

WGCB11/002



WOBURN GOLF AND COUNTRY CLUB,  
WOBURN, BEDFORDSHIRE

*Results of an Archaeological Evaluation*

*for Water Resource Associates Ltd*

*November 2011*



# WOBURN GOLF AND COUNTRY CLUB, WOBURN, BEDFORDSHIRE

## RESULTS OF AN ARCHAEOLOGICAL EVALUATION

*for Water Resource Associates Ltd*

*November 2011*

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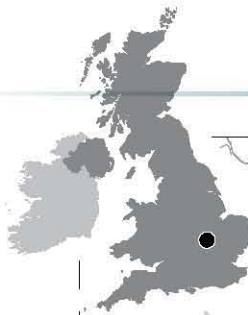
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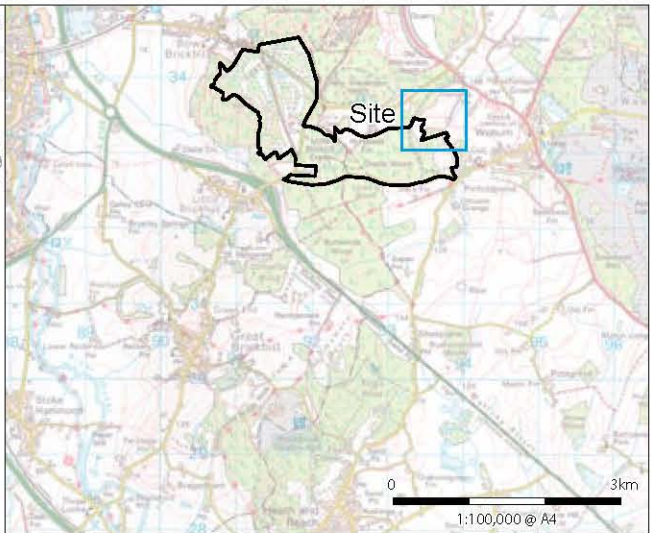
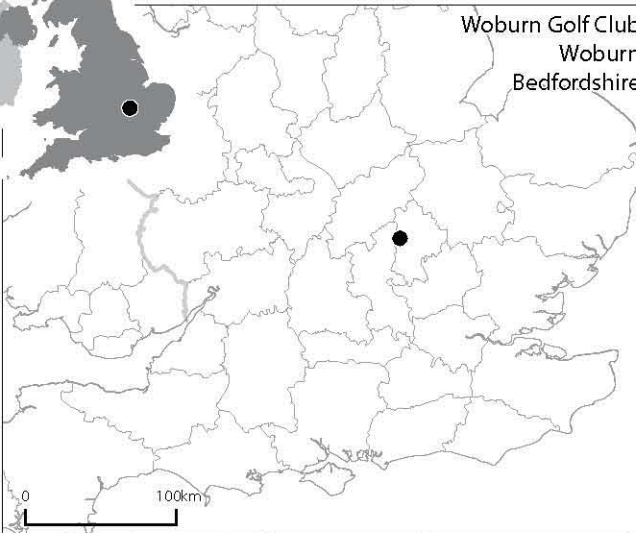
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Woburn Golf Club  
Woburn  
Bedfordshire



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Illus 2



**Key**

- development area
- location of proposed reservoir NIR3
- area of wild meadow
- trenches

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Scale 1:5,000 @ A4



Illus 1  
Site location



# WOBURN GOLF AND COUNTRY CLUB, WOBURN, BEDFORDSHIRE

## Results of an Archaeological Evaluation

*Headland Archaeology Ltd conducted an evaluation at a proposed development site at Woburn Golf and Country Club in order to provide further information on the archaeological potential of the site. The work was commissioned by Water Resource Associates Ltd acting for Bedford Estates. A total of twenty one trenches were excavated over the development area. These identified remains of Roman settlement and field systems, including structural remains and industrial residues. The majority of remains were datable to from the late Iron Age to the 2nd century AD*

### 1. INTRODUCTION

#### 1.1 Planning background

Water Resource Associates Ltd is developing proposals for the installation of a new water management and irrigation system at Woburn Golf and Country Club, Woburn, Bedfordshire. The site is henceforth referred to as the Development area (DA). The proposed works comprise the creation of a new reservoir and wild flower meadow on land at the eastern end of the golf course. As part of the application process, the Company commissioned Headland Archaeology to undertake a heritage assessment of the entire DA (in line with PPS5: Planning for Historic Environment) which highlighted the potential for below-ground archaeology within the area affected by the proposed works (Headland Archaeology 2011a).

Because of the potential for sub-surface archaeological remains, Central Bedfordshire Council's Archaeology Team (AT) produced a brief (CBC 2011) requiring the implementation of a programme of archaeological trial trenching within the DA. Headland Archaeology was commissioned by Water Resource Associates Ltd to agree a programme of trial trenching in line with the brief and produce a Written Scheme of Investigation (WSI) for the work (Headland Archaeology 2011b). Headland were also commissioned to undertake the site works and produce a report (this document) on the results.

#### 1.2 Site location and background

The DA covers c.4.5 ha and is centred on NGR SP 9340 3333 on the eastern edge of Woburn Golf course, c.1.3km to the west of Woburn and south of Longslade Lane (Illus 1). The natural topography of the DA is generally flat and occupies a plateau at a height between 136.9–140.5m OD. Land slopes downward to the north, east and western edges of the DA. The site is currently fallow but has been cultivated in the past. Indeed, it was last ploughed c.2004.

The DA lies on the northern edge of the London Basin, on the Greensand Ridge. The underlying geology consists of Greensand originally formed at the bottom of a shallow sea in the Cretaceous period, sometimes coloured green from the mineral glauconite, but also yellow, orange and brown stained from the presence of iron oxide. Beds of decayed volcanic ash, known as Fuller's Earth, are found within the sands and this mineral has been quarried since antiquity. Large quantities of Iron Stone are also known to be present within the Greensand Ridge.

#### 1.3 Archaeological background

The archaeological background of the DA and the surrounding land has been summarised in detail in the Desk Based Assessment (DBA) (Headland Archaeology 2011a). Local research frameworks suggest that the Greensand Ridge is likely to have attracted Mesolithic



activity, particularly vantage points such as scarps and bluffs overlooking watercourses, but no stray finds are recorded in the study area or close by. Little Neolithic activity is known, and recorded later prehistoric activity is confined to some Bronze Age barrows north of Leighton Buzzard and an Iron Age hillfort at Danesborough Camp in Wavendon Wood at Aspley Heath (1.6km north of the DA).

The DA lies 2.5km to the north east of the modern A5, on the line of the Roman Watling Street, which ran from Dover via London to Wroxeter. The small Roman defended settlement of *Magiovinum* lies 3km to the WNW of the study area, on the line of Watling Street. Recent excavations at Fox Close, within Woburn's town centre produced evidence of 1st–2nd century Roman pottery production (Newbould and Slowikowski, in prep.). This represents the first evidence for Roman occupation within Woburn. The paucity of evidence for Roman activity in this area is likely to be due in part to the lack of recent development in the Greensand Ridge area (Oake *et al* 2007, 4).

The DA falls within the modern civil parishes of Aspley Heath, Woburn and Little Brickhill. The place name derivations (from the EPNS online resource) suggest something of the character of the area in the post-Roman and early medieval periods; Aspley (the Heath element is apparently later) from *Aespe leah* or aspen-tree wood/clearing; Woburn meaning crooked stream, and Brickhill (Brichellae C11th; Parva Brichull C13th) derived from the Celtic *Brig* and OA *hyll* = (the hilltop) hill.

Within the DA itself, geophysical survey (Barker and Mercer 1999; Historic Asset – HA1 Headland Archaeology 2011a), (Illus 2) revealed a large number of linear anomalies considered to represent field systems, enclosures and track-ways. A number of large area anomalies indicating possible iron working was also identified, an interpretation supported by the presence of possible slag on the ground surface. Evaluation of morphologically similar anomalies c.300m to the NE of the proposed reservoir at Horsemoor farm, revealed evidence of Saxo-Norman occupation (HER13499).

## 2. METHODOLOGY

### 2.1 Objectives

In general the objectives of the evaluation are presented in the WSI (Headland Archaeology 2011, Section 4).

The specific objectives of the evaluation were:

- to test the results of the geophysical survey (Barker and Mercer 1999) within the areas impacted by the proposed reservoir and wild flower meadow.

- establish the location, extent, nature, date and significance of any archaeological features or deposits that may be present.
- establish the integrity and state of preservation of any archaeological features or deposits that may be present.

### 2.2 Methodology

Fieldwork took place between the 17th and 24th October 2011. A total of twenty-one trenches were excavated between 30 and 50m in length and 2m wide (Illus 3 & 4). Trenches were laid out in order to test geophysical survey anomalies and blank areas which fell within zones of proposed development impact.

A 360 degree tracked mechanical excavator equipped with a flat-bladed bucket was used to remove topsoil under direct archaeological control. Excavation continued until clean geological sediments, significant archaeological deposits or structures were encountered or until the limit of safe excavation was reached, whereupon sondages were dug to establish the depth of the natural geology.

Further excavation required to satisfy the objectives of the evaluation was continued by hand. A representative sample of identified features, sufficient to meet the objectives of the evaluation, was investigated by hand and all identified features were recorded. The stratigraphy of each trench was recorded in full.

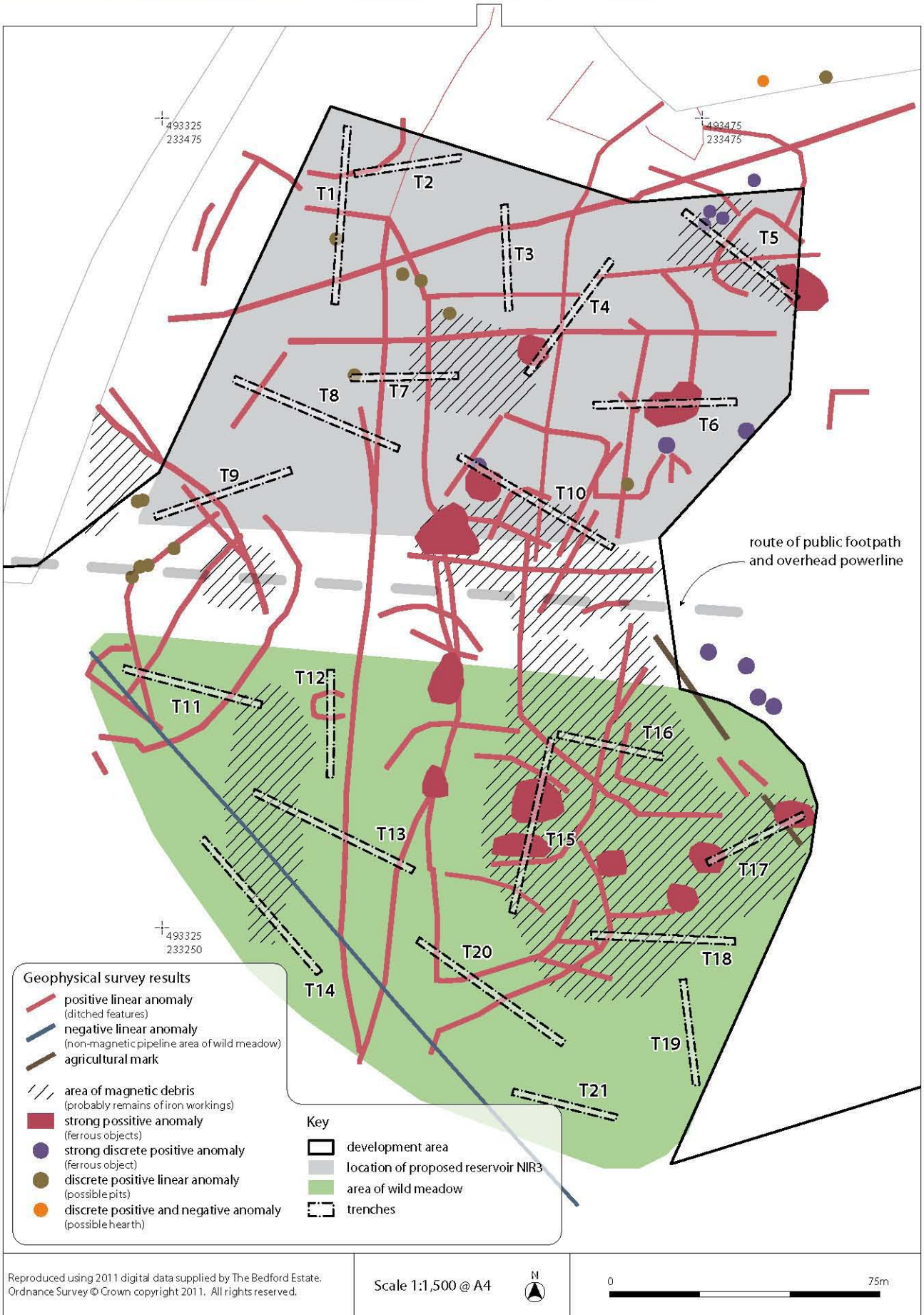
The evaluation was monitored and approved by CBC's AT. Backfilling of the trenches was undertaken following approval from the AT.

### 2.3 Recording

All recording was in accordance with the code of practice of the Institute for Archaeologists (IfA). All trenches and contexts were given unique numbers and all recording was undertaken on pro forma record cards that conform to accepted archaeological standards. All stratigraphic relationships were recorded.

An overall site plan at an appropriate scale and relative to the National Grid was recorded by digital survey using a differential GPS.

A full photographic record comprising colour slide and black and white print photographs was taken, supplemented with digital photography. A metric scale was clearly visible in record photographs of contexts.



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Illus 2  
Trench location



## 3. RESULTS

### 3.1 Introduction

Full trench descriptions, including orientation, length and depth of overburden are presented in Appendix 1. Technical details of individual contexts are presented in Appendix 1. Context numbers are expressed according to the trench in which they were found; *ie* Trench 10 – [1000], [1001]; Trench 20, [2000], [2001] *etc*. The results are described in chronological order and grouped by feature type.

Overburden generally comprised topsoil between 0.29m and 0.45m in depth and is the result of modern ploughing. This directly overlays the undisturbed geology, which comprised yellow orange sands. Subsoil was observed in isolated patches of the DA (Trenches 1, 7 & 8) and was up to 0.2m thick.

### 3.2 Late Iron Age

A small number of features were datable from pottery to the late Iron Age (LIA). All were located in the western part of the DA (Illus 3 & 4).

#### 3.2.1 Field systems

4 Trench 3 contained a broadly E-W aligned ditch terminus [300], the deposits of which contained 13 sherds of LIA pottery. It was located c.7m south of and parallel to a large linear anomaly revealed by geophysical survey (Illus 2 and 3), evidence of which was not present within the trench. A second, N-S aligned terminus [1308] was identified in Trench 13 containing 2 sherds of LIA pottery. It corresponded with a linear geophysical anomaly (Illus 4). In the western part of Trench 11, a NE-SW aligned ditch [1103] also containing 2 sherds of LIA pottery was identified. It corresponded with a linear geophysical anomaly and was re-cut by a smaller ditch containing no datable material [1101]. Geophysical survey indicates these remains are likely to represent field systems and enclosure ditches or parts of track-way ditches.

#### 3.2.2 Pits

Two pits [503 and 505] were identified in Trench 5, the fills of which were significantly darker than those in the remainder of the DA. They contained relatively large amounts of late Iron Age pottery (19 and 31 sherds respectively). Three further pits in Trench 7 [701 and 705] and Trench 13 [1306] also contained LIA pottery and were similar in morphology to [503 and 505]. Two discrete features in Trench 5 [509 and 510] contained no datable material. However, their morphology and proximity to [503 and 505] suggests they may be of a similar date.

LIA pottery, recovered from the topsoil of Trench 14 supports the evidence that the western part of the

DA was in use during this time. It also demonstrates that archaeological deposits have been truncated by ploughing.

### 3.3 Roman

The majority of remains within the DA were datable by pottery to the 1st and 2nd centuries. They comprised ditches, pits and post-holes as well as a number of layers containing Roman artefactual material.

#### 3.3.1 Plough horizon

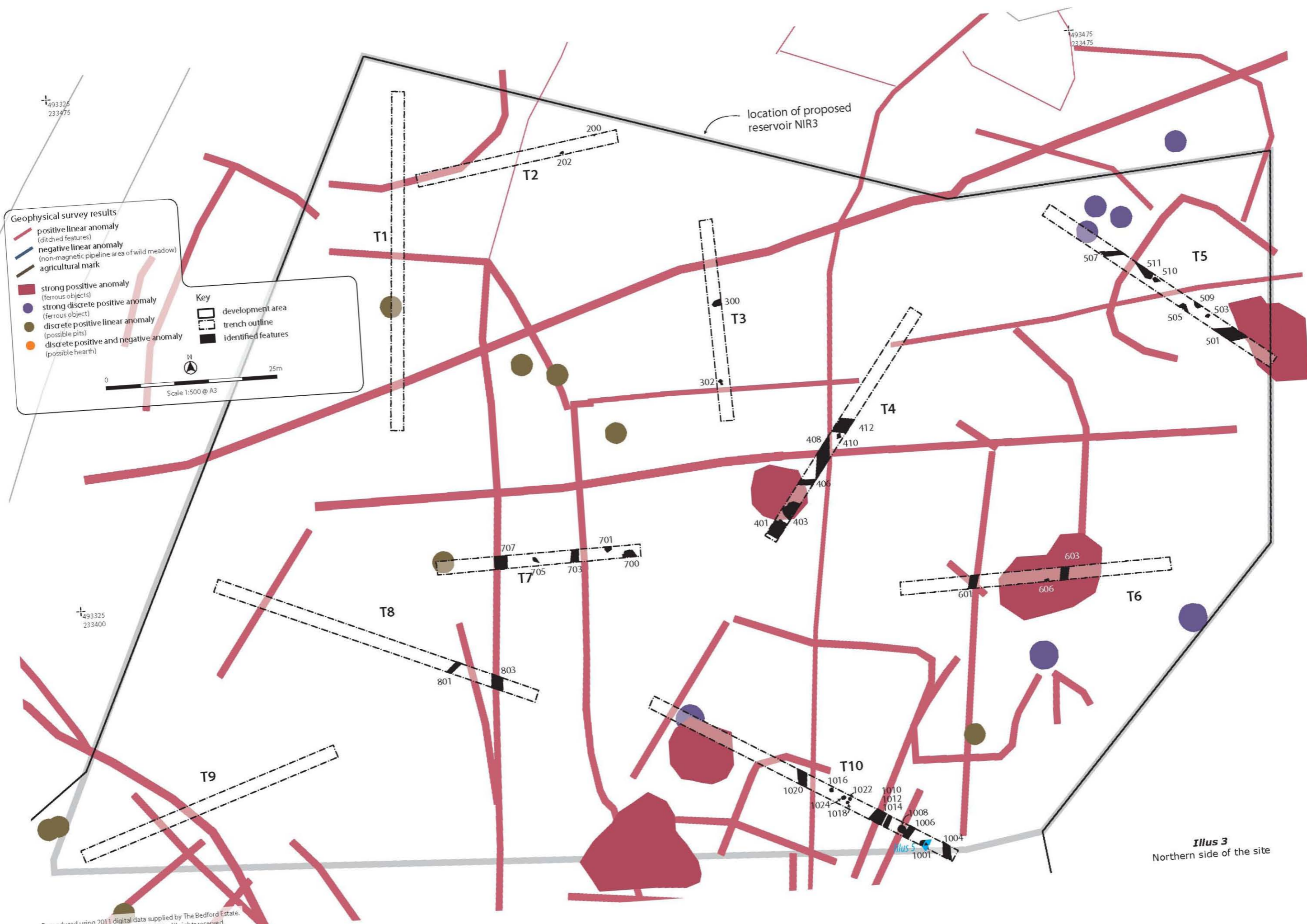
The majority of the length of Trench 15 was occupied by a dark area deposit [1500] measuring c.40m in length and up to 0.2m in depth (Illus 4). It contained some 207 sherds of pottery datable to the 2nd century and broadly corresponded to two area anomalies revealed by geophysical survey (Illus 4). Samples taken from the layer also revealed evidence of industrial activity in the form of hammerscale, slag and glass waste. The layer was partially removed by machine to establish its depth (Illus 4). A 1m wide sondage was also placed in the centre of the deposit (Illus 4 & 10).

Beneath the layer were the remains of two ditches [1501] and [1511], two pits [1503] and [1507] and two postholes [1505] and [1509]. These features contained similar deposits and artefactual material to the layer above. This indicates the layer may have been partially derived from the underlying archaeological remains through plough truncation. Alternatively, the organic character of the deposit, and the presence of pottery and industrial residues within it suggests it may represent an accumulation of settlement waste. However, the deposit was homogenous and well sorted with evenly distributed inclusions. This suggests the deposit has been disturbed, most likely through plough action following the abandonment of the site (such as the remains of a flattened, reworked midden deposit). Whatever its origins, (1500) is unlikely to represent an *in situ* deposit. Levels taken along Trench 15 demonstrate that the layer occupies a depression in the natural geology some 40m in length. This has protected much of the layer and the remains beneath it from ploughing in the modern era (Section 3.5).

#### 3.3.2 Ditches – Field systems

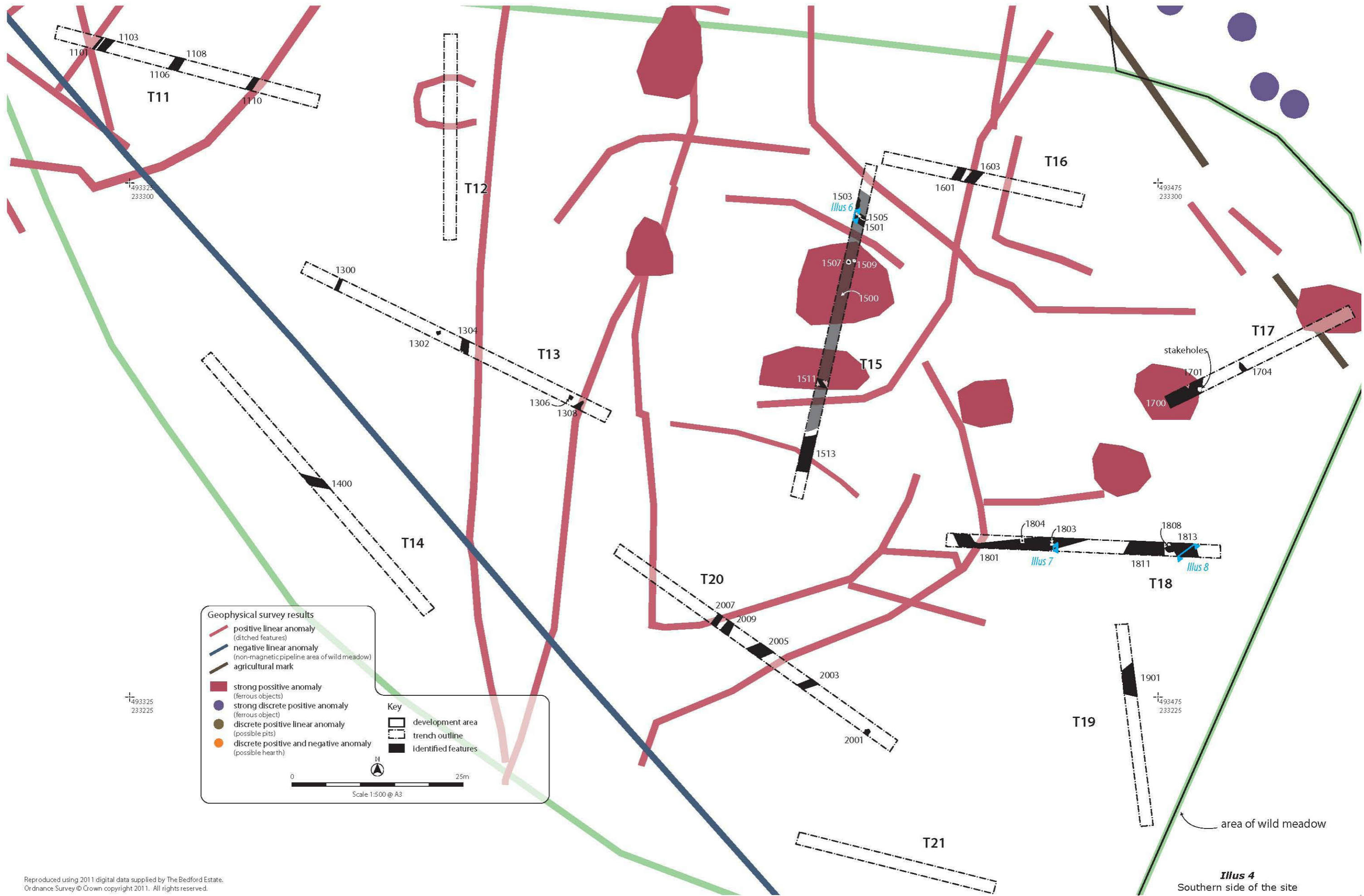
A large number of variously aligned, morphologically similar linear features were identified across the DA.

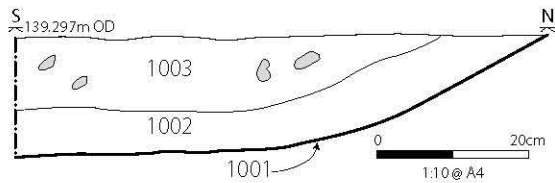
A broadly N-S aligned ditch [707, 803 and 1304] corresponded with a linear anomaly from the geophysical survey. It contained only two sherds of 2nd century pottery within [1304]. Its morphology and the relatively small assemblage of pottery indicated it is likely that these three formed part of a large field system or track-side ditch. Indeed, approximately 12m to the east of this was similarly sized ditch [703], which corresponded to a parallel



**Illus 3**  
Northern side of the site

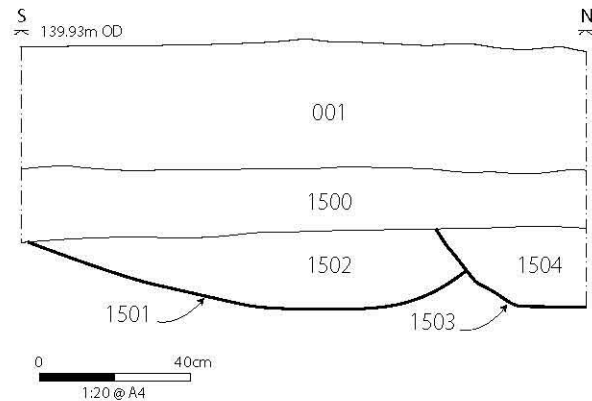
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Illus 5

Section of pit [1001] facing E



Illus 6

Section of [1501] & [1503] beneath [1500] facing E

geophysical anomaly and contained nine sherds of 1st–2nd century pottery. It is possible the two ditches, which extend across the entire length of the DA and converge at its southern extent form part of a contiguous system.

The presence of a third, contiguous ditch, extending from north to south across the DA before curving to a NW–SE alignment, was confirmed in Trenches 4 and 10 [408, 1020] (Illus 3 & 4). Only one of the slots [408] contained datable material in the form of six sherds of 1st–2nd century Roman pottery. The geophysical anomaly was also targeted by Trench 15 but was not present.

A number of other ditches within the DA contained relatively small amounts of pottery (less than ten sherds – Section 4) datable to the 1st and 2nd centuries AD [601, 1601, 1603 and 2005]. These ditches were present across the DA and largely followed alignments indicated by geophysical survey. These are considered to represent enclosures and/or field-systems.

### 3.3.3 Ditches – Settlement enclosure

A second group of ditches [403, 412, 501, 603, 1010, 1012/1014, 1400, 1501, 1701 and 1801] contained much larger concentrations of 1st–2nd century Roman pottery (more than 10 sherds – Section 4). All except [501, 1400 and 1701] corresponded with geophysical anomalies. All ditches within this category (with the exception of [1400]) were located within the eastern part of the DA (Illus 3 and 4). Indeed the biggest assemblages came from [403]:46 sherds, [1010]:175 sherds, [1012/1014]:78s sherds and [1801]:132 sherds. These were generally in association with pits containing contemporary pottery and the large area anomalies indicated by geophysical survey. Both trial trenching and geophysical survey also clearly demonstrate that feature density is greatest in the eastern part of the DA. Furthermore, although they were morphologically similar to the more sparsely dated ditches in the western part of the DA, their fills were generally darker, containing greater organic content. Given their density, deposits and the relative abundance of pottery, it is likely they represent settlement enclosure ditches.

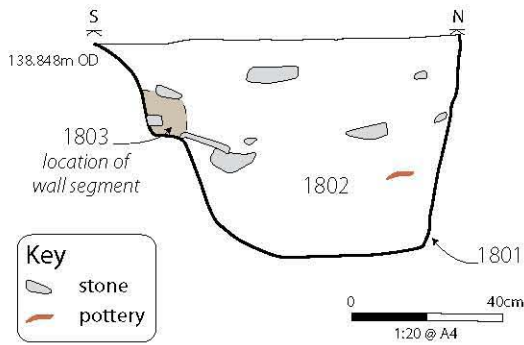
### 3.3.4 Pits

A number of morphologically similar pits [302, 606, 701, 705, 1001, 1008, 1016, 1302, 1306 and 1901] were identified across the DA (Illus 3 and 4). Although they differed in size, their deposits were broadly similar; consisting of grey sand. Most contained 1st and 2nd century Roman pottery (Section 4). The majority were located within the eastern part of the DA, in association with those ditches containing the densest concentrations of pottery.

Of particular interest was pit [1001], which contained two deposits consisting of a probable clay lining overlain by grey sand (1003). This deposit contained the remains of an iron tool or weapon and four hobnails, one of which was recovered from environmental sampling (Section 4.6). No evidence of burning was present. Also in Trench 10, pit [1016] contained the remains of a near complete (broken) rotary quern stone and an iron nail (Illus 10). Samples of the surrounding deposit contained small amounts of slag and vitrified waste indicative of high-temperature industrial processes.

Two large area deposits of similar composition and date to layer [1500] were identified in Trenches 4 (401) and 17 (1700) (Illus 3 & 4 respectively). Like [1500], they also corresponded with large anomalies revealed by geophysical survey. They were also found to contain large quantities of 2nd Century Roman pottery (Section 4). Samples taken from the base of the excavated slot through [401] revealed evidence of metalworking waste in the form of hammerscale. Although similar in character and date to layer [1500] these were much deeper and are more likely to represent the remains of large pits than layers.

Pit [1901] was unusually large in comparison to the remainder of the features on the site. It contained four deposits with eleven sherds of 1st–2nd century Roman pottery recovered from the uppermost fill (1905). Despite the pit's width of 5m and depth of 0.60m it was not revealed by geophysical survey.



Illus 7

Section of ditch [1801] facing E

### 3.3.5 Structures

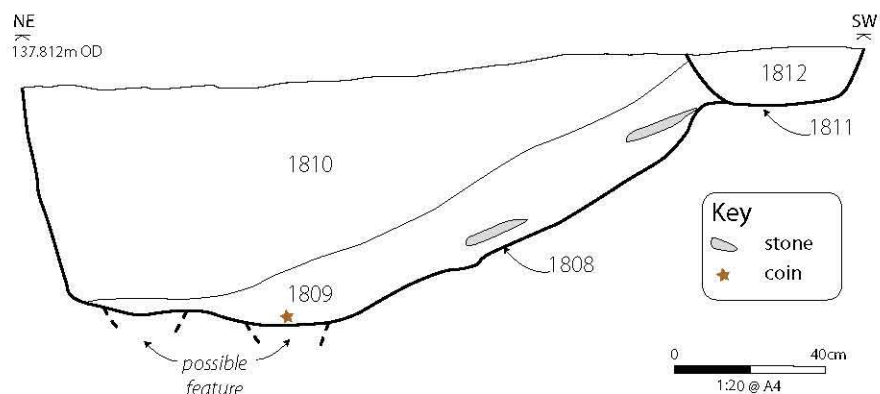
Despite the small number of postholes [1018, 1505 and 1509] identified within the DA (Illus 3 and 4). All contained single deposits which consisted of clay rather than the sandy deposits within all the other features observed. It is likely the clay was used as a packing material for posts. Clay is not naturally occurring within the DA and therefore would have been imported. Posthole [1018] was found in association with two unexcavated postholes. Their location adjacent to pits and linear features containing relatively large amounts of pottery strongly suggests they form the remains of a structure rather than a fence-line. Posthole [1505] was located in the base of ditch [1501] although the relationship was unclear. A second posthole [1509] was located c.5m to the south beneath layer [1500]. It is possible that similar remains are present beneath the unexcavated portion of layer [1500].

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A broadly E-W aligned ditch [1801] within Trench 18 contained the remains of a probable ironstone wall [1803] running in line with the ditch (Illus 4 and 7). It was up to 0.3m in width and was at least 1m long. The stone in the wall was irregular in shape but generally flat and was not mortar bonded.

### 3.3.6 Trackway

At the eastern end of Trench 18, a large N-S aligned ditch [1813] was identified. Its uppermost deposit consisted of redeposited natural. The lower fills contained 38 sherds of 2nd-3rd century Roman pottery and a coin likely to be of a similar date (Section 4). The sides of the ditch [1808] were cut by two parallel gullies of similar widths and depths. It is possible these form the limits of a trackway. Indeed, the redeposited natural may represent deliberate backfilling of the earlier ditch [1808] as part of the track's construction. These



Illus 8

Section of Ditch [1808] and [1811] facing NW

remains do not appear to be present on the geophysical survey. However, their layout is similar to geophysical anomalies c.8m to the north. Given that geophysical survey was undertaken in 1999 (prior to widespread availability of accurate GPS technology) it is possible that location inaccuracies within the survey data have led to errors in the location of trenches.

### 3.3.7 Cremations

Two possible cremations [200 and 202] were located in Trench 2 at the northern edge of the DA. Both were small in size and were directly beneath the topsoil, indicating they had been partially truncated by modern ploughing. Due to the large amount of burnt bone observed in their respective deposits they were left unexcavated at this time. Geophysical survey indicates they are immediately to the east of two linear anomalies. However, these were not picked up by trial trenching.

## 3.4 Undated

Very few features identified in the DA were found to be lacking in dating evidence [410, 507, 1106, 1108, 1300, 2001, 2003 and 2007]. Feature [410] has a similar deposit to other datable features in Trench 4. However its irregular morphology suggests it may be a tree-throw hole. The two undated gullies in Trench 11 [1106 and 1108] had similar deposits to [1103] and were parallel with it. They did not appear on the geophysical survey. Similarly, an undated gully in Trench 13 [1300] also did not appear on the geophysical survey, but does share morphological properties to other nearby features. The linear features identified in Trench 20 [2003, 2007 and 2009] all contain similar fills to [2005] which contained 2nd century Roman pottery. Given their morphological characteristics and proximity to datable features, these are likely to represent parts of the wider network of Roman field systems within the DA.

Beneath layer [1500] in Trench 15 were the remains of a small undated pit [1507]. It contained large amounts of iron slag (weighing 1.7kg). However, no evidence of



Illus 9 ►  
*Trench 4 facing NE and deposit [0401]*



Illus 10 ►  
*Quern stone in pit [1016] facing NE*



11

Illus 11 ►  
*Slot through [1500] facing E and gully [1511]*





Illus 12

East facing section of ditch [1801] and wall [1803]

burning was present within the pit. Indeed, its fills were lighter than the overlying layer. The importance of these pits is increased due to the suggestion of large areas of iron working on the DA and the presence of the slag and other metalworking residue supports this albeit on a smaller scale. Despite the lack of supporting dates, these remains are likely to be Roman in date.

### 3.5 Ploughing

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With the exception of isolated patches in Trenches 1, 7 and 8, no subsoil was present across the DA. In the majority of the DA, the archaeological horizon was directly overlain by a plough soil. Indeed, the site was ploughed annually until around seven years ago, when it was sown with grass. This indicates that the recent ploughing has removed the majority of the subsoil from the DA, resulting in truncation of archaeological remains. This is supported by the recovery of over one-hundred sherds of LIA and Roman pottery from the topsoil in Trenches 6 and 14.

This may also explain the shallowness of many of the ditches (See Hey and Lacey 2001: 33) and, more significantly the absence of many of the features highlighted by geophysical survey as well as the absence of the surface slag observed during the geophysical survey. A considerable number of linear geophysical anomalies were not confirmed by trial trenching, most notably in Trenches 1, 2, 3, 8, 9 and 12 in the northern and western part of the DA. Indeed, it is likely that truncation is heavier in these parts of the DA. This may have skewed the evidence pointing to the eastern part of the DA being more heavily occupied.

It is therefore likely that areas where subsoil has survived (Trenches 1, 7 and 8), or where earlier ploughing activity has occurred (beneath layer [1500]) may have better preservation potential for archaeological remains, whereby these deposits have protected the underlying archaeology from modern plough truncation.

### 3.6 Description of the significance of the heritage assets

A number of research frameworks cover the DA. On a local scale, the Bedfordshire archaeological research framework document, *Bedfordshire Archaeology: Research and archaeology: Resource assessment, research agenda and strategy*, notes that the Greensand Ridge generally has received little archaeological attention until recently, when programmes of aerial photography and development-related work have begun to indicate that the ridge may have been as densely settled as the better known river valleys (Oake *et al* 2007, 4). Relevant regional research frameworks comprise *Research and archaeology: A framework for the eastern counties – 1 resource assessment* (Glazebrook 1997), *Research and Archaeology: A framework for the eastern counties – 2 research agenda and strategy* (Brown and Glazebrook 2000). More recently the eastern regional framework was revised to include Bedfordshire *Revision of the regional archaeological framework for the eastern region* (Medleycott and Brown 2008). The latter identifies a number of research themes which could be addressed by remains within the DA.

*'Understanding the continuity of Iron Age into Roman settlement and the 2nd century Romanisation', identifying continuity as well as new settlement'* (Medleycott & Brown 2008, 65).

*'How does industry relate to topography and natural resource...'* (Medleycott & Brown 2008, 66).

| Description of HA               | Trench no.                                | Feature no.   | Significance of HA on local, regional, national, international scale |
|---------------------------------|---|---|--|
| HA1 – Roman settlement remains  | 4, 5, 6, 7, 8, 10, 15, 16, 17, 18, 19, 20 | [#01–412], [501–505], [507], [601–606], [700], [1001–1018], [1501–1511], [1601], [1603], [1700–1704], [1801–1815], [1901], [2001] | Regional significance  |
| HA2 – Roman field systems       | 1, 2, 7, 8, 9, 11, 12, 13, 14, 20         | [703], [707], [801], [803], [1101], [1106–1110], [1300–1308], [1400], [2002–2009]   | Regional significance  |
| HA3 – Post-Roman plough horizon | 15  | [1500]  | Regional significance  |
| HA4 – Possible cremations       | 2   | [200], [202]  | Regional significance  |
| HA5 – LIA settlement activity   | 5, 7, 13                                  | [300], [503], [505], [701], [705], [1103], [1306], [1308]   | Regional significance  |

Table 1  
*Significance of Heritage Assets*

## 4. FINDS ASSESSMENT

This report assesses all hand collected finds recovered from trial trenching. It does not include bulk finds recovered from sample processing though does include a few individual, unique finds found at that stage.

The finds assemblage amounted to a sizeable assemblage of LIA and Roman pottery, with accompanying metalwork, metalworking waste and two quern stones. The main period of site occupation seems to have been between the late 1st and mid 2nd century AD. There is also a handful of residual earlier pottery and chipped stone finds. Finds

were found in 16 separate trenches and are quantified by trench and contexts in the Table 2. Complete catalogues of all the finds are given below.

### 4.1 Prehistoric and Roman pottery

The assemblage comprises 1,518 sherds weighing 19.1kg, the largest deposits deriving from Trenches 10 and 15, which respectively contained 5.1kg and 3.4kg. Pottery was examined by context, quantified using minimum sherd count and weight, and recorded in an Access database. The pottery is moderately fragmented, with an

| Tr. | Feature     | Description | Context     | Pottery spot date | Pottery (Sherd Count) | Metalwork | Stone Quern | Chipped Stone | Metalworking Waste (Wgt) | Fired Clay (Wgt) |
|-----|-------------|-------------|-------------|-------------------|-----------------------|-----------|-------------|---------------|--------------------------|------------------|
| 3   | 300         | Ditch       | 301         | Late Iron Age     | 13                    | -         | -           | 4             | 3g                       | -                |
| 3   | 302         | Pit         | 303         | -                 | -                     | -         | -           | -             | -                        | 3g               |
| 4   | 401         | Pit         | 402         | Roman C2+         | 62                    | -         | -           | 7             | -                        | 35g              |
| 4   | 403         | Ditch       | 404         | Roman C2+         | 46                    | -         | -           | -             | -                        | 7g               |
| 4   | 406         | Gully       | 407         | Roman C1-2        | 1                     | -         | -           | 4             | -                        | -                |
| 4   | 408         | Ditch       | 409         | Roman C1-2        | 6                     | -         | -           | -             | -                        | -                |
| 4   | 412         | Ditch       | 413         | Roman C1-2        | 19                    | -         | -           | -             | 88g                      | -                |
| 5   | 501         | Ditch       | 502         | Roman C2+         | 12                    | -         | -           | -             | -                        | -                |
| 5   | 503         | Pit         | 504         | Late Iron Age     | 19                    | -         | -           | 1             | -                        | -                |
| 5   | 505         | Pit         | 506         | Late Iron Age     | 31                    | 1         | -           | -             | 58g                      | -                |
| 6   | -           | Topsoil     | -           | Roman C2+         | 88                    | -         | -           | -             | -                        | -                |
| 6   | 601         | Ditch       | 602         | Roman C2+         | 2                     | -         | -           | -             | 51g                      | -                |
| 6   | 603         | Ditch       | 604         | Roman C2+         | 14                    | -         | -           | -             | -                        | -                |
| 6   | 606         | Pit         | 607         | Roman C2+         | 6                     | -         | -           | -             | -                        | 5g               |
| 7   | 700         | Pit         | 700         | Late Iron Age     | 19                    | -         | -           | -             | -                        | -                |
| 7   | 701         | Pit         | 702         | Late Iron Age     | 14                    | -         | -           | -             | -                        | -                |
| 7   | 703         | Ditch       | 704         | Roman C1-2        | 9                     | -         | -           | -             | -                        | -                |
| 7   | 705         | Pit         | 706         | Late Iron Age     | 13                    | -         | -           | -             | -                        | 68g              |
| 8   | 801         | Gully       | 802         | Roman C2+         | 101                   | -         | -           | -             | -                        | -                |
| 10  | 1001        | Pit         | 1003        | Roman C2-3        | 65                    | 5         | -           | -             | -                        | -                |
| 10  | 1006        | Ditch       | 1007        | Roman C2+         | 4                     | -         | -           | -             | -                        | -                |
| 10  | 1010        | Ditch       | 1011        | Roman C2-3        | 175                   | -         | -           | -             | -                        | 18g              |
| 10  | 1012 / 1014 | Ditches     | 1013 / 1015 | Roman C2+         | 78                    | -         | -           | 1             | -                        | -                |
| 10  | 1016        | Pit         | 1017        | Roman C2+         | 121                   | 1         | 2           | -             | -                        | 76g              |
| 10  | 1018        | Post hole   | 1019        | Roman C1-2        | 1                     | -         | -           | -             | -                        | -                |
| 11  | 1103        | Ditch       | 1104        | Late Iron Age     | 2                     | -         | -           | -             | -                        | -                |
| 13  | 1302        | Pit         | 1303        | Roman C2+         | 5                     | -         | -           | -             | -                        | -                |



| Tr. | Feature | Description | Context | Pottery spot date | Pottery (Sherd Count) | Metalwork | Stone Quern | Chipped Stone | Metalworking Waste (Wgt) | Fired Clay (Wgt) |
|-----|---------|-------------|---------|-------------------|-----------------------|-----------|-------------|---------------|--------------------------|------------------|
| 13  | 1304    | Ditch       | 1305    | Roman C2+         | 2                     | -         | -           | -             | -                        | -                |
| 13  | 1306    | Pit         | 1307    | Late Iron Age     | 4                     | -         | -           | -             | -                        | -                |
| 13  | 1308    | Terminus    | 1309    | Late Iron Age     | 2                     | -         | -           | -             | -                        | -                |
| 14  | -       | Topsoil     | -       | Late Iron Age     | 5                     | -         | -           | -             | -                        | -                |
| 14  | 1400    | Ditch       | 1401    | Roman C1-2        | 30                    | -         | -           | -             | -                        | 231g             |
| 15  | 1500    | Layer       | 1500    | Roman C2+         | 207                   | -         | -           | -             | -                        | 10g              |
| 15  | 1501    | Ditch       | 1502    | Roman C2+         | 24                    | -         | -           | -             | -                        | -                |
| 15  | 1503    | Pit         | 1504    | Roman C2+         | 14                    | -         | -           | -             | 12g                      | -                |
| 15  | 1507    | Pit         | 1508    | -                 | -                     | -         | -           | -             | 1765g                    | -                |
| 15  | 1509    | Post hole   | 1510    | Roman C2+         | 7                     | -         | -           | -             | -                        | -                |
| 16  | 1601    | Ditch       | 1602    | Roman C1-2        | 5                     | -         | -           | -             | -                        | -                |
| 16  | 1603    | Ditch       | 1604    | Roman C2+         | 6                     | -         | -           | -             | -                        | -                |
| 17  | 1700    | Pit         | 1700    | Roman C2+         | 47                    | -         | -           | 1             | -                        | -                |
| 17  | 1701    | Ditch       | 1702    | Roman C2+         | 33                    | -         | -           | -             | -                        | 222g             |
| 17  | 1701    | Ditch       | 1703    | Roman C2+         | 6                     | -         | -           | -             | -                        | -                |
| 18  | 1801    | Ditch       | 1802    | Roman C2+         | 132                   | -         | -           | 1             | -                        | -                |
| 18  | 1806    | Pit         | 1807    | Roman C1-2        | 10                    | -         | -           | -             | -                        | -                |
| 18  | 1808    | Ditch       | 1809    | Roman C2-3        | 38                    | 1         | -           | -             | -                        | -                |
| 19  | 1901    | Pit         | 1905    | Roman C1-2        | 11                    | -         | -           | -             | -                        | 124g             |
| 20  | 2005    | Ditch       | 2006    | Roman C2+         | 9                     | -         | -           | -             | -                        | -                |
|     |         |             |         |                   | <b>1,518</b>          | <b>8</b>  | <b>2</b>    | <b>19</b>     | <b>1,977g</b>            | <b>799g</b>      |

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Table 2

*Quantification of finds by trench (by sherd numbers or weight as appropriate)*

average sherd weight of 13g, and survives in fair to good condition. A number of vessels are represented by more than single sherds, suggesting the material has not moved far from its place of original use.

## 4.2 Type series

Thirty-two fabric types were identified using common names and type codes in accordance with the Bedfordshire Ceramic Type Series (Table 3). The majority of the assemblage is datable to the late 1st-mid 2nd centuries AD, with the remainder comprising Iron Age and later Roman pottery.

## 4.3 Late Bronze Age / Early Iron Age

Two coarse flint-tempered body sherds (9g) characteristic of the late Bronze Age / early Iron Age period represent the

earliest pottery on the site. They derive from a single vessel, and occur as residual finds in early Roman ditch [703].

## 4.4 Late Iron Age

LIA pottery in the 'Belgic' tradition (c. 50 BC-AD 100) totals 240 sherds (3.0kg) and comprises a range of both wheel-thrown and hand-made vessels. Shell/grog (fabric F05), sand/grog (F09), shell (F07) and grog-tempered fabrics occur (F39, F06A-C) with the latter group predominating. Nine features in Trenches 3, 5, 7, 11, 13 are datable to the LIA, and five unstratified sherds of the same date were collected from Trench 14. Diagnostic Iron Age forms are lid-seated vessels, some with linear combed and incised decoration; everted rim and cordoned jars; large storage vessels; and a single butt beaker.

| Fabric type                           | Common name                  | Sherd no. | Weight (g) |
|---------------------------------------|------------------------------|-----------|------------|
| <b>Late Bronze Age-early Iron Age</b> |                              |           |            |
| F01A                                  | Coarse flint                 | 2         | 9          |
| <b>Late Iron Age</b>                  |                              |           |            |
| F05                                   | Grog and shell               | 17        | 381        |
| F06A                                  | Fine grog                    | 11        | 133        |
| F06B                                  | Medium grog                  | 134       | 1227       |
| F06C                                  | Coarse grog                  | 61        | 1101       |
| F07                                   | Shell                        | 9         | 90         |
| F09                                   | Sand and grog                | 6         | 61         |
| F39                                   | Grog and mica                | 2         | 49         |
| <b>Roman</b>                          |                              |           |            |
| R01                                   | Samian                       | 8         | 116        |
| R01                                   | Mica-gilded ware             | 1         | 20         |
| R03C                                  | Verulamium region white ware | 6         | 86         |
| R03C                                  | Smooth white ware            | 2         | 13         |
| R05A                                  | Orange sandy                 | 9         | 80         |
| R05B                                  | Fine orange sandy            | 2         | 22         |
| R05C                                  | Orange sandy micaceous       | 8         | 79         |
| R05D                                  | Orange sandy white-slipped   | 2         | 5          |
| R06A                                  | Nene Valley grey ware        | 8         | 215        |
| R06B                                  | Coarse grey ware             | 477       | 5540       |
| R06C                                  | Fine grey ware               | 444       | 5957       |
| R06F                                  | Grog and sand grey ware      | 11        | 83         |
| R06H                                  | White-slipped grey ware      | 74        | 943        |
| R06I                                  | Black-slipped grey ware      | 43        | 703        |
| R07B                                  | Sandy black ware             | 52        | 694        |
| R09A                                  | Pink grogged ware            | 2         | 28         |
| R10A                                  | Buff gritty ware             | 20        | 263        |
| R10B                                  | Fine buff ware               | 3         | 56         |
| R10C                                  | White-slipped buff ware      | 7         | 57         |
| R11E                                  | Oxford mortaria              | 3         | 47         |
| R12B                                  | Nene Valley Colour Coat      | 1         | 5          |
| R13                                   | Shell                        | 55        | 697        |
| R14                                   | Sandy (red-brown harsh)      | 37        | 396        |
| UNID                                  | Unidentified / undatable     | 1         | 2          |

Table 3  
*Pottery type series*

## 4.5 Roman

Roman pottery was collected from 35 features, 16 of which yielded only fully Romanised wares of 2nd century and later date (Trenches 4, 5, 6, 10, 13, 15, 16, 17 and 20). A total of 1,274 sherds (16.1kg) was recovered, the greatest concentration (2.7kg) deriving from plough layer (1500).

The assemblage is primarily local in character and is dominated by wheel-thrown coarse ware vessels in a range of fine to coarse reduced sand-tempered fabrics (group R06 and variants), which total nearly 50% of the Roman pottery (by weight). It is possible that amongst the reduced wares are products of the 'Woburn Industry' (fabric R43A), recently identified following excavations at Fox Close, Woburn (Newboul and Slowikowski, in prep). The reduced wares would, however, require further analysis to determine this.

The grey wares are supplemented by locally sourced coarse wares in reduced (types R07, R14), oxidised sand-tempered fabrics (R05, R10) and shell-tempered sherds (R13). One flat shelly piece with a thickness of 13mm may be either a thick jar base or a thin roof tile. Diagnostic forms are lid-seated vessels, everted rim jars, simple flat rim bowls, triangular rim bowls and jars, flanged bowls, folded beakers, straight-sided bowls or dog-dishes (some imitating Black-Burnished ware forms), and narrow-necked jars, some with cordons, indicating continuity from the 'Belgic' tradition. Decorative attributes comprise a standard range of types, amongst which burnishing (overall and lattice), slipping (black and white) and rilling are most common. The use of slips and burnishing is restricted to the sandy wares, and rilling to shelly vessels. Sooting on the exterior surfaces of some of the latter indicates their use as cooking pots. None of the sherds appear to have been deliberately altered or modified.

Regional imports are scarce. They comprise 2nd-century white ware (R03A) and pink-grogged ware (R09A), from the Verulamium region and Caldecotte, Bucks. respectively; mica-gilded ware (R02) of uncertain provenance; late 2nd-century + white ware mortaria sherds (R11E) from Oxfordshire; and 3rd-century colour coated ware from the Nene Valley.

Eight highly abraded sherds of early Roman Samian ware (R01) deriving from central and south Gaul represent the only continental imports. Diagnostic elements are a bowl, dish with an internal wear mark, and a form 33 conical cup.

## 4.6 Metalwork

Only three metal finds were found. The most notable of these is a coin (1809), though at present this is too corroded to identify. However, it is not inconsistent with



the 2nd to 3rd century date for associated pottery. The other distinctive find is a bifurcated shaft, part of a tool or weapon [1003]. Other finds consist of nails (1017), (506) and hob nails (1003). One of these may be of an early date being associated with pottery exclusively of Late Iron Age date in pit [505].

#### 4.7 Coarse stone finds

A total of 17 pieces of stone rotary quern were found in the same pit [1016], representing about half of two different though nearly identical querns. Both were made of the same coarse conglomerate stone, both were upper stones, but when pieced together clearly form two different querns with slightly different dimensions (diameters 390mm, 410mm). Though not closely datable, they are probably broadly contemporary with the large collection of associated 2nd century or later pottery.

#### 4.8 Chipped stone

A small collection of 19 pieces of chipped flint was recovered. All were of prehistoric date, the most distinctive being a distal end scraper of Neolithic or early Bronze Age date (1013/1015). All the finds were residual, associated with Late Iron Age or Roman pottery.

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#### 4.9 Metalworking waste

A small assemblage of iron-working waste was recovered, with a total weight of 2.0kg, spread through Trenches 3, 4, 5, 6 and 15. Typically this was made up of small pieces of iron slag and with some furnace lining material, associated with Late Iron Age and Roman pottery. However, the majority of the assemblage (1.7kg) was recovered from one pit [1507] but no associated finds by which to date this material.

#### 4.10 Fired clay

Thirty-three fired clay fragments (799g) were recovered, the majority occurring in a fine sand and organic tempered fabric. Most are amorphous, although a number have finger smoothed surfaces. Five sand-tempered fragments (222g) collected from ditch [1701], range in thickness from 15–20mm and appear to be part of the redeposited lining of a feature. One piece of daub recovered from pit [1016] retains a partial wattle impression of uncertain diameter. The fill of ditch [1400] yielded twelve pieces of a 17mm thick circular plate or tray, which may represent pre-fabricated oven or hearth furniture, or perhaps a lid for a pottery vessel. A hand made brick or slab fragment (124g) with a thickness of 25mm derived from pit [1901]. Such objects are commonly occurring finds on sites of late Iron Age and early Roman date.

### 5. ENVIRONMENTAL

The results of the assessment are presented in Appendix 2 (Retent samples) and (Flot samples). All material was preserved through charring. Material suitable for AMS (Accelerated Mass Spectrometry) radiocarbon dating is shown in the tables.

Seven samples were processed for environmental assessment. Charred cereal grain was identified in four of the samples (see Appendix 2, Table 2). The charred grain abundance in all four samples (01, 03, 04 and 07) was recorded as rare incidence and included oat (*Avena* sp.), wheat sp (*Triticum* sp.) and indeterminate grain (*Cerealia indet.*), where the charred remains were too poorly preserved to be identified to species level. The assemblage also contained wild taxa in the form of sedge nutlets, (*Carex* sp.), ivy-leaved speedwell (*Veronica hederifolia*) and goosefoot sp. (*Chenopodium* sp.).

Charcoal fragments were identified in all of the seven samples assessed with quantities ranging from rare to common incidences (see Appendix 2, Tables 1 and 2). Charcoal fragment size ranged from 0.2cm to a maximum of 1cm and were observed by eye to be both oak (*Quercus* sp.) and non-oak species.

A small number of animal bone fragments were identified from within the DA. However these were too poorly preserved to allow identification. This is likely to be due to local adverse preservation conditions

### 6. DISCUSSION

Trial trenching evaluation within the DA revealed archaeological remains representing field systems and possible settlement/occupation from the early Roman period. These are discussed by Heritage Asset (HA) below.

Trenching revealed archaeological remains indicative of Roman settlement activity within the eastern part of the DA (HA1). This comprised ditches and pits containing large amounts of 1st–2nd century Roman pottery. Industrial activity was also hinted at by the presence of hammerscale, slag and other magnetic residues in this part of the DA. The partial remains of two quernstones were also recovered (Section 4.7). Deposits in this area were also generally much darker than in the remainder of the DA, indicating greater accumulation of organic material and supporting the presence of more intense occupation. A small number of clay-lined postholes were also identified, suggesting the presence of structural remains.

HA2 is located in the western part of the DA where feature density was lower and consisted solely of ditches, which were either undated, or contained relatively smaller amounts of Roman pottery than in HA1. Their deposits were also generally lighter, with a lower organic content than those

within HA1. These remains are considered to represent outlying field systems on the settlement periphery.

However, given the lack of remains related to geophysical anomalies within HA2, it is possible that truncation was heavier in this part of the DA. It is therefore possible that the apparent differences in intensity of occupation between HA1 and HA2 have been skewed.

HA3 comprises a large, shallow area deposit within Trench 15 (within HA1). It corresponds with a series of large area anomalies shown on the geophysical survey and occupies a depression in the natural geology. It contained a large assemblage of 1st–2nd century pottery as well as magnetic industrial residues including hammerscale. The artefactual assemblage is in keeping with that of HA1 and is likely to have derived either from archaeological remains through ploughing of underlying archaeology after the abandonment of the settlement or through the plough disturbed remains of a former midden deposit. Although it is therefore unlikely to represent an *in situ* deposit, it has nonetheless served to protect the underlying archaeology from modern ploughing. As such, the preservation potential for sub-surface archaeology is greater within the extent of HA3.

The two possible cremations (unexcavated) in the north of the DA (HA4) are located within an area otherwise devoid of archaeological features. This could suggest the presence of a cemetery outside the main activity areas of HA1 and HA2. Although burnt bone was visible within these features, they have suffered from plough truncation and are only partially preserved. HA5 comprises a phase

of LIA occupation, comprising field ditches and pits within the western part of the DA.

The results of trial trenching evaluation have in part confirmed the results of previous geophysical survey and demonstrated the presence of settlement activity from the LIA/early Roman transition into the 2nd and 3rd centuries AD. Samples taken from deposits across the DA suggest contained magnetic residues and occasional charcoal fragments indicative of industrial activity. Environmental potential, in the form of plant remains and animal bone was very limited, although this is unsurprising, given the well-drained sandy geology.

Investigations also demonstrated that these remains have been truncated by modern ploughing activity. Indeed, many of the anomalies identified by geophysical survey were not confirmed by trial trenching (i.e. the ‘C-shaped’ enclosure within Trench 12 or the large magnetic area anomalies – Illus 2). This indicates they may have been removed by modern ploughing, particularly in the northern and western parts of the DA.

Despite the likely damage to the site caused by modern ploughing, the totality of remains encountered suggest the presence of long-term settlement occupation from the late Iron Age to the third century AD. This is broadly commensurate with the dates for the Roman pottery production site at Fox Close, Woburn, c. 1km east of the DA (Newbould and Slowikowski, in prep). These investigations have significantly increased our understanding of LIA and Roman activity in Woburn. It is accepted that the Iron Age and Roman remains located

| Description of HA               | Trench no.             | Description of development affecting | Significance of heritage asset on local, regional, national, international scale | Impact of development on HA (None, Low, Medium, High)                |
|---------------------------------|------------------------|--------------------------------------|--|--|
| HA1 – Roman settlement remains  | 4, 5, 6, 7, 8, 10      | Reservoir                            | Regional significance  | High   |
| HA1 – Roman settlement remains  | 15, 16, 17, 18, 19, 20 | Wild flower meadow                   | Regional significance  | Medium – if topsoil is stripped<br>Nil – if topsoil is not stripped* |
| HA2 – Roman field systems       | 1, 2, 7, 8, 9          | Reservoir                            | Regional significance  | High   |
| HA2 – Roman field systems       | 11, 12, 13, 14, 20     | Wild flower meadow                   | Regional significance  | Medium – if topsoil is stripped<br>Nil – if topsoil is not stripped* |
| HA3 – Post-Roman plough horizon | 15                     | Wild flower meadow                   | Regional significance  | Medium – if topsoil is stripped<br>Nil – if topsoil is not stripped* |
| HA4 – Possible cremations       | 2                      | Reservoir                            | Regional significance  | High   |
| HA5 – LIA settlement activity   | 5, 7                   | Reservoir                            | Regional significance  | High   |
| HA5 – LIA settlement activity   | 13                     | Wild flower meadow                   | Regional significance  | Medium – if topsoil is stripped<br>Nil – if topsoil is not stripped* |

Table 4  
Impact on Heritage Assets



within the DA are of regional significance. Judged on accepted current criteria (DCMS 2010) there is no suggestion these remains are of national significance or should be designated.

## 6.1 Assessment of the impact of development on the significance of heritage assets

The change of use in the DA is from unused grassland into a reservoir in the northern part of the DA (2.5ha) and wild flower meadow in the southern part of the DA (2ha) (Illus 2). Sub-surface heritage assets within the DA are located between 0.29–0.57m below the existing ground surface. The groundworks for the change of use for the reservoir in the northern half of the DA (Illus 2 and 3) will exceed this depth and therefore the impact of the development upon any underlying remains is considered high (Table 4). Groundworks for the wild flower meadow in the southern half of the DA (Illus 2 and 4) could involve stripping of topsoil. If this were the case, the resulting impact upon the archaeological horizon is considered to be medium. However, if preparation for the wildflower meadow could be demonstrated to avoid stripping of or damage to the existing topsoil in the southern part of the DA, the impact on sub-surface archaeological remains is considered to be nil\*. The overburden in this part of the DA is between 0.35m and 0.44m in depth.

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## APPENDICES

### Appendix 1 – Site register

#### Trench register

| Trench no. | Length (m) | Orientation | Description   | Min depth to nat (m) |
|------------|------------|-------------|---|----------------------|
| 001        | 50         | N-S         | 0-0.26m topsoil; 0.26-0.40m subsoil; 0.40m+ natural sands | 0.4                  |
| 002        | 30         | E-W         | 0-0.32m topsoil; 0.32-0.45m subsoil; 0.45m+ natural sands | 0.45                 |
| 003        | 30         | N-S         | 0-0.32m topsoil; 0.32-0.52m subsoil; 0.52m+ natural sands | 0.52                 |
| 004        | 40         | NE-SW       | 0-0.39m topsoil; 0.39m+ natural sands                     | 0.39                 |
| 005        | 40         | NW-SE       | 0-0.29m topsoil; 0.29m natural sands                      | 0.29                 |
| 006        | 40         | E-W         | 0-0.37m topsoil; 0.37m+ natural sands                     | 0.37                 |
| 007        | 30         | E-W         | 0-0.30m topsoil; 0.30-0.51m subsoil; 0.51m+ natural sands | 0.51                 |
| 008        | 50         | NE-SW       | 0-0.30m topsoil; 0.30-0.49m subsoil; 0.49m+ natural sands | 0.49                 |
| 009        | 40         | NW-SE       | 0-0.30m topsoil; 0.30-0.52m subsoil; 0.52m+ natural sands | 0.52                 |
| 010        | 50         | NE-SW       | 0-0.35m topsoil; 0.35m+ natural sands                     | 0.35                 |
| 011        | 40         | NE-SW       | 0-0.38m topsoil; 0.38m+ natural sands                     | 0.38                 |
| 012        | 30         | N-S         | 0-0.38m topsoil; 0.38m+ natural sands                     | 0.38                 |
| 013        | 50         | NE-SW       | 0-0.37m topsoil; 0.37m+ natural sands                     | 0.37                 |
| 014        | 50         | NE-SW       | 0-0.33m topsoil; 0.33m+ natural sands                     | 0.37                 |
| 015        | 50         | NNW-SSE     | 0-0.41m topsoil; 0.41m+ natural sands                     | 0.41                 |
| 016        | 30         | E-W         | 0-0.38m topsoil; 0.38m+ natural sands                     | 0.38                 |
| 017        | 30         | NW-SE       | 0-0.40m topsoil; 0.40m+ natural sands                     | 0.4                  |
| 018        | 40         | E-W         | 0-0.45m topsoil; 0.45m+ natural sands                     | 0.45                 |
| 019        | 30         | NNE-SSW     | 0-0.35m topsoil; 0.35m+ natural sands                     | 0.35                 |
| 020        | 50         | NE-SW       | 0-0.40m topsoil; 0.40m+ natural sands                     | 0.4                  |
| 021        | 30         | ENE-WSW     | 0-0.44m topsoil; 0.44m+ natural sands                     | 0.44                 |



## Context register

| Context no. | Area     | Type          | Description   |
|-------------|----------|---------------|---|
| 200         | Trench 2 | Cremation     | Small circular feature 0.20m wide (not excavated)         |
| 201         | Trench 2 | Fill of [200] | Black sandy fill of [200] containing burnt bone           |
| 202         | Trench 2 | Cremation     | Oval feature 0.35m wide (not excavated)                   |
| 203         | Trench 2 | Fill of [202] | Black sandy fill of [202] containing burnt bone           |
| 300         | Trench 3 | Ditch         | Linear feature 0.90m wide and 1.40m long                  |
| 301         | Trench 3 | Fill of [300] | Light black, grey sandy fill of [300] containing pottery  |
| 302         | Trench 3 | Pit           | Circular feature 0.60m wide and 0.20m deep                |
| 303         | Trench 3 | Fill of [302] | Mid grey silty sand fill containing pottery               |
| 401         | Trench 4 | Pit           | 2m wide feature containing pottery                        |
| 402         | Trench 4 | Fill of [401] | Black silty sand containing pottery                       |
| 403         | Trench 4 | Ditch         | 0.90m wide and 0.27m deep, possible terminus              |
| 404         | Trench 4 | Fill of [403] | Black/grey silty sand containing pottery                  |
| 405         | Trench 4 | Deposit       | Grey silty sand deposit possible subsoil patch            |
| 406         | Trench 4 | Gully         | Linear feature aligned E-W 0.55m wide and 0.27m deep      |
| 407         | Trench 4 | Fill of [406] | Light grey sandy fill containing pottery                  |
| 408         | Trench 4 | Ditch         | Linear feature aligned N-S up to 3.0m wide and 0.35m deep |
| 409         | Trench 4 | Fill of [408] | Mid grey sandy fill containing pottery                    |
| 410         | Trench 4 | Tree bowl?    | Obscure shaped feature up to 0.30m deep                   |
| 411         | Trench 4 | Fill of [410] | Grey sandy fill with gravel inclusions                    |
| 412         | Trench 4 | Ditch         | Linear feature aligned E-W 2.40m wide and 0.25m deep      |
| 413         | Trench 4 | Fill of [412] | Grey sandy fill with gravel inclusions, pottery and flint |
| 501         | Trench 5 | Ditch         | Linear feature aligned WSW-ENE 1.60m wide and 0.38m deep  |
| 502         | Trench 5 | Fill of [501] | Mid grey brown sandy fill                                 |
| 503         | Trench 5 | Pit           | Small pit 0.45m wide and 0.21m deep                       |
| 504         | Trench 5 | Fill of [503] | Dark grey sand fill                                       |

| Context no. | Area      | Type           | Description   |
|-------------|-----------|----------------|---|
| 505         | Trench 5  | Pit            | Small pit 0.60m wide and 0.28m deep   |
| 506         | Trench 5  | Fill of [505]  | Dark grey sand fill   |
| 507         | Trench 5  | Gully          | Linear feature aligned WSW-ENE 0.57m wide and 0.14m deep  |
| 508         | Trench 5  | Fill of [507]  | Mid grey sandy fill   |
| 601         | Trench 6  | Ditch          | Linear feature aligned N-S, 1.1m wide and 0.38m deep  |
| 602         | Trench 6  | Fill of [601]  | Dark orange brown sand  |
| 603         | Trench 6  | Ditch          | Linear feature aligned N-S 1.0m wide and 0.49m deep   |
| 604         | Trench 6  | Fill of [603]  | Dark orange brown sand  |
| 605         | Trench 6  | Fill of [603]  | Dark black sandy fill   |
| 606         | Trench 6  | Pit            | Small pit 0.60m wide and 0.27m deep   |
| 607         | Trench 6  | Fill of [606]  | Dark grey brown sandy fill  |
| 700         | Trench 7  | Pit            | Pit unexcavated   |
| 701         | Trench 7  | Pit            | Circular pit 1.00m wide and 0.25m deep  |
| 702         | Trench 7  | Fill of [701]  | Dark brown silty sand with black patches with charcoal, burnt bone, fire cracked stones and pottery |
| 703         | Trench 7  | Ditch          | Linear feature aligned N-S 1.00m wide and 0.35m deep  |
| 704         | Trench 7  | Fill of [703]  | Mid brown sandy fill containing pottery   |
| 705         | Trench 7  | Pit            | Irregular shaped feature 0.60m wide and 0.10m deep  |
| 706         | Trench 7  | Fill of [705]  | Dark grey sand fill containing burnt bone and pottery   |
| 707         | Trench 7  | Ditch          | Linear feature 2.00m wide and 0.60m deep  |
| 708         | Trench 7  | Fill of [707]  | light brown grey sandy fill   |
| 801         | Trench 8  | Gully          | Linear feature aligned NE-SW 0.65m wide and 0.25m deep  |
| 802         | Trench 8  | Fill of [801]  | Mid grey sandy fill   |
| 1001        | Trench 10 | Pit            | Circular pit 0.70m wide and 0.15m deep  |
| 1002        | Trench 10 | Fill of [1001] | Yellow brown clay fill of pit with chalk patches  |
| 1003        | Trench 10 | Fill of [1001] | Black silty sand fill of pit  |
| 1004        | Trench 10 | Ditch          | Unexcavated   |
| 1005        | Trench 10 | Fill of [1004] | Unexcavated   |
| 1006        | Trench 10 | Ditch          | Linear feature aligned N-S 0.80m wide and 0.30m deep  |
| 1007        | Trench 10 | Fill of [1006] | Light grey brown sandy fill   |

| Context no. | Area      | Type           | Description   |
|-------------|-----------|----------------|---|
| 1008        | Trench 10 | Pit            | Unexcavated   |
| 1009        | Trench 10 | Fill of [1008] | Unexcavated   |
| 1010        | Trench 10 | Ditch          | N-S aligned linear feature cut by [1012]                |
| 1011        | Trench 10 | Fill of [1010] | Mid light grey brown sandy fill                         |
| 1012        | Trench 10 | Ditch          | N-S aligned linear feature cut by [1014]                |
| 1013        | Trench 10 | Fill of [1012] | Mid light grey brown sandy fill                         |
| 1014        | Trench 10 | Ditch          | N-S aligned linear feature cutting [1012]               |
| 1015        | Trench 10 | Fill of [1014] | Mid light grey brown sandy fill                         |
| 1016        | Trench 10 | Pit            | Small pit 0.60m wide and 0.32m deep                     |
| 1017        | Trench 10 | Fill of [1016] | Mid grey brown sandy fill with pottery and quernstone   |
| 1018        | Trench 10 | Posthole       | Circular posthole 0.43m wide and 0.22m deep             |
| 1019        | Trench 10 | Fill of [1018] | Yellow brown clay fill of pit with chalk patches        |
| 1020        | Trench 10 | Ditch          | Unexcavated linear feature aligned N-S, 1.2m wide       |
| 1021        | Trench 10 | Fill of [1020] | Mid light grey brown sandy fill                         |
| 1022        | Trench 10 | Posthole       | Unexcavated circular posthole 0.40m wide                |
| 1023        | Trench 10 | Fill of [1022] | Yellow brown clay fill of pit with chalk patches        |
| 1024        | Trench 10 | Posthole       | Unexcavated circular posthole 0.40m wide                |
| 1025        | Trench 10 | Fill of [1024] | Yellow brown clay fill of pit with chalk patches        |
| 1101        | Trench 11 | Gully          | Linear feature aligned NE-SW, 0.60m wide and 0.38m deep |
| 1102        | Trench 11 | Fill of [1101] | Grey sandy fill   |
| 1103        | Trench 11 | Ditch          | Linear feature aligned NE-SW, 1.20m wide and 0.90m deep |
| 1104        | Trench 11 | Fill of [1103] | Brown sand fill   |
| 1105        | Trench 11 | Fill of [1103] | Dark grey sand fill                                     |
| 1106        | Trench 11 | Gully          | Linear feature aligned NE-SW, 0.65m wide and 0.21m deep |
| 1107        | Trench 11 | Fill of [1106] | Grey brown sandy fill                                   |
| 1108        | Trench 11 | Gully          | Linear feature aligned NE-SW, 0.65m wide and 0.18m deep |
| 1109        | Trench 11 | Fill of [1108] | Light grey sandy fill                                   |
| 1300        | Trench 13 | Gully          | Linear feature aligned NE-SW, 0.50m wide and 0.25m deep |
| 1301        | Trench 13 | Fill of [1301] | Grey silty sand deposit possible subsoil patch          |

| Context no. | Area      | Type           | Description  |
|-------------|-----------|----------------|--|
| 1302        | Trench 13 | Pit            | Small circular pit, 0.70m wide and 0.15m deep  |
| 1303        | Trench 13 | Fill of [1302] | Grey sandy clay  |
| 1304        | Trench 13 | Ditch          | Linear feature aligned N-S, 1.30m wide and 0.50m deep  |
| 1305        | Trench 13 | Fill of [1304] | Dark grey silty sand   |
| 1306        | Trench 13 | Pit            | Circular pit, 0.70m wide and 0.20m deep  |
| 1307        | Trench 13 | Fill of [1306] | Dark grey silty sand   |
| 1308        | Trench 13 | Terminus       | Terminal end of linear feature aligned NE-SW, 1.30m wide and 0.20m deep                      |
| 1309        | Trench 13 | Fill of [1308] | Dark grey silty sand   |
| 1400        | Trench 14 | Ditch          | Linear feature aligned E-W, 1.20m wide and 0.40m deep  |
| 1401        | Trench 14 | Fill of [1400] | Grey silty sand fill   |
| 1500        | Trench 15 | Layer          | 40m long plough layer of black sand containing pottery, fired clay fragments and animal bone |
| 1501        | Trench 15 | Ditch          | Linear feature NW-SE aligned, 1.30m wide and 0.20m deep                                      |
| 1502        | Trench 15 | Fill of [1501] | Black sand   |
| 1503        | Trench 15 | Pit            | Small pit 0.28m wide and 0.23m deep  |
| 1504        | Trench 15 | Fill of [1503] | Dark grey/black sandy fill   |
| 1505        | Trench 15 | Posthole       | Circular posthole 0.23m wide and 0.15m deep in base of [1501]                                |
| 1506        | Trench 15 | Fill of [1505] | Grey sandy fill  |
| 1507        | Trench 15 | Pit            | Circular pit, 0.54m wide and 0.10m deep  |
| 1508        | Trench 15 | Fill of [1507] | Grey sand fill containing large amounts of iron slag   |
| 1509        | Trench 15 | Posthole       | Circular posthole, 0.30m wide and 0.21m deep   |
| 1510        | Trench 15 | Fill of [1509] | Dark yellow brown clay fill  |
| 1511        | Trench 15 | Gully          | Linear feature below plough layer aligned NW-SE, 0.60m wide and 0.30m deep                   |
| 1512        | Trench 15 | Fill of [1511] | Grey brown sandy fill  |
| 1601        | Trench 16 | Ditch          | Linear feature aligned NNE-SSW, 1.10m wide and 0.55m deep                                    |
| 1602        | Trench 16 | Fill of [1601] | Mid grey brown silty sand  |
| 1603        | Trench 16 | Ditch          | Linear feature aligned NNE-SSW, 0.85m wide and 0.30m deep                                    |
| 1604        | Trench 16 | Fill of [1603] | Grey sandy fill  |
| 1700        | Trench 17 | Pit            | Dark black/grey sandy deposit, 0.35m thick   |



| Context no. | Area      | Type           | Description   |
|-------------|-----------|----------------|---|
| 1701        | Trench 17 | Ditch          | Linear feature aligned NE-SW, 1.90m wide and 0.50m deep   |
| 1702        | Trench 17 | Fill of [1701] | Black/grey silty sand   |
| 1703        | Trench 17 | Fill of [1701] | Grey silty sand   |
| 1704        | Trench 17 | Terminus       | Linear terminus aligned E-W, 0.65m wide and 0.40m deep  |
| 1705        | Trench 17 | Fill of [1704] | Grey silty sand fill  |
| 1801        | Trench 18 | Ditch          | Linear feature NE-SW aligned, 0.95m wide and 0.58m deep   |
| 1802        | Trench 18 | Fill of [1801] | Dark grey brown silty sand  |
| 1803        | Trench 18 | Wall?          | Thin patch of wall located on edge of linear [1801] made of non-local stone, no mortar present. Minimum 1m long and 0.3m wide |
| 1804        | Trench 18 | Ditch          | Same as [1801]  |
| 1805        | Trench 18 | Fill of [1804] | Same as [1802]  |
| 1806        | Trench 18 | Pit            | Unexcavated   |
| 1807        | Trench 18 | Fill of [1806] | Unexcavated   |
| 1808        | Trench 18 | Ditch          | Linear feature NNE-SSW aligned, 1.80m wide and 0.67m deep   |
| 1809        | Trench 18 | Fill of [1808] | Dark grey brown silty sand  |
| 1810        | Trench 18 | Fill of [1808] | Redeposited natural fill  |
| 1811        | Trench 18 | Gully          | Linear feature aligned NNE-SSW, 0.47m wide and 0.15m deep   |
| 1812        | Trench 18 | Fill of [1811] | Dark grey silty sand  |
| 1813        | Trench 18 | Ditch          | Linear feature aligned NNE-SSW, 0.70m wide and 0.30m deep   |
| 1814        | Trench 18 | Fill of [1813] | Dark grey silty sand  |
| 1815        | Trench 18 | Gully          | Linear feature aligned N-S, 0.60m wide and 0.20m deep   |
| 1816        | Trench 18 | Fill of [1815] | Mid grey brown silty sand   |
| 1901        | Trench 19 | Pit            | Large pit, 4.80m wide and 0.70m deep  |
| 1902        | Trench 19 | Fill of [1901] | Brown sandy gravel  |
| 1903        | Trench 19 | Fill of [1901] | Mid grey brown silty sand   |
| 1904        | Trench 19 | Fill of [1901] | Orange brown sands (Redeposited natural)  |
| 1905        | Trench 19 | Fill of [1901] | Grey brown silty sand   |
| 2001        | Trench 20 | Pit            | Small pit, 0.75m wide and 0.23m deep  |
| 2002        | Trench 20 | Fill of [2001] | Dark grey silty sand  |
| 2003        | Trench 20 | Gully          | Linear feature aligned N-S, 0.76m wide and 0.23m deep   |
| 2004        | Trench 20 | Fill of [2003] | Dark grey silty sand  |

| Context no. | Area      | Type           | Description   |
|-------------|-----------|----------------|---|
| 2005        | Trench 20 | Ditch          | Linear feature aligned N-S, 1.65m wide and 0.25m deep |
| 2006        | Trench 20 | Fill of [2005] | Mid grey brown silty sand                             |
| 2007        | Trench 20 | Gully          | Linear feature aligned N-S, 0.55m wide and 0.22m deep |
| 2008        | Trench 20 | Fill of [2007] | Dark grey silty sand                                  |
| 2009        | Trench 20 | Ditch          | Unexcavated Linear feature aligned N-S, 1m wide       |
| 2010        | Trench 20 | Fill of [2010] | Dark grey silty sand                                  |

*Photographic register*

| Photo no. | Direction facing | Description      |
|-----------|------------------|------------------|
| 001       | –                | ID Shot          |
| 002       | NE               | Trench 9         |
| 003       | NW               | Trench 8         |
| 004       | W                | Trench 7         |
| 005       | S                | Trench 1         |
| 006       | W                | Trench 2         |
| 007       | N                | Trench 3         |
| 008       | NE               | Trench 4         |
| 009       | SE               | Trench 5         |
| 010       | SW               | Ditch [401]      |
| 011       | S                | Ditch [403]      |
| 012       | W                | Ditch [406]      |
| 013       | NW               | Ditch [408]      |
| 014       | N                | Pit [410]        |
| 015       | W                | Ditch [412]      |
| 016       | W                | Trench 10        |
| 017       | SW               | Trench 6         |
| 018       | E                | Trench 11        |
| 019       | S                | Trench 12        |
| 020       | SE               | Trench 13        |
| 021       | SE               | Trench 14        |
| 022       | S                | Trench 15        |
| 023       | E                | Trench 16        |
| 024       | S                | Trench 17        |
| 025       | E                | Trench 18        |
| 026       | SE               | Trench 19        |
| 027       | ESE              | Trench 20        |
| 028       | E                | Trench 21        |
| 029       | NE               | Ditch [410]      |
| 030       | N                | Cremation [200]  |
| 031       | N                | Trench 2 section |
| 032       | W                | Ditch [300]      |
| 033       | N                | Pit [302]        |
| 034       | WNW              | Ditch [501]      |
| 035       | WNW              | Pit [503]        |
| 036       | NW               | Pit [505]        |
| 037       | WNW              | Ditch [507]      |
| 038       | S                | Cremation [202]  |

| Photo no. | Direction facing | Description                                  |
|-----------|------------------|--|
| 039       | S                | Ditch [601]                                  |
| 040       | S                | Ditch [603]                                  |
| 041       | S                | Ditch [603]                                  |
| 042       | S                | Pit [606]                                    |
| 043       | SE               | Gully [601]                                  |
| 044       | S                | Deposit (700)                                |
| 045       | N                | Pit [701]                                    |
| 046       | N                | Ditch [703]                                  |
| 047       | SE               | Pit [705]                                    |
| 048       | N                | Gully [707]                                  |
| 049       | SW               | Gully [1300]                                 |
| 050       | N                | Pit [1302]                                   |
| 051       | SE               | Ditch [1304]                                 |
| 052       | NW               | Pit [1307]                                   |
| 053       | SE               | Unexcavated feature [1308]                   |
| 054       | E                | Ditch [1401]                                 |
| 055       | NW               | working shot [1016] with half quernstone     |
| 056       | NW               | working shot [1016] with whole quernstone    |
| 057       | NE               | Gully [1101], ditch [1103]                   |
| 058       | N                | Gully [1106] and gully [1108]                |
| 059       | W                | Ditch [1501], pit [1503] and posthole [1505] |
| 060       | W                | Posthole [1505]                              |
| 061       | E                | Pit [1507]                                   |
| 062       | E                | Posthole [1509]                              |
| 063       | W                | (1500) and [1511]                            |
| 064       | E                | (1500) and [1511]                            |
| 065       | NW               | gully [1511]                                 |
| 066       | S                | Ditch [1601]                                 |
| 067       | SE               | Ditch [1603]                                 |
| 068       | S                | Ditch [1701]                                 |
| 069       | W                | Pit (1700)                                   |
| 070       | S                | Ditch [1703]                                 |
| 071       | E                | Pit [2001]                                   |
| 072       | SE               | Gully [2003]                                 |
| 073       | SE               | Ditch [2005]                                 |
| 074       | S                | Gully [2007]                                 |
| 075       | NW               | Pit [1001]                                   |
| 076       | SE               | Ditch [1006]                                 |



| Photo no. | Direction facing | Description                 |
|-----------|------------------|-----------------------------|
| 077       | SE               | Ditch [1010, 1012 and 1014] |
| 078       | W                | Posthole [1018]             |
| 079       | W                | Pit [1016]                  |
| 080       | E                | Ditch [1801]                |
| 081       | E                | Wall (1803) gully [1815]    |
| 082       | NE               | Ditch [1808]                |
| 083       | NE               | Ditch [1813]                |

### Sample register

| Sample no. | Context no. | Description                                   |
|------------|-------------|---|
| 001        | 402         | Black silty sand fill                         |
| 002        | 607         | Black silty sand fill of pit [606]            |
| 003        | 1003        | Black/grey silty sand fill above clay lining  |
| 004        | 1017        | Fill from around quernstone                   |
| 005        | 1502        | Black sand fill of ditch beneath plough layer |
| 006        | 1500        | Plough layer black sand                       |
| 007        | 1700        | Pit   |
| 008        | 1702        | Sample of lower fill of ditch [1701]          |
| 009        | 1703        | Sample of upper fill of ditch [1701]          |
| 010        | 1019        | Sample of yellow brown clay                   |
| 011        | 1802        | Grey brown silty sand sample                  |

## Appendix 2 – Environmental tables

### Retent sample results

| Context no. | Sample no. | Sample Vol (l) | Ceramic |      |               | Stone   |       | Metal     |             | Industrial waste |         |       |
|-------------|------------|----------------|---------|------|---------------|---------|-------|-----------|-------------|------------------|---------|-------|
|             |            |                | Pottery | CBM  | Other ceramic | Lithics | Stone | Fe object | Other metal | Fe slag          | Mag res | Other |
|             |            |                | Roman   | Daub |               |         |       |           |             |                  |         |       |
| 402         | 001        | 10             | +++     | +++  | +             | +++     |       |           | +           |                  | ++++    |       |
| 607         | 002        | 20             | +++     | ++++ |               |         |       |           |             | +++              |         |       |
| 1003        | 003        | 35             | ++++    | +++  |               | ++++    |       | +         |             |                  | ++++    | ++++  |
| 1017        | 004        | 50             | ++++    | ++++ |               | +++     | +     | +         |             |                  | ++++    | +++   |
| 1502        | 005        | 10             | +++     | +++  |               | +++     |       | +         |             |                  | +++     |       |
| 1500        | 006        | 20             | ++++    | ++++ |               | ++++    |       |           |             | ++               | ++++    |       |
| 1700        | 007        | 10             | +++     | +++  |               |         |       |           |             | ++               |         |       |

### Retent sample results continued...

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| Context no. | Sample no. | Sample Vol (l) | Burnt bone | Unburnt bone | Charcoal |               | Material available for AMS Dating | Comments  |
|-------------|------------|----------------|------------|--------------|----------|---------------|-----------------------------------|---|
|             |            |                | Mammal     | Mammal       | Qty      | Max size (cm) |                                   |   |
| 402         | 001        | 10             | +          |              |          | <0.5          |                                   | Clay shot was present. Charcoal not retained. Mag res - slag, hammerscale and vitrified waste |
| 607         | 002        | 20             |            |              |          | <0.5          |                                   | Charcoal not retained.  |
| 1003        | 003        | 35             | +          |              |          | 1.5           |                                   | Fe hob nail present. Charred nutshell present. Mag res - vitrified waste                      |
| 1017        | 004        | 50             | ++         | +            | +        | 1.0           |                                   | Non-oak charcoal, Fe nail and quern stone present. Mag res, slag and vitrified waste.         |
| 1502        | 005        | 10             |            | +            |          |               |                                   | Mag res - poss. slag.   |
| 1500        | 006        | 20             | +          |              |          | <0.5          | Burnt Bone +                      | Charcoal not retained. Mag res - slag, hammerscale and vitrified waste.                       |
| 1700        | 007        | 10             |            |              | +        | 1.0           | Charcoal +                        | Non-oak charcoal  |

**Key** + = rare, ++ = occasional, +++ = common and ++++ = abundant

**NB** charcoal over 1cm is suitable for identification and AMS dating



## Flotation sample results

| Context no. | Sample no. | Total flot Vol (ml) | Cereal grain |              |                 | Other plant remains | Metal | Charcoal |               | Material available for AMS | Comments                                |
|-------------|------------|---------------------|--------------|--------------|-----------------|---------------------|-------|----------|---------------|----------------------------|---|
|             |            |                     | Avena sp.    | Triticum sp. | Cerealia indet. |                     |       | Qty      | Max size (cm) |                            |   |
| 402         | 001        | 25                  |              |              | +               |                     |       |          |               |                            | fungal sclerotia +                      |
| 607         | 002        | 75                  |              |              |                 |                     |       | +        | 0.2           |                            |   |
| 1003        | 003        | 75                  | +            | +            | +               |                     |       | ++       | <0.5          | + cereal grain             | Oak and non-oak charcoal                |
| 1017        | 004        | 100                 | +            |              | +               | +                   |       | +++      | 1             | + charcoal                 | Non-oak charcoal, roundwoods            |
| 1502        | 005        | 20                  |              |              |                 |                     |       | +        | 0.2           |                            | Veronica hederifolia sp. +, Carex sp. + |
| 1500        | 006        | 50                  |              |              |                 |                     |       | ++       | <0.5          |                            |   |
| 1700        | 007        | 50                  |              |              | +               |                     |       | ++       | <0.5          |                            | Chenopodium sp. +, Carex sp. +          |

**Key** + = rare, ++ = occasional, +++ = common and ++++ = abundant

**NB** charcoal over 1cm is suitable for identification and AMS dating







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