

An Archaeological Evaluation at Leicester Lane, Great Bowden

Leicestershire

NGR: SP 473640 289120

Adam Clapton



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An Archaeological Evaluation at Leicester Lane, Great Bowden, Leicestershire

Summary

An archaeological field evaluation was carried out by University of Leicester Archaeological Services (ULAS) on land at Leicester Lane, Great Bowden, Leicestershire.

The work was commissioned in advance of a residential development by Gladman Developments as part of the discharge of Condition 22 on planning permission 16/01942/OUT.

A desk-based assessment and geophysical survey have previously been undertaken which identified archaeological potential and located anomalies, some of possible archaeological origin.

The site consisted of 2 areas of excavation to the north of Leicester Lane on the western boundary of Great Bowden. Fourteen trenches were excavated across the area of proposed development with archaeological features in 5 of the 14 trenches. Features included gullies and ditches with diagnostic sherds of pottery indicating 1st-2nd century Roman in date.

The archive for this site will be deposited with Leicestershire County Museums with accession number X.A41.2018.

Introduction

Outline planning permission has been granted for development of the land by Gladman Developments as part of the discharge of Condition 22 on planning application 16/01942/OUT. The conditions require a programme of archaeological work comprising trial trenching to determine the impact of the proposed scheme on any buried archaeology and produce a mitigation strategy for the site.

This report represents the programme of archaeological trial trenching that was undertaken in April 2018. It follows a desk-based assessment (Pegasus Group 2016), geophysical survey (Pre-Construct Geophysics 2017) and a strategy of work set out in the Scheme for Investigation for Evaluation (Pegasus Group 2017).

The work involved the machine excavation of 14, 30m long trial trenches located across 2 fields, where constraints allowed, throughout the development. Trenches were focused on areas containing anomalies possibly associated with archaeological remains identified during the geophysical survey.

The archaeological evaluation was undertaken in accordance with National Planning Policy Framework Section 12: Conserving and Enhancing the Historic Environment (DCLG March 2012). All archaeological work was in accordance with the Chartered Institute for Archaeologists (CIfA) Code of Conduct (2014) and adhered to their *Standard and Guidance for Archaeological Field Evaluation* (2014).

Site Description, Topography and Geology

The site is located to the west of the settlement of Great Bowden (Figures 1). Public footpaths lie beyond the western and northern boundaries of the site, Leicester Lane lies immediately to the south and to the east are housing, garden allotments and sawmill.

The site comprises one sub rectangular agricultural field (Area 1) and a small section of another to the north (Area 2), totalling approximately 2.18ha in area. The boundaries around and within the site consist of hedgerows, except for the northern boundary which is open. The site occupies a gentle north-facing slope at a height of c.88- 99m aOD (Figures 2 and 3).

The bedrock geology of the site consists of Dyrham Formation (siltstone and mudstone, interbedded). This sedimentary bedrock formed in the Jurassic Period (c.183-191 million years ago) in a local environment previously dominated by shallow seas.3 No superficial deposits are recorded for this site.



Figure 1: Site Location



Figure 2: Area of assessment



Figure 3: Area 1 looking south-east 3



Figure 4: Area 2 looking north-west

Archaeological and Historical background

A Desk-Based Assessment (Pegasus Group 2016) highlighted several areas of interest close to the assessment area.

Prehistoric (to AD 43)

No prehistoric activity has been recorded within the site but finds have been recorded in an area adjacent to the north-east of the site (MLE 10148). Fieldwalking here recorded two late Iron Age pottery sherds and eight Romano-British pottery sherds (ELE 4675). Although identified as a possible site on the HER, there is no further evidence such as cropmarks to support this, and the amount of prehistoric material recorded is small and could have resulted from the manuring of fields in this area with refuse from activity elsewhere. Fieldwalking in Russell Seeds to the south of the site on three occasions (ELE 5389, ELE 5388, ELE 7783) identified over 40 pieces of worked flint including blades, flakes, cores, scrapers and some burnt flint (MLE 17041). The excavation of test pits in Great Bowden (ELE 9145) revealed a number of Neolithic to Bronze Age flint flakes to the east of the site, although no cut features were uncovered (MLE 21624, MLE 21628, MLE 21630). During an archaeological watching brief c.230m east of the site (ELE 5987), an unusual sherd of decorated Iron Age pottery was recovered (MLE 17526). Various artefacts were discovered during fieldwalking (ELE 4847) in Kendall's Field c.345 west of the site. Seven pieces of worked flint were collected as well as artefacts of various dates (MLE 16664). Prehistoric flint found through fieldwalking c.450m

south-east of the site (MLE 19894, ELE 7785) included struck fragments, scrapers and blades were recovered.

Roman (AD 43 to AD 410)

No Roman activity has been recorded within the site, but again Romano-British finds were recorded adjacent to the northeastern part of the site, during fieldwalking, comprising eight Roman pottery sherds (MLE 10148, ELE 4675). This material may represent activity in this area but could equally have resulted from the manuring of the fields with material from elsewhere. Metal detecting and fieldwalking to the south of Leicester Lane (ELE 598, ELE 5389, ELE 5388, ELE 7783) identified greater quantities of more diverse material comprising sherds of pottery; ceramic building material including some flue tile; tesserae; three brooches; nine 4th-century coins; and a possible piece of glass (MLE 1999), indicating a possible area of settlement activity. The form, nature and extent of this activity is currently unknown. Roman pottery was also discovered c.420m south-east of the site at Lower Green's Hill (MLE 19893). Various artefacts were discovered during fieldwalking (ELE 4847) in Kendall's Field c.345 west of the site. Two pieces of Roman pottery and one piece of glass were collected (MLE 16664). During an archaeological watching brief (ELE 5987), a sherd of transitional early Roman pottery was recovered c.230m east of the site (MLE 17526). Roman pottery has also been recovered to the east of the site from The Paddock, Upper Green Farm and Old Hall (MLE 21594, MLE 21607, MLE 21612).

Early Medieval (AD 410 to AD 1066)

Great Bowden is known to have Anglo-Saxon origins. The site was historically located within the parish of Great Bowden and appears to have formed part of the agricultural hinterland to this settlement during the medieval period. No early medieval activity has been recorded within the site. One sherd of early Anglo-Saxon pottery was found during fieldwalking, 200m to the south-west of the site (MLE 17042).

Medieval (AD 1066 to AD 1539)

No medieval activity has been recorded within the site The Church of St Peter and St Paul (MLE 14936), situated c.970m east of the site in the centre of the settlement of Great

Bowden is of medieval origin, built in the 13th-century. Medieval settlement at Great Bowden appears to have been focused to the east of the site. Trial trenching and a watching brief (ELE 4848, ELE 5987) at Green Lane, *c*.235m east of the site, recorded gullies, pits and postholes as well as medieval pottery (MLE 16665). This site is within the medieval village core. Medieval village earthworks including a building platform and enclosure were noted *c*.105m east of the site on aerial photographs and during a field survey (MLE 1950). Fieldwalking *c*.30m south of the site (ELE 5389, ELE 5388, ELE 7783) recorded medieval material including pottery, glass and pieces of clay pipes (MLE 17040). Metal detecting (ELE 7784) found a small number of metal finds including a medieval horse shoe. This material is most likely to have resulted from the manuring of the fields with debris from the medieval settlement at the east of the site. Some medieval pottery was recovered during the excavation of test pits to the north of Great Bowden Hall *c*.150m west of the site (ELE 9145, MLE 21595), although the majority of the finds were post-medieval in date. Additional medieval sherds have been discovered through the excavation of test pits and fieldwalking to the west of the site (ELE 4847, MLE21590, MLE

21591, MLE 16664). Small amounts of medieval sherds were also recovered at several locations to the east and south-east of the site (MLE 6751, MLE 6753, MLE 21608, MLE 21610, MLE 19892). Ridge and furrow earthworks have not been recorded within the site, but are present to the north and the south of the village.

Post-medieval (AD 1539 to AD 1801) and Modern (AD 1801 to present)

The site itself appears to have changed little since at least the late 19th-century as seen on The First Edition Ordnance Survey map of 1886. A large number of buildings in Great Bowden, to the east of the site, were built during the post-medieval period when the settlement expanded. Great Bowden Hall (MLE 14956) is located *c*.310m west of the site and dates from the early 19th-century. A windmill situated c.370m south-west of the site, to the south of Great Bowden Hall, was noted in 1775 (MLE 1949). The road leading to the site is called Burnmill Road, which may indicate the fate of the structure. A large number of post-medieval findspots are recorded in the study area. Fieldwalking c.30m south of the site revealed postmedieval material including pottery, glass and pieces of clay pipes (ELE 5389, ELE 5388, ELE 7783, MLE 17040). To the east P16-0195 | DS | December 2017 Leicester Lane, Great Bowden, Leicestershire 6 of the site, the excavation of test pits revealed post-medieval pottery, brick or tile, clay pipe fragments, glass, animal bone and other objects (ELE 9145, MLE 21590, MLE 21591, MLE 21593, MLE 21608, MLE 21610), and fieldwalking (ELE 7785) to the south-east revealed more similar finds. More post-medieval material was recorded to the west of the site also (MLE 10289, MLE 16664, MLE 21595). Again, this material may have resulted from the manuring of the fields with material from the settlement of Great Bowden, as no associated cut features are recorded. The Grand Union Canal, Market Harborough Arm was built in 1797 from Leicester to Debdale Wharf (MLE 16299). The canal was extended towards Market Harborough by 1809. The Conservation Area surrounding the Market Harborough Arm section of the Grand Union Canal extends to cover Great Bowden Hall and its surroundings, and is located c.220m west of the site. The Midland Railway, Leicester and Hitchin Extension passes through Great Bowden, c.500m east of the site (MLE 16083). The line opened in 1857 for transporting coal and in 1868 the line carried passenger trains to St Pancras, London.

Great Bowden separated from Market Harborough in 1995, when the former became a separate civil parish.

A fluxgate gradiometer survey (Figure 5) of the site detected a limited number of potential ditches (and at least one potential pit) in the mid-southern part of the site. Elements of these potentially reflect enclosure boundaries associated with an early agricultural landscape. There are also slight geophysical suggestions of a curvilinear ditch in this locality. The survey also registered extensive traces of former ridge and furrow. Modern responses are predominantly associated with modern boundary features, with a dense array of stronger anomalies in the south-west region; these are conceivably indicative of some form of modern rubble.



Archaeological Aims and Objectives

The main objectives of the archaeological work were as follows:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- To record any archaeological deposits to be affected by the ground works.
- To establish the relationship of any remains found to the surrounding contemporary landscape.
- To recover artefacts and ecofacts to compare with other assemblages and results
- To produce an archive and report of any results.

Within the stated project aims, the principal objective of the recording was to establish the nature, extent, date, depth, and significance of the heritage assets within their local and regional context in order to formulate a mitigation strategy to address the impacts of the proposed development on cultural heritage.

All work conforms to the requirements of the National Planning Policy Framework (2012). It has been designed in accordance with current best archaeological practice and the appropriate national standards and guidelines including:

- *Management of Archaeological Projects* (English Heritage, 1991);
- Model Briefs and Specifications for Archaeological Assessments and Field Evaluations (Association of County Archaeological Officers, 1994);
- *Code of Conduct* (Chartered Institute for Archaeologists, 2014);
- *Standard and Guidance for Archaeological Field Evaluations* (Chartered Institute for Archaeologists, 2014);
- Standards for Field Archaeology in the East of England (Association of Local Government Officers, 2003);

Methodology

A total of 14, 30m long and 1.8m wide trenches were excavated across the development area based on a sampling strategy of 3.5%. 12 trenches were located in Area 1 and 2 trenches were located in Area 2. The archaeological evaluation targeted geophysical anomalies and provided a representative sample across the site. The trench locations are shown in figure 6.



A 13 ton 360 mechanical excavator were used to excavate the trenches using a 1.8m wide toothless ditching bucket. Topsoil and subsoil was stored separately and excavation ceased at undisturbed natural deposits.

The trenches were recorded at an appropriate scale by measured drawing and photography and were GPS-located to Ordnance Survey National Grid.

A photographic record, utilising high resolution digital data capture, was maintained during the course of the fieldwork and included:

- the site prior to commencement of fieldwork;
- the site during work, showing specific stages of fieldwork.

Upon completion of the evaluation trenching, the excavated trenches were backfilled and well compacted.

Results

Fourteen trenches were excavated across the area of proposed development (Figures 6). The topsoil consisted of a dark greyish brown, friable silty loam with occasional pebbles, charcoal flecks and modern debris inclusions. Subsoil where present consisted of a mid-light yellowy brown silty clay of plastic compaction with rare charcoal fleck inclusions. The natural substrata was a yellowy brown clay with very occasional ironstone deposits and a sandy matrix. Archaeological features were encountered in 5 of the 14 trenches (Figure 7). These were trenches 2, 3, 6, 9 and 10.

All trenches measured 1.8m in width and 30m in length and all measurements were taken from the top of the trench.

Trench	Orientation	Min.	Max.	Description
No.		Depth	Depth	
1	NNE-SSW	0.28m	0.38m	Negative trench, evidence of furrows
2	N-S	0.36m	0.46m	1 linear excavated with pottery [9] and
				evidence of furrows
3	E-W	0.32m	0.40m	2 linears with pottery excavated [5] [7] and
				evidence of furrows and field drains
4	E-W	0.29m	0.35m	Negative trench, evidence of furrows and
				field drains
5	E-W	0.30m	0.47m	Negative trench, evidence of furrows and
				field drains
6	NNE-SSW	0.29m	0.34m	1 linear with pottery [1] and possible ditch
				terminus [3] excavated. Evidence of furrows
7	NNE-SSW	0.33m	0.37m	Negative trench, evidence of furrows and
				plough scars
8	E-W	0.39m	0.50m	Negative trench, evidence of furrows

9	E-W	0.30m	0.45m	1linear and recut with pottery excavated [15]
				[17], evidence of furrows
10	NNW-SSE	0.30m	0.49m	1 linear and recut excavated [11] [13],
				evidence of furrows and plough scars
11	ESE-WSW	0.31m	0.37m	Negative trench, evidence of furrows
12	E-W	0.29m	0.40m	Negative trench, evidence of field drain
13	E-W	0.29m	0.40m	Negative trench, evidence of furrows
14	E-W	0.34m	0.40m	Negative trench, evidence of furrows



Figure 7: Negative trenches shown in black and trenches containing archaeology are shown in red

This trench was located over probable archaeological deposits as highlighted on the geophysical survey. This appeared to be a linear feature creating part of an enclosure at the southern end of Area 1 (Figure 8).



Figure 8: Trench 3 looking north (1m scale)

A single linear ditch [9] was recorded at 10.7m from the southern end of the trench running east-west orientation (Figures 9 and 10). It consisted of a moderate to steep sloping 'V'' shaped cut measuring 0.6m in width and 0.4m in depth. It contained a single fill (10) consisting of a mid-brownish grey silty clay of firm compaction with occasional charcoal flecks and rare pebble inclusions. A single sherd of mid-1st-2nd century Roman pottery was recovered from this context.



Figure 9: Ditch [9] looking east (0.5m scale)





This trench was located to the east of trench 2, over possible archaeological deposits as highlighted on the geophysical survey. This appeared to be a continuation of the possible linear enclosure seen in trench 2 (Figure 11).



Figure 11: Trench 3 looking west (1m scale)

Two archaeological features were observed in this trench (Figures 12-14). At the east end of the trench a small gully [7] was observed consisting of a 'V' shaped cut measuring 0.3m in width and 0.2m in depth, running east-west. It contained a single fill (8) consisting of a mid-greyish brown silty clay of plastic compaction with rare charcoal fleck inclusions. Pottery recovered indicated a mid-1st-2nd century Roman in date.

Immediately to the west of this a second linear [5] was recorded running north-south, appearing to be later than or contemporary with [7] and forming a right angle with it. It consisted of a 'V' shaped cut measuring 0.67m in width and 0.34m in depth with a moderately sloping sides and concave base. It contained a single backfill of soft compaction consisting of a mid-brownish grey silty clay, with occasional charcoal flecks and rare small pebble inclusions. A single sherd of late 2nd century Roman pottery was recovered from this fill along with 3 abraded fragments of Roman tile.



Figure 12: Ditch [5] looking north (1m scale)



Figure 13: Gully [7] looking east (0.5m scale)



Trench 6 was located on the eastern edge of the development site in Area 1, to the north-east of trench 2, running north north-east to south south-west (Figure 15).



Figure 15: Trench 6 looking north north-east (1m scale)

Two archaeological features were observed in this trench (Figures 16-18). At 5.5m from the north north-east end of trench a curving gully [1] was observed running east-west across the trench. It consisted of moderately sloping concave sides with a concave base and measured 0.47m in width and 0.2m in depth. It contained a single fill (2) consisting of dark brownish grey silty clay of friable compaction containing rare small pebbles and occasional charcoal fleck inclusions. Five sherds of mid-1st-2nd century Roman pottery was recovered from this fill along with three sherds of fired clay. Environmental samples also yielded positive results from this fill

At the south south-west end of the trench a second feature [3] was observed running south eastnorth west. This appeared to be either a terminus of a linear heading to the south east or an elongated pit feature. It consisted of a moderate-steep concave-straight cut with an irregular base measuring 0.7m in width and 0.4m in depth. It contained a single backfill (4) consisting of a mid-brownish grey silty clay of firm compaction with several large angular stone inclusions and rare charcoal flecks. A large millstone fragment (sf1) of Roman or medieval date was recovered from this feature along with a Mesolithic or Upper Palaeolithic flint plunging blade.



Figure 16: Gully [1] looking east (1m scale)



Figure 17: Ditch terminus/pit [3] looking south east (1m scale)

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Figure 18: Trench 6 plans and sections

Trench 9 was located in the north-west of Area 1, and was placed to investigate possible archaeological deposits as highlighted on the geophysical survey (Figure 19).



Figure 19: Trench 9 looking west south-west (1m scale)

A large linear feature was observed running the complete length of the trench (30m), although only its southern half was seen with its full profile extending out beyond the northern edge of the trench (Figures 20 and 21). It consisted of a moderately sloping 'V' shaped cut [15] with concave base measuring 0.7m+ in width and 0.5m+ in depth. It contained a single fill (16) consisting of a mid-brownish grey silty clay of firm compaction with rare pebble inclusions and occasional charcoal flecks. This appeared largely sterile and no finds were recovered from this fill. Both [15] and (16) appeared truncated by a larger but shallower recut [17] consisting of a shallow concave cut with a concave-flat base measuring 1.4m+ in width and 0.3m in depth. It contained a single fill (18) consisting of a mid-dark greyish brown silty clay of firm compaction with occasional small pebble inclusions and rare charcoal flecks. Four sherds of mid-1st-2nd century Roman pottery were recovered from this fill.



Figure 20: Ditch [15] and ditch recut [17] looking north east (1m and 0.5m scale)



Figure 21: Trench 9 plans and sections

23

Trench 10 (Figure 22) was located on the western boundary of Area 1 and was situated to target possible archaeological deposits as highlighted on the geophysical survey, possibly the same feature as seen in trench 9.



Figure 22: Trench 10 looking north-west (1m scale)

A linear was observed running north east-south west across the trench at 10m from its south east end (Figures 23 and 24). It consisted of a moderately sloping 'V' shaped cut [11] measuring 0.75m+ in width and 0.45m+ in depth. It contained a single fill (12) consisting of mid orangey grey silty clay with occasional charcoal flecks and rare small pebble inclusions. No pottery was recovered from this fill although two small fragments of clay hearth lining were recovered. This cut is most likely the same as [15] seen in trench 9 to the east. Both [11] and (12) appeared truncated by a wider but shallower recut [15]. This consisted of a shallow concave sloping cut with a concave-flat base measuring 1.4m in width and 0.3m in depth. It contained a single fill (16) consisting of a mid-dark greyish brown silty clay of firm compaction with occasional small pebble inclusions and rare charcoal flecks. No finds were recovered. This cut is most likely the same as [17] seen in trench 9.



Figure 23: Ditch cut [11] and ditch recut [13] looking north north-east (1m and 0.5m scale)



Figure 24: Trench 10 plans and sections

The Roman Pottery, Tile and Fired Clay

Nicholas J. Cooper

Roman Pottery

A total of fourteen sherds (98g) of Roman pottery were recovered trenches 2, 3, 6, 9 and 14. The pottery has been analysed by form and fabric using the Leicestershire County Museums Roman pottery fabric series (Pollard 1994, 111-114), and in accordance with *The Standard for Pottery Studies in Archaeology* (Barclay *et al.* 2016), and quantified by sherd count and weight. The assemblage is generally abraded and fragmentary with a low average sherd weight of 7g. The quantified record is presented below (Table 1).

Roman Pottery							
Trench	Cut	Context	Fabric	Form	Sherds	Weight	date
2	9	10	GT1	jar	1	54	M1st-E2nd
3	5	6	C2NV	beaker	1	18	L2nd
3	7	8	OW2	misc	1	2	2nd
3	7	8	CG1A	jar	1	1	M1st-2nd
6	1	2	CG1A	jar	5	13	M1st-2nd
9	17	18	CG1A	jar	4	5	M1st-2nd
14	US		CG1A	jar	1	5	M1st-2nd
Total					14	98	Av.Sh.Wt 7g

Table 1: The Roman Pottery

The assemblage comprises a narrow range of vessel types, mainly jars, manufactured in local grog-tempered (Fabric GT1) and shell-tempered (Fabric CG1A) fabrics used in the area during the Mid-1st and 2nd centuries. The two exceptions to this are the pedestal base of a Lower Nene valley colour-coated ware beaker (Fabric C2NV) from [5] (6), probably from a small bag-shaped type (Howe *et al.* 1980, no.44) dating to the later 2nd century, and small sherd in oxidised ware (Fabric OW2).

Roman Tile

Three abraded fragments of Roman tile (100g) in a sandy orange fabric were recovered from (6) [5] in Trench 3, but not identifiable to type. They would indicate the existence of stone-founded buildings in the vicinity.

Fired clay and hearth lining

Three fragments of fired clay with a micaceous fabric (30g) were recovered from Trench 6 [1] (2). They are amorphous with no wattle impressions but presumably derive from wattle and daub structures in the vicinity. In addition, two small fragments (5g) of clay hearth lining with vitrified internal surfaces to a depth of 4mm were recovered from [11] (12). These fragments

would indicate some kind of high temperature craft activity in the vicinity but not demonstrably related to metal working.

Discussion

Despite the abraded nature of the assemblage it demonstrates the existence of stratified, datable deposits across the site which will require further investigation if the development proceeds. The condition of the material would suggest secondary deposition at some distance from the centre of settlement activity.

The Millstone

Nicholas J. Cooper

A fragment (sf1) from the upper stone of a millstone was recovered from [3] (4) in Trench 6. It is manufactured in an orange sandstone and about 25% of the central perforation is preserved (70mm diameter). The lower (grinding) surface is flat and bears concentric wear marks. The upper surface is convex, but not evenly dressed, and is damaged by pock marks, possible due to the fact that, before being broken, it was incorporated into a hearth, which blackened all the original external surfaces to a depth of 3mm. A small part of the outer circumference of the stone is preserved suggesting an original diameter of about 500mm. The thickness of the stone is 115mm. The millstone will be Roman or possibly medieval in date.

The Flint

Lynden Cooper

A total of seven pieces of worked flint were recovered during the evaluation, six of which were unstratified, with the single stratified piece coming from [3] (4), catalogued as follows.

Field 1 U/S. A retouched flake and two secondary flakes.

Trench 6 [3] (4). Plunging blade/ flanc de nucleus

Trench 9 U/S. A retouched flake.

Trench 11 U/S. A core.

Trench 13 U/S. A secondary flake.

The unstratified material is of local till-derived flint of broad Neolithic or Early Bronze Age date, whilst the plunging blade is Mesolithic or possibly Upper Palaeolithic in date.

The Charred Plant Remains

Adam Santer and Rachel Small

Introduction

During an archaeological evaluation at Leicester Lane three bulk soil samples were taken and processed for the analysis of charred plant remains. Sample 1 was from the fill (2) of a gully [1], sample 2 was from the fill (10) of a linear ditch [9] and sample 3 was from the fill (18) of a large recut ditch [17]. All of the features dated to the middle 1st-2nd century (Early Roman period). The analysis of the charred plant remains recovered from the samples are presented here, together with a discussion of what this can potentially tell us about past diet, crop husbandry strategies and environment at the site.

Methodology

The samples consisted of a mid-brown clay and were processed in a York tank using a 0.5mm mesh with flotation into a 0.3mm sieve. The flotation fractions (flot) was sorted for plant remains and other artefacts under an x10-40 stereo microscope. The residues were air dried and split using a 4mm sieve. The over 4mm fractions were sorted by eye for artefacts whilst the fractions under 4mm were sorted under the microscope. The extracted charred plant remains were identified by comparison to modern reference material available at ULAS and their names and details of their preferred habitats follow Stace (1991). The plant remains were quantified as follows (see table 1): each whole grain or those representing over 60% of the specimen was counted as one; for chaff, each glume base was counted as one; and for seeds, each fragment was counted as one.

Results

Sample 1 (2) [1] gully fill

Sample 1 contained a medium density of charred plant remains; 17.6 items per litre. Grains were dominant; the majority were poorly preserved being abraded and highly fragmentary and therefore it was only possible to identify roughly a quarter (27.1%) to species. Glume wheat (*Triticum* spp.) was the most common species identified followed by barley (*Hordeum vulgare* L.), a small number of oat (*Avena* spp.) grains were also present.

A small number of chaff fragments were present in sample 1. This included two wheat (*Triticum* spp.) glume base fragments, these were very abraded and fragmentary and therefore it was not possible to identify them to species. A cultivated oat (*Avena sativa* L.) lemma base was also present and this may suggest that the grains mentioned previously were also cultivated oat (as this can only be ascertained from the chaff). Another food item present in the sample was pea (*Pisum sativum* L.).

A large number of wild seeds were also present in the sample. Large grass (Poaceae) seeds were also common, it is possible these represent poorly preserved wild/cultivated oat. Stinking chamomile (*Anthemis cotula* L.) was most dominant with 36 seeds present, the large number could represent a burnt seed head. This plant typically grows in agricultural lands and thrives in heavy clay. It is therefore used as an indicator of the use of improved ploughing equipment (Ciaraldi 2001, cited in Monkton 2001: 18). Goosefoot (*Chenopodium* spp.), dock (*Rumex* spp.) and a wild radish seed (*Raphanus raphanistrum* L.) were also present, and again they are typical of cultivated areas. A spearwort (*Ranunculus flammula/lingual* L.) seed was also found, these typically grow in marshy/wet conditions.

Sample 2 (10) [9] ditch

This sample contained a very low density of plant remains. Two cereal grains were present, only one of which could be identified and as wheat. Three goosefoot seeds (*Chenopodium* spp.) were also present.

Sample 3 (18) [17] ditch re-cut

Charred plant remains were not present in sample 3.

Note on the charcoal from samples

Charcoal flecks were present in all three samples but fragments measuring over 2mm in diameter and therefore suitable for identification to species and radiocarbon dating were absent.

Note on the residues

The residues from samples 2 and 3 contained no artefacts or charred plant remains. Sample 1 also contained no artefacts but contained a large number of charred plant remains, seventy eight items in total and this represents 29.4% of the overall assemblage. This included grains and peas (see table 1). These charred plant remains can be classed as 'heavy' and their presence in the residue is reflective of flotation being less effective, which is likely due to the heavy clay make-up of the soil.

Table 1: charred plant remains present in samples 1, 2 and 3. Key: * indicates that for sample 1, three barley grains, seven glume wheat grains, sixty four indeterminate grains, three garden peas and one stinking chamomile seed where extracted from the residue.

Sample	*1	2	3	
Context	2	10	18	
Cut	1	9	17	
Feature type	Gully	Ditch	Ditch re-cut	
Grain				
Avena sp.	5			Oat
Hordeum vulgare L.	16			Barley
Triticum sp.	27	1		Glume wheat
Indeterminate grain	129	1		Indeterminate grain
Chaff				
Avena sativa L. lemma base	1			Cultivated oat lemma base
Triticum sp. glume base	2			Wheat glume base
Straw culm node	1			Straw culm node
Legumes				
Pisum sativum L.	5			Garden pea
Wild seeds				
Anthemis cotula L.	37			Stinking chamomile
Chenopodium sp.	9	3		Goosefoot
Poaceae (large)	24			Large grass
Ranunculus flammula/lingula L.	1			Lesser spearwort/Greater spearwort
Raphanus raphanistrum L.	1			Wild radish
Rumex sp.	2			Docks
Lathyrus/Vicia	3			Pea/Vetch
Vicia sp.	2			Vetch
Total	265	5	0	
Sample volume (L)	15	15	17	
Items per litre	17.6	0.33	0	

Discussion

Three samples were taken during an evaluation at Leicester lane; only sample 1 contained charred plant remains in a moderate density, and this was a fill of a gully. Sample 2 and 3, which were taken from ditches, contained very few charred plant remains.

The assemblage from the gully was dominated by grains and this likely represents food spillage. The presence of glume wheat, barley and cultivated oat suggests they were consumed. This hypothesis is supported by the presence of peas which again were likely cooked and spilled. The chaff and plant remains are likely contaminates of the grain or waste from preparing it for consumption that was used as tinder on the hearth. It is generally considered that processing took place on a small scale on a day to day basis in Roman rural settlements. These remains along with other waste from hearths, may have been formerly deposited in the features or may have collected in them whilst they were open.

The wild seeds present indicate the cultivation of heavy clay soils, which would have required the use of improved farming equipment. Also, waterlogged soils due to the presence of spearwort, it is possible the fields may have had poor drainage.

These finds are typical of other mid Roman assemblages found throughout rural East Midlands (see Monkton 2001: 17-18).

Recommendations for further work

If further work is carried out at Leicester Lane or in the near vicinity, it is suggested that further sampling should be undertaken and the charred plant remains analysed. A larger number of features should be targeted and greater concentrations of soil taken for each sample, 40-60 litres is recommended, and residues should be sorted for plant remains. This will allow for the retrieval of a larger assemblage of charred plant remains and therefore a better understating of diet, and crop husbandry strategies at the site. Greater insight into arable farming methods, agricultural intensification with relation to the source of cereals, and the supply of crops to towns are regional research aims (*ibid*: 35).

Discussions and Conclusions

University of Leicester Archaeological Services carried out an archaeological evaluation on land at Leicester Lane, Great Bowden. The work involved the machine excavation of 14, 30m long trial trenches located throughout the development area focusing on areas containing anomalies possibly associated with archaeological remains identified following the geophysical survey.

The topsoil and subsoil where present appeared consistent across the study area, with the natural substratum consisting of predominantly yellowish brown clay with very occasional pockets of ironstone.

Ridge and furrow was recorded in all trenches excavated representing agricultural farming and ploughing from the medieval period through to the present day. In trenches 2, 9 and 10 this could be seen truncating archaeological deposits. The presence of ridge and furrow could also be seen on the geophysical survey. Field drains were also present in several trenches.

Archaeological deposits were encountered in 5 of the 14 trenches, all in Area 1. These were trenches 2, 3, 6, 9 and 10. The features represented gullies, ditches and a possible pit.

Ditch cuts [5], [7] and [9] in trenches 2 and 3 confirmed the presence of an enclosure of mid-1st-late 2nd century Roman date within the study area as initially indicated on the geophysical survey (Figure 25). As a result further archaeological deposits are likely within the immediate area. Recent excavations opposite the development area, on the south side of Leicester Lane (Cambridge East, forthcoming) have yielded some prehistoric features and a series of Roman ditch systems, suggesting perhaps a continuation of the activity into this area.



Figure 25: Archaeology in trenches 2 and 3 (in red) overlaying the geophysical data

Despite no clear indications on the geophysical survey, gully [1] and ditch terminus/pit [3] in trench 6 indicate the further presence of archaeology deposits, with gully [1] indicating further evidence of enclosure systems of Roman date in the development area. Environmental samples taken from (2) also indicates the presence of potentially good charred plant remains within the archaeological deposits. The presence of a Mesolithic or Upper Palaeolithic plunging blade in (4) although possibly residual within the cut, does indicate the possibility of prehistoric archaeology in the immediate area. This suggests the density of archaeological deposits maybe greater than the geophysical survey indicates at this stage.

Despite being interpreted on the geophysical survey as a possible geological feature, the anomaly targeted in trenches 9 and 10 appeared to be a ditch feature of 1st-2nd century Roman date with associated recut (Figure 26). Both trenches identified a narrow deeper cut [11] and [15] with a wider shallower recut [13] and [17] truncating this. Despite the anomaly appearing less positive as it headed east, evidence suggests it possibly runs the entire width of the development area and continues out of the study area on its eastern boundary. Its nature suggests a boundary ditch feature of at least 2 phases perhaps bounding the archaeology seen to the south.



Figure 26: Archaeology in trenches 9 and 10 (in red) overlaying the geophysical data

It appears that archaeological features are present in the development area with the focus being in the mid-southern portions of Area 1. Trenches on the northern boundary of Area 1 and trenches in Area 2 appear clear of archaeological deposits at this stage. It is noted that archaeology in trenches 2, 3 and 6 are concentrated to flatter topography within the development area, suggesting settlement activity is focused on flatter ground, with the possible boundary ditch seen in trenches 9 and 10 running across the slope as the field drops away to the north. It is worth noting no animal bone was present in any excavated sections which may indicate poor preservation and survival due to acidic soil conditions. It is also clear that truncation of archaeological deposits due to ploughing has taken place across the development area, shown through the consistent ridge and furrow recorded in the trenches and the presence of prehistoric flints in the topsoil. Despite this, it is clear archaeological deposits do remain in situ.

Archive

The site archive will be held by *Leicestershire Museums Service, under accession no. X.A41.2018.*

The site archive consists of:

1 Unbound A4 copy of this report

14 A4 Trench recording sheets

1 A4 Photo record sheets

A4 Colour digital contact print 1 CD of digital photos

Drawing Sheets and Indices

Context Sheets and Indices

Publication

Since 2004 ULAS has reported the results of all archaeological work through the *Online Access to the Index of Archaeological Investigations* (OASIS) database held by the Archaeological Data Service at the University of York. A summary of the work will also be submitted for publication in a suitable regional archaeological journal in due course.

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Oasis Data

	Oasis No	universi1-315430			
	Project Name	An Archaeologica Lane, Great Bowd	l Evaluation at Leic en	ester	
	Start/end dates of field work	16-04-18 - 19-04-	18		
	Previous/Future Work	unknown			
	Project Type	Evaluation			
	Site Status	None			
PROJECT DETAILS	Current Land Use	Pasture			
DETAILS	Monument Type/Period	Roman			
	Significant Finds/Period	Roman			
	Development Type	Residential			
	Reason for Investigation	NPPF			
	Position in the Planning Process	Planning condition			
	Planning Ref.	16/01942			
	Site Address/Postcode	Leicester Lane, Great Bowden			
PROJECT	Study Area	2.18 ha			
LOCATION	Site Coordinates	SP 473640 289120)		
	Height OD	88aOD-99aOD			
	Organisation	ULAS			
	Project Brief Originator	Local Planning Authority (CDC)			
PROJECT CREATORS	Project Design Originator	Pegasus Group			
	Project Manager	Vicki Score			
	Project Director/Supervisor	Adam Clapton			
	Sponsor/Funding Body	Developer – Gladman Developments			
		Physical	Digital	Paper	
	Recipient	Leics MusService	Leics MusService	Leics MusService	
ARCHIVE	ID (Acc. No.)	X.A41.2018	X.A41.2018	X.A41.2018	
	Contents	Pottery, Flint	Photos	Trench sheets, photo records, site	

		indices, context sheets		
	Туре	Grey Literature (unpublished)		
PROJECT BIBLIOGRAPHY	Title	An Archaeological Evaluation at Leicester Lan Great Bowden		
	Author	Clapton, A		
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