Stage 4 Mitigative Excavation of the Kilmanagh Crossroads Site (AkGx-48) Dixie Road and Olde Baseline Road Design for Road Improvements Part of West Half Lot 34, Concession 4 Geographic Township of Chinguacousy Town of Caledon, R.M. of Peel, Ontario

Original Report

Prepared for:

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Archaeological Licence #P128 (Hull) MTCS PIF #P128-051-2009 ASI File #08TE-40

7 June, 2013



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EXECUTIVE SUMMARY

Archaeological Services Inc. (ASI) was retained by the Delcan Corporation of Hamilton, Ontario to conduct a Stage 4 mitigative excavation of the Kilmanagh Crossroads site (AkGx-48), located at the intersection of Dixie road and Olde Baseline road, on the northwest part of Lot 34, Concession 4 in the geographic Township of Chinguacousy, now in the Town of Caledon. Fieldwork was completed under the project management of Ms. Eva MacDonald (P125) and project direction of Dr. Katherine Hull (MTCS PIF #P128-051-2009). Field direction responsibilities were shared by Mr. Wesley Oldham (R292), responsible for the block excavation of the midden, and Ms. Denise McGuire (P315), who supervised the stripping of landscape fill and topsoil over the site area and the excavation of cultural features.

The stage 4 mitigative excavation of the Kilmanagh Crossroads (AkGx-48) was initiated on July 14, 2009, and completed on November 21, 2009. First, 345 one-metre square units were excavated over an area of 33 m north-south and 21 m east-west to salvage a midden identified in the topsoil. Next, 575 square metres of landscape fill was removed using a Gradall equipped with a smooth bucket and 14 cultural features were excavated. A total of 58,681 historical artifacts and seven pre-contact aboriginal artifacts were recovered.

The analysis of the archival research, the recovered artifact assemblage, the spatial distribution of certain artifact types, and the settlement pattern data indicates that the Kilmanagh Crossroads site (AkGx-48) represented a blacksmith shop and domestic residence occupied between the 1860s and the 1890s. A twentieth-century occupation overlapped the site as evinced by a stone foundation and modern drains.

This report represent the fulfillment of our 2009 licensing agreement with the Ontario Ministry of Tourism, Culture and Sport (MTCS) and the statements contained on PIF# P128-015-2009. It supersedes a preliminary report filed with MTCS on June 15, 2010. In a letter dated July 7, 2010 MTCS concurred that the provincial interest in the Kilmanagh Crossroads site (AkGx-48) had been addressed, and was satisfied that concerns for impacts to the site had been met where design improvements to the intersection of Dixie road and Olde Baseline road, which includes a roundabout, were planned.

It is concluded, therefore, that the Kilmanagh Crossroads site (AkGx-48) has been sufficiently excavated and documented and no further concerns exist for this archaeological site.



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APPENDICES

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1.0 PROIECT CONTEXT

1.1 **Development Context**

Archaeological Services Inc. (ASI) was retained by The Delcan Corporation, of Hamilton, Ontario to conduct a Stage 4 mitigative excavation of the Kilmanagh Crossroads site (AkGx-48), located at the intersection of Dixie Road and Olde Baseline Road, on the northwest part of Lot 34, Concession 4 in the geographic Township of Chinguacousy, now in the Town of Caledon (Figure 1). Excavations at the site of Kilmanagh Crossroads (AkGx-48) were conducted as it could not be preserved within the planned design improvements to the intersection of Dixie road and Olde Baseline road, which includes a roundabout.

The fieldwork was conducted under the project management of Ms. Eva MacDonald (P125) and project direction of Dr. Katherine Hull, under archaeological license P128 issued to Dr. Hull (MTCS PIF #P128-051-2009) in accordance with the Ontario Heritage Act (RSO 1990). Mr. Wesley Oldham (R292) and Ms. Denise McGuire (P315) shared field director responsibilities. All activities were completed in accordance with the terms of the Ministry of Tourism, Culture and Sport's 1993 Archaeological Assessment Technical Guidelines (MTCS 1993).

Permission to access the land and carry out all activities necessary for the purposes of this excavation was granted by the Delcan Corporation on March 23, 2009. The following report will summarize the study background, method, discussion and recommendations stemming from the mitigative excavation.

Appendices A and B contain the artifact catalogues of all the cultural material recovered by Archaeological Services Inc. as a result of the Stage 4 mitigative excavation.

1.2 **Historical Context**

In order to place and better understand the significance of Kilmanagh Crossroads (AkGx-48) site within the context of nineteenth-century land use, archival research has been conducted for the property in question at the Ontario Archives.

Chinguacousy Township, now in the Town of Caledon, is the largest township in Peel County. The township was surveyed in 1819 and shortly settled by people arriving from New Brunswick, the United States, and other parts of Upper Canada (Ontario). The township has excellent agricultural land and the Etobicoke and Credit Rivers provided ample waterpower in the early period of settlement (Mika and Mika 1977:416). Within this township, according to the Abstract Index to Title Deeds, the Crown Patent for the west half of Lot 34, comprised of 100 acres, was granted to the Canada Company in 1832. In 1839, the Canada Company deeded the property to Thomas Falconer, who had been living on the property for at least two years as he was listed with the address of Lot 34, Concession 4 EHS, in Walton's 1837 Home District Commercial Directory (Walton 1837:68). No other occupants of Lot 34 were listed at that time. By 1846, Isaac Lowes occupied the east half of Lot 34 and Thomas Falconer continued to occupy the west half (Brown 1846:16, 18).

Twenty years later, Falconer began to sell small commercial lots in the Crossroads community of Kilmanagh, the name given to the intersection of Dixie and Olde Base Line roads by the numerous Irish immigrants in the neighbourhood. First, Thomas Falconer granted half an acre of the west half to James Perdue in 1857. Indeed, a small structure was illustrated in the northwest corner of Lot 34 on the 1859 Tremaine Map of Peel County, but its function was not specified. The agricultural returns included with



the 1861 census listed James Perdue as a 59 year old Irish-born farmer of 100 acres on Lot 33, Concession 5 EHS. No entry could be found for the west half of Lot 34, Concession 4. It is possible that Perdue purchased the small half-acre property as a business opportunity for another family member who did not end up staying at that location.

In 1862, George Falconer, the new owner of the northwest quarter, granted 520 square feet to Alexander Lindsay. It would appear that only the two commercial parcels were created as subsequent transactions deal with the larger 99 acre farm or the two smaller lots. For example, James Perdue then sold his half acre to Robert Wylie in 1862. Wylie then indentured 799 square feet to Robert Kerr in 1863. In 1868, Robert Kerr sold his part back to Robert Wylie, who in turn sold the piece to William McKenna in 1871. McKenna then sold this part to William Hodgson in 1882, who in turn sold it to John McFarlane in 1884. In 1892, John McFarlane sold his half acre to William Grahame. William Grahame sold this property to George and Robert Nelson in 1908.

Census and assessment rolls provide additional information about the activities that took place in Kilmanagh. Although not every year is available, it would appear that one of the commercial lots was occupied by a blacksmith, while the other was occupied by a shoemaker. These businesses were established sometime after 1861 as no entry could be found in the 1861 census for them with these professions in the Kilmanagh Crossroads neighbourhood. By 1871, the census confirmed the presence of William Grahame, who was described as a 35 year-old English-born shoemaker who lived with his wife and one child, and Robert Wylie. He was described as an English-born blacksmith, aged 36, who lived with his wife and four children. Wylie possessed half an acre and owned two dwelling houses. By the time of the 1876 Assessment, Robert Wylie had moved on and William McKenna was listed as the blacksmith on the half acre lot he had purchased in 1871. Further information about McKenna was obtained from the 1881 census. He was listed as a 46 year old Ontario-born blacksmith of Irish descent who lived with his 41 year old wife Elizabeth and their five children.

By the time of the 1901 census, the smithy had been abandoned, but William Grahame the shoemaker, now 66 years old, continued to live on Lot 34 with his wife and his daughter, whose occupation was given as a dressmaker. They possessed half an acre and had one dwelling house.

To summarize the preceding information, the archaeological site AkGx-48 is located within the former community of Kilmanagh, a crossroads hamlet on the Olde Baseline road at Dixie road. A shoemaker and a blacksmith were situated on two commercial lots occupied circa 1857 to 1908 by immigrant families who set up businesses in the community. The smithy was gone by 1901. Local informants and later maps indicate a new house was constructed at that location in the 1920s, just opposite the junction of Horse Shoe Hill road (Experimental Farm Service 1953). This structure has since been demolished.

1.3 Archaeological Context

The stage 1 archaeological assessment for the detail design improvements on Dixie road determined that no archaeological sites had been registered with in a three km radius of the study area. The Kilmanagh Crossroads site (AkGx-48) was discovered in May of 2006 subsequent to a Stage 2 test pit survey of the detail design (ASI 2006). The distribution of the Stage 2 test pits followed Olde Baseline road and extended over an area approximately 35 metres east-west by 15 metres north-south (Figure 2). Of the 37 test pits excavated in the site vicinity, five indicated disturbed soils, and 15 were positive from which 43 artifacts were collected (ASI 2006). While the artifact assemblage included sponged ceramics typical of the mid-nineteenth century, the presence of sawn large mammal bone and colourless glass indicated that there was also a late nineteenth or early twentieth-century component.



The stage 3 archaeological fieldwork on the Kilmanagh Crossroads (AkGx-48) site was undertaken October 23 to 26, 2006 under the field supervision of Mr. Andrew Clish (P046). A total of 1,942 artifacts was recovered from 17 test units excavated throughout the area of positive test pits (Figure **2**). These largely comprised artifacts related to the architectural and tools and equipment classes. The majority of the test units were either disturbed or mixed with twentieth-century material. However, unit 493N-191E on the western edge of the site, and unit 500N-205E contained nineteenth-century artifacts and exhibited ploughed topsoil profiles. This portion of the site had retained its integrity and was interpreted as the location of the blacksmith located on the property circa 1857 to 1901. Given the unique function of the site as a commercial enterprise on Dixie road during the mid-to-late nineteenth century, the Kilmanagh Crossroads (AkGx-48) site was determined to be a significant cultural resource (ASI 2007). After consultation with the Delcan Corporation it was determined that the site could not be avoided within the detail design for road improvements. Stage 4 fieldwork was conducted between July 14 and November 21, 2009.

2.0 FIELD METHODS

The Stage 4 mitigative excavation of the Kilmanagh Crossroads site (AkGx-48) was initiated on July 14, 2009 under the project direction of Dr. Katherine Hull (MTCS PIF #P128-051-2009). Field direction responsibilities were shared by Mr. Wesley Oldham (R292), responsible for the block excavation, and Ms. Denise McGuire (P315), who supervised the stripping of the site and excavation of the cultural features. The weather conditions were suitable to complete the assessment and no work was conducted when the conditions were unsuitable. Detailed photographic images were taken on several occasions during the fieldwork and the location and direction of each photo can be seen in Figure 3.

The Stage 3 recording grid was re-established and a GPS reading [UTM 17T 0589804 4853370] was taken at the datum stake 500N-200E. Block excavation began around Unit 493N-191E. The soil excavated from each one-metre square unit was screened through 6 mm mesh to optimize the recovery of small artifacts, and the artifacts were bagged with reference to the recording grid. Topsoil comprised a dark grayish-brown sandy loam and the sterile subsoil comprised a yellowish sand (Plate 1). While it was anticipated that numbers would decrease as the excavation proceeded south into a zone where no positive test pits were recorded during the Stage 2 assessment, this was not the case (Figure 4). Topsoil varied in depth between 17 cm in Unit 499N-188E and 82 cm in Unit 471N-200E, with an average (excluding the units containing the stone foundation) of 40 cm. The thickening of the topsoil south of the 472N grid line was accomplished through the addition of a mottled yellow sand to level the area of the former modern house (

Plate 2). This would explain the increased artifact counts in units that contained up to three times the volume of soil as units located closer to Olde Baseline road.

Work proceeded until artifact counts fell below 100 artifacts in a unit or until excavation was halted by the presence of mature trees with substantial root systems that could not be compromised (Plate 3, Plate 4; Figure 4). In particular, the excavation of units into the tree line and down the slope bordering the ditch along Dixie road would have destabilized the trees given the sandy nature of the topsoil and subsoil and the potential for blowout conditions. Sections of a stone foundation (Feature 14) were also uncovered and these were left in situ as it was thought that they might relate to the blacksmith's shop (Plate 5; Figure 5) After the orientation of the foundation was determined, seven units were placed inside to examine the nature and extent of potential feature fill. These units contained 10 cm of topsoil and no artifacts were recovered. It was determined through local informants that the foundation was related to the modern house that formerly stood on the property.

Given the degree to which the topsoil had been landscaped over the site area and the number of onemetre squares that had been excavated (n=345) up to November 13, 2009 the decision was made to remove the balance of the fill mechanically. On November 17, 2009, 575 square metres of landscape fill was removed (Figure 2) under the direction of Ms. Denise McGuire using a Gradall equipped with a smooth bucket operated by Mr. Jack Rooney, of Rooney Brothers Gradall Limited, thus fully exposing Feature 12, a small post (Feature 13), the stone house foundation (Feature 14), and numerous modern utilities and drains (Figure 5). After it was revealed that the stone foundation had been partially demolished along the north end of the site, topsoil stripping was discontinued to avoid the disturbance along the 505N grid line and the Bell Canada cable documented during the Stage 3 assessment (ASI 2007). It should be noted further that it was not possible to maintain a minimum buffer of 10 m around Feature 12 with respect to the edge of excavation given the close proximity of the tree line and ditch bordering Dixie Road on the west, and the tree line and creek bordering the south edge (Figure **5**).

Thirteen potential pit features were numbered consecutively and defined more precisely with shovel and trowel and recorded within the grid (Figure 5). The features were mapped in plan view at a 1:10 scale, and then cross-sectioned to examine soil profiles and contents. The fill removed from each feature was screened through 6 mm mesh to optimize the recovery of small artifacts, and the artifacts were bagged with reference to the feature number. The features' profiles were further mapped at a 1:10 scale, and photographed, before they were 100 percent excavated. All the features were determined to be cultural, including four posts, five refuse pits, two general pits, one stone footing, and a root cellar.

3.0 RECORD OF FINDS

3.1 Site Stratigraphy

During the block excavation of the site, the soil fill in each unit was excavated to five cm below subsoil, except where features detected in the subsoil were left in situ. Artifacts from each unit were bagged and labeled according to grid provenience. Prior to the mechanical stripping of the site, the southwest portion of the block excavation wall and a portion of the east wall were closely examined as they displayed complex stratigraphy (Figure 6, Figure 7).

The stratigraphy present in each section was photographed and drawn (scale 1:20 cm). A small plan view was also provided for the east wall section (Figure 6). Each drawn profile utilized a different system of labeling the layers. The south/ west profiles were labelled with a descriptive system, while the south/ east profiles were labelled with a numeric method. Based on these profiles and a consideration of the site history, each strata represents a different event in the site development history. The south/ west profiles document the historical horizon, specifically the layers of coal, coal ash and buried topsoil, and modern road work. The south/ east profiles document the historical horizon, as well as the construction and subsequent demolition of a modern structure and associated utility trenches.

A master list of layers has been created in order better understand the site formation process as a whole (Table 1). Sixteen unique master layers were identified at the Kilmanagh Crossroads site. These master layers are described in detail in Table 1. Along the west wall of the block excavation, all units north of 472N-193E contain only the natural topsoil to subsoil sequence. All the east wall units north of 480N-202E may have contained stratigraphy relating to the construction and demolition of the modern foundation but this was not documented and the units were excavated from top soil to subsoil. The master layers presented in Table 1 are further discussed below.



Master			Munsell	Field	
Layer	Layer	Composition	value	Interpretation	Reinterpretation (if different)
	1	Dark grayish brown sandy silt with sod on top	2.5Y 4/2	Topsoil	
1	1	Dark brown sandy loam mottled with red brick and charcoal	10YR 3/3	Topsoil (?)	
2	2	Mottled light olive brown clay and sand	2.5Y 5/4	Lens	Modern deposit of clay and sand
3	3	Olive brown sand	2.5Y 4/4	Sand fill	Displaced subsoil mixed in gravel from road improvements
4	4	Mottled light olive brown sand with worm and root casts	2.5Y 5/4	Lens	Displaced sand fill or subsoil
5	5	Mottled light yellowish brown sand with clay and gravel inclusions	2.5Y 6/4	Lens	Displaced subsoil and mixed in gravel from road improvements
6	2	Brown sand mottled with dark soil	10YR 4/3	Displaced topsoil	Leveling for landscaping?
7	3	Dark yellowish brown sand mottled with mortar, coal ash, demolition debris and red brick	10YR 4/6	Demolition layer	
8	7	Greyish brown clay mixed with light and dark sand	10YR 5/2	Modern utility/ drain (modern feature)	Utility would need to be put in post construction of building (or at least frame) thus 7 would cut through layers
9	5	Pale brown sandy topsoil with organics leached out	10YR 6/3	More buried Topsoil?	Displaced topsoil from the construction of the modern foundation
10	6	Light brownish greyish brown fine gravel mixed with light and course sand	10YR 6/2	Lens?	Displaced topsoil from the construction of the modern foundation
11	9	Yellowish brown soil mottled with a dark soil	10YR 5/4		Displaced topsoil from the construction of the modern foundation
12	8	Light yellowish brown sand mottled with dark soil and gravel, rocks	10YR 6/4		Displaced subsoil from the construction of the modern house foundation, also possibly the workers trench for the building of the foundation
13	6	White coal ash	10YR 8/1	Lens	Burnt coal waste from the forge
14	7	Coal	-	Lens	Discarded coal from forge
	8	Very dark greyish brown sandy loam with several root systems and some charcoal	2.5Y 3/2	Buried Topsoil	Buried historical horizon
15	4	Very dark greyish brown organic sand mottled with subsoil, artifact producing layer	10YR 3/2	Buried Topsoil	Buried historical horizon
16	9	Mottled yellow white and dark yellowish brown sand, mottled with worm and root casts	10YR 4/6	Subsoil	
	10	Dark Yellowish brown sand	10YR 4/4	Subsoil	
					South and West Profile (Figure

Table 1. Master List of Lavers from the Kilmanagh Crossroads (AkGx-48) Site

East and South Profile (Figure 6)



Layer 1 represents a topsoil level. Based on the descriptions of the topsoil recorded for each profile, this layer is brown (2.5Y 4/2 or 10YR 3/3) in colour and primarily sandy. In the south/ east profile, Layer 1 also contained some brick and mortar fragments from the demolition of the modern house. In the east/ south profile (Figure 6) the topsoil varies from a maximum thickness of 30 cm to a minimum thickness of 10cm and an average thickness of 20cm. The topsoil in the south/ west profile is much more variable with a maximum thickness of 44 cm and a minim thickness of 16cm in unit 469N-197E (Figure 7) and an average thickness of 25 cm.

Layers 2-5 (Figure 7) likely relate to previous road modifications/improvements in the construction of the existing right-of-way noted in the field review of the study corridor (ASI 2006, 2007). Any paving of the associated road was completed in the latter parts of the twentieth century. In the early part of the twentieth century the surrounding roads were unmetalled, meaning a road surface that does not have any form of covering over the bear worn earth or grass, and by mid-century the surrounding roads had a loose or stabilized surface (Department of Militia and Defense, Bolton 1914; Department of National Defense, Bolton 1919, 1926, 1954 and 1958). Layer 2 sits within Layer 1 and consists of a thin lens, varying between 4 - 10 cm thick and 2.2 m in length, of mottled light olive brown (2.5Y 5/4) clay and sand. This layer represents a modern deposit as clay does not appear to be naturally occurring on the site and occurs only in other modern deposits. Layer 3 consists of a sandy olive brown (2.5Y 4/4) wide tapering band measuring 42 cm at its thickest point, 16 cm in middle and tapering to a point. This fill is displaced subsoil from road modifications or fill brought in for landscaping purposes. Layer 4 is a small, wide lens, measuring 16 cm in thick and 35 cm wide, of light olive brown (2.5Y 5/4) sand with worm and root casts. This layer appears to be a mixture topsoil and sterile sand due to previous road improvements. Layer 5 is a wide layer that spans five units along the west wall, measuring 5.3 m in total length. At its thickest point Layer 5 measured 30 cm, and 10 cm at smallest point, with an average of 20 cm. The layer consists of mottled light vellowish-brown (2.5Y 6/4) sand, with clay and gravel inclusions. Layer 5 represents displaced subsoil with gravel mixed in from road improvements. It is also important to note that these layers as a whole become shallower as you move north along the west wall.

Layers 6-12 (Figure 6) relate to the construction as well as the demolition of the modern house located just north of Unit 480N-202E. Layer 6 is comprised of brown (10YR 4/6) sand mottled with dark soil, very similar to the composition of the topsoil suggesting that this layer is displaced topsoil. The thickness of this layer varied between 20 cm and 6 cm, with an average of 13 cm. This layer likely functioned as a leveling layer for landscaping after house demolition as it sits on top of Layer 7 and part of Layer 9 (Figure 6). The top limit of Layer 6 sits at the general horizontal limits of Layer 9 and 12, leaving a relatively flat surface for the current topsoil (Layer 1). Layer 7 is comprised of a dark yellowish brown (10YR 4/6) sand fill mottled with mortar, coal ash, demolition debris and both complete and fragmentary red brick. The maximum thickness is 30 cm, the layer tapers to a minimum thickness of 4 cm just before the layer ends. This layer is related to the demolition of the modern house. Layer 8 is a modern trench related to the modern foundation and measured 48 cm in height and 40 cm wide. In the profile this layer is only present in unit 478N-202E and cut through Layers 9, 10, and 11 sitting on top of the subsoil (Layer 16) and ending at the topsoil (Layer 1). The fill of Layer 8 is comprised of greyish brown (10YR 5/2) clay mixed with light and dark sand.

Layers 9, 10 and 11 (Figure 6) are composed of layers of displaced top and subsoil as a result of the construction of the modern foundation. Layer 9 is comprised of pale brown (10YR 6/3) sandy topsoil from which the organic component has been leached (the thickness varies between 20 and 14 cm, the south end of the layer tapers to a point). Layer 10 is comprised of a light brownish greyish brown (10YR 6/2) fine gravel fill interbedded with light and course sand, this fill is likely a mix of topsoil and



soil with some gravel inclusions (the thickness varied between a maximum of 26 cm and a minimum of 16 cm). Layer 11 is a small, almost square layer, measuring 24 cm high and 28 cm wide, comprised of a yellowish-brown (10YR 5/4) soil mottled with a dark soil; this fill probably represents a mix of topsoil and sub soil. Layer 12 is a thick layer, 69 cm at the deepest point and 140 cm wide, which runs from subsoil to the current topsoil. Based on the profile this layer is predominate in unit 479N-202E and ends with a sloping south edge approx. 40 cm in the following unit, 478N-202E, leaning on layers 10 and 11. This layer is comprised of light yellowish-brown (10YR 6/4) sand mottled with dark soil and gravel with a few larger rocks present at the interface of the layer and the subsoil. The layer is comprised of displaced subsoil from the modern foundation that sits just one unit north of 479N-202E. Due to the close proximity to the modern foundation and the depth of the layer, it is possible that prior to being filled in, the floor of the layer functioned as the builder's trench around the foundation.

Layers 13 and 14 likely relate to forge activities (Plate 6; Figure 7). Both layers are thin lenses, ranging no more than 2-6 cm in thickness. Together, these lenses run through five units, totalling 5.3 m in length, beginning in unit 470N-193E and ending in unit 472N-193E. Layer 13 is comprised of white coal ash (10YR 8/1). Layer 14, a continuation of Layer 13, contains coal. Both of these layers sit directly above the buried topsoil. Early blacksmiths utilized coal and charcoal as fuel for their heat source; however, coal eventually superseded charcoal as the common fuel used by blacksmiths in the later part of the nineteenth century (Light 1987). According to Holmstrom (1904), during the beginning of the twentieth century, smiths would choose to use either coal or charcoal depending on the task they were going to perform. The land use history has revealed that there was a blacksmith shop present at the site, active between the 1870s and 1890s but owned and operated by two different smiths during this time. As the blacksmith shop was active during the later part of the nineteenth century, it is plausible that the shop used coal as a fuel source, if not its primary fuel source. Thus, layers 13 and 14 represent forge discards. For blacksmiths, it was common practice to discard forge waste in a convenient location that was close to the forge in order to keep travel time to a minimum when disposing of large volumes of wasters produced by the forge (Doroszenko and Light 1997). At present the location of the shop is not known.

Layer 15 in both profiles represents buried topsoil or the buried historic horizon and is comprised of similar fills. In the south and west profile (Figure 6, Figure 7) Layer 15 is comprised of a very dark greyish brown (2.5Y 3/2) sandy loam with several root systems and some charcoal and varies between 20 and 16 cm in thickness, with an average of 18 cm. In the south and east profile (Figure 6), the buried topsoil is comprised of very dark greyish-brown (10YR 3/2) organic sand, mottled with subsoil, and noted to be an artifact producing layer. Here the buried topsoil is slightly thicker with measuring a maximum of 36 cm and a minimum of 22 cm, with an average of 30 cm.

Level 16 represents the subsoil throughout this site. However, the composition of the subsoil differs slightly in each profile. In the south and east profile (Figure 6) the subsoil is described as dark yellowish brown (10YR 4/4) sand, while in the south and west profile (Figure 7), the subsoil is described as yellow white and dark yellowish brown (10YR 4/6) sand mottled by worm and root activity.

3.2 Cultural Features

The 14 cultural features uncovered throughout the site are summarized in Table 2 below and their distribution throughout the site is indicated in Figure **5**.

		ummary of Historical Features, Ki	· _ · _ · _ · _ · _ · _ · _ · _	F 1
Feature	Dimensions LxWxH (cm)	Description of Plan and Profile	Fill contents	Feature Function
1	126x29x14	Long, irregular rectangle; shallow basin	Dark yellowish-brown soil (10YR 4/4); 11 artifacts	Refuse pit
2	44x36x10	Ovoid; basin	Dark greyish-brown soil(10YR 4/2); 12 artifacts	Post
3	117x95x62	Large, irregular; deep pit	Two fills: dark brown sandy soil (7.5YR 3/2) and a mottled yellowish-brown soil (10YR 5/6); 31 artifacts	Large refuse pit
4	124x65x66	Large, irregular; deep pit	Mottled soil (equal parts), brown (10YR 4/3), dark yellowish-brown (10 YR 4/6), and yellowish-brown (10YR 5/8); 101 artifacts	Refuse pit
5	12x11x58	Circular; basin	Dark brown sand (10YR 3/3); zero artifacts	Post
6	21x14x10	Rectangular; basin	Dark brown sandy soil (10YR 3/3); one artifact	Post
7	44x50x15	Almost square; basin	Dark yellowish-brown soil (10YR 3/4); five artifacts	Post
8	97x64x15	Ovoid; shallow basin	Brown sandy soil (10YR 4/3); 27 artifacts	Refuse pit
9	248x109x20	Large, rectangular; pit	Brown sandy soil (10YR 4/3); 254 artifacts	Refuse pit
10	39x23x18	Irregular rectangle; basin	Brown sandy soil (10YR4/3); three artifacts	General pit
11	32x27x10	Rectangular; pit	Very dark greyish-brown organic sandy soil (10YR 3/2); 11 artifacts	Stone Footing
12	545x284x100	Rectangular; pit	Multiple layers of fill; 2,725 artifacts	Root cellar
13	35x32x15	Ovoid; basin with flat bottom	Very dark greyish-brown sandy soil (10YR 3/2); 23 artifacts	Post
14	Length of complete side 14 m	Incomplete rectangle	-	Modern house foundation

Table 2: Summary of Historical Features, Kilmanagh Crossroads (AkGx-48)

Feature 1 was a long, irregular rectangular refuse pit (

Figure 8). At maximum length, width and depth the feature was 126 cm, 29 cm and 14 cm, respectively. The feature's soil consisted of a dark yellowish-brown (10YR 4/4) fill that contained 11 artifacts in total. These artifacts include one exfoliated and undecorated refined white earthenware (RWE) fragment, one fragment of window glass, one head of a machine cut nail, two heads and four points from horse shoe nails, one incomplete bolt, and one indeterminate metal fragment.

Feature 2, a post, measured 44 cm in length, 36 cm in width and 10 cm deep (Plate 7). The fill consisted of an organic dark grayish brown (10YR 4/2) soil and contained 12 artifacts. These artifacts include one

exfoliated Rockingham fragment with moulded scalloped lines, two fragments of window glass, one complete and five heads of horse shoe nails and two fragments of scrap metal.

Feature 3 was a large, irregular basin-shaped pit that measured 117 cm long, 95 cm wide, and 62 cm deep, that was eventually filled in with refuse (Figure 9). The feature's fill consisted of two types of soil: a mottled yellowish-brown soil (10YR 5/6) that was 80 percent organic, 19 percent sand, and one percent charcoal and a vertical, 15 cm wide and 52 cm deep, vein of dark brown (7.5 YR 3/2) soil that was 92 percent organic, seven percent sand and one percent charcoal. It is possible that this dark vein of soil was the remnants of a post. This feature was sectioned and excavated in two halves, a north and south half. The north half contained two complete machine cut nails and four shafts and four heads of machine cut nails, one smoking pipe bowl with the top of a moulded Scottish thistle present, and one unidentified metal fragment. The south half contained two shafts of bolts, a complete bracket, four complete machine cut nails and one head of a machine cut nail, one head of a horse shoe nail, a single bite from a smoking pipe with a mottled tan glaze, a piece of metal strapping, and two RWE rim fragments. One fragment has a blue sponge decoration and the other has a part of a hand painted decoration present.

Feature 4 was a large, oddly-shaped refuse pit that measured 124 cm in length, 65 cm in width and 66 cm deep. The features fill consists of mottled soil: equal parts brown (10YR 4/3), dark yellowish-brown (10YR 4/6), and yellowish-brown (10YR 5/8) primarily organic soil (Figure **10**). Red brick fragments and a single piece of slag were recovered but not retained. Also found within the feature fill were modern items such as styrofoam and pieces of a plastic bag. Feature 4 was sectioned north to south along the long axis. After the excavation of the east section of the feature, it was discovered that there was part of a metal liner present at the bottom of the feature sitting between the feature and the subsoil. In total, 101 artifacts were recovered from the fill. The east section of the feature produced 71 artifacts. These included a Rockingham tableware fragment and a small yellow ware fragment, two incomplete bolts, a fragment of wire, two complete machine cut nails, three heads of horse shoe nails, one fragment of a glass liquor bottle, one fragment of an unidentified bottle, two unidentified fragments of metal, and 57 fragments of a possible metal shovel. The west half contained 30 artifacts in total; these included a single fragment of window glass, three fragments of an olive green liquor bottle, and 26 fragments of a flat-sided metal container. Although there are modern inclusions in this feature, it is plausible that this feature is related to the blacksmith shop, as the lining discovered at the bottom of the pit may be the remnants of a metal-lined coal storage bin (Light and Unglik 1987). Feature 5, discussed below, may represent a corner or one edge of the blacksmith shop, as the post may be related to structure.

Feature 5 was a post located in the central portion of the west half of Feature 4. It measured 12 cm in length, 11 cm wide and a depth of 58 cm was revealed during sectioning. The post ends just above the metal lining in Feature 4 (Figure **10**). The fill of Feature 5 was primarily composed of dark brown (10YR 3/3) sand with a few wood fragments present. No artifacts were recovered.

Feature 6 was a post that measured 21 cm in length, 14 cm in width, and a depth of 10 cm revealed during sectioning (Plate 8). The fill of Feature 6 was 90 percent dark brown (10YR 3/3) organic sandy soil. One head of a horse shoe nail was recovered from the fill.

Feature 7 was an almost square post that measured 44 cm in length and 50 cm in width (Figure **11**). The feature was sectioned along its long axis, in a west to east orientation, revealing a basin-shaped profile with a depth of 15 cm. The fill consisted of dark yellowish-brown (10YR 3/4) sand and contained five artifacts in total. These artifacts include the head of a horse shoe nail, the bowl of a smoking pipe with part of a moulded harp motif present, and three indeterminate metal fragments,



possibly scrap metal.

Feature 8 was an ovoid-shaped general pit that was 97 cm long and 64 cm wide (Plate 9). The feature was cross-sectioned along its long axis, in a north to south orientation, revealing a shallow basin shaped profile with a depth of 15 cm. The fill consisted of organic brown (10YR 4/3) sandy soil mottled with a small portion of sand and contained 27 artifacts in total. These artifacts included a fragment of mammal bone, nine heads and five points from horse shoe nails, one complete machine cut nail, five fragments of window glass, and six fragments of an unidentified metal.

Feature 9 was a large refuse pit that measures 284 cm in length and 109 cm in width. The feature was sectioned along its longest axis, in a northwest to southwest orientation, revealing a shallow basin-shaped profile with a depth of 20 cm (Figure 12). The fill consisted of a brown (10YR 4/3) organic sandy soil mottled with some sand. A total of 245 artifacts was recovered from the feature; 123 artifacts originated from the west section of the feature and 131 artifacts originated from the east section of the feature. Table 3 below lists the artifact class, type and total recovered from Feature 9.

Artifact class	Type - portion	Total
Architectural	nail, machine cut – complete	7
	nail, machine cut – incomplete	18
	window glass	17
Furnishings	flower pot	1
Indeterminate	container, unidentifiable	4
	unidentified	27
Kitchen/Food	kitchenware	2
	tableware	14
	teaware	1
Organic	faunal, mammal	31
	faunal, shell	2
Personal Artifacts	button	1
	container, medicine	1
	grommet	1
	smoking pipe	2
Tools/Equipment	bolt	3
	chain link	1
	horse shoe nail – complete	6
	horse shoe nail – head	81
	horse shoe nail – point	25
	screw	1
	spike	2
	truss head rivet	4
	washer	2

Table 3: Artifacts from Feature 9

Feature 10 was a rectanguloid feature that was 39 cm long and 23 cm wide (Plate 10). The feature was sectioned along its long axis, in a north to south in orientation, revealing a basin-shaped profile with a depth of 18 cm. The fill was comprised of brown (10YR 4/3) sand mottled with charcoal and contained a mammal bone fragment and two heads from horse shoe nails.

Feature 11 was a stone footing (Figure 13). On the surface, the feature was rectangular in shape with a length of 32 cm and a width of 27 cm. The feature was sectioned along its long axis, in a southwest to northeast orientation, revealing a basin-shaped profile with a depth of 18 cm. A large flat stone lay in

the center of the feature, near the surface, surrounded by rocks (Figure **13**). The fill around the rocks consisted of organic very dark greyish brown (10YR 3/2) sandy soil. A total of 11 artifacts consisting of one glazed red earthenware fragment, two undecorated RWE fragments, two olive green glass liquor bottle fragments, a cylindrical glass bottle base, one mammal bone fragment, one shard of window glass, and three heads of horse shoe nails were recovered from this feature. Based on the location of Feature 11 (Figure 5), it is probably related to a structure associated with Feature 12, the root cellar.

Feature 12, the root cellar, is the largest feature uncovered during the mitigative excavation (Plate 11). The root cellar measured 545 cm in length and 248 cm in width. For the excavation of the root cellar, it was divided into four quadrants. Quadrant I, II and IV were excavated stragraphically, while Quad III was excavated as one fill layer, revealing a depth of 100 cm and a mostly basin-shaped profile. In the profile of the west wall of quad III (Figure **14**) the floor has a shallow slope.

The fill of Feature 12 consisted of five layers (Figure 14). Layer 1, the upper most layer, consisted of a sandy brown fill that was 75 percent organic with a 10 percent sterile sand mix and equal parts charcoal, wood and mortar inclusions. Layer 1 had a minimum depth of 20 cm and a maximum depth of 65 cm. Layer 2 was a thin lens between Layers 3 and 5, varying between 12 cm and 8cm thick. This layer, as well as Layer 3, only appeared in the west wall profile of Quad 3. Layer 2 consisted of a black (10YR 2/1) mix that was 85 percent charcoal, 10 percent organic sand, and five percent ash. Layer 3 was a basin-shaped light grey (10YR 7/2) mortar deposit, 126 cm in length and 34 cm deep, that dipped into Layer 5 and sat under Layers 1 and 2. The fill for Layer 3 consisted of 95 percent mortar and five percent organic soil. Layer 4 was a mottled dark brown (10YR 3/3) sandy layer with mortar chunks that sat primarily under Layer 1, except in the west wall profile where it sat under Layer 5, and above a wood layer and Layer 5. The fill in Layer 4 consisted of a dark brown sandy soil mottled with an equal part of mortar that ranged between 20 cm and eight cm in thickness. Layer 5 was a yellowish-brown (10YR 5/4) sand layer that sat around and underneath a wooden structure present near the bottom of the feature; it varied between 40 cm and two cm in thickness. A post excavation plan view of the wooden structure at the bottom of Feature 12 can be seen in Figure 15 and Plate 12.

In total, 2,725 artifacts were recovered from Feature 12. Material not retained during excavation included wood, brick, mortar, slag, and coal. Table 4 below lists the class, type and total of the artifacts recovered from each layer present in the feature, Quad III, and the artifacts from the Feature 12 layer excavated in units 469N-197E and 469N-199E.

Table 4: Artifacts from Feature 12					
Level/Quad/Unit	Artifact class	Sub-class or type	Total		
Level 1			1,007		
	Architectural	Building Component	1		
		Nail, wire	5		
		Nail, machine cut	331		
		Nail, indeterminate	1		
		Window glass	190		
	Furnishings	Lighting Device	4		
	Kitchen/Food	Beverage Consumption	7		
		Beverage Preparation	2		
		Beverage Storage	16		
		Food Consumption	11		
		Indeterminate	69		
	Organic	Faunal, avian	9		
		Faunal, mammal	104		
		Faunal, shell	1		

	Table 4: Art	ifacts from Feature 12	
Level/Quad/Unit	Artifact class	Sub-class or type	Total
	Personal Artifacts	Clothing	12
		Medicine	4
		Personal Gear	11
	Tools/Equipment	Animal Husbandry	1
		Horse shoe nail	42
		Armament	1
		General Tools	2
		Hardware	19
		Specialized Tools	2
		Writing	1
	Indeterminate	Indeterminate	161
Level 2			129
	Architectural	Building Component	1
	Aremicecurat	Nail, machine cut	46
		Window glass	29
	Furnishings	-	1
	Kitchen/Food	Beverage Consumption	3
	Kitchen/roou	e ,	1
		Beverage Service	2
		Beverage Storage	
	0	Indeterminate	10
	Organic		3
		faunal, mammal	10
	Personal Artifacts		3
	Tools/Equipment	-	4
		Hardware	2
		Writing	1
	Indeterminate	Indeterminate	13
Level 3			109
	Architectural	Nail, machine cut	55
		Window glass	6
	Furnishings		1
	Kitchen/Food	Beverage Consumption	4
Level 2 Level 3 Level 4		Food Service	3
		Indeterminate	2
	Organic	faunal, avian	1
		faunal, mammal	4
	Personal Artifacts	Clothing	8
	Tools/Equipment	Animal Husbandry,	2
		Horse shoe nail	
		Hardware	4
		Sewing	1
	Indeterminate	Indeterminate	18
Level 4			211
	Architectural	Nail, machine cut	129
		Window glass	25
		Brick	1
	Furnishings	Lighting Device	2
	Kitchen/Food	Indeterminate	2
	Organic	Faunal, mammal	7
	Personal Artifacts	Clothing	1
	i cisonal Arthacts	Personal Gear	1
		Toilet/Hygiene	1
		ioitet/ nygielle	<u>1</u>



Level/Quad/Unit	Artifact class	Sub-class or type	Total	
	Tools/Equipment	Animal Husbandry,	1	
		Horse shoe nail		
	Indeterminate	Indeterminate	41	
Level 5			151	
	Architectural	Nail, machine cut	48	
		Brick	2	
		Window glass	9	
	Furnishings	Lighting Device	2	
	Kitchen/Food	Beverage Consumption	1	
		Beverage Storage	2	
		Indeterminate	3	
	Organic	Faunal, avian	4	
		Faunal, mammal	25	
		Wood fragments	5	
	Personal Artifacts	Clothing	3	
		Personal Gear	9	
	Tools/Equipment	Animal Husbandry,	2	
	iooto/ =quipinent	Horse shoe nail	-	
		Hardware	1	
	Indeterminate		35	
Quad III	macterinnate	macterimate	714	
Quad III	Architectural	Building Component	3	
	Architecturat	Nail, machine cut	250	
		Nail, wire	15	
		Window glass	54	
	Furnishings	Household Accessory	1	
	runnsnings	Lighting Device	1	
	Kitchen/Food	Beverage Consumption	14	
	Kitchen/100u	Beverage Service	3	
		Food Consumption	3	
		Food Preparation	13	
		Food Storage	15	
		Indeterminate	1 30	
	Organic		11	
	Organic	faunal, avian faunal, mammal	62	
	Davaanal Antifaata	•		
	Personal Artifacts	Clothing	36	
		Medicine Personal Gear	4 12	
	Tools /Fauinment			
	Tools/Equipment	Agricultural	1 2	
		Animal Husbandry Horse shoe nail		
			60 1	
		General Tools	1	
		Hardware	14	
		Specialized Tools	1	
	J. J. A	Writing	1	
	Indeterminate	Indeterminate	121	
Unit 469N-197E			252	
	Architectural	Nail, wire	1	
		Nail, machine cut	80	
		Nail, indeterminate	2	
		Window glass	50	
	Furnishings	Lighting Device	5	



Table 4: Artifacts from Feature 12				
Level/Quad/Unit	Artifact class	Sub-class or type	Total	
	Kitchen/Food	Beverage Consumption	6	
		Beverage Service	1	
		Food Consumption	1	
		Food Preparation	1	
		Indeterminate	17	
	Organic	Faunal, avian	5	
	-	Faunal, mammal	33	
	Personal Artifacts	Personal Gear	4	
	Tools/Equipment	Animal Husbandry,	9	
		Horse shoe nail		
		Hardware	15	
		Other	1	
	Indeterminate	Indeterminate	21	
Unit 469N-199E			152	
	Architectural	Nail, wire	2	
		Nail, machine cut	42	
		Window glass	22	
	Kitchen/Food	Beverage Consumption	1	
		Food Consumption	3	
		Food Preparation	2	
		Food Storage	1	
		Indeterminate	19	
	Organic	Faunal, mammal	23	
	Personal Artifacts	Personal Gear	4	
	Tools/Equipment	Animal Husbandry	1	
		Horse shoe nail	11	
		Hardware	1	
		Specialized Tools	1	
	Indeterminate	Indeterminate	19	
Grand Total			2,725	

Feature 13 was a post that measured 35 cm in length and 14 cm in width (Plate 13). The post was sectioned along its long axis, in a north to south orientation, revealing a pit with truncated sides in profile with a depth of 15 cm. The fill consisted of very dark greyish-brown (10YR 3/2) organic sandy soil. Only three fragments of window glass were recovered from this feature.

Feature 14 represents the modern stone foundation discovered on the north-eastern edge of the block excavation (Plate 5; Figure 5). The foundation had been constructed from a single course of dry-laid large, shaped but not cut, lime stone blocks. According to local informants this house was built in the early twentieth century around the 1920s.

3.3 Artifact Distribution

For those units bearing artifacts, artifact yields ranged between 548 in unit 474N-200E and a count of one in units 484N-182E, 493N-197E 494N-198E. The units that did not produce any artifacts were located within the modern foundation (Figure 4).

As illustrated in Figure 4, there are two areas where the artifacts cluster. There is a larger clustering of artifacts in the southwest portion of the excavated area, over and around where the root cellar is situated. A smaller clustering of artifacts sits on the western edge of the block-excavated area that borders an unexcavated area due to trees and their root systems (Plate 3, Plate 4; Figure 5). In order to gain a better understanding of the artifact distributions across the area of block excavation, Golden Software Inc.'s Surfer 8 program was used to create a variety of maps that mapped the densities of certain artifact types throughout the site. The results can be seen in Figure 16 and Figure 17, and indicate that there are areas where the artifacts are clustering. In previous studies, analyzing artifact type distribution in this manner has proven to be a very successful method in understanding artifact distribution in the plough zone (King 1988; Poulton and Dodd 2007). A similar approach, "Geographical Visualization," has been employed to successfully identify the probable location of a blacksmith's forge though the visualization of artifact distribution (Stine 2000).

Table 5 lists the artefact yield per feature. As mentioned in the section above, the majority of the artifacts recovered from the features originated from Feature 12, the root cellar. The second largest collection of artifacts originated from Feature 9 and the third largest collection from Feature 4. The remaining features contributed significantly less artifacts to the overall artefact Feature artifact yield.

Table 5: Distribution of Artifacts in Features			
Feature	Artifact Yield	Percent of total from features	
1	11	0.35%	
2	12	0.38%	
3	31	0.97%	
4	101	3.17%	
5	-	-	
6	1	0.03%	
7	5	0.16%	
8	27	0.85%	
9	254	7.98%	
10	3	0.09%	
11	11	0.35%	
12	2,725	85.58%	
13	3	0.09%	
Total	3,184	100.00%	

3.4 Artifact Inventory

A total of 58,681 historic artifacts (Table 6; Appendices A and B) was recovered during the Stage 4 Mitigative excavation of the Kilmanagh Crossroads Site (AkGx-48), including 55,497 from the onemetre square units and 3,184 from feature contexts. It should be noted that 59 artifacts lacked provenience, but do appear in the catalogue.

This assemblage contains a broad range of historical artifacts as well as modern artifacts including fragments of plastic, Styrofoam and Eveready-brand batteries. The "Classification System for Historical Collections" (Canadian Parks Service 1992) was used to organize the historical artifacts (refer to Table 6). The category of "Organic" was added to account for floral and faunal remains commonly found on historical sites. The artifacts were divided into the following seven artifact classes: architectural (n= 17, 500), furnishings (n= 435), kitchen/food (n= 4,811), organic (n= 2,427), personal artifacts (n=1,305), tools/equipment (n=27,231) and items of indeterminate function (n= 4, 972). Detailed artifact

catalogues are located in Appendix A, ceramic artifacts, and Appendix B, non-ceramic artifacts.

The artifacts related to this project will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Tourism, Culture, and Sport and any other legitimate interest groups. The nature in which the material from Kilmanagh Cross roads (AkGx-48) site is stored is summarized in Table 7.

Artifact Class	Units	Features	Functional Class an Class Totals	Class Total as
				percent of Site
Architectural	16,022	1,478	17,500	29.82%
Nail, wire	1,915	23		
Nail, hand-wrought	208			
Nail, indeterminate	1,389	3		
Nail, machine cut	8,400	1,029		
Nail, roofing	62			
Door hardware	140	4		
Fencing	8			
Brick	14	3		
Window glass	3,871	415		
Other building component	15	1		
Furnishings	417	18	435	0.74%
Furniture	53			
Flower pot	159	2		
Key	7	_		
Clock winding key	1			
Household accessories	14			
Lamp Component	180	16		
Lighting devices	3	10		
Kitchen/Food	4,524	287	4,811	8.20%
Tableware	2,632	150	1,011	0.2070
Teaware	576	46		
Kitchenware	758	57		
Tumbler	4	1		
Utensils	42	5		
Bottle cap	38	2		
Modern bottle opener	1			
Can opener	1			
Cast iron cookware	1			
Club sauce stopper	1			
Container, food	27	2		
Container, liquor	308	6		
Container, mineral water	1	2		
Coca-Cola bottle glass	23	17		
Container, unidentifiable	3	17		
Corn	5			
Cup	1			
Peanut	70	4		
Pitcher	1	1		
Modern pot handle	1			
Unidentified	31	242	0 (07	1.4101
Organic	2,084	343	2,427	4.14%



Table 6: Artifacts from the Kilm				
Artifact Class	Units	Features	Class Totals	Class Total as percent of Site
Faunal, avian	128	33		percent of Site
		در		
Faunal, fish	2	202		
Faunal, mammal	1,816	302		
Faunal, shell	80	3		
Faunal, unidentifiable	43			
Coal slag	2			
Coal	13			
Wood fragments		5		
Personal Artifacts	1,183	122	1,305	2.22%
Adornment	15	0		
Clothing	306	63		
Medicine	73	9		
Personal Gear	774	49		
Toilet/Hygiene	15	1		
Tools/Equipment	26,851	380	27,231	46.41%
Agricultural	229	1	·	
Animal Husbandry	28	5		
Horse shoe nails	20,042	280		
Armament	13	1		
Fishing and Trapping	2	0		
Furniture	1	0		
General Tools	102	6		
Hardware	1,883	77		
Indeterminate	4,411	3		
Other	7	1		
Recreation	, 15	0		
Sewing	13	1		
Specialized Tools	77	4		
Writing	26	3		
Indeterminate	4,416	556	4,972	8.47%
Misc	2,109	376	7,772	0.7/ /0
container, unidentifiable	2,109	180		
Total			E0 201	100%
IULAL	55,497	3,184	58,681	100%

Table 7: Kilmanagh Crossroads (AkGx-48) Artifact Storage information

Catalogue Numbers	Material	Box Numbers
1001 – 13356	Ceramic, glass, Misc., metal, organic	1 – 39
13370 – 14290	Ceramic, glass, Misc., metal, organic	40- 42
-	Ceramic, glass, Misc., metal, organic	43
	1001 – 13356 13370 – 14290	1001 – 13356Ceramic, glass, Misc., metal, organic13370 – 14290Ceramic, glass, Misc., metal, organic

The material from each unique lot and one-metre square is contained in a plastic zip lock bag (ceramics, glass, some metal and faunal, brick and miscellaneous) and paper bags (some metal and faunal material); the bags are arranged sequentially starting with the one-metre squares followed by features, in standard size cardboard banker's boxes.

3.4.1 Architectural Class

There are a total of 17,500 artifacts in the architectural class, representing 29.82 percent of the total



artifact assemblage. Nails dominate this class. Nail type, and their quantity, recovered from the Kilmanagh Crossroads (AkGx-48) include: 9,429 machine cut, 1,938 wire, 208 hand-wrought, 62 roofing, and 1,392 examples of indeterminate nails. Hand-wrought nails predate the 1830s and the blacksmith's occupation of the site. These nails may indicate that the commercial lots were located where Thomas Falconer resided in the 1830s. Machine-cut nails date to between 1830 and 1900 and wire nails post-date 1900. The majority of the nails recovered from the site are machine cut, which coincides with the blacksmiths' occupation of the site circa the 1860s through the 1890s. According to the artifact distribution map (Figure 16), machine-cut nail cluster around Features 12, the root cellar, 11 and 13 in the south eastern section of the site.

Numerous window glass fragments (n=4,286) were recovered from the site. Based on the artifact distribution map, the window glass fragments cluster around the south eastern section of the site around Feature 12, the root cellar, and Feature 13 (Figure 16). However, there is a small clustering of window glass around Feature 7, noted to be a post (Table 2). A variety of door hardware artifacts were recovered throughout the site and include: four latch hooks, 114 door hinge fragments, door jam plates (Cat.#2714), door lock plate (Cat.#1779), part of a door lock (Cat.#14006), door latch plate (Cat.#2714), door latch catch (Cat.#14007), door knocker (Cat.#1544), two door knobs (for example Cat.#4526), door jamb latch (Cat#1180.), two door jamb brackets (for example Cat.#1257), six fragments of door handles (for example Cat.#3425), door bolt latch (Cat.#1543), and thumb latch handle (Cat.#14008). Other building components include: four fragments of roofing slate, five fragments of pipe, one pipe clamp (Cat.#1788), two pipe fittings, five mortar fragments, one fragment of a chimney grate (Cat.#2463), and one anchor hook (Cat.#1782).

Seventeen brick samples were retained from the site, only one of which was complete. The others were in various states of completeness. Three of the brick examples are charred and four other examples of brick have mortar present on one or multiple surfaces. Nine bricks samples were recovered from top soil, including the complete brick (Cat.#12489), and three brick fragments were recovered from Feature 12. Of those brick complete enough to determine method of manufacture, all were handmade, five were water struck (Cats.#8710, 10030, 11317, 12489, 14165) and two were sand struck (Cats.#13869, 14137). In the process of making a handmade brick, the clay is poured into a wooden mould, trimmed with some form of utensil and extracted from the mould form using sand or water as a lubricant, leaving characteristic marks on the sides of the brick (Gurcke 1987:103). Two of the water struck bricks (Cat#s.10030; 12489) contained small white fragments and organics inclusions.

Finally, fence components include eight ornamental diamond-shaped fence tip fragments.

3.4.2 Kitchen/Food-Related Class

In total, 4,811 kitchen/food-related items were recovered from the Kilmanagah Crossroads (AkGx-48) site (Appendix A). These artifacts relate to the storage, preparation, distribution, and consumption of food and beverages.

3.4.2.1 Ceramic

The Kitchen/Food-related ceramic assemblage from the Kilmanagh Crossroads contains 4,183 sherds (Appendix A), comprising 7.1 percent of the entire collection. The collection contains refined ceramic types with manufacture dates concentrated in the later part of the nineteenth century. Discerning the ware types within an assemblage is useful to archaeologists as a relative dating technique because of the



historical progression of types in industrial-era ceramic production.

Introduced in the 1830s, refined white earthenware represented a change in glaze composition, from a lead-based to a lead-free glaze (Kenyon 1980). First appearing in merchants' records in 1847, ironstone became extremely popular, reaching its height in the 1880s. The wheat pattern, characterized by distinctive wheat images moulded on the body of the vessel, became popular in the 1860s and was available through the remainder of the century. By the 1890s, ironstone had become a bargain ware available in limited forms while the new vogue ceramic ware, semi-porcelain, was available with numerous decorative treatments in stores and via catalogues (Kenyon 1995).

Within the ceramic assemblage, refined white earthenware, a mid-century ware type, is the most prevalent refined ceramic type, comprising 46.3percent (n=1,937) of the ceramic assemblage. Yellow ware, another mid-century type is also present (n=214 or 5.1 percent). Later-century ceramic types present include ironstone (n=1,214 or 29 percent) and semi-porcelain (n=31or 0.7 percent). Also there are examples of vitrified earthen earthenware fragments (n=34 or 0.8 percent), as well as 65 (or 1.6 percent) unidentifiable ware types due to thermal alteration or exfoliation.

The Kilmanagh collection contains a fairly large collection of coarse red earthenware ceramic (529 or 12.83 percent of the ceramic assemblage), and a much smaller amount of buff earthenware (62 or 1.38 percent of the assemblage. Unfortunately, coarse red and buff earthenware are difficult to date due to the relative stability of its overall morphological characteristics and the limited amount of published research on the topic. Coarse red earthenware, also known as redware, is a heavy, thickly potted ceramic type. Redware receives its name from the reddish colour of the clay after firing. In addition, it is porous and must be glazed (often seen on the interior only) in order to prevent leakage. This type of redware was relatively fragile and would break if exposed to extreme heat. Therefore, redware items were almost exclusively food preparation and storage items. In contrast to the refined white earthenware and ironstone vessels, which for the majority of this time period were imported into Canada, redware was usually produced from local clay at local potteries (Kenyon 1980, Webster 1969). The local Ontario manufacturing of redware began as early as the late 1820s as German-speaking potters immigrated into the areas of Waterloo County and the Niagara Peninsula (Newlands 1979:22).

As ceramic ware types changed through time, so did the decorative styles. Unlike ware types, decorative styles were quicker to change as the manufactures attempted to keep in-step with the popular styles of the day. Due to this quick change in style of decoration, the types of decorative treatments present in a ceramic assemblage offer a finer focus when assessing occupation dates of an archaeological site. An analysis of the styles present suggest an occupation as early as the 1830s and as late as the 1890s. However there are multiple examples of ceramics that date to post-1900s. A summary of the decorative style types, as well as the date range for their availability is present in Table 7 below.

Table 7: Refined Ceramic Decorative Styles and Approximate Date Ranges in Ontario				
Style	Date Range	No. sherds	percent of ceramics	
Transfer, blue	1820s-present	164	3.96	
Transfer, brown	1828-present	12	0.29	
Transfer, purple	1828-present	12	0.29	
Transfer, green	1828-present	4	0.10	
Transfer, Willow pattern	1830s-present	22	0.53	
Hand-painted, late palette	1830s-1870s	139	3.36	
Transfer, black	1830s-1840s	35	0.85	



Stage 4 Mitigative Excavation of th	e Kilmanagh Crossroads Site (AkG>	(-48)	
Dixie Road and Olde Baseline Road	Page 20		
Edgeware, straight	1840-1860	42	1.01
Transfer, flow blue	1840s-1860s	20	0.48
Transfer, flow black	1840s-1860s	15	0.36
Stamped/sponged	1840s-1870s	162	3.91
Moulded, Wheat pattern	1860s-1900s	40	0.97
Rockingham	1855-1890s	64	1.55
Decalcomania	1900-present	21	0.51

Of particular interest is the very blotchy and uneven Rockingham decoration that appeared on coarse red earthenware (14 of the 64 examples) and buff earthenware (50 of the 64 examples) (Plate 14). The characteristic mottled Rockingham glaze could be produced in two ways. The first is by dripping a biscuit-fired vessel in a clear or yellow glaze and letting it air dry; next an iron-based brown glaze was either dripped or spattered over the vessel and fired in a gloss oven (Langenbeck 1859:66; Strandling 2005:11; Jefferson Patterson Park & Museum 2013). The second method was particular to those potters working in North America. These potters dipped a clear glaze or boracic acid onto a vessel that had first been dipped in a brown glaze, producing the characteristic appearance of the Rockingham glaze (Stradling 2005:11; Jefferson Patterson Park & Museum 2013). However, it appears that the potter who decorated these vessels did not employ either of these methods to produce the Rockingham glaze. Instead, the Rockingham glaze reflects a technique common to many south western Ontario potters of Germanic ancestry that produced a speckled appearance. In this technique, a transparent lead glaze over the orange-red pottery resulted in a red-brown colour that was given a specked appearance by sprinkling powered iron rust on to the wet glaze (Webster 1971:26).

As noted previously, there are a variety of ceramics that date to the twentieth century. These include all of the decalcomania decorated (for example Cat.#4016; Plate 15 and Cat.#5623; Plate 16) ceramics. This decoration type appears on English bone china porcelain (totaling n=10 of n=94 or 2.2 percent), semi-porcelain (n=1) and vitrified earthen (n=11). This type of decoration suggests that these ceramics date to post-1900 and relate to a different occupation of the site than the earlier ceramic component of the ceramic assemblage. Additionally, two RWE tea cups (Cats.# 1338, 5349), and multiple tea cup fragments, have a thick glassy glaze that is heavily crazed and thermally altered, with a band of floral decoration just below the rim and a late RWE fabric. In addition to these definable features, on the two bases associated with these teacups there is a mark that reads "Made in Japan" (Cat.#1338, Plate 17). This mark dates these tea cups to post-1921, suggesting use and consumption by the occupants of the 1920s house (Miller 2000).

Turning to a discussion of vessels, the ceramic sherds have been sorted into a minimum number of vessels based on diagnostic rims, ware type, and distinctive decorative attributes. In total, 128 ceramic vessels could be identified, and unless otherwise noted, all subsequent ceramic vessel counts referred to in this document will be minimum vessel counts (MNV).

Teas

The Kilmanagh Crossroads collection contains 41 tea cups (Table 8), 30 saucers (Table 9), and two coffee or tea pots (Table 10).

	Table 8: Unique Teacups in the Kilmanagh Crossroads (AkGx-48) Assemblage				
Cat. #	Provenience	Ware	Description		
		type			
1337	470-200	RWE	Stamp, black , late RWE, on the vitrified end; Plate 16		

	Table 8: Unique Teacups in the Kilmanagh Crossroads (AkGx-48) Assemblage				
Cat. #	Provenience	Ware type	Description		
1338	470-200	RWE	Transfer print, blue floral pattern on exterior of rim fragment, thick glassy glaze on late RWE, post-1921 as indicated by the "Made in		
			Japan" makers mark present on the base(Miller 2000); Plate 17		
3542	476-196	RWE	Late palette , green leaves, blue flowers and black stem; Plate 16		
4265	478-191	RWE	Late palette, red and blue flower, black stem and thin band on		
			exterior and interior or rim		
4724	478-200	RWE	Transfer print, blue geometric band; Plate 16		
5149	479-196	RWE	Late palette, blue floral design, thermally altered, Plate 17		
5349	479-199	RWE	Transfer print, blue, exfoliated, flared rim, thick glaze, there is a band		
			of floral decoration around the rim, associated with 1338,1337		
6122	481-193	RWE	Undecorated rim sherd		
6692	483-185	RWE	Transfer print, black foliage band		
7766	485-188	RWE	Late painted, red and blue flower, green leaves and black stem, thin red bands just below the rim on interior and exterior surfaces, thermally altered		
8832	487-190	RWE	Undecorated rim sherd, slightly exfoliated		
9424	489-185	RWE	Late painted, thin band of red just below the rim on either side of the		
			rim, on the exterior surface there is part of a blue band		
9594	489-189	RWE	Transfer print, floral blue flow		
11380	495-183	RWE	Late painted, banded decoration, on exterior a thin red band/ wide		
			blue band/thin red band, thin red band on interior surface		
13775	Feature 12,	RWE	Late painted , banded decoration, on exterior surface red/blue/red		
	Q.2, lvl. 2		band, interior surface thin red band		
1830	472-197	Ironstone	Sponge, blue, over moulded wheatware pattern; Plate 18		
2270	473-198	Ironstone	Undecorated, straight side, the internal rim is slightly slopped		
2453	474-195	Ironstone	Banded, thin gilt band below thick blue hand painted over glaze; Plate 18		
2624	474-198	Ironstone	Undecorated, slightly flared rim, handle present		
2633	474-198	Ironstone	Stamped, green, band of connecting linear wheels; Plate 18		
4492	478-197	Ironstone	Undecorated, flared rim		
4982	479-193	Ironstone	Exfoliated, undecorated, slightly flared rim		
4983	479-193	Ironstone	Moulded, general, rope band and part of a flower below		
5214	479-197	Ironstone	Moulded, general, vine band; Plate 18		
5284	479-198	Ironstone	Moulded, wheatware, band of 'wheat in the meadow'; Plate 18		
5350	479-199	Ironstone	Undecorated, straight sided		
5982	481-190	Ironstone	Sponge, blue, on exterior and small band just below the rim on the internal surface; Plate 18		
6471	482-192	Ironstone	Moulded, wheatware		
6612	482-195	Ironstone	Moulded, general, raised band decoration below the rim, fluted body		
7261	484-186	Ironstone	Stamped, blue, repeated geometric band of muddled wheels; Plate 18		
7462	484-191	Ironstone	Moulded, general, low relief moulded band		
8221	486-187	Ironstone	Moulded, general, low relief swirled band		
8571	487-184	Ironstone	Moulded, wheatware , grape vine motif		
9640	490-185	Ironstone	Moulded, general, bands of moulded decoration		
9695	490-186	Ironstone	Undecorated, slight flared rim		
13681	Feature 12 469-197	Ironstone	Moulded, general, ribbons and foliage; Plate 18		
14170	469-197	Ironstone	Undecorated, straight rim		
5351	479-199	P.BON*	Undecorated, slightly flared rim; Plate 16		
5352	479-199	P.BON*	Thin gilt band just below the rim		
5623	480-192	P.BON*	Decalcomania, vibrant floral band, blue, green, purple and orange		



Table 8: Unique Teacups in the Kilmanagh Crossroads (AkGx-48) Assemblage				
Cat. #	Provenience	Ware	Description	
		type		
			leaves over a yellow background the band is outlined in black, thin	
			gilt band just around the rim; Plate 16	
12953	498-199	P.BON*	Undecorated, fared rim	
			* Porcelain, English bone china	

Table 9 :	Unique Sauce	rs in the Kilmanagh Crossroads (AkGx-48) Assemblage	
venience	Ware type	Description	

	Table 9 : Unique Saucers in the Kilmanagh Crossroads (AkGx-48) Assemblage				
Cat. #	Provenience	Ware type	Description		
1829	472-197	RWE	Stamped, black, band of abstract suns are present		
6213	481-195	RWE	Exfoliated and undecorated		
6794	483-188	RWE	Moulded, general, chunky RWE, floral pattern with blue sponge over		
			top		
6913	483-193	RWE	Transfer print, green , floral band; Plate 19		
7210	484-184	RWE	Undecorated, rounded sides		
9642	490-185	RWE	Moulded, general band of floral decoration just below the rim		
9850	490-189	RWE	Undecorated, late RWE		
11982	496-189	RWE	Late painted, banded, thin red band/wide band of blue		
13400	Feature 3,	RWE	Sponge, blue		
	South half				
13802	Feature 12	RWE	Stamped, black repeated motif of either abstract flowers or suns; Plate 19		
14178	469-197	RWE	Sponge, blue, on side of saucer boarded with thick panted band and thin painted ring in the center of the saucer; Plate 19		
1770	472-196	Ironstone	Undecorated, softly curved side		
2216	473-197	Ironstone	Moulded, general, two thin raised band		
2976	475-196	Ironstone	Stamped, blue, thermally altered		
4716	478-200	Ironstone	Moulded, general, floral vine		
5453	479-201	Ironstone	Moulded, general, banded decoration		
5931	481-189	Ironstone	Exfoliated, undecorated saucer		
6421	482-191	Ironstone	Painted, banded, two uneven bands of red		
6793	483-188	Ironstone	Moulded, "wheat, rope and ribbons" pattern		
7811	485-189	Ironstone	Exfoliated, undecorated, curved side		
7812	485-189	Ironstone	Moulded, wheatware		
8930	488-183	Ironstone	Moulded, wheat ware with wide flutes on the side		
10181	491-188	Ironstone	Moulded, general , band of foliate		
11205	494-192	Ironstone	Late painted, moulded, wide flutes on the side and two bands of		
			red painted just below the rim		
11341	494-196	Ironstone	Sponge, blue, open sponge pattern		
11540	495-189	Ironstone	Moulded, general, band of curved lines		
13181	499-200	Ironstone	Transfer print, blue , repeated floral design, soft scalloped rim		
13881	Feature 12,	Ironstone	Moulded, repeated panels of bows of rope and wheat		
	Quad 3				
8833	487-190	P.BON*	Moulded, general, slightly flared scalloped rim		
13904	Feature 12, Quad 3	P.BON*	Gilt, two thin bands just below the rim		
10485	492-187	Vitrified	Transfer print and moulded motif, scalloped rim, repeated lace like		
-		earthenware	moulded decoration, a blue vine transfer print over top		
			* Porcelain, English bone china		

Cat. #	Provenience	Ware type	Description
7123	483-196	Ironstone	Moulded, wheatware, wide mouthed tea or coffee pot with scalloped rim and wide ribbed body with a wheatware pattern near the rim; Plate 20
13 888	Feature 12	Ironstone	Spout and portion of the attached body of a coffee or tea pot. Moulded, part of what appears to be a "wheat and barley" pattern, the body present is decorated with wide ribs; Plate 20

Table 10: Beverage Service Vessels in the Kilmanagh Crossroads (AkGx-48) Assembl	age
Table 10. Develage Service vessels in the Kithanagh Crossioads (AKOA-40) Assembli	use

Tablewares - Plates

The collection contains one muffin (7" diameter), 11 twiffler (8" diameter), 12 supper plates (9" diameter), and nine table plate (10" diameter) (Table 11).

	Table .	LI:Unique Plates	in the Kilman	agh Crossroads (AkGx-48) Assemblage
Vessel	Cat.#	Provenience	Ware	Description
Muffin	4715	478-200	Ironstone	Moulded, general , possible band of wheatware
				pattern
Twiffler	2218	473-197	RWE	Transfer print, blue willow
	3417	476-194	RWE	Banded, thick band of blue over glaze painted
				above a thin gilt band
	4225	477-201	RWE	Transfer print, blue willow
	5029	479-194	RWE	Moulded, general, soft large scalloped rim, moulded
				floral band
	5667	480-193	RWE	Transfer print, blue willow
	4792	478-201	Ironstone	Exfoliated, undecorated
	5023	479-194	Ironstone	Moulded, general, repeated decoration of either a
				berry or a bunch of grapes
	7722	485-187	Ironstone	Moulded, wheat ware, shallow flutes on the brim
				near the brink
	13020	499-188	Ironstone	Moulded, general, repeated circular design
	14243	469-199	Ironstone	Moulded, wheatware, band of prairie shape pattern
	7358	484-188	P.BON*	Undecorated rim shred, slightly flared
Supper	2219	473-197	RWE	Edgeware, general, blue, severely thermally altered
				Plate 21
	6423	482-191	RWE	Edgeware, straight, blue
	8224	486-187	RWE	Edgeware, straight, blue, slightly thermally altered
	10000	490-193	RWE	Transfer print, blue, linear geometric band
	11412	495-184	RWE	Transfer print, blue willow
	1478	471-197	Ironstone	Sponge, blue; Plate 21
	3037	475-197	Ironstone	Stamped, blue
	4902	479-191	Ironstone	Moulded, general, foliage band
	4942	479-192	Ironstone	Moulded, wheatware
	13680	Feature 12,	Ironstone	Moulded, wheatware
		Q.2, lvl.1		
	14032	Feature 12,	Ironstone	Moulded, general, band of large filigree leaves;
		Q.2 lvl.1		Plate 21
	14173	469-197	Ironstone	Painted - small sherd, based on its shape it is
				probably from the side of a flatware vessel, very
				small portion of a red band of decoration present
Table	1121	470-193	RWE	Edgeware, straight, blue
	7125	483-196	RWE	Edgeware, straight, blue

Table 11. Unique Plates in the Kilmanagh Crossroads (AkGy_/18) Assemblage



Vessel	Cat.#	Provenience	Ware	Description
	7263	484-186	RWE	Edgeware, straight, blue, with repeated, simple impressed pattern
	9112	488-186	RWE	Edgeware, straight, blue with simple impressed repeated patterns, wide brim, side and raised foot ring present on the base
	9812	490-188	RWE	Edgeware, straight, blue
	5981	481-190	Ironstone	Moulded, wheatware decoration, a "wheat" pattern
	8572	487-184	Ironstone	Edgeware, straight, blue
	13686	Feature 12, Q.2, lvl.1	Ironstone	Undecorated, thermally altered
	14031	Feature 12, Q.4, lvl.1	Ironstone	Undecorated, the fabric appears to be early ironstone/late RWE

* Porcelain, English bone china

Other food consumption vessels

The Kilmanagh Crossroads collection contains four additional food consumption vessels that aren't flatwares (Table 12).

Vessel	Cat.#	Provenience	Ware	Description
Egg cup	7768	485-188	P.BON*	Moulded, general, flared rim and fluted body
-	7769	485-188	P.BON*	Moulded, general, flared rim and small tapering fluted body
	12034	496-192	P.BON*	Moulded, general, fluted body and gray speckle
Egg or Custard cup	8134	486-185	RWE	Egg or custard cup. Transfer print, blue, multi- fluted sides, Asian inspired landscape with a small gazebo like structure present print image, thermally altered

Porcelain, English bone china

Food preparation, service and storage vessels

Nineteen vessels were used either in food preparation, service, or storage (Table 13).

Table 13: Unique Food Preparation, Service, and Storage Vessels in the Kilmanagh Crossroads (AkGx-48) Assemblage

Vessel	Cat.#	Provenience	Ware	Description
Bowl, general	4016	477-198	Vitrified earthenware	Decalcomania, green, orange, purple, red and yellow decalcomania floral pattern below thin gilt horizontal band on exterior of mending fragments, the decoration appears to be upside down based on the perspective of the flowers, 5 inch bowl; Plate 15
	8574 11092	487-184 494-185	Yellow ware Yellow ware	Factory slip, mocha; Plate 15 Factory slip, banded. The bands are as follows thin black, white, yellow or no band, black, wide brown, thin black, yellow or no band, white and

			Assem	blage
Vessel	Cat.#	Provenience	Ware	Description
				black band; Plate 15
	4296	478-192	RWE	Stamped, blue, linear floral pattern below one
				thick and two thin stamped/sponged blue
				horizontal bands; Plate 15
	8934	488-183	RWE	Factory slip, banded, blue. Sequence of visible
				bands: wide/thin/thin; Plate 15
	13041	499-189	RWE	Painted, thin bands of red on internal and external
				surface
Salt -cellar	5218	479-197		Gilt band just below the rim on the external
				surface
Dish, other	10137	491-187	RWE	Transfer print, blue, geometric decoration with
				filigree vines near the rim.
	2096	473-195	Ironstone	Transfer print, blue flow, possible Asian theme.
Preserve Jar	5712	480-194	Ironstone	Rim of a preserve jar; Plate 22
Crock	3584	476-197	Red	Glazed, dark reddish-brown - glazed interior and
			earthenware	exterior; Plate 22
Bottle	14042		Red	Glazed, tan, slightly exfoliated, tall slightly
			earthenware	tapering finish, sloping neck into sloping
				shoulders, tan although slightly green glaze on
				interior and exterior of bottle
Cream pot	5091	479-195	Red	Glazed, brown, large tapering rim; Plate 22
·			earthenware	
Milk pan	2050	473-194	Red	Glazed, dark brown, glazed interior and exterior
			earthenware	surfaces; Plate 22
	2448	474-195	Red	Glazed, black, glazed interior and exterior,
			earthenware	thermally altered; Plate 22
	4126	476-200	Red	Glazed, speckled brown, glazed interior and
			earthenware	exterior surfaces; Plate 22
	11419	495-184	Red	Glazed, brown with black speckles, glazed interior
			earthenware	and exterior surfaces
	13699	Feature 12,	Red	Glazed, brown with dark brown speckles, glazed
		Q.2, lvl.1	earthenware	interior and exterior surfaces, thick flat rim
	13907	Feature 12,	Red	Rockingham, blotchy Rockingham on interior and
		Q.3	earthenware	exterior surfaces
				* Porcelain, English bone china

Table 13: Unique Food Preparation, Service, and Storage Vessels in the Kilmanagh Crossroads (AkGx-48) Assemblage

* Porcelain, English bone china

In total, there are six base fragments with partial maker's marks and one registration mark present (Plate 23). The ceramics with partial marks have been listed below in Table 14. Based on the marks present only one ceramic (Cat.#5484) dates to the blacksmiths' occupation of the site. The rest of the discernible and datable marks date to early to mid-1900s and probably related to the occupation of the circa 1920s structure present on the site (The Potteries 2013).

	Table 14: Maker's Marks on Ceramics from the Kilmanagh Corssroads (AkGx-48) Site							
Cat. #	Provenience	Ware Type	Form	Date	Description			
5145	479N-196E	Ironstone	Teacup	Post 1906	Booth(Limited) printed makers mark			
5147	479N-196E	RWE	Teacup	-	Blue makers mark reads "DAL/ & /TCHELL/			



Cat. #	Provenience	Ware Type	Form	Date	Description
					No210/hesnut Street/ PHILADEL", this also identifies the image of an American scene that would have been on the teacup.
5484	480N-188E	Ironstone	Indt.	1867, June 11th	Impressed registration mark present, the marks in the corner of the diamond read "T" / '11' / ? / 'M',
				,	based on the mark the date is 1867, June the 11th
6373	482N-190E	Ironstone	Indt.	1912 -	Incomplete J &G Meaking makers mark, part of an
				1975	American royal arms image, mends with 6711, Possibly post 1970
8541	487N-182E	Ironstone	Flatware	Post	Part of an Alfred Meaking makers mark
9810	490N-187E	Ironstone	Indt.	1897	Part of a black maker's mark present, eagle's wine
9810	490N-187E	nonstone	mat.	-	Part of a black maker's mark present, eagle's wing and a shield with 5 arrows pointing left from the shield

In summary, the date ranges for the ceramic assemblage reflects a broad occupation date of circa 1800-1900. However, the bulk of the ceramics date to the second half of the nineteenth century and are associated with the blacksmiths' occupation of the site. The more modern ceramics either relate to the occupation of the 1920s house or modern dumping practices.

3.4.2.2 Non-Ceramic Kitchen/Food-Related Artifacts

Non-ceramic Kitchen/Food-related artifacts included a mix of historical and post-1900 artifacts. The modern artifacts include: 11 examples of bottle caps, one bottle opener (Cat.#4444), one can opener (Cat.#8508), 40 fragments of Coca-Cola bottles, four turn keys from sardine cans, a metal pot handle (Cat.#3207), and one plastic handle from a utensil (Cat.#5465; Table 15). The rest of the artifacts include 314 fragments of liquor bottles, three fragments of mineral water bottles, a cast iron cookware handle (Cat.#6119), one club sauce stopper (Cat.#9652), 21 fragments of glass food containers, five fragments of thermally altered corn, one tin cup (Cat.#3214), 70 thermally altered peanut fragments, one colourless press moulded glass spout from a jug (Cat.#13656), and five colourless tumbler fragments (Appendix B). In total, there are 41 (out of 42 items) different utensils recovered from the Kilmanagh Crossroads (AkGx-48) site. The utensils, provenience and description are listed in Table 15.

Utensil	Cat.#	Provenience	Description
Fork	2416	474N-195E	Three-tine fork fragment with shank and shoulder
	2860	475N-194E	bone handle fork with metal shaft, shank and two tines; third tine missing
	2995	475N-197E	Three-tine fork with two of the tines present along with shoulder, shank and portion of the tang
	3435	476N-195E	Three- tine fork with fragments of shoulder and shaft
	4485	478N-196E	Rusted, three-tined fork; Plate 24
	5273	479N-197E	Rusted, three tongs, two are incomplete, bulbous shank, bolster present and complete rat tail tang
Knife, table	4551	478N-197E	Very rusted, rat tailed tang, bolster and heel of a knife
	5070	479N-194E	Rusted metal portion of the handle, bolster present, missing side

Table 15: Utensils Within the Kilmanagah Crossroads (AkGx-48) Assemblage





			ithin the Kilmanagah Crossroads (AkGx-48) Assemblage
Utensil	Cat.#	Provenience	Description
			panels
	5408	479N-199E	Rusted, flat thinner blade, rounded tip, small flat tail tang
	7607	484N-194E	Rusted, very rusted blade of a table knife
	7644	484N-196E	Rusted, blade from a table knife, the end has a sharp curve on the blade side
	7988	485N-192E	Rusted, tang present, bolster present and part of the blade
		Feature 12,	Rusted, fragmentary and thermally altered knife, part of the handle is
	14012	Quad 3	present, any of the bone handle covering is charred
Knife,	(very rusted, the end of the rat tailed tang and the end of the knife have
carving	4552	478N-197E	broken off
			rusted, part of the blade and bolster of a knife, possible modification
	4695	478N-199E	present, opposite the shape edge of the blunt edge has been flattened
			slightly
	9198	488N-188E	Rusted, modern take knife blade
Knife,	1263	470N-199E	Ferrous metal component of probable paring knife; three pins in
other	4007	(70) 0005	handle; 3" long blade
Spoon,	1297	470N-200E	Severely corroded table spoon bowl fragment, ferrous metal
table	5069	479N-194E	Very rusted bowl of a spoon, ferrous metal
Spoon,	1451	471N-197E	Corroded fragment with no indication of type of plating, ferrous metal
serving	1471	4/ IN-1// L	conduct magment with no indication of type of plating, ferrous metal
Serving	13829	Feature 3,	Very rusted ferrous metal, three parts of a serving spoon, part of a large
		Qd.2, lvl.3	bowl, stem and handle, the handle is a long rectangle with rounded
			corners and tapers slightly towards the stem, moulded, there is a
			recessed ring just inside the edge, there is fragments of fabric that are
			rusted to the back of the handle of the spoon.
Spoon,	5272	479N-197E	green and white rust, gray metal, 'tear drop' shaped handle with
tea			impressed decoration floral design, the spoon is bent at the stem; Plate
c	20/0	(77) 40/5	24
Spoon, other	3860	477N-196E	Spoon handle fragment, ferrous metal.
other	4343	478N-194E	Spoon handle fragment, white metal.
	14011	Feature 12,	Rusted ferrous metal spoon, the upper portion of the bowl is missing,
	14011	Quad 3	the end of the handle is rounded and the handle and stem taper
		Quados	towards the bowl, similar/same as the Windsor spoon pattern
Utensil	2301	473N-199E	Bone handle fragment with two metal pins
	3158	475N-199E	Bone handle fragment with three pins present
	3353	476N-193E	Small bone handle fragment
			Bone handle fragment with three brass pins intact; only one piece and
	3517	476N-196E	no remains of shaft
	4123	476N-200E	End fragment of a bone cutlery handle
	4203	477N-201E	Cutlery bone handle fragment with two brass pins
	4486	478N-196E	Bone handle with three pins, the handle tapers slightly, some of the
	5040	470N 104F	bone has flaked away; Plate 23
	5049 5238	479N-194E 479N-197E	Bone panel from a utensil Part of a bone side panel for a utensil, probably from a knife, there are
	0626	4/7N-17/C	two pin holes present
	5465	479N-201E	Clear plastic handle from some form of utensil
	7987	485N-192E	Part of a flat, bulbous end of a utensil handle, gray coloured metal
			Rusted, ferrous metal, flat utensil handle, tapered stem into a rounded
	8311	486N-188E	end
	9523	489N-187E	Small portion of bone handle form a utensil of sorts, part of two small





	Table	e 15: Utensils W	ithin the Kilmanagah Crossroads (AkGx-48) Assemblage
Utensil	Cat.#	Provenience	Description
	10983	493N-193E	Part of the bone panel from a utensil, the portion that would have been attached to the metal is flat and stained with rust, the top of the panel is semicircular, at the top center there is a flat portion with part of a round perforation for the rivet, on the sides are repeated diamonds
	11518	495N-187E	End and lower portion of a rectangular bone handle from a utensil
	13247	500N-197E	Rusted, ferrous handle from some sort of utensil (probably a spoon or fork), made from a flat piece of ferrous metal. 'Inexpensive make', the handle is rectangular in shape with rounded corners, the is rectangular and the sides have been folded downwards, the lower portion of the sides of the handle have also been folded downwards; Plate 23

3.4.3 Organic Class

There are 2,427 artifacts in the organic class from the Kilmanagh Crossroads (AkGx-48) site. The assemblage consists of a faunal and non-faunal component. All the faunal bone in the assemblage is very fragmentary and has not been identified beyond class. Mammal bone dominated the collection (n=2,118), followed by avian bone (n=161), shell (n=83), indeterminate (n=43), and fish bone (n=2) that was recovered from two units, 476N-199E and 475N-199E. The other categories of bone were much more dispersed throughout the excavated units.

Non-faunal organic artifacts include two pieces of coal slag, 13 pieces of coal, and five fragments of wood. Coal and coal slag was recovered from multiple units but ultimately not retained. The wood fragments were all recovered from Feature 12. These fragments relate to the wood lining of the root cellar (Figure **15**; Plate 12).

3.4.4 Personal Class

In the Kilmanagah Crossroads (AkGx-48) collection, the personal class contains 1,303 artifacts comprising 2.2 percent of the entire assemblage.

3.4.4.1 Personal Gear

There are 823 artifacts classified as personal gear. The following artifacts represent the post-1900 component relating to the activities associated with the 1920s house and general refuse disposal practices on the site: one umbrella part (Cat.#9764), six American and 11 Canadian coins dating between 1940-1970, two key chains, one cigarette mouthpiece (Cat.#2532), and one canteen stopper (Cat.#6929).

Two interesting and unique artifacts in the Kilmanagh Crossroads collection include a small personal "mint box" (Cat.#8680), and an incomplete brass note/sketch book clasp (Cat.#11248; Plate 25). The clasp is part of a shield-shaped "Henry Penny's Patent Improved Metallic Books" dating to the late nineteenth century and possibly originating from England (Victoria and Albert Museum 2013). Other artifacts relating to the mid-to-late nineteenth century include: two eye glass lenses (Plate 25), a decorative brass frame for the handle of a bag or brief case (Cat.#4556), a walking stick point (Cat.#13633; Plate 25), two tokens, two 1859 one cent coins (Cats.#2304, 4751; Plate 25), one 1894 one cent coin (Cat.#8760), one 1899 one cent coin (Cat.#14157), one 1863 American penny (Cat.#4045), two indeterminate coins, 20 tobacco tags (five heart-shaped tags used by the Macdonald



tobacco company of Montreal and dating between 1870-1922 (Springate 1997:11); five round tags and 10 unspecified tags), and 765 fragments of smoking pipes.

Smoking pipes are the most common type of personal gear artifact recovered from the Kilmanagh Crossroads (AkGx-48) site. A selection of pipes and stems from the collection can been seen in Plate 26. The smoking pipe collection contains 763 white ball clay and two red ball clay fragments. Red ball clay pipes include a stem (Cat.#8905) and a complete bowl decorated with wide flutes (Cat.#3357; Plate 26). Moving from the bite to the bowl, there are 46 examples of glazed bites and five examples of unglazed bites, 338 stem fragments, 295 pipes either lack or have illegible/indeterminate makers marks and 43 have legible makers mark's. In total, there are 43 stem fragments with maker's marks present. These makers, associated date range, and number of stems with the maker's marks present, are listed in Table 16.

Table 16: Stems with Maker's Marks from the Kilmanagh Crossroads (AkGx-48) Site

Maker's Mark	Date range	Quantity	
William White of Glasgow	1805-1955	2	
McDougall of Glasgow	1846-1967	6	
Henderson of Montreal	1847-1876	28	
Bannerman of Montreal	1857-1907	3	
Davison of Glasgow	1861-1891	1	
W & D Bell of Quebec	1862-1877	3	
Total			43

There are 25 examples of spurs present in the collection. Bowl fragments from the collection total 390; 224 do not exhibit any decoration, 20 have an embossed "TD" mark present and 146 exhibit a variety of motifs (Plate 26). Decorative treatments include: ribbed or fluted bowls (for example Cats.#1111, 5046), cross-hatching (for example Cat.#6629), bands of vines or curved lines (for example Cat#7920), and bowls with multiple band of decoration (for example Cat.# 9301). In addition to these decorative types, many bowls exhibit images rather than repeated designs. These include: a ship with three stacked sails (Cat.#12334), the Scottish thistle (Cats.#13390, 6767), a thistle within a wreath (Cat.#6767), part of a harp (Cats.#12526, 13460), floral designs (Cat.#9171), the image of a bird sitting on a branch (Cat#10403), tapered radiated bands in the form of a tree (Cat.#8387), large swirled leaves with a ribbed background (Cats.#4948, 7079), and a fleur-de-lis by Henderson (Cats.#8139, 9393) dating between 1847 and 1876 (Kenyon 1984).

3.4.4.2 Clothing

In total, 369 artifacts are related to clothing. The artifacts relating to the modern house and possible refuse dumping include: two zipper sliders, two rivets, nine grommets, and a snap eyelet. Those artifacts relating to the mid-to-late nineteeth century occupation of the site include: 97 leather shoe fragments, one belt buckle and one buckle, two general eyelets and five shoe-related eyelets, seven suspender buckles, and 230 buttons.

Within the collection of buttons there are 77 Prosser buttons of many varieties, 42 shell, 39 bone, 31 metal, 17 modern plastic, 10 glass, 10 jet, and four Goodyear rubber buttons. The Prosser button (Cat.#5263; Plate 27) was invented in England in 1840; in 1848, the manufacturing technique was adopted in the United States and these buttons soon became very affordable through mass-production.



Prosser buttons continued to be produced at least until the 1950s (Sprague 2002). In terms of use, the Prosser button could be found on a variety of garment types but primarily found on men's shorts, women's dresses, and children's clothing (Ferris 1986; Sprague 2002). "Pearl" buttons (Cat.#8018; Plate 27), made from shell, became popular after 1820. Smaller varieties of pearl buttons were mostly worn on shirts and blouses while larger buttons were used for waist coasts, frocks and full-length coats (Ferris 1986:100).

Of the metal buttons, two are brass with a gilt covering (Cats.#13954, 13955; Plate 27). In the late eighteenth and early nineteenth century these buttons were quite fashionable. These buttons were like jewelry for the clothing, worn on every garment imaginable, and selected with just as much care and consideration as one would place in choosing any personal decorative accessory (Ferris 1986). The majority of glass buttons are black with only three white or frosted buttons. Black glass and Jet buttons (Cats.#5279, 9656; Plate 27) reached the height of their production between 1880 and 1914; however, their popularity began to decline during this time as people began to want brighter coloured buttons to match their brightly coloured textiles (The Buttonmonger 2013). In sum, the majority of the buttons present in the artifact assemblage date to the mid-to-late nineteenth century.

3.4.4.3 Adornment

Within the personal artifact class, there is a small collection of adornment items. These artifacts include: one brass jewellery setting (Cat.#3830), one plastic modern charm in the shape of a bunny (Cat.#11726), one part of a metal brooch that was painted black and consists of a cluster of roses (Cat.#3175; Plate 25), seven beads, and five rings or fragments of rings. Five of the beads are glass, one is clay (Cat.#1871), and two are modern plastic faux pearl beads (Cat.#12169). Of the five rings, three are brass (Cats.# 2638, 2895), one is pewter (Cat.#2302), and one is a modern mixed metal and plastic cameo ring (Cat.#7554).

3.4.4.4 Medicine bottles

The Kilmangah Crossroads (AkGx-48) assemblage contains 82 examples of medicine bottles. Although many of these examples are fragmentary, there are eight complete bottles and many body fragments with enough embossing present to identify the former contents.

Although many bottles do not offer a suggestion of their former contents beyond the broad category of medicine, the function and approximate date ranges can be ascribed to the bottles based on the finish, any scars on the base, and if a mould seam is present. For the purposes of this report, there are two main categories, pre-1900s relating to the occupation of the blacksmiths and post-1900 relating to the occupation of the modern house and modern refuse disposal activities. Starting at the top, the types of finishes present in the collection consists of patent, prescription, ring, flared and externally threaded (Plate 28). Patent finishes represent the majority of the identified finishes in the collection. Most of these finishes have been created though an applied or tooled method and date to pre-1900. The patent finish type continued to be used on bottles in the early part of the twentieth century, only the method of forming has changed (Jones and Sullivan 1989). The threaded finish spears on an Aspirin bottle dating to post-1900 (Plate 28). Moving to dateable attributes of the base, open pontil scars were common until

circa 1870s with the introduction of the snap case mould (Jones and Sullivan 1989:45). There are only three examples of bottle with open pontil scars present (Cats.# 4503, 4573, 7138).

The identifiable medicines/chemical/druggist bottles include three examples of mid-to-late nineteenth century Mrs. Winslow's Soothing Syrup bottles (MWSS) (Cat#s.13916, 13917, 13528). Interestingly, the three MWSS bottles may be related to either the Wylie or the McKenna families as both were listed with children in residence at the time of the 1871 and 1881 censuses. Between 1835 and 1900, MWSS was a well known, widely distributed and effective treatment for infant teething pain, due to the large percentage of morphine and alcohol contained in the syrup (Scharfenberger 2009:25). Two of the MWSS bottles are mouth blown two-piece, post bottom moulded bottles with an embossed "7" present on the base. The mould seams date these bottles to between the 1840s and 1900 (Jones and Sullivan 1989).

Machine-made containers with Owens suction scars were manufactured and consumed post-1903 (Jones and Sullivan 1989:38). Examples includes a circa 1900 -1986 (Fike 1987) "J. R. Watkings" bottle (Cat.#13708), "Sloan's Liniment" (Plate 28) bottles that were manufactured in Canada between 1900 and 1914 (Fike 1987: 137), three of which were recovered from Feature 12 (Cats.#13706, 13707, 13913), three "Aspirin" bottle in various states of completeness (Plate 28; Cat#s. 5940-5942), and a complete "Buckley's" bottle (Plate 28; Cat# 5943). On the base of both the complete Aspirin and Buckley's bottle there is an embossed "D" in a diamond and a dot over top of the diamond indicating that this bottle was produced by the Dominion Glass Company (Montreal, Quebec & other locations) circa 1928 -1970s (Miller and Jorgensen 1986).

Based on the dateable medicine-related bottles in the collection, most date post-1900 and are related to the occupation of the modern house and refuse dumping activities on the site.

3.4.4.5 Toilet and Hygiene

A total of 16 comb fragments was found at the Kilmanagh Crossroads site (AkGx-48); no other toilet and hygiene-related artifacts were recovered from the site. The majority of combs were made from a hard black rubber. Of these combs, two combs are double-sided, two combs are single-sided and the rest are indeterminate. Modern combs recovered from the site include a ferrous metal comb (Cat.#3777) and a translucent yellow plastic comb fragment with "made in Canada" embossed on the band of the comb (Cat.# 9174).

3.4.5 Furnishings Class

The Kilmanagh Crossroads assemblage contains 435 items related to the furnishing of a domestic residence, equalling less than one percent of the artifact assemblage. Within this category of artifacts there are two general groupings of artifacts: those related to the mid-nineteenth century blacksmith shop and associated residence and those artifacts related to the modern house that once stood within the study area. Those artifacts that relate to the blacksmith occupation include: three cast iron stove parts, a clock winding key (Cat.#8032; Plate 29), seven keys of varying size (Plate 29), and 196 lamp-related fragments. Of the lamp-related fragments, there are nine lower rim fragments that indicate different types of lamp chimneys were used at the site. These types of chimney lamps include a solar lamp, a lamp with a cylindrical body and straight lower rim, and bulbous body chimneys with straight or flanged lower rim (Woodhead et al. 1984:60). Additionally, eight fire-polished upper rims from lamp



chimneys were recovered from the site. The other lamp components recovered from the site includes two brass air distributor plates (Cats.#6276, 13632), and part of colourless glass from a lamp font (Cat.#13655).

In total, there are 161 sherds of terracotta flower pots that could be associated with either period of occupation or refuse dumping practices.

The following artifacts post-date 1900: two fragments of mirrored glass, five drawer handles, one furniture pad/bumper (Cat.#10833), 45 bed springs, one fuse (Cat.#4070), one electrical switch (Cat.#3303), an electrical outlet (Cat.#3146), and part of a light bulb or fuse (Cat.#2573).

3.4.6 Tools and Equipment Class

There are 3,231 artifacts associated with the tools and equipment class, comprising 46.4 percent of the total assemblage.

3.4.6.1 Agricultural

A total of 230 agricultural related artifacts was recovered from the Kilmanagh Crossroads (AkGx-48) site. These artifacts include: one drainage pipe (Cat.#8428), 45 fragments of drainage tile, 63 fence staples, 119 examples of fence wire, and two fragments of a plough coulter.

3.4.6.2 Animal Husbandry

The Kilmanagh Crossroads (AkGx-48) assemblage contains two brass dog tags, which are the only two artifacts from this category not related to horse care or horse hardware. Both tags are engraved with "Dog Tag/ Chinguacousy" and relate to the occupation of the modern house. One tag is dated 1925 (Cat.#6177, Plate 25) and the other is dated 1927.

In total, there are 20,322 examples of horse shoe nails. Horse shoe nails (HSN) alone represent 34.6 percent of the entire artifact assemblage recovered from the Kilmanagh Crossroads (AkGx-48) site. Of these nails, 724 are complete, 14,934 have had their points clipped, and 4,518 points of HSN are present (Plate 30). Complete nails represent unused nails. When clipped, a small protrusion will be left on the HSN that forms the clinch that will be cut off or straightened when removing a the horses shoe (Wiseman 1973:78), and the clipped points of HSN represent used nails (Doroszenko and Light 1997; Light and Unglik 1987).

Looking at the distribution of each portion of the HSN (Figure **17**), there does not appear to be any specific area of concentration for the complete nails. The maximum number of complete horse shoe nails in one area is nine nails, and there are multiple small clusters of 5-7 horse shoe nails distributed throughout the site. HSN with their points clipped were recovered from all over the site in generally large numbers. A major clustering of HSN with their points clipped centers around units 487N-184E and 489N-183E and flow outwards from this area. Based on the distribution map, it appears that the clipped points of HSN have four small clusters. One cluster sits around 479N-190E, in the same area of



the major clustering of HSN with their points clipped. Other clusters center around units 479N-190E, 479N-199E, and 485N-190E. Based on the distribution of the different parts of the HSN, in particular the large overlapping cluster of HSN with their points clipped and the clipped points around unit 487N-184E, it is plausible that this was one of the main areas where shoeing was practiced. This area may also represent the front of the shop as the shop itself was probably too small to accommodate horses inside (Light and Unglik 1987).

With this large volume of HSN, particularly HSN with their points clipped, it is possible to calculate a rough estimate of the number of horses the blacksmiths might have shod. The assumptions are: all horse shoes are replaced at the same time; all horses have four legs; the HSN represent the removal of horse shoes from a horse to be re-shoed; all the HSN represent successful removal of HSN and no mistakes. The number of HSN used for securing a shoe to a horses hoof ranges between four (Holmstorm 1904:154) and six nails (Wiseman 1973:92), ranging from a minimum of 16 HSN to a maximum of 24 HSN per horse. Therefore, based on the number of HSN with their points clipped, it is possible that between 622 and 933 horses were reshod by the blacksmiths who worked at Kilmanagh Crossroads, between 1857 and the 1890s.

Other horse related items include horse shoes (Plate 31), shoeing tools (Plate 30) and livery-related (Plate 30) items. In total, fives examples of horse shoes were recovered from the block excavation of the Kilmangh Crossroads (AkGx-48) site. One small horse shoe, 9 cm wide and 7 cm tall, may be for a pony (Cat.#4247). Another horse shoe appears to be an unfinished or 'blank' horse shoe (Cat.#4805). There is one cock from a mudding shoe present (Cat.#6150). The remaining examples of horse shoes (Cat.#7535, 9796) are all fragmentary and have been cut away from the rest of the shoe; it is probable that these modified shoe fragments are scrap metal after being removed from the horse's hoof.

Shoeing tools include the bone handle for a hoof knife (Cat.#13961; Plate 30), originating from Feature 12, Quad 3, and a bone handle of a horse pick (Cat.#14263; Plate 30), also originating from Feature 12 in unit 469N-199E. The livery-related artifacts include: a metal dash pole (Cat.#2514), a brass grommet from a horses harness (Cat.#13716), 15 examples of harness buckles, one ferrous metal square (Cat.#8310), a horse bit (Cat.#5006) and five examples of horse bells. Four of the bells recovered from the site are "jingle" or sleigh bells (for example Cat.#5656). The other bell is a brass "petal" bell (Cat.#5560, Plate 30), distinguished by its ring of daisy-like petals encircling the top and a single throat (slit) with rounded ends; it makes a wonderful jingling sound. Both of these types of bells have been produced for many centuries by both American and British craftsmen (Classic Bells 2002).

3.4.6.3 Hardware

In total, 1,960 hardware-related artifacts were recovered during the excavations of the Kilmanagh Crossroads (Akgx-48) site. These include 611 examples of bolts, 281 examples of screws, 191 examples of truss head rivets (Plate 32), 186 examples of rivets, 156 washers, 100 examples of wire fragments, 102 examples of various types of chain links (such as "single jack chain" Cat.#6244, one example of a double loop chain Cat.#11746; the rest are examples of straight chain links), 80 examples of nuts, 68 tacks, 58 fragments of strapping, 44 spikes, 31 fragments of brackets, 12 hook fragments, six O-rings, four tow bar fragments, three cotter pins, three fragments of clamps, three fragment of metal plating, two U-bolt fragments, two thumb tacks, two railway spikes, two fragments of adjustable clamps, one example of a screw spike (Cat.#9725), one S-hook (Cat.#13164), one rivet or bolt cap (Cat.#3762), one plating fragment (Cat.#1651), one long hex nut (Cat.#5604), one lock washer



(Cat.#9196), one ceramic insulator (Cat.#5680), one drain catch (Cat.# 5658), one brass bearing (Cat.#9247), and part of an anchor chain (Cat.#6903).

3.4.6.4 Writing

There are 29 examples of writing related artifacts. These include: three fragments of stoneware ink wells, three fragments of ceramic ink bottles, a rusted lower portion of a modern pen (Cat.#12039), nine cylindrical fragments of graphite that have been whittled to a point at one end, and 13 fragments of slate pencils.

3.4.6.5 Armament

The Kilmanagh Crossroads (AkGx-48) assemblage contains 14 examples of armament-related artifacts, including: one musket ball (Cat.#14063) recovered from Feature 12, one composite metal trigger part possibly from a pistol (Cat.#10724), three bullet fragments, eight bullet casings, and one modern rubber bullet (Cat.#1270).

3.4.6.6 Recreation

A total of 15 recreation related-artifacts was recovered during excavation, the majority of which are modern items: one porcellaneous lid from a tea set (Cat.# 10361), one modern white plastic pawn gaming piece (Cat.# 12110), six examples of modern glass marbles, and eight examples of modern toys including a black plastic King Kong figure (Cat.# 8528), an "Uncle Sam 1955 Play Dime" (Cat.# 1611) and multiple small toy car parts.

3.4.6.7 Sewing

The assemblage contains three straight pins (for example Cat.#3931), two scissors (Plate 25; Cat.#5271), two safety pins (for example Cat.#5778), and four thimbles. Three of the thimbles are brass and were recovered during the unit excavations. The fourth thimble is made from a composite metal (Cat.#13833) and was recovered from Feature 12. On one of the brass thimbles (Cat.#5624; Plate 25) just above the folded edge is a band of vertical ribs with a floral design and embossed lettering that reads "FRIEND SHIP."

3.4.6.8 Fishing and Trapping

Two examples of fishing related artifacts were recovered from Kilmanagh Crossroads (AkGx-48). These artifacts include a grey, squat tear drop shaped fishing weight (Cat.#10170), and a single incomplete fish hook (Cat.#9877).



3.4.6.9 General tools

General tools were recovered during excavation include: one ferrous axe fragment (Cat.#9683; Plate 32), three stoneware blacking bottle fragments, four clothing peg springs, a ferrule fitting possibly for a paint brush (Cat.#4615), a modern hacksaw blade (Cat.#11362), one possible blade from hedge cutters (Cat.#7534), one incomplete head of a hammer (Cat.#6461), one hitch fragment (Cat.#6456), a large eye hook (Cat.#8864), one nail punch (Cat.#4382), one pair of pliers (Cat.#3208), two sharpening stones, three fragments of a wrench, part of a ceramic insulator (Cat.#8901), a rusted padlock key (Cat.#8062), and 85 examples of modern batteries. The majority appear to be "Everyready" or "Every day" batteries.

3.4.6.10 Specialized Tools

The Kilmanagh Crossroads (AkGx-48) assemblage contains 81 examples of specialized tools. The artifacts relating to the blacksmith occupation (either possible use or manufacture) include: a fragment of an anvil (Cat.#3681), part of a wrought iron bench clamp (Cat.#4890), eight drill bits in various states of completion (Plate 31), five examples of hammers (Plate 31), part of the drill bit attachment from a hand-drilling machine (Cat.#8457), a lathe tool (Cat.#8565, Plate 29), two nail sets, 13 moulding plane blade fragments, a release leaver for some sort of tool (Cat.#8338), 27 examples of probable bar stock iron, 17 files, and tong handle fragments (Cat.#7489).

Files (Plate 32) are one of the many ubiquitous tools found in smithies (Doroszenko and Light 1996). The material for all of these files has been listed as a ferrous metal. More specifically, the files have probably been made from a medium to high quality steel as files need to be made of a harder material than the material which they abrade (Light 1991; Ross and Light 2000). Due to the high quality of steel used in files, many rural blacksmiths would reuse the good metal of an old file and other scrap metal when they needed cast steel (Light 2007). It is probable that the files found on the site were factory made. Six of the files recovered from the site (Cats.# 2730, 2932, 3808, 10173; Plate 32, 13634 and 14089) were complete single singe pointed files, meaning these files had a tang that was intended for insertion into a socketed wooden handle. Although fragmentary, the rest of the file fragments are probably single singe pointed files as single singe pointed files came in many variations, a variety of which were recovered from Kilmanagh Crossroads (AkGx-48). These variations include files with a triangular blade, a rectangular blade, and half round blade.

Three triangular files were recovered from the site and include Cat.#2939 from the unit excavations and Cat.#13634 and Cat.#14089 from Feature 12. Their total lengths varied (11.43 cm, 10.2 cm, and 15.4 cm respectively) but they all exhibited single cut teeth configuration. Rectangular flat blade files, although not type specific, include Cats.# 5925, 6013, 8409, 11173; Plate 32 and 12324. All of these fragments have been cut away from the rest of the file. The reason for this modification is unknown. Due to the high quality of steel used for files, these fragments may be the end result of the file modification or saved for further modification. Based on its diamond-shaped cross-section, one complete rectangular file (Cat.#10173) can be classified as a "feather edge" (Ross and Light 2000:26) file with single cut teeth. There are two examples of "half round", file one is complete (Cat.#3808) and the other is only the point of the file (Cat.# 12790). There is one examples of a probable example of a reworked file. The point of a file with single cut teeth was somehow detached from the rest of the file;



the detached end has been flattened out to an ovoid-shaped head, resembling wide machine cut nail (Cat.#11705, Plate 32).

Interestingly, there are a variety of wood working-related tools recovered from the site. All of the drill bits, the moulding plane blade fragments, the lathe fragment and part of the drill bit attachment from a hand-drilling machine (Hooper and Shirley 1913; Walker 1980). With such items on the site, it is plausible that the smith also preformed some wood working activities in addition to making wood working tools.

A variety of hammers were recovered from the site and include: the anvil end of an anvil hammer (Cat.#1264), a possible fragment of a cross peen hammer (Cat.#2886), and a general hammer fragment (Cat.#3613). Of particular interest are two, very small hammers. Possibly, these could have been created/used for more specific and delicate tasks. One is the small head of a specialized hammer (Cat#7780; Plate 29), measuring 7.2 cm in length. The striking face is flat, the neck of the striking face is cylindrical, the eye is rectangular, the cheek is small, one part of the claw is curled and tapers to a point and the other part of the claw is missing. It is surprisingly heavy for its size. This is highly specialized hammer, possibly a type of watchmaker's or jeweller's hammer for the small and delicate work that such activities require. The other hammer is a miniature version of a mason's hammer (Cat#14005), recovered from Feature 12. Rather than a specialized tool, this may be a child's toy.

3.4.6.11 Other and Indeterminate

Within the artifact assemblage from the Kilmanagh Crossroads (AkGx-48) site, there are a variety of artifacts that relate to carriage hardware. These include a ferrous wheel strip covering from a carriage wheel (Cat.#1842), part of a brass carriage wheel hub (Cat.#1738), a bracket for a carriage light (Cat.#9925), part of a carriage whip bracket holder (Cat.#10725), two fragments of carriage brake shoes, (example Cat.#2937), and a rusted support bar for the back rest of a carriage bench (Cat.#14228).

One particularly interesting artifact is a corner piece from a heavy slab of dressed stone (Cat.#5753). There is a lip present on the broken edge and there are rust stains present. This is probably part of a ground support for some form of heavy machinery.

There are four fragments of indeterminate, probable tool fragments (Cat#s.1038, 11004) and an indeterminate large ferrous spring fragment (Cat.#8167).

The majority of indeterminate artifacts recovered from the Kilmanagh Crossroads (Akgx-48) site relate to forge activities. In total, 4,325 fragments of metal that have been identified as scrap metal were recovered throughout the site. Combined there were 63 fragments of slag and klinker retained during the unit excavation of the site. This material was present but not retained in 191 units throughout the site. The multitude of scrap metal fragments represent the by-products of forge operation (DeVore 1990).

Scrap metal accumulated during the course of the smith's work, but smiths also actively sought out scrap metal in exchange for their services (Light 2007). Useful scrap would accumulate in specific areas throughout the shop, while exhausted metal would be discarded (Light 1984, 2007; Light and Unglik 1987). Based on the artifact distribution map (Figure 16), there are two main clusters of scrap metal around units 480N-188E and 482N-189E. As the location of the Blacksmith shop is unknown, these clusters could represent either storage areas for scrap metal or discard areas for exhausted metal.



3.4.7 Indeterminate Class

There are a total of 4,972 artifacts, equaling 8.47 percent of the entire assemblage, that could not be assigned to a functional class or sub-class. Seventeen of these artifacts were identified to type but their original use could not be determined. The remaining artifacts comprised two major categories: unidentifiable contained of a variety of material types totaling 2,487 artifacts and 2,485 completely unidentifiable artifacts consisting mostly of metal artifacts (totaling 1961 artifacts or approx. 79 percent of the completely unidentifiable artifacts).

3.5 Artifact Analysis - Pre-contact Aboriginal Lithic Artifacts

A total of seven pre-contact lithic artifacts was recovered from the excavated fill of six one meter units (Table 17; Figure 4). The collection consists of three pieces of debitage (two shatter and one flake fragment), four tools, in the form of a projectile point, portions of two bifaces, and a third probable biface fragment.

The projectile point likely was manufactured from a flake of Onondaga chert as it had an obtuse angle to the blade. It exhibited slight serration along one lateral margin and may represent an Early Archaic Nettling point, although it is incomplete (Plate 33, left). The tip and blade portion of a semi-refined biface was present, manufactured from Onondaga chert (Plate 33, middle). The remaining biface edge fragment and likely biface fragment were both manufactured from Kettle Point chert (Plate 33, right, top and bottom, respectively).

The distribution of pre-contact material is illustrated in Figure 4. The material derived from a five by ten metre area, with one additional piece recovered from a unit excavated 10 metres to the north.

Cat	Unit	Qty	Туре	Material	Length	Width	Thickness	Comments		
#					(cm)	(cm)	(cm)			
L1	477N-198E	1	Shatter	Kettle point	2.8	2	0.8	prob. fragment from a biface		
L2	477N-198E	1	Biface fragment	Kettle point	1.6	3.2	0.9	edge frag. of crude biface		
L3	478N-200E	1	Biface fragment	Onondaga	3.8	2.7	0.9	semi-refined, triangular biface, blade portion broken by transverse fracture at midsection		
L4	480N-192E	1	Shatter	Onondaga						
L5	481N-188E	1	Projectile point	Onondaga	3.1	2	0.4	small, stemmed/ corner- notched pt. w slight serration on lateral margin; likely made on a flake with convex curvature at distal end; base broken by oblique fracture- possible Early Archaic Nettling pt.		
L6	482N-191E	1	Flake fragment	Onondaga						
L7	492N-193E	1	Shatter	Onondaga						

Table 17: Pre-Contact Assemblage from the Kilmanagh Crossroads (AkGx-48) Site



In summary, the sparse nature of the pre-contact assemblage at the Kilmanagh Crossroads (AkGx-48) site represents a transient event involving limited tool refurbishment.

3.6 Inventory of the Documentary Record

The material relating to the Stage 4 mitigative excavation of the Kilmanagh Crossroads (AkGx-48) site is curated by ASI as part of the 2009 licensing agreements made with the Ministry of Tourism, Culture, and Sport. The details of this curated material are listed in Table 18.

	lab	ie 18: Inventory of Documentary and Mate	erial Record					
Project:	Stage 4 Mitigat	Gx-48), Town of Caledon						
ASI File:	08TE-040	MTC PIF:	P128-051-2009					
Document/M	Material	Location	Comments					
Written Field Notes, Annotated Field Maps, GPS Logs, etc.		Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9						
Field Photography (Digital)		Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	Stored on ASI network servers and/or CD-ROM					
Research/Analysis/Reporting Materials (Various Formats)		Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	Hard copy and/or digital files stored on ASI network servers and/or CD-ROM					
Artifacts		Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	58,681 Euro-Canadian and seven Pre- contact artifacts stored in 43 boxes.					
			All material stored in standard banker's boxes by provenience. Collection may be transferred to one of ASI's secure, off- site storage facilities if deemed necessary.					

Table 18: Inventory of Documentary and Material Record

4.0 ANALYSIS AND CONCLUSIONS

Archival research into the area around the Kilmanagh Crossroads (AkGx-48) site indicated that Lot 34 was occupied by different craftsmen between 1857 and 1908, including at least two successive blacksmiths. For example, in the 1871 census, Robert Wylie, who had purchased the property in 1862, was listed with half an acre and two dwelling houses. Wylie was described as an English-born blacksmith who lived with his wife and four children. According to the 1876 Assessment, William McKenna, who had purchased the property in 1871, was listed as the blacksmith on the lot. The 1881 censes indicated McKenna was of Irish descent and he and his wife had five children. By the time of the 1901 census, the smithy had been abandoned and the only commercial lot on Lot 34 was that of the shoemakers. Eventually a new domestic structure was built on the former smithy lot in the 1920s.

In total, 60,666 historical artifacts have been recovered from Stage 2, 3 and 4 excavations of the site, consisting of a variety of coarse and refined earthenware ceramics, container and window glass, metal nails, personal items, hardware and organic remains as well as a variety of modern artifacts. The stage 4 mitigative excavation produced 58,681 historical artifacts and seven pre-contact lithic artifacts. There



are two time periods of occupation represented in the Kilmanagh artifact collection: those ranging in date from the mid-1800s to the early 1900s that relate to the blacksmiths, and modern artifacts that range in date from post-1900 to present day, which relate to the occupation of the 1920s house and refuse disposal practices on the property. Due to the site's close proximity to two major roads, the intersection of Olde Baseline road and Dixie road, it is expected that a variety of modern garbage would accumulate on or near the site as well.

Half of the assemblage comprises mid-century ware types include refined white earthenware comprising 46.3 percent (n=1,937) and yellow ware representing 5.1 percent (n=214) of the ceramic assemblage. Later ceramic types present include ironstone (n=1,214 or 29 percent) and semi-porcelain (n=31or 0.7 percent) representing one third of the Kilmanagh ceramic assemblage. The assemblage also contains a fairly large number of coarse red earthenware ceramic (529 or 12.83 percent), and a much smaller amount of buff earthenware (62 or 1.38 percent). Decorative styles present in the collection reflect a variety of ceramic purchases throughout the nineteenth century, rather than a focus on a particular style. The most common decorative types include hand painted motifs (mostly floral), sponged/stamped motifs, blue transfer prints and Rockingham. The coarse red earthenware and buff earthenware vessels bearing the Rockingham decoration are of particular interest as they reflect a technique common to many western Ontario Germanic Potters that produce a speckled appearance (Webster 1971:21). Thus, analysis does not reveal a preference for any particular type of decoration, but rather a wide range of all the major types available to Ontario consumers.

In addition to the common decorated ceramics of the nineteenth century, there are decoration types common on early twentieth-century ceramics that probably date to the occupation of the 1920s house. These include all of the decalcomania decorated ceramics, appearing on English bone china porcelain, semi-porcelain and vitrified earthen. There are at least two late refined white earthenware tea cups with have thick glassy glaze that is heavily crazed and thermally altered, with a band of floral decoration just below the rim with "Made in Japan" on the base indicating that these tea cups date to post-1921 (Miller 2000). The majority of the dateable maker's marks bearing ceramics recovered from Kilmanagh date to the early 1900s, with the exception of one registration mark on an ironstone vessel, offering a date of June 11th 1867.

In summary, the date ranges for the ceramic assemblage reflects a broad occupation date of *circa* 1800-1900, with the majority of the ceramics reflective of styles popular between the 1850s and 1900 with a modern ceramic component.

A total of 128 unique ceramic vessels was identified within the Kilmanagh Crossroads collection—a robust number of unique vessels for a rural domestic site in Southern Ontario. The identified vessels represent the many stages of kitchen activities, from preparation (milk crocks and pans, cream pot) to service (serving dish) to consumption (various sizes of plates and egg cups). At this site there are a large variety of tea ware related items, 41 tea cup and 30 saucers. The majority of these vessels date to between the 1850s and 1900, indicating use by Wylie and McKenna families. The English bone china vessels date to post-1900. The large variety of different tea cups and saucers present suggest single purchases rather than the purchasing of sets of tea wares.

A variety of other artifacts in the collection are also useful in determining an occupation date for the Kilmanagh Crossroads (AkGx-48) site. The assemblage of smoking pipes carries an overall manufacture date between 1805 and 1907, and the bulk of the identifiable marks indicate pipes made by Henderson of Montreal (n=28) dating between 1847-1876. The nail collection predominantly dates between 1830-1900, with the majority of the nails being of machine cut manufacture. The presence of both machine-cut and wire nails indicates construction, though more limited, continued throughout the



nineteenth century. The hand-wrought nails recovered from the site predate the 1830s and may indicate that the original occupant of Lot 34, Thomas Falconer constructed his home at this location.

A variety of coins recovered from the site include two 1859 one cent coins, one 1894 one cent coin suggest a late nineteenth century date that falls within the time frame of the blacksmith's occupation of the site. There also are a variety of identifiable and dateable medicine bottles including three "Mrs. Winslow's Soothing Syrup" bottles that pertain to teething children that once occupied the site between 1857 and 1900. The other complete medicine bottles all date to the post-1900s and include four "Sloan's Liniment" bottles that were manufactured in Canada between 1900 and 1914.

Both Robert Wylie and William McKenna were listed as blacksmiths. Almost all general smiths during the nineteenth century also acted as farriers (Doroszenko and Light 1997; Light and Unglik 1987), and this is evident in the significant number of horse shoe nails recovered from the site (n=20,322) representing 34.6 percent of the entire artifact assemblage. Of these, 14,934 have had their points clipped, and 4,518 clipped points were recovered indicating, that these were used and spent horse shoe nails. This large volume of horse shoe nails suggests that shoeing horses was a major activity at this blacksmith shop.

Currently the location of the black smith shop is unknown. Based on the concentration of horse shoe nails around unit 487N-184E, this could indicate the entrance of the blacksmith shop. Horses are too large to bring into the blacksmith shop so shoeing would take place in front of the major point of access of the black smith shop (Light and Unglik 1987). This location is fairly close to the road so it would generally allow for direct access from the road.

The majority of features on the site were posts or functioned as refuse or general pits. Features 3-5 may have been related to the structure of the blacksmith shop, possibly representing the corners of the structure. Feature 12 is a root cellar similar to others documented in southern Ontario (MacDonald 1997). It probably marks the location of the house occupied by the smith and his family given that rural craftsmen often lived where they worked in the nineteenth century. It was probably filled in around 1900 and may have continued to be used as a refuse pit for a period of time explaining the number of mid-twentieth century medicine bottles recovered from the upper layers of the feature. Feature 11, a footing, is probably related to the structure associated with the root cellar.

In summary, the Stage 4 mitigative excavation of the Kilmanagh Crossroads (AkGx-48) site resulted in the documentation of a post-1900 stone foundation, the documentation and controlled removal of 13 cultural features, and the collection of 58,681 historical artifacts and seven pre-contact lithic artifacts. The analysis of the artifacts revealed two groupings of artifacts, those relating the occupation of the blacksmiths between the 1850s and 1892, and post-1900 artifacts relating to the occupation of the 1920s structure or refuse disposal strategies on the site. The earlier collection relates to the occupation of the Wylie and McKenna families. However, there are no distinct assemblage differences between these two occupants. Given the unique function of the site as a commercial blacksmithing enterprise on Dixie Road during the mid-to-late nineteenth century, the Kilmanagh Crossroads (AkGx-48) site represents a significant cultural resource.

This report represent the fulfillment of our 2009 licensing agreement with the Ontario Ministry of Tourism, Culture and Sport (MTCS) and the statements contain on PIF# P128-051-2009. It supersedes a preliminary report filed with MTCS on June 15, 2010. In a letter dated July 7, 2010 MTCS concurred that the provincial interest in the Kilmanagh Crossroads site (AkGx-48) had been addressed, and was satisfied that concerns for impacts to the site had been met where design improvements to the intersection of Dixie road and Olde Base line road, which includes a roundabout, were planned.



5.0 RECOMMENDATION

It is concluded, therefore that:

1. The Kilmanagh Crossroads (AkGx-48) has been sufficiently excavated and documented, and no further concerns exist for this archaeological site.

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. 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 Tourism, Culture, and Sport should be immediately notified.

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

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance is provided:

- This report is submitted to the Minister of Tourism, Culture, and Sport as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 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, preservation and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture, and Sport a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological 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 *Cemeteries Act*, R.S.O 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002. c.33 (when proclaimed in force) require that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Consumer Services.
- 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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8.0 MAPS AND FIGURES

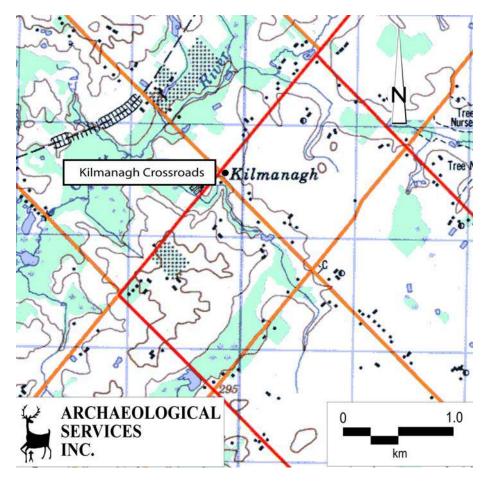


Figure 1: Location of the Kilmanagh Crossroads Site (AkGx-48). Base Map: NTS Bolton Sheet 30M/13, Edition 7, 1994.

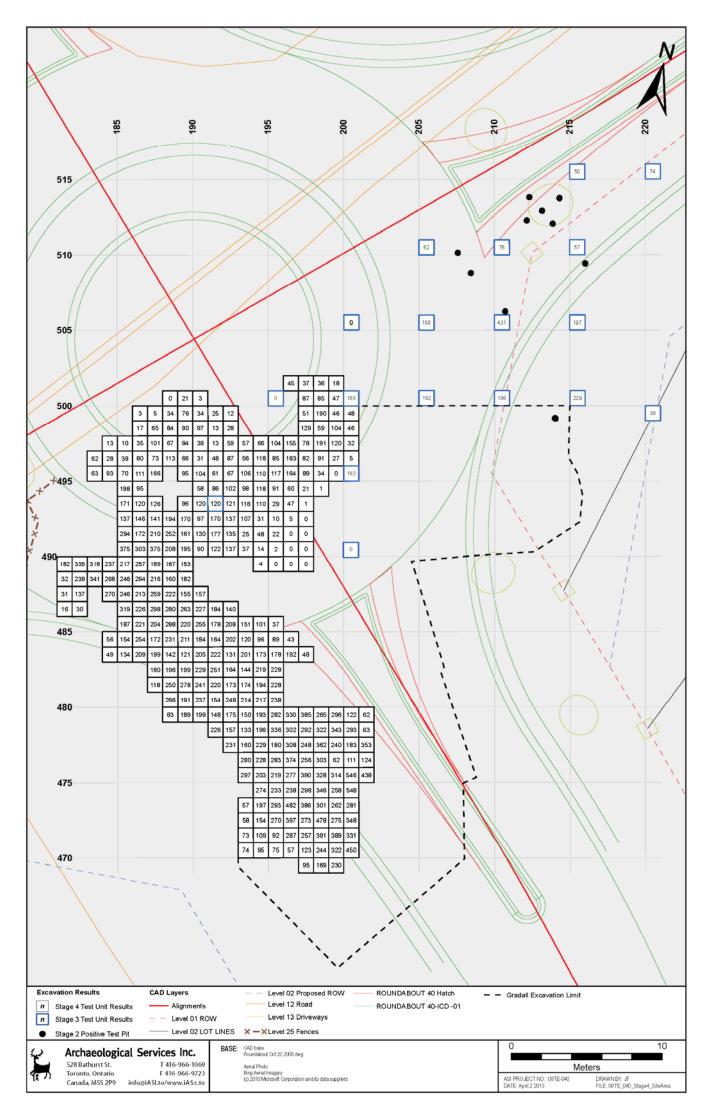


Figure 2: Stage 4 Block Excavation of the Kilmanagh Crossroads (AkGx-48) and Proposed Road Improvement.



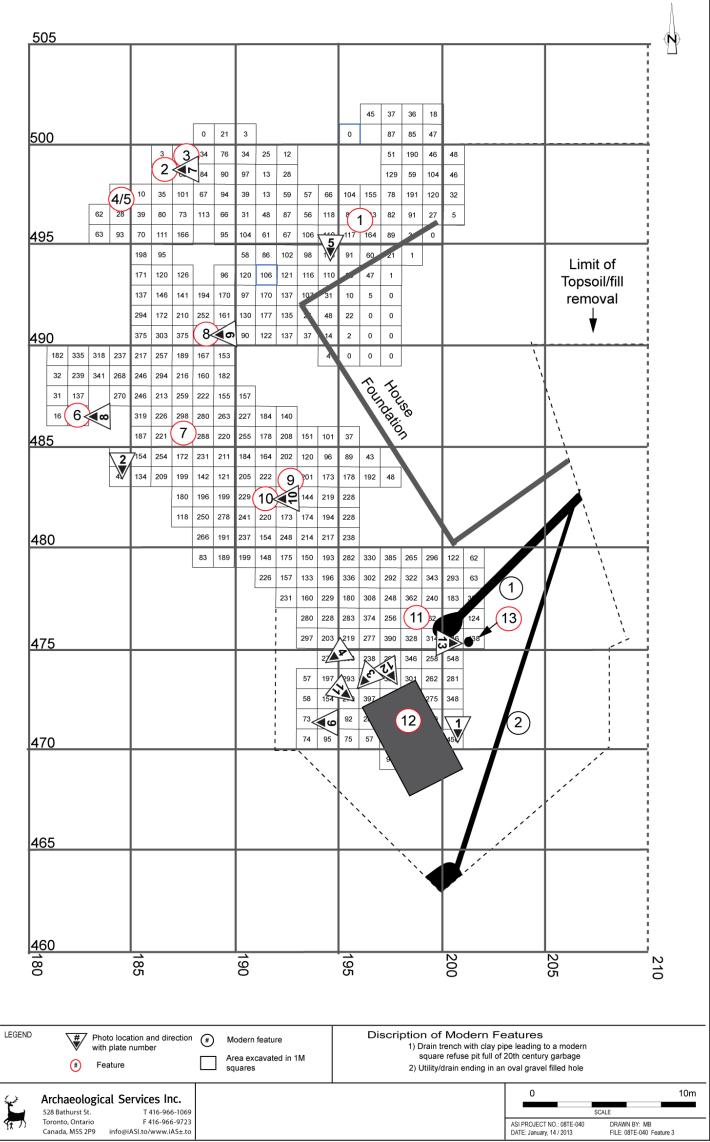


Figure 3: Photo Locations for the Stage 4 Mitigative Excavation of Kilmanagh Crossroads (AkGx-48).



N\E	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201
501									-							45	37	36	18		
500									21	3		x	x	x	х	x	87	85	47		
499						3	5	34	46	34	25	12	x		х	x	51	190	46	48	
498						17	65	84	90	97	13	28	x		x	x	129	59	104	46	
497				13	10	35	101	67	94	39	13	59	57	66	104	155	78	191	120	32	
496			62	28	39	80	73	113	66	31	48	87	56	118	85	183	82	91	27	5	
495			63	93	70	111	166	x	95	104	61	67	106	110	117	164	89	34	0		
494		x	x	x	198	95	x		x	58	86	102	98	118	91	60	21	1		~	
493		x		x	171	120	126	x	96	120	st.3	121	116	110	29	47	1				
492		x	x	x	137	146	141	194	170	137	170	97	107	31	10	5	0				
491	x	x		x	294	172	210	252	161	130	177	135	25	48	22	0	0				
490	х	x	x	x	375	303	375	208	195	90	122	137	37	14	2	0	0		st.3		
489	182	335	318	237	217	257	189	167	153	х	х		x	4	0	0	0				
488	32	293	341	268	246	294	216	160	182	х	x		x								
487	31	137	x	270	246	213	259	222	155	157	x	x	x	x							
486	16	30		x	319	226	298	280	263	227	184	140	x	x							
485		x	x	x	187	221	204	288	220	255	178	208	151	101	37						
484			x	56	154	245	172	231	211	184	164	202	120	96	89	43					
483				49	135	209	199	142	121	205	222	131	201	173	178	192	48				
482							180	196	199	229	251	164	144	219	228	х	x	x	x	x	
481							118	250	278	241	220	173	174	194	228	x	x		x	x	
480									191	237	154	248	214	217	238	X	x	x	X	x	
479									189	199	148	175	150	193	282	330	385	265	296	122	62
478										х	226	157	133	196	336	302	292	322	343	293	63
477											x	231	160	229	180	308	248	362	240	183	124
476									x	x	x	x	280	228	283	374	256	303	62	111	353
475									x	x		x	297	203	219	277	390	328	314	546	438
474										x	x	x	х	274	233	238	298	346	258	548	
473												x	57	197	293	482	386	301	262	281	
472												x	58	154	270	397	273	478	275	348	
471												x	73	109	92	287	257	391	389	331	
470													74	95	75	57	123	244	322	450	
469													x	х	x		95	169	230		
468															x						
467														6.8	x						

Figure 4: Artifact Distribution – Unit Totals.

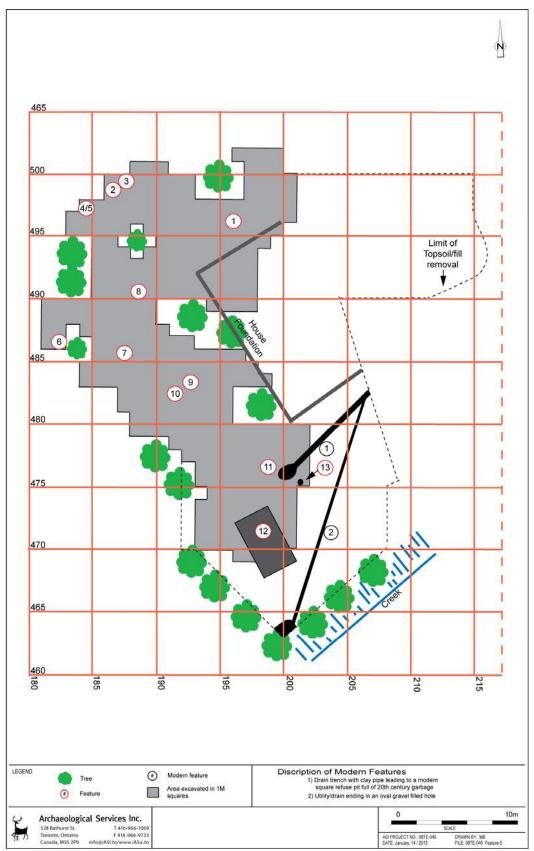


Figure 5: Feature Map.



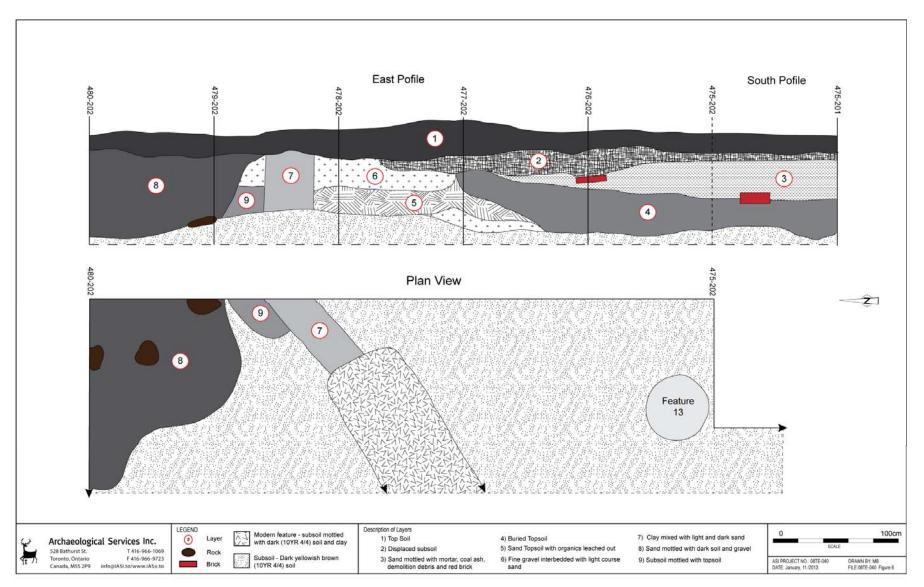


Figure 6: East and South Profile and Plan view of Layer 7,8 and 9, a modern feature and Feature 13.



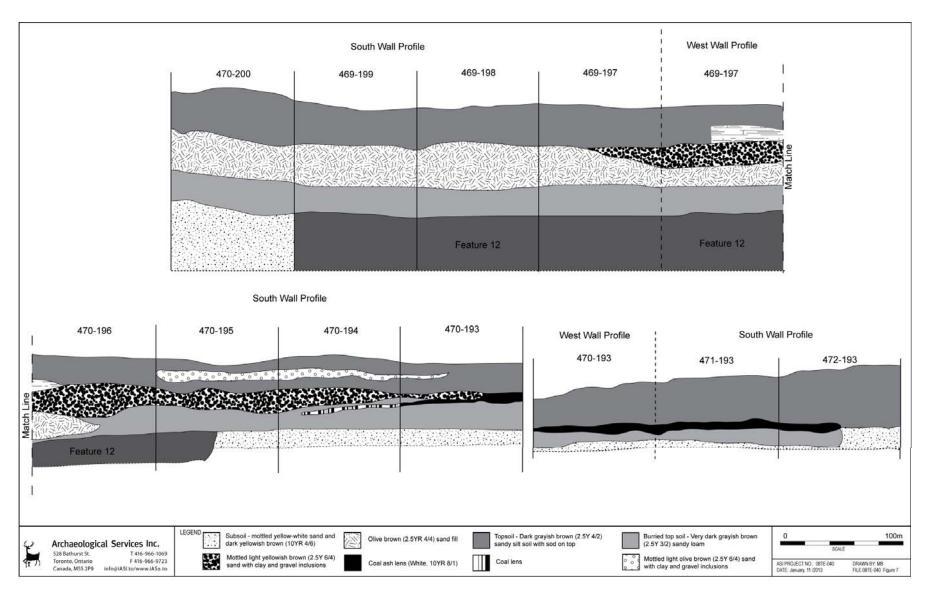


Figure 7: South Wall Profile and the southern portion of the West Wall Profiles.



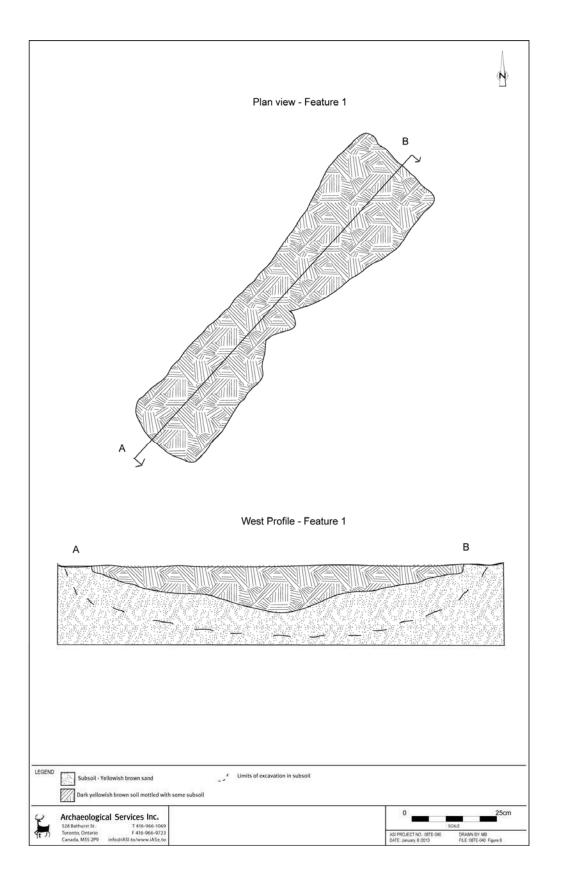


Figure 8: Feature 1 – Refuse Pit.



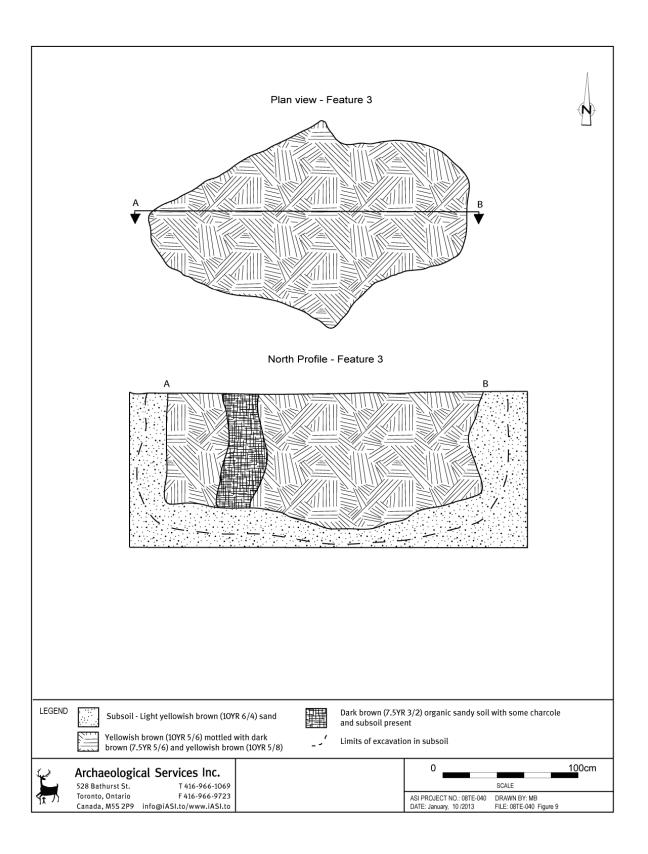


Figure 9: Feature 3 – Large Refuse Pit.



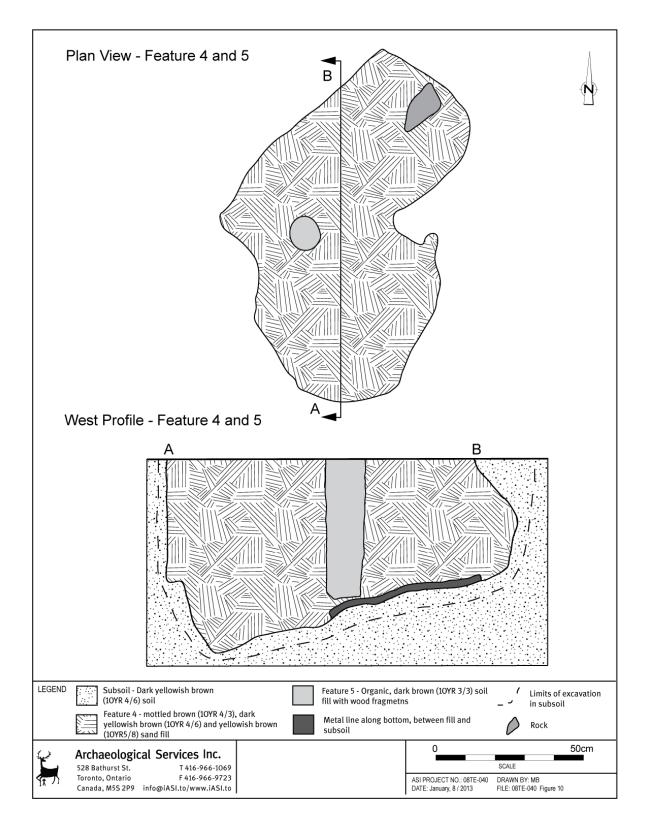
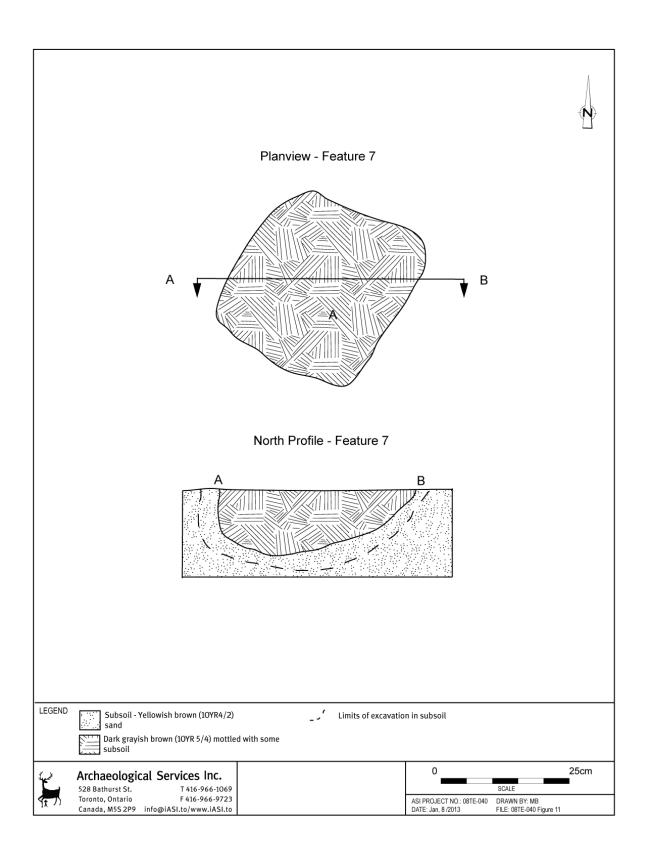


Figure 10: Feature 4 and 5 – Refuse Pit with a Post.







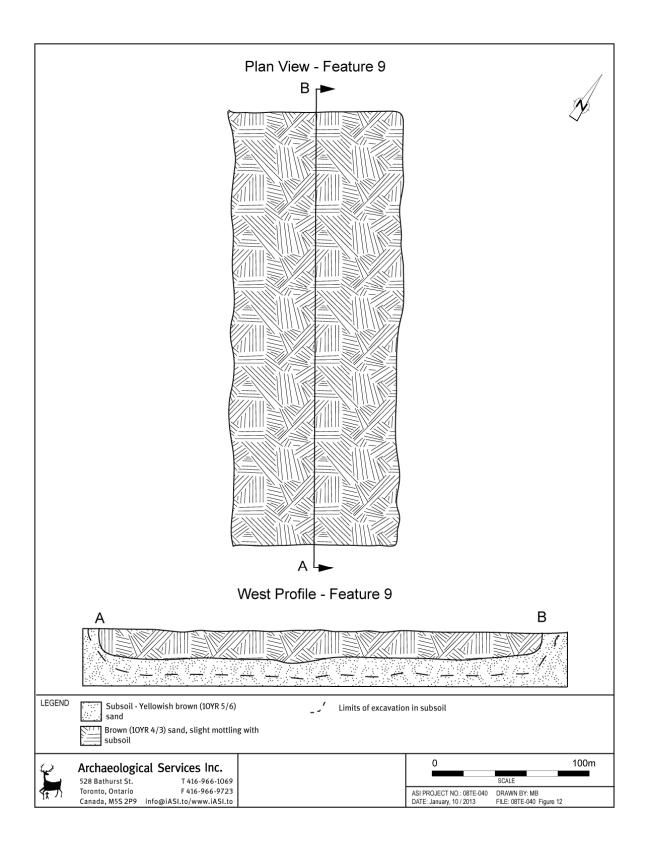


Figure 12: Feature 9 – Refuse Pit.



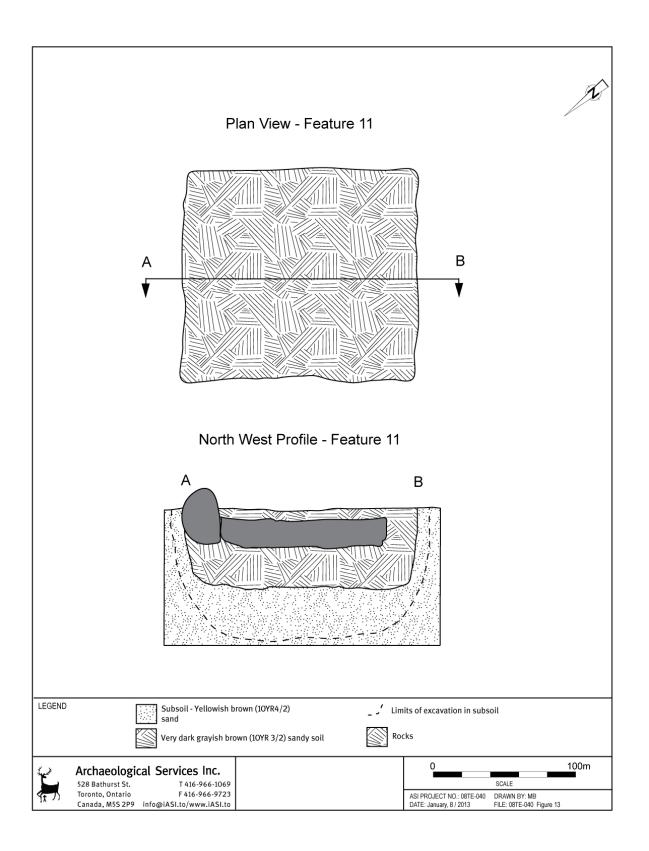


Figure 13: Feature 11 – Stone Footing.



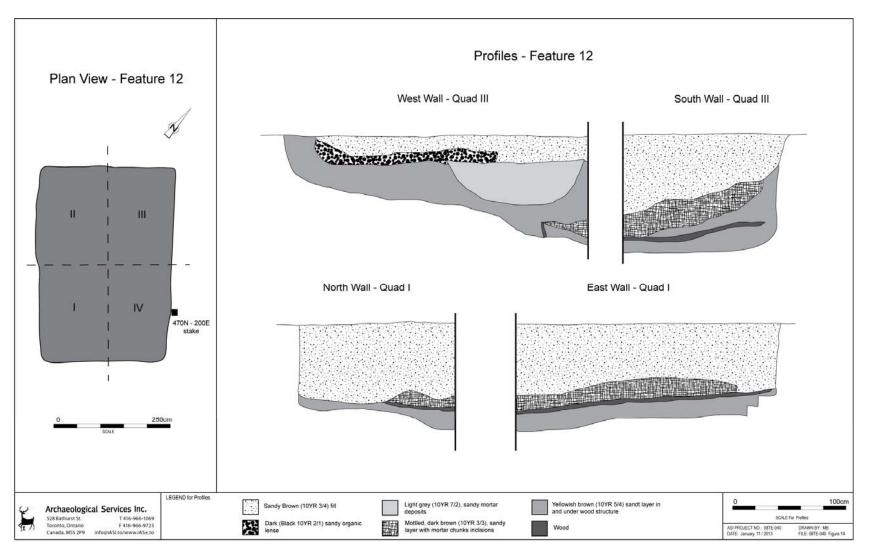


Figure 14: Feature 12 – Root Cellar – Plan View and Profiles.



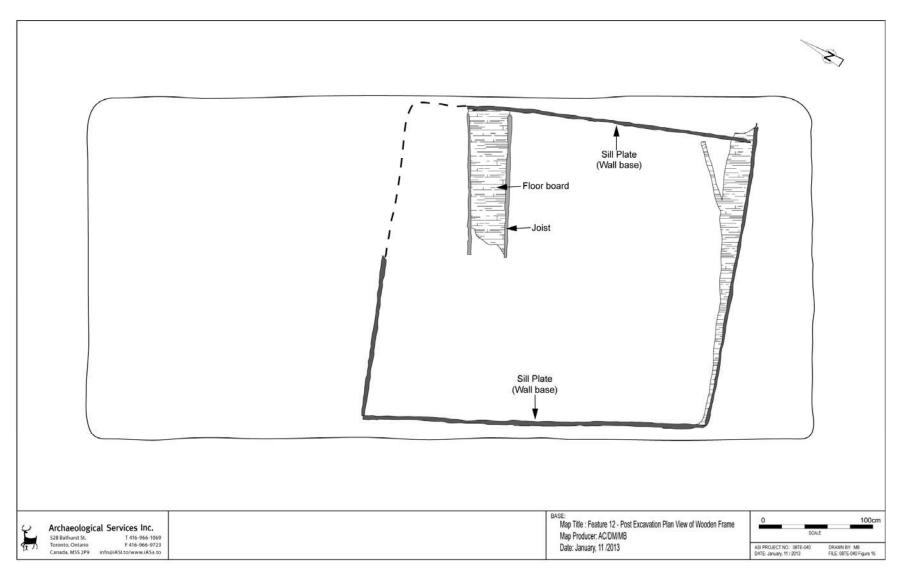


Figure 15: Feature 12 – Post Excavation Plan View of Wooden Frame.



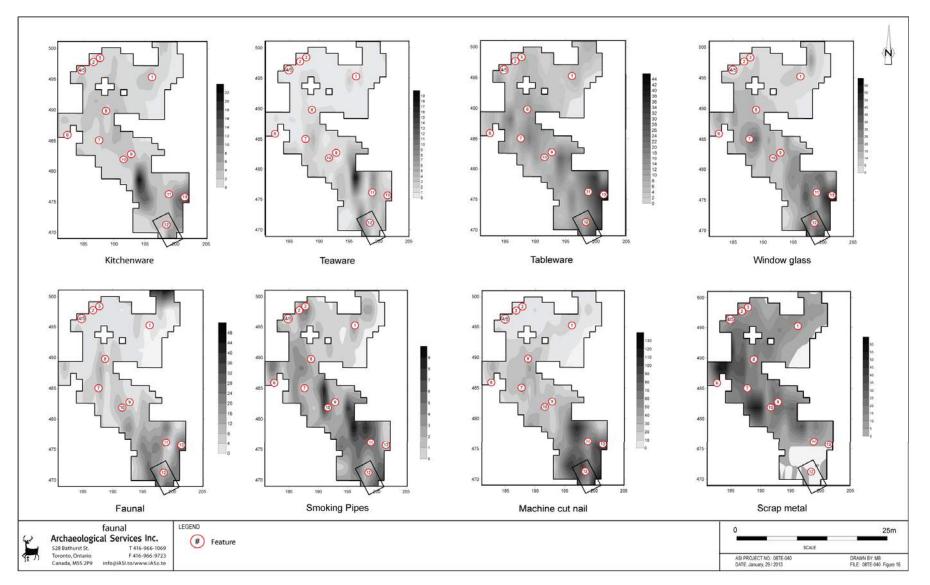


Figure 16: Artifact Distributions by Type.



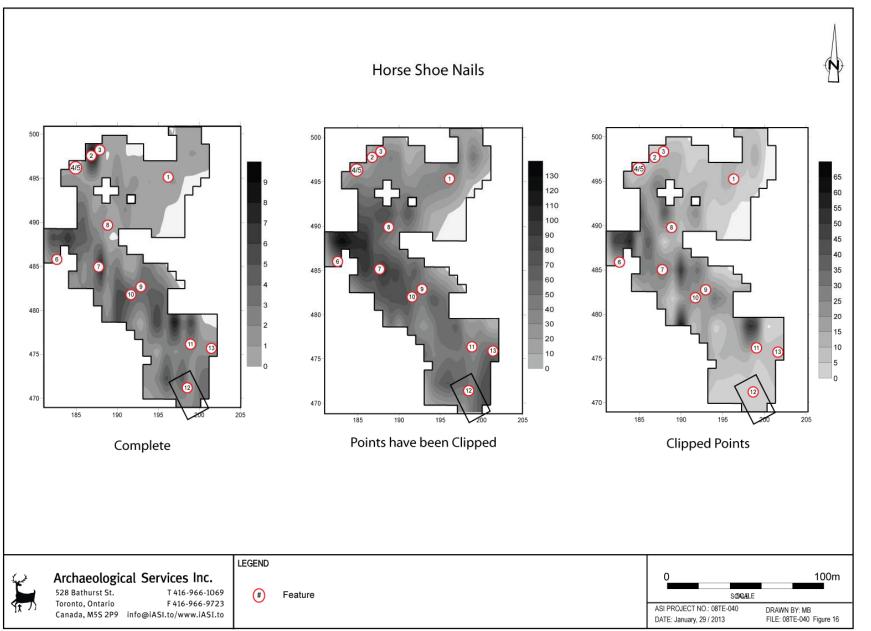


Figure 17: Artifact Distribution – Horse Shoe Nail.



9.0 IMAGES



Plate 1: Typical undisturbed soil profile as seen in unit 483N-184E, looking south.



Plate 2: Example of the buried topsoil present in the southern part of the site. Note the 470N-200E stake.



Plate 3: Looking west over block excavation. Note large tree root extending between archaeologists at centre and right of picture. Slope and ditch along Dixie road are beyond the west edge of excavation.



Plate 4: Test unit excavation, facing southwest. Note the heavy foliage and tree growth to the south of the site.





Plate 5: Looking south over modern stone foundation exposed by block excavation.



Plate 6: Looking west along 193E grid line; four layers visible, including dark soil fill (artificially thickened topsoil), coal ash, buried topsoil and yellow sand subsoil at base of excavation.



Stage 4 Mitigative Excavation of the Kilmanagh Crossroads Site (AkGx-48) Dixie Road and Olde Baseline Road Detail Design, Town of Caledon



Plate 7: West profile of Feature 2.

	T TALLA
KILMANAGH CROSSROADS 08TE-40 AKGx-48	
FEATURE 6	
PLAN	
JULY 31 '09	1×1

Plate 8: Plan view of Feature 6, looking west.





Plate 9: Plan view of Feature 8, looking west.



Plate 10: West Profile of Feature 10.



Plate 11: Plan view of Feature 12, looking south east.



Plate 12: Post excavation plan view of Feature 12, looking south, note the wooden frame.





Plate 13: East profile of Feature 13



Plate 14: Rockingham on course red earthenware and buff earthenware. Large base (Cat#13903) glaze present on the external surface of the base. Center artifact, handle (Cat.#13905)





Plate 15: Examples of bowls from the collection. Top row, left to right: vitrified earthenware with floral decalcomania (Cat# 4016), yellowware with mocha factory slip (Cat# 8574), yellowware with banded factory slip (Cat.# 11902). Bottom row, left to right: blue banded factory slip (Cat.# 8934) and blue stamped floral design (Cat.# 4296).



Plate 16: Examples of Teawares. Top row, left to right: vitrified scalloped saucer with a blue transfer print over a filigree moulded design (Cat.# 10485), teacup with repeated black stamped motif (Cat.#1337). Middle row, left to right: two English bone china teacups - undecorated flared rim (Cat.#5351) and gilt and floral decalcomania band of decoration (Cat.#5623), RWE teacup with painted flora design blue flower, green leaves and brown stem (Cat.#3542). Bottom row, RWE teacups, left to right: the internal and external blue transfer print decoration present on the flared rim (Cat.# 4724), banded painted design with a wide blue band framed with to thin red bands (Cat.#5147).





Plate 17: Example of teacups from a set. Upper left (Cat.#5419) is one cup, three rim sherds on the bottom right are part of a different cup (Cat.#1338). All the sherds have been thermally altered; have a thick glassy glaze and a band of blue floral transfer print decoration. As see on the base sherd, the mark on the bottom of the teacups reads 'Made in Japan'



Plate 18:. Examples of Ironstone teacups with different decoration types. Left column, from top, blue stamped band with a repeated motif (Cat.#7261), soft moulded leaf motif (Cat.#5214), moulded band of 'wheat in the meadow' (Cat.#5284). Middle column, from top, blue sponge (Cat.#5982), single moulded leafy motif (Cat.#13681), repeated green stamped motif (Cat #.2633). Right column, from top, two rim shreds with blue sponge over a wheatware motif (Cat#s.1830 & 7680), thick band of mottle blue in between the gilt bands (Cat.#2453)





Plate 19: Examples of RWE saucers. From the top left, green floral transfer print (Cat.#6913); blue sponge with hand painted boarders (Cat.#14178) and black, repeated stamped design (Cat.# 13802)



Plate 20: Moulded ironstone spout (Cat.#13888) and rim (Cat.#7123) from a coffee or tea pot.





Plate 21: Examples of Tableware. Top row: RWE, straight blue edge ware supper plate (Cat.#2219 & 3592). Middle row: ironstone supper plate with moulded large filigree moulded decoration on the brim (Cat.#14032). Bottom row, ironstone vessels, from left: supper plate with moulded Wheatware motif (Cat.#5981) serving dish with blue flow decoration (Cat.#2096); supper plate with blue sponge over a moulded motif (Cat.#1478).



Plate 22: Kitchenware. Left column: course red earthenware milk pans (top: Cat.#2448; 2050; 4126;). Right column, from top: course red earthenware crock (Cat.#3548); course red earthenware cream pot (Cat.#5091); Ironstone preserve jar (Cat.#5712).





Plate 23: Examples of ceramic makers marks. Starting from the left, small part of a black makers mark (Cat.#9810), large base fragment with black makers mark (Cat.#8541), blue makers mark (Cat.#5147), impressed registration mark (Cat#5484), a black makers mark and an impressed makers mark (Cat.#6373&6711), and a tea cup base with a sheer purple colour (Cat.#5145).



Plate 24: Examples of utensils. In the left column, from top, complete composite meal spoon with impressed floral design on the handle (Cat.# 5272), utensil handle (Cat.# 13247), rusted bone plated handle (Cat.#4486). In the right column, from top, fork with three tines (Cat.# 4485), small end portion of a rectangular bone handle.





Plate 25: Personal artifacts and a dog tag. Left column, from top: stacked leather heel (Cat.#13, 960); Henry Penny's note or sketch book clasp (Cat.# 11284); part of a suspender buckle (Cat.#8157); heart shaped and round tobacco tags (Cat#s. 13878 & 9045). Middle left column, from top: 1859 one cent coin (Cat.#4751); thimble(Cat.#5264); eye glass lens (Cat.#11, 017); cigar case (Cat.#4848). Right middle column, from top: 18?9 one cent coin (Cat.#14157); walking stick point (Cat.#13, 633); floral brooch (Cat.#3157); 1927 Chinguacoosy dog tag (Cat.#3745). Right column, scissors (Cat.#5271).



Plate 26: Smoking pipes. Examples of decorated bowls and makers marks on stems. Top row bowls, from left: red ball clay pipe (Cat.#3357) and white ball clay pipes (Cat#s.8794 & 6838). Middle row, from left: one decorated (Cat.#9301), 'TD' pipe (Cat.#12744) Bottom row, decorated bowls (from left: Cat#s.14053 & 12053). Pipe stems, from top stem: thermally altered glazed bite (Cat.#10632); Davidson pipe (Cat.#10428); W &D Bell (Cat.#4474); Bannerman (Cat.#2202); Henderson (Cat.#2685).





Plate 27: Buttons. Top row, from left: moulded jet button with (Cat.#5279); moulded brass button with gilt covering (Cat.#13954); incomplete shell button (Cat.#8018). Bottom row, from left: moulded jet button with metal omega shank (Cat.#9656); Prosser button (Cat.#5263); brass composite button (Cat.#10902).



Plate 28: Medicine bottles. Top row, from left: Aspirin bottle (Cat.#5940); top bottle 'Sloan's Liniment' bottle (Cat.#2763); bottom bottle 'Buckley's' bottle (Cat.#5943). Bottle finishes on the bottom row, from left: applied patent lip (Cat.#2433); prescription lip with extra beck ring (Cat.#2198); patent lip, machine made (Cat.#3399); patent lip, machine made (Cat#1569).





Plate 29: Keys and tools. Left column, from top: single bit barreled key (Cat.#4548); middle right – clock winding key (Cat.#8032); small single bit barrel key (Cat.#8032); bottom – head for a small specialized hammer (Cat.#7708). Right column, from top left: small mason's hammer (Cat.#14005); drill bit (Cat.#8168); small hand drill (8973); bottom right column – drill bit (Cat.#6510); drill bit (Cat#12968).



Plate 30: Horse shoe and horse strapping related items. Left column, from top: bone handle from a hoof knife (Cat.#13961); bone handle from a horse shoe pick (Cat.#14, 263); two single bar buckles (Cat#s.8644 & 8466); horse harness square (Cat.#8310). Right column, from top: brass petal bell (Cat.#5560); three examples of complete horse shoe nails (Cat#s.4683, 10203 & 5742); four examples of clipped horse shoe nails (Cat.#10406); three examples of clipped points from horse shoe nails (Cat.#10407).





Plate 31: Horse shoes. Left column, from top: Small horse shoe (Cat.#4247); two horse shoe fragments (Cat#s. 7535 & 9796). Right column, from top; horse shoe blank (Cat.#4805), branch of a mud horse shoe (Cat#6150).



Plate 32: Tools. Top row: complete file (Cat.#10173). Second row from top, from left: modified files (Cat#s. 12790; 11705; 11173). Bottom row, from left: part of an axe blade (Cat.#9683); top middle - two examples of truss head rivets (Cat#s.11224 & 9726); right side - tips of moulding plane blades (Cat#s.9245 & 5747); bottom right lathe blade (Cat.#8565).







Plate 33: Lithics. From left: L5, L3, top L2 and bottom L1.

Appendix A: The Kilmanagh Crossroads (AhGx-48) Ceramic Artifact Inventory

Appendix B: The Kilmanagh Crossroads (AhGx-48) Non-ceramic Artifact Inventory