

Highfields School, London Road, Newark,

Archaeological Evaluation Report

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Prepared for Ben Bailey Homes

by

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Summary

To inform a proposed planning application, a trial trench archaeological evaluation was undertaken on land at Highfields School, Newark. The site comprises four enclosed areas of sports or playing fields.

Although the archaeological potential of the site was previously unknown, Newark has a rich and varied history, ranging from the Bronze Age through the Roman and Saxon periods when the riverside settlement expanded. Aerial photographs of the area have revealed cropmarks and earthworks indicating activity on the periphery of the settlement, extending around the proposed development site. The medieval town thrived on the trade of wool and cloth; the river being utilised to transport goods around the country.

Newark was a strategic stronghold during the Civil War; a Royalist stronghold that came under siege repeatedly, finally surrendering when the king was captured in 1647. The military earthwork fortifications are still visible in the area, with Crawfords Sconce, a Parliamentary siege position, lying c.350m southwest of Highfields School. Highfields House was built in the mid 19th century, later converted to use as a school.

Fourteen trenches were excavated to investigate anomalies identified by a preceding geophysical survey. A complex of ditches and occasional pits were revealed to the north and east of the school buildings. Dating evidence indicates small scale activity in the Iron Age and Roman periods associated with an enclosure to the north of the school, and medieval and post-medieval agricultural activity.



Figure 1: Location of the proposed development site at scale 1:25,000. Highfields School is shown in red. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.

1.0 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) was commissioned by Ben Bailey Homes to complete an archaeological evaluation on land at Highfields School, Newark, Nottinghamshire.

This work took place to advise and inform a future planning application for a residential development. Trenches were targeted on anomalies identified in a preceding geophysical survey to investigate the character and survival of any archaeological remains revealed.

2.0 Location and description (Figs. 1 and 2)

Newark-on-Trent is located approximately 19 miles southwest of Lincoln on the southern bank of the River Trent. The proposed site is 1.5 miles southeast of the centre of Newark-on-Trent on the east side of the B6326 London Road which extends from Newark to Balderton to the south; the site is part of Highfields School.

The site comprises of five areas, which were subject to a geophysical survey prior to trial trench evaluation. Area 5 lies immediately adjacent to the school buildings; Area 4 covers the sports field; Area 3 occupies a large "L" shaped field to the north of the school; Area 2 is a large rectangular field to the northeast, and Area 5 a small plot to the rear of properties fronting onto Barnaby Road. Areas 1, 2 & 3 are currently open uncultivated grassland.

The site is approximately centred on NGR SK 81158 52938.

3.0 Geology and topography

The bedrock geology of the area is of the Branscombe Mudstone Formation which is a sedimentary bedrock formed c. 200-217 million years ago in the Triassic period. The local environment of the Triassic was that of hot dry deserts with a low potential for precipitation.

The overlying superficial geology is Balderton Sand and Gravel which formed up to 3 million years ago in the Quaternary Period. The local environment during this period was dominated by rivers, depositing sand and gravel detritus to form river terraces. In these areas alluvial deposits of fine silt and clay developed.

Newark-on-Trent is up to 30m above sea level; the proposed site is approximately 15m OD.

4.0 Planning background

The site is being considered for residential development. The County Archaeologist for Nottinghamshire was consulted on the archaeological implications for such an application, and advised the site lay in an archaeologically significant area but with unknown site specific potential. A scheme of pre-application investigation was recommended, including a geophysical survey of the entire site to identify any potential anomalies, followed by trial trenching targeted on the results of the geophysical survey.

The geophysical survey was completed in August 2014, full report pending at time of writing (Bunn, 2014). Areas 2, 4 & 5 of the survey revealed only irregular anomalies interpreted as modern disturbance; a strong response in Area 5 corresponds to a former track which ran between Highfields House and the stable block. Area 1, the small plot on the northern edge of the site, showed similar responses, although a faint linear feature may indicate a ditch on an approximately northwest-southeast alignment. In Area 3 there were multiple responses indicating a complex of features or enclosures.

The trench plan was designed to investigate magnetic anomalies identified across the site (Fig 2). A total of fourteen 20m long trenches were excavated in an attempt to characterise the archaeological remains and thus inform a forthcoming planning application.

5.0 Archaeological and historical background

Early activity around Newark is inferred from scatters of flint tools that have been recovered, the closest of which is a Bronze Age flint scraper found close to Falston Avenue, less than 400m west of the site (PastScape ref: 324359). A late Bronze Age hoard of 6 spearheads, 3 axeheads and 2 discs were found during construction works for Newark railway in 1877, reportedly recovered on the west side of London Road, less than 350m from the site (PastScape ref: 324266). Iron Age occupation has been identified during archaeological investigations at Balderton nearly 3km south of the site.

There are multiple recorded Roman settlements along the banks of the River Trent; in Newark, occupational evidence has been recovered from the waterfront area, close to the Fosse Way, the major Roman road which linked Lincoln and the east coast to the southwest, and the large Roman towns of Cirencester and Bath (Margary, 1973). While it is likely that activity was focused in this area, Roman coins dating from the 1st – 4th century have been recovered across the modern town (PastScape ref: 324253), and cropmark enclosures thought to be Roman in date have been identified on aerial photographs of the outskirts of Newark, less than 2km to the southeast and southwest of the site (PastScape ref: 324303; 324347).

The settlement at Newark survived the withdrawal of the Roman administration back to the Continent, and evidence of the Saxon settlement has been revealed in the same waterfront and roadside locations as its Roman precursor. The Saxon village was enclosed by a defensive ditch, although there are records of sporadic features and artefacts being identified outside of this area. A large Saxon cemetery on the western periphery of Newark has been excavated in phases, revealing around 400 cremations with associated grave goods. Investigations of this area also identified a possible Neolithic surface, disturbed by funerary activity (PastScape ref: 322220).

Newark is reputedly the site of a late Saxon mint, although the location of this has never been confirmed (PastScape ref: 324361). Coins continued to be struck here into the 12th century.

Newark is listed in the 1086 Domesday Survey as 'Newerche'. The entry includes the villages of Balderton and Farndon, and is listed as a large, rich manor with a mill, a fishery and 10 churches. The manor is valued in 1086 as being worth £34 to the Lord, the Bishop of Lincoln St. Mary (<http://domesdaymap.co.uk/place/>). Newark appears repeatedly in documentary sources throughout the medieval period, with evidence to suggest that many of the modern streets were already in existence in the 12th century and that by 1225-31 the town had extended beyond its defences, with suburbs developing along its approach roads.

Whilst the castle and town defences were described as derelict by 1581 the town itself continued to prosper in the post-medieval period, deriving its wealth from trade in wool, hides, leather, and cloth manufacture. This was helped by the traffic in coal and other commodities along the River Trent and business brought by the growing use of the Great North Road, a route linking London to York and Edinburgh which developed during the medieval period.

During the Civil War, Newark was a Royalist stronghold and was besieged in 1643, 1644 and again in 1645. The town withstood all the sieges laid against it and only surrendered after the King was captured in May 1646. As a result of this prolonged period of conflict the town and its environs developed many siege works and military earthworks. Some still survive as

earthwork features, although at the end of the Civil War the local inhabitants were ordered to assist in the demolition of the fortifications including much of the castle. The closest of the known Civil War features to the site is that of a Parliamentary sconce c. 350m southwest at Shakespeare Street (Crawfords Sconce).

Newark's location at the crossing of the River Trent and the Great North Road ensured its economic growth throughout the later post-medieval period. During the 18th and 19th centuries many older buildings were replaced by new brick structures: new churches, chapels, breweries, malthouses and warehouses were constructed.

Highfields House was built in the mid 19th century as a large private dwelling situated within a private park. The house does not appear on historic mapping predating the 1884 OS map (<http://www.old-maps.co.uk/maps.html>); the site appears to have been undeveloped possibly cultivated land prior to this. The house was occupied by the Ministry of Defence as a local base for the Military Police throughout WWII, and was bought as the new premises for what had previously been "Sheldrakes" School. The school has occupied the site since the late 1940's, with occasional additions and alterations.

6.0 Methodology

The evaluation comprised fourteen trenches each 20m x 2m, positioned in areas 1, 2, 3 & 5 of the geophysical survey. Trenches in Areas 1 & 2 were excavated according to the agreed trenching plan; trenches in Areas 3 & 5 were adjusted to allow for the retention of the school sports fields.

Trenches were initially machine excavated using a smooth wide bucket on a wheeled JCB excavator. They were manually cleaned, and archaeological features excavated by hand. Sections were drawn at a scale of 1:20 or 1:50, and features plotted on trench plans drawn at a scale of 1:50, which were tied into the GPS trench positions. Drawings were supplemented by a digital photographic record, a selection from which is reproduced in Appendix 1. Deposits were recorded on standard PCAS record sheets, and an excavation site diary was also kept. Finds were stored in labelled finds bags prior to their removal to the offices of PCAS for initial processing.

Following fieldwork completion, Finds were processed and dispatched to relevant specialists. Roman and prehistoric pottery was sent to Ian Rowlandson for identification (Appendix 3); Post Roman pottery was submitted to Anne Irving (Appendix 4). Animal bone is identified by Jen Wood (Appendix 5); Small Finds catalogued by Gary Taylor at APS (Appendix 6) and environmental samples were processed by ULAS (Appendix 7). All remaining finds were catalogued in-house (Appendix 8).

The fieldwork was completed between 28th July – 19th August 2014 by P. Chavasse, J. Sleaf, S. Savage, and L. Brocklehurst. Ground conditions were fairly dry; weather throughout remained overcast with periods of sunshine.

7.0 Results

Topsoil was consistent across the site, recorded as mid brownish grey fine sandy silt with moderate small pebble inclusions. Subsoil was also identified in all trenches, an orange-brown sandy silt, again with small pebble inclusions. Natural geology was recorded as orange-brown sands and gravel.

7.1 Trench 1 (Fig 3)

Trench 1 lay in Area 1 where the geophysics indicated low archaeological potential. Three ditches were revealed, one of which has been dated to the 13th-15th century.

Trench 1 was orientated approximately N-S and was excavated to a depth of 0.6m. Three linear features were identified at the south end of the trench, each of which was sealed beneath a sequence of topsoil (100) overlying subsoil (101). They were all cut into the natural substrate (102). Three fragments of post-medieval-modern pottery were recovered from the topsoil.

The largest of the three linears was [103]. This was on an approximate E to W alignment and was 2.1m wide and 0.74m deep. The feature had steep sides, which were irregularly stepped into a narrow concave base. Within this feature four deposits were recorded; two of these were slumpage on the northern and southern edges of the feature, whilst the other two were silting deposits, developing in the centre. No finds were recovered.

A second linear feature [104] was located a short distance to the south of [103]. This was also on an E to W alignment. It was 1.1m wide and 0.5m deep, with very straight steep edges and a flat base. Three deposits were recorded within this feature; two of these were slumpage on the edges, whilst the upper fill comprised the main silting within the feature. The main deposit, (112), contained a single sherd of 13th-15th century pottery.

The third ditch excavated in Trench 1 [105] was located immediately to the south of [104] and was also on an E to W alignment. It was 1m wide and 0.3m deep, with steep edges and a narrow concave base. Only one deposit (113) was recorded within this feature. This was heavily mixed sandy silt. No finds were recovered.

7.2 Trench 2 (Fig 4)

Trench 2 lay in Area 1 of the geophysics, positioned to investigate undefined anomalies that potentially indicated the remains of a modern track. Four linear features were revealed in this trench, one of which contained a sherd of Iron Age pottery.

The trench was orientated on an approximately E to W alignment and was excavated to a depth of 0.8m. Four linear features were exposed, sealed beneath topsoil (200), and cut into the subsoil, (201), which overlay the natural substrate (202). Residual 19th century pottery and fragments of post-medieval clay tobacco pipe were recovered from the topsoil surrounding this trench.

The topsoil contained two fragments of 18th -19th century clay pipe, 2 sherds of post-medieval pottery and 1 sherd of Iron Age pottery. Metal finds included a decorated copper button dating from the 17th-18th century, two coins, one a William III farthing the other an 1873 Queen Victoria penny, and two fragments of rolled lead which are identified as line snickers used in fishing. A lead ball identified as a weight was also recovered, which in conjunction with the coins may indicate trade in the vicinity in the post-medieval period.

Linear features [203] and [206] were located towards the centre of Trench 2 and were orientated approximately NE-SW. [206] had cut [203] and was likely a re-cutting of the latter. Feature [203] was 2.1m wide and 1.2m deep, It contained two deposits; these comprised a mixed sand silt, (204), which produced a single sherd of Iron Age pottery, and gravel-rich silt, (205), from which no finds were recovered.

Ditch [206] was 1.8m wide and 1m deep, and had a profile similar to that of [203] - steep edges and a narrow, flat base; with its eastern edge cutting through [203]. This feature contained three deposits: a mixed sand silt basal fill, (207), a bulk silt deposit, (208) and a shallow upper deposit, (211). No finds were recovered from this feature.

A third linear, [209], (potentially the same as [307] in Trench 3) was located in the very north eastern corner of the trench, with only one edge revealed in the excavation. It was on an approximate NW-SE alignment; 1m+ wide and 0.7m deep with a steep edge. This feature contained deposit, (210), devoid of finds.

The final feature excavated in this trench was a fourth ditch, [212], located in the very north western corner. As with [209], this was only partially exposed, however an NE-SW alignment was extrapolated from the short length exposed. Ditch [212] was more than 2.5m wide and was 1.5m deep; the east edge was steep but stepped and ran into a narrow concave base. This feature contained a single sandy silt deposit. No finds were recovered.

7.3 Trench 3 (Fig 5)

Trench 3 lay on the north side of Area 1, positioned to investigate a potential ditch. Two pits and a ditch corresponding with the geophysical anomaly were revealed; the ditch could not be dated.

Trench 3 was orientated approximately NW-SE and was excavated to a depth of 0.76m. One linear, potentially the same as [209] in Trench 2 was exposed, as well as two intercutting pits. The features were sealed beneath topsoil, (300), and were cut into the subsoil, (301), which overlay the natural substrate (302).

The topsoil contained two fragments of lead, 4 fragments of 18th-19th century clay pipe and 2 sherds of mid-late 1st-2nd century Roman pottery. A silver half groat dating from between 1526-1544, issued during the reign of Henry VIII was also recovered from the topsoil around this trench.

The two pits were similar in shape; both broadly oval in plan with steep sides and a concave base. The south eastern edge of pit [305] had been truncated by the later pit [303]. [305] was 0.9m in diameter and 0.54m deep; [303] 1.04m in diameter and 0.44m deep. Both pits contained single deposits and were fairly similar in composition, although the fill of [303], context (304), was darker than its counterpart.

The fill of pit [303], (304), contained 1 fragment of worked flint identified as possibly Neolithic and three sherds of a mid-late Iron Age quartz-gritted jar. An environmental sample taken from this pit contained low quantities of charred grain identified as spelt/emmer wheat, as well as uncultivated species including grasses, Goosefoot and Ivy-leaved Speedwell - a similar assemblage of plant remains as found in a sample taken from ditch [803]. The fill of [305], (306), contained fragments of animal bone and one small sherd of 12-13th century pottery.

The stratigraphic relationship showing [305] pre-dating [303] would suggest the pottery in at least one of these pits was possibly intrusive. The environmental evidence and dating from [303] corresponds with the evidence or securely dated ditch [803], which supports the supposition that the pottery in [305] is probably intrusive.

The final feature excavated in Trench 3 was a ditch orientated approximately E-W. On site it was observed that this was probably the same ditch as [209] in Trench 2. It produced no finds.

7.4 Trench 4 (Fig 6)

Trench 4 lay in Area 1, positioned across at least two linear anomalies. Two ditches were revealed; a single sherd of Roman pottery was recovered from the westernmost ditch.

Trench 4 was orientated approximately E-W and was excavated to a depth of 0.8m. Two linears, [403] and [405], were identified and investigated. Both were sealed by topsoil, (400), and cut through the subsoil, (401), that overlay the natural substrate.

Ditch [403] traversed the centre of the trench and was aligned approximately N-S. It was 1.9m wide and 0.9m deep and contained a single sandy silt deposit, (404), within which was a single sherd of mid-late 1st-2nd century Roman pottery. It had steep, even edges and a narrow concave base, presenting a broadly V-shaped profile.

A second ditch [405] was located in the north eastern corner of the trench, on an approximately NW-SE alignment. It was 0.45m wide and 0.8m deep and contained a single sandy silt deposit, (406); no finds were recovered.

7.5 Trench 5 (Fig 7)

Trench 5 lay in towards the centre of Area 1, positioned over the southern side of a possible enclosure identified by geophysics. Two ditches, one containing a small collection of 1st century Roman pottery, were revealed.

Trench 5 was orientated approximately N-S and was excavated to a depth of 0.8m. Two linear features, [503] and [505], were identified. These were sealed by topsoil, (500), and cut into the subsoil, (501), that overlay the natural substrate (502).

Linear feature [503] was located near the centre of the trench and was orientated E-W. It was 1.9m wide and 1.10m deep, with steep, even sides and a narrow concave base. It contained a single sandy silt deposit, devoid of finds.

The second feature, located towards the northern end of the trench was a more substantial parallel linear [505]. It was 3.46m wide and 1.08m deep. Two deposits were identified within this feature, a primary fill, (506) and an upper fill, (507). Environmental sampling of the primary fill identified charred grains of spelt/emmer wheat, a wheat species commonly cultivated in the Roman period, and various weed species. Fill (507) contained 13 sherds of Roman pottery, with both handmade and wheel thrown forms identified, and dated to the late 1st century. It is thought that it may be the same feature as [610] recorded in Trench 6.

7.6 Trench 6 (Fig. 8)

Trench 6 lay east of Trench 5 in Area 1 and was situated in an area that was suspected to be largely negative, based on geophysical survey results. A sequence of ditches was exposed, each on a general NW-SE alignment.

Trench 6 was orientated approximately NNW-SSE and was excavated to a depth of 0.95m. Five linear features, [603], [606], [608], [610] and [612] were identified and excavated. These were sealed by topsoil, (600), and were cut into the subsoil, (601), that overlay the natural substrate (602). The topsoil contained two sherds of 17th-18th century pottery and a fragment of clay tobacco pipe.

Feature [606] was located at the very northern end of Trench 6, orientated NW-SE. It was 1.25m wide and 0.55m deep, with a single gravelly deposit, (607), within. This contained two sherds of a 1st-2nd century Roman jar.

Feature [603] was also orientated on a NW-SE. It was 0.6m wide and 0.3m deep, filled by a single silty sand (604) that contained 1 sherd of 17th-19th century Nottinghamshire Stoneware pottery, and 1 sherd of Iron Age pottery. The Iron Age sherd was heavily abraded and therefore possibly intrusive.

Feature [608] was situated towards the centre of Trench 6 to the south of [603]; orientated on a WNW-ESE. It was 1.125m wide and 0.5m deep, and contained a single fill, (609), devoid of finds.

Adjacent feature [610] was 2m wide and 1.15m deep, and potentially the same ditch as [505] recorded in Trench 5. This feature had been cut on its southern edge by another linear [612]. No finds were recovered from its fill (611).

[612] was the final such feature identified in Trench 6. It partially cut linear [610] to the north and was possibly a re-cutting of this feature, or alternatively a later ditch altogether. It was

1.7m wide and 1.1m deep. As with the other features in this trench, it contained a single fill, (613) devoid of finds.

7.7 Trench 7 (Fig. 9)

Trench 7 was in Area 2 of the geophysics, where a poorly defined linear anomaly had been identified. A single large ditch was exposed, which was not dated.

Trench 7 was orientated approximately NE-SW and was excavated to a depth of 0.65m. One linear feature, [703], was exposed. This was defined beneath the topsoil, (700), and cut through the subsoil, (701), that overlay the natural substrate (702).

The ditch, [703], was at the very SE end of the trench and was orientated E-W. It was 1.4m wide and 0.6m deep. It contained only one fill, (704), of fine sandy silt, which incorporated no finds.

7.8 Trench 8 (Fig. 10)

Trench 8 was positioned in the northwest corner of Area 3. Irregular geophysical anomalies here were interpreted as modern ferrous material in the top and subsoils. The trench revealed two ditches, one of which contained 4th century Roman pottery.

Trench 8 was orientated approximately NNE-SSW and was excavated to a depth of 0.95m. Two linear features, [802] and [804], were identified at either end. These were located beneath the topsoil, (800), and cut into the subsoil, (801), overlying the natural substrate (806). Clay tobacco pipe and a single sherd of Roman greyware pottery were recovered from the topsoil.

Ditch [802] lay towards the north end of the trench on an approximately NE-W alignment. It was 2.50m wide and 0.9m deep, and contained a single fine sandy silt fill (803), from which 11 sherds of Roman pottery was recovered. This material was identified as 4th century greyware in a variety of forms including two bowls, and a single sherd of a shell gritted ware. A single fragment of 16th-18th century CBM was also recovered, however this is considered intrusive.

Environmental assessment of a sample from fill context (803) identified rich plant remains: charred grains included weed species, Goosefoot and Ivy-leaved Speedwell; Goosefoot is a plant that grows in damp, hydrogen rich conditions, suggesting occasionally water-logged conditions in the ditch. Speedwell is a weed which commonly grows on cultivated ground being rested over winter. Cultivated grains included spelt/emmer wheat, and a concentration of Glume wheat. Wheat processing in the Roman period involved initial preparation for long-term storage, with a secondary stage of processing as small quantities of the grains were removed from storage for use, with the residue commonly disposed of on a fire. The parts of the grain recovered from this sample indicate this second stage of processing was occurring on or close to the site.

The charring of grain in significant quantities would suggest the presence of a hearth in the vicinity- it is unlikely the ash would be removed to any great distance from a hearth. With the evidence of the second stage of processing in addition to the charred remains and the collection of domestic Roman pottery recovered from this feature, it is likely there is a small occupation site in the vicinity.

The second ditch [804] lay in the southern half of Trench 8, also on an E-W alignment. This was smaller, measuring 1.6m in diameter and up to 0.44m deep. It contained a single fill of sandy silt (805) but was void of any finds.

7.9 Trench 9 (Fig. 11)

The position of Trench 9 was adjusted so it lay to the east of, and parallel to, Trench 8 in Area 3. Three ditches were exposed, one containing Roman pottery, and a large post-medieval pit.

Trench 9 was orientated approximately NNE-SSW and was excavated to a depth of 1.1m. Three linear features, [903], [907] and [909], as well as a pit, [905], were exposed. These were beneath the topsoil, (900), and cut into the subsoil, (901), overlying the natural substrate (902).

Ditch [909] lay at the southern end of Trench 9, on an approximately E-W alignment. This was 1.70m wide and 0.80m deep. It contained a fine sandy silt, devoid of finds. This feature may be the same as ditch [804] in Trench 8 to the west.

Running along the west side of the trench was a partially exposed ditch [907]. A 15m stretch of of this ditch was exposed; width 0.80m+ and depth 0.70m. A single sandy silt fill with frequent small pebble inclusions was recorded, but there no finds were recovered from the intervention.

Ditch [907] was cut by a third ditch [903], which lay on an E-W alignment. This was 2.60m wide and 0.90m deep. A single rim sherd of a Roman greyware jar was recovered from the sandy silt fill (904), suggesting an earlier date for ditch [907].

The relationship between ditch [903] and the subsoil (901) was unclear. Above the ditch fill the horizon was darker than the surrounding subsoil, however there was no clear cut through the subsoil and the change in the subsoil may have been due to bioturbation or leeching.

A single pit was exposed at the north end of Trench 9, clearly cut from directly beneath the topsoil through the subsoil. This was only partially exposed, but appeared to be of oval plan, measuring 1.2m. The sides of this pit were almost vertical, however the base was undetermined as it exceeded 1.20m in depth and was considered unsafe to excavate further. It was filled with an orange sand interspersed with lenses of silty 'garden soil'. No dating was recovered, but due to its stratigraphic relationship with the topsoil it was considered to be later post-medieval/modern.

The remaining five trenches, 10 – 14, were all devoid of any archaeological remains. Residual artefacts were recovered from the topsoil in some areas, as well as pottery and clay tobacco pipe fragments that date from the 18th-20th century.

8.0 Discussion and conclusion

Archaeological features revealed by this scheme of trenching were concentrated in Areas 1, 2 & 3 to the north and east of the Highfields School buildings.

The geophysical survey results identified Area 1 as having the highest potential for archaeological remains, with a complex of linear anomalies suggesting a possible enclosure and associated features. The results of the survey in Area 5 were indicative of only modern ferrous materials and disturbance associated with modern activity on the sports field; the strong response in Area 4 corresponded with an early modern track between the former house and stables, therefore trenching was not considered necessary. Trenching of Area 5 was somewhat limited by the need to preserve the sports field for the imminent start of the school year, however the three trenches excavated in this area to the west of the school were negative of archaeological remains.

Only a small proportion of the features exposed yielded dateable artefacts. Where features are dated by a single artefact, such dating is assigned tentatively. Three sherds of a

decorated Iron Age jar were recovered from pit [303], which cut pit [305], which contained two sherds of medieval pottery; the pottery in either feature may be intrusive. Likewise, pottery recovered from ditch [603] is identified as Iron Age and 17th-19th century Post-medieval. Either or both of these fragments may be intrusive. The single fragment of 16th-18th century CBM in ditch 802 is considered intrusive due to the concentration of Roman pottery found in this same feature.

Securely dated features include large ditches in Trenches 8 & 9. The profiles, dimensions and orientation of these suggests this is a continuation of the same feature, supported by the dating evidence; sections in both trenches yielded Roman pottery, with the larger group from Trench 8 being dated to the 4th century.

The final feature from which a sufficient number of dateable artefacts were recovered was ditch [506] in Area 1. Twelve sherds of early Roman pottery were found during the excavation of this. Small amounts of Roman pottery were found either in features or the topsoil of all but one of the trenches in Area 1, where the geophysics indicated a possible enclosure or complex of associated ditches. It is considered likely that the ditches located in Trenches 3, 4 & 6 all correspond to the geophysical anomalies, with those found in Trenches 2 & 6 confirming the survival of archaeological remains in the surrounding area and corresponding to the poorly defined magnetic variation seen in the survey results. Beyond Area 1 and the pottery found in secure contexts in Trenches 8 & 9, no further Roman pottery was recovered, even as residual artefacts in the topsoil. This indicates the Roman activity was focused in the area of the identified features.

Environmental assessment of samples taken from three trenches, Trenches 3, 5 & 8, from features which contained Roman pottery identified a range of species. Uncharred fragments of elder, clover and sunspurge found in all three samples are likely to be modern intrusions, however charred remains of other species were also identified. Weed species were found in all: goosefoot and ivy-leaf spurge, which may have been growing on cultivated ground that was left fallow over winter and became slightly water-logged in the winter conditions. Cultivated remains included three species of wheat: spelt, emmer and triticum, all of which were commonly grown in the Roman period. The parts of the wheat crop found indicates they had been stored and were being processed for consumption, the residue resulting from this processing being swept into a fire before being cleared out. The processing and the presence of a fire indicate occupation in the vicinity. The concentration of these charred remains were found in an east-west ditch in Trench 8, slightly removed from the small enclosure seen in Area 1.

Three sherds of medieval pottery were recovered during this scheme. A single sherd of 13th-15th century Nottingham glazed ware was recovered from one of a series of ditches on the same alignment at the south end of Trench 1. The relationship between these features is unknown, and only speculative interpretations are possible at this stage. Two fragments of a 12th-13th century handmade vessel were recovered from pit [305], however as discussed above this material may be intrusive.

The scatter of Post-medieval pottery was concentrated around Area 5 where it was recovered from the topsoil. This material is considered the result of post-medieval farming in the area. Pottery around Trench 6 in Area 1 is of a slightly earlier date and somewhat isolated, perhaps suggesting some minor activity in the vicinity, although again the presence of this material may be due to post-medieval farming.

The available evidence indicates a Roman enclosure towards the centre of Area 1, north of the school, with associated activity in the vicinity and a large ditch extending to the southeast. Activity is small scale, but available dating would suggest the site was occupied from the late Iron Age through to the 4th century AD. The purpose and character of this site is not yet fully determined; the revealed features in this area are interpreted as an enclosure,

however this enclosure probably lies on the periphery of a small low-status occupation site, perhaps a farmstead or similar which lies largely outside of the areas investigated.

There is little evidence of activity on the site in the medieval period; the small amount of medieval pottery recovered may indicate the site was ploughed and enriched with midden waste imported from elsewhere. Residual artefacts dating from the 16th-19th century recovered from the topsoil in Area 1 may be evidence of post-medieval trade; the site lies on the periphery of post-medieval Newark, but in an easily accessible location. For this reason these items may also be chance losses incurred by people travelling through the area, with artefacts being incorporated into the ploughsoil as the area was enclosed and more intensively cultivated for agricultural purposes prior to the construction of Highfields House in the mid 19th century.

9.0 Effectiveness of methodology

Intrusive evaluation was an appropriate method for gathering further information about the sites archaeological potential; investigating the results of the geophysical survey and the character and survival of the identified archaeological remains. The evidence gathered during this scheme of works indicates archaeological activity is concentrated to the north and east of the school, where a small Iron Age-Roman site has been revealed, and demonstrating the area was utilised for agricultural purposes in the medieval and post-medieval periods before Highfields House was built in the 19th century. The body of data produced by this evaluation is considered sufficient to inform the planning and development process.

10.0 Project archive

The site records, currently in the custody of PCAS, will be deposited with a printed copy of this report at Newark and Sherwood Museums. It may be consulted by citing the global accession number, NEKMS 2014.23.

11.0 Acknowledgements

Pre-Construct Archaeological Services would like to thank Ben Bailey Homes for this commission and for their co-operation during the groundworks.

12.0 References

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<http://domesdaymap.co.uk/place/SK7954/newark-on-trent/>

<http://www.old-maps.co.uk/maps.html>

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Figure 2: Trench Plan for Highfields School, overlain on geophysical survey results (Bunn, 2014)

— = 20m x 2m trench

0 100m

Scale 1:1250

Figure 3: Trench 1 Plan (1:100) and Section (1:50)

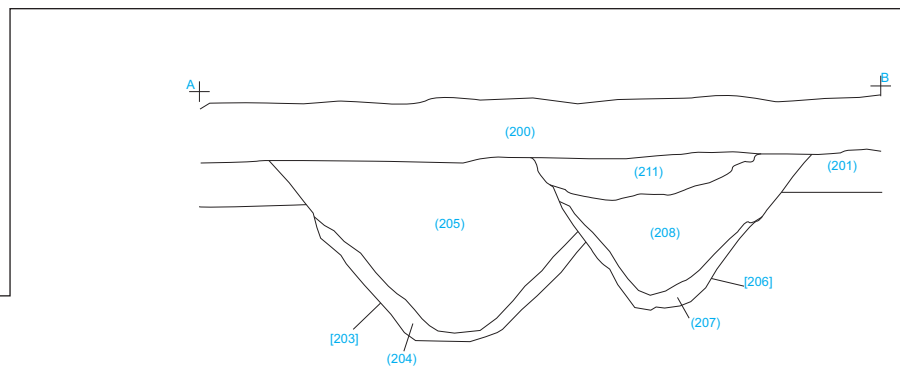
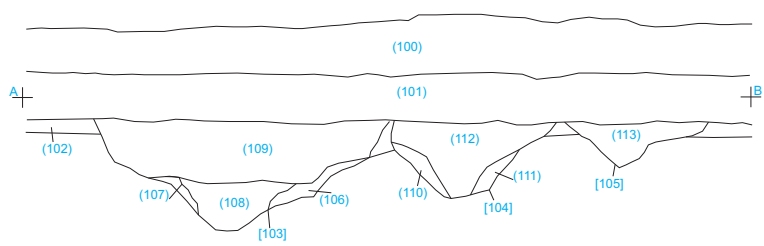
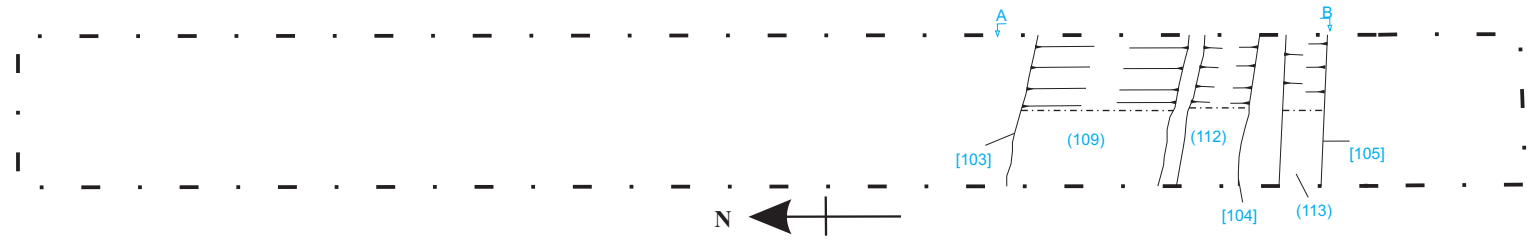
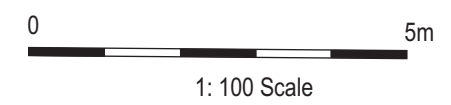
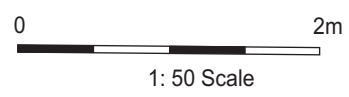
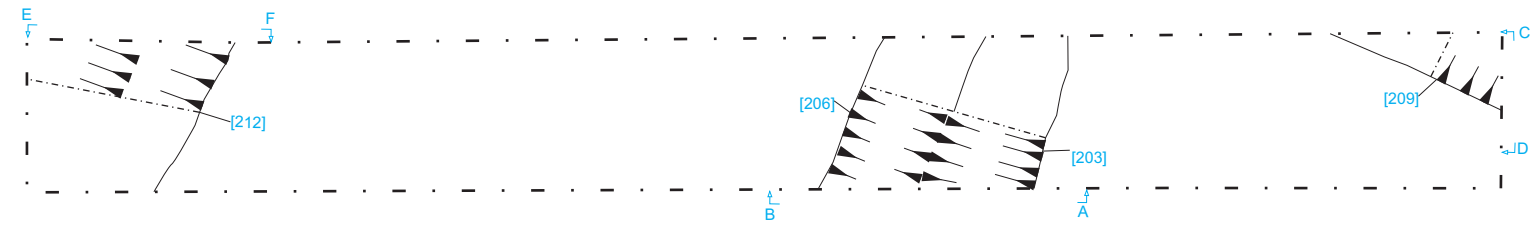
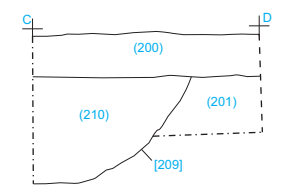
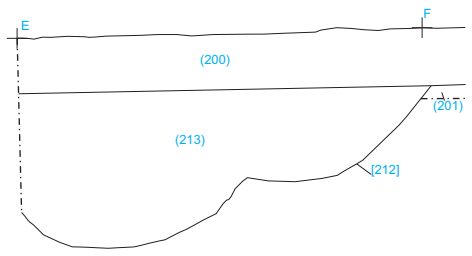


Figure 4: Trench 2 Plan (1:100) and Sections (1:50)



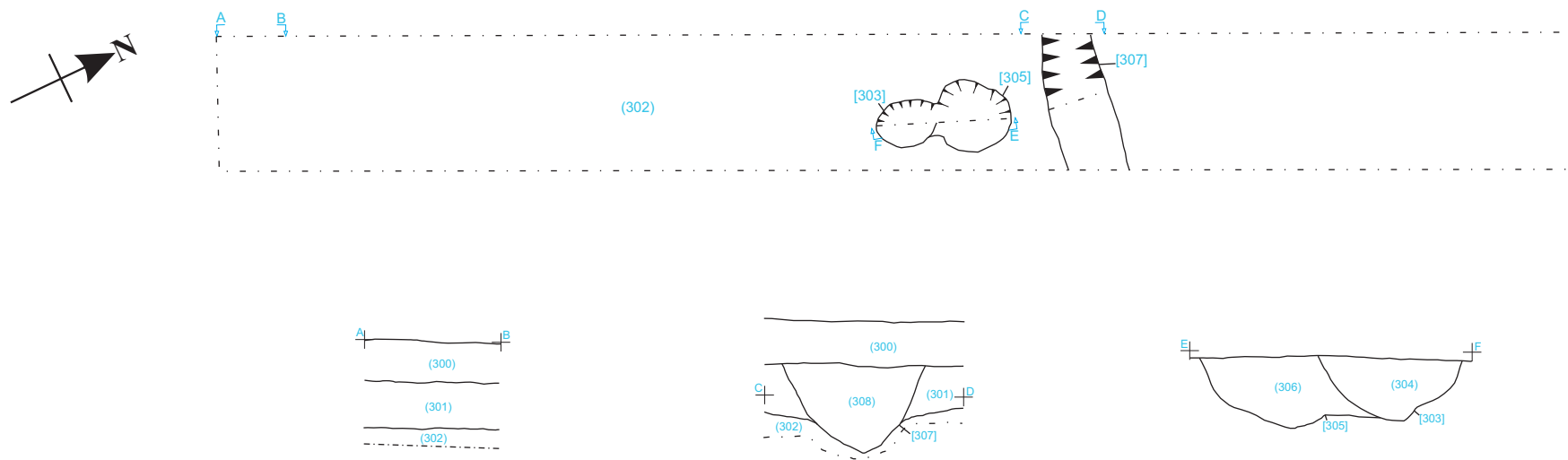
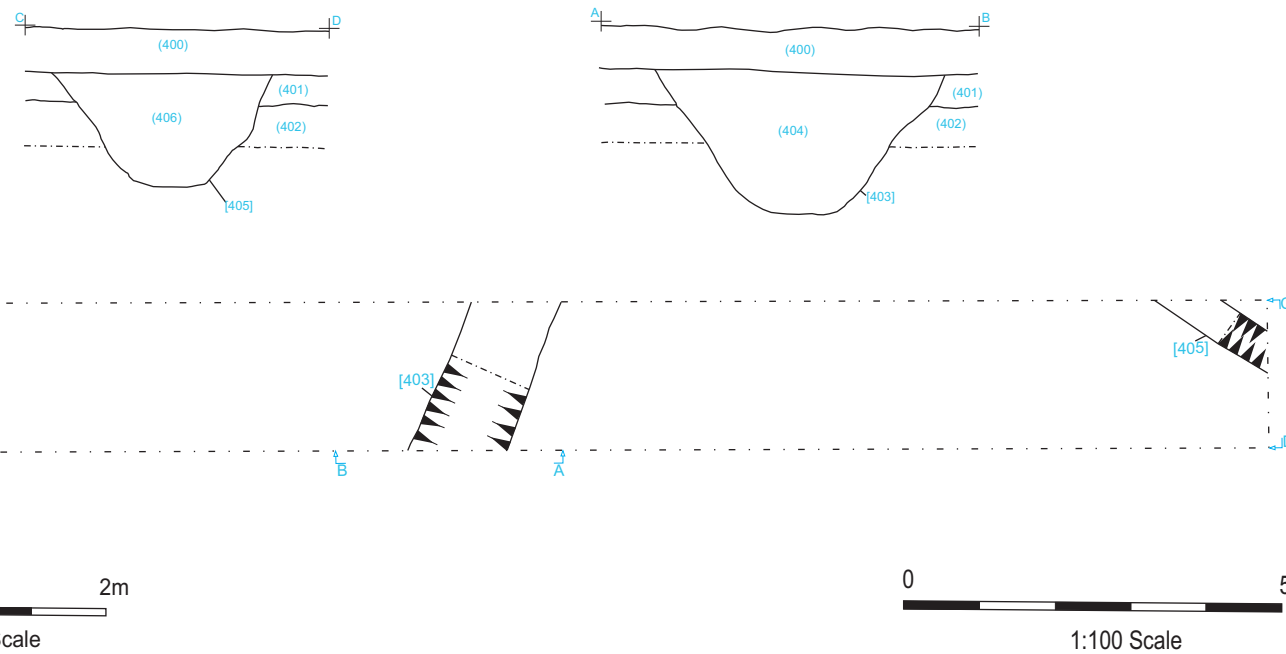


Figure 5: Trench 3 plan (1:100) and Sections (1:50)

Figure 6: Trench 4 Plan (1:100) and Sections (1:50)



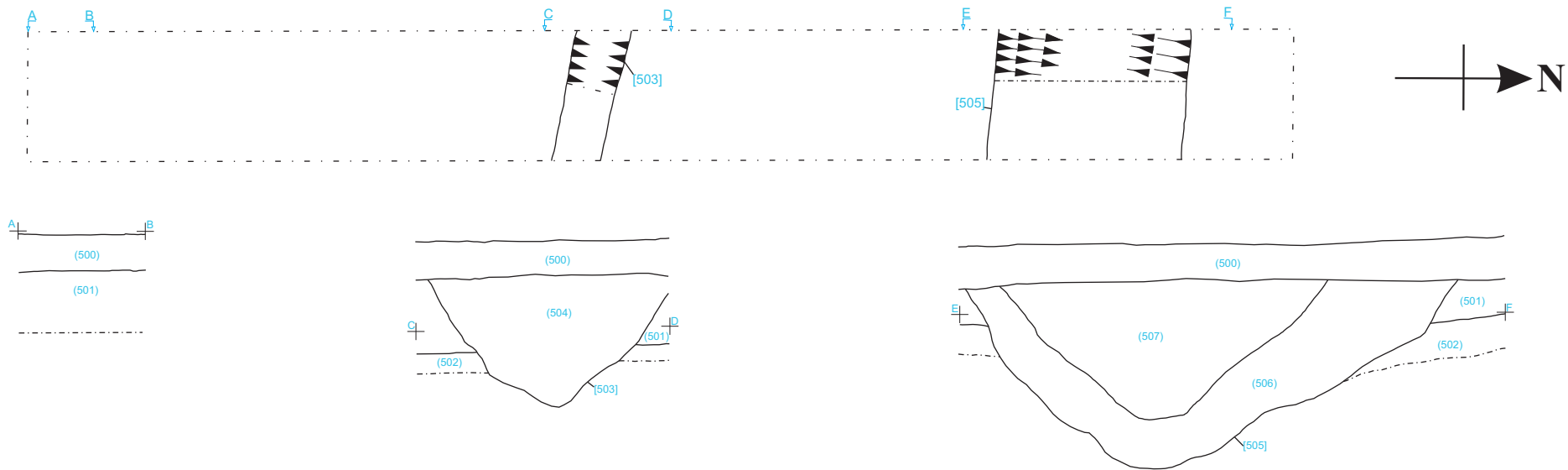


Figure 7: Trench 5 Plan (1:100) and Sections (1:50)

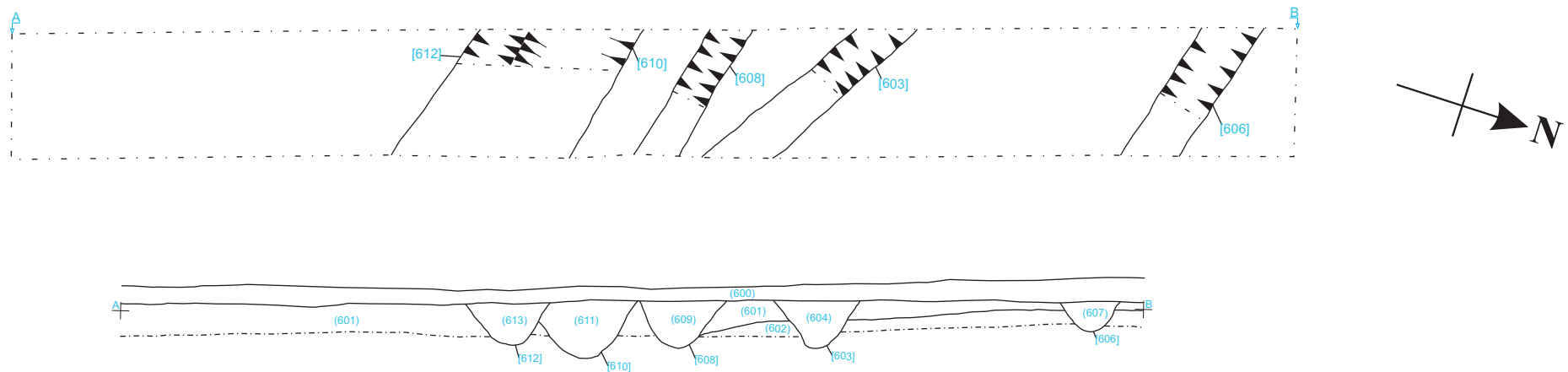
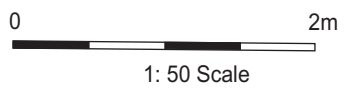


Figure 8: Trench 6 Plan (1:100) and Section (1:50)



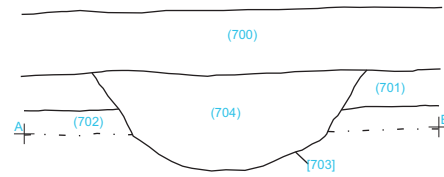
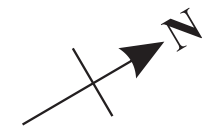


Figure 9: Trench 7 Plan (1:100) and Section (1:50)

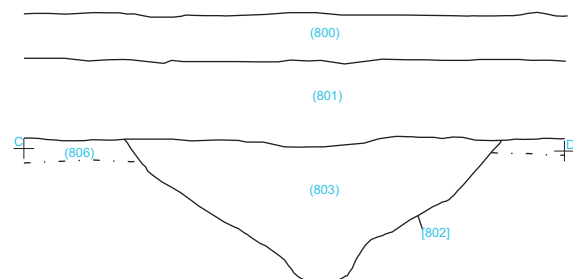
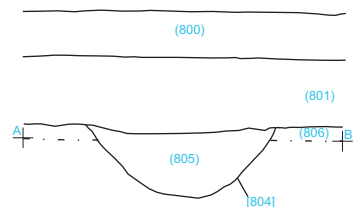
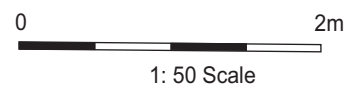


Figure 10: Trench 8 Plan (1:100) and Sections (1:50)



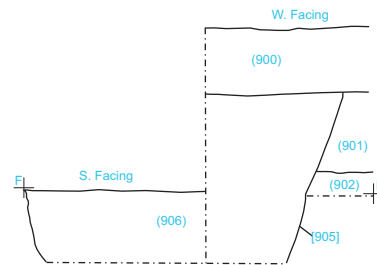
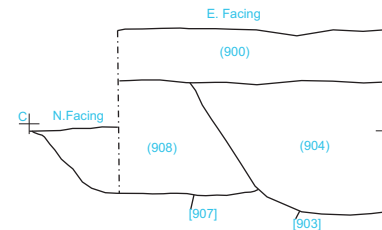
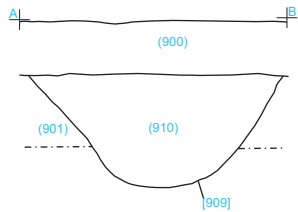
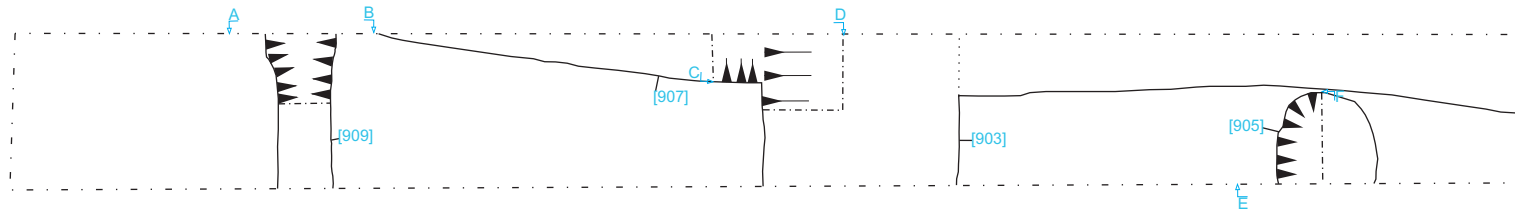


Figure 11: Trench 9 Plan (1:100) and Sections (1:50)



Appendix 1: Colour plates



Plate 1: Composite of Area 1 looking north east.



Plate 2: Trench 1 looking north (pre-ex.)



Plate 3: Ditches [103] & [104].



*Plate 4: Trench 2 looking east
(pre-ex.)*



*Plate 5: South facing section through
ditches [203] & [206].*



Plate 6: West facing section through ditch [209].



Plate 7: Trench 3 looking south west (pre-ex).



Plate 8: Intercutting pits [303] & [305].



Plate 9: East facing section through ditch [307]



Plate 10: Trench 4 looking east (pre-ex)



Plate 11: North facing section ditch [403]



*Plate 12: Trench 5 looking north
(pre-ex.)*



*Plate 13: East facing section through
ditch [503]*



*Plate 14: Oblique shot of east facing
section through ditch [505]*



Plate 15: Trench 6 looking northeast
(pre-ex.)



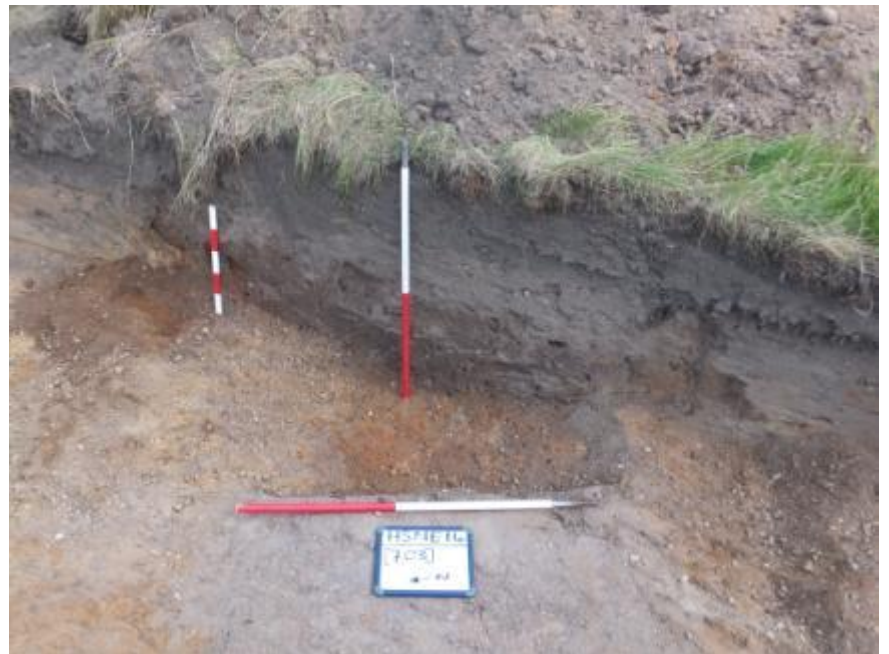
Plate 16: East facing section through
ditch [603]



Plate 17: East facing section through
ditches [610] & [612]



*Plate 18: Trench 7 looking northeast
(pre-ex.)*



*Plate 19: Northwest facing section
through ditch [703]*



*Plate 20: Trench 8 looking south
(post-ex.)*



Plate 21: East facing section through ditch [804]



Plate 22: Trench 9 looking north (pre-ex.)



Plate 23: section through pit [905]



*Plate 24: Relationship between
ditches [903] & [907]*



*Plate 25: East facing section through
ditch [909]*

Appendix 2: Context Summary

Trench 1

Context	Type	Description	Finds/Dating
100	Topsoil	Mid brownish grey fine sandy silt, firm but friable, with moderate small <0.05m pebble inclusions. 0.40m thick.	19 th – 20 th C pottery x 3 Modern
101	Subsoil	Mid orange-brown sandy silt, loose but friable with moderate small <0.05m pebble inclusions, rare charcoal flecks. Diffuse edges to horizon. 0.30m thick.	-
102	Natural	Banded orangey sands/gravel.	-
103	Cut	Ditch on E-W orientation. Stepped sides and “V” shaped base. 2.20m wide; 0.74m deep.	-
104	Cut	Ditch on E-W orientation. Steep smooth sides to flat central base. 1.10m wide; 0.50m deep.	Medieval
105	Cut	Ditch on E-W orientation. N side fairly steep; S side a gradual slope and slightly stepped. Base narrow and concave. 1m wide; 0.30m deep.	-
106	Fill of 103	Light yellow brown fine sand, loose. Slump on south side of 103. 0.30m wide 0.30m deep.	-
107	Fill of 103	Light yellow brown fine sand, loose. Slump on north side of 103. 0.30m wide 0.30m deep.	-
108	Fill of 103	Light grey silty sandy, loose but friable with frequent pebble and gravel inclusions. Natural silting of ditch 103. 0.80m wide 0.34m deep.	-
109	Fill of 103	Mid grey brown silty sand, loose but friable, frequent small pebble inclusions. Upper silting of ditch 103. 2.10m wide 0.40m deep	-
110	Fill of 104	Mid grey with yellow streaks, loose sandy gravel with frequent small stone inclusions. Slumping on north side of 104. 0.40m wide 0.34m deep.	Medieval
111	Fill of 104	Mid grey with yellow streaks, loose sandy gravel with frequent small stone inclusions. Slumping on south side of 104. 0.35m wide 0.32m deep.	Medieval
112	Fill of 104	Mid grey brown sandy silt, loose but friable, frequent small stone inclusions. Natural silting of 104. 1.10m wide 0.50m deep.	13 th -15 th C pottery x 1
113	Fill of 105	Light grey brown fine silty sand – very disturbed, frequent small stone inclusions. Single fill of 105. 1m wide 0.30m deep	-

Trench 2

Context	Type	Description	Finds/Dating
200	Topsoil	Same as 100. 0.30m thick.	Iron Age pottery x 1, 19 th C pottery x 2; CTP x 2; lead objects x 2, 1873 penny; 1695-1700 farthing, Cu alloy button. Modern
201	Subsoil	Same as 101. 0.50m thick	-
202	Natural	Same as 102.	-
203	Cut (cut by 206)	Ditch on NNE-SSW orientation. Steep sides and concave base. c.2.10m wide; 1.20m deep.	Iron Age
204	Fill of 203	Mid orange-brown fine sandy silt, compacted with moderate small <0.05m pebble inclusions. Some iron panning. Primary fill of 203. 1.80m wide 0.10m deep.	Iron Age pottery x 1
205	Fill of 203	Mid orange-brown coarse gritty sandy silt, loose but friable with frequent small <0.05m pebble inclusions and rare charcoal flecks. Main fill of 203. 2/10m wide 1.20m deep.	-
206	Cut (cuts 203)	Ditch on NNE-SSW orientation. Steep sides and concave base. 1.80m wide; 1m deep.	-
207	Fill of 205	Mid orange brown fine silty sand compact with rare small pebble inclusions and charcoal flecks. Primary fill of 206. Some iron panning. 1.20m wide 0.14m deep.	-
208	Fill of 205	Mid orange-brown fine sandy silt loose friable with frequent gravel inclusions. Secondary fill of ditch 205. 1.56m wide 0.90m deep.	-
209	Cut (Same as 307)	Ditch on ESE-WNW orientation, partially exposed. Moderately sloped sides and concave base. 0.85m exposed width 0.70m deep.	-
210	Fill of 209	Dark greyish brown firm silty sand with small-medium sized stone inclusions. Single fill of ditch 209.	-
211	Fill of 205	Dark grey brown fine sandy silt, firm but friable with rare small pebble inclusions. Upper fill of ditch 205. 1.40m wide 0.28m deep.	-
212	Cut	Ditch on NE-SW orientation. Partially exposed. Moderately sloped sides and concave base. 2.50m exposed width; 1m deep.	-
213	Fill of 212	Mid orange brown fine sandy silt, loose but friable with frequent gravel inclusions and rare charcoal flecks. Single fill of 212.	-

Trench 3

Context	Type	Description	Finds/Dating
300	Topsoil	Same as 100. 0.35m thick.	1 st -2 nd century Roman pottery x 2; CTP x 4. Lead object, Henry VIII ½ groat (unstratified). Modern
301	Subsoil	Same as 101. 0.36m thick	-
302	Natural	Same as 102.	-
303	Cut (cuts 305)	Sub-circular pit in centre of trench, moderately sloped sides and wide concave base. Slightly elongated, longest axis on N-S alignment. 0.90m length, c.0.70m wide and 0.44m deep.	Dating insecure
304	Fill of pit 303	Mid greyish brown firm slightly silty sand with occasional small stones. Single fill of pit 303.	Mid-late Iron Age pottery x 3; worked flint x 1 possibly early Neolithic
305	Cut (cut by 303)	Sub circular pit in centre of Trench3. Moderately sloped sides and wide concave base. Slightly elongated, longest axis on N-S alignment. 1.04m length, c.1.05m wide and 0.54m deep.	Dating insecure
306	Fill of pit 305	Light orange grey firm sand with occasional small-medium sized stones at base of fill. Single fill of pit 305.	13 th -15 th C pottery x 2
307	Cut (Same as 209)	Ditch on E-W orientation. Moderate-steeply sloped sides and concave base. 0.60m width; 0.60 deep. Diffuse edges.	-
308	Fill	Dark greyish brown firm silty sand with small-medium sized stone inclusions. Single fill of 307.	-

Trench 4

Context	Type	Description	Finds/Dating
400	Topsoil	Same as 100. 0.30m thick.	Modern
401	Subsoil	Same as 101. 0.30m thick	-
402	Natural	Same as 102.	-
403	Cut	Ditch on NNE-SSW orientation. Steeply sloped sides and concave base. 1.68m wide 0.72m deep.	Early Roman
404	Fill of 403	Dark brown grey fine sandy silt, friable but loose with moderate small pebble inclusions and rare charcoal flecks. Natural silting. Single fill of 403	1 st -2 nd century Roman pottery x 1
405	Cut	Ditch on NW-SE orientation. Steeply sloped sides and concave base. c.1m width; 0.50 deep.	-

406	Fill of 405	Mid grey brown sandy silt, loose but friable with moderate small pebble inclusions. Natural silting. Single fill of 405	-
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Trench 5

Context	Type	Description	Finds/Dating
500	Topsoil	Same as 100. 0.30m thick.	Modern
501	Subsoil	Same as 101. 0.50m thick	-
502	Natural	Same as 102.	-
503	Cut	Ditch on E-W orientation. Steeply sloped sides and "V" shaped base. 1.90m width; 1.05m deep.	-
504	Fill of 503	Dark grey brown firm silty sand with small pebbles and gravel and rooting. Single fill of 503. Natural silting.	-
505	Cut	Ditch on E-W orientation. S side steeply sloped before stepping out at base, N side more moderately stepped. Base concave. 3.46m width; 1.08m deep.	Early Roman
506	Fill of 505	Light orange brown loose slightly silty sand with moderate pebble and gravel inclusions. Lower fill of 505. 2m width 0.60m deep.	Roman
507	Fill of 505	Dark grey brown firm slightly silty sand with frequent stone inclusions. Upper fill of 505. 1.90m wide 0.70m deep.	Mid-late 1 st century Roman pottery x 13

Trench 6

Context	Type	Description	Finds/Dating
600	Topsoil	Same as 100. 0.30m thick.	17 th -18 th C pottery x 2; CTP x 1. Modern
601	Subsoil	Same as 101. 0.50m thick	-
602	Natural	Same as 102.	-
603	Cut	Ditch on NW-SE orientation. Moderately sloped sides and concave base. 0.60m width; 0.30 deep. May cut through topsoil – edges diffuse.	Likely post-medieval-modern
604	Fill of 603	Mid orange brown firm slightly silty sand with small stones and gravel inclusions. Single fill of 603.	Iron Age x 1 (abraded), 17 th -19 th C pottery x 1
605	Layer	Grey with orange mottling, loose-firm gravel and sand with stone inclusions. Possible natural gravel layer or remains of bank flanking ditch 603. 0.45m deep.	-
606	Cut	Ditch on NW-SE orientation. Moderately slope sides and concave base. 1.25m width; 0.55m deep.	Early-mid Roman
607	Fill of 606	Mid grey brown loose but friable gravelly	1 st -2 nd century Roman

		sand. Single fill of ditch 606.	pottery x 2
608	Cut	Ditch on WNW-ESE orientation. Moderately sloped sides and concave base. 1.25m width; 0.50m deep.	-
609	Fill of 608	Mid grey brown loose but friable gravelly sand. Single fill of ditch 608.	-
610	Cut (Cut by 612)	Ditch on NW-SE orientation. Moderately sloped sides and concave base. 2m width; 1.15m deep.	-
611	Fill of 610	Mid grey brown loose but friable gravelly sand. Single fill of ditch 610.	-
612	Cut (cuts 610)	Ditch on WNW-ESE orientation. Moderately sloped sides and concave base. 1.70m width; 1.10m deep.	-
613	Fill	Mid grey brown loose but friable gravelly sand. Single fill of ditch 612.	-

Trench 7

Context	Type	Description	Finds/Dating
700	Topsoil	Same as 100. 0.35m thick.	Modern
701	Subsoil	Same as 101. 0.30m thick	-
702	Natural	Same as 102.	-
703	Cut	Ditch on E-W orientation. Moderately sloped sides and shallow concave base. 1.40m width; 0.60m deep.	-
704	Fill	Light brownish grey fine sandy silt with rare charcoal flecks and moderate small pebble inclusions. Single fill of 703. Natural silting.	-

Trench 8

Context	Type	Description	Finds/Dating
800	Topsoil	Same as 100. 0.30m thick.	Late 2 nd century Roman x 1 (residual); CTP x 1. Modern
801	Subsoil	Same as 101. 0.46m thick	Modern
802	Cut (Same as 903)	Ditch on E-W orientation. Moderate - steeply sloped sides and concave base. 2.50m width; 0.90m deep.	Late Roman
803	Fill	Mid-dark brown grey fine sandy silt, firm but friable with moderate small pebbles and rare charcoal inclusions. Diffuse edges. Single fill of 802.	4 th century Roman pottery x11; Roman pottery x 1; 16-18 th C CBM x 1; Cattle/large mammal bone x 4
804	Cut	Ditch on E-W orientation. Moderately sloped sides and concave base. 1.60m width; 0.40m+ deep.	-
805	Fill	Mid brownish grey fine sandy silt, firm but	-

		friable with moderate small pebbles and rare charcoal flecks. Single fill of 804.	
806	Natural	Same as 102.	-

Trench 9

Context	Type	Description	Finds/Dating
900	Topsoil	Same as 100. 0.35m thick.	Modern
901	Subsoil	Same as 101. 0.35m thick	-
902	Natural	Same as 102.	-
903	Cut (Same as 802) (cuts 907)	Ditch on E-W orientation. Moderate to steeply sloped sides and concave base. 2.60m width; 0.90m deep.	Roman
904	Fill of 903	Mid-dark brown grey fine sandy silt, firm but friable with moderate small pebbles and rare charcoal inclusions. Diffuse edges. Single fill of 903.	Roman pottery x 6
905	Cut	Sub-circular pit/ditch terminus with vertical sides, base not established. Post-medieval quarry pit. 1m wide and at least 1.50m deep.	-
906	Fill	Bands of orange sand and brown gardens soils. Single backfilling event of quarry pit 905.	-
907	Cut (cut by 903)	Ditch on N-S orientation. Moderately sloped sides and concave base. 0.80m width; 0.70m deep.	-
908	Fill	Light brown grey fine sandy silt, firm but friable with frequent small pebble inclusions. Single fill of 907.	-
909	Cut	Ditch on E-W orientation. Moderately sloped sides and concave base. 1.70m width; 0.80m deep.	-
910	Fill	Light brown grey fine sandy silt firm but friable with rare charcoal flecks and moderate amounts of small pebbles.	-

Trench 10

Context	Type	Description	Finds/Dating
1000	Topsoil	Same as 100. 0.35m thick.	-
1001	Subsoil	Same as 101. 0.20m thick	-
1002	Natural	Same as 102.	-

Trench 11

Context	Type	Description	Finds/Dating
1100	Topsoil	Same as 100. 0.45m thick.	-

1101	Subsoil	Same as 101. 0.35m thick	-
1102	Natural	Same as 102.	-

Trench 12

Context	Type	Description	Finds/Dating
1200	Topsoil	Same as 100. 0.30m thick.	19 th C pottery x 9
1201	Subsoil	Same as 101. 0.40m thick	-
1202	Natural	Same as 102.	-

Trench 13

Context	Type	Description	Finds/Dating
1300	Topsoil	Same as 100. 0.40m thick.	19 th -20 th C pottery x 11; CTP x 4
1301	Subsoil	Same as 101. 0.45m thick	-
1302	Natural	Same as 102.	-

Trench 14

Context	Type	Description	Finds/Dating
1400	Topsoil	Same as 100. 0.30m thick.	19 th -20 th C pottery x 17; CTP x 2; Glass x 1
1401	Subsoil	Same as 101. 0.40m thick	-
1402	Natural	Same as 102.	-

**A report on the Roman and Iron Age and Roman pottery from Highfields School, London Road, Newark-on-Trent, Nottinghamshire
HSNE14, NGR SK 81158 52938**

Appendix 3: The Iron Age and Roman pottery

By I.M. Rowlandson

September 14th 2014

Introduction

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery* (Darling 2004). As there is no standardised agreed fabric series for Nottinghamshire the pottery has been recoded utilising codes developed by the City of Lincoln Archaeological Unit- CLAU (see Darling and Precious 2014) augmented with the inclusion coding system developed by Knight for the prehistoric material (Knight 1998). An attempt at a 'maximum' vessel estimate has been made following Orton (1975, 31). Samian, mortaria, amphorae and vessels selected as suitable for illustration have been bagged separately for ease of future reference. The archive record (tabulated below) is an integral part of this report and will be curated in an Access database, available from the author in a digital format. The report was produced on the basis of context information by PCAS Ltd.

The pottery

The Roman pottery presented for assessment totalled 39 sherds, weighing 0.997kg (RE0.52). The pottery is described by context in the summary table below.

Iron Age and Roman pottery summary					
Context	Spot date	Comments	Sherd	Weight (g)	Total RE %
200	IA	A single handmade sherd.	1	11	0
204	IA	A single handmade basal sherd.	1	22	0
300	ML1-M2	A small group including a fragment from a large jar in a native tradition gritty fabric and a footring from a vessel in an oxidised fabric.	2	36	0
304	MLIA	Fragments from a single handmade quartz-gritted jar with fine scored or combed decoration.	3	112	0
404	ML1-2	A single sherd in a native tradition gritty ware.	1	9	0
507	ML1	A small group including fragment from a large handmade jar and a wheelmade cordoned jar with an everted rim (Precious 2005, No. 7).	13	199	7
604	IA?	A single abraded handmade sherd.	1	12	0
607	L1-M2	An everted rim from a large jar in a native tradition gritty ware fabric.	2	28	13
800	2C+	A single greyware sherd with burnished lattice decoration and external carbonised deposit.	1	23	0
803	4C	A small group of greyware including a large bowl with an everted rim and a wide-mouthed bowl.	11	326	21
803	Roman	A single shell-gritted sherd.	1	326	21
904	Roman	A rim sherd from a single greyware jar.	6	438	22

Fabric summary							
Fabric code	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
OX	Oxidised	Misc. oxidized wares	1	2.56%	4	0.40%	0
GREY	Reduced	Miscellaneous grey wares	14	35.90%	565	56.67%	32

Fabric summary							
Fabric code	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
IAGR	Reduced	Native tradition/transitional grit-tempered wares	7	17.95%	152	15.25%	20
QU	Handmade	Quartz gritted (Iron Age)	3	7.69%	112	11.23%	0
GRSH	Handmade	Handmade grog and shell- gritted (Iron Age)	13	33.33%	161	16.15%	0
SHEL	Calcareous	Miscellaneous undifferentiated shell-tempered	1	2.56%	3	0.30%	0

Form summary							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
BEV	Bowl	Everted rim	4	10.26%	117	11.74%	13
BWM3	Bowl- large	Wide-mouthed; D&P No. 1229-30	2	5.13%	46	4.61%	8
CLSD	Closed	Form	1	2.56%	14	1.40%	0
J	Jar	Unclassified form	2	5.13%	36	3.61%	11
JCOR	Jar	Cordoned	3	7.69%	83	8.32%	7
JL	Jar	Large	10	25.64%	514	51.55%	13
JRUST	Jar	Rusticated	1	2.56%	10	1.00%	0
JB	Jar/Bowl	Unclassified form	1	2.56%	12	1.20%	0
JBL	Jar/Bowl	Large	10	25.64%	116	11.63%	0
PD	Plate/Dish	Form	1	2.56%	4	0.40%	0
-	Unknown	Form uncertain	4	10.26%	45	4.51%	0

A small proportion of the pottery could be dated to the Iron Age although few feature sherds were present and only one lightly scored or combed vessel from context 304 was diagnostic of a mid to late Iron Age date.

A small number of vessels in the transitional 'Iron Age Gritty' or 'Trent Valley ware' fabrics were retrieved most notably a jar of a corrugated form with multiple cordons from context 507. A good parallel for this vessel is an example illustrated from Norton Disney (Precious 2005, No. 7). A similar vessel also wheel-made and in a grog-tempered fabric, occurred at the Late Iron Age and Roman settlement at Weekley, Northants (Jackson and Dix, 1987, fig 39, no 140). The Weekley example came from Ceramic Phase 2, which, although containing some earlier wares, is dated to the third quarter of the first century. This vessel type is rooted in the Iron Age tradition, for example corrugated Iron Age vessels from Sleaford (Elsdon 1997, Fig. 55 etc.) but being wheel-made continues well into the Roman period. Several examples with corrugated walls occurred at the villa site of Norton Disney (Oswald, 1937 fig 1, nos 3 and 5). Examples were published by Oswald from groups considered to date to the middle of the 1st century AD at Margidunum (Oswald 1952, Pl. 7. 10-1). An example of a similar vessel was also published from Ramsdale Park (Turner and Swarbrick 1978, No. 36). On this basis a date in the 2nd half of the 1st century AD is likely for his context.

No Roman finewares were present and the majority of the pottery was made up of greywares, many that could only be broadly dated to the Roman period. The small group from context 803 was dated to the 4th century AD with large bowl forms typical of late groups from Lincoln and Nottinghamshire present (Darling 1977).

Conclusions

This assemblage suggests the present of Iron Age to late Roman activity on the site and adds to existing evidence for Roman activity in the vicinity of the modern town of Newark. Although the assemblage was not large it suggests that further investigations are likely to produce additional pottery of this date.

Recommendations

This assemblage should be deposited in the relevant local museum.

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HSNE14- Iron Age and Roman pottery archive

Context	Fabric	Form	Rim	Body	Base	Dec	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight (g)	Rim diam	Rim eve
200	GRSH	-	-	U	-	HM	1	ABR		BS; IRF- 'U'= UNKNOWN FORM		1	11	0	0
204	GRSH	-	-	-	FLP	HM	1	ABR		BASE; FLP; IRF		1	22	0	0
300	IAGR	JL	-	-	-	WF	1			BS; GROG OR CP SPARSE QU		1	32	0	0
300	OX	PD	-	-	-		1	VAB		BASE FTR; FOOTRING; SANDY FABRIC		1	4	0	0
304	QU	JL	-	GLOB/ELL	-	SCRA; HM	1			BS; IRF; FINE SCORING OR COMBING MID TO LATE IRON AGE; COMMON MEDIUM QUARTZ WITH SPARSE ANGUALR COARSE QUARTZ		3	112	0	0
404	IAGR	-	-	-	-		1			BS; R; GROG OR CP/QU/SHEL		1	9	0	0
507	GRSH	JBL	-	U	-	HM	1	ABR		BS; IRF		10	116	0	0
507	IAGR	JCOR	-	-	-	COR D	1			RIM; SHLDR; GROG OR CP SPARSE QU; CORUGATED CORDONED JAR AS PRECIOUS 2005, FIG. 7		3	83	20	7
604	GRSH	JB	-	U	-	HM	1	ABR		BS; OX/R/OX;		1	12	0	0
607	IAGR	JL	-	-	-		1			BS; R/OX/R/OX/R; GROG ORCP/QU/SHEL; LARGE EVERTED RIM		2	28	22	13
800	GREY	J	-	-	-	LA	1	CARBON DEP EXT		BS		1	23	0	0
803	GREY	BEV	-	-	-		1			RIM GIRTH		4	117	19	13
803	GREY	BWM3	-	-	-		1	ABR		RIM SHLDR		2	46	25	8
803	GREY	CLSD	-	-	-	SHG	1			BS		1	14	0	0
803	GREY	JL	-	-	-		2			BS		2	136	0	0
803	GREY	JRUST	-	-	-	RLIN	1			BS		1	10	0	0
803	SHEL	-	-	-	-		1			BS		1	3	0	0
904	GREY	J	-	-	-		1			RIM; NECKED TYPE?		1	13	14	11
904	GREY	JL	-	-	-		1			BS		1	94	0	0
904	GREY	JL	-	-	-		1	ATTRITION INT?		BASE		1	112	0	0

Appendix 4: HSNE14

THE CERAMIC FINDS

Dr Anne Irving

THE POTTERY

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001). A total of 48 sherds from 46 vessels, weighing 582 grams was recovered from the site.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The pottery was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the pottery is included in Archive Catalogue 1, with a summary in Table 1. The pottery dates from the Medieval to the Early Modern period.

Results

Table 1, Summary of the Pottery

Period	Cname	Full name	Earliest date	Latest date	NoS	NoV	W (g)
Medieval	EMHM	Early Medieval Handmade ware	1100	1250	2	1	4
	NOTG	Nottingham glazed ware	1250	1500	1	1	57
Medieval to Post-medieval	HUM	Humberware	1250	1550	1	1	42
Post-medieval	BL	Black-glazed wares	1550	1750	6	6	151
	NOTS	Nottingham stoneware	1690	1900	2	2	13
	STSL	Staffordshire/Bristol slipware	1650	1780	1	1	6
	WS	White Stoneware	1700	1770	1	1	18
Early Modern	BCHIN	Bone China	1850	1900	8	7	59
	CREA	Creamware	1770	1830	1	1	5
	ENGS	Unspecified English Stoneware	1690	1900	1	1	26
	NCBW	19th-century Buff ware	1800	1900	2	2	24
	PEARL	Pearlware	1770	1900	16	16	102
	WHITE	Modern whiteware	1850	1900	6	6	75
				TOTAL	48	46	582

Discussion

Three sherds of medieval pottery are present although the majority of the assemblage dates to the post-medieval and early modern periods. The range of ware types is typical for this area, comprising locally made wares and regional imports.

Potential

The sherds are stable and suitable for long-term storage. No further work is required on the assemblage.

THE CERAMIC BUILDING MATERIAL

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001). Twenty-two fragments of tile, brick and abraded fragments of Ceramic Building Material, weighing 137 grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. Fragments were counted and weighed within each context. The ceramic building material was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the ceramic building material is included in Table 2.

Results

Table 2, Ceramic Building Material Archive

Cxt	Cname	Full name	NoF	W (g)	Description	Date
803	BRK	Brick	1	423	Soot; laminated through heat?	16th to 18th?

Potential

The fragments are stable and suitable for long-term storage. No further work is required on the assemblage.

SPOT DATING

The dating in Table 3 is based on the evidence provided by the finds detailed above.

Table 3, Spot dates

Cxt	Date	Comments
100	19th to 20th	
112	Mid 13th to 15th	Date on a single sherd
200	19th	
306	Late 12th to mid 13th?	
600	17th to 18th	
604	Late 17th to 19th	Date on a single sherd
803	16th to 18th?	Date on brick
1200	19th	
1300	19th to 20th	
1400	19th to 20th	

ABBREVIATIONS

ACBMG	Archaeological Ceramic Building Materials Group	NoF	Number of Fragments
		NoS	Number of sherds
BS	Body sherd	NoV	Number of vessels
CBM	Ceramic Building Material	TR	Trench
CXT	Context	UHJ	Upper Handle Join
LHJ	Lower Handle Join	W (g)	Weight (grams)

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FINDS CATALOGUE

Finds Catalogue 1, The Pottery

Cxt	Cname	Fabric	Form	NoS	NoV	W (g)	Part	Description
100	BL		Jar/ bowl	1	1	25	Base	
100	WHITE		Cup/ drinking bowl	1	1	2	BS	Blue transfer print; flake
100	WS		Jar/ bowl	1	1	18	BS	
112	NOTG		Jug	1	1	57	Base	Abraded
200	ENGS		Jar	1	1	26	Handle	Strap
200	PEARL		Hollow	1	1	1	BS	Blue paint
306	EMHM		Jar/ bowl	2	1	4	BS	?ID
600	BL		Jar/ bowl	1	1	10	Base	
600	HUM		Jug	1	1	42	Handle	Strap
604	NOTS		Hollow	1	1	2	BS	
1200	BCHIN		Hollow	2	1	17	Rim + BS	
1200	BL		Jar	1	1	6	Rim	
1200	BL		Jar/ bowl	1	1	36	Base	
1200	NCBW		Hollow	1	1	19	BS	Moulded; red paint
1200	PEARL		Various	3	3	12	Rim + BS	Blue transfer print
1200	STSL	Red	Bowl	1	1	6	Rim	Pie crust rim; brown slip
1300	BL		Jar/ bowl	1	1	37	BS	Abraded
1300	CREA		Hollow	1	1	5	BS + Rim	
1300	NOTS		Hollow	1	1	11	BS	
1300	PEARL		Various	5	5	16	Rim + BS	Blue paint + transfer print
1300	WHITE		Jar/ bowl	3	3	23	BS	Blue transfer print
1400	BCHIN		Cup	1	1	21	Base	Blue transfer print
1400	BCHIN		Small vessel	5	5	21	Rim + Base	One blue applied motif
1400	BL		Shallow dish/bowl	1	1	37	Profile	
1400	NCBW	Slipped	Hollow	1	1	5	BS	
1400	PEARL		Various	4	4	50	Base + BS	Blue transfer print
1400	PEARL		Dish	3	3	23	Rim	Blue and brown transfer print
1400	WHITE		Cup	1	1	27	Base	Blue transfer print
1400	WHITE		Cover	1	1	23	Knop	Blue transfer print

Appendix 5
Highfields School, London Road,
Newark-on-Trent, Nottinghamshire (HSNE 14)
The Animal Bone
By Jennifer Wood

Introduction

A total of 4 (379g) refitted fragments of animal bone were recovered by hand during archaeological works undertaken by Pre-Construct Archaeology Services Ltd at Highfields School, London Road, Newark-on-Trent, Nottinghamshire. The remains were recovered from Trench 8 ditch [802].

Results

The remains were generally of a moderate overall condition, averaging at grade 3 on the Lyman criteria (1996).

No evidence of burning, butchery, working or gnawing was noted on the remains.

Table 1, Summary of Identified Bone

Context	Cut	Taxon	Element	Side	Number	Weight	Comments
803	802	Large Mammal Size	Femur	L	1	112	Midshaft, in three fragments
		Cattle	Femur	L	1	144	Distal shaft and condyles, Bd=87mm
		Cattle	Humerus	L	1	99	Proximal articulation, two fragments
		Large Mammal Size	Rib	X	1	24	Blade fragment, in two fragments

As can be seen, cattle were the only species identified within the assemblage.

The assemblage is too small to provide meaningful information on animal husbandry and utilisation on site, save the presence/use of the animals on site.

In the event of further works the site is liable to produce further remains of moderate condition, with a moderate potential of providing further information of site economy and animal husbandry practices.

No further work is recommended for this assemblage.

References

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Appendix 6

THE OTHER FINDS

By Gary Taylor

Introduction

Seven other finds weighing a total of 82g were recovered. All are of metal.

Condition

The other finds are in good condition, though one of the coins is very worn.

Results

Table 1, Other Materials

Cxt	Material	Description	NoF	W (g)	Date
200	Lead	Rolled, folded over thin sheet	1	7	1873+
200 /1\	Lead	Probable weight, 18mm diameter, spherical with some flattened/trimmed areas and hole for possible suspension loop, minimal corrosion, post-medieval	1	35	
200 /2\	Copper alloy	Coin, Queen Victoria penny, 1873	1	7	
200 /3\	Copper alloy	Coin, William III farthing, 1695-1700	1	5	
200 /5\	Copper alloy	Button, decorated with 10-point star surrounded by two concentric rings of dots, 17 th -18 th century	1	1	
300	Lead	Rectangular thick sheet, partially folded over – possible line sinker?	1	26	
TR 3, /4\	Silver	Coin, Henry VIII, halfgroat, second coinage, bent	1	1	1526-44

Provenance

The other finds were recovered from topsoil in Trenches 2 (200) and 3 (300), and as unstratified material from Trench 3.

Range

All of the other finds are of metal, suggesting effective use of a metal detector to aid artefact recovery.

Three coins were retrieved. The earliest of these is a silver halfgroat (2 pence) of Henry VIII's second coinage, of the period 1526 – 1544. This is slightly bent, but this is likely to be accidental rather than a deliberate act to turn the coin into a charm or love token (love tokens, in particular, were usually bent twice). A copper farthing of William III was also found. This is very worn, with the reverse virtually entirely illegible, but is of the period 1695-1700. The latest coin was a Queen Victoria penny of 1873, which is fairly worn.

A copper alloy button, decorated with a star and rings of dots was also found. This probably dates to the 17th-18th centuries.

Three lead items were also found. Two are pieces of sheet that have been folded and one of these may be a partially unfolded line sinker, used in fishing. The third item is spherical and although resembling a musket ball is probably a weight. There is no evident casting seam or sprue, which would be expected from a musket ball, although sprues are mostly removed from shot that have been fired or prepared for firing. There is, however, evidence of trimming, and a small hole that perhaps accommodated a wire suspension loop.

Potential

The other finds are of moderate potential. Several of the items are post-medieval and it is likely that all of the assemblage is of this period. The coins may suggest some mercantile or trading activity in the area through the post-medieval period. The possible line sinker may indicate fishing occurring nearby, and the probable weight may also be from fishing or perhaps a balance being used in trade.

SPOT DATING

The dating in Table 2 is based on the evidence provided by the finds detailed above.

Table 2, Spot dates

Cxt	Date	Comments
200	1873+	based on latest coin
300	undated	
TR 3	1526+	based on 1 coin; unstratified

ABBREVIATIONS

CXT Context
 NoF Number of Fragments
 TR Trench
 W (g) Weight (grams)

Appendix 7: Highfields School, London Road, Newark-on-Trent (HSNE 14): Analysis of the charred plant remains.

Rachel Small, University of Leicester Archaeological Services

Introduction

Three samples were taken during trial trenching at Highfields School, London Road, Newark-on-Trent. They were from a pit fill (sample 1, context 304), a ditch (sample 3, context 803) and an unidentified feature (sample 2, context 506). Pottery from all three contexts was dated to the Roman period. Context 803 was disturbed in the post-medieval period as a brick dating to the 16th-18th centuries was found. The samples were taken to establish if they contained charred plant remains which are a useful indicator of activities associated with crop processing.

Method

The samples had a high sand content and were wet sieved in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were transferred into plastic boxes; air dried and then sorted using an x10-40 stereo microscope. The plant remains were identified by comparison with modern reference material available at ULAS and were counted and tabulated below (table 1). The plant names follow Stace (1991). The residues were air dried and the fractions over 4mm sorted for all finds.

The procedure followed was to initially wet sieve one part of each sample to gauge its potential. All three samples contained charred plant remains. Samples 1 and 2 contained low numbers (approximately 10 specimens or less); therefore the decision was made not to wet sieve the remaining parts because this would not produce 50 items. The latter quantity is considered the minimum number of items in a sample needed to provide a reliable conclusion on the crop processing stages represented. The first part of sample 3 contained approximately 26 specimens and so another part was sieved to obtain 50 items. Combining the two parts for sample 3, 77 items were counted in total (table 1).

Results

Grain was present in samples 1 and 3 in low numbers (10 specimens or less). The grain was poorly preserved and severely burnt, but three spelt/emmer wheat (*Triticum* spp.) grains could be identified. A single piece of *Triticum* sp. glume base was identified in sample 2, and large quantities were found in sample 3.

Charred weed seeds were present in each sample in low numbers (10 specimens or less). Identified species included grasses (*Poaceae*), goosefoots (*Chenopodium* spp.), an annual weed of damp nitrogen-rich soils, and ivy-leaved speedwell (*Veronica hederifolia* L.), an annual or winter annual which is common on cultivated ground, preferring loose, rich loams (Jones *et al.* 2004).

Uncharred seeds were present in each sample in low numbers including elder (*Sambucus nigra* L.), clover (*Trifolium* sp.) and sun spurge (*Euphorbia helioscopia* L.). Elder has a good survival rate and is common in archaeological soil samples. However, the clover and sun spurge are most likely modern intrusions. Modern rootlets were also present in sample 1.

Table 1: Analysis of charred plant remains from samples. Key: + rare (0 – 10 items), ++ common (10 – 50 items) and +++ (50 + items).

Sample	Litres	Context	Feature	Trench	Charred grain	Charred chaff	Charred seeds	Approx. number of charred remains	Approx. number of charred remains per litre	Uncharred seeds	Charcoal	Notes
1	7	304	Pit	3	+		+	10	1.43	+	+	Rootlets present. Charred remains identified: 1 x grain, 4 x <i>Veronica hederifolia</i> L., 4 x <i>Chenopodium</i> spp. and 1 x seed. Uncharred seeds identified: 1 x <i>Sambucus nigra</i> L., 1 x <i>Trifolium</i> sp. and seed casing.
2	9	506		5		+	+	2	0.22	+	+	Charred remains identified: 1 x <i>Triticum</i> sp. glume base, 1 x <i>Veronica hederifolia</i> L. and seed casing. Uncharred seeds identified: 1 x <i>Euphorbia helioscopia</i> L. and seed casing.
3 (part 3)	8	803	Ditch	8	+	++	+	26	3.25	+	+	Charred remains identified: 20 x <i>Triticum</i> spp. glume base, 3 x grain, 2 x <i>Chenopodium</i> spp. and 1 x seed. Uncharred seeds identified: 1 x <i>Euphorbia helioscopia</i> L. and seed casing.
3 (part 1)	8	803	Ditch	8	+	++	+	51	6.38	+	+	Charred remains identified: 37 x <i>Triticum</i> spp. glume base, 3 x <i>Triticum</i> spp. grains, 4 x grain, 4 x <i>Poaceae</i> , 1 x <i>Chenopodium</i> sp. and 2 x seed. Uncharred seeds identified: fragments of <i>Sambucus nigra</i> L. seed casing.
TOTALS FOR SAMPLE 3												
3	16	803	Ditch	8	+	+++	+	77	4.81	+	+	Charred remains identified: 57 <i>Triticum</i> spp. glume base, 3 x <i>Triticum</i> spp. grain, 7 x grain, 4 x <i>Poaceae</i> , 3 x <i>Chenopodium</i> spp. and 3 x seed. Uncharred seeds identified: 1 x <i>Euphorbia helioscopia</i> L. and seed casing including <i>Sambucus nigra</i> L.

Sample 3

Sample 3 was the most abundant in charred plant remains containing, 77 items. The presence of glume wheat is suggestive of a Roman date, rather than a post-medieval date when free-threshing wheat was grown. The quantity is sufficient for detailed analysis to provide conclusions on crop processing stages represented in the sample. Where possible Van der Veen's (2007: 987) ratios were calculated (table 2); she recommends a minimum 25 items for each ratio. Ratio C, glume bases/grains for *Triticum* spp., is a high value (even when the indeterminate grains are included); she suggests this represents the by-product of a later crop processing stage. Ratio F, number of ID's/1 litre of deposit, is a relatively low value, suggesting the remains were from a slow repeated deposition (day-to-day activity).

Table 2: Calculations and values for Van der Veen's (2007: 987) ratios.

Ratio C - <i>Triticum</i> spp. glume bases/grains	
Number of <i>Triticum</i> spp. glume bases	57
Number of <i>Triticum</i> spp. grains	3
Ratio	19
Ratio C - <i>Triticum</i> spp. glume bases/grains (including indeterminate grains)	
Number of <i>Triticum</i> spp. glume bases	57
Number of <i>Triticum</i> spp. and indeterminate grains	10
Ratio	5.7
Ratio F - number of ID's/1 litre of deposit	
Number of ID's	77
Litres	16
Ratio	4.81

In the Roman period glume wheat cereal crops would be harvested and go through the initial stages of processing to remove straw and weeds before storage. Small amounts would be taken out of storage on a day-to-day basis and go through a second stage of processing to prepare them for consumption. This included: parching, pounding, winnowing, coarse sieving, fine sieving and hand-picking (Van der Veen 1992: 81).

The glume bases analysed probably represent the by-product from fine sieving, and the weed seeds are likely to be remains from coarse/fine sieving or handpicking. This waste would have been thrown onto the fire. The small number of grains probably represents food spillage during cooking or food waste. Both remains would have been burnt on the hearth on a day-to-day basis, and the sweepings deposited in the ditch and other features.

Other Finds

A very small number of finds were found in the coarse fractions of samples 1 and 3, they were absent from sample 2 (table 3). The finds included: charcoal, 2 sherds of pottery dated to the Roman period and small bone fragments, probably from medium mammals.

Table 3: Catalogue of coarse fraction finds for samples.

Sample	Context	Feature	Trench	Coarse fraction finds
1	304	Pit	3	1 x charcoal.
2	506		5	
3 (part 3)	803	Ditch	8	4 x bone fragments and 3 charcoal.
3 (part 1)	803	Ditch	8	2 x Roman pot sherds and 8 x bone fragments.

Conclusion

Analysis of the samples showed that all three contained charred plant remains. Sample 3 contained a large enough quantity of charred remains for a detailed analysis (77 items). Analysis of Van der Veen's (2007: 987) ratios provided evidence for day-to-day processing

of spelt/emmer wheat in the Roman period for consumption; the remains being burnt on a hearth and then deposited in a ditch. If further excavation takes place sampling of soil is highly recommend; further analysis could provide further insight into crop processing activities at the site.

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Appendix 8:
 Highfield School, Newark
 HSNE14
 NEKMS:2014.23

Finds Catalogue

Context	Material	No.	Weight (g)	Description	Date	Action
200	C Pipe	2	6g	Clay pipe stem fragments	C18th/19th	
300	C Pipe	4	9g	Clay pipe stem fragments	C18th/19th	
304	Flint	1	1g	Broken blade flake. Notch-like break near proximal end has no secondary working so probably natural break. Pronounced dorsal ridge. Little abrasion. Tom Lane (pers comm.)	probably Early Neolithic	
600	C Pipe	1	1g	Clay pipe stem fragment	C18th/19th	
800	C Pipe	1	4g	Clay pipe stem fragments	C18th/19th	
1300	C Pipe	4	9g	Clay pipe stem fragments	C18th/19th	
1400	Glass	1	2g	Blue bottle glass	Modern	
1400	C Pipe	2	5g	Clay pipe stem fragments	C18th/19th	

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