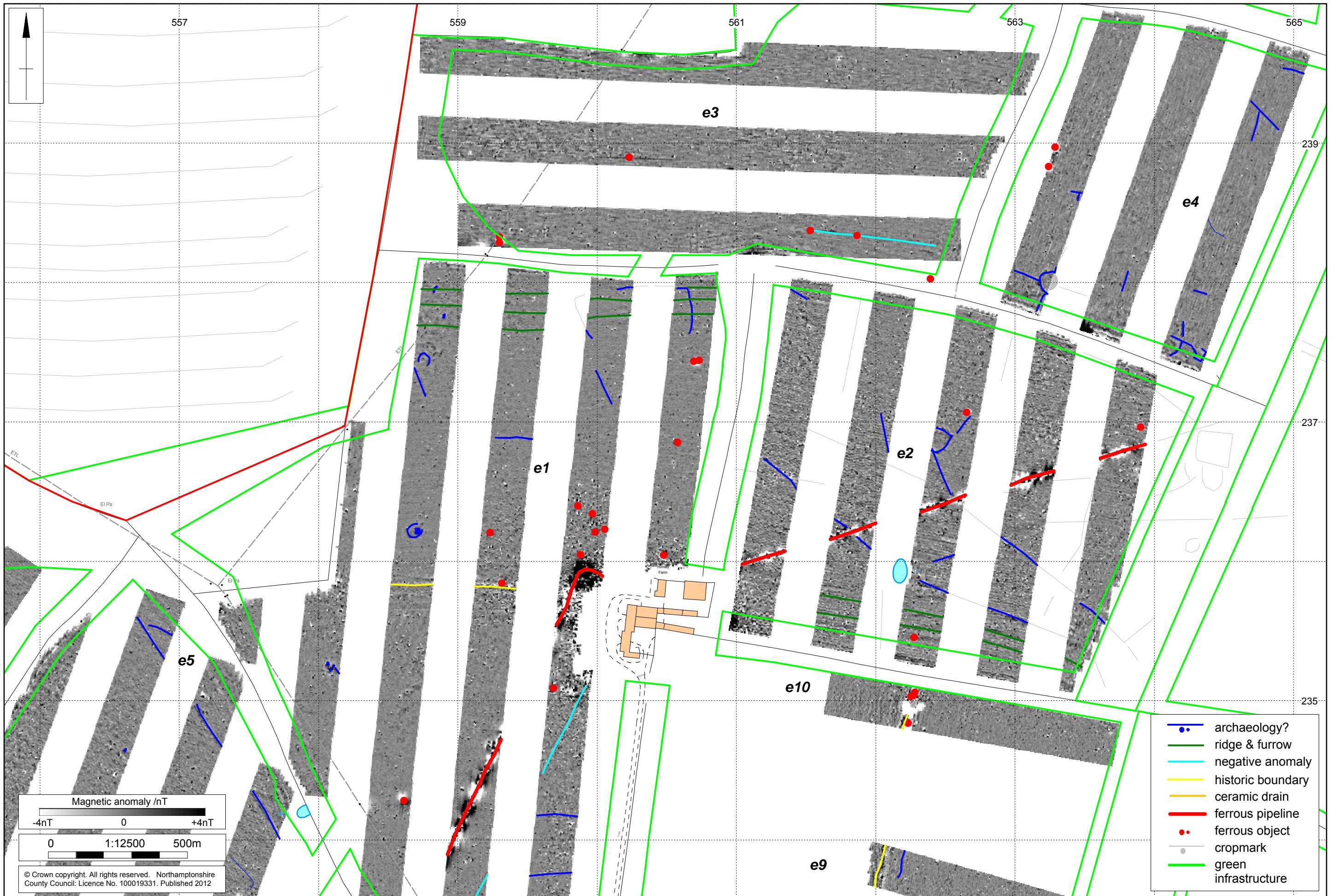
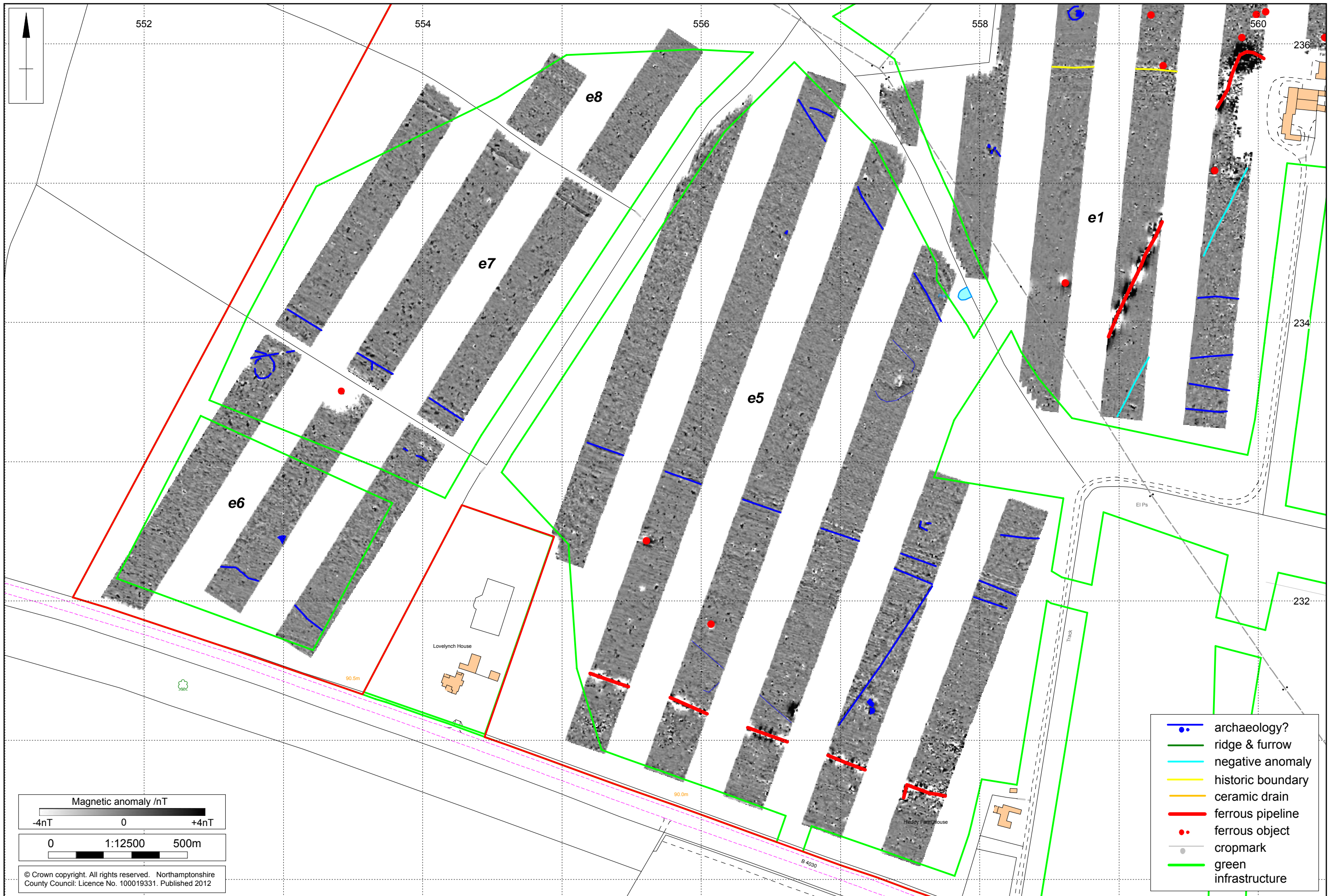


Scale 1:2,500

Survey Results & Interpretation: Block D d1 - d4 Fig 18







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APPENDIX 15.4
ARCHAEOLOGICAL EVALUATION REPORT

Bicester Eco Development Bicester Oxfordshire



Archaeological Evaluation Report Volume 1: Main Report and Appendices

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Bicester Eco Development, Bicester, Oxfordshire

Archaeological Evaluation Report

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Volume 3 Trench Descriptions and Context Inventory



Summary

Oxford Archaeology South (OAS) was commissioned by Hyder Consulting (UK) Ltd, on behalf of A2Dominion, to undertake an evaluation of the site of the proposed Bicester Eco Development to the north-west of Bicester, Oxfordshire (centred on SP 56700 24200) in advance of submission of an Outline Planning Application for proposed development.

The work took place between 12th August and 25th October 2013. A total of 529 trenches were excavated across the area. Of these trenches, 130 had features of archaeological origin, including 26 that had only furrows or modern features.

Evidence was found for activity from several periods. The earliest was represented by a single feature containing pottery sherds (Peterborough ware) of middle Neolithic date (c. 3400-2500 BC). The presence of isolated features or small clusters features widely dispersed in the landscape is typical of this period.

A number of archaeological features were in a small valley on the eastern side of the site. While these were undated, the presence of burnt stones and charcoal forming low mounds sealed beneath a deposit of colluvium (hill-wash deposits) is significant. Such 'burnt mounds' are widely known (although unusual in Oxfordshire) and generally date to the Bronze Age (c. 2400-700 BC) and may be the remains of prehistoric saunas or, alternatively, specialised cooking sites. A number of pits and a sinuous ditch in the same valley may represent further activity of the same date.

There were five widely-separated locations which produced substantial quantities of early-middle Iron Age pottery (c. 700-100BC), as well as a number of other features which produced single sherds or features in which the pottery was found in association with later material. Such a dispersed pattern of activity is somewhat unusual for this period but may suggest that the site lies in the hinterland of a more substantial settlement located elsewhere.

There were two main areas and one subsidiary area of Roman activity (AD 43-410) revealed by the evaluation. The two main areas of activity are typical of Roman rural settlements in Oxfordshire (and elsewhere) in terms of the types features and range of artefacts present. They are potentially noteworthy, however, in terms of their chronological range, spanning, as they did, the whole Roman period. Such continuity, with some evidence of expansion in the late Roman period, is perhaps unusual. The third, smaller area of activity contained material of largely early Roman date and may have been a small, outlying farmstead. Human remains were found in all three areas.

Geophysical anomalies suggesting the presence of ridge and furrow agriculture were fairly widespread across the site and furrows were also present in a number of trenches. This suggests that much of the site was under arable cultivation during the medieval period (and later). No evidence of medieval or later settlement was recorded on the site, aside from the extant farmhouses themselves.

There were a large number of undated features present across the site. Most of these were ditches and it is likely that these were boundary and drainage ditches associated with the agricultural use of the site. While these could be of almost any date from the later prehistoric period onwards, it is, perhaps, most likely that they are of medieval or later date.



1 INTRODUCTION

1.1 Project details

- 1.1.1 Oxford Archaeology South (OAS) was commissioned by Hyder Consulting (UK) Ltd, on behalf of A2Dominion, to undertake an evaluation of the site of the proposed Bicester Eco Development to the north-west of Bicester, Oxfordshire (Fig. 1).
- 1.1.2 The work was undertaken in advance of submission of an Outline Planning Application. A brief was set by Richard Oram of Oxfordshire County Council detailing the Local Authority's requirements for a staged archaeological evaluation of the site necessary to inform the planning process. The first stage of works, geophysical survey, was completed prior to the evaluation.
- 1.1.3 A Written Scheme of Investigation (Oxford Archaeology 2013a) was submitted to, and approved by, Richard Oram of Oxfordshire County Council for the second stage of works, evaluation trenching. This document reports the results of those investigations.
- 1.1.4 It was further agreed that two fields, where access for evaluation trenching was limited due to ecological constraints, should be subject to additional geophysical survey. A Written Scheme of Investigation (Oxford Archaeology 2013b) for these additional works was submitted to, and approved by, Richard Oram of Oxfordshire County Council and the results are summarised in Section 4, below
- 1.1.5 All work was undertaken in accordance with the Institute for Archaeologists' '*Standard and Guidance for archaeological field evaluation*' (revised 2008) and local and national planning policies.

1.2 Location, geology and topography

- 1.2.1 The proposed development site is located to the north-west of Bicester (centred on SP 56700 24200).
- 1.2.2 The site is underlain by various formations and members of the Great Oolite Group, of Mid-Jurassic age, which are dominated by limestones with subordinate mudstone beds. The majority of the site is covered by the Cornbrash Formation which forms a broad south-east sloping plateau.
- 1.2.3 The rest of the site is covered by the White Limestone Formation, which forms a broad plateau towards the north-west of the site. The White Limestone Formation is overlain by the Forest Marble Formation. The Forest Marble Formation forms a narrow outcrop between the White Limestone and Cornbrash Formations, and also crops out on the flanks of the stream valleys. The streams are flanked by narrow tracts of alluvium of late Quaternary age, up to 150m wide.
- 1.2.4 The topography of the site is generally flat with heights ranging between 83 and 97m OD across the site.

1.3 Archaeological and Historical Background

- 1.3.1 The archaeological and historical background to the site has been described in a desk-based assessment (Hyder Consulting 2011) and is not reproduced here. A brief summary is given below, followed by a more detailed description of previous investigations within the site, to set the context for the evaluation.
- 1.3.2 The site is located in an area which has seen little archaeological investigation prior to the current project but its archaeological potential is demonstrated by a number of recorded monuments within the immediate vicinity. The proposed site is adjacent to the C10th/C11th Church of St Lawrence, restored and partly rebuilt 1874 by Henry Woodyer (PRN 5106). A post-medieval fishpond survives to the south of the church (PRN 5107) and a large depression to the NE has been recorded as an, earlier,



medieval fishpond (PRN 13743). Home Farm, to the SW of the church is a listed C17th Farmhouse (PRN 17289) and it is likely that the church would have once been accompanied by medieval, post-medieval and possibly late Saxon settlement.

1.4 Archaeological investigations within the site

Exemplar Site

- 1.4.1 Evaluation trenching was carried out on an area of land forming the north-eastern part of the site (the *Exemplar Site*), for which planning permission has been granted. The evaluation (Oxford Archaeology 2010) revealed a small number of ditches, of probable agricultural origin, but no significant archaeological remains were present.

South-eastern area

- 1.4.2 Three fields in the south-eastern corner of the site are the subject of a separate planning application and have already been evaluated. A geophysical survey (Northamptonshire Archaeology 2012) and evaluation trenching (Northamptonshire Archaeology 2013) were undertaken and revealed a small group of Iron Age features and a series of probable enclosures of Roman date.

Aerial photographic assessment

- 1.4.3 An assessment of cropmarks visible on aerial photographs has been carried out (Airphoto Services 2010). This revealed a number of areas across the site where cropmarks representing archaeological features are visible (Fig. 2a-d). There is an area of ditches and enclosures at the south of the site at Himley Farm. There is also evidence of a ring ditch, which may be the remains of a Bronze Age barrow (Oxfordshire Historic Environment Record (OHER) no 13907). An extensive complex of features, including ditches, pits, possible tracks and enclosures are visible as cropmarks close to Hawkswell Farm (OHER no 15958). They are probably the remains of a prehistoric or Romano-British settlement and may relate to Iron Age settlement recorded at Slade Farm, 400m to the south of the site. Further cropmarks identified during the air photo survey within the area may also date to this period. Evidence of medieval ridge and furrow agriculture was also recorded.

Geophysical survey

- 1.4.4 A magnetometer survey of the site has been carried out (Northamptonshire Archaeology 2011). Alternate lines of grids, each 30m wide, were surveyed across the site resulting in a 50% sample coverage of the area.
- 1.4.5 A large number of magnetic anomalies representing subsurface features were detected, including several concentrations of features (Fig. 2a-d), enhancing and extending the evidence from the aerial photographic assessment.

1.5 Acknowledgements

- 1.5.1 A2Dominion funded the project and Jenny Wylie of Hyder Consulting acted as consultant for the project. Richard Oram, the Planning Archaeologist at Oxfordshire Council Council, monitored the work. The fieldwork was conducted by Vix Hughes assisted by Alex Latham, Kevin Moon, Jim Mumford, Ian Cook, Vicky Skipper, Lee Sparks, Nick Swift, Alice Rose, Felicia Fricke, Lee Grana, Tom Rose-Jones, Chris Richardson, Natalie Anderson, James Archer, Grace Rowe and Victoria Green. The report was written and compiled by Vix Hughes, illustrated by Tom Black, Gary Jones, Emily Plunkett and Julia Collins and archived by Nicola Scott. The project was managed for OA by Ken Welsh, who also edited the report.
- 1.5.2 Thanks also go to the various landowners and tenant farmers at the site, without whose co-operation and assistance the project would not have been possible.



2 EVALUATION AIMS AND METHODOLOGY

2.1 General aims

2.1.1 The general aims of the evaluation were:

- (i) To determine the location, extent, date, character, condition, significance and quality of any archaeological remains within the development;
- (ii) To assess vulnerability/sensitivity of any exposed remains;
- (iii) To provide sufficient information on the archaeological potential of the site to enable the archaeological implications of the proposed development to be assessed
- (iv) To assess the impact of previous land use on the site;
- (v) To inform a strategy to avoid or mitigate impacts of the proposed development on surviving archaeological remains;
- (vi) To disseminate the results through the production of a site archive for deposition with the Oxfordshire Museum Service and to provide information for accession to the Oxfordshire HER.

2.2 Specific aims and objectives

2.2.1 The specific aims and objectives of the evaluation were:

- (vii) To investigate and characterise various anomalies identified through geophysical survey and aerial photographic assessment that may represent archaeological features;
- (viii) To examine areas identified by the geophysical survey as being blank;
- (ix) To determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive.

2.3 Site specific methodology

- 2.3.1 It was proposed to excavate an array of 541 trenches, each 50m long, representing a 2% sample of the site, excluding areas of existing woodland, hedgerows and buildings. A number of trenches could not be excavated, largely due to ecological constraints, and, in the event, a total of 529 trenches were excavated. The trenches were located to investigate geophysical anomalies and cropmarks. Trenches were also located in apparently blank areas where no geophysical anomalies or cropmarks were recorded.
- 2.3.2 The trench locations are shown in Figures 2a-d; the position of several trenches was adjusted in order to avoid services, structures, electric fences and other unforeseen obstacles.
- 2.3.3 Each trench was excavated using an appropriate mechanical excavator fitted with a toothless bucket. A total of four excavators were in use across the project and each excavator was under the direct supervision of an archaeologist.
- 2.3.4 Machining continued in spits down to the top of the undisturbed natural geology or the first archaeological horizon depending upon which was encountered first. Once archaeological deposits were exposed, further excavation proceeded by hand.
- 2.3.5 The exposed surfaces were sufficiently cleaned to establish the presence/absence of archaeological remains. A sample of each feature or of each feature or deposit type, for example pits, postholes, and ditches, was excavated and recorded. In the event of the identification of an exceptional number and complexity of archaeological deposits, sample excavation was more circumspect and aimed to be minimally intrusive.
- 2.3.6 Two fields in the south of the site (Fig. 2a) contained ponds with breeding populations of great crested newts. It was agreed with the Oxfordshire Planning Archaeologist, and



in consultation with Hyder's ecologist, to carry out only limited trenching in these fields and to supplement the results with further detailed geophysical survey. The results of this additional survey are summarised in Section 4, below, and the full report is contained in Appendix A.



3 RESULTS

3.1 Introduction and presentation of results

3.1.1 A general description of the ground conditions encountered and the distribution of archaeological deposits is given below. This is followed by a trench by trench description of the trenches which contained archaeological remains. Full trench descriptions and a context inventory are contained in Volume 3.

3.1.2 The trenches were numbered from 1-558. However, the following trenches were not excavated: 134, 138, 140, 142-144, 147-151, 153, 156-168, 301, 371 and 374-375.

3.2 General soils and ground conditions

3.2.1 The underlying geology consisted of a pale yellow to grey clay-rich cornbrash. There were also frequent patches of brownish orange silty clay and less frequent patches of yellower silty clays and grey clays. The geology lay, in most cases, directly below the ploughsoil which was, on average, 0.3m thick.

3.2.2 A stony subsoil was present in disparate locations and was, in places, quite extensive.

3.2.3 The ground and light conditions were generally good, with archaeological features being readily visible.

3.3 General distribution of archaeological deposits

3.3.1 Of the 529 trenches excavated, 130 contained significant archaeological features, approximately 24.5% of the total.

3.3.2 The archaeological remains were cut from immediately beneath the topsoil, or subsoil if present, into the underlying geology, unless otherwise stated.

3.3.3 One trench, Trench 97, contained a feature of probable Neolithic date.

3.3.4 Nine trenches; 48, 81, 86, 322, 378, 394, 462, 471 and 553, had features that contained early to middle Iron Age pottery.

3.3.5 A total of 32 trenches (76, 80, 99, 100, 105, 106, 112, 114, 115, 117, 123, 174, 175, 176, 177, 178, 179, 183, 290, 302, 322, 323, 377, 378, 379, 422, 502, 503, 504, 505, 507 and 512) contained significant features of Roman date.

3.3.6 A total of 26 trenches (45, 101, 137, 139, 226, 228, 257, 266, 267, 270, 271, 274, 297, 298, 305, 306, 307, 308, 342, 364, 368, 395, 397, 405, 408 and 409) contained only furrows which were of probable medieval to early post-medieval date.

3.3.7 A total of 11 trenches (82, 117, 189, 224, 276, 280, 283, 295, 310, 391 and 429) contained only features of post-medieval date. In addition

3.3.8 A total of 51 trenches (13, 36, 47, 55, 69, 70, 75, 79, 92, 93, 98, 119, 121, 124, 169, 170, 172, 180, 195, 200, 203, 204, 238, 256, 272, 273, 278, 293, 294, 300, 304, 316, 343, 348, 382, 390, 403, 404, 407, 414, 418, 431, 435, 436, 439, 450, 457, 501, 506, 529 and 556) contained only undated features.

3.3.9 Some of the undated features could be associated spatially with dated features: for example, the features in Trench 98 are likely to be of Roman date since they lie within an area of Roman activity. Other features, such as a large probable quarry in Trench 313, can potentially be dated to the post-medieval period by comparison to cartographic sources.

3.3.10 The trenches that contained no significant remains, and which are not discussed below, were as follows: 1-12, 14-35, 37-44, 46, 49-54, 56-68, 71-74, 77, 78, 83-85, 87-91, 94-96, 102-104, 107-109, 111, 113, 116, 118, 120, 122, 125-133, 135, 136, 141, 145, 146, 152, 154, 155, 171, 181, 182, 184-188, 190-194, 196-199, 201, 202, 205-223, 225, 227, 229-237, 239-255, 258-265, 268, 269, 275, 279, 281, 282, 284-289, 291, 292, 296, 299, 303, 309, 311, 312, 314, 315, 317-321, 324-341, 344-347, 349-363, 365-367,



369, 370, 372, 373, 380, 381, 383-389, 392, 393, 396, 398-402, 406, 410-413, 415-417, 419-421, 423-428, 430, 432, 434, 437, 438, 440-449, 451-456, 458-461, 463-470, 472-500, 508-511, 513-528, 530-552, 554, 555, 557 and 558.

3.4 Trenches 13 and 36 (Fig. 4)

Trench 13 (Fig. 23)

- 3.4.1 The trench contained ditch 1303 (Plate 1) which contained fill 1304 which produced no artefacts.

Trench 36 (Fig. 23)

- 3.4.2 An E-W aligned ditch or field boundary (3602) contained one fill (3603) which produced no artefactual material. The ditch was on the same alignment as a geophysical anomaly, although offset to the south (see also Trench 55).

3.5 Trenches 45, 47, 48, 55, 69, 70, 75 and 76 (Fig. 5)

Trench 45 (Fig. 23)

- 3.5.1 Trench contained two furrows, one of which (4503) was fully recorded. Its single fill (4504) contained no artefactual material. A second furrow was located further to the east.

Trench 47 (Fig. 23)

- 3.5.2 Trench contained a ditch, 4703, aligned NE-SW. The single fill (4704) contained no artefactual material. The feature corresponded to a geophysical anomaly.

- 3.5.3 A furrow was located to the west of the ditch.

Trench 48 (Fig. 24)

- 3.5.4 Trench contained a large pit, 10m across and more than 1m deep (Plate 2). Three interventions were excavated; one at each end (4802 and 4808) and one in the middle (4804). A sequence of three fills (4805, 4806 and 4807) was recorded in the central intervention. Fill 4805 contained 73 sherds of pottery, animal bone and flint, fill 4806 contained eight sherds of pottery and animal bone and fill 4807 contained six sherds of pottery and animal bone. All of the pottery dates to the early to middle Iron Age. A soil sample from this feature produced no significant charred remains. The feature corresponded to a geophysical anomaly.

- 3.5.5 No evidence of the geophysical anomaly, which was present in Trench 47, was seen.

Trench 55 (Fig. 24)

- 3.5.6 Trench contained one NW-SE aligned ditch, 5502, which was of a similar size and continued along the same alignment as the one seen in Trench 36 to the west. The single fill (5503) contained no artefactual material. The feature corresponded to a geophysical anomaly.

Trench 69 (Fig. 24)

- 3.5.7 The trench contained two E-W aligned ditches; an irregular, shallow ditch (6904) at the southern end, and a deeper more regular ditch (6906) in the centre. Each ditch contained a single fill, neither of which produced any artefactual material.

Trench 70 (Fig. 25)

- 3.5.8 The trench contained a ditch (7003), aligned NE-SW. The single fill (7004) contained no artefactual material.

Trench 75 (Fig. 25)

- 3.5.9 The trench contained a single E-W aligned ditch (7502). The single fill (7503) contained no artefactual material. The feature corresponded to a cropmark visible on aerial photographs.

Trench 76 (Fig. 25)

- 3.5.10 The trench contained two parallel ditches (7603 and 7605), aligned NW-SE. Both ditches contained a single fill. The fill (7604) of the north-eastern ditch (7605) contained three sherds of 2nd century or later pottery. The features corresponded cropmarks visible on aerial photographs.

3.6 Trenches 79, 80, 81, 82, 86 and 97 (Fig. 6)**Trench 79 (Fig. 25)**

- 3.6.1 The trench contained a line of three possible postholes (7905, 7907 and 7909), on a N-S alignment, as well as an irregular pit (7911) which contained heat-affected clay. None of the fills contained any artefacts.

Trench 80 (Fig. 26)

- 3.6.2 The trench contained two N-S aligned ditches, 8004 and 8006. Both features contained single fills. Fill 8005, of ditch 8006, contained a single sherd of Roman pottery and animal bone.

- 3.6.3 There was also a possible posthole (8008, not illustrated) which contained a fragment of animal bone.

Trench 81 (Fig. 26)

- 3.6.4 A ditch terminus 8102 was aligned NW-SE. The single fill contained no artefactual material. The adjacent ditch terminus (8104) had a single fill that produced no finds. Overlying both features was a layer or upper depression infill, 8107. This layer contained 45 sherds of early to middle Iron Age pottery and animal bone.

Trench 82 (Fig. 26)

- 3.6.5 The trench contained a pit, 8203, which cut through the subsoil. The single fill (8204) contained ceramic building material of medieval or post-medieval date, and three struck flints of broadly Mesolithic/Neolithic date.

Trench 86 (Fig. 26)

- 3.6.6 The trench contained a pit (8602) with a single fill (8603), which contained three sherds of probable Iron Age pottery. It was cut by a possible ditch, 8604, although this was irregularly shaped and its single fill (8605) contained no finds.

Trench 97 (Fig. 27)

- 3.6.7 Ditch 9703 was NE-SW aligned and was probably a field boundary belonging to an earlier field system (Plate 4). The single fill (9704) contained 22 sherds of middle Neolithic pottery including a number of distinctive Peterborough ware sherds. Typically such assemblage would be more common in a pit.

3.7 Trenches 92, 98 - 101, 105, 106, 110, 112, 114, 115, 169, 170, 172 - 180, 183 and 195 (Fig. 7)**Trench 92 (Fig. 27)**

- 3.7.1 A pit, 9203, had a single heat-affected fill (9202), but produced no artefacts (Plate 3).

Trench 98 (Fig. 27)

- 3.7.2 The trench contained two features; a small cremation burial and a posthole. Four sherds of 3rd-4th century AD pottery were recovered from a subsoil (9801) which overlay the features.

- 3.7.3 The cremation (9803) was very shallow and its single fill (9804) contained burnt fuel residue and fragments of calcined human bone.

- 3.7.4 Posthole 9805 had a single fill (9806) which contained no artefactual material.

**Trench 99 (Fig. 27)**

- 3.7.5 The trench contained a NW-SE aligned ditch (9903) (Plate 5) and a pit (9905). Both features had single fills. Fill 9904 in pit 9905 contained 20 sherds of pottery of 3rd - 4th century date, along with animal bone.

Trench 100 (Fig. 28)

- 3.7.6 The trench contained a wide E-W aligned ditch, 10002 at its northern end, and a possible hollow way or eroded trackway, 10005, towards the south.

- 3.7.7 The ditch (Plate 6) contained two fills (10003 and 10004) which both contained pottery; the upper fill (10003) also contained animal bone. The pottery from the upper fill was of 3rd - 4th century date, while the 85 sherds of pottery from the lower fill was of 2nd century or later date.

- 3.7.8 The hollow way, 10005, was nearly 5m wide with a broad shallow U-shaped profile (Plate 7). There appeared to be evidence of wear or erosion on the underlying cornbrash, not seen commonly in the base of other features. The single fill (10006) contained no artefactual material.

Trench 101 (Fig. 28)

- 3.7.9 A single N-E aligned furrow, 10103, was present towards the centre. The single fill (10004) contained five fragments of medieval to post-medieval ceramic building material.

Trench 105 (Fig. 28)

- 3.7.10 The trench contained two ditches, almost perpendicular to one another. Ditch 10504 was N-S aligned and its single fill (10503) contained a sherd of Roman pottery and animal bone.

- 3.7.11 Ditch 10506 was aligned E-W and its single fill (10505) contained seven sherds of 4th century AD pottery and animal bone.

Trench 106 (Fig. 28)

- 3.7.12 There were three furrows (10604, 10606 and 10608), aligned E-W. Each feature had a single fill; a sherd of possible Roman pottery was recovered from furrow 10608.

Trench 110 (Fig. 29)

- 3.7.13 A single ditch (11002), aligned N-S, was visible at the eastern end. The ditch contained two fills of which the upper fill, 11003, contained pottery of 1st century AD date and animal bone.

Trench 112 (Fig. 29)

- 3.7.14 A single E-W aligned ditch, 11204, was visible at the northern end of the trench (Plate 8). The ditch had four fills (11206, 11208, 11205 and 11203). Fill 11208 contained six sherds of late 1st century AD or later date, fill 11205 contained 35 sherds of mid-late 1st century AD date and fill 11203 contained 45 sherds of late 1st-mid 2nd century AD date. Fills 11205 and 11203 also contained animal bone.

Trench 114 (Fig. 29)

- 3.7.15 The trench contained a possible holloway, four ditches, a stone-lined well and a posthole.

- 3.7.16 Posthole 11402 contained fill 11401 which produced two sherds of Roman pottery.

- 3.7.17 Hollow way 11405 was 5m wide and contained a single fill (11404) which produced 66 sherds of early-mid 2nd century AD pottery as well as animal bone. The feature was similar to the hollow way in Trench 100 to the south-west.

- 3.7.18 Feature 11407 (Plate 9) contained a single fill, 11406, which produced eight sherds of pottery dated to the 13-14th century. It also contained 58 sherds of Roman pottery indicating that it may have cut through an earlier feature.



- 3.7.19 Adjacent to furrow 11407 was ditch 11415. It contained fill 11414 which produced six sherds of pottery dated to the 1st century.
- 3.7.20 Ditch terminus 11418 contained fill 11417 which produced five sherds of pottery dated to the late 1st century.
- 3.7.21 Ditch 11412 (Plate 10) was 2.9m wide and at least 1m deep and contained fill 11411 which produced eleven sherds of pottery of 2nd century or later date. It was cut by the construction cut (11413) for a well (11410).
- 3.7.22 Well 11410 (Plate 11) was of stone construction and was 0.5m wide and at least 1m deep. Although the eastern side had been dismantled or damaged, more than 12 courses of limestone slabs were exposed, forming a curving lining. The lining was of dry bonded structure and a sherd of pottery of 2nd century or later date was recovered from it. Within the well was a stone rich fill (11409) which produced four sherds of pottery of 2nd century or later date. A soil sample taken from this fill contained a small assemblage of amphibian, vole and other rodent bones. Overlying the upper well fill and the remainder of the ditch was fill 11408, which contained 11 sherds of pottery of 2nd century or later date and a small quantity of animal bone.
- 3.7.23 The depth of features 11410 and 11412, and the instability of their fills, meant that no section was drawn.
- Trench 115 (Fig. 30)**
- 3.7.24 Ditch 11504, aligned N-S, contained fill 11505 which produced a sherd of Roman pottery.
- Trench 169 (Fig. 31)**
- 3.7.25 Ditch 16903, aligned E-W, contained fill 16902 which produced no artefactual material (Plate 14).
- Trench 170 (Fig. 31)**
- 3.7.26 Six fragments of fired clay from an oven or hearth were recovered from the topsoil.
- 3.7.27 A small pit, 17003, had a single heat-affected fill (17002) which contained no artefactual material.
- Trench 172 (Fig. 31)**
- 3.7.28 The trench contained two parallel NW-SE ditches (Plate 15), 17202 and 17204. They demarcated a trackway which was seen to continue to the north-west, as a geophysical anomaly, through Trenches 178, 177 and 173. The ditches did not contain any artefactual material but are of probable Roman origin.
- Trench 173 (Fig. 32 and Plate 16)**
- 3.7.29 The trench contained a re-cut ditch, a posthole 17309 and two possible foundation trenches / ditches. The features corresponded to geophysical anomalies. In addition, there were small spreads of dark-hued material towards the southern end of the trench which, in consultation with the County Archaeologist, were left unexcavated.
- 3.7.30 Ditch 17303 was aligned roughly N-S with a return to the east. The fill, 17302, produced 36 pottery sherds dated to the late 1st to 2nd century. The feature may be the remains of a foundation trench rather than a ditch.
- 3.7.31 Ditch 17307 (Plate 17) was over 7.8m wide. It had a single fill (17305) which contained 187 sherds of pottery dated to the late 3rd century. The ditch was re-cut by ditch 17306 which was filled by 17304. Fill 17304 produced 293 sherds of pottery, dated to mid 4th century, and 48 iron hobnails. In addition there were two copper coins, one dated to AD 364-378, and the other to AD 350-364. The full depth of the features was difficult to determine within the confines of the trench.



3.7.32 A small posthole (17309) contained one fill (17308) which produced six sherds of pottery dated to the late 1st to 2nd century.

3.7.33 To the south was the rectilinear ditch, 17311. Although very shallow, the feature was clear in plan and the fill (17310) contained 60 sherds of pottery dated to the 2nd century. The feature may be the remains of a foundation trench rather than a ditch.

Trench 174 (Fig. 33)

3.7.34 Ditch 17404 (Plate 18), aligned E-W, contained fill 17405 which produced five sherds of pottery of late 2nd century date and animal bone.

3.7.35 Ditch 17406, aligned NW-SE, did not produce any artefacts.

Trench 175 (Fig. 33)

3.7.36 The trench contained two ditches and a layer filling a shallow depression in the natural cornbrash.

3.7.37 Ditch 17502 was aligned NE-SW and its fill (17503) contained 3rd-4th century pottery.

3.7.38 Ditch 17504 was aligned E-W and its fill (17505) contained 3rd-4th century pottery.

3.7.39 The ditches were cut into deposit 17506 which may have be a small area of subsoil preserved in a shallow depression. It produced a sherd of 2nd century or later pottery.

Trench 176 (Fig. 34)

3.7.40 The trench contained a ditch, a posthole and a pit.

3.7.41 Ditch 17602, aligned NW-SE, had a single fill, 17603, which contained pottery dated to the mid 3rd century or later, animal bone and metal fragments.

3.7.42 A possible posthole 17604, had a single fill which contained no artefactual material.

3.7.43 Pit 17606 had a single fill 17607 which contained pottery dated to the 2nd century or later, animal bone and metal fragments.

Trench 177 (Fig. 34 and Plate 21))

3.7.44 The trench contained two parallel E-W ditches (17702 and 17704) (Plates 19 and 20). They demarcated a trackway which was seen to continue through Trenches 172, 173 and 178.

3.7.45 Each ditch had a single fill. Fill 17703 in ditch 17702 contained 2nd-4th century pottery and animal bone. The features correspond to geophysical anomalies.

Trench 178 (Fig. 34)

3.7.46 The trench contained three ditches 17803, 17805 and 17807.

3.7.47 Ditch 17803 was aligned E-W but did not contain any artefactual material.

3.7.48 Ditch 17805 was aligned N-S but did not contain any artefactual material.

3.7.49 Ditch 17807, aligned NW-SE, had one fill (17808) which contained pottery dated to the mid 3rd century onwards, a fragment of oven furniture, ceramic building material and animal bone.

Trench 179 (Fig. 35)

3.7.50 Posthole 17902 did not contain any artefactual material.

3.7.51 Ditch 17904, aligned E-W, contained fill 17905 which produced a sherd of Roman pottery.

Trench 180 (Fig. 35)

3.7.52 Pit 18002 (Plate 22), 0.7m deep and 1.62m wide, contained a sequence of five fills, one of which (18005) contained animal bone.

**Trench 183 (Fig. 35)**

- 3.7.53 A large pit (18303) contained two fills (18302 and 18304). The lower fill (18302) contained 32 sherds of pottery dated to between AD 325 and 400, ceramic building material of probable medieval to post-medieval date, animal bone and metal.

Trench 195 (Fig. 36)

- 3.7.54 A single ditch or field boundary, 19503, aligned NNE-SSW, was present. The single fill contained no artefactual material.

3.8 Trenches 117, 119, 121, 123 and 124 (Fig. 8)**Trench 117 (Fig. 30)**

- 3.8.1 Pit 11702 was approximately 7m wide and at least 0.7m deep. It contained at least three fills (11703, 11704, 11705) but, due to its depth, was not fully excavated. Fill 11704 contained post-medieval pottery, ceramic building material, metal and glass fragments. The other two fills contained no artefactual material. The feature corresponded to a geophysical anomaly.

Trench 119 (Fig. 30)

- 3.8.2 The trench contained three ditches (11903, 11905 and 11907) and a furrow (11909).
3.8.3 Ditch terminus 11903, aligned NE-SW, had a single fill 11902, that contained a fragment of unidentifiable ceramic building material.
3.8.4 Ditch 11905 was aligned E-W and its single fill contained no artefactual material (Plate 12).
3.8.5 Ditch 11907 was aligned NE-SW and its fill (11906) contained a metal object.
3.8.6 The furrow was aligned from E-W.

Trench 121 (Fig. 31)

- 3.8.7 Two possible ditches, 12102 and 12106, both aligned E-W, were excavated. Each contained a single fill, neither of which contained any artefactual material.

Trench 123 (Fig. 31)

- 3.8.8 A single NW-SE aligned ditch (12303) (Plate 13) produced a sherd of 1st century AD or later pottery from the fill, 12304.

Trench 124 (Fig. 31)

- 3.8.9 Ditch 12404, aligned E-W, had one fill which contained no artefactual material.

3.9 Trenches 137, 139, 200, 203 and 204 (Fig. 9)**Trench 137**

- 3.9.1 The trench contained two unexcavated E-W aligned furrows.

Trench 139

- 3.9.2 The trench contained three E-W aligned furrows, parallel with each other, of which two (13903 and 13905) were excavated. Neither fill contained any artefactual material.

Trench 200 (Fig. 36)

- 3.9.3 The trench contained two curving ditches (20003 and 20008), and a third ditch 20005, which was cut by 20010.
3.9.4 Ditch 20003 was slightly curved, aligned N-S, and the single fill contained no artefactual material.
3.9.5 To the west (18.5m) was a slightly curved ditch (20008), aligned NW-SE. The single fill contained no artefactual material (Plate 23). Ditches 20003 and 20008 may correspond to a circular cropmark, although they are considerably offset.
3.9.6 Ditch 20005 was aligned NE-SW. It did not contain any artefactual material. It was cut by ditch 20010.



3.9.7 Ditch 20010 was aligned NE-SW. It had vertical sides and may have been the cut for a land drain although none was present.

Trench 203 (Fig. 36)

3.9.8 Ditch 20303 was aligned N-S. The single fill (20304) contained an iron nail. It was cut by furrow 20305 to the east.

3.9.9 Furrow 20305 was aligned NW-SE and contained one fill, which produced no artefactual material.

Trench 204 (Fig. 37)

3.9.10 Ditch 20403 (Plate 24) was aligned N-S and the single fill contained no artefactual material.

3.9.11 Feature 20405, aligned NNW-SSE, was a probable furrow. The single fill contained no artefactual material.

3.10 Trenches 256, 266, 267, 270, 271, 272, 273 and 274 (Fig. 10)

Trench 256 (Fig. 37)

3.10.1 The trench contained a ditch, 25603, aligned NW-SE. The single fill (25602) contained no artefactual material. It corresponded with a geophysical anomaly and a cropmark.

Trench 266

3.10.2 The trench contained a furrow (26603), aligned NE-SW. The fill contained no artefactual material.

Trench 267 (Fig. 37)

3.10.3 The trench contained two parallel furrows, aligned NE-SW.

3.10.4 Furrow 26702 had three fills (26703, 26704 and 26705). Fill 26703 contained a fragment of clay pipe and a fragment of wine bottle.

3.10.5 Furrow 26706 was not excavated.

Trench 270

3.10.6 The trench contained two unexcavated NE-SW aligned furrows.

Trench 271

3.10.7 Two parallel NW-SE aligned furrows were present. Furrow 27103 was filled by 27102 which contained a fragment of clay pipe.

Trench 272

3.10.8 The trench contained a small pit (27204), which contained no artefactual material.

3.10.9 There was also a furrow which was not excavated.

Trench 273 (Fig. 37)

3.10.10 Ditch 27302, was aligned E-W. Its fill (27303) contained a fragment of ceramic building material.

Trench 274

3.10.11 Three furrows, aligned NE-SW, were present within the trench. They were not excavated

3.11 Trenches 276, 277, 278, 280, 290, 293 and 294 (Fig. 11)

Trench 276 (Fig. 38)

3.11.1 Tree throw-hole 27603 contained fill 27604 which produced several fragments of animal bone.

3.11.2 Ditch 27605 was aligned NW-SE and its single fill contained no artefactual material.

3.11.3 Ditch 27607 (Plate 25) was aligned E-W and its fill (27608) contained four sherds of medieval pottery.



3.11.4 Ditch 27609 was aligned NW-SE and its fill (27610) contained a sherd of Roman pottery and animal bone.

Trench 277 (Fig. 38)

3.11.5 Ditch 27703, aligned NW-SE, contained no artefactual material.

Trench 278 (Fig. 38)

3.11.6 A row of four postholes, aligned E-W, was present at the western end of the trench (Plate 26).

3.11.7 The postholes (27802, 27804, 27806 and 27808) each had a single fill, none of which contained any artefactual material. The postholes were all of similar dimensions.

Trench 280 (Fig. 38)

3.11.8 Ditch 28003 (Plate 27), aligned N-S, had one fill (28004) which contained a sherd of post-medieval pottery.

3.11.9 Posthole 28005 contained no artefactual material within its fill (28006). It did contain charcoal from the sample taken, although this could not be identified to species.

Trench 290 (Fig. 39)

3.11.10 Ditch 29003 (Plate 28), aligned E-W, contained a sequence of seven fills (29010, 29008, 29009, 29006, 29007, 29005 and 29004). Fill 29009 contained 36 sherds of mid-late 1st century AD pottery and animal bone, fill 29006 contained 28 sherds of mid-late 1st century AD pottery and animal bone, fill 29007 contained six sherd of late 1st century AD pottery and fragments of oven furniture, and fill 29005 contained 27 sherds of mid 3rd century or later pottery, fragments of fired clay and animal bone.

Trench 293 (Fig. 40)

3.11.11 The trench contained three possible ditches (29303, 29305 and 29309), all aligned E-W, and a possible posthole 29307. No artefactual remains were present

3.11.12 Ditch 29303 had one fill which contained no artefactual material. The relationship of ditch 29303 to ditch 29305 was unclear. Ditch 29305 was cut by ditch 29309.

3.11.13 The possible posthole 29307 was cut by 29305. It was irregular in shape and may have been of natural origin.

Trench 294 (Fig. 40)

3.11.14 The trench contained two features: ditch terminus 29403, aligned NE-SW, and ditch 29405, aligned NW-SE. Both features were regular in plan and profile but the single fills within each were sterile and very similar to the natural silt.

3.12 Trenches 189, 224, 226, 228, 295, 297, 298, 300 and 302 (Fig. 12)

Trench 189 (Fig. 36)

3.12.1 Ditch 18902, aligned NW-SE, contained fill 18903 which produced a sherd of post-medieval pottery.

Trench 224

3.12.2 There was one linear feature, 22403, which was probably a recent drainage feature.

Trench 226

3.12.3 The trench contained two furrows, aligned SW-NE, which were not excavated.

Trench 228

3.12.4 The trench contained a N-S aligned furrow. The single fill contained no artefactual material.

Trench 295

3.12.5 There were three NE-SW aligned furrows. A drainage ditch, 29503, contained three fills, 29504-29506, the lowest of which, 29504, contained post-medieval pottery.

Trench 297

- 3.12.6 Three furrows (29703, 29705 and 29709), aligned NE-SW, were present. The fill (29706) of furrow 29705 contained metal fragments.

Trench 298

- 3.12.7 Feature 29804 was a probable NE-SW aligned furrow. Its fill contained no artefactual material.

Trench 300 (Fig. 40)

- 3.12.8 The trench contained an unexcavated furrow, aligned NE-SW, and a narrow ditch (30003), aligned N-S. Its fill, 30004, contained no artefactual material. The feature corresponded to a geophysical anomaly.

Trench 302 (Fig. 40)

- 3.12.9 The trench contained two intercutting ditches (Plate 29), 30203 and 30205. The relationship between these two features was uncertain due to the similarity of their fills.

- 3.12.10 Ditch 30203 was aligned E-W and terminated within the trench. The single fill contained a single sherd of 1st century AD pottery.

- 3.12.11 Ditch 30205 was N-S aligned and the single fill yielded no artefactual material.

3.13 Trenches 238, 257, 304 - 308, 310 and 313 (Fig. 13)**Trench 238 (Fig. 37)**

- 3.13.1 A shallow ditch, 23804, aligned E-W, had a single fill (23803) that contained no artefactual material.

Trench 257

- 3.13.2 The trench contained a furrow, aligned N-S, which was not excavated.

Trench 304 (Fig. 40)

- 3.13.3 The trench contained ditch 30403, aligned NE-SW. The single fill contained no artefactual material.

Trench 305

- 3.13.4 The trench contained two furrows, aligned E-W. They were not excavated.

Trench 306

- 3.13.5 Trench contained two E-W aligned furrows, one of which was excavated (30604). Its fill contained fragments of glass and metal.

Trench 307

- 3.13.6 The trench contained two furrows, aligned E-W. They were not excavated.

Trench 308

- 3.13.7 The trench contained a furrow, aligned E-W. It was not excavated.

Trench 310 (Fig. 41)

- 3.13.8 The trench contained a ditch terminus (31003), aligned N-S. The fill (31002) contained clay pipe fragments and a sherd of 18th century pottery.

Trench 313

- 3.13.9 Trench contained a large area of backfilled subsoil, 31302, probably a quarry shown on the 1st edition OS mapping.

3.14 Trenches 283, 316, 322, 323 and 348 (Fig. 14)**Trench 283 (Fig. 39)**

- 3.14.1 The trench contained a ditch (28302), aligned N-S, which had two fills (28303 and 28304). Both fills contained metal fragments and fill 28304 contained a sherd of post-medieval pottery and a fragment of fired clay.

**Trench 316 (Fig. 41)**

- 3.14.2 The trench contained ditch 31605 (Plate 30), aligned E-W, which contained a sequence of four fills (31604, 31606, 31603 and 31602). The upper fill (31602) contained a complete brick. The feature corresponded to a geophysical anomaly.

Trench 322 (Fig. 41)

- 3.14.3 The trench contained two ditches (Plate 31). The features corresponded to geophysical anomalies.

- 3.14.4 Ditch 32203 was aligned WSW-ENE and contained fill 32202 which produced 61 sherds of middle Iron Age pottery.

- 3.14.5 Ditch 32205 was aligned NE-SW. The single fill, 32204, contained two sherds of late 1st century AD pottery.

Trench 323 (Fig. 42)

- 3.14.6 The trench contained a ditch, two pits and a cremation burial.

- 3.14.7 Ditch 32302 (Plate 32) was aligned N-S and contained two fills (32303 and 32304). The upper fill 32304 contained animal bone and 44 sherds of mid 2nd century pottery.

- 3.14.8 To the west was a cremation pit (32305). The fill (32306) contained over 1kg of burnt human bone, from two adult individuals, as well as charcoal and two sherds of pottery of 1st century AD date.

- 3.14.9 To the east of the ditch were two heavily truncated pits, 32307 and 32309 (Plate 34). They each had a single fill but neither contained any datable artefactual or burnt material, only animal bone fragments.

Trench 348 (Fig. 42)

- 3.14.10 The trench contained a ditch (34802), aligned N-S, which had one fill (34803) that contained no artefactual material (Plate 35).

3.15 Trenches 342, 343, 391, 394, 395, 397, 405, 407, 408 and 409 (Fig. 15)**Trench 342**

- 3.15.1 There was one furrow 34204, aligned E-W. The single fill (34203) contained fragments of metal and post-medieval pottery.

Trench 343 (Fig. 42)

- 3.15.2 Ditch terminus 34305, aligned E-W, contained fill 34304 which produced no artefactual material.

Trench 391

- 3.15.3 The trench contained a furrow (39102), aligned N-S.

Trench 394 (Fig. 43)

- 3.15.4 Three ditches were present at the northern end of the trench.

- 3.15.5 Ditch 39403 (Plate 41), aligned NW-SE, had a single fill (39402) which contained a sherd of middle to late Iron Age pottery.

- 3.15.6 Ditch 39405 (Plate 42) was E-W aligned and had a single fill (39404).

- 3.15.7 Ditch 39407 was on the same alignment and had a single fill (39406). Neither fills contained any artefactual material.

Trench 395

- 3.15.8 There were four unexcavated furrows, three aligned NW-SE and one aligned NE-SW.

Trench 397

- 3.15.9 The trench contained a furrow (39704), aligned NE-SW. Its fill contained a sherd of Romano-British pottery.

**Trench 405 (Fig. 44)**

- 3.15.10 The trench contained six furrows, aligned NNE-SSW, one of which was excavated (40503). The fill (40502) contained a sherd of post-medieval pottery.

Trench 407 (Fig. 44)

- 3.15.11 Ditch 40702 was aligned N-S while ditch 40705 (Plate 44) was aligned NNW-SSE. Both features had a single fill, neither of which contained any artefactual material.

Trench 408

- 3.15.12 The trench contained three evenly spaced furrows, aligned NNE-SSW. They were not excavated.

Trench 409

- 3.15.13 The trench contained six evenly spaced furrows, aligned NNE-SSW. They were not excavated.

3.16 Trench 368 (Fig. 16)**Trench 368**

- 3.16.1 The trench contained four furrows, aligned N-S. They were not excavated.

3.17 Trench 364 and 471 (Fig. 17)**Trench 364**

- 3.17.1 The trench contained four furrows, aligned N-S. They were not excavated.

Trench 471 (Fig. 48)

- 3.17.2 Pit 47102 contained a single fill (47103) which produced a sherd of pottery dated to the middle Iron Age.

- 3.17.3 Ditch 47104 (Plate 54) was aligned N-S. Its fill (47105) contained no artefactual material.

3.18 Trenches 377-379, 382, 390, 422, 501-507 and 512 (Fig. 18)**Trench 377 (Fig. 42)**

- 3.18.1 The trench contained five ditches and two pits.
- 3.18.2 Ditch 37702 was aligned NE-SW and had two fills. Fill 37703 contained 14 sherds of Roman pottery and one post-medieval sherd. It was overlain by 37704 which contained one sherd of Roman pottery, bone and metal fragments. The feature corresponded to a geophysical anomaly.
- 3.18.3 Ditch 37705 was aligned NE-SW and had a one fill (37706) which contained animal bone.
- 3.18.4 Ditch 37707 (Plate 36) was aligned NE-SW and had a one fill (37708) which contained animal bone. The feature corresponded to a cropmark.
- 3.18.5 Ditch 37717 was aligned N-S had a single fill (37718) which contained animal bone and metal. The feature corresponded to a cropmark.
- 3.18.6 Ditch 37714 (Plate 38) was aligned NE-SW and had two fills (37715 and 37716). Fill 37716 contained two sherds of 4th century pottery and animal bone. The feature corresponded to a cropmark.
- 3.18.7 Pit 37709 (Plate 37) had two fills (37710 and 37711). Fill 37711 contained seven sherds of 2nd century or later pottery and animal bone.
- 3.18.8 The second pit, 37712, had a single fill (37713) which contained three sherds of 4th century pottery, 14 iron hobnails, a fragment of oven furniture and animal bone.

Trench 378 (Fig. 43)

- 3.18.9 Ditch 37803, aligned E-W, had two fills (37804 and 37805). Fill 37805 contained late 5 sherds of later prehistoric pottery and 21 sherds of 1st century AD pottery and animal bone (Plate 39). The feature corresponded to a cropmark.

**Trench 379 (Fig. 43)**

- 3.18.10 Ditch 37903 (Plate 40), aligned N-S, had a single fill (37902) that contained animal bone and four sherds of mid 3rd or later century pottery.

Trench 382

- 3.18.11 The trench contained a posthole (38202) which was heavily truncated and contained no finds.

Trench 390 (Fig. 43)

- 3.18.12 The topsoil (39000) produced seven sherds of mid 3rd or later century pottery.
- 3.18.13 Ditch 39002, aligned E-W, had a single fill (39003) which contained a small plain copper alloy ring that was not closely datable.
- 3.18.14 To the north was a NW-SE aligned ditch, 39005, which had a single fill (39004) devoid of finds.

Trench 422 (Fig. 45)

- 3.18.15 Feature 42203 (Plate 46) was a broad shallow depression rather than a pit. The fill (42202) contained 64 sherds of mid 4th century AD or later pottery, a nail and a hobnail, animal bone and a single human tooth. The feature might have been the base of a midden deposit although a soil sample from it did not produce any evidence to support this interpretation.
- 3.18.16 Ditch 42205 was aligned N-S. No artefactual material was present.
- 3.18.17 Feature 42207 was an irregular, probably natural, feature. No artefactual material was present.

Trench 501 (Fig. 49)

- 3.18.18 The trench contained three shallow ditches (50103, 50105 and 50107), all aligned E-W, none of which contained any artefactual material.

Trench 502 (Fig. 49)

- 3.18.19 A curvilinear ditch (50205) had a single fill that was devoid of artefactual material.
- 3.18.20 Ditch 50209 (Plate 55) was aligned NE-SW. The fill (50208) contained two sherds of 2nd century pottery. The feature corresponded to the geophysical anomaly and cropmark.
- 3.18.21 Ditch 50211 was aligned NE-SW and lay 1.5m to the west. The single fill was devoid of artefactual material.
- 3.18.22 Pit 50207 had one fill (50206) that contained two sherds of pottery dated to the late 1st century AD or later.
- 3.18.23 In addition an area of heat-affected, disturbed cornbrash (50203) contained a fragment of animal bone and a fragment of pottery of second century AD or later date.

Trench 503 (Fig. 50)

- 3.18.24 The trench contained three ditches, all were aligned NW-SE.
- 3.18.25 Ditch 50307 (Plate 56) contained fill 50308 which produced a sherd of 1st century AD pottery. It was cut by ditch 50305.
- 3.18.26 Ditch 50305 contained fills 50306 and 50313. Fill 50313 contained 27 sherds of mid 3rd century pottery, a fragment of bangle of typical 4th century type and a copper alloy coin dated to AD 388-402.
- 3.18.27 Ditch 50309 contained fills 50310, 50311 and 50312. Fill 50312 contained a range of material including a sherd of prehistoric pottery, 50 sherds of Roman pottery and six sherds of 18th century pottery. There was also a copper alloy coin dated to AD 364-367. It is likely, therefore, that this upper fill has been disturbed by later ploughing.



3.18.28 Ditch 50304 cut through the subsoil and is therefore likely to be of later origin. However, it contained 41 sherds of late 2nd-mid 3rd century AD pottery.

Trench 504 (Fig. 51)

3.18.29 Ditch 50403 (Plate 57), aligned NW-SE, contained fill 50404 which produced four sherds of pottery dated to the 2nd century onwards, animal bone and an iron nail. The feature corresponded to a cropmark.

3.18.30 Ditch terminus 50405, aligned NW-SE, contained fill 50406. No artefactual material was present.

3.18.31 Ditch 50407, aligned NW-SE, contained fill 50408. No artefactual material was present. The feature corresponded to a cropmark.

Trench 505 (Fig. 51)

3.18.32 Pit 50503 was extremely shallow. Its fill (50502) contained two sherds of Roman pottery and a sherd of 18th century pottery.

3.18.33 Ditch 50505 (Plate 58) was aligned NW-SE and its fill (50504) contained four sherds of 2nd century AD or later pottery. The feature corresponded to a cropmark.

3.18.34 Ditch 50507 (Plate 59) was aligned E-W. No artefactual material was present.

Trench 506 (Fig. 51)

3.18.35 Ditch 50602, aligned NW-SE, was extremely shallow and contained no artefactual material.

Trench 507 (Fig. 51)

3.18.36 Human remains, consisting of the femurs and partial tibia and fibula shafts of a neonate, were recovered from the topsoil, presumably disturbed by ploughing from a nearby archaeological feature.

3.18.37 Pit 50710 contained fill 50709 which produced seven sherds of mid 3rd century AD pottery and a fragment of oven lining.

3.18.38 A possible trackway visible as cropmarks corresponded to land drains which crossed the trench at this location.

Trench 512 (Fig. 52)

3.18.39 Ditch 51204 (Plate 60), aligned E-W, contained fill 51203. It produced eight sherds of mid 3rd century AD pottery. The feature corresponded to a geophysical anomaly.

3.19 Trenches 414, 418, 429, 431, 435 and 439 (Fig. 19)

Trench 414 (Fig. 44)

3.19.1 Ditch 41402 was aligned NW-SE. No artefactual material was present.

Trench 418 (Fig. 45)

3.19.2 Ditch 41803 was aligned WSW-ESE. No artefactual material was present.

Trench 429 (Fig. 45)

3.19.3 Ditch 42903, aligned N-S, contained fill 42902 which produced a post-medieval glass fragment. The feature corresponded to a geophysical anomaly.

Trench 431 (Fig. 46 and Plate 47)

3.19.4 This trench lay towards the base of a shallow valley and contained colluvial deposits washed downslope.

3.19.5 At the base of the trench was a layer of sterile colluvium (43102). Overlying this was a burnt deposit (43103), which formed a low mound,. The deposit was a dark bluish grey-black clayey silt with frequent burnt stone fragments and frequent charcoal and ashy/soot inclusions. A soil sample from this layer contained a significant quantity of charcoal, but only a few charred plant remains.

3.19.6 To the north was a second possible mound (43104) composed of almost identical burnt material (Plate 48). The feature corresponded to a geophysical anomaly.

3.19.7 Sealing both of these deposits was a colluvial deposit, 43101, which lay below the topsoil.

Trench 435 (Fig. 47)

3.19.8 Ditch terminus 43502 (Plate 49) was aligned NW-SE. No artefactual material was present.

Trench 439 (Fig. 47)

3.19.9 The trench contained a cluster of four pits (43902 43905, 43907 and 43909) (Plate 52).

3.19.10 They were all of similar dimensions. Each pit had a single fill but none produced any artefactual material other than fragments of fired clay. Soil samples were taken from each pit but these contained almost no charred remains. The features corresponded to a geophysical anomaly.

3.20 Trenches 403, 404 and 436 (Fig. 20)

Trench 403 (Fig. 44)

3.20.1 The trench contained ditch 40303, aligned NNW-SSE. No artefactual material was present. The feature corresponded to the geophysical anomaly.

Trench 404 (Fig. 44)

3.20.2 The trench contained ditch 40403 (Plate 43), aligned NNW-SSE. No artefactual material was present.

Trench 436 (Fig. 47)

3.20.3 This trench lay on the edge of a shallow valley (see Trench 431, above) and contained colluvial deposits washed downslope.

3.20.4 Colluvial deposit 43612 overlay the natural geology (43606) and dipped visibly downslope from west to east. It was overlain by further colluvial deposits 43611, 43603, 43602 and 43613.

3.20.5 Sealed beneath the colluvium was a ditch, 43604 (Plates 50 and 51). An extension to the trench demonstrated that the ditch was sinuous in plan rather than curvilinear. The ditch contained fill 43605 that contained no artefactual material.

3.21 Trenches 450, 457 and 462 (Fig. 21)

Trench 450 (Fig. 48)

3.21.1 Ditch 45004 (Plate 53) was aligned E-W. No artefactual material was present. The feature corresponded to a geophysical anomaly.

Trench 457 (Fig. 48)

3.21.2 Posthole 45703 had a single fill (45702), which was devoid of any artefactual material.

Trench 462 (Fig. 48)

3.21.3 At the eastern end of the trench was a short length of ditch (46206), the fill of which (46205) contained a fragment of iron and animal bone.

3.21.4 A small pit (46204) lay partially within the trench. Its fill (46203) contained three sherds of middle Iron Age pottery.

3.22 Trenches 529, 553 and 556 (Fig. 22)

Trench 529 (Fig. 52)

3.22.1 The trench contained ditch 52903, aligned E-W. It contained fill 52902 which produced animal bone. The feature corresponded to a geophysical anomaly and a cropmark.

**Trench 553 (Fig. 53)**

- 3.22.2 Ditch 55302, aligned E-W, contained three fills (55303, 55304 and 55305). Fill 55304 contained 18 sherds of middle Iron Age pottery and a single sherd of Romano-British pottery. The feature corresponded to the geophysical anomaly.

Trench 556 (Fig. 53)

- 3.22.3 Ditch 55602 was aligned NE-SW. No artefactual material was present. The feature corresponded to a geophysical anomaly.

3.23 Finds summary

- 3.23.1 A moderate quantity of artefactual material was recovered from the features recorded in the evaluation. The range of material included pottery, fired clay, ceramic building material (CBM), flint, stone, metal, slag, glass and animal bone. A fuller description of the finds can be found in Appendix B.
- 3.23.2 The presence of the pottery is interesting and provides important dating evidence for any settlement activity. The assemblage is suggestive of scattered, low density, rural activity from the Neolithic onwards.
- 3.23.1 The evaluation produced 2080 sherds (18,069g) of pottery, mostly of later prehistoric and (particularly) Roman date but including middle Neolithic sherds from one context, a single possible early Anglo-Saxon sherd, a few medieval fragments and a modest quantity of post-medieval/modern sherds
- 3.23.2 Middle Neolithic pottery was identified in a single context (9704).
- 3.23.3 Iron Age pottery occurred in 15 context groups, of which four locations, Trench 48 (87 sherds), Trench 81 (45 sherds), Trench 322 (61 sherds) and Trench 553 (18 sherds) together account for nearly 92% (by sherd count) of all the Iron Age pottery recovered.
- 3.23.4 A total of 1738 sherds (weighing 15,743g) of Roman pottery was recovered during the evaluation. The assemblage included both fine wares, largely of the Oxford industry, and course wares. The only imported wares were a few sherds of samian. Both early and late Roman material was present, suggesting some continuity of activity although there was a lack of specifically middle Roman material, perhaps reflecting a lack of diagnostic material rather than a hiatus in occupation.
- 3.23.5 The post-Roman assemblage included a single sherd of possible Anglo-Saxon pottery, 19 sherds of 13th-16th century medieval pottery and 71 sherds of 17th century or later pottery. Most is derived from the topsoil.
- 3.23.6 Thirty fragments (1428g) of fired clay were found from the features in 12 trenches. The assemblage indicates the presences of hearths or ovens, possibly with shallow truncated bases surviving in some areas together with oven/hearth furniture of probably late Iron Age – early Roman date.
- 3.23.1 Ceramic building material (CBM) amounting to 123 fragments (3888g) was recovered from 55 trenches. Roman tile (nine fragments weighing 453g) was recovered from five trenches (111, 273, 377, 397, 503) with only three pieces recovered from ditches, the remainder being found in the topsoil
- 3.23.2 The post-Roman CBM (109 fragments, 3429g) ranges from medieval to 20th century. It is very dispersed across the project area with no significant concentrations. The character of the assemblage is typical of a ploughsoil assemblage comprising material that has become incorporated during arable cultivation from manuring or material relating to agricultural improvement such as field drainage or general maintenance such as metalling of farm tracks. The remaining five fragments were undatable.
- 3.23.1 A small collection of nine pieces of clay pipe was recovered from eight contexts. The size and condition of the material is typical of casual loss and field scatters.



- 3.23.2 The evaluation produced a very small assemblage of 18 glass fragments, including 12 sherds of vessel glass (largely wine bottles), four pieces of window glass, a single bead, and a piece of glass waste. All are of post-medieval date.
- 3.23.3 The evaluation produced a small assemblage which comprises 134 metal objects (152 fragments) including 132 pieces of iron and two pieces of copper alloy. The most numerous iron finds are hobnails, of probable Roman date, and nails. There was also a horseshoe and a knife which are probably of 19th century or later date.
- 3.23.4 The six copper alloy finds comprise four coins, all of 4th century AD date. There is also a small plain ring (context 39003), not closely datable, and a fragment of a 4th century Romano-British bracelet (context 50313).
- 3.23.5 The evaluation produced 27 fragments of slag from Trenches 175, 278 and 378.
- 3.23.6 There were two un-urned cremations; an individual of around 7 to 10 years in Trench 98; and the remains of two adult individuals within the same cremation in Trench 323. In addition, human remains were recovered from the topsoil of Trench 507. The remains comprised the left and right femur and partial, unsided tibia and fibula shafts, of a neonate who had been still born, or who had died during or shortly after birth. A single human tooth was recovered from pit fill 42202.
- 3.23.1 The evaluation produced seven fragments of worked flint from six contexts. Technologically, three pieces, from Trenches 48 and 82, may be broadly dated to the Mesolithic or Neolithic periods. Beyond this, the assemblage simply attests to human presence in the landscape during the prehistoric period.
- 3.23.2 Nine items of worked stone were found. These include a roof 'tile', a socketed block, a fragment of a shale spindle whorl and a perforated stone.
- 3.23.3 A total of 1288 hand-collected animal bone fragments were recovered from the site. The assemblage came from features preliminarily dated to the Iron Age, Roman and post-medieval periods, the majority of the bones being Roman. The assemblage contains bones from cattle, sheep/goat, pig, horse, dog, fox and domestic fowl. Cattle and sheep/goat are the most numerous animals in the Iron Age and Roman assemblages. Their predominance is typical for sites of these periods and suggests the importance of secondary products such as dairy, wool and the use of cattle for traction.
- 3.23.4 The majority of flots from the 21 soil samples were rich in modern plant material. On the whole, charcoal, while well-preserved where present, was small, in most cases being <4mm and therefore unsuitable for C14 dating or species identification.



4 ADDITIONAL GEOPHYSICAL SURVEY

4.1 Introduction

4.1.1 Additional geophysical survey was undertaken in two fields (Fig. 2a) where ecological constraints limited the number of trenches which could be excavated. The survey was designed to provide full coverage of the two fields. The full report is included at Appendix A but a short summary is provided below.

4.2 Results

- 4.2.1 A relatively low number of geophysical anomalies were recorded in the two fields (Fig. 54)
- 4.2.2 In the northern field, a semi-circular anomaly, possibly representing part of a small enclosure ditch, was recorded. A short linear anomaly to the north-west of this may be a further spur ditch. Further short lengths of linear anomaly and a number of possible land drains were also recorded. Remnant ridge and furrow was recorded in the southern part of the field.
- 4.2.3 In the southern field, a probable former field boundary was recorded along with a parallel ditch-like feature. Further short lengths of linear anomaly were also recorded.
- 4.2.4 The low density of anomalies in the southern field is, to some extent, confirmed by the results of the six trenches which were excavated in this field, none of which contained any archaeological features.

5 DISCUSSION

5.1 Reliability of field investigation

- 5.1.1 The trenches were excavated in reasonable conditions throughout the evaluation and archaeological features were generally easily identifiable.
- 5.1.2 There was a general correspondence of archaeological features to geophysical anomalies to features, most of which were of archaeological origin. However, there was a tendency for irregular isolated anomalies to be of natural origin. The geophysical survey was able to identify linear features which, on excavation, were usually proven to be relatively shallow ditches. It did also on several occasions identify linear banding of natural siltier deposits within stonier geology as possible archaeological features. In some case the geophysical anomalies were field drains or pipes.
- 5.1.3 Where trenches were positioned in areas identified by the geophysical survey as being blank, few archaeological features were present. Occasional features were found but these were often of natural origin.
- 5.1.4 It is therefore felt that the recorded density and distribution of archaeological features provides a generally accurate representation of the evaluation area as a whole.

5.2 Evaluation objectives and results

- 5.2.1 The location, extent, date, character, condition, significance and quality of archaeological remains within the development was determined. Most of the features encountered were linear in nature although both small and large discrete features were also present. The majority of features for all periods were shallow and of limited extent. Periods represented were: Neolithic, probable Bronze Age, early-middle Iron Age, Roman, medieval and post-medieval. A fuller characterisation follows below in the phased interpretation section.
- 5.2.2 The vulnerability/sensitivity of the remains encountered is quite high. There was clear evidence of features being truncated through modern ploughing and the remains were in some cases very sensitive to damage, including the two cremations excavated.



- 5.2.3 In a number of cases features were anticipated to be present from the geophysical survey but no corresponding features could be detected. It is probable that they may be extremely shallow and ephemeral in nature.

5.3 Interpretation

Introduction

- 5.3.1 Evidence was found for scattered activity dating to the prehistoric period: a single feature contained pottery dating to the Neolithic period, a small group of trenches contained deposits which, while undated, may date to the Bronze Age, and a scatter of features, including a substantial enclosure, contained material of early-middle Iron Age date.
- 5.3.2 There were two main areas of Roman activity, well represented by the geophysical survey, as well as a third, less extensive area.
- 5.3.3 The locations of the main areas of prehistoric and Roman period activity are shown on Figure 55.
- 5.3.4 Medieval and post-medieval activity was primarily related to the agricultural use of the area and was widespread across the site.

Neolithic

- 5.3.5 Trench 97 contained a feature which produced sherds of middle Neolithic date, including 13 sherds of Peterborough ware. The association of this material with a linear feature is a little unusual and might possibly suggest that the sherds were redeposited. However, dispersed isolated features, or small clusters of features, containing Peterborough ware pottery have been found with increasing regularity across many parts of the country so the presence of this material is not unusual and further isolated features containing similar pottery could well exist elsewhere on the site.
- 5.3.6 Little can be said about the significance of this feature beyond the fact that it clearly attests to the use of this landscape during this period.

Undated (probable Bronze Age)

- 5.3.7 Three trenches, 431, 436 and 439, contained features that, although undated, may be of Bronze Age date.
- 5.3.8 Trench 431 contained an extensive deposit of burnt stones and charcoal, forming a low mound, sealed beneath a layer of colluvium (hill wash). A second similar, though smaller, feature was also present in the trench. The features were located in a shallow valley close to an existing stream. Features such as this are usually interpreted as burnt mounds and where they have been excavated are generally of Bronze Age date (Champion 1999, 102-103).
- 5.3.9 As in this case, burnt mounds are generally located adjacent to streams, and are often associated with a hearth and a watertight pit or trough. The purpose of these features is obscure but it has been suggested that they mark the sites of saunas or, alternatively, specialised sites for the cooking of food.
- 5.3.10 If these are burnt mounds of Bronze Age date then they form part of a very small group of such features that have been found within Oxfordshire. The Oxfordshire Historic Environment Record (OHER) contains only two entries identified as burnt mounds. One is at Yarnton (OHER PRN 16388.03), where two areas of burnt mound deposits were recorded, and the second is a possible burnt mound found at St Helen's Avenue in Benson (OHER PRN 16138).
- 5.3.11 To the north in Trench 439, at the crest of the same small valley, was a tight cluster of four well-defined pits. Further south, and buried beneath colluvium on the side of the



valley, was a sinuous ditch. There was no means of dating these features but they may be broadly contemporary with the burnt mound activity.

Early – middle Iron Age

- 5.3.12 Eight trenches, 48, 81, 322, 378, 394, 462, 471 and 553 had features that contained early to middle Iron Age pottery. However, only four, or perhaps five, of these (Trenches 48, 81, 322, 553 and perhaps 462) contained significant groups from stratigraphically secure deposits. The nature of the fabrics and the type of temper used in the later prehistoric pottery is indicative of a date range of broadly early-middle Iron Age, and perhaps more likely middle Iron Age rather than earlier.
- 5.3.13 The nature of the activity is difficult to determine given the paucity of remains and their dispersed distribution. However, in the case of Trench 553, the ditch from which the pottery was recovered forms part of a large enclosure (some 75m by 45m) recorded both as a geophysical anomaly and as a cropmark. Within the enclosure are a number of other anomalies which may represent contemporary features. A second, smaller, cropmark enclosure exists some 200m to the south. A ditch was present in a trench (Trench 529) positioned to investigate this anomaly but only animal bone was recovered.
- 5.3.14 Similarly, Trench 462 was located to investigate two small sub-circular enclosures. However, the revealed archaeological features bore little resemblance to the recorded anomalies.
- 5.3.15 The pottery from Trench 48 was recovered from a single large pit, evident as a geophysical anomaly, which also contained animal bone but little in the way of charred plant remains. No other features of this date were recorded in the vicinity so the function of this pit remains unclear.
- 5.3.16 In Trench 81, two ditches were overlain by a deposit which filled a shallow hollow and which contained a significant quantity of early-middle Iron Age pottery as well as animal bone. Again, no other features of this date were recorded in the vicinity although Trench 86, to the east, contained a small pit which produced three small sherds of pottery of possible Iron Age date.
- 5.3.17 Trench 322 contained a ditch with a significant quantity of early-middle Iron Age pottery. It corresponded to a geophysical anomaly which and may form a small enclosure.
- 5.3.18 The pottery from Trench 378 came from a feature which also contained early Roman material. It is likely, therefore, to be redeposited within this feature and nothing further can be said about the nature the activity here. Trenches 394 and 471 produced single sherds of pottery only.
- 5.3.19 Overall, the evidence for this period seems to indicate dispersed utilisation of the landscape, although the enclosure in the vicinity of Trench 553 may represent a more substantial focus. To some extent, this is unusual, more typical of the pattern seen in earlier periods, perhaps indicating that a more extensive settlement exists. The broad dating of the pottery means that it is not possible to suggest whether or not the activity represented is contemporary or sequential.

Roman

- 5.3.20 A total of 32 Trenches contained significant features of Roman date. There were two main areas (labelled Areas A and B on Fig. 55) and one subsidiary group of trenches (Trenches 290, 322 and 323) containing features of this date.
- 5.3.21 Area A is located on the western side of the site and Area B is located in the northern part of the site, with the subsidiary group lying in between. Only occasional features of Roman date were present outside of the main concentrations.



5.3.22 The small focus of Roman activity centred on Trenches 290, 322 and 323 contained only a limited number of features but produced a substantial quantity of pottery, largely of early Roman date. It is not clear what form the activity took, but the presence of fragments of oven furniture in Trench 290 and a cremation burial in Trench 323 could indicate a small-scale domestic settlement, perhaps an outlying farmstead.

Area A

5.3.23 This area was only partially subject to geophysical survey which limits the overall interpretation. The evidence visible indicates a probable trackway, marked by a pair of parallel ditches, running SE-NW which then turns west, probably continuing through Trenches 114 and 105.

5.3.24 There was a concentration of features, both in the trenches and in the area covered by the geophysical survey, within the area adjacent to the northern part of the trackway and this seems to form the focus of the activity. There were very few postholes but this may be a result of the stony nature of the natural geology and truncation by later ploughing. However, a number of small rectilinear features in Trench 173 could be the remains of foundation trenches or beam slots for small structures. Certainly, the range and quantity of artefacts present (including pottery, fragments of oven furniture, animal bone, metal finds and a spindle whorl), and the presence of a well are consistent with domestic occupation. The relative absence of imported pottery, and the lack of evidence of metalworking or other industry, suggests that the settlement was a small agricultural settlement of relatively low status.

5.3.25 The cremation burial in Trench 98, while undated, is likely to be of Roman date and could form part of a small cemetery set apart from the main focus of occupation.

5.3.26 It appears, however, to have been relatively long-lived. While there is little to suggest a pre-conquest origin, there is certainly a significant quantity of early (1st-2nd century) material. Although distinctively middle Roman material is generally absent, there is no reason to believe that the settlement did not continue in this period, albeit perhaps at a reduced level. The wider distribution of late Roman pottery indicates that activity became more extensive during this period.

Area B

5.3.27 The geophysical survey and cropmark evidence in this area appears to show a series of enclosures of varying dimension and shape. The features revealed during the evaluation were generally linear, forming the boundaries of enclosures. There were a few pits but postholes and other structural evidence was almost entirely absent, perhaps because of the solid nature of the bedrock and the degree of plough truncation.

5.3.28 The range and quantity of artefactual material was present was similar to that from Area A, again suggesting an agricultural settlement of relatively low status. The fragmentary remains of a human neonate were present in the topsoil of Trench 507, presumably deriving from a plough-damaged feature in the vicinity, and a single human tooth was found in a late Roman pit in Trench 422, perhaps from an earlier burial. It is likely, therefore, that further burials, both disturbed and *in situ*, may be found in Area B.

5.3.29 The pottery assemblage indicates that this settlement existed alongside the settlement in Area A and, indeed, followed a very similar trajectory of development throughout the Roman period.

5.3.30 While both of these settlements are typical of Roman rural settlements in Oxfordshire (and elsewhere) in terms of the types features and range of artefacts present, they are potentially noteworthy in terms of their chronological span. Detailed comparison with other sites in the region has not been attempted at present, given the limited pottery



assemblage recovered during the evaluation. However, the continuity, and perhaps expansion, of activity through the entirety of the Roman period at both sites is perhaps unusual (pers comm Paul Booth).

Medieval to post-medieval

- 5.3.31 Geophysical anomalies suggesting the presence of ridge and furrow agricultural were fairly widespread across the site and furrows were also present in a number of trenches. This suggests that much of the site was under arable cultivation during the medieval period (and later).
- 5.3.32 Evidence of post-medieval agricultural practices was recorded to a limited degree across the sites, as the remnants of field boundary ditches in a small number of trenches and from elements of land management, whether it be drainage ditches or boundaries.
- 5.3.33 No evidence of medieval or later settlement was recorded on the site, aside from the extant farmhouses themselves.

Undated features

- 5.3.34 There were a large number of undated features present across the site. Most of these were ditches and it is likely that these were boundary and drainage ditches associated with the agricultural use of the site. While these could be of almost any date from the later prehistoric period onwards, it is, perhaps, most likely that they are of medieval or later date.

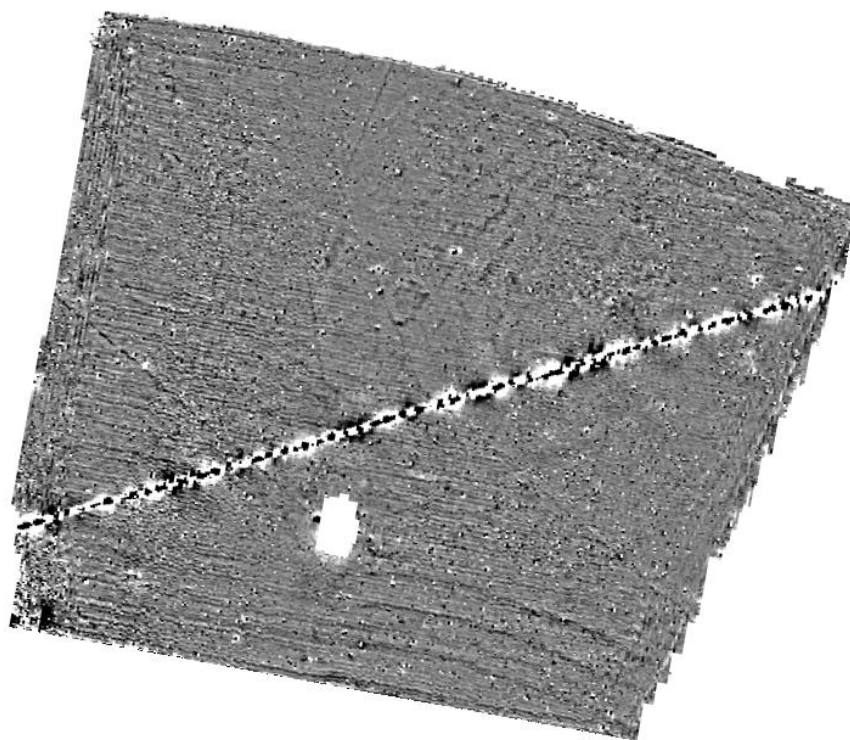


APPENDIX A. ADDITIONAL GEOPHYSICAL SURVEY



Northamptonshire Archaeology

Further archaeological geophysical survey of land
at the proposed Bicester Eco Development
Bicester, Oxfordshire
November 2013



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Report 13/258

July 2013



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QUALITY CONTROL

	Print name	Signed	Date
Checked by	Mark Holmes	<i>MH</i>	16/12/13
Verified by	Pat Chapman	<i>PC</i>	16/12/13
Approved by	Andy Chapman	<i>AC</i>	16/12/13

OASIS REPORT FORM

PROJECT DETAILS		OASIS No. 166867	
Project title	Further archaeological geophysical survey of land at the proposed Bicester Ecotown, Bicester, Oxfordshire		
Short description	Northamptonshire Archaeology was commissioned by Oxford Archaeology, on behalf of their clients to conduct an archaeological geophysical survey of land at the proposed Bicester Ecotown, Bicester, Oxfordshire. A magnetometer survey was undertaken over an area of 12ha. The survey identified a small number of linear ditch anomalies and a former field boundary.		
Project type	Geophysical survey		
Previous work	Northamptonshire Archaeology 2012; Airphoto Services 2011; Oxford Archaeology 2010		
Current land use	Arable Land		
Future work	Unknown		
Monument type and period			
Significant finds	None		
PROJECT LOCATION			
County	Oxfordshire		
Site address	Bucknell Road		
Easting Northing	SP 5621 2352		
Area (sq m/ha)	12ha		
Height aOD	90 aOD		
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology (NA)		
Project brief originator	Richard Oram, Oxfordshire County Council		
Project Design originator	Northamptonshire Archaeology		
Director/Supervisor	Ian Fisher		
Project Manager	Mark Holmes (NA), Ken Welsh (OA)		
Sponsor or funding body	Oxford Archaeology (OA)		
PROJECT DATE			
Start date	05/11/2013		
End date	16/12/2013		
ARCHIVES	Location (Accession nos.)	Contents	
Physical			
Paper		Site survey records	
Digital		Survey data	
BIBLIOGRAPHY			
Title	Further archaeological geophysical survey of land at the proposed Bicester Ecotown, Bicester, Oxfordshire		
Serial title & volume	Northamptonshire Archaeology Report 13/258		
Author(s)	Charlotte Walker		
Page numbers	8 pages of text and figures		
Date	16th December 2013		

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**FURTHER ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND AT THE
PROPOSED BICESTER ECO DEVELOPMENT
BICESTER, OXFORDSHIRE
NOVEMBER 2013**

Abstract

Northamptonshire Archaeology was commissioned by Oxford Archaeology to conduct an archaeological geophysical survey of the proposed Ecotown development area at Bicester, Oxfordshire. A magnetometer survey was undertaken over an area of 12ha and identified a small number of linear ditch anomalies and a former field boundary.

1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Oxford Archaeology (OA), on behalf of Hyder Consulting, to conduct a magnetometer survey on land for the proposed Bicester 'Eco Town', Bicester, Oxfordshire (NGR SP 5621 2352). The proposed Eco Town is located to the north-west of Bicester (Fig 1).

The fieldwork was carried out in November 2013, to augment a previous survey undertaken in 2011-2012 (NA 2012) and covered approximately 12ha. It comprised the 'infilling' of areas previously not surveyed within two separate land parcels; fields E2, E9 and E10. This was undertaken in order to inform the future mitigation strategy for the site, since trial trench evaluation was not feasible within these two fields. The work conformed to a specification prepared by Northamptonshire Archaeology (NA 2013) as a condition of a planning application for development of the land.

2 BACKGROUND

2.1 Location and geology

The site is located on the western edge of Bicester and lies at 90m aOD. To the north, south and west the field is bounded by hedgerows to further open fields. The eastern boundary is formed by a thicker tree line to further fields.

The site slopes slightly from north-west to south-east and is primarily situated on cornbrash limestone formations interspersed with forest marble formation of interbedded limestone and mudstone (BGS 2013).

2.2 Historical and archaeological background

The archaeological and historical background of the site has been described in a desk-based assessment (Hyder Consulting 2011).

The site is located in an area which has seen little archaeological investigation prior to the current project but its archaeological potential is demonstrated by a number of recorded monuments within the vicinity. There is an area of ditches and enclosures at the south of the site at Himley Farm. There is also evidence of a ring ditch, which may be the remains of a Bronze Age barrow (Oxford Historic Environment Record (OHER) no 13907).

An extensive complex of features, including ditches, pits, possible tracks and enclosures are visible as cropmarks close to Hawkswell Farm (OHER no 15958). They are probably the remains of a prehistoric or Romano-British settlement and may relate to Iron Age settlement recorded at Slade Farm, 400m to the south of the site. Further cropmarks identified during the air photo survey within the area may also date to this period (Airphoto Services 2010).

Geophysical survey, which was undertaken across the entire Bicester 'Eco Town' area, confirmed and expanded upon the presence of these features (Butler and Walker 2012). Particular concentrations of features were located to the north of the current site in Block B (Fig 1). These included sub-rectangular and sub-circular ditched enclosures, curvilinear ditches and pits, likely to be of late prehistoric or Roman date. Other foci of archaeological features were detected in Block A and Block C. Of particular interest was a possible, long curving driveway or crowding alley in Block C.

To the north of the site lie the remains of a deserted medieval settlement at Caversfield. There is a 10th/11th-century church at Caversfield and a post-medieval fishpond to the south of the church. A large depression to the north-east has been recorded as an earlier, medieval fishpond (OHER no 13743). There are several areas where eroded ridge and furrow earthworks still survive. These represent the remains of the medieval open field system of agriculture. Close to a small watercourse within the site are a number of upstanding ridges which may be the remains of post-medieval water meadows (Airphoto Services 2010).

A trial trench evaluation was undertaken in 2010 by Oxford Archaeology in fields at Home Farm, at the northern part of the site (exemplar site). Of seventy trenches, only six contained any features (OA 2010). These were all linear and were interpreted as agricultural boundaries, although they were ambiguous and may equally have been natural in origin.

Further evaluation trenching of the site is ongoing, with preliminary results indicating that the first stage of geophysical survey provided a reasonably reliable representation of the archaeological features and deposits within the site. Six trenches have already been excavated in Block E10, but no archaeological features or deposits were present in any of them (OA 2013). Evaluation trenching undertaken in fields immediately to the east and south of the current site found evidence of Iron Age and Roman activity (Walker 2013).

The specific area covered in this survey has already been partially surveyed. The data from this supports the evidence drawn from aerial photography to show the presence of two ditches following a north-west to south-east orientation (Butler and Walker 2013). Little else is evident in the field aside from a modern pipeline running south-west to north-east.

3 METHODOLOGY

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

A system of 30m grids contiguous with the previous survey was established within the areas to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid. The gradiometers were carried at a brisk but steady walking pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists and with the agreed method statement for this project (EH 2008; IfA 2011; NA 2013).

The survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3. The raw data is available in Figure 4.

Field numbers used in the earlier report have been retained for this stage of reporting.

4 SURVEY RESULTS

Magnetic anomalies detected by this stage of the geophysical survey represent subsurface features, as follows:

- Ditches – linear positive anomalies;
- Remnant medieval ridge and furrow - repeated parallel weakly positive linear anomalies;
- Ferrous pipelines – linear chains of alternating intense positive/negative anomalies;
- Land drains/other pipes – linear positive anomalies;
- Iron debris - 'dipolar' paired intense positive/negative anomalies, small if on the surface (eg nails, horseshoes), broader by size and depth of burial. The smaller dipolar anomalies are very common and so are not generally illustrated in the interpretation diagram.

In the central northern part of the field, was a semi-circular anomaly, possibly representing part of a small enclosure ditch. A short linear anomaly to the north-west of this may be a further spur ditch. Two further short lengths of ditch, aligned south-east to north-west were located c 70m to the north-west.

Remnant medieval ridge and furrow aligned roughly parallel to the southern boundary of field E2, was located at the south.

A ferrous pipeline, aligned north-east to south-west, crossed field E2 and was probably the same one as previously found in E1, the field immediately to the west (Butler and Walker 2013).

Cropmark evidence (APS 2010) shows two features arcing across the field from the south-eastern corner to the west. The northern most of these was mapped as far as the ferrous pipeline, beyond which it changed alignment, becoming more northerly. The continuous linear nature of these anomalies, coupled with their relatively low magnetic response, perhaps suggest that they are land drains rather than ditches.

The eastern part of an anomaly at the south of field E2, thought to have been a ditch when located in the previous survey, proved to be part of the ridge and furrow cultivation. To the west was a further linear anomaly, aligned north-west to south-east. It is possible that this feature is associated with the pond, from which it appears to originate and as such it possibly represents a pipe or land drain rather than a ditch.

Linear anomalies on the eastern and western boundaries represent modern agricultural ploughing practices.

In Fields E9 and E10 was an anomaly possibly representing a former field boundary, aligned north to south. A parallel anomaly located to the east of this may represent a ditch with further possible short lengths of ditch at the west and east.

There was an extensive area of disturbed ground around the western side of a pond at the south of the survey area. This may be caused by the spoil from its excavation.

5 CONCLUSION

The survey has detected a small number of possible short ditches, which might represent a low level of prehistoric or Roman activity in Block E2, possibly field systems associated with nearby settlement. No other significant archaeological features were identified.

Many of the cropmarks identified by the aerial photograph survey are not apparent on the survey results.

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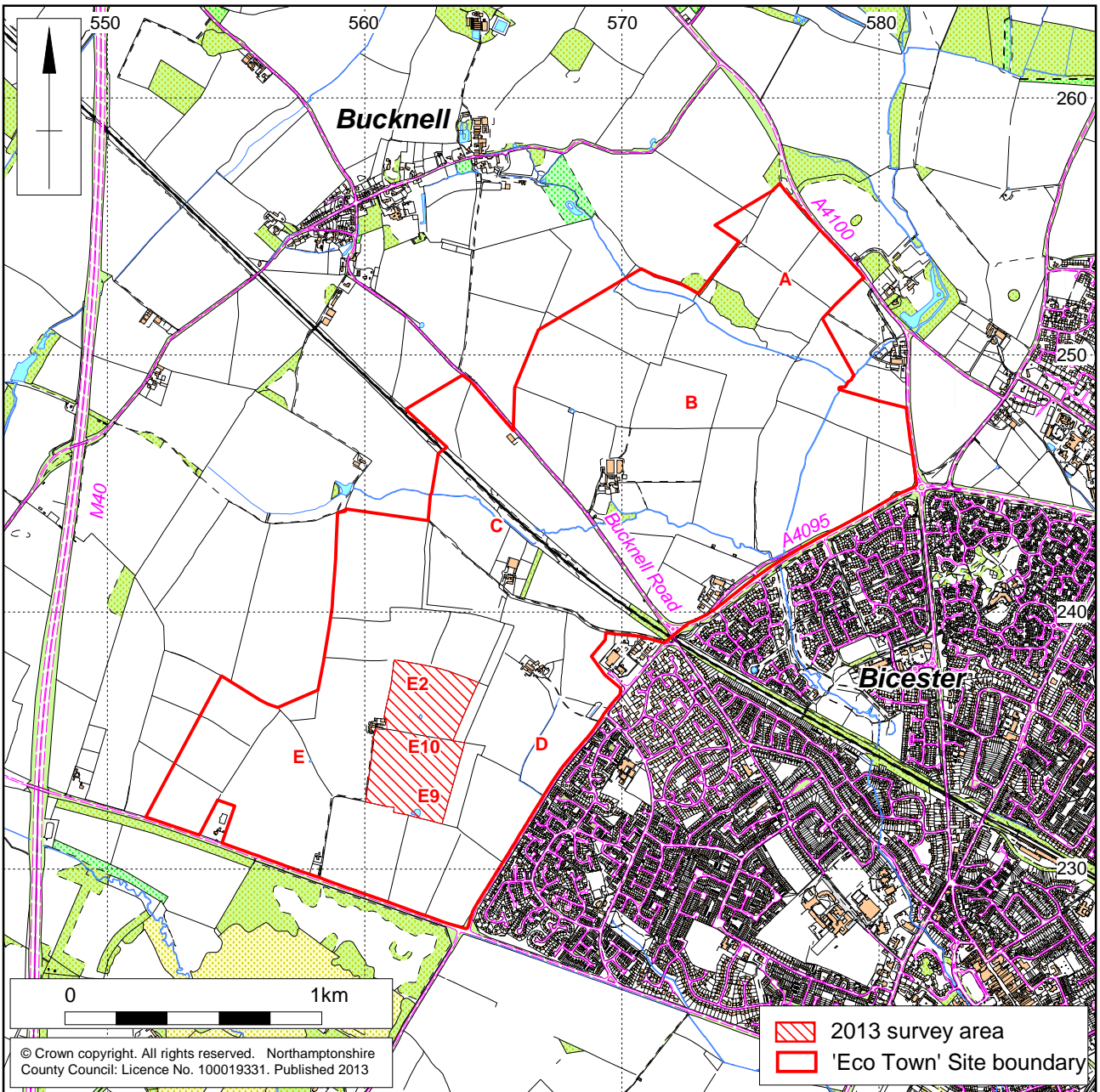
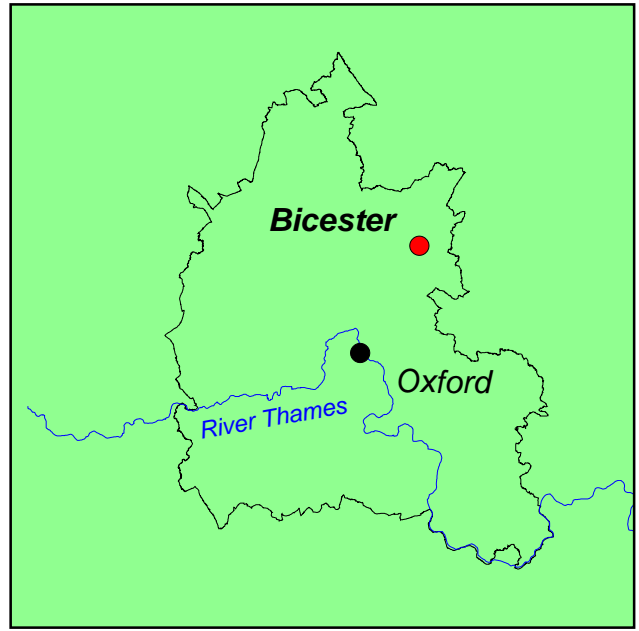
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Scale 1:25,000

Site Location Fig 1