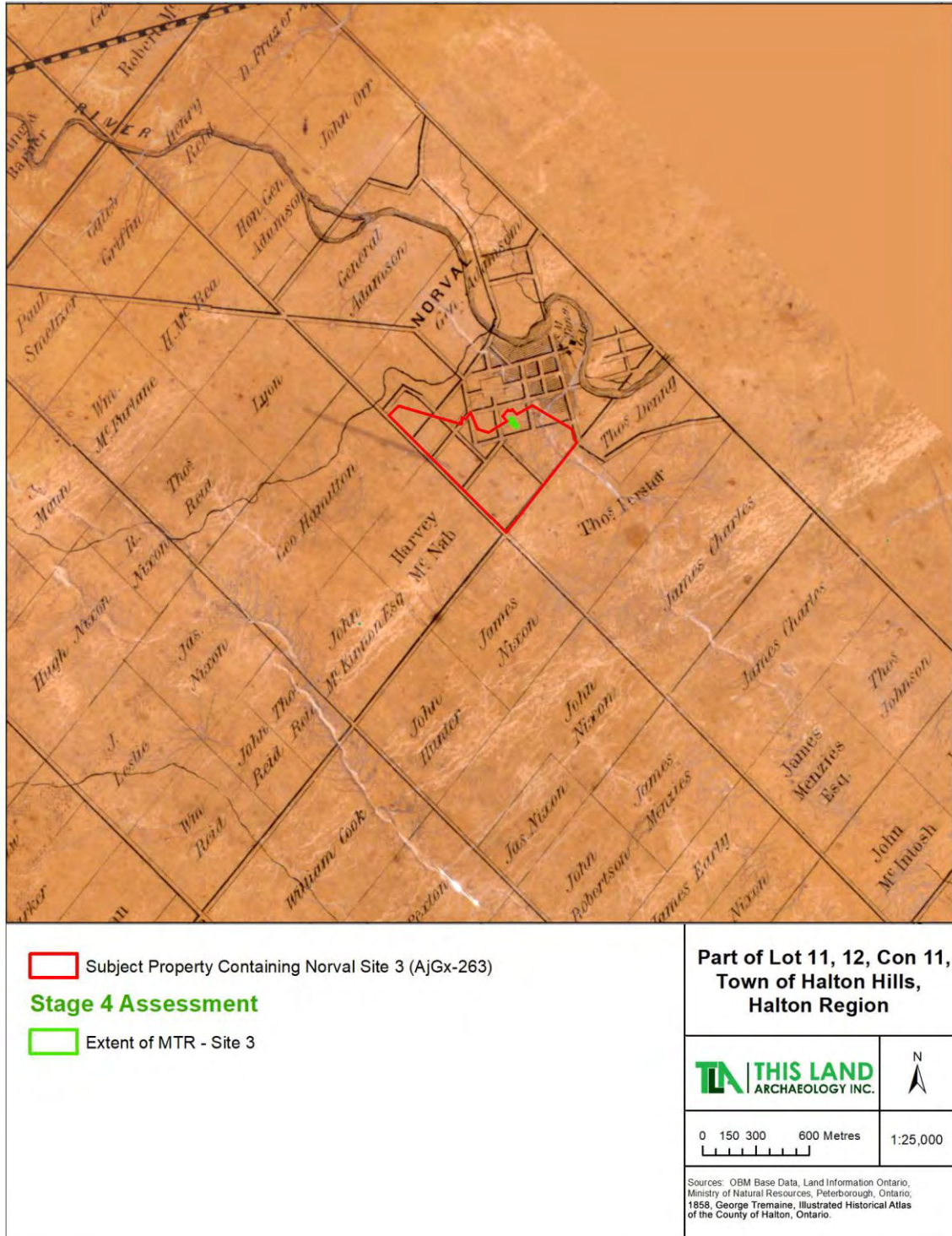


Figure 2: 1858, George Tremain, *Illustrated Historical Atlas of the County of Halton, Ontario*.

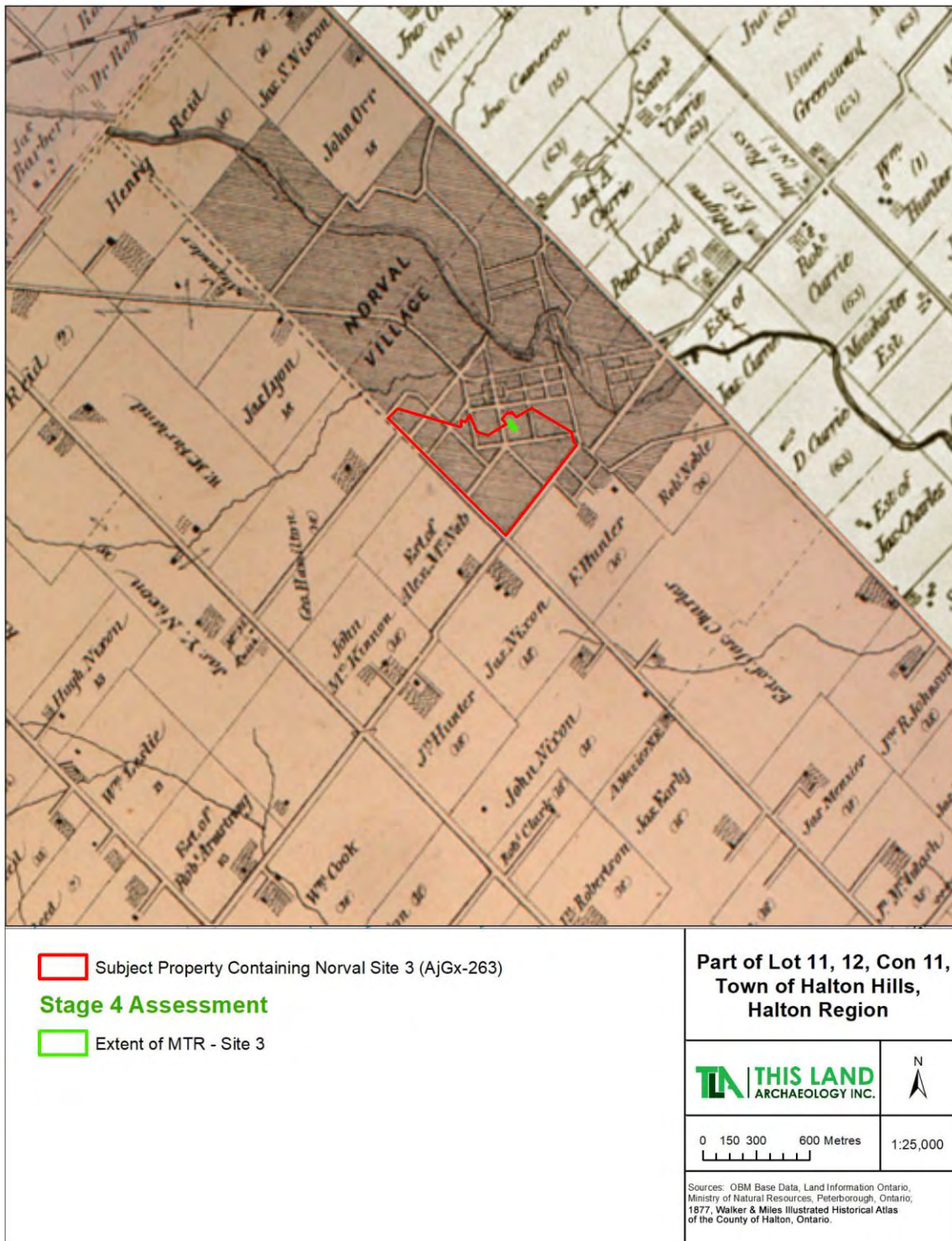


Figure 3: 1877, Walker and Miles, *Illustrated Historical Atlas of the County of Halton, Ontario*.



Figure 4: Current land use, Norval Site 3 area subject to Stage 4 MTR.

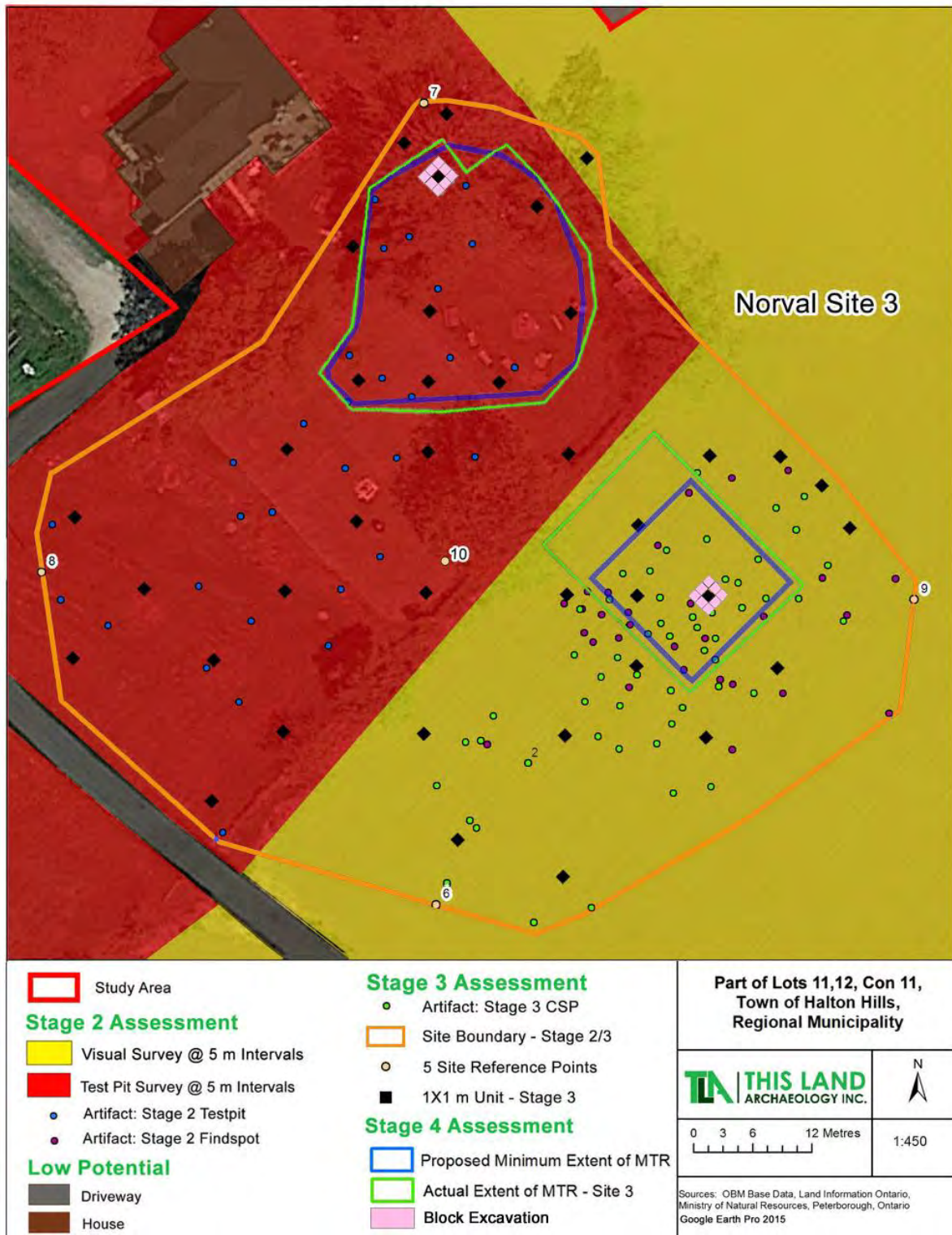


Figure 5b: Results of previous assessments and Stage 4 mitigation showing the location of block excavation, and extent of MTR.

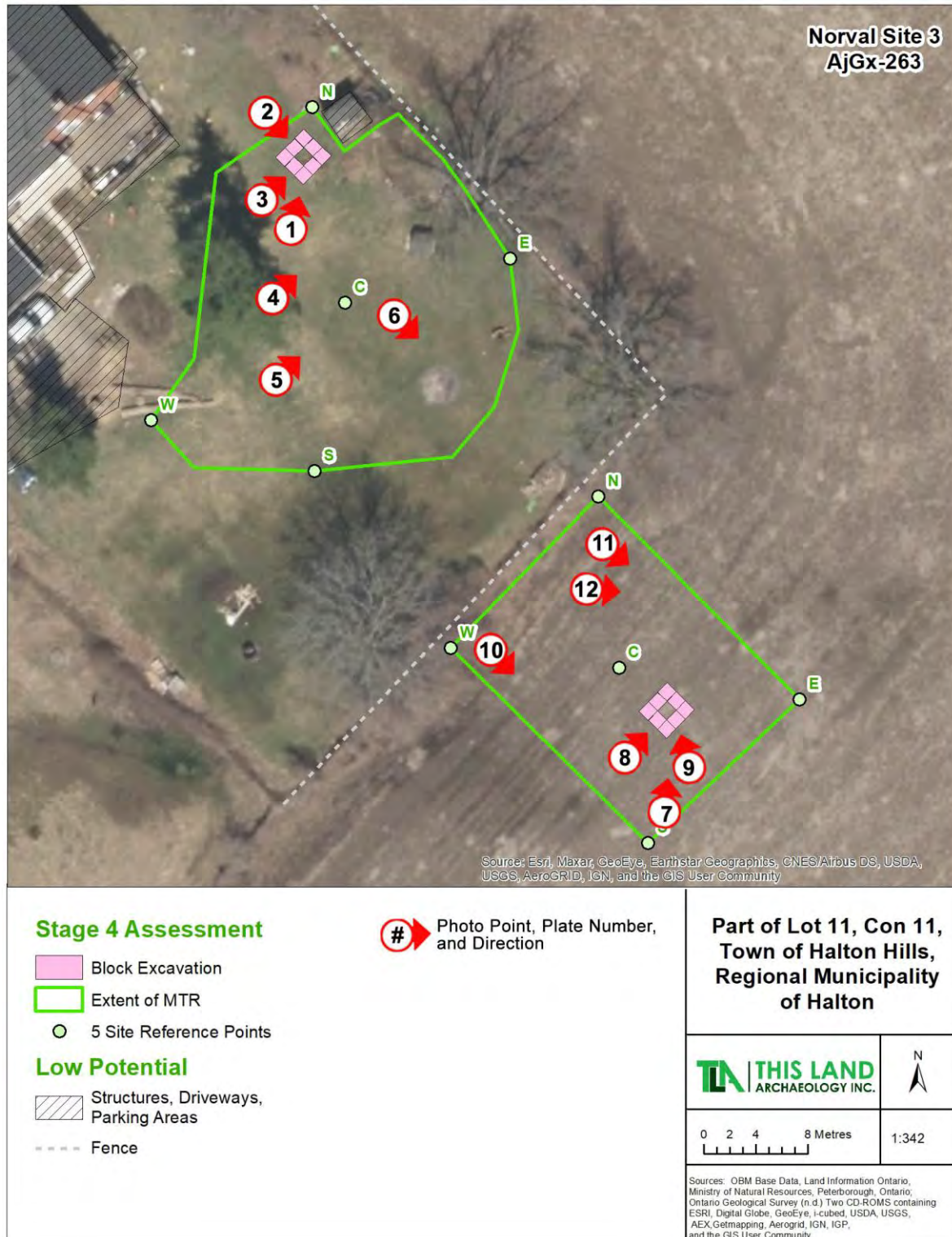


Figure 6a: Results of Stage 4 mitigation on current land use with area of block excavation illustrated, MTR actual extent, five site reference points and photo points.

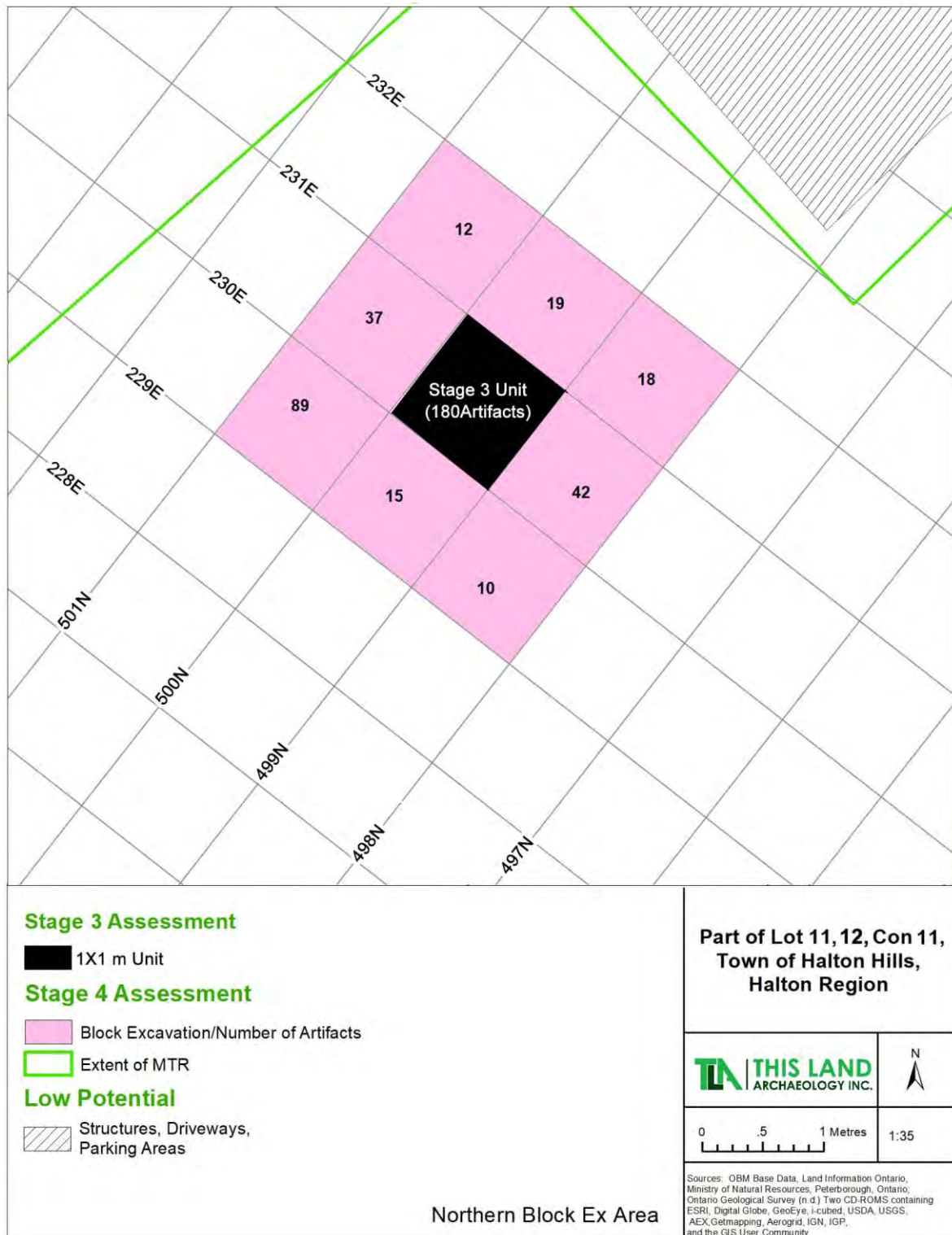


Figure 6b: Stage 4 block excavation with number of artifacts recovered-Northern area.

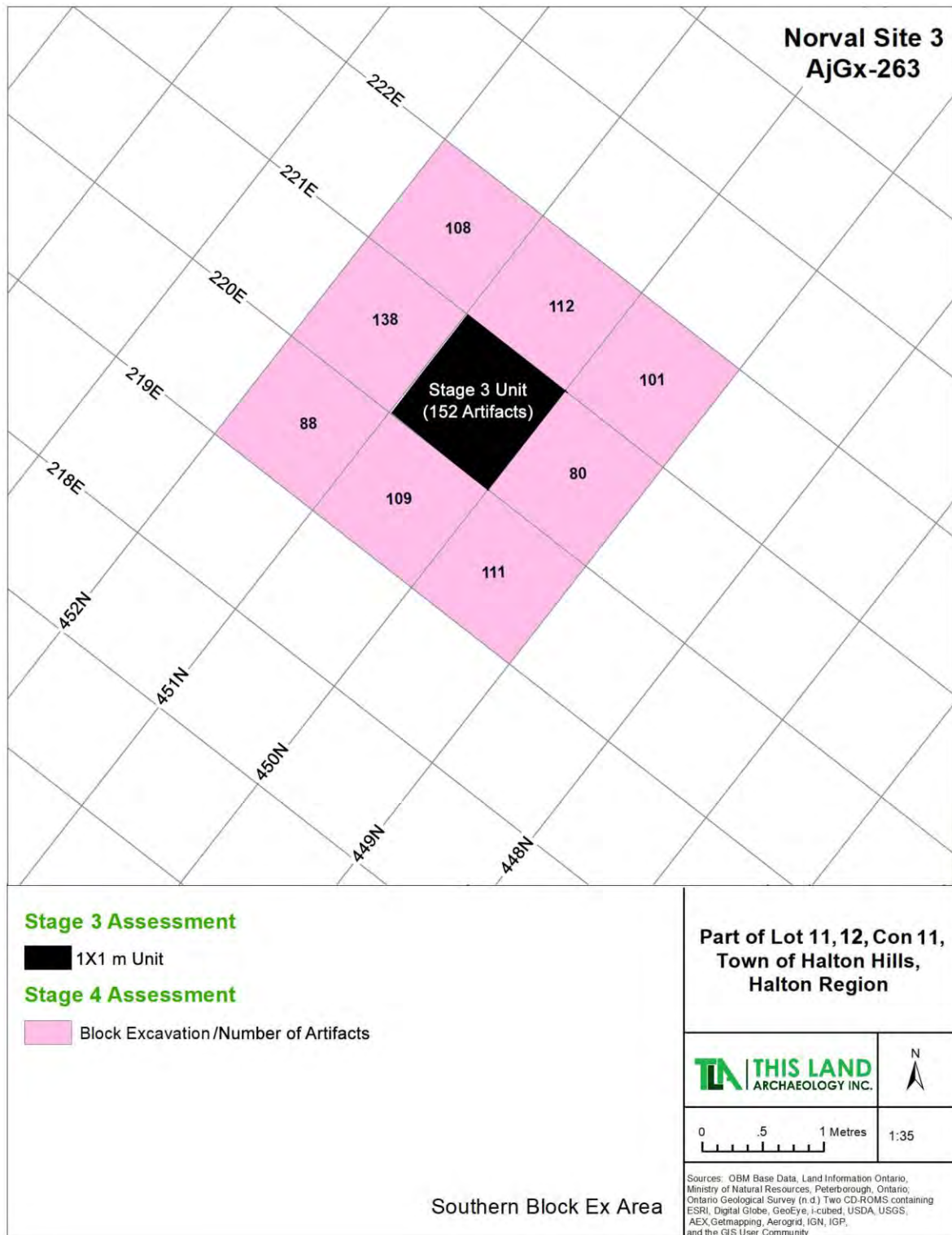


Figure 6c: Stage 4 block excavation with number of artifacts recovered-Southern area.



Plate 1: Block excavation (north area).



Plate 2: Plan view of completed block excavation (north area).



Plate 3: Profile view of completed block excavation (north area).



Plate 4: MTR (north area).



Plate 5: MTR (north area).



Plate 6: Shovel shining a potential feature (north area).



Plate 7: Block excavation (south area).



Plate 8: Plan view of completed block excavation (south area).



Plate 9: Profile view of completed block excavation (south area).



Plate 10: MTR (south area).



Plate 11: MTR (south area).



Plate 12: Shovel shining a potential feature (south area).

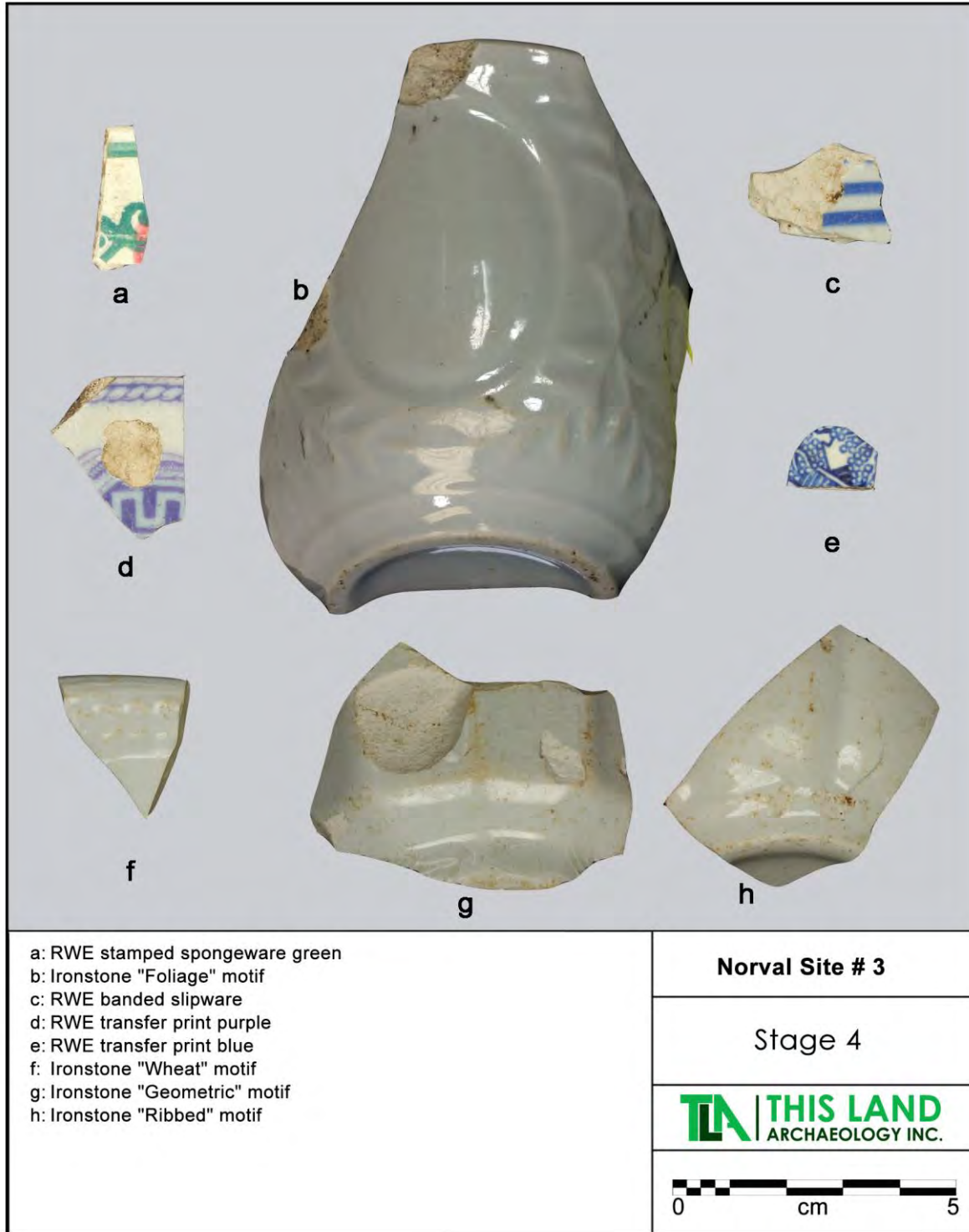


Plate 13: Sample of Artifacts recovered.

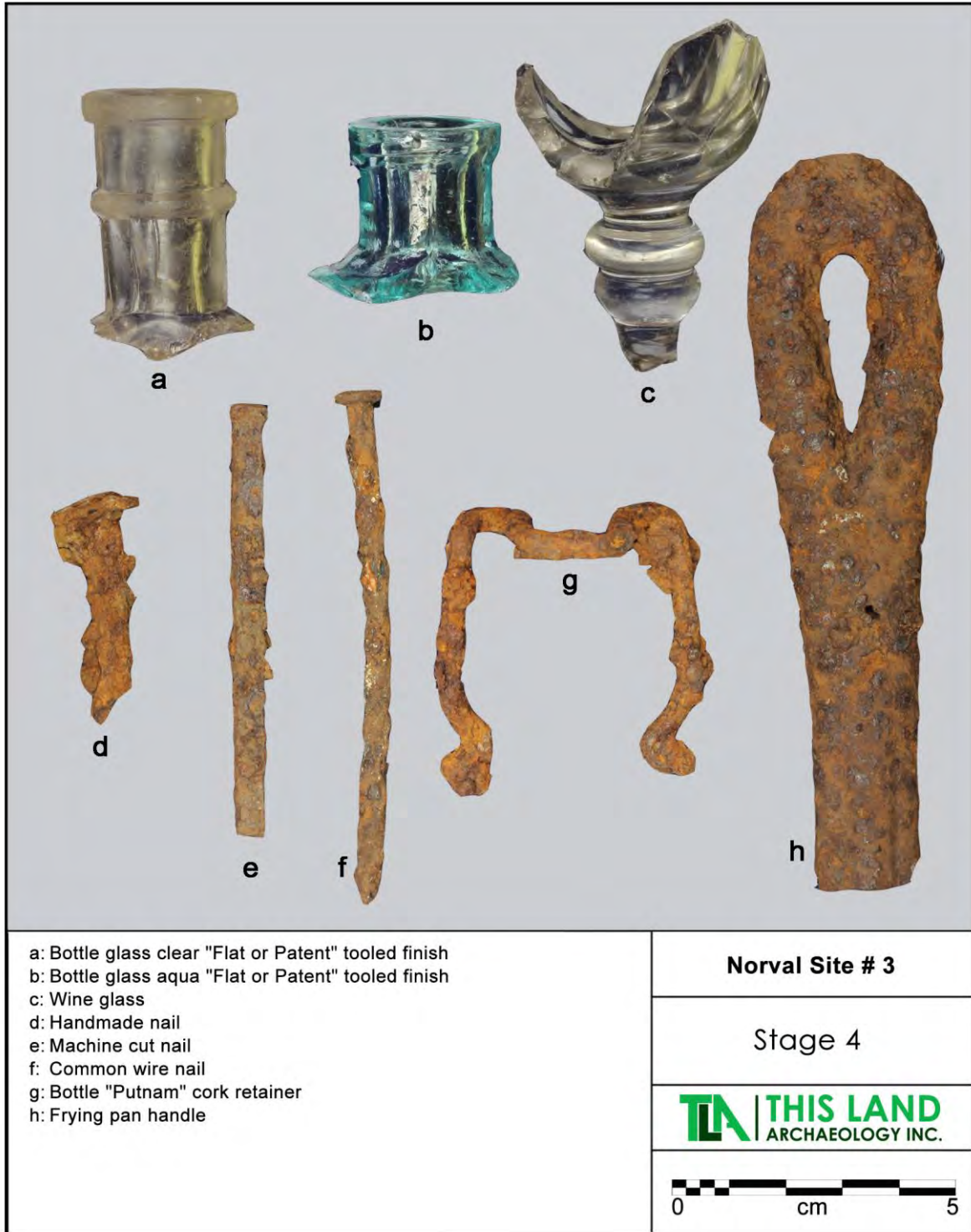


Plate 14: Sample of Artifacts recovered.

7.0 Appendix:

Table 12: Artifact Catalogue - Norval Site 3

Table 12: Artifact Catalogue Stage 4 Mitigation of Norval Site 3 (AjGx-263)

Unit	ID	Ext	Cla	Fun	Description	Decoration	Colour	Comments	No.	Box
451221	###	107	Arc	Ind	Red Brick		Red		2	1
451221	###	108	Arc	Ind	Thick Window Glass		N/A		4	1
451221	###	109	Arc	Ind	Thin Window Glass		N/A		1	1
451221	###	104	Arc	Ind	Machine Cut Nails		N/A		58	1
451221	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		2	1
451221	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		2	1
451221	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		2	1
451221	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		29	1
451221	###	299	Ope	Ind	Slate Fragment	Slate Fragment	N/A		2	1
451221	###	243	Oth	Ind	Metal Indeterminate Object	Metal Indeterminate Object	N/A		6	1
449219	###	107	Arc	Ind	Red Brick		Red		2	1
449219	###	108	Arc	Ind	Thick Window Glass		N/A		3	1
449219	###	104	Arc	Ind	Machine Cut Nails		N/A		73	1
449219	###	228	Gls	Ind	Bottle Glass	Olive Body Sherd	Olive		2	1
449219	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		1	1
449219	###	236	Gls	Ind	Pressed Glass	Pressed Glass	Clear		1	1
449219	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		1	1
449219	###	241	Oth	Ind	Flowerpot	Unglazed	Red		1	1
449219	###	126	Cer	Ind	Ironstone	Geometric Motif	White		3	1
449219	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		17	1
449219	###	265	Oha	Ind	Barrel Banding	Barrel Banding	N/A		7	1
498231	###	101	Arc	Ind	Common Wire Nails		N/A		1	1
498231	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		5	1
498231	###	111	Cer	Ind	Buff Stoneware	Glazed	Buff	Buff stoneware inkwell fragment-1:	1	1
498231	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		2	1
498231	###	240	Oth	Ind	Coal	Coal	Black		4	1
498231	###	210	Fau	Ind	Bone Fragment		N/A		5	1
498230	###	107	Arc	Ind	Red Brick		Red		1	1
498230	###	104	Arc	Ind	Machine Cut Nails		N/A		1	1
498230	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		1	1
498230	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua	BG aqua probable mend with finish -32:	32	1
498230	###	240	Oth	Ind	Coal	Coal	Black		2	1
498230	###	247	Oth	Ind	Slag	Slag	N/A		1	1
498230	###	210	Fau	Ind	Bone Fragment		N/A		3	1
498230	###	221	Gls	Ind	BG Finish Tooled	Bottle Glass Finish Tooled	See Comment	BG aqua flat or patent tooled finish 1875 - 1905-1:	1	1
499231	###	104	Arc	Ind	Machine Cut Nails		N/A		4	1
499231	###	101	Arc	Ind	Common Wire Nails		N/A		1	1
499231	###	186	Cer	Ind	Refined White Earthenware	Transfer Print Purple	Purple		6	1
499231	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		5	1
499231	###	210	Fau	Ind	Bone Fragment		N/A		1	1
499231	###	278	Oha	Ind	Wire	Wire	N/A		1	1
499231	###	329	Oha	Ind	Hardware Other	Hardware Other	See Comment	Hardware metal spring-1:	1	1
500231	###	104	Arc	Ind	Machine Cut Nails		N/A		2	1
500231	###	101	Arc	Ind	Common Wire Nails		N/A		1	1
500231	###	228	Gls	Ind	Bottle Glass	Olive Body Sherd	Olive		3	1
500231	###	238	Gls	Ind	Tumbler Clear	Tumbler Clear	Clear	Wine glass fragment-1:	1	1
500231	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		1	1
500231	###	111	Cer	Ind	Buff Stoneware	Glazed	Buff		1	1
500231	###	131	Cer	Ind	Ironstone	Wheat Motif	White		1	1
500231	###	125	Cer	Ind	Ironstone	Foliage Motif	White	Ironstone foliage motif coffee cup mend (n=4) 50 % complete-1:	1	1
500231	###	258	Ofo	Ind	Cooking Pan Metal	Cooking Pan Metal	N/A	Metal frying pan handle fragment-1:	1	1
449221	###	107	Arc	Ind	Red Brick		Red		2	1
449221	###	108	Arc	Ind	Thick Window Glass		N/A		2	1
449221	###	109	Arc	Ind	Thin Window Glass		N/A		4	1
449221	###	103	Arc	Ind	Hand Made Nails		N/A		1	1
449221	###	104	Arc	Ind	Machine Cut Nails		N/A		43	1
449221	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		10	1
449221	###	223	Gls	Ind	Bottle Glass	Blue Body Sherd	Blue		1	1
449221	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		1	1
449221	###	186	Cer	Ind	Refined White Earthenware	Transfer Print Purple	Purple		1	1
449221	###	174	Cer	Ind	Refined White Earthenware	Sponge Stamped Cut Other	Other	RWE stamped spongeware green w rim line green-1:	1	1
449221	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		3	1
449221	###	131	Cer	Ind	Ironstone	Wheat Motif	White		3	1
449221	###	125	Cer	Ind	Ironstone	Foliage Motif	White		1	1
449221	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		17	1
449221	###	305	Osm	Ind	Smoking Pipe Bowl	Smoking Pipe Bowl	N/A		1	1
449221	###	250	Ofa	Ind	Glass Button	Glass Button	N/A		2	1
449221	###	242	Oth	Ind	Metal	Metal	N/A	Metal spike-1:	1	1
449221	###	247	Oth	Ind	Slag	Slag	N/A		1	1
449221	###	210	Fau	Ind	Bone Fragment		N/A		1	1
449221	###	265	Oha	Ind	Barrel Banding	Barrel Banding	N/A		2	1
449221	###	266	Oha	Ind	Bolt	Bolt	N/A		2	1
449221	###	288	Ope	Ind	Figurine Ceramic	Figurine Ceramic	N/A	Ceramic figurine fragment "hand"-1:	1	1
499229	###	104	Arc	Ind	Machine Cut Nails		N/A		1	1
499229	###	101	Arc	Ind	Common Wire Nails		N/A		4	1
499229	###	241	Oth	Ind	Flowerpot	Unglazed	Red		1	1
499229	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		6	1
499229	###	210	Fau	Ind	Bone Fragment		N/A		1	1
499229	###	278	Oha	Ind	Wire	Wire	N/A		1	1
499229	###	268	Oha	Ind	Clevis Pin	Clevis Pin	N/A		1	1
500229	###	107	Arc	Ind	Red Brick		Red		2	1
500229	###	104	Arc	Ind	Machine Cut Nails		N/A		2	1
500229	###	101	Arc	Ind	Common Wire Nails		N/A		2	1
500229	###	186	Cer	Ind	Refined White Earthenware	Transfer Print Purple	Purple		1	1
500229	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		21	1
500229	###	241	Oth	Ind	Flowerpot	Unglazed	Red		4	1
500229	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		50	1
500229	###	240	Oth	Ind	Coal	Coal	Black		3	1
500229	###	210	Fau	Ind	Bone Fragment		N/A		3	1
500229	###	329	Oha	Ind	Hardware Other	Hardware Other	See Comment	Hardware metal spring-1:	1	1
450221	###	108	Arc	Ind	Thick Window Glass		N/A		4	1
450221	###	109	Arc	Ind	Thin Window Glass		N/A		6	1
450221	###	104	Arc	Ind	Machine Cut Nails		N/A		52	1
450221	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		5	1
450221	###	229	Gls	Ind	Bottle Glass	Other Glass Body Sherd	See Comment	BG Putnam cork retainer 1860s - 1880s -1:	1	1
450221	###	236	Gls	Ind	Pressed Glass	Pressed Glass	Clear		1	1
450221	###	238	Gls	Ind	Tumbler Clear	Tumbler Clear	Clear		1	1
450221	###	174	Cer	Ind	Refined White Earthenware	Sponge Stamped Cut Other	Other	RWE stamped spongeware green-1:	1	1
450221	###	156	Cer	Ind	Refined White Earthenware	Banded Slipware	Polychrome		3	1
450221	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		5	1
450221	###	241	Oth	Ind	Flowerpot	Unglazed	Red		2	1

Table 12: Artifact Catalogue Stage 4 Mitigation of Norval Site 3 (AjGx-263)


Unit	ID	Ext	Cla	Fun	Description	Decoration	Colour	Comments	No.	Box
450221	###	130	Cer	Ind	Ironstone	Ribbed Motif	White		1	1
450221	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		21	1
450221	###	305	Osm	Ind	Smoking Pipe Bowl	Smoking Pipe Bowl	N/A		1	1
450221	###	210	Fau	Ind	Bone Fragment		N/A		5	1
450221	###	278	Oha	Ind	Wire	Wire	N/A		2	1
450221	###	289	Ope	Ind	Hair Comb	Hair Comb	N/A	Hair comb plastic fragment-1:	1	1
451220	###	107	Arc	Ind	Red Brick		Red		1	1
451220	###	108	Arc	Ind	Thick Window Glass		N/A		6	1
451220	###	109	Arc	Ind	Thin Window Glass		N/A		2	1
451220	###	104	Arc	Ind	Machine Cut Nails		N/A		61	1
451220	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		5	1
451220	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		4	1
451220	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		17	1
451220	###	154	Cer	Ind	Porcelain	Porcelain Undecorated	N/A		1	1
451220	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		5	1
451220	###	118	Cer	Ind	Coarse Red Earthenware	Unglazed	Red		2	1
451220	###	131	Cer	Ind	Ironstone	Wheat Motif	White		1	1
451220	###	126	Cer	Ind	Ironstone	Geometric Motif	White		1	1
451220	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		28	1
451220	###	250	Ofa	Ind	Glass Button	Glass Button	N/A		2	1
451220	###	243	Oth	Ind	Metal Indeterminate Object	Metal Indeterminate Object	N/A		1	1
451220	###	271	Oha	Ind	Fence Staple	Fence Staple	N/A		1	1
451219	###	107	Arc	Ind	Red Brick		Red		13	1
451219	###	108	Arc	Ind	Thick Window Glass		N/A		4	1
451219	###	109	Arc	Ind	Thin Window Glass		N/A		1	1
451219	###	104	Arc	Ind	Machine Cut Nails		N/A		30	1
451219	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		1	1
451219	###	228	Gls	Ind	Bottle Glass	Olive Body Sherd	Olive		4	1
451219	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		2	1
451219	###	182	Cer	Ind	Refined White Earthenware	Transfer Print Blue	Blue		1	1
451219	###	186	Cer	Ind	Refined White Earthenware	Transfer Print Purple	Purple		1	1
451219	###	156	Cer	Ind	Refined White Earthenware	Banded Slipware	Polychrome		1	1
451219	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		2	1
451219	###	154	Cer	Ind	Porcelain	Porcelain Undecorated	N/A		1	1
451219	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		3	1
451219	###	111	Cer	Ind	Buff Stoneware	Glazed	Buff		1	1
451219	###	131	Cer	Ind	Ironstone	Wheat Motif	White		1	1
451219	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		19	1
451219	###	243	Oth	Ind	Metal Indeterminate Object	Metal Indeterminate Object	N/A		1	1
451219	###	275	Oha	Ind	Screw	Screw	N/A		1	1
451219	###	221	Gls	Ind	BG Finish Tooled	Bottle Glass Finish Tooled	See Comment	BG clear flat or patent tooled finish 1875 - 1905-1:	1	1
500230	###	108	Arc	Ind	Thick Window Glass		N/A		1	1
500230	###	104	Arc	Ind	Machine Cut Nails		N/A		4	1
500230	###	101	Arc	Ind	Common Wire Nails		N/A		1	1
500230	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		5	1
500230	###	230	Gls	Ind	Chimney Glass	Chimney Glass	Clear		2	1
500230	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		10	1
500230	###	125	Cer	Ind	Ironstone	Foliage Motif	White		1	1
500230	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		13	1
449220	###	107	Arc	Ind	Red Brick		Red		1	1
449220	###	108	Arc	Ind	Thick Window Glass		N/A		2	1
449220	###	109	Arc	Ind	Thin Window Glass		N/A		9	1
449220	###	104	Arc	Ind	Machine Cut Nails		N/A		29	1
449220	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		4	1
449220	###	228	Gls	Ind	Bottle Glass	Olive Body Sherd	Olive		1	1
449220	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		2	1
449220	###	236	Gls	Ind	Pressed Glass	Pressed Glass	Clear		1	1
449220	###	173	Cer	Ind	Refined White Earthenware	Sponge Stamped Cut Blue	Blue		1	1
449220	###	156	Cer	Ind	Refined White Earthenware	Banded Slipware	Polychrome		1	1
449220	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		2	1
449220	###	241	Oth	Ind	Flowerpot	Unglazed	Red		2	1
449220	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		12	1
449220	###	299	Ope	Ind	Slate Fragment	Slate Fragment	N/A		1	1
449220	###	243	Oth	Ind	Metal Indeterminate Object	Metal Indeterminate Object	N/A		6	1
449220	###	240	Oth	Ind	Coal	Coal	Black		1	1
449220	###	210	Fau	Ind	Bone Fragment		N/A		4	1
449220	###	265	Oha	Ind	Barrel Banding	Barrel Banding	N/A		1	1
450219	###	107	Arc	Ind	Red Brick		Red		6	1
450219	###	108	Arc	Ind	Thick Window Glass		N/A		7	1
450219	###	109	Arc	Ind	Thin Window Glass		N/A		2	1
450219	###	104	Arc	Ind	Machine Cut Nails		N/A		33	1
450219	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		2	1
450219	###	222	Gls	Ind	Bottle Glass	Aqua Body Sherd	Aqua		6	1
450219	###	226	Gls	Ind	Bottle Glass	Green Body Sherd	Green		1	1
450219	###	236	Gls	Ind	Pressed Glass	Pressed Glass	Clear		1	1
450219	###	169	Cer	Ind	Refined White Earthenware	Rimline Monochrome	Monochrome	RWE rim line monochrome red-1:	1	1
450219	###	182	Cer	Ind	Refined White Earthenware	Transfer Print Blue	Blue		1	1
450219	###	174	Cer	Ind	Refined White Earthenware	Sponge Stamped Cut Other	Other	RWE stamped spongeware brown-1:	1	1
450219	###	188	Cer	Ind	Refined White Earthenware	RWE Undecorated	White		7	1
450219	###	117	Cer	Ind	Coarse Red Earthenware	Glazed	Red		9	1
450219	###	118	Cer	Ind	Coarse Red Earthenware	Unglazed	Red		11	1
450219	###	241	Oth	Ind	Flowerpot	Unglazed	Red		1	1
450219	###	111	Cer	Ind	Buff Stoneware	Glazed	Buff		4	1
450219	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		13	1
450219	###	305	Osm	Ind	Smoking Pipe Bowl	Smoking Pipe Bowl	N/A		1	1
450219	###	244	Oth	Ind	Miscellaneous	Miscellaneous	See Comment	Misc frosted glass round (?)-1:	1	1
450219	###	265	Oha	Ind	Barrel Banding	Barrel Banding	N/A		1	1
498229	###	107	Arc	Ind	Red Brick		Red		1	1
498229	###	105	Arc	Ind	Mortar		White		1	1
498229	###	225	Gls	Ind	Bottle Glass	Clear Body Sherd	Clear		1	1
498229	###	235	Gls	Ind	Milk Glass	Milk Glass	White		1	1
498229	###	241	Oth	Ind	Flowerpot	Unglazed	Red		2	1
498229	###	127	Cer	Ind	Ironstone	Indeterminate Motif	White		4	1
Total									1,089	

Abbreviation Description	
Class (Cla)	Acronym
Aboriginal	Abo
Ceramics	Cer
Faunal	Fau

Table 12: Artifact Catalogue Stage 4 Mitigation of Norval Site 3 (AjGx-263)

Unit	ID	Ext	Cla	Fun	Description	Decoration	Colour	Comments	No.	Box
					Floral	Flo				
					Glass	Gls				
					Other	Oth				
					Other fastener	Ofa				
					Other Firearm / ammunition	Ofi				
					Other food related	Ofo				
					Other hardware	Oha				
					Other horse tack	Oht				
					Other music	Omu				
					Other personal	Ope				
					Other smoking	Osm				
					Other Tools	Oto				
					Other toy	Oty				
<p>When function, makers mark or manufacture technique is known please see the Comments column for details. No comment denotes indeterminate manufacture technique due to condition of artifact.</p>										

SCALE 1" = 1250'



J.D. BARNES LIMITED

METRIC DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN ADDITION TO THE FEET AND INCHES SHOWN ON YOUR

NOTES

BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A, B AND C,
BY REAL TIME NETWORK (RTN) OBSERVATIONS. UTM ZONE 17, NAD83 (CHS)
(2010 C)

FOR BEARING COMPARISONS, A ROTATION OF 050°40' COUNTER-CLOCKWISE WAS
APPLIED TO BEARINGS ON ALL PLANS. GAVE AND EXCEPT PLAN 72R-1987B.

FOR BEARING COMPARISONS, A ROTATION OF 37°05'00" COUNTER-CLOCKWISE WAS
APPLIED TO BEARINGS ON INSTRUMENT NO. 505552.

FOR BEARING COMPARISONS, A ROTATION OF 04°05'00" COUNTER-CLOCKWISE WAS
APPLIED TO BEARINGS ON INSTRUMENT NO. 717372.

INTEGRATION DATA		
OBSERVED REFERENCE POINTS (ORP's): UTM ZONE 17, NAD83 (CHRS) (2010.0).		
COORDINATES TO URBAN ADDRESS PER SECTION 14 (2) OF OREGON 216/10.		
POINT ID	EASTING	NORTHING
ORP (A)	501 305.44	4 832 728.83
ORP (B)	581 730.80	4 832 560.87
ORP (C)	582 143.78	4 832 886.51

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH BOUNDARIES OR BOUNDARY LINES.

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999674.

[illegible]

ALL SET 558 AND PE MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11 (4) OF OREG. 525/91.

Norval Site 3 (AjGx-263)
Stage 4 Extent of MTR

SURVEYOR'S CERTIFICATE

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.

December 15, 2017
DATE

