University of Leicester

Archaeological Services

An Archaeological Evaluation on Land at Brixworth, Northamptonshire

NGR: SP75076 69372

Steve Baker

ULAS Report No

An Archaeological Evaluation on
Land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire

(SP 75076 69372)

Steve Baker

For: Acreage Strategic Land

Approved by:

Signed Vicki Score

Date: 5th Jan 2015

Name: Vicki Score

University of Leicester
Archaeological Services
University Rd., Leicester, LE1 7RH
Tel: (0116) 2522848 Fax: (0116) 2522614
www.le.ac.uk/ulas

ULAS Report Number
©2014-235

Accession Number NH_Brix2014

CONTENTS

FIGURES

TABLES

An Archaeological Evaluation on Land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire

Summary

University of Leicester Archaeological Services (ULAS) carried out an archaeological evaluation by trial trenching on land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire. The work was undertaken as part of an archaeological impact assessment in advance of a proposed residential development.

The evaluation targeted known geophysical anomalies and revealed archaeological deposits consisting of ditches, gullies, postholes representing a series of enclosure systems, property/land boundaries, possibly structures; evidence for intensive local occupation and dating from the mid Iron Age through to the 2nd century AD. The Iron Age activity was focused around three enclosures and a trackway on a north-west – south-east alignment in the centre of the site. To the north and south two discrete areas of complex Roman archaeology was identified dating predominantly to the late 1st – 2nd century AD.

The site archive will be held by ULAS, accession no. NH_Brix2014, until a recipient organization for Northamptonshire has been established.

1. Introduction

An archaeological evaluation was carried out by ULAS for Acreage Strategic Land in October/November 2014 on land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire. This was undertaken in advance of an application for proposed commercial and recreational development.

The Northamptonshire Historic Environment Record (HER) shows that the application site lies within an area of archaeological interest. Therefore, the Assistant Archaeological Advisor of Northamptonshire County Council (NCC) as archaeological advisor to the planning authority, required an evaluation by trial trenching in order to assess the nature, extent, date and significance of any archaeological deposits suggested by the geophysical survey which might be present in order to determine the potential impact upon them from future development proposals. The work was detailed in their brief (NCC 2014).

This document presents the results of the archaeological field evaluation (AFE) at the above site, in accordance with National Planning Policy Framework (NPPF): Section 12 Conserving and Enhancing the Historic Environment. It follows the Written Scheme of Investigation (WSI) approved by NCC prior to the start of the work (ULAS 2013), as agreed with NCC. The fieldwork specified below is intended to confirm preliminary indications of character and extent of any heritage assets in order that the potential impact of the development on such remains may be assessed by the Planning Authority.

2. Description, Topography and Geology

The application area (approximately 7 hectares) currently comprises an agricultural field that lies to the west of Pitsford Reservoir and immediately east of the A508 (Fig.1; SP75076). The land is currently in agricultural use with a metalled trackway running along the eastern edge of the site. The land slopes to the north and the south with a high point of 113m OD in the centre and 103m OD to the far south.

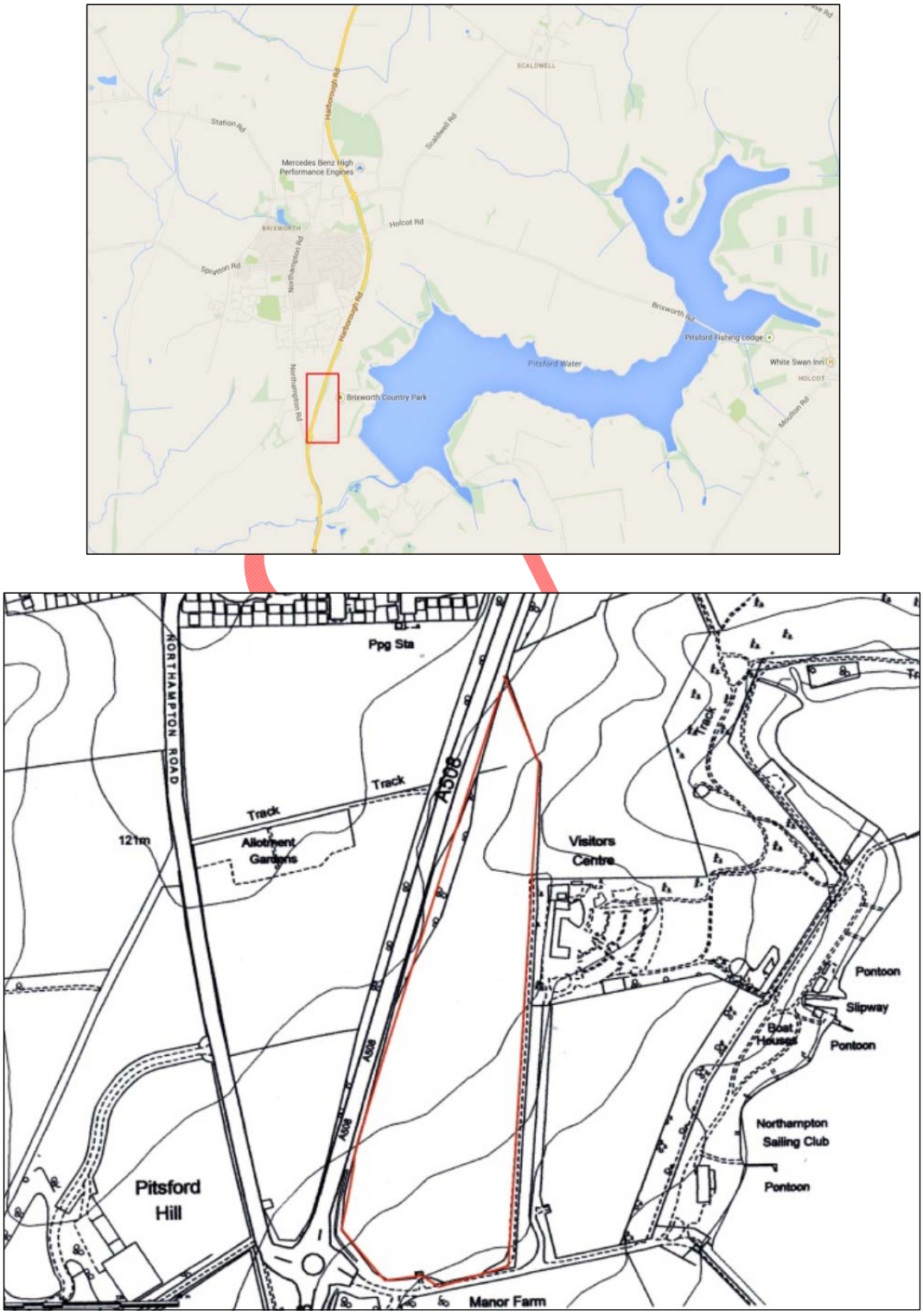

Figure 1: Site Location and proposed development area.

The site lies on the edge of a band of Northampton Sand Formation Ironstone surrounded by Whitby Mudstone Formation Mudstone, (British Geological Survey of Britain). The substratum across the site varied considerable from boulder clay, crushed limestone and ironstone, geological outcrops and depositions of sand. There was also a significant amount of sedimentary and palaeochannel deposition, notably at the bottom of the natural undulations in the landscape.

3. Archaeological and Historical Background

The Northamptonshire Historic Environment Record (HER) shows that the application site lies in an area of archaeological interest. Work in the immediate vicinity has identified Iron Age and Roman activity around the road island at the south of the site by Manor Farm (**MNN6831**) and to the north on the opposite side of the A508 (**MNN1687**). Within the site itself, a cropmark of a ring ditch has been identified (**MNN130760**) close to the visitor centre. There is an undated settlement to the north (**MNN2958**) and several crop marks in the surrounding fields.

Archaeological work (strip, plan and sample) immediately north of the visitor centre on in 2014 found no archaeological deposits and concluded that much of the land between the application site and the reservoir had been levelled during the construction of the visitor centre and associated car park (Clapton 2014). There is a steep drop along the eastern side of the site and the visitor centre and surrounding land lie several metres lower than the proposed site.

4. Archaeological Objectives

The main objectives of the evaluation were:

- To identify the presence/absence of any archaeological deposits
- To identify the nature of the anomalies recorded on the geophysical survey and establish the accuracy and usefulness in determining archaeological features.
- To establish the character, extent and date range of any archaeological deposits identified.
- To produce an archive and report of any results.

Within the stated project objectives, the principal aim of the evaluation was to establish the nature, extent, date, depth, significance and state of preservation of archaeological deposits on the site in order to determine the potential impact upon them from the proposed development.

The evaluation was considered in light of the East Midlands Research Framework (Cooper 2006) and strategy (Knight *et al.* 2012), along with targeting national research aims, highlighted as English Heritage's critical research priorities. As the HER suggested the possibility of identifying Iron Age and Roman deposits research strategies were focussed on these periods.

Trial trench evaluations can contribute to knowledge on rural settlement, landscape and society. Information on the sequence and chronology of boundaries and their relationship to settlements may be recovered and palaeo-environmental evidence could provide information on agricultural practices and land use. Artefacts can provide evidence for evidence for craft industry and exchange across broad landscape areas.

5. Methodology

All work followed the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (2012) and adhered to their *Standard and Guidance for Archaeological Field Evaluation* (2010).

Prior to trial trenching a geophysical survey was undertaken (Davies 2014). Following the results of the survey the trench plan was agreed with the Archaeological Advisor, Northamptonshire County Council and Planning Authority to target specific anomalies as well as some blank areas.

Evaluation by trial trenching of the area was undertaken across the entire site. Twenty-eight 30m by 1.8m and seven 25m by 1.8m trenches were excavated across the site (Figs 2, 4-5) targeting features identified by the geophysical survey.

Figure 2: Machining in progress

Constraints

Constraints on site included overhead powerlines running north - south along the east edge of the site and a water pipe running north-west to south-east in the south of the site. A 10m stand-off zone was kept clear either side of the water pipe and the overhead cables. Trench 04 was extended to the north-east to investigate an archaeological anomaly at the north-east end and Trench 35 was moved southwards 10m to further avoid the overhead power lines. Trench locations are shown on Fig. 5.

Topsoil and overburden were carefully removed in level spits, under continuous archaeological supervision using a mechanical excavator with a toothless bucket. Trenches were excavated down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first.

Trenches were examined by hand cleaning and any archaeological deposits located were planned. Archaeological deposits were sample-excavated by hand as appropriate to establish the stratigraphic and chronological sequence, recognising and excavating structural evidence and recovering economic, artefactual and environmental evidence. Many of the features were substantial and health and safety concerned prevented them being excavated within the confines of a trial trench. In these cases features were excavated to their maximum safe depth (usually 1m below surface). Particular attention was paid to the potential for buried palaeosoils and waterlogged deposits in consultation with ULAS's environmental officer.

Measured drawings of all archaeological features were prepared at a scale of 1:20 and tied into an overall site plan. All plans were tied into the Ordnance Survey National Grid. Relative spot heights were taken as appropriate.

Sections of any excavated archaeological features were drawn at an appropriate scale. All sections were levelled with a DGPS or EDM and tied to the Ordnance Survey Datum, or a permanent fixed benchmark.

Trench locations were recorded by DGPS on the Ordnance Survey National Grid. The trenches were backfilled and levelled at the end of the evaluation.

6. Results – Geophysical Survey

The detailed gradiometry survey was undertaken on 2nd – 3rd October by Stratascan (Davies 2014). The survey identified substantial evidence for past settlement activity in the form of linear and curvilinear features and backfilled pits, supporting the evidence from HER. Large areas of ridge and furrow cultivation provide evidence for a largely agricultural past since the medieval period. A number of other linear and small discrete cut features are of possible archaeological origin although some may also be natural in origin relating to the ironstone geology of the site (Fig. 3).

The modern underground service, the electricity pylon and magnetic disturbance caused by nearby ferrous metal objects were also identified by the survey.

7. Results – Trial Trenches

Archaeological deposits were uncovered and recorded in 28 of the 35 trenches excavated (Figs 4-5). Trenches 6-9, 25-27 and Trench 35 contained no archaeological finds or deposits. None of these empty trenches targeted anomalies identified as archaeological origin by the geophysical survey. Trench 25, containing palaeo-channel deposits, was backfilled for safety reasons shortly after excavation and recording. Trench 3 contained deep alluvium deposits and was partially backfilled after excavation.

The topsoil was consistent across the site and was composed of a mid-dark brown silty-clay loam with occasional/frequent small rounded and sub-rounded pebbles. It ranged in thickness from 0.11-0.50m. Below this was a mid-grey-brown silt-clay subsoil, ranging in thickness from 0.03-0.94m. Natural substratum was reached in all trenches but varied considerably of gravels and clay, and was reached at 0.29-0.77m (Appendix 1).

Figure 3: Geophysical Survey Results (from Davies 2014)

Figure 4: Northern part of the site. Trial Trench locations overlain on the geophysical survey interpretation

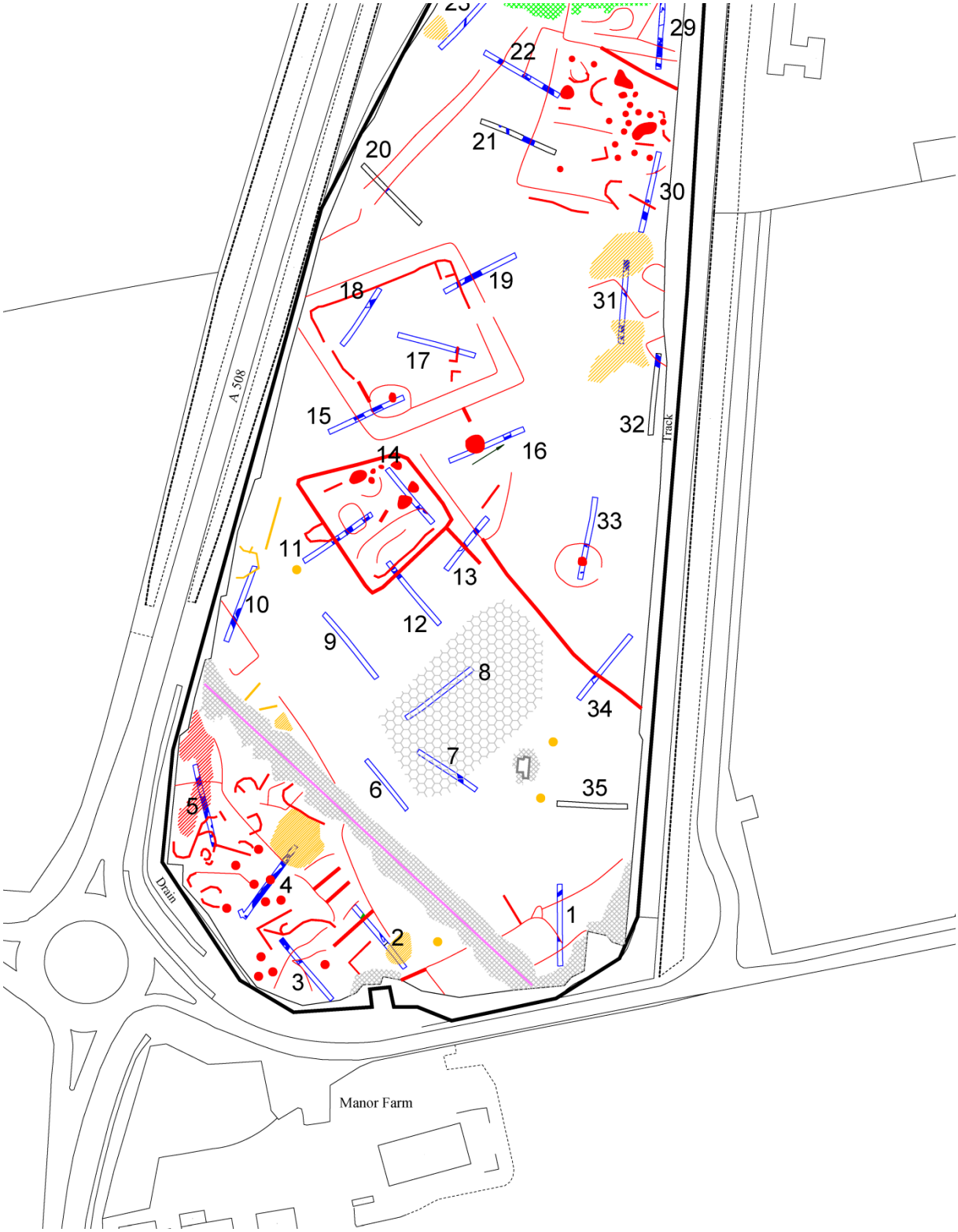

Figure 5: Southern part of the site. Trial Trench locations overlain on the geophysical survey interpretation

Trench 1

Trench 01 was located in the south of the proposed development area at the foot of the slope and sloped southwards targeting geophysical anomalies in this corner of the site. A gully **[59]** located 11m from the southern end of the trench ran on a north-south orientation. The gully had a maximum depth of 0.22m and width of 0.90m. It contained a single silty-clay fill **(58)** that was devoid of finds. An adjacent smaller gully **[61],** with a width of 0.29m and maximum depth of 0.12m, ran parallel to **[59]** and contained a fill **(60),** devoid of finds very similar to (58). These features are broadly consistent with those identified on the geophysical survey.

Silty-clay alluvium deposits were observed in the south of the trench to a depth of 0.60m. No other archaeological deposits were observed.

Trench 2

Trench 2 was 30m in length and orientated north-west - south-east, sloping down towards the south-east. There was some evidence for furrows in the north of the trench and the ditch identified on the geophysical survey was tested and found to be a broad, shallow furrow. A possible undated gully **[65],** 0.10m deep, 0.80m wide and with a length of 3.60m+, orientated north-east to south-west was not identified on the survey. The gully was located 13.4m from the north-west end and was on a slightly different alignment to the ridge and furrow. The single mid-grey brown clayey silt fill **(64)** was devoid of finds.

Alluvium deposits were observed in the southern 15m of the trench and were excavated to a safe maximum depth of 1.40m.

Trench 3

The southernmost trench in the proposed development area was 30m long and orientated north-west - south-east across geophysical linear anomalies. It sloped down southwards. One of the geophysical anomalies was identified in the trench as a gully **[09],** 0.50m wide, 0.30m deep and 0.92m in length. The single mid-greyish brown fill **(08)** was devoid of finds. Spread/layer **(69),** sterile mid-grey brown friable silty-clay, was observed in the north of the trench extending beneath the bulk. It had a maximum recorded depth of 0.25m and contained three sherds of 2nd century AD pottery.

Trench 4 (Fig. 6)

Trench 4 was orientated north-east - south-west and contained significant archaeological deposits. This trench was extended to 32.50m at its north-east end to investigate the extent of a feature running beneath the bulk at the end and sides, and observed by geophysical survey. This feature was identified as a possible quarry pit **[144]**. This had a depth of 0.80m+ (not bottomed) and a width in excess of 4.50m (Figs 7-9). Two fills were observed, both silty-sand deposits (**(145)** and **(146)**). Pottery ranging from the late 1st – mid-2nd century AD as well as animal bone identified as sheep and goat were recorded.

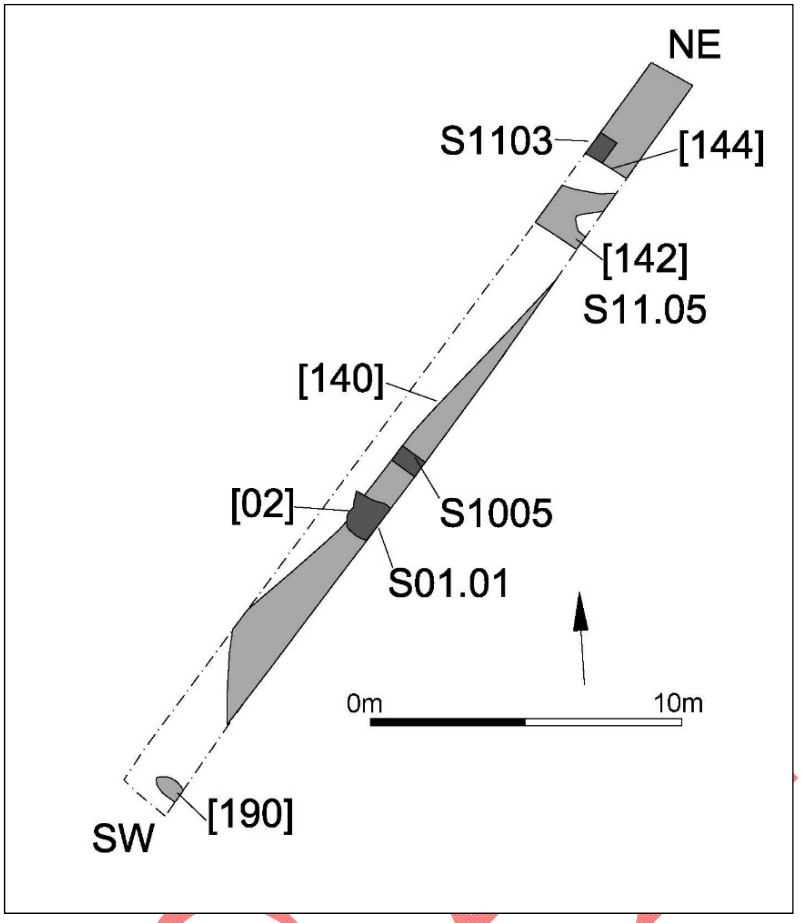

Figure 6: Plan of Trench 4

Figure 7: Trench 4, looking south-west with quarry pit [144] in the foreground.

Figure 8: Pit [144], Trench 4, looking west

Gully **[142]** with a maximum depth of 0.30m and width of 0.90m, was located immediately south of the quarry pit and had a single dark brown silty fill **(143),** devoid of finds (Fig. 9).

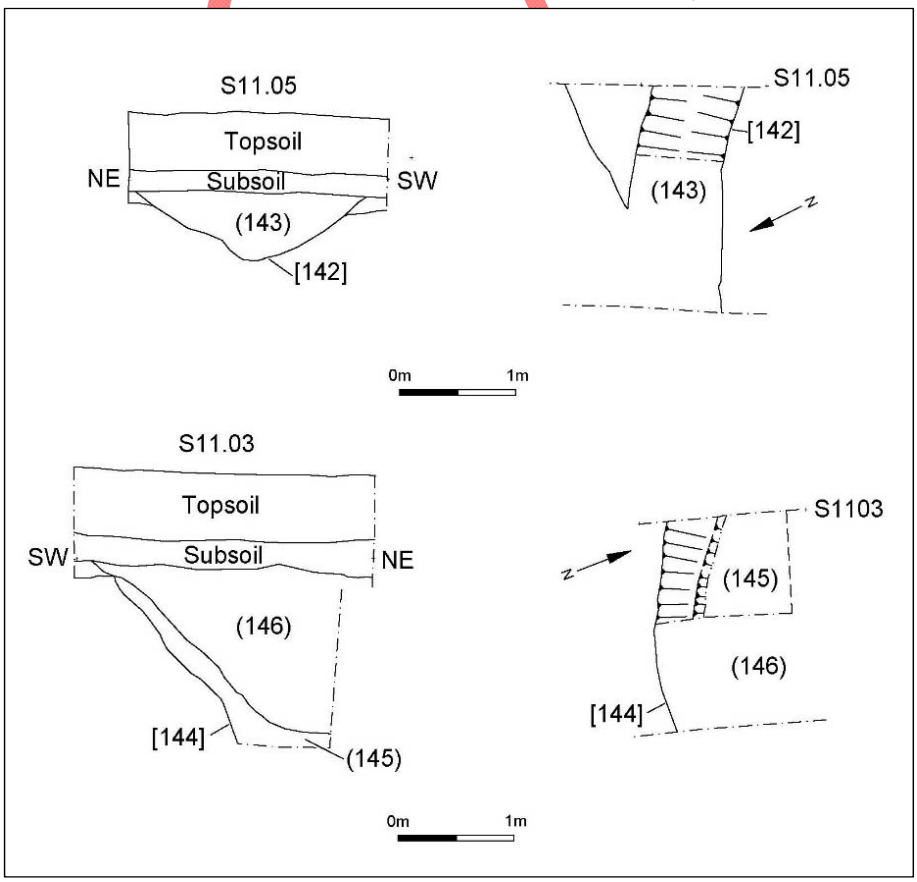

Figure 9: Section and plan drawings, Trench 4

Linear **[140]** was orientated north-east - south-west along the length of the trench. It was shallow, *c.* 0.20m deep and had a width exceeding 1.80m (Fig. 9). The loose silty-sandy fill **(141)** contained sandstone and ironstone fragments and was devoid of finds.

A substantial pit **[02]** (Fig. 10) cut through linear [140] and was partially excavated but not bottomed. It had a depth and width exceeding 0.85m and 1.30m respectively. The upper fill comprised a light yellowish-brown silty clay **(01)** contained slag, 13 sherds of 1st – mid 2nd century AD pottery, animal bone (predominantly sheep and goat) and a small fragment of possible Roman glass. Another fragment of bone recovered was worked, possibly an awl or pin beater of Roman date.

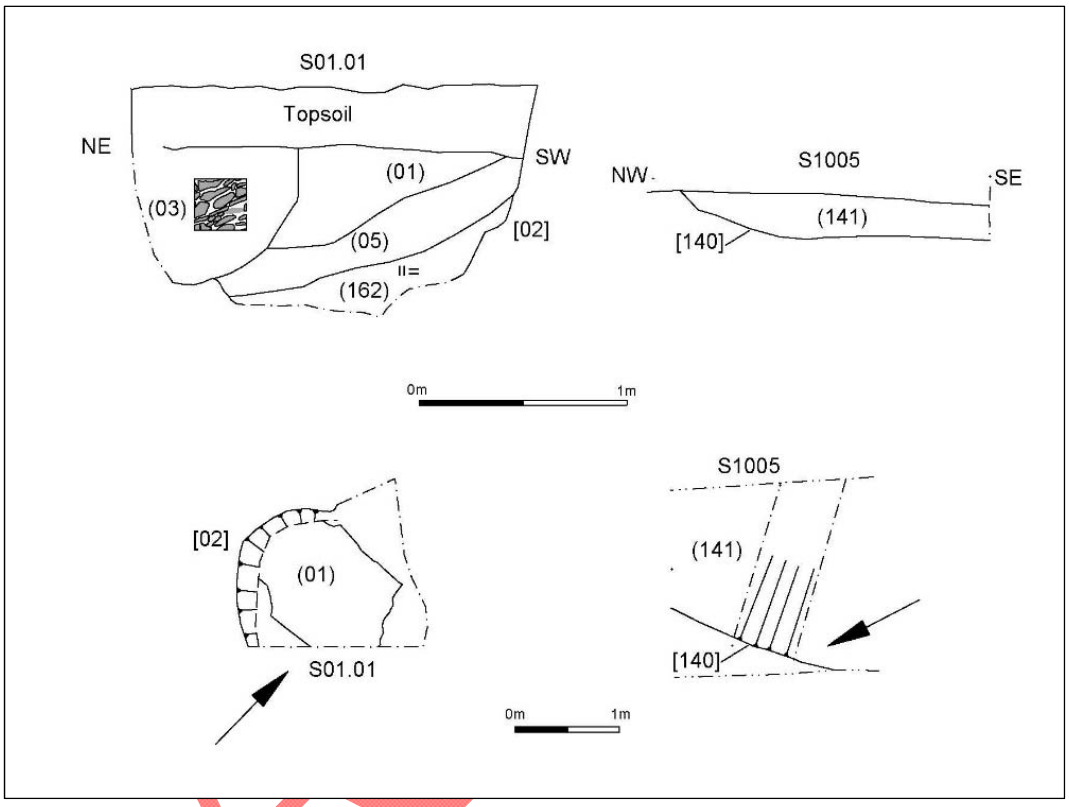

Figure 10: Section and plan drawings, Trench 4

Trench 5 (Fig. 11)

Trench 5 was 30m long, orientated north-west to south-east and located to target several geophysical anomalies. Trench 5 contained significant and extensive archaeological deposits, typically surviving in layers and extending beneath the extents of the trench. The trench was excavated down to natural sub-stratum that varied throughout the length of the trench.

At the south-eastern end, ditch **[43]** was 1.30m+ wide with a maximum depth of 0.29m, and contained a single fill **(44),** devoid of finds (Figs 12 and 14).

North-west of ditch **[45]** was a sub-circular pit **[45]** 0.80m wide and 0.34 deep (Fig.14). The single fill **(46)** contained two sherds of 2nd century AD pottery (Figs 12 and 14).

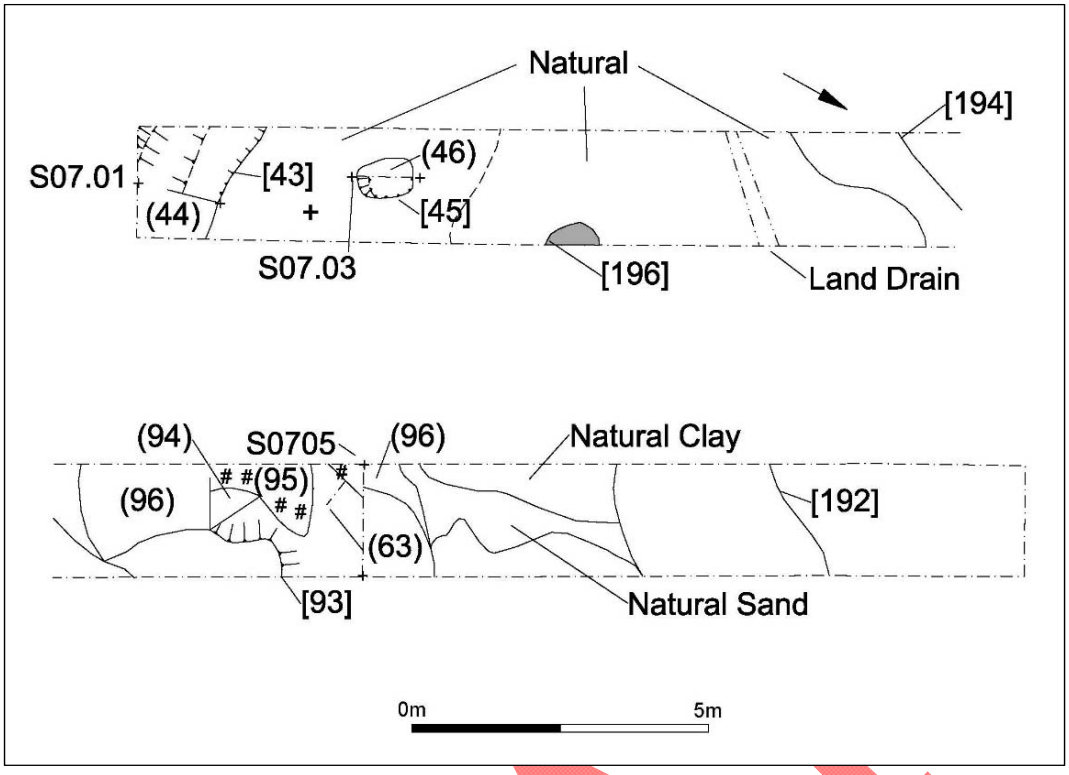

Figure 11: Plan of Trench 5

Figure 12: Trench 5, looking north-west at [43] and [45].

Towards the centre of the trench feature **[93]** (Figs 13-14) was only partially excavated due to the complexity of archaeological deposits discovered. These included a partially

robbed possible wall structure **(94)**, approximately 0.94m wide, beneath a dark charcoal rich burnt layer **(95)** containing burnt clay fragments. The backfill of the robber trench **(63)**, contained a significant amount of animal bone along with 76 sherds of late 1st - 2nd century AD pottery. This overlay a possible re-deposited layer of natural **(96)** 0.2 m thick, perhaps representing the initial backfilling of the robber cut and also containing animal bone pottery sherds of late 1st - 2nd century AD date.

Figure 13: Trench 5, central area, looking north-west

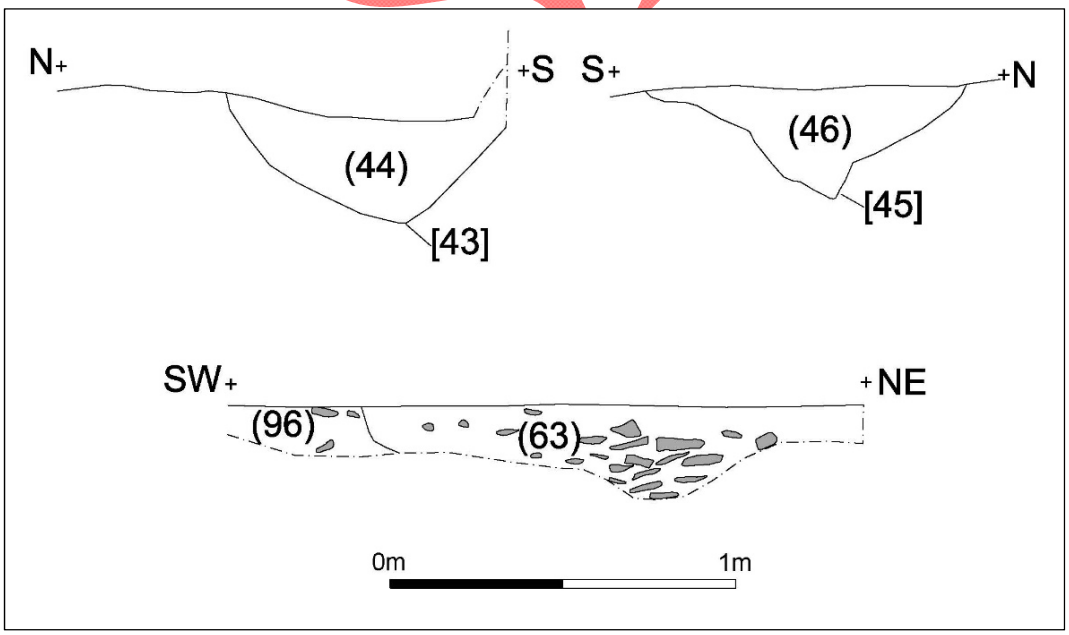

Figure 14: Section drawings, Trench 5

An unexcavated linear feature, 3.20m wide **[192]** was located approximately 4m from the north-west end of the trench, orientated east-west. Another possible linear feature **[194]** and pit **[196]** were recorded in the centre of the trench.

Trench 6

Orientated north-west to south-east, Trench 6 was 30m in length and was excavated down to a reddish-orange brown crushed ironstone sub-stratum at a depth of 0.98-1.14m. It did not target any geophysical anomalies and no archaeological features or deposits were observed.

Trench 7

Orientated north-west to south-east, Trench 7 was 25m in length and was excavated down to a crushed limestone sub-stratum matrix at a depth of 0.30-0.35. There was some evidence for furrows orientated north-east - south-west. It did not target any geophysical anomalies and no archaeological features or deposits were observed.

Trench 8

Trench 8 was 30m long and orientated north-east to south-west. It was excavated to a crushed sandstone sub-stratum layer between 0.19 - 0.35m deep. Land drains orientated north - south were identified crossing the trench at approximately 7m intervals. It did not target any geophysical anomalies and no archaeological features or deposits were observed.

Trench 9

Trench 9 was 30m in length and orientated north-west to south-east. The trench was excavated to a mid-brown crushed ironstone sub-stratum between 0.40 - 0.73m deep. There was evidence for furrows traversing the trench on a north-east - south-west orientation, but no archaeological features or deposits were identified.

Trench 10 (Figs 15-16)

Trench 10 was 30m long and orientated north – south. It targeted a geophysical anomaly which was identified as a sequence of parallel gullies cutting the orange-brown clay substratum clay. Gullies **[132], [134], [136]** and **[138]** were orientated north-east - south-west.

Gully **[132]** was 0.5m wide and quite shallow (approximately 0.1m deep) with a concave base. The fill comprised a single mid-greyish silty-clay fill **(133),** devoid of finds. Gully **[134]** was very similar. It was 0.45m wide and also shallow (0.15m deep) with a concave base. The mid-brownish silty-clay fill **(135)** was devoid of finds. Gully **[136]** was deeper (0.32m deep) and 0.70m wide with steeper sides and a concave base. The fill comprised a mid-greyish brown silty-clay **(137)** containing a fragment of sheep/goat and horse bone. The deepest gully **[138]** was 0.45m deep and 0.85m wide with steep sides and a flat base. It contained a single mid-greyish brown fill **(139),** with a fragment of animal bone, identified as cattle.

A partial pit **[177]** identified running beneath the north-east bulk of the trench and 3.50m was not excavated.

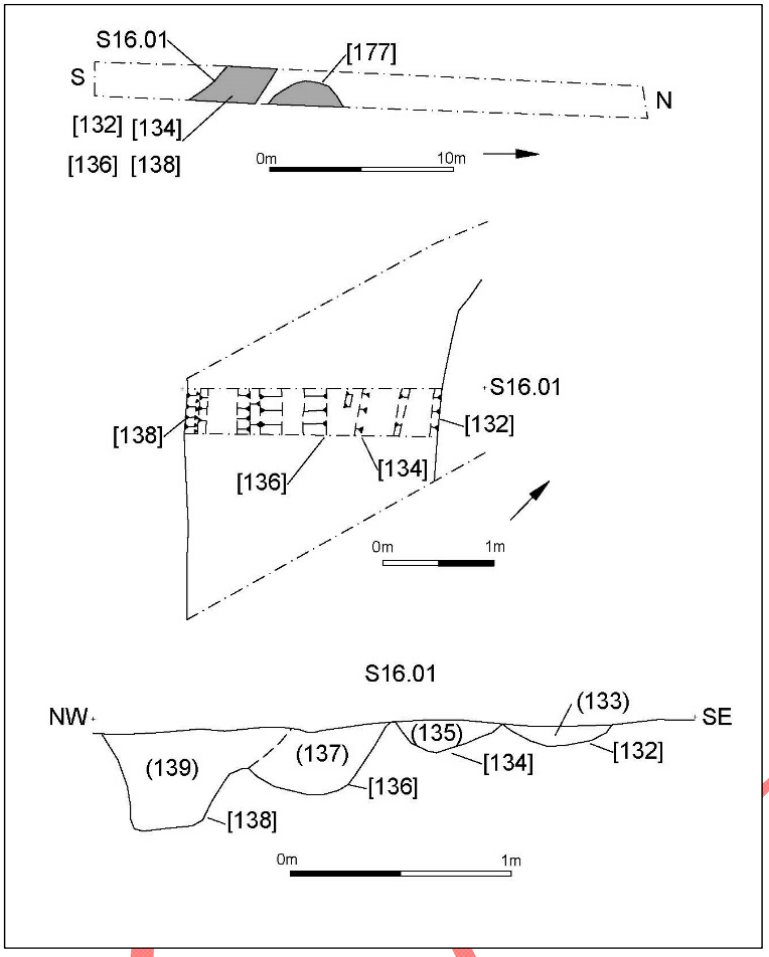

Figure 15: Section and plan drawings, gully sequence, Trench 10

Figure 16: Gully sequence, Trench 10, looking south-east

Trench 11 (Fig. 17)

Trench 11 was 30m long and located to target geophysical linear anomalies interpreted as the western ditch of a rectangular enclosure **(Fig 16: A)** and both sides of an internal

rectangular enclosure. All three anomalies were identified as features within Trench 11 cutting the light-orange brown sandy-clay substratum.

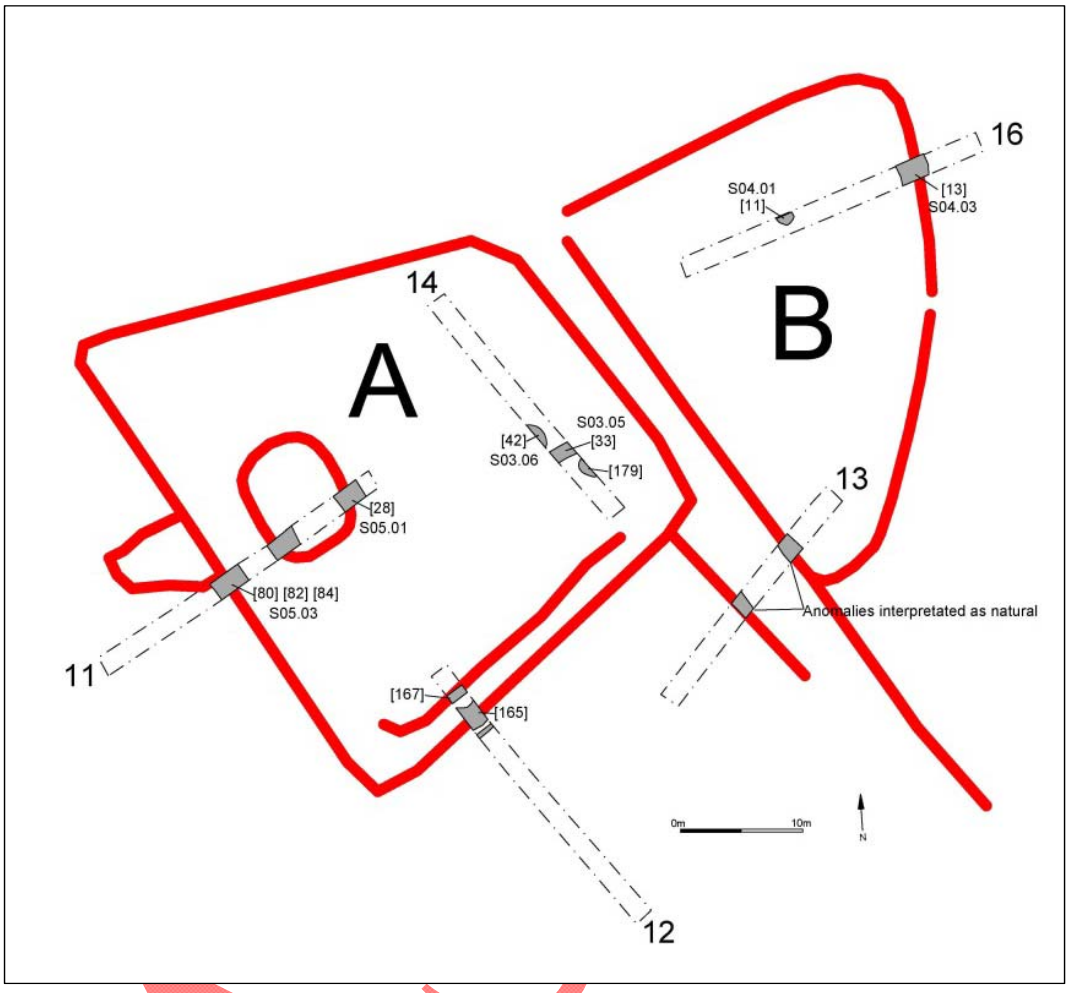

Figure 17: Location plan, Enclosure A and B, Trenches 11, 12, 13, 14 and 16

Ditch **[28]** (Figs 18-19) lay 1.50m from the south-west end and represents the easternmost ditch of the internal rectangular enclosure. It was approximately 0.65m deep, 2.90m wide and contained several fills. The profile was shallow near the top and stepped lower down with a flat and narrow base. The primary fill **(34),** 0.21 thick and 0.50m wide, was composed of mid-yellow/red-brown silty-clay and was devoid of finds. Fill **(35),** 0.38m thick, comprised a mid-yellow brown silty-clay and was also devoid of finds. The upper fill comprised a mid-yellow brown clayey-silt **(36)**, with charcoal flecks and ironstone fragments was 0.45m thick. It contained four tiny fragments of pottery dating to the mid/late Iron Age and fragments of cattle bone.

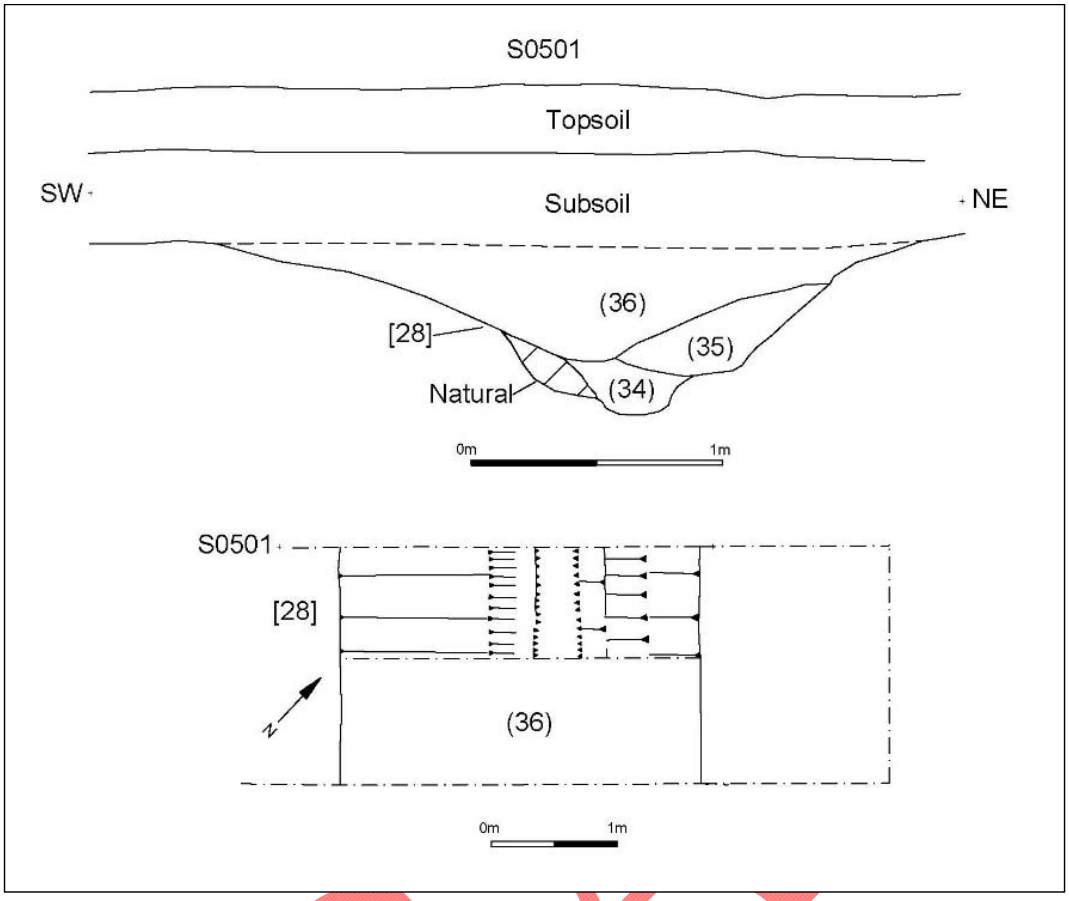

Figure 18: Section and plan drawings, ditch [28], Trench 11

Figure 19: Ditch [28], Trench 11, looking north-west

The opposite side ditch of this internal enclosure was identified in plan and left unexcavated.

The south-western side of the enclosure ditch was identified as a sequence of three ditches **[80], [82]** and **[84]** (Figs 20-21) approximately 12m from the south-west end of the trench. The latest ditch in the sequence, **[82]** was 1.90m wide and 0.90m deep with sloping sides (approximately 45° at the top), becoming almost vertical near the base to form an "ankle breaker". It contained a single mid-greyish brown clay-silt fill **(83),** devoid of finds. This ditch cut two earlier ditches. Of the two earlier features, ditch **[84]** was a similar size and shape. The southernmost ditch in the sequence, it also had a profile with gradual 45° sides becoming steeper to form an "ankle breaker" with a flat and narrow base. The ditch was 1.25m wide and 0.96m deep with a mid-yellow brown silty-clay fill **(85)** containing worked flint, probably residual.

Ditch **[80]** was smaller with a more rounded profile approximately 1.40m wide and 0.70m deep. It had sloping sides becoming steeper towards the base. The single mid-yellow brown silty-clay fill **(81),** contained flecks of charcoal and a single sherd of 1st century AD pottery.

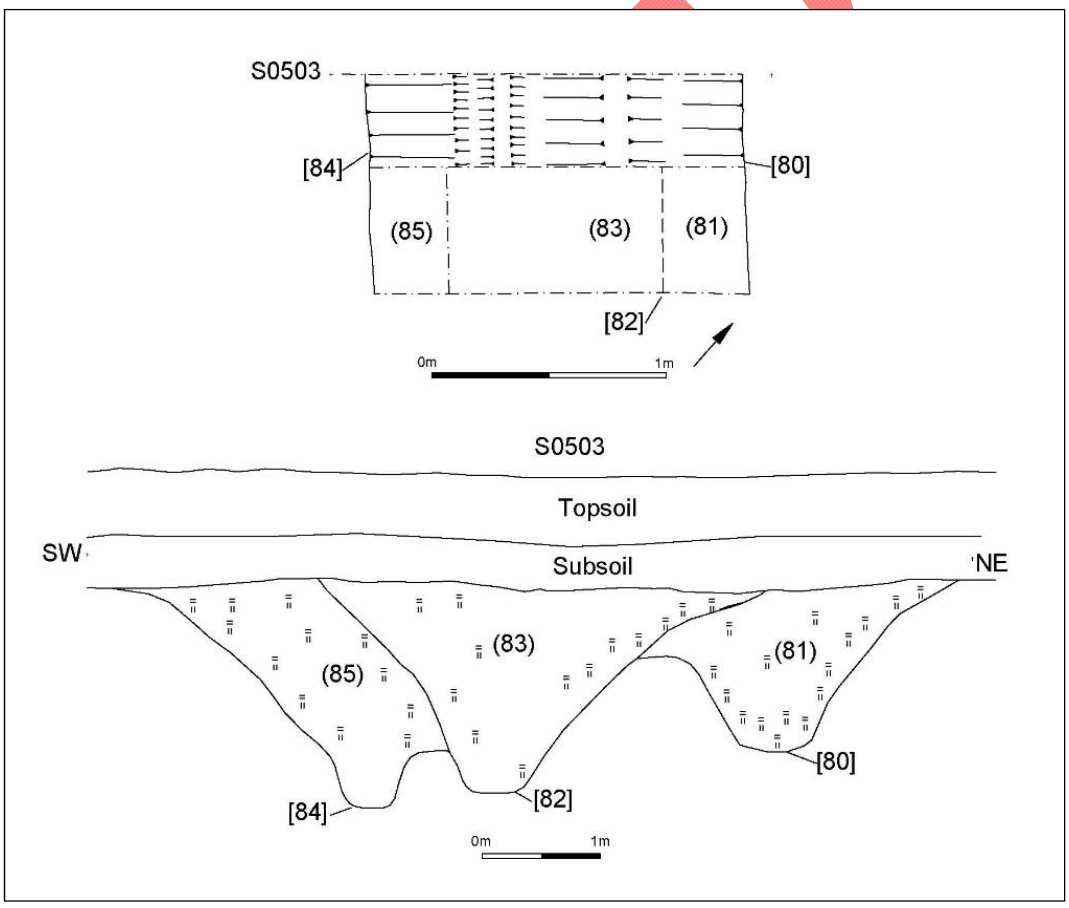

Figure 20: Section and plan drawings, ditch sequence [84], [82], [80], Trench 11

Figure 21: Ditch sequence [84], [82], [80], Trench 11, looking north-west

Trench 12 (Fig. 17)

Trench 12 was located to target the south-eastern side of rectangular enclosure **A** (Fig 18) as well as a internal parallel linear feature. These were identified as two linear ditches 2.3m from the north-west end of the trench. The enclosure ditch **[165]** was 2.9m wide with a parallel ditch **[167]** 0.80m wide, corresponding to the geophysical survey results and were identified and left unexcavated.

Trench 13 (Fig. 17)

Trench 13 was located to confirm the nature of linear anomalies that appeared to form a linear feature protruding south-east from the corner of enclosure **A** and the south-west side of enclosure **B** (Fig. 17). The trench was excavated down to light-yellow brown clay natural substratum 0.33 - 0.44m in depth. No obvious archaeological features were identified in the trench although there were sandy clay patches in the approximate location of the geophysical anomalies. Although these were investigated they appeared to represent features of natural origin despite the positive results of the geophysical survey. These features are fainter than the other geophysical anomalies and it is possible that these were shallower features that have been truncated leaving little visible trace in the trench.

Trench 14 (Fig. 17)

Trench 14 orientated north-west - south-east was located to target possible anomalies from the geophysical survey suggesting internal features within the southern rectangular enclosure **A** (Fig. 17). It was 25m long and excavated to a depth of 0.30 - 0.43m down to a similar clay substratum as seen in Trench 13. Two partial pits **[42]** and **[179]** and a ditch **[33]** were identified.

Ditch **[33]** was orientated north-east - south-west and had a sloping 45°- 50° profile with a pointed, concave base. It was 1.13m wide and 0.52m deep and contained a sequence of

several fills (Figs 22-23). The primary fill was a mid-orange brown sandy-clay **(32),** 0.52m thick. This was overlain by a mid-orange-brown sandy-clay fill **(31),** 0.47m thick. A thin mid-dark brown grey silty-clay fill **(30),** 0.1m deep overlay fill (31). All of these lower fills were both devoid of finds.

The upper fill **(29),** 0.14m deep comprised a mid-brown clayey-silt containing large rounded pebbles and smaller sub-rounded stones. It also contained three sherds of late 1st century AD pottery.

Pit **[42]** was was located approximately 2.5m east of ditch **[33]** and extended beneath the south-west bulk. Sub-circular in plan, it was 0.78m deep and the exposed area suggested a diameter of 2.25m (Figs 22 and 24). The sides were very steep and the base was not reached. The pit contained several deposits. The lowest identified fills **(51),** 0.46m+ thick and **(49),** up to 0.65m thick comprised mid-grey brown sandy-silts. Along the western edge fill **(50)**, comprised a mid-orange brown silty-clay, 0.65m thick. These fills were devoid of finds and probably represent tip layers.

Above these were two lighter deposits. Fill **(47)** was a mid/light-yellow brown 0.26m thick, devoid of finds while fill **(48)** 0.44m thick was slightly browner with orange mottling and, contained unidentified animal bone fragments. The upper fill **(41)** was 0.2m thick and comprised a mid-brown grey silty-sand and contained seven sherds of mid-late 1st century AD pottery.

Another feature **[179]** identified as a pit approximately 2.1m wide extended beneath the north-east section and was not excavated.

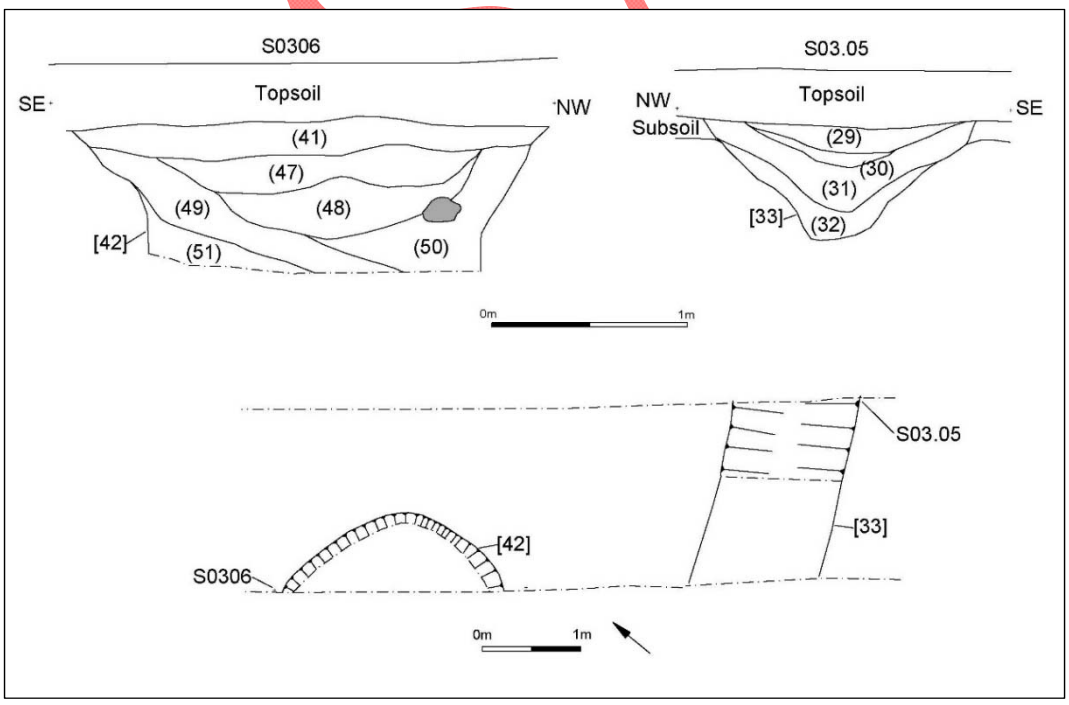

Figure 22: Section and plan drawings, Trench 14

Figure 23: Ditch [32], Trench 14. Looking north-east

Figure 24: Pit [42], Trench 14, looking south-west

Trench 15 (Fig. 26)

Orientated north-east to south-west and 30m long, Trench 15 was located to investigate geophysical linear anomalies interpreted as a double ditched rectangular enclosure immediately north of the enclosure excavated in Trenches 11 and 12 (Fig. 25, **C**). The trench targeted the southern part of the south-west side of the enclosure and a sub-

rectangular feature conjoined to southern corner. Two wide ditches corresponding with the geophysical anomalies were observed in this trench (Fig. 25).

Figure 25: Trench 15, pre-excavation, looking south-west with ditches visible beyond the scale.

The inner enclosure ditch/sub-rectangular enclosure was represented by a sequence of ditches (Figs 27-28).

The earliest and furthest north-east ditch of the sequence was ditch **[55].** This contained three fills. Truncated by **[56], [113]** and **[57],** it was 0.80m+ wide and 0.60m deep. Its sides were concave and shallow and the base relatively flat. The primary fill **(108)** had a silty-sand composition, was a maximum of 0.23m thick and contained two sherds of mid/late Iron Age pottery. Above this a re-deposited yellow clay slump, 0.13m thick was devoid of finds **(109).** The tertiary fill **(110)** was up to 0.48m and comprised a mid-orangey brown silty-sand with charcoal flecks. It contained four sherds of mid/late Iron Age pottery.

Ditch **[56]** was also truncated by ditches **[57]** and **[113]**. It was 1.40m+ wide and 0.90m deep, with straight and a concave base. It contained a mid-brown silty-sandy fill **(111)** with 19 sherds of "scored ware" dated to the mid/late Iron Age as well as a fragment of cattle bone.

Ditch **[113]** cut both **[56]** and **[55].** It was a "v-shaped" ditch seen only in section. It was 0.58m deep and 1.25m wide, with straight sides and contained a single silty-sandy, sterile fill **(114)**.

The latest ditch in the sequence **[57]** lay furthest south-west. It was1.57m wide with a maximum depth of 0.49m. The light-mid orangey-brown silty-sandy fill **(112)** contained six sherds of mid-late Iron Age pottery. The ditch had slightly convex irregular sides with a concave rounded base.

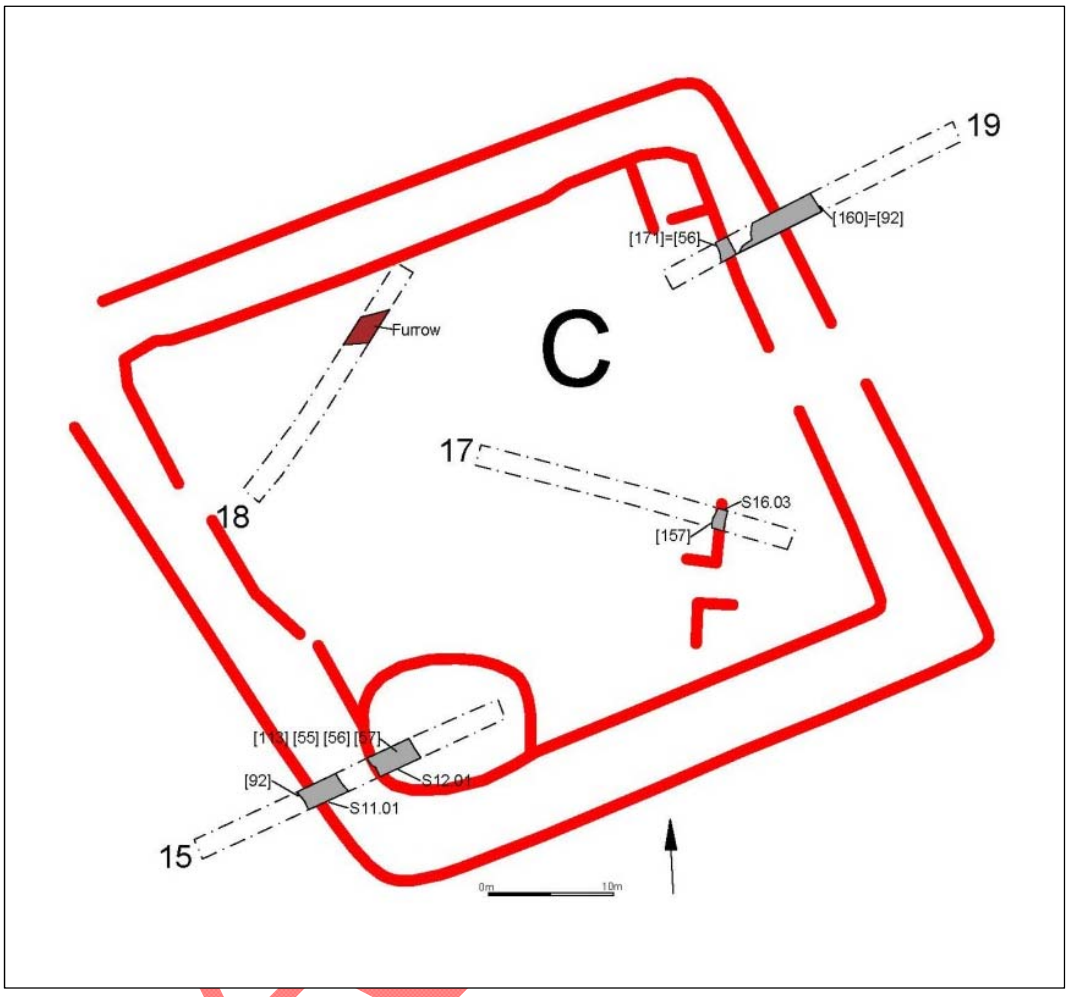

Figure 26: Location Plan, Enclosure C, Trenches 15, 17, 18 and 19

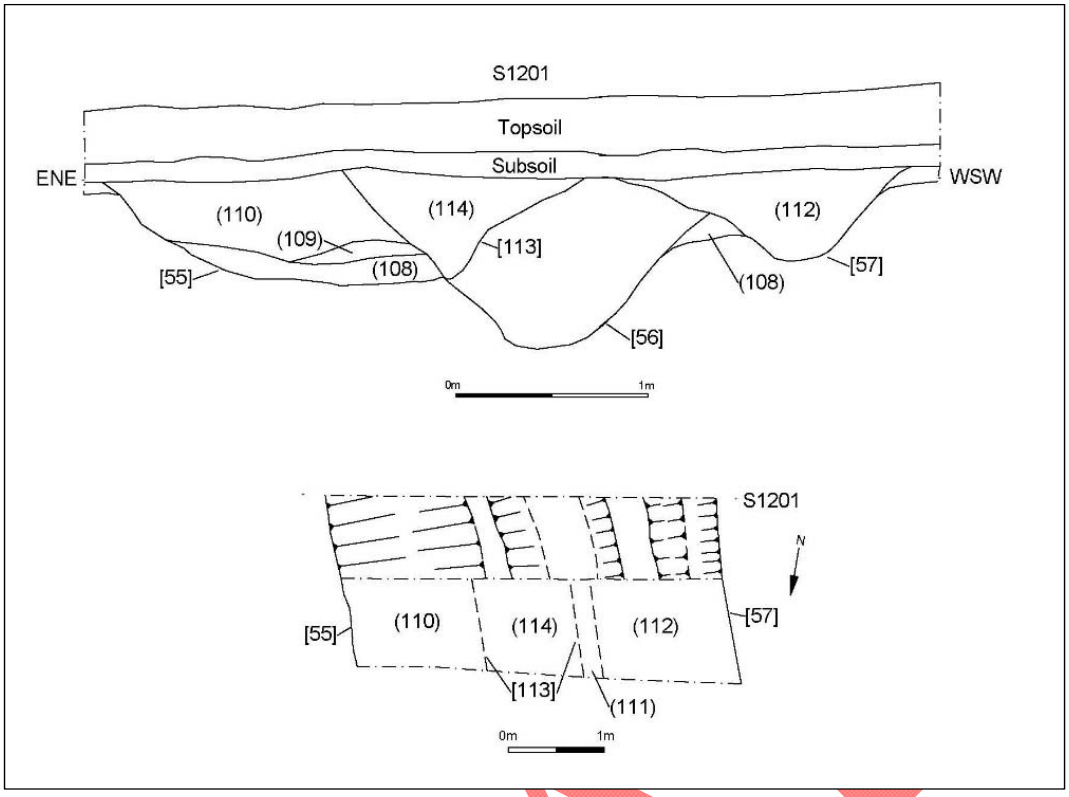

Figure 27: Section and plan drawing, ditch sequence [55], [56], [57], Trench 15

Figure 28: Ditch sequence [55], [56], [57], Trench 15

The large outer enclosure ditch **[92]** lay 4.2m to the south-west of the internal ditch sequence. It was excavated to a depth of 1.4m from ground level where excavation stopped due to health and safety factors. The ditch 4m+ wide with straight and steep sides and contained numerous fills **(100) (102) (103) (106) (107) (191)** and one visible recut **[99]** (Figs 29-30)**.**

Fill **(100)** on the north-east and south-west edge was an ironstone slump containing charcoal flecks, 0.06m+ thick. Along the opposite edge **(101)** was an orange brown sandy silt, 0.46m+ deep. Overlying both these was fill **(102)**, 0.60m+ deep, composed of mid orange brown silty-sand, containing ironstone, animal bone and pottery dating to the late

Iron Age/1st century AD. Fill **(103),** 0.69m thick, was similar to **(102)** but with less ironstone and was observed both sides of recut **[99].**

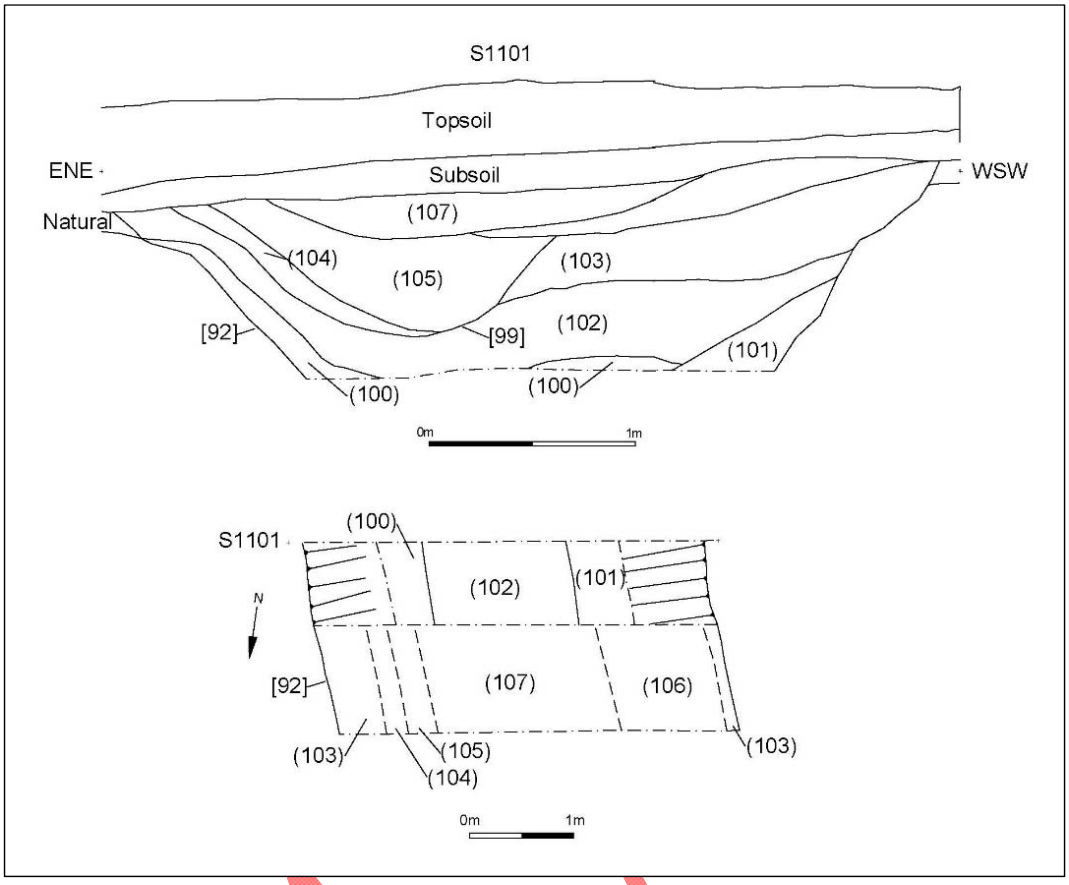

Figure 29: Ditch [92], section and plan drawings, Trench 15

Figure 30: Ditch [92], and recut [99], Trench 15, looking south.

Recut ditch **[99]** was 1.70m wide and 0.65m deep and was less substantial than the earlier ditch **[92].** The sides and the base were smooth and concave. A clay band **(104)** 0.65m deep lay along the base and east side of the feature. Directly above this **(105)** an ironstone

rich silty-sand with charcoal flecks, 0.65m thick, contained two sherds of late Iron Age/1st century AD pottery.

Overlying the recut deposit **(106)** comprised re-deposited yellow clay was devoid of finds. Also devoid of finds and identified as possible a subsoil slump was **(107)** in the top of the ditch with a thickness of 0.23m.

Trench 16 (Fig. 17)

Trench 16 was orientated north-east to south-west and located to target geophysical linear anomalies appearing to represent a triangular enclosure (Fig 17, **B**) between the two rectangular enclosure systems. Two archaeological features, a pit and a ditch were identified cutting the orange brown silty-sand substratum.

Pit **[11] (**Fig. 31) was sub-circular in plan and extended beneath the north-west edge of the trench. It was approximately 1.55m wide and 0.85m+ deep, with steep, slightly concave sides. It contained a friable dark yellow-brown clay-sand fill **(10)**, containing animal bone, identified as domestic cattle, sheep/goat and horse, and four sherds of pottery dated to the mid/late Iron Age. Within the confines of the trench it was not possible to fully excavate the pit. The pit confirmed an anomaly identified as a pit on the geophysical survey.

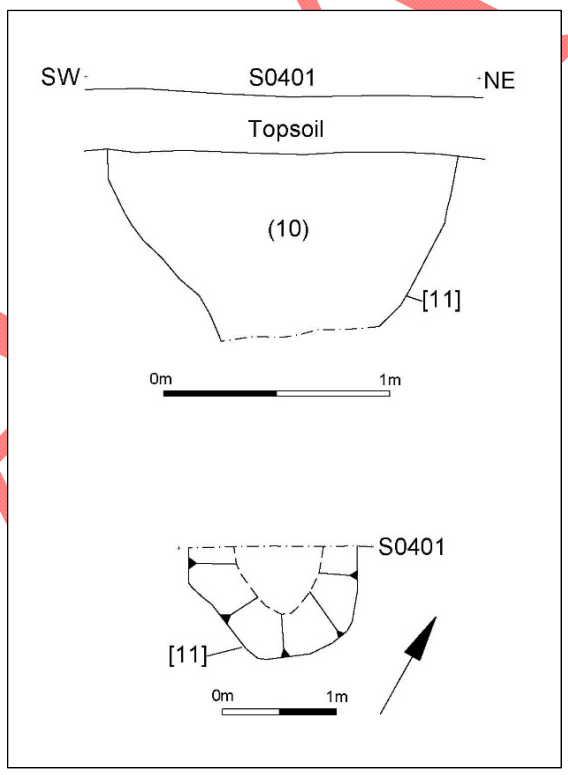

Figure 31: Pit [11], section and plan drawing, Trench 16

Ditch **[13]** (Figs 32 - 33)**,** was 1.0m+ deep and 2.90m wide, and corresponded to the geophysical survey evidence for a north - south orientated curvilinear ditch forming the eastern boundary of a triangular enclosure (Fig. 17, **B).** It had slightly wavy, gradually sloping sides and was not fully excavated. The single light red-brown sandy clay fill **(12)** contained a worked flint, probably residual, but no other datable finds.

Figure 32: Ditch [12], Trench 16, looking north-west

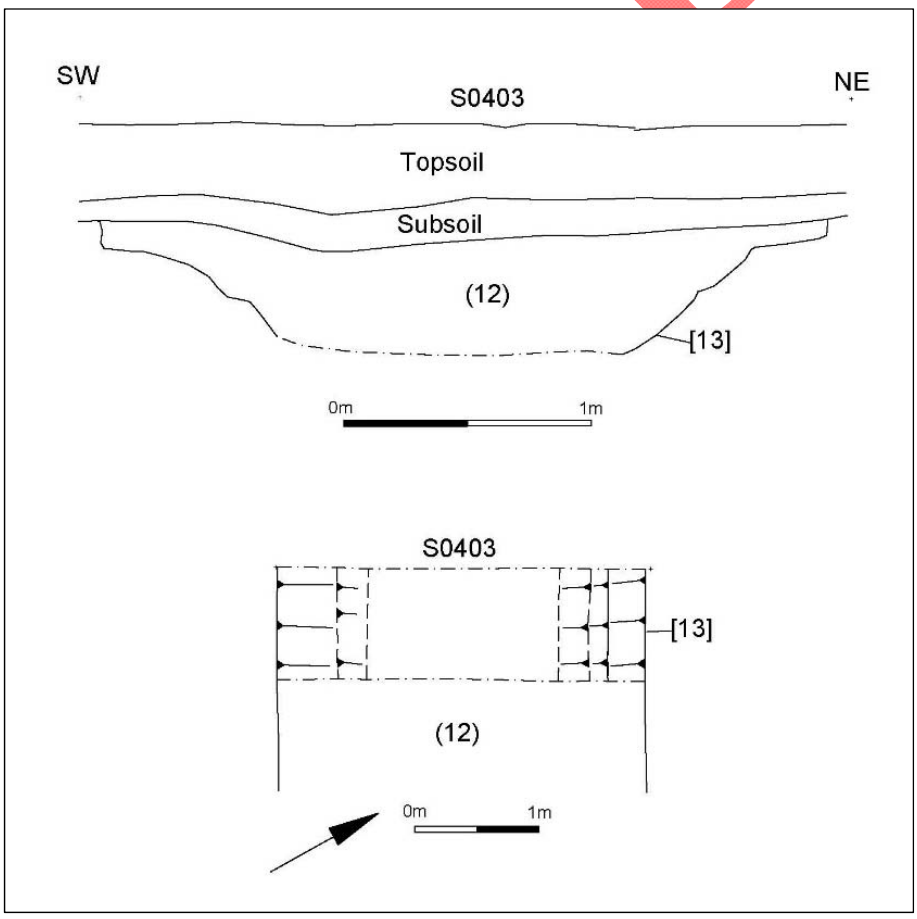

Figure 33: Ditch [13], section and plan drawings, Trench 16

Trench 17 (Fig.25, 35)

Trench 17 was located within the interior of the northern rectangular enclosure (Fig. 25, **C**) systems to target a small anomaly identified by the geophysical survey. The substratum was orange brown crushed ironstone.

Ditch **[156]** 0.47m deep and 1.0m wide, was the only archaeological feature observed in this trench, 6.0m from the eastern end and corresponded to the geophysical evidence (Fig. 34). The north - south ditch had sloping sides (approximately 45°) meeting at a tapering base. The loose mid red-brown sandy-silt fill **(157)** was devoid of finds.

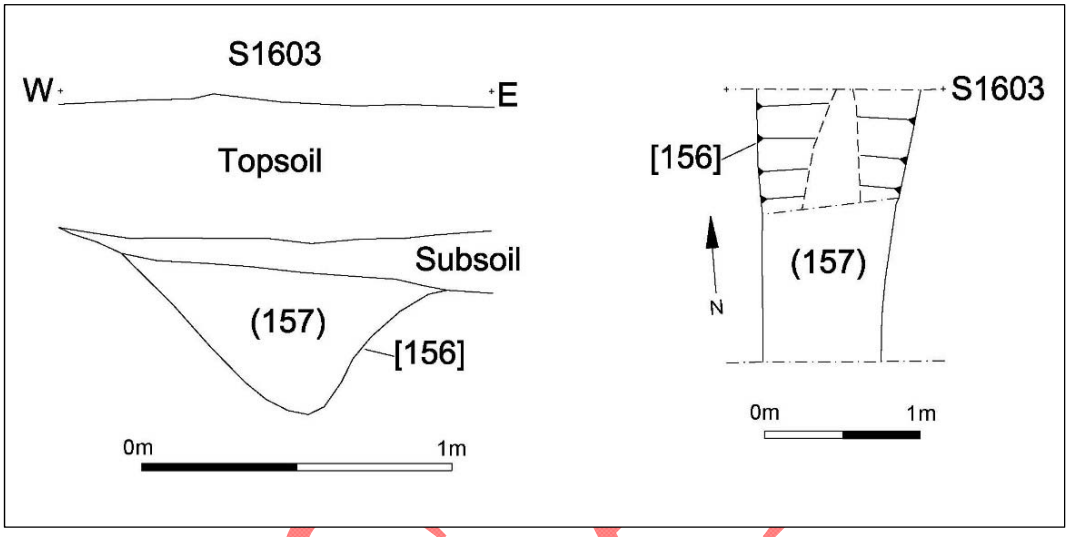

Figure 34: Ditch [156], section and plan drawing, Trench17

Trench 18 (Fig. 26)

Trench 18, also located inside the northern rectangular enclosure, contained an anomaly 5.70m from the north-east end. It was investigated and determined to be a shallow furrow with a mid-brown silty-loam, similar in composition to the subsoil and typical of similar furrows observed elsewhere. No archaeological deposits were observed within this trench.

Trench 19 (Fig. 26)

Trench 19 was located to look at the eastern double ditch of the northern enclosure (Fig 26, **C)**. The trench contained two north-west - south-east linear features. The inner ditch **[171]** was 1.3m wide while the outer ditch **[160]** was 4.7m wide. These features correspond with the enclosure ditches excavated in Trench 15 and these were left unexcavated. A single sherd of pottery was recovered from the surface of the mid grey-brown sandy-silt fill **(159)** of ditch **[160]**.

Trench 20 (Fig. 26)

Trench 20 was located to target two parallel linear anomalies both running north-east - south-west that appeared to form a trackway north-west of double-ditched enclosure **C**. Only the south-eastern gully was identified 12.5m from the north-west end of the trench.

It was 0.36m deep and 0.50 wide, with steep sides and a flattish base (Fig. 35). Its single fill **(37)** comprised a light red-brown clay-silt and was devoid of finds.

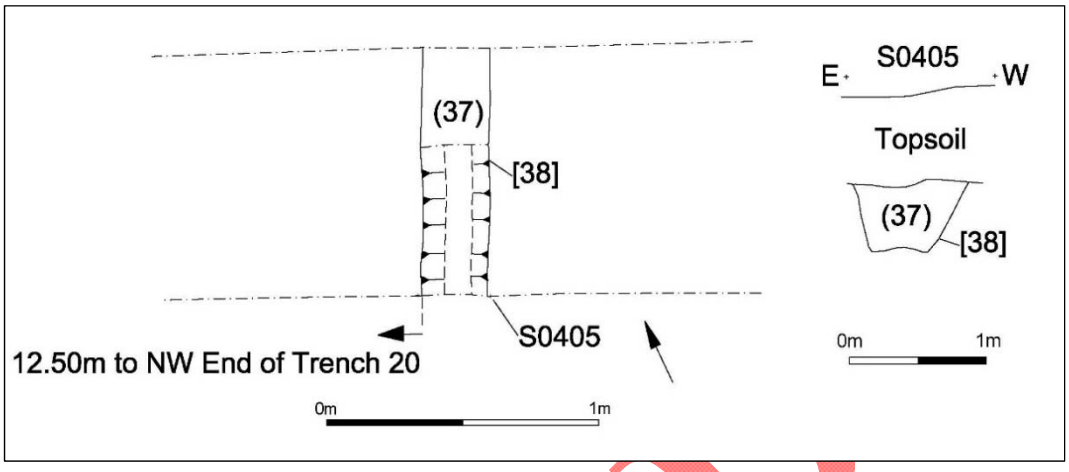

Figure 35: Ditch [38], section and plan drawings, Trench 20

There was some disturbance from north-south land drains observed throughout the trench. However, despite careful cleaning of the trench, there was no evidence for the north-west gully and it is possible that it has been destroyed by ploughing.

Trench 21 (Fig. 36)

Trench 21 was located to target a concentration of geophysical anomalies in the north-east of the proposed development area, interpreted as another rectangular enclosure **(**Fig. 36, **D)** with internal activity. It was orientated north-west – south-east across the enclosure ditches of the western boundary. Three linear features **[116] [118] [149]** were identified traversing the trench on a north - south orientation.

A small ditch **[149]** perhaps represented an outer ditch, parallel to the main enclosure. Although not shown on the geophysical survey, a linear feature was identified further north which could have continued towards this features. It was 0.86m wide and 0.28m deep, with moderately sloping sides and a "v-shaped" base. Its single mid red-brown silty-clay fill **(150)** was devoid of finds (Figs 37-8).

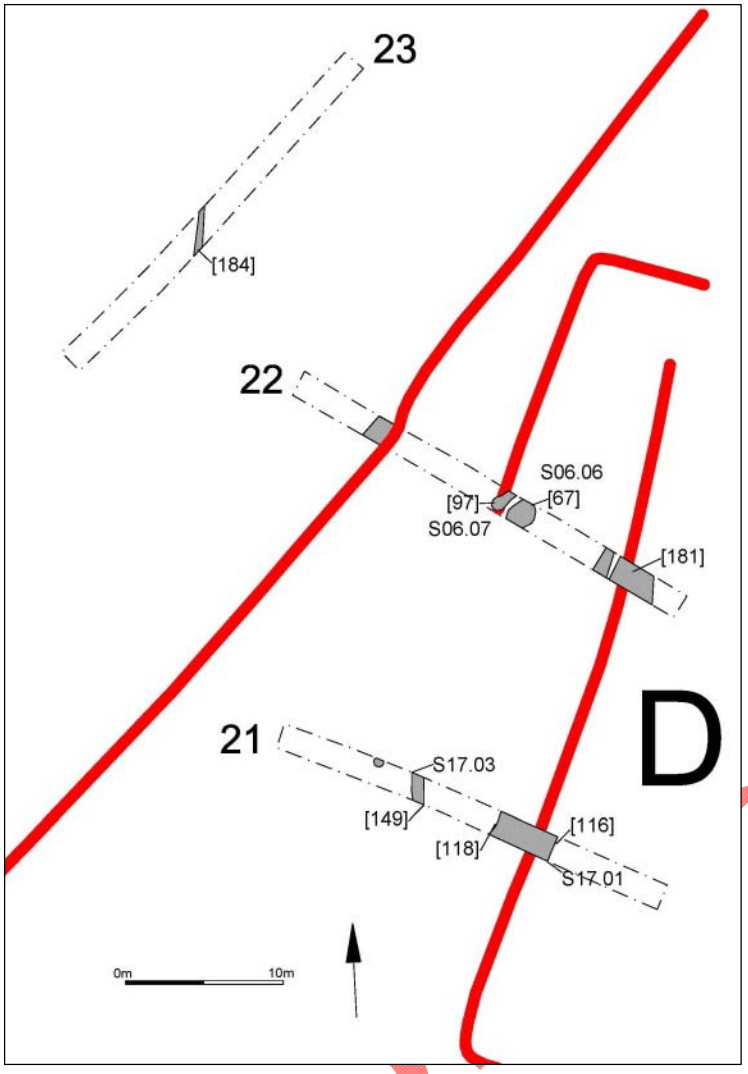

Figure 36: Location plan, Enclosure D (west), Trenches 21, 22 and 23

Figure 37: Ditch [149]. Trench 21, looking north

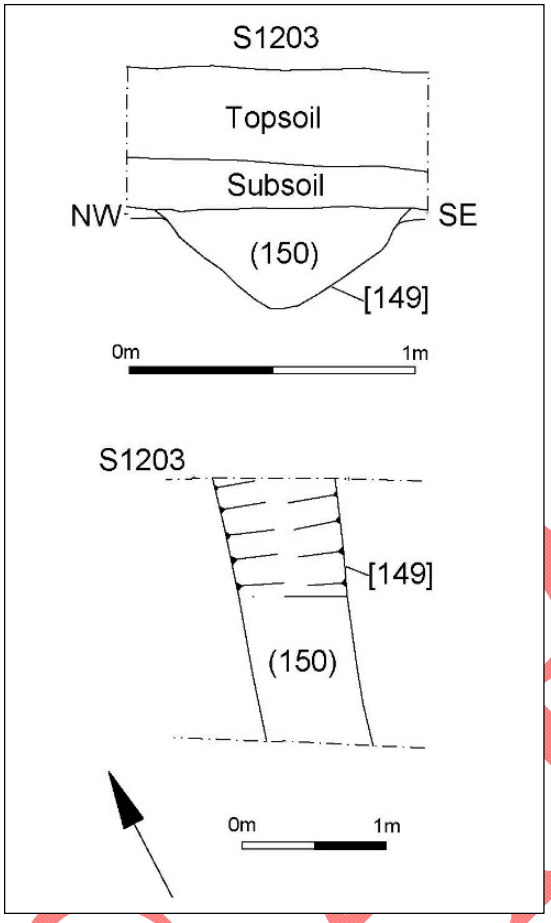

Figure 38: Ditch [149], section and plan drawings, Trench 21

Ditches **[118]** and **[116]** were located 8.5m from the south-east end of the trench and represent the western boundary of enclosure **D** (Figs 39-41). The inner ditch **[116]** was 0.50m+ deep and 3.10m wide, with sloping 45° sides and a dark red-brown silty-sand fill **(117)**. The fill contained pottery, animal bone identified as cattle, sheep/goat and horse and worked flint. Due to health and safety issues it was not bottomed. The pottery totalled 127 sherds, 57 of which were dated to the late 1st, mid-2nd century AD. The outer parallel ditch **[118]** was 0.38m deep and 1.20m wide. It had sloping sides, a concave base and a fill **(119),** very similar to **(117),** was devoid of finds. Ditch **[116]** also contained a bones from a human infant that were identified following during processing.

Figure 39: Ditch [116], Trench 21, looking south

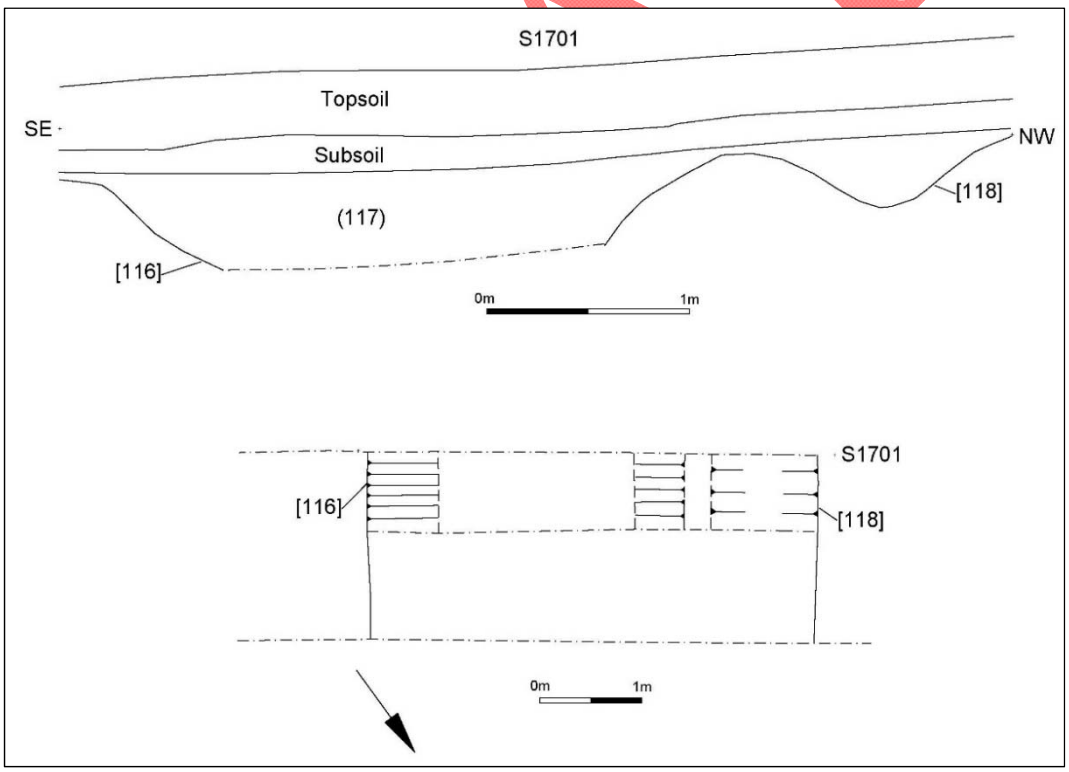

Figure 40: Ditch [118], section and plan drawings, Trench 21

Figure 41: Detail of pottery in ditch [116], Trench 21, looking west

Trench 22 (Fig. 37)

Trench 22 was located 30m north of Trench 21 in order to target three geophysical anomalies including the western ditch of enclosure **D**, as well as the eastern ditch of the trackway investigated in Trench 20 and a feature between the two.

Enclosure ditch **[181]** was observed but left unexcavated 5.40m from the south-east end of the trench. Its south-eastern edge extended beneath the trench bulk which could not be extended due to the presence of overhead power lines. This features correlates to **[118]** (Trench 21).

Feature **[67]** located 10.90m from the south-east end was investigated and determined to be a pit. It was 0.65m deep and 1.70m wide and contained a dark brown-grey silty-clay fill **(68),** running beneath the south-western bulk (Figs 43-44), containing flint and four pottery sherds dating to the 1st century AD.

Gully **[97]** lay immediately to the south-east of **[67],** with steep, slightly wavy sides and a concave base. It was 0.45m deep with a visible diameter of 0.75m corresponding with the geophysical anomaly (Figs 42-43). The mid orange-brown silty-sandy fill **(98)** was devoid of finds and there was evidence of some root disturbance.

A linear feature **[184],** 0.90m wide, probably represents a continuation of the 'trackway' ditch **[38]** excavated in Trench 20.

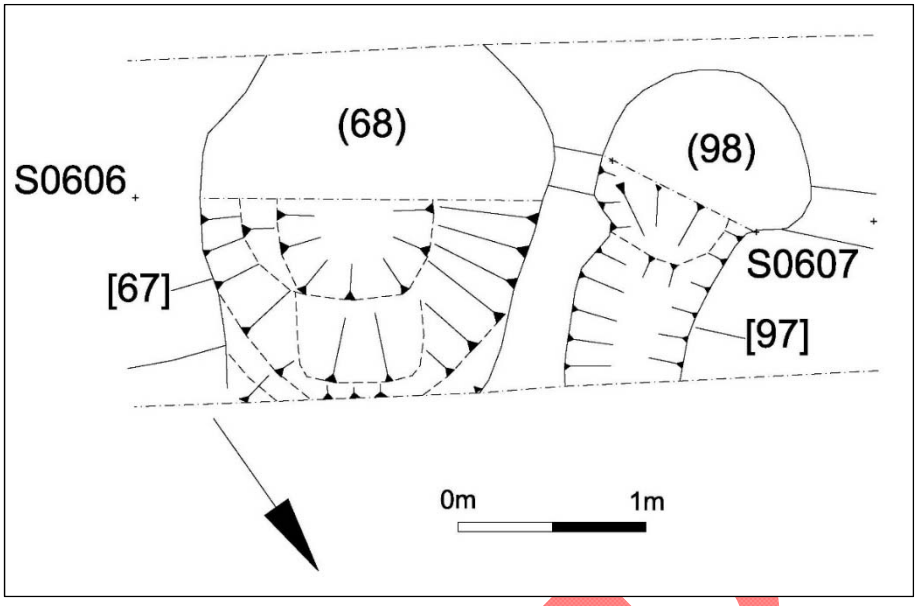

Figure 42: Plan of Pit [67] and Gully [97], Trench 22

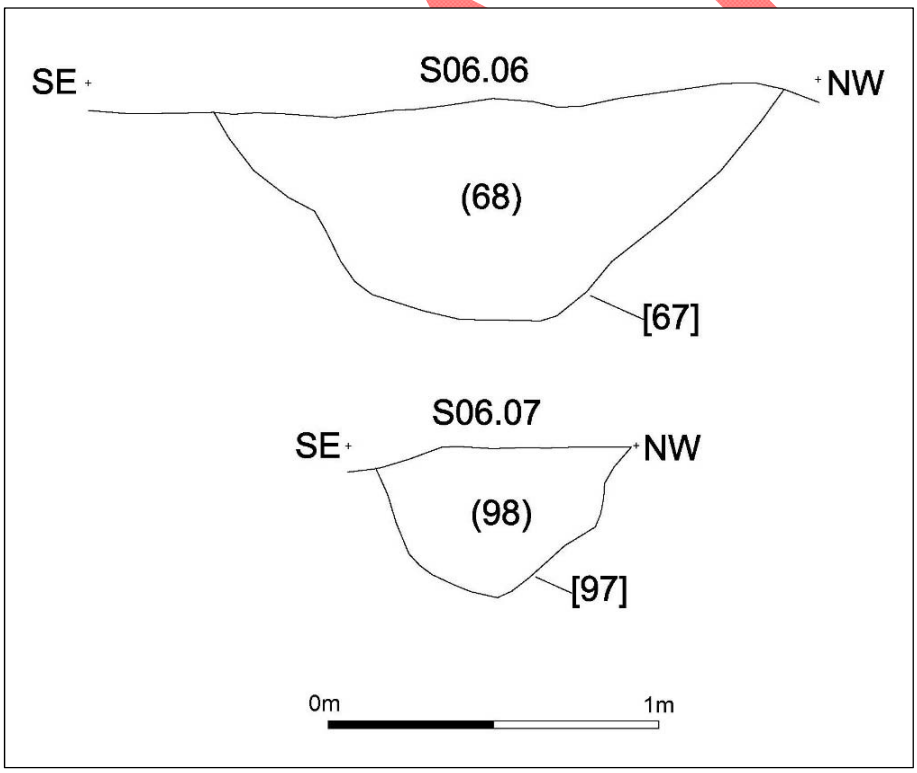

Figure 43: Section drawings of Pit [67] and Gully [97], Trench 22

Trench 23 (Fig. 37)

Located to the west of enclosure **D** away from the concentrations of anomalies identified by geophysical survey, Trench 23 found evidence for furrows, but no archaeological deposits.

Trench 24 (Figs 44-45)

Trench 24 lay north of the main concentration of geophysical anomalies. It was orientated north-west – south-ease and sloped down northwards with the natural lie of the land. The geophysical survey had identified some anomalies and a ditch corresponding to this was identified along with several other archaeological deposits (Fig. 44).

A linear feature **[151]** traversed Trench 24 in an east -west orientation. It was 0.32m deep and 1.65m wide with a flat base. The sides, initially gradual, were stepped to form a u-shaped gully. The primary fill was a mid-grey-brown silty-clay **(158)** and contained one sherd of late 1st - early 2nd century AD pottery (Fig. 45).

Although fill **(152)** above it contained one sherd of late 1st century AD pottery, this is likely to be residual as **(152)** probably represents the remains of a furrow overlying the earlier gully.

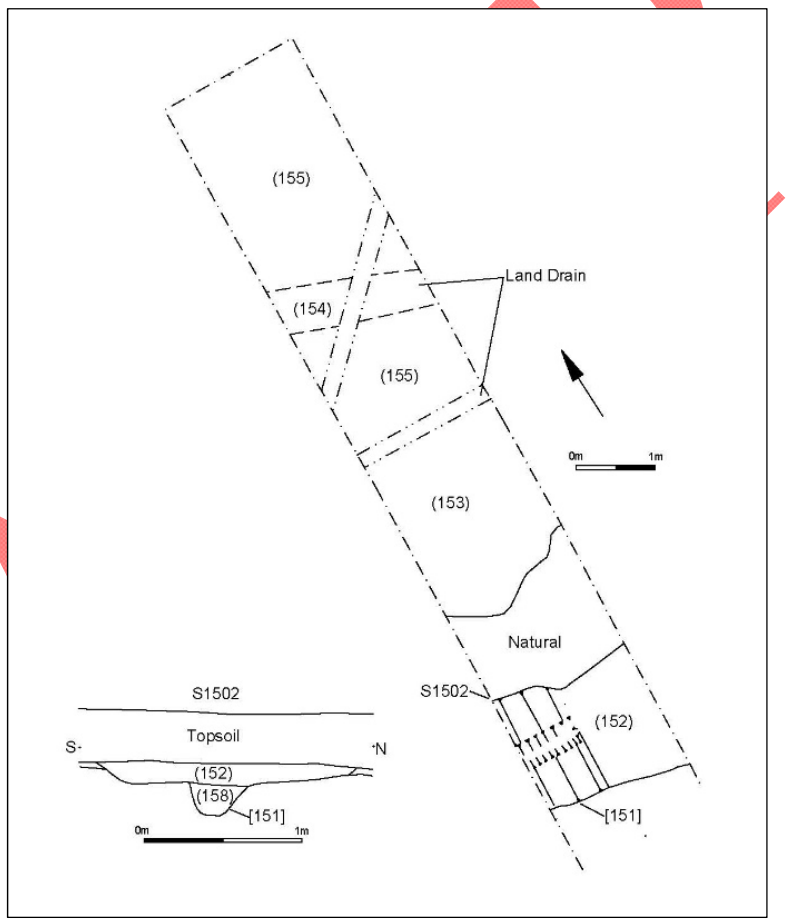

Figure 44: Plan of north end of Trench 24 and Ditch [151] section drawing

A complex concentration of inter-related archaeological deposits approximately 8.5m in length was observed in the north-west end of the trench extending beneath the end. They were recorded in situ.

Deposit **(155)** comprised of mid-orange-brown clay-silt containing ironstone and small pebbles. It yielded two sherds of abraded 1st century AD pottery and animal bone**.** A similar deposit **(154)** was 0.60m wide, contained five sherds of abraded 1st century AD pottery. Deposit **(153)** was 1.50m wide and was composed of mid-yellow grey-brown

silty-clay ironstone fragments and contained two sherds of late 1st - early 2nd century AD pottery and worked flint. The inter-relationships between these deposits was complex and beyond the scope of the evaluation.

Figure 45: Ditch [151], Trench 24, looking west

Trench 25 (Fig. 5)

Trench 25 was orientated north-east to south-west. It was located at the base of a slope towards the north of the proposed development site in an area identified by the geophysical survey as containing amorphous magnetic variation of probable natural origin. Land drains, in a herring bone construction pattern, were observed in the northern half of this trench and silty alluvial deposits between 0.63-1.63m deep. No archaeological deposits were observed in this trench.

Trench 26 (Fig. 5)

Trench 26, the northern most in the proposed development area, was 30m long and orientated north-west-south-east. The substratum was of orange brown boulder clay. Evidence was present for north-east-south-west furrows traversing the trench. No archaeological deposits were observed.

Trench 27 (Fig. 5)

Trench 27, orientated north-east - south-west and sloping slightly southwards, was excavated to a consistent mid-brown mudstone. No archaeological deposits were observed.

Trench 28 (Fig. 46)

Trench 28 was orientated north - south and located to target the anomalies identified by geophysics north of enclosure **D**. These features were interpreted as part of another rectangular enclosure (Fig 46, **E**)**.** Two ditches were identified corresponding with the northern boundary ditch of the enclosure and an internal curvilinear gully.

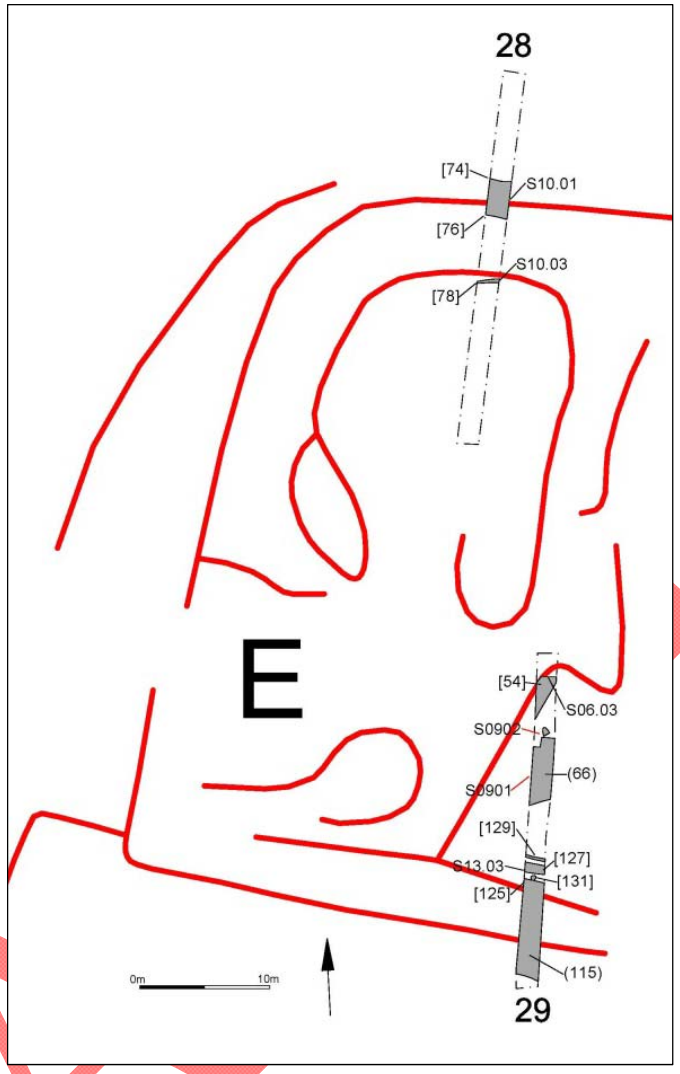

Figure 46: Location plan, Enclosure E, Trenches 28 and 29

In the north of the trench, the enclosure boundary was represented by two ditches. The outer ditch **[74]** was 1m+ deep, 2.20m wide and orientated east–west. The feature had sides of 60° and contained a firm red-brown silty-sand fill with ironstone **(75)**, devoid of finds (Figs 47-48). The ditch was not fully excavated.

Immediately south of and parallel to **[74]** lay gully **[76].** It was 0.28m and 0.50m wide with 40° sloping sides and a concave base containing a red-brown silty-sand and ironstone fill **(77),** devoid of finds (Fig. 47).

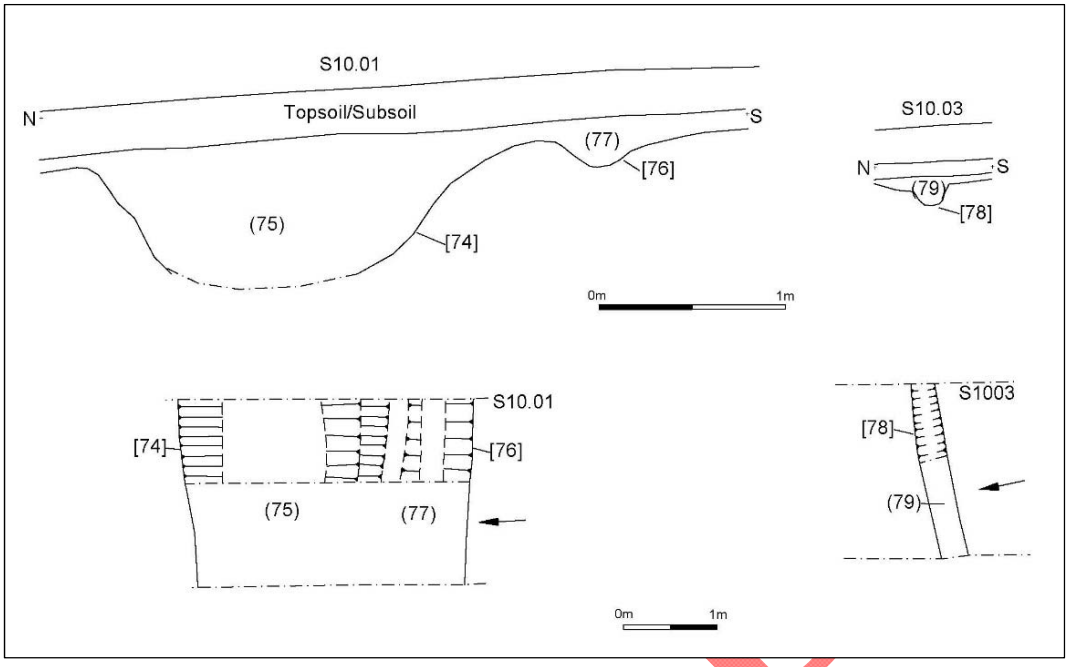

Figure 47: Section and plan drawings, Ditch [74], Gully [79], Trench 28

Figure 48: Ditch [74], Trench 28, looking east

Trench 29 (Fig. 47)

Trench 29 was orientated north - south along toward the eastern limit of the proposed development area and was located to target the southern boundary of enclosure **E** / northern boundary of enclosure **D** and internal features. The substratum was an orange sandy-clay with ironstone and the trench contained a complex interrelated sequence of ditches and other features. Where **i**ndividual features could be identified they were sample

excavated but the complex interrelated linear features **(115)** representing the southern boundary were recorded in-situ.

Layer **(66)** was identified at the northern end of the trench, running beneath the bulks and extending 10m+ southwards along the trench. The fill comprised a mid-brown clay-sand containing worked flint, bone, an iron nail and pottery dating from the 1st to the late 2nd/early 3rd century AD (Figs 51, 53). It also contained a small amount of animal bone from cattle, sheep/goat. This layer was removed and found to mask a number of earlier archaeological deposits **[53], [54], [71]** and **[73]**.

Parallel ditches **[53]** and **[54]** lay beneath **(66)** and were orientated north-east to south-west. Ditch **[53]** was 0.40m wide and 0.35m deep with a flattish base. It contained a friable mid-yellow-brown silty-sand (**52),** devoid of finds. Ditch **[54],** 0.60m wide and 0.31m deep with a flat based. It contained a similar silty-sandy fill **(163)** containing animal bone, identified as sheep/goat (Figs 49-50).

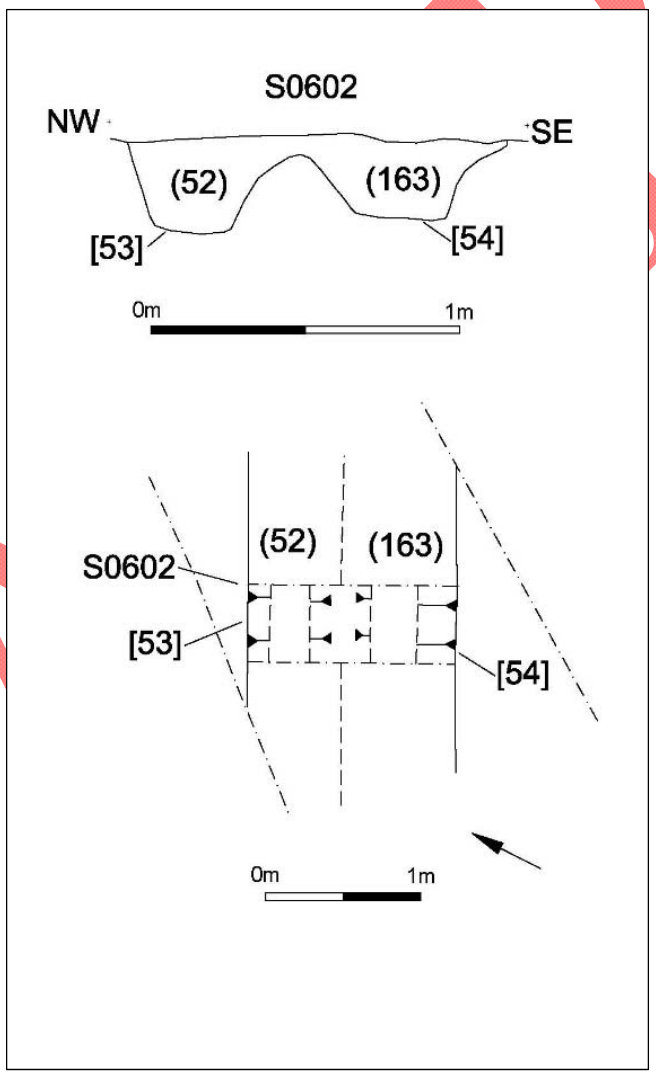

Figure 49: Section and plan drawings, Gullies [53] and [54], Trench 29

Figure 50: Gullies [53] and [54], Trench 29, looking northwards

Gully **[71]** was located 6.70m from the north-east end of the trench and orientated north-south, lying directly below **(66).** It was 0.40m wide and 0.30m deep with gradually concave sides and a flattish base (Figs 51-2). Its lower fill **(70)** was a dark greyish brown silty-sand. Five sherds of pottery dated to the late 1st/2nd century AD were recovered from the fill. Above it was redeposited natural **(197),** 0.15m thick and devoid of finds.

Post-hole **[73]** was located immediately to the west of gully **[71].** It was 0.20m deep with a diameter of 0.40m, concave sides and a flattish base (Figs 51-2). The fill **(72),** dark grey-brown silty-sand was devoid of finds.

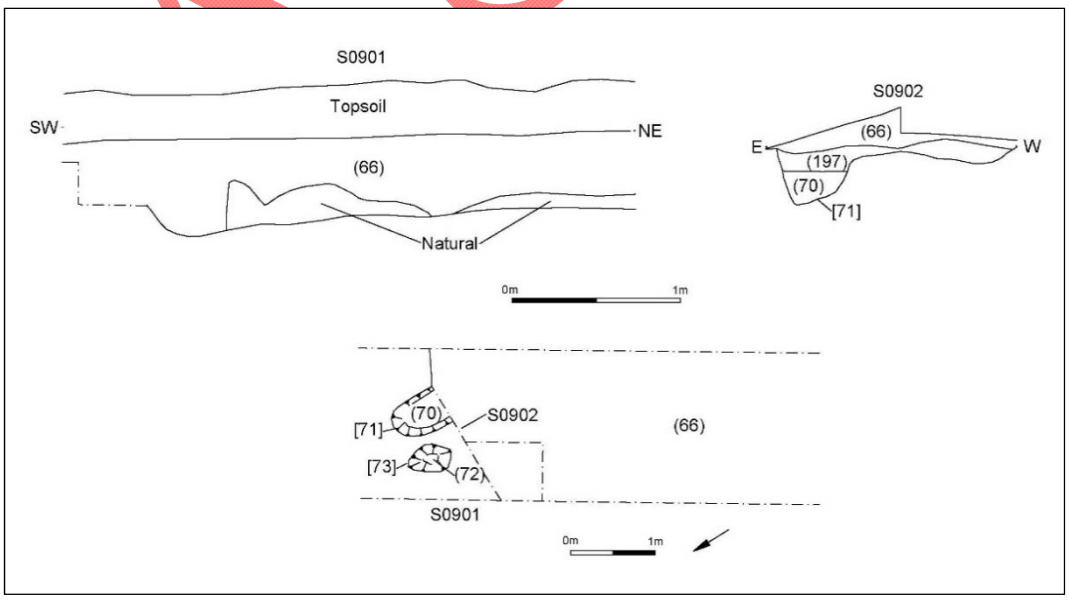

Figure 51: Section and plan drawings, Layer (66) and Gully [71], Trench 29

Figure 52: Trench 29, Gully [71], Layer (66), looking southwards

Figure 53: Trench 29, Layer (66), looking westwards

In the southern part of the trench, gully **[129]** was the northern most of the east-west linear features representing the southern boundary ditches of enclosure **E (**Fig.47)**.** It was 0.30m wide and 0.11m deep, with gradually sloping sides breaking gently at a central and concave base (Figs 54-55). The friable mid-grey brown clayey silt fill **(128)** was devoid of finds.

Immediately south of this, ditch **[127]** was 0.48m deep and 1.25m wide, with a steep southern side and more gradual northern one, both breaking sharply with a concave base,

containing a similar friable mid-grey brown clayey silt **(126)** also devoid of finds (Figs 54-55).

A sondage was excavated to evaluate the northern part of the east-west sequence representing the southern boundary of enclosure **E /** northern boundary of enclosure **D.** Ditch **[125]** had a steep, straight northern edge to a depth with an estimated width of 1.10m+ (Figs 54-55). The fill was a mid-grey-brown clayey-silt **(124)** and contained one pottery sherd dated to the late 1st/mid-2nd century AD.

A sub-circular post-hole **[131]** located between ditches **[127]** and **[125]** and cutting the latter, was approximately 0.22m deep and 0.38m wide. It had steep, slightly concave sides and a concave base (Figs 55-56). It contained a mid-brown fill **(130)** devoid of finds.

The sequence of interrelated linear features **(115)** beginning 1.0m from the southern end of Trench 29 and extending approximately 8.50m northwards was left unexcavated. Eleven sherds of pottery were recovered from the surface of this sequence all dated to the mid-late 1st/2nd century AD.

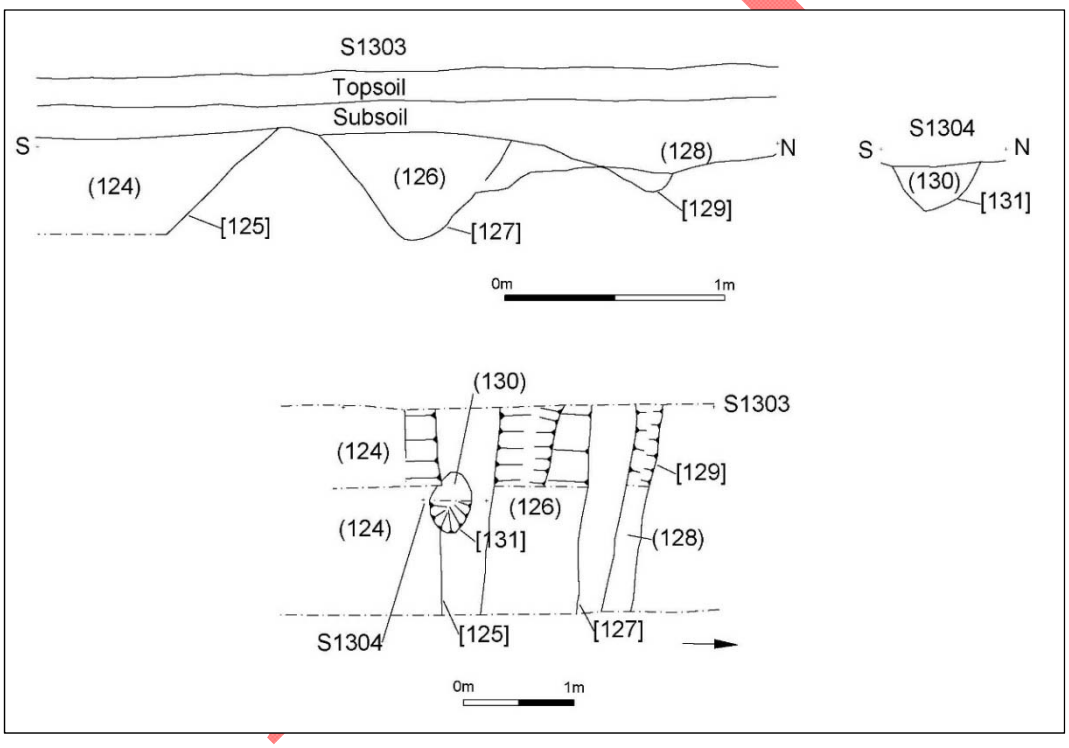

Figure 54: Ditch sequence [125], [127], [129], Post-hole [131], section and plan drawings, Trench 29

Figure 55: Ditch sequence [125], [127], [129] with Post-hole [131], Trench 29, looking westwards

Trench 30 (Fig 56)

Located south of Trench 29 and on the same alignment, Trench 30 targeted geophysical anomalies within, and at the southern extent of enclosure **(D).**

A sub-circular pit **[121]** located 10.70m from the southern end, 0.30m deep, had a diameter of 1.0m with concave sides and a central, concave base. The loose dark-grey-brown clayey-silt fill **(120)**, contained one sherd of pottery, dated to the 2nd century AD and a small amount of unidentified animal bone (Fig. 57).

Ditch **[123]** lay 3.50m south of **[121].** It was 0.40m deep and 1.0m wide with a flat base and concave sides (Fig. 57). The firm dark-orangey brown silty-clay fill **(122)** was devoid of finds.

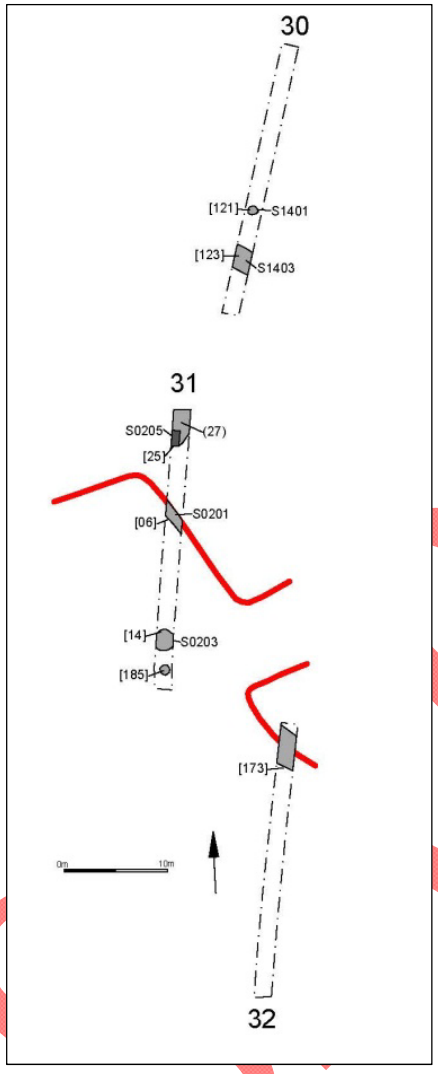

Figure 56: Location plan, Trenches 30-32

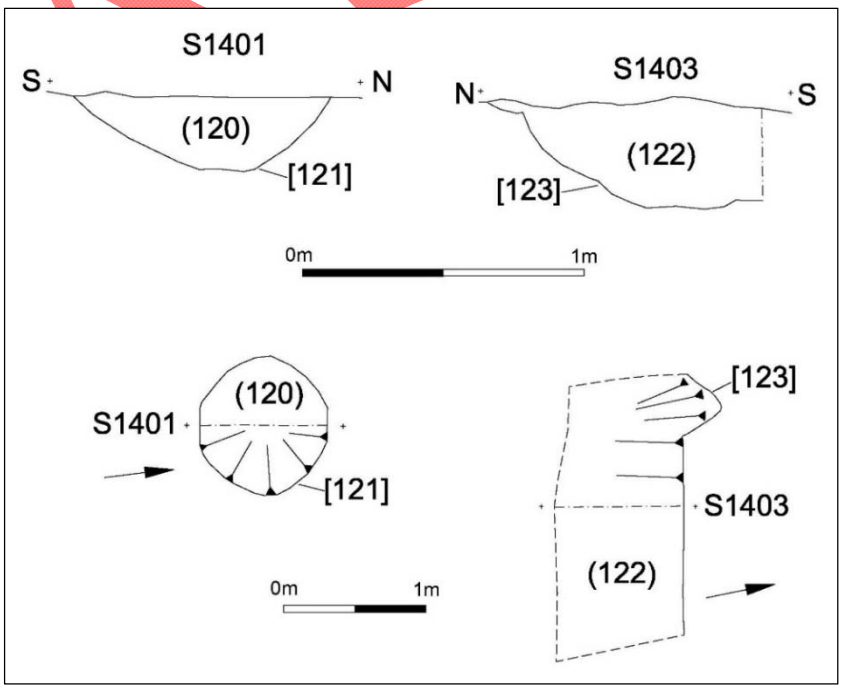

Figure 57: Section and plan drawings, Trench 30

Trench 31 (Fig. 57)

Orientated north-south, Trench 31 targeted a linear geophysical anomaly as well as weak positive anomalies of possible archaeological origin.

At the southern end of the trench, pit **[14],** sub-oval in plan, with steep sides and an east - west orientation was not fully excavated. It was 0.70m+ deep and 2.20m in diameter and contained several fills (Figs 58-9). The earliest visible fill was a mid-yellow-brown clayey-silt **(18),** with no finds. Above this was a dark-brown clayey-silt with red patches, **(17),** which contained 11 sherds of mid-late Iron Age pottery. A dark brown-grey silty-clay **(16)** with red patches and charcoal flecks contained eight sherds of mid - late Iron Age pottery including three scored ware fragments. The upper fill **(15)** was a mid-yellow-brown silty-clay, 0.56m thick, with charcoal flecks, containing animal bone, predominantly sheep/goat and cattle, and 15 sherds of mid - late Iron Age pottery.

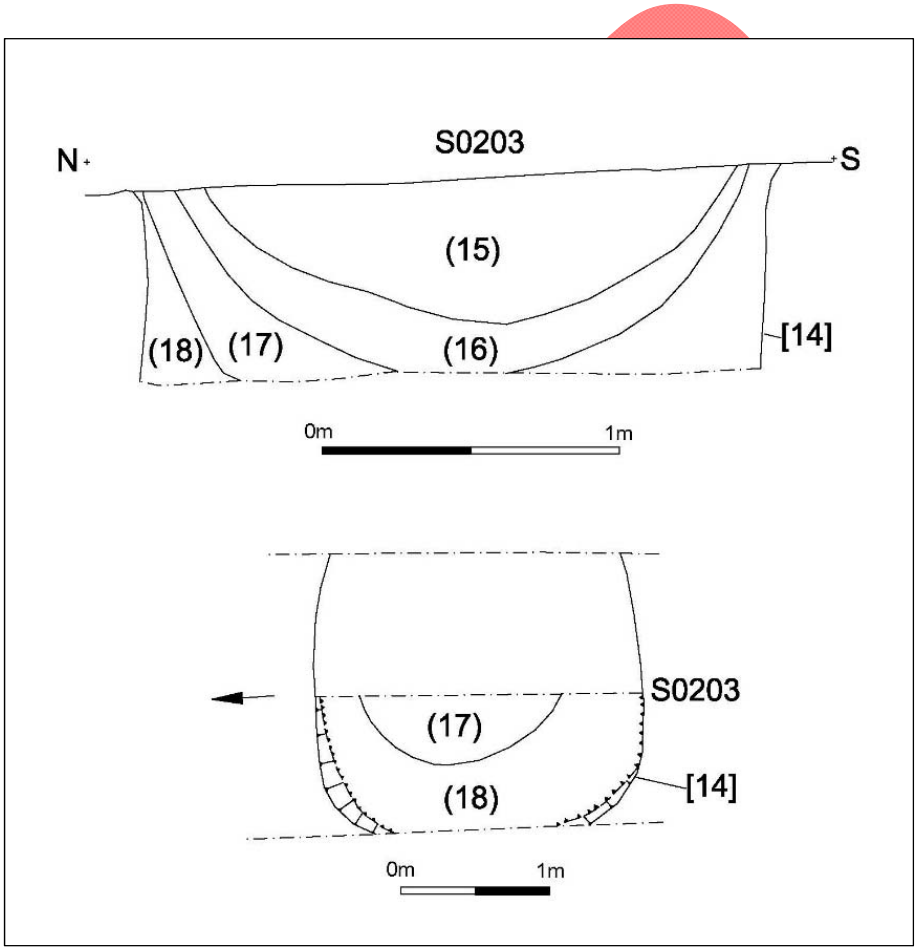

Figure 58: Section and plan drawings, Pit [14], Trench 31

Figure 59: Pit [14], Trench 31, looking south

Ditch **[06]** running north-west to south-east in the centre of the trench corresponded with a linear geophysical anomaly. It was 1.0m wide and 0.60m deep and the eastern side was stepped becoming steeper and convex towards the base (Fig. 60). A single mid-orange-brown silty-sandy fill **(07)** was devoid of finds.

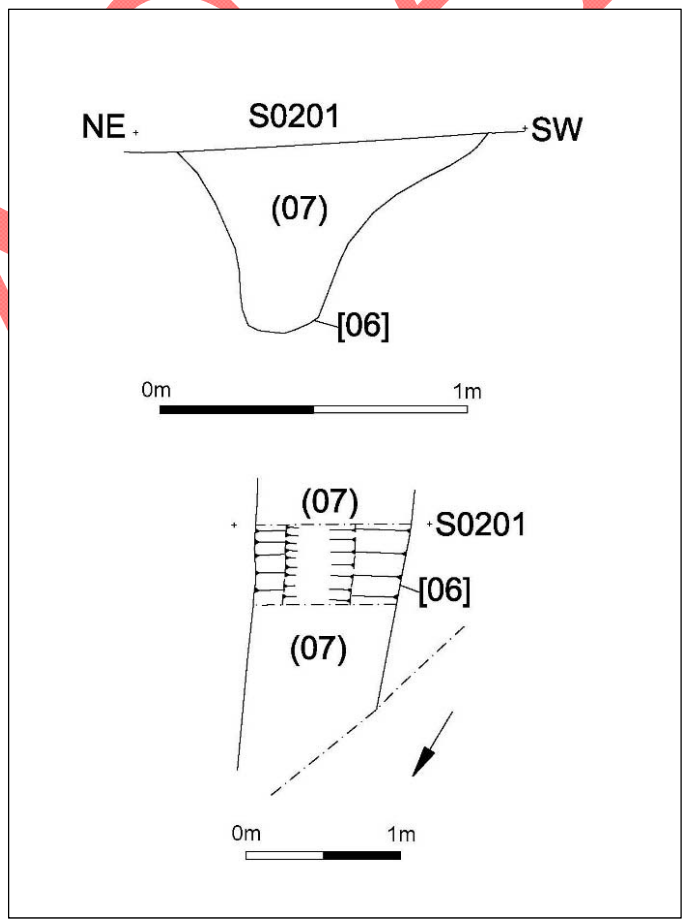

Figure 60: Section and plan drawing, Ditch [06], Trench 31

A possible oval pit **[25]** (Fig.61 and 63) was recorded in the north of Trench 31. It had steep, straight sides and an unclear, possibly concave base although it was not fully excavated. It was 0.85m deep, 1.40m+ wide and contained at least two fills (Figs 61-62). The possible primary fill **(26)** comprised a mid-orange-brown silty-sand with yellow patches, 0.55m thick where observed in section and was devoid of finds. The upper mid-orange-brown silty-sand with ironstone and sandstone fragments **(27)**, was 0.72m thick where observed and 1.40m+ wide. It contained animal bone, identified as cattle, and 12 sherds of late-1st/mid-2nd century AD pottery.

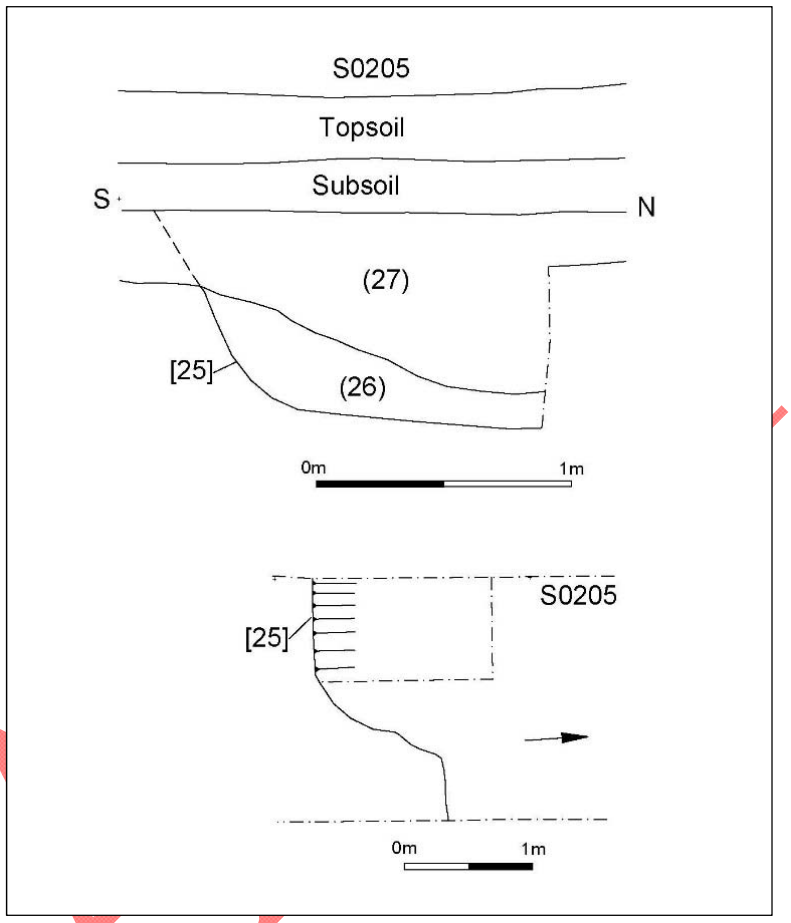

Figure 61: Section and plan drawing, Pit [25], Trench 31

Figure 62: Ditch [25], Trench 31, looking west

Trench 32 (Fig. 57)

Located on the eastern limit of the development area and orientated north-south this trench contained a single archaeological feature, a gully initially identified by the geophysical survey. This is probably the same feature present in Trench 31. Ditch **[173]** was 0.62m and orientated north-west to south-east. No finds were recovered.

Trench 33 (Fig. 63)

Trench 33 was orientated north – south and located over geophysical anomalies interpreted as a possible roundhouse with internal features. Four features, post-hole **[87],** pit **[89],** ditch **[91]**, were investigated and sub-circular post-hole **[188],** 0.14m in diameter, was observed and planned (Fig. 65).

Gully **[91]** appears to represent the northern side of the drainage gully of the roundhouse. It was 1.0m wide and 0.38m deep (Fig. 64) and although a small quantity of clinker was recovered from the mid-grey brown very silty-sand fill **(90),** no datable finds were recovered.

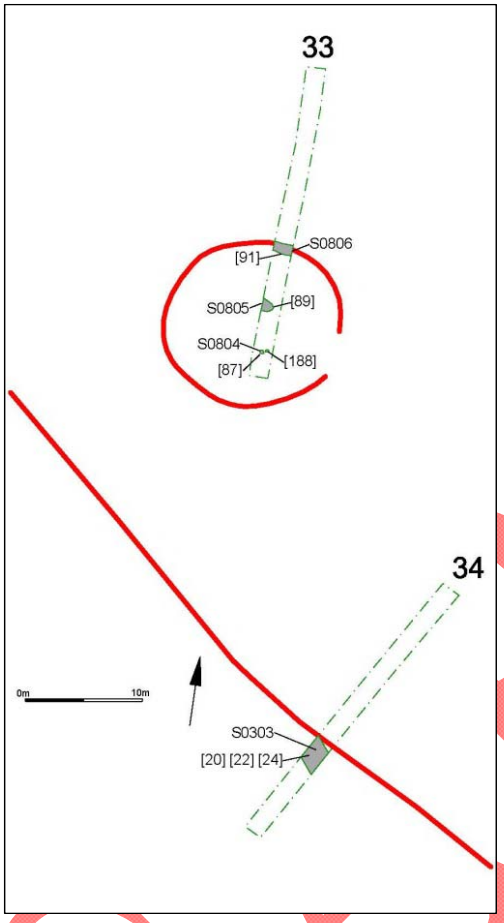

Figure 63: Location Plan of Roundhouse feature, Trench 33 and 34

Figure 64: Gully [91], Trench 33, looking east

Within the roundhouse, at the south end of the trench, post-hole **[87]** was sub-circular in plan, with steep, almost vertical sides breaking sharply to a concave and central base. It was 0.21m deep with a diameter of 0.40m and contained a dark-brown-grey silty-sand fill **(86),** devoid of finds. Immediately north-east of this was unexcavated post-hole **[188]** (Figs 65-66)**.**

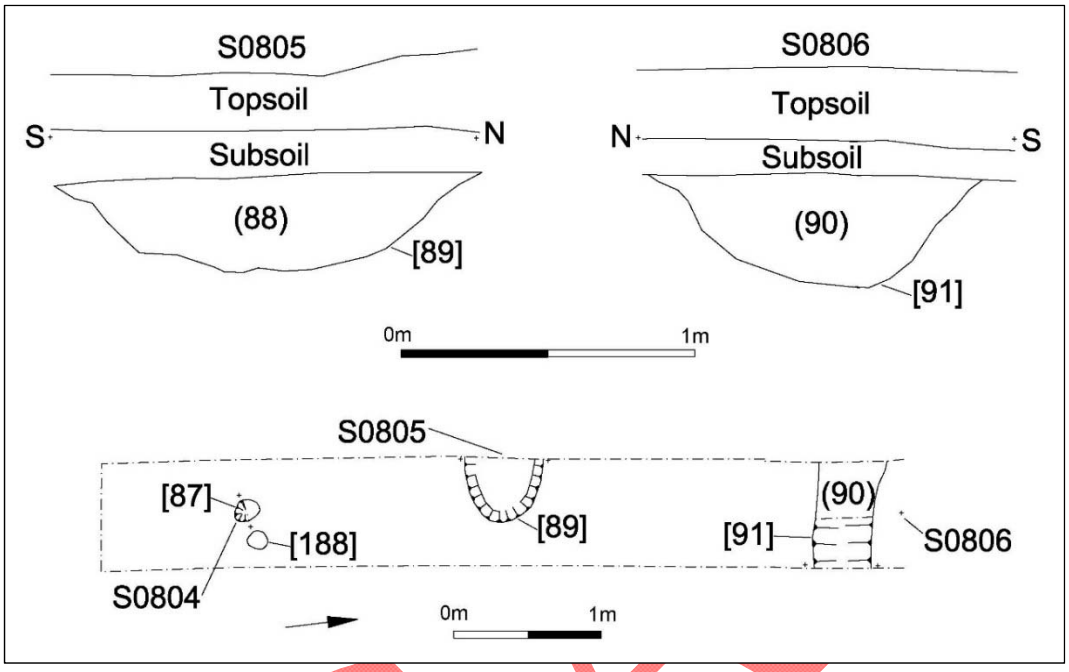

Figure 65: Section drawings, Pit [89], Gully [91], Plan drawing, south end of Trench 33

Figure 66: Post-hole [87], Trench 33, looking north

North of the post-holes a pit/gully terminus **[89]** was 1.09m wide and 0.33m deep extending beneath the western bulk. Three pottery sherds dated to the 1st century AD were recovered from the mid-grey-brown silty-sand (**88).** The feature was sub-oval with steep, straight sides breaking sharply before a central and slightly wavy base (Fig. 67).

Figure 67: Pit [89], Trench 33, looking north-west

Trench 34 (Fig. 63)

Orientated north-east to south-west, Trench 34 (Fig. 63) was positioned to investigate a geophysical linear anomaly. Excavation showed this to be an interrelated parallel ditch sequence **[20] [22] [24],** traversing the trench north-west to south-east. The stratigraphic relationship between the ditches was undetermined.

The southernmost of the ditches **[20]** was 0.19m deep and *c*. 0.80m+ wide. It had gradual 40° sides breaking gently to a central and slightly concave base (Fig. 68). The single mid-grey brown fill **(19)** was devoid of finds.

Ditch **[22]** was the middle and deepest of the sequence at 0.48m deep and *c*. 0.86m wide. The profile had a steep, straight north-east side and a more gradual 40° straight south-west side (Fig. 68). The mid-grey-brown silty-sandy fill **(21)** was devoid of finds.

At the northern side of the sequence and 18.75m from the end, ditch **[24]** was shallower at 0.12m deep and *c*. 0.80m+ wide (Fig. 68). The mid-grey-brown silty-sand fill **(23)** was also devoid of finds.

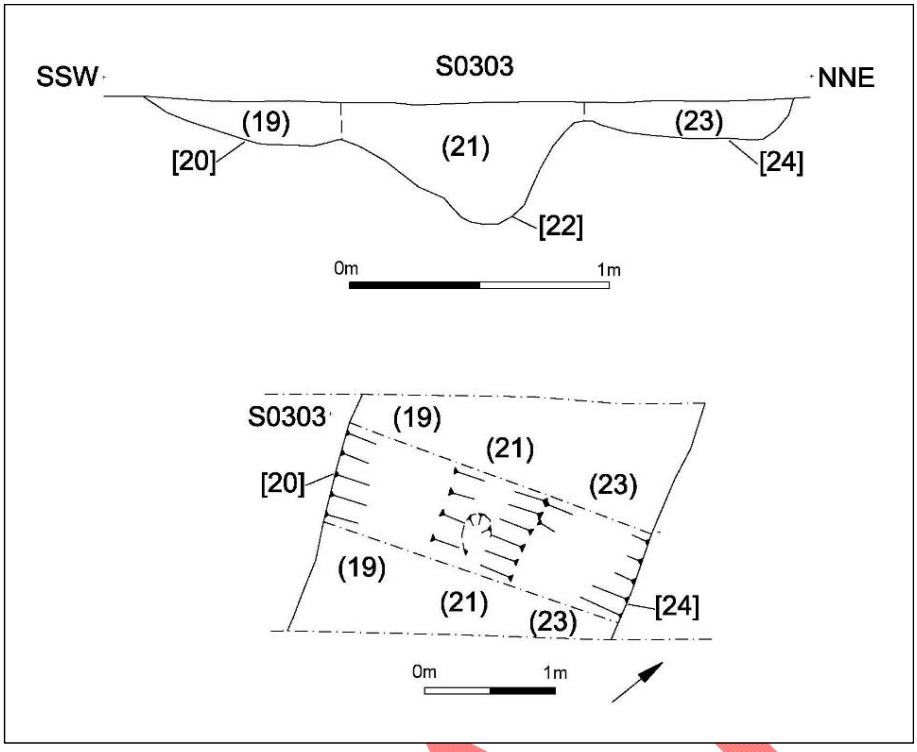

Figure 68: Section and plan drawings, ditch sequence [20], [22], [24], Trench 34

Trench 35

Trench 35 was moved approximately 10m directly south to avoid overhead power lines. Orientated east-west, there was some evidence for the presence of furrows traversing the trench on a north-east to south-west alignment. No archaeological deposits were observed.

8. The Finds

The Pottery - Elizabeth Johnson

Introduction

The archaeological evaluation produced a stratified pottery assemblage comprising 460 sherds weighing 9.383kg, with an estimated vessel equivalent (EVEs) value of 6.04. The assemblage contained both middle-late Iron Age and Roman pottery. The average sherd weight (ASW) of 20.1g suggests a good level of preservation overall, however, the Iron Age pottery is generally in poor condition with small, abraded sherds present. When considered separately, the average sherd weight of the Iron Age pottery is only 7.5g, reflecting poor levels of preservation for the earlier material within the assemblage. A small amount of re-deposited material was also recovered, comprising 16 sherds weighing 93g.

Methodology

The pottery was sorted into fabrics through hand specimen examination with the aid of a binocular microscope at x15 magnification when required. The middle-late Iron Age pottery was classified using Jackson's fabric series from Hunsbury Iron Age Hillfort, Northampton (Jackson 2003), with the addition of the grog and shell fabric from Higham Ferrers, Northamptonshire (Timby 2004). The late Iron Age-early Roman transitional and Roman pottery was classified using Timby's fabric series from Higham Ferrers (Timby 2004, 2009), with additions from Marney's Milton Keynes series (Marney 1989), and the National Roman fabric reference collection (Tomber and Dore 1998) where appropriate. Quantification was by sherd count, weight (grams) and estimated vessel equivalents (EVEs based on rim values). Vessel forms were assigned where diagnostic sherds allowed. The dataset was recorded and analysed within an Excel workbook, which comprises the archive record. A summarised version of the fabric descriptions is given in the Table 1. The full pottery catalogue is available in Appendix 2.

Table 1: Summary of fabric descriptions.

Fabric	Description
Mid-late Iron Age	
SH1	Moderate to common coarse shell.
SH2	Variable amounts of medium shell.
SH3	Variable amounts of fine shell.
GR	Grog is the main inclusion.
Qt	Quartz is the dominant inclusion.
GRSH	Grog and shell, sparse to moderate frequency of calcareous inclusions and fossil shell mixed with grog and some fine quartz.
Late Iron Age-Early Roman (transitional)	
GRSH	Grog and shell as above.
GR	Grog is the main inclusion.
SA	Handmade red-brown, hard, medium sandy ware with a black core.
SHELL	A red-brown, orange or black ware, with a moderate to common frequency of fossil shell.

Fabric	Description
Roman	
SGSam	South Gaulish Samian ware.
CGSam	Central Gaulish Samian ware.

DOR BB1	Dorset Black Burnished ware.
BOX GR	Burnt oxidised grog-tempered.
BWH GR	Burnt white grog-tempered.
BGY GR	Burnt grey grog-tempered.
GY GR	Grey grog-tempered.
OX GR	Oxidised grog-tempered.
WW GR	White grog-tempered.
BWH SY	Burnt white sandy ware.
SHELL	Shelly ware.
LNV CC	Lower Nene Valley colour-coated ware.
MK14	Northants/Upper Nene Valley grey ware.
MK9	Black sandy wares.
MK47	Early grey sandy wares.
GREY	Miscellaneous grey sandy ware.
GYF	Miscellaneous fine grey sandy ware.
OXID	Oxidised sandy ware.
MK18c	Northants(?) white ware.

The Iron Age Pottery

The table below provides a quantified summary of the Iron Age fabrics present within the assemblage.

Table 2: Summary of Iron Age pottery fabrics present.

Fabric	Sherds	% Sherds	Weight (g)	% Weight	EVEs	% EVEs	ASW (g)
GR	30	41.1%	174	32.0%	0.075	23.4%	5.8
SHELL	32	43.8%	272	50.0%		0.0%	8.5
GRSH	8	11.0%	76	14.0%	0.125	39.1%	9.5
Qt	3	4.1%	22	4.0%	0.12	37.5%	7.3
Total	**73**	**100.0%**	**544**	**100.0%**	**0.32**	**100.0%**	**7.5**

The assemblage is dominated by shelly and grog-tempered wares, which is typical of Iron Age material from Northamptonshire in general, although usually shelly wares make up a larger component. Iron Age pottery was recovered from Trenches 11, 15, 16, 17, 29 and 31. Most of the assemblage comprises plain body sherds however seven rims and 13 scored sherds were recovered.

Trench 11 revealed four very small fragments (2g) of grog-tempered pottery. The sherds were thin walled and abraded. Twelve sherds (109g) of pottery were recovered from Trench 15, including a grog-tempered carinated jar with an upright flattened rim from [55] (108). Another carinated jar with an upright rim in a grog and shell tempered fabric was found in [55] (110). Although only four sherds (32g) of pottery were retrieved from a single context (10) within Trench 16, the material includes a scored shelly ware body sherd and two jar rims. Both rims have grog and shell tempered fabrics and both are upright, though one is slightly everted. Trench 17 revealed 19 sherds (123g) of pottery from a single context [156] (111). All the pottery is grog tempered and includes an upright jar rim and eight scored sherds. One sherd (13g) of shelly ware was recovered from (52) within Trench 29. Trench 31 revealed 33 sherds (265g) of pottery, including the largest group of shelly ware (25 sherds). The pottery was all found within [14] (15), (16) and (17) and includes two jar rims and four scored body sherds. One jar rim is a rounded shelly ware, whilst the other is an upright flattened rim in a quartz sandy fabric. This is the only occurrence of a quartz sandy fabric within the assemblage.

The Roman Pottery

The table below provides a quantified summary of the Roman fabrics present within the assemblage.

Table 3: Summary of Roman pottery fabrics present.

Fabric	Sherds	% Sherds	Weight (g)	% Weight	EVEs	% EVEs	ASW (g)
BGYGR	3	0.8%	160	1.8%	0.125	2.3%	53.3
BHWGR	6	1.7%	52	0.6%		0.0%	8.7
BHWSY	3	0.8%	52	0.6%		0.0%	17.3
BOXGR	44	12.1%	3016	34.6%	0.51	9.3%	68.5
BWHGR	13	3.6%	265	3.0%	0.275	5.0%	20.4
CGSam	2	0.6%	30	0.3%	0.325	5.9%	15.0
DORBB1	13	3.6%	119	1.4%	0.05	0.9%	9.2
GR	6	1.7%	52	0.6%		0.0%	8.7
GREY	155	42.7%	2667	30.6%	2.1	38.3%	17.2
GYF	1	0.3%	3	0.0%		0.0%	3.0
GYGR	6	1.7%	47	0.5%		0.0%	7.8
LNVCC	2	0.6%	13	0.1%		0.0%	6.5
MK14	9	2.5%	280	3.2%	0.68	12.4%	31.1
MK18c	1	0.3%	181	2.1%	0.225	4.1%	181.0
MK47	3	0.8%	20	0.2%		0.0%	6.7
MK9	24	6.6%	608	7.0%	0.55	10.0%	25.3
OWGR	1	0.3%	42	0.5%		0.0%	42.0
OXGR	17	4.7%	450	5.2%		0.0%	26.5
OXID	5	1.4%	97	1.1%	0	0.0%	19.4
OXIDF	26	7.2%	123	1.4%	0.325	5.9%	4.7
SGSam	1	0.3%	2	0.0%		0.0%	2.0
SHELL	21	5.8%	381	4.4%	0.325	5.9%	18.1
WWGR	1	0.3%	47	0.5%		0.0%	47.0
Total	**363**	**100.0%**	**8707**	**100.0%**	**5.49**	**100.0%**	**24.0**

A small group of what could be described as late Iron Age-early Roman transitional pottery dating to the middle of the 1st century and comprising 23 sherds (122g), was recovered from Trenches 15, 22, 24 and 33. Nine sherds (36g) were recovered from Trench 15 including a shelly ware rounded out-curved jar rim from [92] (102) most likely dating to the mid-1st century. The remaining pottery comprises very small and abraded grog and shell tempered wares from [92] (102) and [99] (105) which may actually be late Iron Age, their condition is so poor it is difficult to tell. Four sherds (77g) were recovered from [67] (68) in Trench 22, comprising grog and shell and shelly wares, and including a grog and shell outcurved rim dating to the mid-1st century. Trench 24 revealed seven sherds (6g) of very abraded, small fragments of pottery. The fabric is a transitional sandy ware dating to the mid-1st century (Timby 2004, 72). Lastly, three sherds (3g) of pottery were recovered from Trench 33. All the material came from [89] (88) and comprises shelly and grog-tempered wares. As with the rest of the transitional material, the sherds are very small and abraded fragments.

Roman pottery was recovered from Trenches 3, 4, 5, 11, 14, 21, 24, 29, 30 and 31, and the table below provides a quantified summary of the Roman fabrics present within the assemblage. The two largest concentrations were found in Trenches 5 and 21, which between them account for 73.5% (80.6% by weight) of the whole assemblage. As such, the material from these two trenches will be discussed first.

One hundred and forty sherds weighing 1.845kg were recovered from four contexts within Trench 5 (44), (46), (63) and (96). The pottery comprises a mix of grey, oxidised and black sandy wares dating to the late 1st and 2nd centuries, along with sandy grog-tempered wares characteristic of Northamptonshire dating from the late 1st century to the middle of the 2nd (Timby 2009, 155-156). The forms present include channel rim, lid-seated, rounded and everted rimmed jars and flat rimmed bowls, with burnished, lattice and cordoned decoration. A fine oxidised ware beaker with roughcast decoration and a cornice rim dates to the 2nd century and was recovered from (63) (Pollard 1994, 77-79). This context also contained a Central Gaulish samian ware O&P LV 13 cup, also dating to the 2nd century (Webster 1994, 67). A Black Burnished ware jar dating to the 2nd century was recovered from (96). One sherd of Northants/Upper Nene Valley grey ware (MK14) was recovered from (44). The form is a flat rimmed bowl dating to the first half of the 2nd century (Marney 1989, 107-109).

One hundred and twenty seven sherds weighing 5.172kg were recovered from a single context (117) within Trench 21. The fabrics are comparable to those from Trench 5, comprising grey and black sandy wares along with Northamptonshire sandy grog-tempered wares. Two vessels account for a large portion of the group; firstly a large BOXGR rounded rim storage jar (43 sherds, 2.987kg), and secondly a grey ware rounded rim jar (45 sherds, 1.500kg). The rest of the group comprises jars including some with outcurved rims and cordons. There is also a Northants/Upper Nene Valley grey ware beaker with barbotine dot panelled decoration. As with Trench 5 above, the pottery suggests a date range from the later 1st to the 2nd century, with nothing needing to date beyond the middle of the 2nd century.

The pottery from the remaining trenches is largely comparable to that from Trenches 5 and 21, with a few notable differences. Trench 4 did not contain a lot of material but it is worth mentioning the presence of mid-1st century shelly ware channel rim jars with diagonal notched decoration on the rims within [2] (1). A small quantity (seven sherds) of mid-late 1st century transitional shelly and grog-tempered ware was also found in Trench 14 [42] (41). The only other pottery from this trench comprised three very small and abraded sherds of grey ware. The only occurrence of an early grey sandy ware comparable to fabric MK47 was found in Trench 24 (153) (158). This range of grey wares date to the later 1st and early 2nd centuries (Marney 1989, 193-194). The latest datable pottery was recovered from Trench 29 (66), with the presence of a Black Burnished ware grooved rimmed bowl and two Nene Valley colour-coated ware beakers, one of which had roulette decoration, all dating to the late 2nd-early 3rd century (Howe *et al* 1980, 16-17; Holbrook & Bidwell 1991, 109).

Discussion

The Iron Age pottery concentrations were found within trenches located towards the centre of the site, whereas the Roman pottery was found within trenches in the southern and northern areas of the site. The earliest mid-1st century Roman pottery within Trench 4 is located in the southern area, whilst the latest material dating to the late 2nd-early 3rd century from Trench 29 is in the northern area, which could indicate a slight shift over time. However, the two largest concentrations of Roman pottery from Trenches 5 and 21 are both located at opposite ends of the site (Trench 5 to the south and Trench 29 further north), and the material recovered from these trenches is comparable both in terms of fabrics and forms present, and date ranges. The smattering of mid-1st century transitional early Roman pottery is mostly found in trenches where other Roman pottery was also recovered. The exception to this is the shelly ware jar rim from Trench 15, which

otherwise produced only Iron Age material and it would perhaps be unwise to place too much emphasis on a single sherd.

Overall, the Iron Age pottery could be given a mid-late Iron Age date, with the presence of scored ware suggesting activity during the middle-late Iron Age from possibly as early as the 4th or 3rd century to the 1st century BC (Elsdon 1992, 88-90). It is worth noting that comparison with other sites has given rise to the suggestion that in this part of Northamptonshire scored ware may have reached its high point during the later 2nd and 1st centuries BC, just before the introduction of wheel-thrown 'Belgic' style wares (Jackson and Dix 1987, 73-77). Whilst scored ware most probably continues into the 1st century AD elsewhere in the East Midlands, in the middle/upper Nene Valley it appears to go out of use as soon as wheel made 'Belgic' styles of pottery appear (Elsdon 1992, 88-90). Although nothing that could be described as 'Belgic' was recovered from this site, there are hints at some form of continuity, or possibly a break of only 30-50 years or so, through the small quantity of transitional wares dating to the mid-1st century

The Roman pottery assemblage is typical of that for this area during the later 1st and 2nd centuries. The Northants/Upper Nene Valley grey wares (MK14 range) were produced at a variety of kiln sites, for example at Ecton, Mears Ashby, Weston Favell and Little Billing (Johnston 1969, 76), and production centres such as these are the most likely sources. The other group of fabrics characteristic of Northamptonshire during the late 1st and 2nd centuries is the sandy grog-tempered and burnt sandy wares. The fabrics are characterised by the presence of grog in a generally harder, sandier fabric than earlier grog-tempered wares, often with blackened exteriors (BOX GR, BWH GR) and with a wider range of firing colours (white, orange and grey rather than brown/black). Channel rimmed jars are the most common form. Likewise, the burnt sandy wares are characterised by their blackened exteriors (Timby 2009, 155-157). Although there are small quantities of pottery dating to the mid-late 1st century and late 2nd-early 3rd century, on the whole the assemblage dates from the later 1st to the 2nd century, with much dating within the first half of the 2nd century.

Object of worked bone - Nicholas J. Cooper

A tapering splinter of animal bone (Length 83mm) was recovered from context (01) and is notable for having rounded edges and a degree of wear and polish over its surfaces and pointed end. The wide end is broken obliquely, showing cancellous tissue but worn, indicating an old break, and that the bone was not deliberately fashioned. This suggests that it had been selected out from butchery waste for secondary usage possibly as an awl or more likely a pin beater, which was poked between the threads of the warp in order to compress the weft on a warp-weighted loom. Single, or double-ended pin beaters are relatively common finds of Roman rural and early Anglo-Saxon sites such as Empingham, Rutland (Fraser 2000, 113-114, fig.54.38-41).

The Animal Bones - Jennifer Browning

Introduction

This report presents the analysis of faunal assemblage recovered during the evaluation at Brixworth in Northamptonshire. Seventeen features produced animal bones; these were ditches gullies, pits and layers from Trenches 4, 10, 11, 14, 15, 16, 21, 29, 30 and 31. Bones were also recovered from the coarse fractions of four bulk environmental samples from contexts (16), [14] (samples 2); (10), [11] (sample 1); (63) (sample 4); and (117) [116] (sample 5) (R. Small, this report).

Methodology

The bones were recovered from features excavated during trial trenching. Specimens were identified with reference to comparative modern and ancient skeletal material held at the School of Archaeology and Ancient History, University of Leicester. A basic record was compiled for each context, noting information on taxa, the presence of butchery marks, burning, gnawing and pathological conditions. Surface preservation was estimated for each context, following Harland et al (2003). The numbers of measurable, fused and unfused bones and ageable mandibles was noted for the main domestic species. An individual bone record was made for those fragments deemed to have useful ageing, sexing and biometrical information, as well as data with interpretive value such as butchery, burning etc. This was compiled directly into a *pro forma* spreadsheet. Where possible, the anatomical parts present for each skeletal element were recorded using the 'zones' defined by Serjeantson (1996), with additional zones ascribed to mandibles based on Dobney and Reilly (1988). Joining fragments were counted as a single fragment, although a record of the original number of fragments was retained.

Provenance

The majority of the assemblage was recovered from ditches, gullies and pits in Trenches 4, 10, 11, 14, 15, 16, 21, 29, 30 and 31. Based on pottery evidence (Johnson, this report) these ranged in date from the mid-late Iron Age through to the 2nd century AD; the bulk of the assemblage dates from the first half of the 2nd century. The Iron Age pottery was distributed within trenches located towards the middle of the site, however, the Roman pottery was found towards the southern and northern ends of the site. The pottery evidence, although sparse for the transitional period, indicates that there may have been some settlement continuity or at least only a short break in occupation.

For the purposes of this report, remains in Trench 4 are considered to belong to the southern group of features, Trenches 10, 11, 14, 15, 16 to the middle (possibly Iron Age) part of the site and Trenches 21, 29, 30 and 31 to the northern group of Roman features. Although this is a rather crude division, it would appear that features in the northern and southern part of the site (ie Roman) have produced higher numbers of bones than those in the middle of the site (Table 4), which accords with the pottery findings of smaller, more abraded sherds in these areas (Elizabeth Johnson pers. comm).

Preservation and Taphonomy

Surface condition was assessed following Harland et al (2003) (Table 5). Due to the recording method, it was necessary to characterise the 'overall' preservation of each context, rather than every bone fragment. It can therefore be assumed that some contexts will be of mixed preservation. However, the majority of bones (90%) were considered to be in 'good' condition, defined as 'lacks fresh appearance but solid; very localized flaky or powdery'. Only 3% was 'fair' (solid in places but flaky or powdery on up to 49% of specimen) but 7% was poorly preserved, indicating the bone surfaces were 'powdery or

flaky over 50% of specimen. There was no discernable pattern to the distribution of the poorly preserved bones.

The bones exhibited both ancient and modern breakage and there were very few whole bones in the assemblage (n=6). Including the detailed record only, refitting of joining fragments of the same bones reduced the recorded number from 273 to 202. However, bone fragments were in general quite large and, as noted above, relatively un-abraded.

Gnawing occurred on 17 cattle and sheep/goat bones in the assemblage in pit [2], ditch [4], pit [11], layer (66) and pit [144]. Thirty-six bones were burnt; these were predominantly charred rather than calcined and most were recovered from context 1, with a scatter of examples in ditch [4], pit [11] and two contexts (15 and 16) of pit [14].

Table 4: Distribution of bone fragments within Trenches and cuts (shaded bones are from trenches with Iron Age pottery)

	ditch	**gully**	**layer**	**pit**	**Total**
Trench 4					
2				124	124
4	20				20
144				3	3
Trench 10					
136		2			2
138		3			3
Trench 11					
28	1				1
Trench 14					
42				11	11
Trench 15					
56	2				2
Trench 16					
11				13	13
Trench 21					
116	41				41
Trench 29					
92	9				9
53 & 54	11				11
(66)			16		16
Trench 30					
121				2	2
Trench 31					
14				53	53
(blank)					
25				1	1
Total	**84**	**5**	**16**	**207**	**312**

Table 5: Preservation within the assemblage based on numbers of specimens (after Harland et al (2003)

Preservation	ditch	gully	layer	pit	Total
2	67	5	16	192	280
3	7			4	11
4	10			11	21
Total	**84**	**5**	**16**	**207**	**312**

Taxa and Carcass Representation
The assemblage produced evidence for the main domestic species; cattle, sheep/goat and pig, as well as horse and dog (Table 6). Using a simple fragment count, sheep/goat bones dominate, accounting for 33% of identified bones, followed by cattle. The partial skeleton of a human infant was recovered from a ditch in Trench 21. Horse bones were distributed in small numbers across the site. No wild animals were identified during this phase of work and the only avian bone was a domestic fowl ulna recovered from the coarse fraction of ditch [116]. However, a small number of amphibian bones (probably representing a single frog and an accidental casualty) were recovered from pit (1) [2].

The trenches from the middle area of the site (potentially Iron Age) produced 33 bone fragments in total of which only a third were diagnostic to taxa (n=11). The identified taxa were cattle, sheep/goat and horse. By contrast, 279 bones were recovered from trenches at the north and south ends of the site (predominantly Roman), of which 47% were identified. Sheep/goat bones were most frequently recovered among these features.
A range of elements were recovered from most taxa with no clear emphasis on particular parts of the body. No large accumulations of waste attributable to specific activities were identified.

The coarse fraction was scanned and found to consist predominantly of shaft fragments of the main domestic mammals. Many of the fragments were charred or calcined, indicating proximity to domestic fires and perhaps suggesting hearth sweepings. Identifable fragments included a cattle incisor (context (16)) and a domestic fowl ulna from context (117).

Articulated Bones
The articulated leg of a cow was recovered from pit [2], consisting of the right femur, tibia, astragalus and calcaneum. No butchery marks were observed and the state of fusion (proximal and distal femur and proximal tibia fusing) suggested that the animal was aged approximately 42-48 months at time of death (Silver 1969).

A human infant was recovered from ditch [116]. The bones were in good condition and evidently represent a single individual, probably in articulation at the time of deposition. All the bones are small and unfused; they do not appear to be neonatal and may represent a child several months old.

Pathologies and Measurements
A small number of abnormalities were noted in the assemblage. A dog mandible from pit [2] is from a large individual and therefore perhaps likely to be Roman, since this was a period that saw the introduction of both very large and very small types of dog. Two premolars at the front of the jaw have been lost and the sockets have healed over, which may be age-related. A probable horse rib from ditch [116] had a proliferative lesion, manifesting as a thin grey layer of periosteal new bone formation on the visceral surface.

While it is difficult to diagnose any particular condition from this fragment, it would appear to indicate an active respiratory infection or disease. A cattle maxilla from layer (66) exhibited periodontal disease.

The measurements taken during this work have been included in Appendix 3and include both teeth and bones. They indicate size variability among the animal at the site, particularly sheep/goat and may be of use for wider studies.

Table 6: Number of identified fragments in rank order. * from one individual

Taxa	No. Identified Fragments
Sheep/goat	47
Cattle	36
Pig	10
Horse	5
Dog	1
Human	36*
Amphibian	6
Total	*141*

Age Structure

Five mandibles with ageable teeth were recorded for sheep/goat, two for cattle and two for pig (Appendix 3). The sheep/goat mandibles were all from immature or sub-adult animals. The cattle mandibles were from an immature and a mature individual, while the pig mandibles were both from animals in their prime. Measurement of the height of the cheekteeth (after Levine 1982), within a horse mandible from pit 11, suggested that the animal was between 10 and 14 at the time of death. The presence of younger animals in the assemblage is supported by evidence for both fused and unfused epiphyses, for cattle sheep and pig.

Butchery

Two bones exhibited butchery marks; fine cut marks were noted on the distal shaft of a horse metapodial from a gully fill (137) [136], which would have occurred during removal of the hide. A burnt fragment of sheep/goat skull from pit [14] had a cut mark and was also chopped through, possibly sagitally.

Discussion

The faunal remains from features dating from the mid-late Iron Age and late 1st- early 2nd century AD were examined. Most of the animals at the site were domestic, with sheep/goat and cattle making the greatest contribution to the assemblage. The current evidence therefore suggests that cattle and sheep/goat formed the basis of the economy, with pigs less well represented in common with most sites of the period. Horse bones occurred sporadically but from features ranging across the site. Dogs were represented by a single mandible from a large and, possibly aged, individual. However, gnawed bones also provide indirect evidence for dogs. The largest and best preserved group of material was recovered from Context 1, a pit in Trench 4, which included an articulated cattle hind-leg. The partial skeleton of a human infant was recovered from ditch [116], which is likely to be a Roman feature and is of interest. Although probably originally articulated at the time of burial, deposition within a ditch into which animal bones were also disposed, may be further evidence of the differential treatment of infants and adults in this period.

The assemblage has suffered from fragmentation but preservation is generally rather good; bones with both fused and unfused epiphyses have been recovered and evidence for

juvenile mammals has survived. The quantity of material recovered, with some contexts producing more than 50 bone fragments, is also indicative of good preservation and may also suggest that occupation was quite intense, with activities generating a large amount of domestic waste. In addition, articulated material has been recovered, indicative of both primary refuse and a lack of post depositional disturbance. Although a single amphibian in pit [2] was the only small creature recovered, the condition of the assemblage suggests that there is no reason why small species should not be present in a larger sample. All these factors indicate that the site has very good faunal potential should it progress to excavation. Rural Romano-British sites have been identified as a research priority for environmental archaeology in the East Midlands, as animal bone assemblages are currently rare and, when they exist, are often small and poorly preserved (Monckton 2006, 272).

The charred plant remains - Rachel Small

Introduction
Five soil samples were taken from pits located in different areas of the site, dating to the mid-late Iron Age, transitional and Roman period. This was to assess if they contained charred plant remains which are a useful indictor of the environment and activities associated with crop processing.

Method
One part of each sample was wet sieved in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were transferred into plastic boxes; they were left to air dry and were then sorted using an x10-40 stereo microscope. Semi-quantitative counts for grains, chaff, nuts and wild seeds in each sample are detailed (table 1). Identification was made by comparison to modern reference material available at ULAS and the names of plants follow Stace (1991). The residues were transferred to plastic trays; they were left to air dry and the fractions over 4mm sorted for all finds.

Results
All samples were abundant in charred plant remains containing in excess of 50 specimens. Grains, chaff, wild seeds and nut shells were recorded. Species presence/absence will now be discussed in more detail, but first taphonomy will be addressed.

Table 7: Semi-quantitative counts for each sample. Key: + rare (0 – 10 specimens); common (10 – 50 specimens); abundant (50+ specimens). M-L IA: Mid to late Iron Age.

Sample	Context	Cut	Feature	Area	Date	Litres	Grain	Chaff	Nut shells	Wild seeds	Charcoal
1	10	11	Pit	Enclosure B	M-L IA	6	++	+++		+++	++
2	16	14	Pit	South of enclosure D	M-L IA	8	+++	+++	+	+++	+++
3	51	42	Pit	Enclosure A	Transitional	7	+++	+++		+++	++
4	63		Pit	Southern concentration	Roman	8	++	(+)		+++	++
5	117	116	Pit	Enclosure D	Roman	5	+++	+		+++	++

Taphonomy
In sample 4 burrowing snails were present. They had recently died as their shells were still shiny, not opaque. Juveniles were present suggesting a breeding colony. These snails may have caused bio-turbulence within the deposit. Modern rootlets were present in all samples.

Grain and chaff
Grain was present in all samples. Spelt/emmer wheat (*Triticum spelta/dicoccon* L.) was most common. Barley (*Hordeum vulgare* L.) grains were identified in samples 2 – 5. Chaff was present in all samples but in sample 4 and 5 the quantities were lower, both of these samples were Roman. *Triticum* spp. glume bases, some of which could be positively identified as spelt wheat due the presence of obvious lengthwise nerves, were present. A small number of culm nodes were identified and they are probably straw.

Other food crops
A small number hazel nut shell (*Corylus avellana* L.) fragments were present in sample 2, these are generally considered a snack food. Vetches (*Vicia* spp.) were identified and they were commonly grown as a fodder crop. In sample 5 approximately ten pods of wild radish (*Raphanus raphanistrum* L.) were present the roots and leaves of the crop may have been collected as they are edible.

Wild seeds

A number of wild seeds were identified (Table 8). They were primarily associated with arable land but also grasslands and disturbed areas. Goosefoot is generally associated with areas of human occupation. The wild seeds can be classified into three types: small free and light, small free and heavy, and big free and heavy.

Table 8: List of wild seeds identified with comments on their size. Key: SFL – small, free and light; SFH – small, free and heavy; BFH – big free and heavy (Jones 1984). Also, comments on habitat preference (Jones et al 2004).

Scientific name	Common name	Size	Habitat
Bromus sp.	Brome grass	BFH/SFL	Arableland, pastures and wastelands
Chenopodium sp.	Goosefoot	SFH	Damp, nitrogen rich soils
Galium aparine L.	Goosegrass	BFH	Arableland, hedgerows and woodlands
Poaceae - large	Grass - large	BFH	Arableland, grassland, disturbed ground
Polygonum sp.	Knotweed	SFH	Arableland and wastelands
Rumex sp.	Dock	SFH	Arableland, grassland, disturbed ground
Tripleurospermum sp.	Scentless mayweed	SFL	Arableland and wasteland
Veronica hederifolia L.	Ivy-leaved speedwell	BFH	Arableland

Coarse fractions

Fragments of animal bone were the most common type of find, present in all of the coarse fractions except for sample 3; these are discussed in a separate report. Pot was present in samples 3, 4 and 5. Baked clay and charcoal fragments were found in small numbers (Table 8) and a flint flake was present in sample 5.

Table 9: Finds present in coarse fractions. Key: + rare (0 – 10 specimens); common (10 – 50 specimens); abundant (50+ specimens).

Sample	1	2	3	4	5
Bone	+	+++		++	+
Pot			+	+	++
Baked clay		+	+		
Charcoal				+	
Flint					+

Discussion

The charred plant remains are probably indicative of day-to-day waste from small scale cereal processing for consumption. There is possibly evidence of waste from winnowing, small free light seeds and culm nodes; however, they are likely contaminants as they are small in number. The main evidence is for waste from fine-sieving which is small free-heavy seeds, residue from hand-picking which is big free heavy seeds and grain food spillage.

In the Iron Age/Roman period glume wheat cereal crops would have been harvested and then underwent initial processing to remove straw and weeds before storage. The ear of glume wheat breaks into spikelets which consist of two glumes containing two grains and the cereal can be stored in this form. Small amounts would be taken out of storage on a day-to-day basis and be processing to prepare them for consumption. This requires parching and pounding to free the grain, followed by fine sieving to remove the chaff and

weed seeds. Finally hand sorting was probably undertaken to remove any weed seeds left that were similar in size to the grain. The waste would have been disposed of in domestic hearths and become charred along with any grains spilled during cooking. The remains of the hearth would then be raked and disposed of in feature such as pits (Monckton and Hill 2011: 130).

Recommendations for further work

This rich assemblage suggests that if any further excavation work is undertaken on the site, a suitable sampling strategy could provide environmental evidence that could aid in the interpretation of the site.

Counts may indicate differences between areas of the settlement and time periods. For example, a difference has been indicated in the quantity of chaff between the Iron Age and Roman period. Further species may also be identified. If more field work is undertaken an appropriate sampling strategy should be implemented.

9. Discussion

The results from the excavation largely confirms the results of the geophysical survey. The interpretation of the geophysical anomalies has proved very accurate, especially regarding the presence and extent of linear features. The excavations did however reveal the identification of additional discrete features not highlighted by the geophysical interpretation and it would be reasonable to predict that, due to the complexity of archaeology revealed in some of the areas evaluated, further well preserved in-situ archaeological deposits and features might be expected.

The trenching has contributed to our knowledge of prehistoric and Roman landscapes in the area in relation to the research aims identified in the WSI (Score 2014). In particular the information from the excavation of the Iron Age enclosures is important as many of these types of features in Northamptonshire are known only from cropmarks.

The features were generally well preserved, although there was evidence for agricultural activity in the form of furrows and some evidence for truncation of the shallower features. The depths of the archaeological deposits varied with most of the features visible beneath the topsoil between 0.2 – 0.5m deep, but with significantly deeper deposits in the lower, southern part of the site where alluvial deposits were present.

The spread of artefacts suggests activity from the mid-late Iron Age through to the 2nd – 3rd century AD, with the earlier deposits and features concentrated within the centre of the site and Roman activity to the north and south.

Iron Age Features

Enclosure A (Trenches 11-14), Enclosure B (Trenches 13 and 16), Enclosure C (Trenches 15 and 17-19), Roundhouse (Trench 33), Trenches 31-32.

Enclosures A, B and C in the centre of the site contain pottery dating from the Mid – Late Iron Age with a few 1st century AD sherds. These three enclosures appear to be interlinked around a linear feature possibly a trackway running north-west to south-east. The archaeological features were cut into the natural substrata beneath at depths of around 0.2 – 0.4m.

The southernmost enclosure **A** is shown on the geophysical survey as rectangular approximately 50m x 40m (on the longest south-western side). The enclosure ditch comprised a sequence of three ditches approximately 1m deep and the southern boundary appeared to have a parallel internal ditch. Internal features include a small enclosure (*c.* 9m x 11m) and some internal discrete features, not identified by geophysical survey.

The triangular enclosure **B** was approximately 60m x 65m along its western side which appears to utilise the long linear feature, possibly a trackway or land boundary running from the south-east of the site. This was identified as a sequence of three ditches in Trench 34, the most substantial of which was 0.48m deep. The enclosure ditch was between 0.20m-0.30m deep in Trench 16, shallower than the other two enclosures and the fainter anomalies on the geophysical survey could suggest a higher degree of truncation. The survey appears to show an eastern entrance with large terminals.

The largest of the three enclosures, the doubled ditched enclosure **C** was approximately 94m x 90m wide (the internal ditch was 74m x 68m), with an entrance on the eastern side. The external ditch was 4m wide and more than 1.4m deep with at least one recut. Within the south-west corner was an internal sub-circular feature approximately 21m wide and utilising the inner enclosure ditch for part of its boundary and no obvious entrance. Excavation revealed a sequence of several ditches, the deepest of which was *c.* 1m. Internal linear features were also identified including a small square feature identified on the survey in the north-east corner.

The function of these three enclosures is unclear. There is a smaller pottery and animal bone assemblage than from the rest of the site perhaps suggesting a non-domestic function, although substantial remains of charred grain, chaff and wild seeds from internal features in Enclosures A and B, indicate cereal processing close by. The lack of an entrance for either the outer Enclosure A or the smaller internal enclosure might also suggest a non-domestic function.

To the east of this enclosure group was an area that was relatively sparse in archaeological remains. Trenches 31 and 32 also contained features containing Iron Age pottery as well as a pit containing Roman pottery.

Trench 33 which confirmed the geophysical evidence of an isolated roundhouse with a diameter of 24m. Excavation of the northern side of the roundhouse revealed a drainage gully 1.0m wide and 0.38m deep. A number of internal features (some not visible on the geophysical survey) were identified containing 1st century AD pottery.

Roman Features

Although there are small quantities of pottery dating to the mid-late 1st century and late 2nd-early 3rd century, generally the assemblage of Roman pottery dates from the later 1st to the 2nd century, particularly within the first half of the 2nd century. While the southern deposits do appear to run on a similar alignment to the Iron Age activity in the centre of the site, the northern Roman enclosures lie on a different north-south orientation.

South Western area (Trenches 1-5)

The interpretation of the geophysical evidence in the south-west of the proposed development area suggested the survival of complex and dense archaeology. Located at the bottom of a natural gradient, both trenches 2 and 3 contained alluvial deposits in their southern ends and Trench 4 revealed a feature perhaps indicative of quarrying. The excavation of Trenches 4 and 5 revealed significant inter-related layers and deposits extending beneath their limits including features not identified by the geophysical survey. The complexity of the deposits may be exacerbated by sedimentary deposits and outcropping bedrock, particularly in the area around Trench 5.

Pottery was abundant and well preserved from features in this area, particularly from Pit **[02]** (Trench 4) and layer **(96),** (Trench 5), dated to the 1st and 2nd century AD. The animal bone recovered, predominantly from Trench 4 was of domesticated sheep/goat and cattle and abundant grain, wild seeds and charcoal remains from a pit in Trench 5, indicates the high potential for environmental survival.

Overall the evidence taken together indicates well preserved dense archaeological deposits of a domestic nature dating to the 1st and 2nd century. The complex archaeological deposits appear to continue beyond the southern and western extents of the site. Trenches 1 and 10 contained fewer individual features and may represent the eastern and northern extent of the activity.

Roman Enclosures D and E (Trenches 21-22,24, 28-30, 31)

The geophysical survey identified two linked rectangular enclosures towards the north of the proposed development area. The southern enclosure **D** was 80m+ x 73m+ wide. Immediately north, (and utilising the northern boundary of Enclosure D for its southern boundary), Enclosure **E**, measured 93m x 63m+. Excavation confirmed the enclosure ditches to be complex and extensive and over 1m deep. Both enclosures contained numerous internal features. There was also evidence from Trench 29 of buried Roman subsoils **(66)** and archaeological features concealed below them, indicative of the survival of complex archaeological stratigraphy across the northern part of the site.

Abundant pottery from the enclosures suggests a late 1st-mid-2nd century AD date and a young human infant burial appeared to have possibly been deliberately deposited within the boundary ditch of Enclosure D.

West of Enclosure **D** and **E**, and running south-west towards Enclosure C, the geophysical evidence suggested a set of parallel gullies, perhaps representing a track way. The south-east gully was confirmed in both Trenches 20 and 22 but the north-west gully was not identified. The geophysical survey does show these signals as slightly weaker and it is possible that the physical remains had been truncated by ploughing.

Further Roman features were identified at the north-west end of Trench 24, where the land gradient drops of, at a depth of 0.23m, suggesting the good survival of archaeological deposits from the 1st and 2nd century AD along the western perimeter of the development area, although there was evidence that these may be subject to disturbance by sedimentary deposits. A pit continuing Roman pottery was also identified in Trench 31 south of the enclosures.

Archaeologically 'blank' areas. Trenches 6-9; 23, 25-27, 35

Two quieter areas were identified within the site. The area immediately to the north of this area of dense Roman archaeology is traversed by a known water main on a north-west to south-east orientation, likely to have disturbed any archaeological deposits. This area is shown on the geophysical survey as relatively quiet and the excavation of Trenches 6-9 and 35 suggests an area extending approximately 100m north-east from the water main with little evidence for archaeological activity.

North of Trench 24, alluvial deposits were observed in Trench 25 but the northern 200m of the site (Trenches 25-27) were devoid of archaeology.

The Regional Context

The potential for archaeological deposits has long been recognised in this area of Northamptonshire. The Northamptonshire Historic Environment Record (HER) has identified numerous cropmarks and finds scatters in this area suggesting prehistoric and

Romano-British occupation and recent excavation work on the opposite side of the A508, uncovered prehistoric and Roman deposits.

To the south of Pitsford Water an ancient landscape rich in archaeological deposits from the Bronze Age through to the Roman period has been identified (Deegan and Foard 2007; Fig. 6.5) between the villages of Pitsford, Broughton and Moulton on either side of a watercourse. Here the landscape appears to be divided by a series of long linear boundaries with broad or doubler-ditched enclosures abutting them, and this site just to the north would fit into this pattern of this occupation (*ibid*. 99). Continuation from the Iron Age to the Roman period also seems to be a feature of these landscapes, although there is no evidence from the excavations at Brixworth to suggest the utilisation of an older Bronze Age landscape.

Double-ditched enclosures are relatively common in Northamptonshire and many are dated to the Mid – Late Iron Age. Many of the identified examples are of a similar size to the Brixworth enclosures and form part of small enclosure groups. The enclosure at Quinton, south of Northampton for example is a similar sized double ditched enclosure to the Brixworth example with an eastern entrance associated with a group of enclosures utilising a linear boundary feature. The example at Creaton, north-west of Brixworth (also a similar size and with an eastern and western entrance) has smaller enclosures tucked into the corners of the larger features like the Brixworth example (Fig. 69). In both of these examples the inner ditch was narrower than the outer (as in the Brixworth enclosure) and it was suggested that these could have held timber posts to revet an inner bank (*ibid*. 99). Neither of these examples show evidence for interior occupation, beyond the interior square enclosure at Creaton, however, the evidence for Brixworth suggest that there are likely to be internal features that perhaps are not readily visible from cropmark evidence.

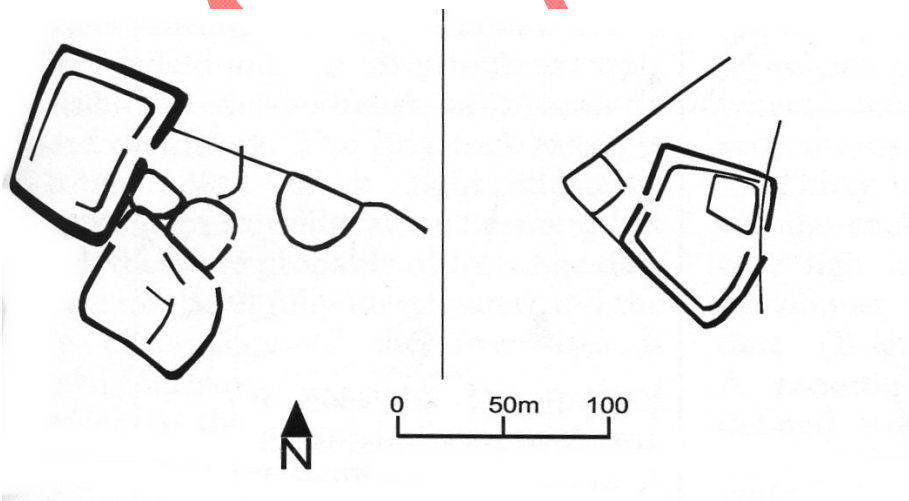

Figure 69: Details of the enclosures at Quinton (left) and Creaton (right). From Deegan and Foard 2007, Fig. 6.15.

It is difficult to identify the function of the Brixworth Iron Age enclosures. The size and steepness of the enclosure ditches might suggest a defensive function or expression of status; however, the small finds assemblage could point to a non-domestic site. While the form is not particularly consistent with a shrine, a ritual aspect to the site cannot be ruled out.

It is hard to say much about the only identified round-house. Unenclosed settlements in Northamptonshire are common, but most are attributed to the Middle – Late Iron Age

(Deegan and Foard 2007, 90). The pottery from the internal pit suggests a later 1st century AD date although it is possible that this feature is later than the ring gully.

The pottery includes transitional types which suggest a continuation from the mid – late Iron Age through to the 2nd – 3rd century, although the Roman landscape at Brixworth is harder to clarify. Many of the deposits are too complex to interpret within trial trenches. Both the northern and southern Roman sites appear to date to the 1st – 2nd century although the difference in orientation might suggest separate phases of occupation or function.

10. Publication

A summary of the work will be submitted for publication in the local archaeological journal in due course. The report has been added to the Archaeology Data Service's (ADS) Online Access to the Index of Archaeological Investigations (OASIS) database held by the University of York.

11. Bibliography

Chartered Institute for Archaeologists (CIfA), 2012 *Codes of Conduct*

Chartered Institute for Archaeologists (CIfA), 2008 *Standards and Guidance for Archaeological Field*

Clapton, A. 2014 *A strip, plan and sample excavation on land at Hill Farm Brixworth.* ULAS Report No.

Cooper. N. (Ed.) 2006 *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda.* Leicester Archaeological Monographs No. 13.

Davies, R. 2014 *Geophysical Survey Report: Pitsford Reservoir, Brixworth, Northamptonshire.* Job Ref. J7470.

Deegan, A. and Foard, G. 2007 *Mapping Ancient Landscapes in Northamptonshire*. English Heritage: Swindon.

Dobney, K. and Reilly, K. 1988 'A method for recording archaeological animal bones: the use of diagnostic zones' *Circaea* **5**, 79-96

Elsdon, S. M., 1992 East Midlands Scored Ware. *Transactions of the Leicestershire Archaeological and Historical Society* **66**: 83-91.

Fraser, S.M., 2000 'The Small Finds' *in* N.J. Cooper, *The Archaeology of Rutland Water*, 105-122. Leicester Archaeology Monograph 6. Leicester: University of Leicester School of Archaeological Studies.

Grant, A., 1982 'The use of toothwear as a guide to the age of domestic ungulates', in Wilson, B., Grigson, C., and Payne, S., (eds) *Ageing and Sexing Animal Bones from Archaeological Sites* Oxford: BAR British Series 109, 91-108

Harland, J. F., Barrett, J. H., Carrott, J., Dodney, K. and Jaques, D. 2003 The York System: an integrated zooarchaeological database for research and teaching. *Internet Archaeology* 13: (http://intarch.ac.uk/journal/issue13/harland_toc.html)

Holbrook, N. and Bidwell, P., 1991 *Roman Finds from Exeter.* Exeter Archaeological Reports: Volume 4. Exeter: University of Exeter Press.

Howe, M. D., Perrin, J. R. and Mackreth, D. F., 1980 *Roman Pottery from the Nene Valley: A Guide.* Peterborough City Museum Occasional Paper No. 2. Peterborough: Peterborough City Museum.

Jackson, D. and Dix, B., 1987 Late Iron Age and Roman settlement at Weekley, Northants. *Northamptonshire Archaeology* **21**: 41-93.

Jackson, D., 2003 Quantification and Assessment of the Pottery from the Hillfort at Hunsbury, Northampton. *Northamptonshire Archaeology* **31**: 137-142.

Johnston, D.E., 1969 Romano-British kilns near Northampton. *Antiquaries Journal* **49**: 75-97.

Jones, G. E. M. 1984 Interpretation of archaeological plant remains: Ethnographic models from Greece. In W. Van Ziest and W. A. Casparie (eds.), *Plants and Ancient Man - Studies in Paleoethnobotany*, 42 - 61. Rotterdam: A.A. Balkema.

Jones, S., Taylor, J. and Ash, F. 1986 (2nd edition 2004). *Seed Identification Handbook: Agriculture, Horticulture and Weeds*. Cambridge: NIAB.

Knight, D., Vyner, B. and Allen, C. 2012 *East Midlands Heritage: An updated research agenda and strategy for the Historic Environment of the East Midlands.* University of Archaeological Resource Centre. June 2014.

Levine, M., 1982 'The use of crown height measurements and tooth eruption sequences to age horse teeth' in Wilson, B., Grigson, C., and Payne, S., (eds) *Ageing and Sexing Animal Bones from Archaeological Sites* Oxford: BAR British Series 109, 223-249

Marney, P. T., 1989 *Roman and Belgic Pottery. Excavations in Milton Keynes 1972-82*. Aylesbury: Buckinghamshire Archaeological Society

Monckton, A. and Hill, A. 2011 The charred plant remains. In J. Thomas (ed.), *Two Iron Age 'Aggregated' Settlements in the Environs of Leicester: Excavations at Beaumont Leys and Humberstone*, (Leicester Archaeology Monograph 19), pg. 124 – 131. Leicester: University of Leicester Archaeology Services.

Monckton, A., 2006 Environmental Archaeology in the East Midlands, in N. Cooper (ed.) *The Archaeology of the East Midlands* Leicester Archaeological Monograph 13, 259-286.

NCC, 2014 *Brief for archaeological work*

Payne, S., and Bull, G., 1988 'Components of variation in measurements of pig bones and teeth, and the use of measurements to distinguish wild from domestic pig remains' *Archaeozoologia* Vol II/1,2, 27-66

Pollard, R., 1994 The Iron Age and Roman Pottery. Pp 51-114 in Clay, P. and Pollard, R., (eds): *Iron Age and Roman Occupation in the West Bridge Area, Leicester. Excavations 1962-1971*. Leicester: Leicestershire County Council Museums, Arts and Records Service.

Serjeantson, D. 1996 'The animal bones' in S. Needham and T. Spence 1996 Refuse and Disposal at Area 16 East Runnymede Vol. II Runnymede Bridge Research Excavations. London: British Museum Press, 194-223

Silver, I, A. 1970 The ageing of domestic animals. In D.R. Brothwell and E.S. Higgs (eds.), *Science in Archaeology: A Survey of Progress and Research* (2nd edition), 283 – 302. New York: Praeger Publishing

Stace, C. 1991 *New Flora of the British Isles*. Cambridge: Cambridge University Press

Timby, J., 2004 The Pottery from Site 3. Pp 72-81 in Mudd, A.: Iron Age and Roman Enclosures near Higham Ferrers: the Archaeology of the A6 Rushden and Higham Ferrers Bypass. *Northamptonshire Archaeology* **32**: 57-93.

Timby, J., 2009 The Roman Pottery. Pp147-184 in Lawrence, S. and Smith, A.: *Between Villa and town. Excavations of a Roman roadside settlement and shrine at Higham Ferrers, Northamptonshire.* Oxford: Oxford Archaeology Monograph 7.

Tomber, R. and Dore, J., 1998 *The National Roman Fabric Reference Collection.* London: Museum of London Archaeology Service.

ULAS, 2013 Written Scheme of Investigation for Archaeological Work. Job No. 15-315.

von den Driesch, A 1976 *A guide to the measurement of animal bones from archaeological sites.* Cambridge, Mass., Peabody Museum of Archaeology and Ethnology, Bulletin no. 1.

Webster, P., 1996 *Roman Samian Pottery in Britain. Practical Handbooks in Archaeology no. 3.* York: Council for British Archaeology.

12. Acknowledgements

The fieldwork, supervised by Steve Baker, was undertaken on behalf of Acreage Strategic Land Estates, and was carried out by Chloe Cronogue-Freeman, Cathryn Shean, Adam Clapton, James Harvey, Donald Clark, Paul Sharrock, Andy McLeish and Richard Huxley. Thanks to Paul Toone for his help during the project. Vicki Score managed the project. Liz Mordue (County Archaeological Advisor of Northamptonshire County Council) monitored the work on behalf of the planning authority.

Author contact details:

****

Mr. Stephen Baker
Archaeological Supervisor
University of Leicester Archaeological Services,
School of Archaeology & Ancient History,
University of Leicester, LE1 7RH.

Tel: 0116 252 2836
Fax: 0116 252 2614
E-mail: sb390@le.ac.uk

University of Leicester
Archaeological Services

Appendix 1: Trench summaries

TRENCH	ORIENTATION	LENGTH AND WIDTH (metres)	TOPSOIL THICKNESS (metres)	SUBSOIL THICKNESS (metres)	TRENCH DEPTH (MIN-MAX metres)	Depth to arch/natural	DESCRIPTION/MAIN CONTEXTS
1	N-S	30 x 1.80	0.24-0.33	0.08-0.20	0.41-0.60	0.39-0.46	Gullies [59] [61] Alluvium at S end
2	NW-SE	30 x 1.80	0.33-0.50	0.15-0.47	0.61-1.84	0.70-0.80	Gully [65] Alluvium at S end
3	N-S	30 x 1.80	0.18-0.46	0.11-0.35	0.53-1.17	0.38-0.81	Gully [09]
4	NE-SW	32.5 x 1.80	0.11-0.28	0.08-0.15	0.18-0.46	0.17-0.41	Linear [140], Gully [142], Pit [144]
5	NE-SW	30 x 1.80	0.15-0.27	0.13-0.37	0.30-0.60	0.29-0.60	Linear [43], Pit [45], Structure? (94), Burnt spread (95)
6	NW-SE	30 x 1.80	0.22-0.26	0.21-0.36	1.14-0.98	0.43-0.62	No archaeological deposits
7	NW-SE	25 x 1.80	0.16-0.26	0.04-0.16	0.30-0.35	0.26-0.33	No archaeological deposits
8	NE-SW	30 x 1.80	0.23-0.28	0.03-0.11	0.29-0.35	0.23-0.35	No archaeological deposits
9	NW-SE	30 x 1.80	0.23-0.35	0.13-0.24	0.40-0.73	0.36-0.59	No archaeological deposits
10	N-S	30 x 1.80	0.25-0.50	0.10-0.48	0.35-0.98	0.35-0.98	Gullies [132] [136] [138]
11	NE-SW	30 x 1.80	0.23-0.33	0.18-0.31	0.52-0.66	0.48-0.61	Ditches [28] [80] [82] [84]
12	NW-SE	30 x 1.80	0.22-0.30	0.04-0.20	0.33-0.56	0.29-0.54	Ditches [165] [167] (unexcavated)
13	NE-SW	25 x 1.80	0.23-0.28	0.05-0.14	0.33-0.44	0.28-0.44	No archaeological deposits observed
14	NW-SE	25 x 1.80	0.19-0.24	0.05-0.13	0.30-0.43	0.24-0.36	Pit [42], Ditch [33], Pit [169] (unexcavated)

15	NE-SW	30 x 1.80	0.20-0.28	0.08-0.19	0.35-0.51	0.31-0.44	Ditches [55] [56] [57] [113] [92] [99]
16	NE-SW	30 x 1.80	0.21-0.30	N/A	0.34-0.50	0.20-0.30	Pit [11], Ditch [13]
17	E-W	25 x 1.80	0.21-0.27	0.08-0.17	0.32-0.55	0.31-0.44	Ditch [156]
18	NE-SW	25 x 1.80	0.22-0.27	0.06-0.27	0.28-0.37	0.27-0.36	Furrow? [39]
19	NE-SW	30 x 1.80	0.21-0.28	0.06-0.20	0.28-0.63	0.22-0.40	Ditches [160] [171] (unexcavated)
20	NE-SE	30 x 1.80	0.23-0.32	N/A	0.24-0.33	0.25-0.32	Gully [38]
21	NW-SE	30 x 1.80	0.28-0.34	0.40-0.46	0.32-0.59	0.30-0.46	Ditches [116] [118] [149]
22	NW-SE	30 x 1.80	0.28-0.32	0.08-0.23	0.30-0.53	0.30-0.53	Pit [67], Linear [97]
23	NE-SW	30 x 1.80	0.20- 0.25	0.06-0.16	0.34-0.55	0.26-0.41	No archaeological deposits
24	N-S	30 x 1.80	0.23-0.33	0.11-0.13	0.24-0.75	0.23-0.41	Ditch [151], contexts (152)-(155)
25	E-W	25 x 1.80	0.37-0.53	0.26-0.94	0.63-1.63	0.14-0.75	No archaeological deposits
26	NW-SE	30 x 1.80	0.28-0.36	0.29-0.50	0.68-0.90	0.66-0.82	No archaeological deposits
27	N-S	30 x 1.80	0.21-0.27	0.05-0.26	0.26-0.56	0.25-0.53	No archaeological deposits
28	N-S	30 x 1.80	0.17-0.26	0.20-0.25	0.23-0.32	0.23-0.30	Ditch [74], Gullies [76] [78]
29	N-S	30 x 1.80	0.20-0.30	0.11-0.43	0.39-0.80	0.62-0.70	Layer (66) (115), Gully [71] [129], Post-holes [73] [131], Ditches [53] [54] [127] [125]
30	NE-SW	30 x 1.80	0.20-0.30	0.06-0.20	0.28-0.63	0.25-0.45	Pit [121], Ditch [123]
31	N-S	30 x 1.80	0.22-0.33	0.06-0.33	0.30-0.71	0.30-0.63	Ditch [06], Pit [14] [25], Layers (16) (17) (18)
32	N-S	30 x 1.80	0.20-0.33	0.09-0.16	0.30-0.47	0.30-0.47	Gully [173]

33	N-s	30 x 1.80	0.20-0.22	0.10-0.19	0.35-0.44	0.32-0.39	Post-hole [87], Pit [89], Gully [91]
34	NE-SW	30 x 1.80	0.20-0.30	0.05-0.14	0.35-0.45	0.33-0.38	Ditches [20] [22] [24]
35	E-W	30 x 1.80	0.24-0.28	N/A	0.30-0.36	0.25-0.30	No archaeological deposits

Appendix 2: Pottery Catalogue

Tr	Cut	Cont	Fabric	Form	Type	Decoration	Shds	Wgt (g)	Diam (cm)	EVEs	Dating
4	2	1	SHELL	Jar	channel rim	diagonal scoring, notches on rim	3	132	26	0.1	1stC
4	2	1	SHELL	Jar	rounded		1	4	14	0.05	1stC
4	2	1	SHELL	Jar	channel rim	diagonal scoring, notches on rim	4	93	24	0.05	1stC
4	2	1	SHELL	Jar		1x rilling	5	56			1stC
4	4	3	WWGR	Jar		rilled	1	47			late1st-mid2ndC
4	4	3	GREY	Jar	everted		1	7	12	0.05	late1st-2ndC
4	4	3	MK9	Jar			3	74			late1stC+
16		10	SH2	Jar		scored x1	2	18			M-LIA
16		10	GRSH	Jar	upright slightly everted		1	8	16	0.05	M-LIA
16		10	GRSH	Jar	upright		1	6	12	0.075	M-LIA
31	14	15	SH2	Jar		misc vessels	6	56			M-LIA
31	14	15	GRSH	Jar		scored x1	5	53			M-LIA
31	14	15	Qt	Jar	upright flattened		3	22	12	0.12	M-LIA
31	14	15	SH1	Jar	rounded		1	10	12	0.05	M-LIA
31	14	16	SH1	Jar		scored x3	8	95			M-LIA
31	14	17	SH1	Jar			11	39			M-LIA
31	25	27	SGSam	Dish			1	2			late1st-mid2ndC
31	25	27	MK14	Jar	pulley rim		1	22	12	0.18	late1st-mid2ndC
31	25	27	MK14	Jar			2	130			late1st-mid2ndC
31	25	27	MK9	Misc			1	1			late1stC+
31	25	27	GREY	Jar		misc vessels	2	19			late1stC+
31	25	27	GREY	Beaker		pedestal	5	102			late1stC+
14	33	29	GREY	Misc		tiny frags	3	1			late1stC+
11	28	36	GR	Misc		tiny frags	4	2			M-LIA
14	42	41	SHELL	Misc			1	4			mid-late1stC
14	42	41	GR	Misc		prob jars	6	52			mid-late1stC
5		44	MK14	Bowl	curved flat		1	19	22	0.1	early-mid2ndC
5		46	SHELL	Jar	outcurved		2	42	19	0.075	2ndC
30		47	MK9	Bowl	flat	copy BB1	1	9	20	0.05	2ndC
29		52	SH2	Jar			1	13			M-LIA
5		63	CGSam	Cup	O&P 13		1	22	12	0.25	2ndC
5		63	BWHGR	Jar	channel rim	misc vessels	9	147	14	0.15	late1st-mid2ndC
5		63	OWGR	Jar			1	42			late1st-mid2ndC
5		63	GYGR	Jar		misc vessels	6	47			late1st-mid2ndC
5		63	OXIDF	Beaker	cornice rim	roughcast	26	123	11	0.325	2ndC
5		63	OXID	Jar			2	18			2ndC+

5		63	OXID	Jar	rounded		2	73	12	0.57.5	2ndC+
5		63	GREY	Bowl	flat rounded	lattice dec	6	85	18	0.18	2ndC
5		63	MK9	Bowl			3	290	28	0.31	late1st-2ndC
5		63	MK9	Jar	channel rim		1	40	16	0.19	late1st-mid2ndC
5		63	GREY	Beaker/ Flask	rounded		1	6	9	0.16	late1st-2ndC
5		63	GREY	Beaker	everted		1	9	9	0.175	late1st-2ndC
5		63	GREY	Jar	misc	inc lattice, burnishing, cordons	18	141			late1st-2ndC
29		66	LNVCC	Beaker		roulette	1	7			late2nd-early3rdC
29		66	LNVCC	Misc			1	6			late2nd-early3rdC
29		66	DORBB1	Bowl	grooved rim		2	11	16	0.05	late2nd-early3rdC
29		66	GYF	Misc	jar/beaker	burnished	1	3			2ndC+
29		66	GREY	Misc	jars prob		6	56			2ndC+
29		66	SHELL	Misc	jars prob		2	10			2ndC+
29		66	BWHGR	Jar			1	9			late1st-mid2ndC
22	67	68	GRSH	Jar	outcurved		1	24	12	0.1	1stC
22	67	68	SHELL	Jar			1	8			1stC
22	67	68	GRSH	Jar			2	45			1stC
3		69	CGSam	Cup	Dr33		1	8	10	0.075	2ndC
3		69	MK18c	Jar	rounded	cordoned, brown painted bands	1	181	20	0.225	2ndC
3		69	GREY	Dish/bowl	plain	burnished	1	17	18	0.11	2ndC
29	71	70	BWHGR	Jar	channel rim		1	25	15	0.125	late1st-mid2ndC
29	71	70	GREY	Jar		misc vessels	4	20			late1st-2ndC
29		72	OXGR	Misc	jar/bowl		1	16			late1st-mid2ndC
29		72	MK9	Misc	jar prob		2	10			1stC
29		62	GREY	Jar		inc barbotine dot panel x1	7	60			late1st-early2ndC
11	80	81	GREY	Misc			1	1			late1stC+
33	89	88	SHELL	Misc			2	2			1stC
33	89	88	GR1	Misc		quite fine	1	1			1stC
5		96	OXID	Jar			1	6			late1st-2ndC
5		96	BHWSY	Jar			3	52			late1st-2ndC
5		96	BHWGR	Jar/bowl			6	52			late1st-mid2ndC
5		96	OXGR	Jar			4	46			late1st-mid2ndC
5		96	BOXGR	Misc	jar prob		1	29			late1st-mid2ndC
5		96	BGYGR	Jar	channel rim		3	160	36	0.125	late1st-mid2ndC
5		96	DORBB1	Jar	misc		11	108			2ndC+
5		96	MK9	Misc			3	31			2ndC+
5		96	GREY	Jar	everted		1	14	12	0.1	2ndC+
5		96	GREY	Jar	everted		1	7	13	0.1	2ndC+
5		96	GREY	Jar	everted		1	8	11	0.2	late1st-2ndC

5		96	GREY	Jar	misc	inc lattice, burnishing, cordons	23	172			late1st-2ndC+
5		96	GREY	Bowl		chamfered	2	56			2ndC
15	92	102	SHELL	Jar	rounded, outcurved	misc vessels	5	18	12	0.075	1stC
15	92	102	GRSH	Misc		abraded	2	7			LIA-1stC
15	99	105	GRSH	Misc		abraded	2	11			LIA-1stC
15	55	108	GR	Jar	upright flattened	carinated	2	14	12	0.075	M-LIA
15	55	110	GRSH	Jar	upright	carinated	1	9			M-LIA
15	55	110	SH2	Jar			3	47			M-LIA
17	156	111	GR1	Jar	upright	scored x8	19	123			M-LIA
15	57	112	SH3	Misc			1	4			M-LIA
15	57	112	GR	Jar/bowl	prob jars		5	35			M-LIA
29		115	OXGR	Jar			2	73			late1st-mid2ndC
29		115	BWHGR	Jar			1	30			late1st-mid2ndC
29		115	SHELL	Jar	channel rim	2 vessels	2	39	26	0.05	mid-late1st-2ndC
29		115	MK9	Jar	round everted	almost bead rim	4	52			late1st-2ndC
29		115	GREY	Jar			2	9			late1st-2ndC+

Tr	**Cut**	**Cont**	**Fabric**	**Form**	**Type**	**Decoration**	**Shds**	**Wgt (g)**	**Diam (cm)**	**EVEs**	**Dating**
21		117	GREY	Jar	rounded outcurved		45	1500	18	0.8	2ndC
21		117	BOXGR	Jar	rounded outcurved	big s/jar	43	2987	32	0.51	late1st-mid2ndC
21		117	OXGR	Jar			7	157			late1st-mid2ndC
21		117	BWHGR	Jar			1	54			late1st-mid2ndC
21		117	MK14	Beaker		barbotine dot panels	4	62			2ndC
21		117	MK14	Jar	rounded outcurved	cordoned	1	47	10	0.4	2ndC
21		117	GREY	Jar	rounded outcurved		1	42	16	0.075	2ndC
21		117	MK9	Jar			6	101			late1st-2ndC
21		117	GREY	Jar		misc vessels	19	222			2ndC+
30		120	GREY	Misc			1	7			2ndC+
29	125	124	OXGR	Jar			1	34			late1st-mid2ndC
4	144	145	OXGR	Jar			1	61			late1st-mid2ndC
4	144	146	OXGR	Jar			1	63			late1st-mid2ndC
4	144	146	GREY	Jar	rounded outcurved	burnished	1	28	16	0.075	2ndC
4	144	146	GREY	Jar/bowl	rounded outcurved	cordoned	2	78	24	0.075	2ndC
24	151	152	SHELL	Misc			1	1			late1stC+
24		153	MK47	Misc		abraded	2	8			late1st-early2ndC
24		154	SA	Misc		abraded	5	3			1stC
24		155	SA	Misc		abraded	2	3			1stC
24	151	158	MK47	Misc	jar/bowl		1	12			late1st-early2ndC

Appendix 3: Animal Bone Catalogue and tables

	sheep/goat	cattle	pig	horse	dog	human	amphibian	Total
Trench 4								
	28	**12**	**5**	**1**	**1**		**6**	**147**
2	23	9	4	1	1		6	124
4	4	3	1					20
144	1							3
Trench 10								
	1	**1**		**1**				**5**
136	1			1				2
138		1						3
Trench 11								
		1						**1**
28		1						1
Trench 14								
								11
42								11
Trench 15								
		1						**2**
56		1						2
Trench 16								
	3	**1**		**1**				**13**
11	3	1		1				13
Trench 21								
	1	**1**		**1**		**36**		**41**
116	1	1		1		36		41
Trench 29								
	3	**6**						**36**
92		2						9
53 & 54	1							11
(66)	2	4						16
Trench 30								
								2
121								2
Trench 31								
	11	**12**	**5**	**1**				**53**
14	11	12	5	1				53
Trench ?								
		1						**1**
25		1						1
Total	**47**	**36**	**10**	**5**	**1**	**36**	**6**	**312**

Anatomical parts represented for the most frequent taxa

Anatomical Region	Element	No.(fragment count)
cattle		
Head	maxilla	2
	mandible	6
	upper teeth	2
	lower teeth	3
Forelimb	humerus	1
	radius	5
Shoulder/hip girdle	scapula	1
	pelvis	1
Hind-limb	femur	1
	tibia	3
Feet	metatarsal	2
	astragalus	1
	calcaneum	2
horse		
Head	mandible	2
	cheek teeth	3
Thorax	rib shaft	1
Feet	metatarsal	1
	metapodial	1
pig		
Head	mandible	4
	maxilla	1
Forelimb	ulna	1
Hind-limb	tibia	1
	fibula	1
Feet	lateral metapodial	1
sheep/goat		
Head	zoned skull	1
	maxilla	2
	premaxilla	2
	mandible	6
	upper teeth	3
	lower teeth	2
	hyoid	1
Forelimb	humerus	2
	radius	5
Shoulder/hip girdle	scapula	2
	pelvis	3
Hind-limb	femur	1
	tibia	5
Feet	1st phalanx	1
	metacarpal	2
	metatarsal	1

human		**17**
Head	incisor	1
	cranium	1
	mandible	1
Shoulder girdle	clavicle	1
	scapula	2
Arm	humerus?	1
	ulna	1
Torso	vertebral fragments	1
	rib shaft	3
Leg	femur	2
	tibia	2
	fibula	1

Measurements of teeth within the assemblage (after von den Driesch 1976 and Payne and Bull 1988)

Context	Taxon	Element	L	WA	WP	H
1	cattle	ldp4	30.4	8.2		
3	cattle	ldp4	29.5	11.6		
3	cattle	lm1	25.8	11.5		
3	cattle	lm2	28.5	12.4		
15	cattle	lm3	32.8	14.8		
16	cattle	lm3	34.2	15.3		
1	dog	lm2	11.6	9.2		
10	equid	lp2	32.47	16.6		
10	equid	lp3	27.9	19.2		
10	equid	lp4	30	18.4		31.1
10	equid	lm1	25.8	16.8		34
10	equid	lm2	27.9	15.1		33.7
10	equid	lm3	33.8	12.6		38.8
1	pig	dp4	18.8		8.2	
15	pig	lm3	34.7	14.7	9.9	
15	pig	Lm3	29.8	15.3	9.9	
16	pig	Lm2	19.1	11.9	12	
16	pig	lm2	19.1	11.9	12	
16	pig	lm3	30.6	14	10.3	
1	sheep/goat	ldp4	17	6.3		
1	sheep/goat	ldp4	16.1	5.9		
1	sheep/goat	lm1	14.7	6.2		
1	sheep/goat	lm1	14.6	6.2		
10	sheep/goat	dp4	16.9	6		
10	sheep/goat	lm1	14.2	6		
66	sheep/goat	lm1	11.3	7		
66	sheep/goat	lm1	11.3	7		
66	sheep/goat	m2	15.1	7.5		

Key: lm=lower molar; dp=deciduous premolar; l=lower

Measurements of bones within the assemblage (after von den Driesch 1976)

Cntxt	Taxon	Element	GL	Bp	Bd	SD	Dd	Bt	HTC	GLl	GLm	DC	H
1	cattle	tibia			57.1								
1	cattle	femur			85							40.4	
1	cattle	astragalus			37.3					57.4	50.4		
1	sheep/goat	tibia			24.1								
1	sheep/goat	ramus (mandible)											70.6
1	dog	ramus (mandible)											72.3
66	cattle	radius		72.1									
17	cattle	metatarsal			46.6								
3	cattle	metatarsal		43.4									
3	sheep/goat	humerus					26.2	25	12.1				
137	sheep/goat	metacarpal	128.5	22.2	25.5	13.8	15.1						
66	cattle	radius		72									

Tooth eruption and wear stages within the assemblage (after Grant 1982)

Context	Taxon	Element	dp4	m1	m2	m3	Age Stage
1	sheep/goat	mandible	f	b			I
1	sheep/goat	mandible	g	d			I
1	sheep/goat	mandible	g				I
3	cattle	mandible	j	f	a		I
10	sheep/goat	mandible	g	c			SA
15	pig	mandible				d	A2
16	pig	mandible			e	b	A2
16	cattle	lm3				g	A3
66	sheep/goat	mandible		g	f		SA

State of epiphyseal fusion within the assemblage on post-cranial bones Key u=unfused, f=fused; g=fusing (fusion line is still visible)

Context	NISP	Taxon	Element	Proximal
27	1	cattle	calcaneum	u
1	1	cattle	femur	g
3	1	cattle	metatarsal	f
1	1	cattle	pelvis	f
66	1	cattle	radius	f
66	1	cattle	radius	f
1	1	cattle	tibia	g
66	1	cattle	tibia	g
66	1	cattle	tibia	g
10	3	large mammal	thoracic vertebra	u

3	1	pig	lateral metapodial	f
1	1	pig	ulna	u
1	1	sheep/goat	1st phalanx	u
15	1	sheep/goat	metacarpal	f
137	1	sheep/goat	metacarpal	f
1	1	sheep/goat	pelvis	u
117	1	sheep/goat	pelvis	f
1	1	sheep/goat	radius	f
1	1	sheep/goat	radius	f
				Distal
1	1	cattle	femur	g
10	1	cattle	humerus	f
17	1	cattle	metatarsal	f
15	1	cattle	radius	f
66	1	cattle	radius	g
66	1	cattle	radius	g
1	1	cattle	tibia	f
10	3	large mammal	thoracic vertebra	u
1	1	pig	fibula	u
3	1	pig	lateral metapodial	f
1	1	pig	tibia	u
1	1	sheep/goat	1st phalanx	f
3	1	sheep/goat	humerus	f
137	1	sheep/goat	metacarpal	f
1	1	sheep/goat	tibia	f
1	1	sheep/goat	tibia	u
1	1	sheep/goat	tibia	u
15	1	sheep/goat	tibia	f

Appendix 4: OASIS RECORD

ID	OASIS entry summary
Project Name	An Archaeological Evaluation by trial trenching on Land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire
Summary	University of Leicester Archaeological Services (ULAS) carried out an archaeological evaluation by trial trenching on land off the A508, Pitsford Reservoir, Brixworth, Northamptonshire.The work was undertaken as part of an archaeological impact assessment in advance of a proposed residential development. The evaluation targeted known geophysical anomalies and revealed archaeological deposits consisting of ditches, gullies, postholes representing a series of enclosure systems, property/land boundaries, possibly structures, evidence for intensive local occupation and dating from the mid Iron Age through to the early 3rd century AD. The site archive will be held by ULAS, accession no. NH_Brix2014, until a recipient organization for Northamptonshire has been established.
Project Type	Trial Trenching
Project Manager	Vicki Score
Project Supervisor	Steve Baker
Previous/Future work	Future: Possible
Current Land Use	Pasture/agricultural
Development Type	Commercial
Reason for Investigation	PPS5
Position in the Planning Process	Pre-planning
Site Co ordinates	SP75076 69372
Height OD	
Start/end dates of field work	27th October-17th November
Archive Recipient	Northamptonshire County Council
Study Area	7 hectares
Associated project reference codes	NH_Brix2014

Contact Details

Richard Buckley or Patrick Clay
University of Leicester Archaeological Services (ULAS)
University of Leicester,
University Road,
Leicester LE1 7RH

T: +44 (0)116 252 2848
F: +44 (0)116 252 2614
E: ulas@le.ac.uk
w: www.le.ac.uk/ulas

University of Leicester
Archaeological Services

REGISTERED ORGANISATION IfA

INVESTOR IN PEOPLE