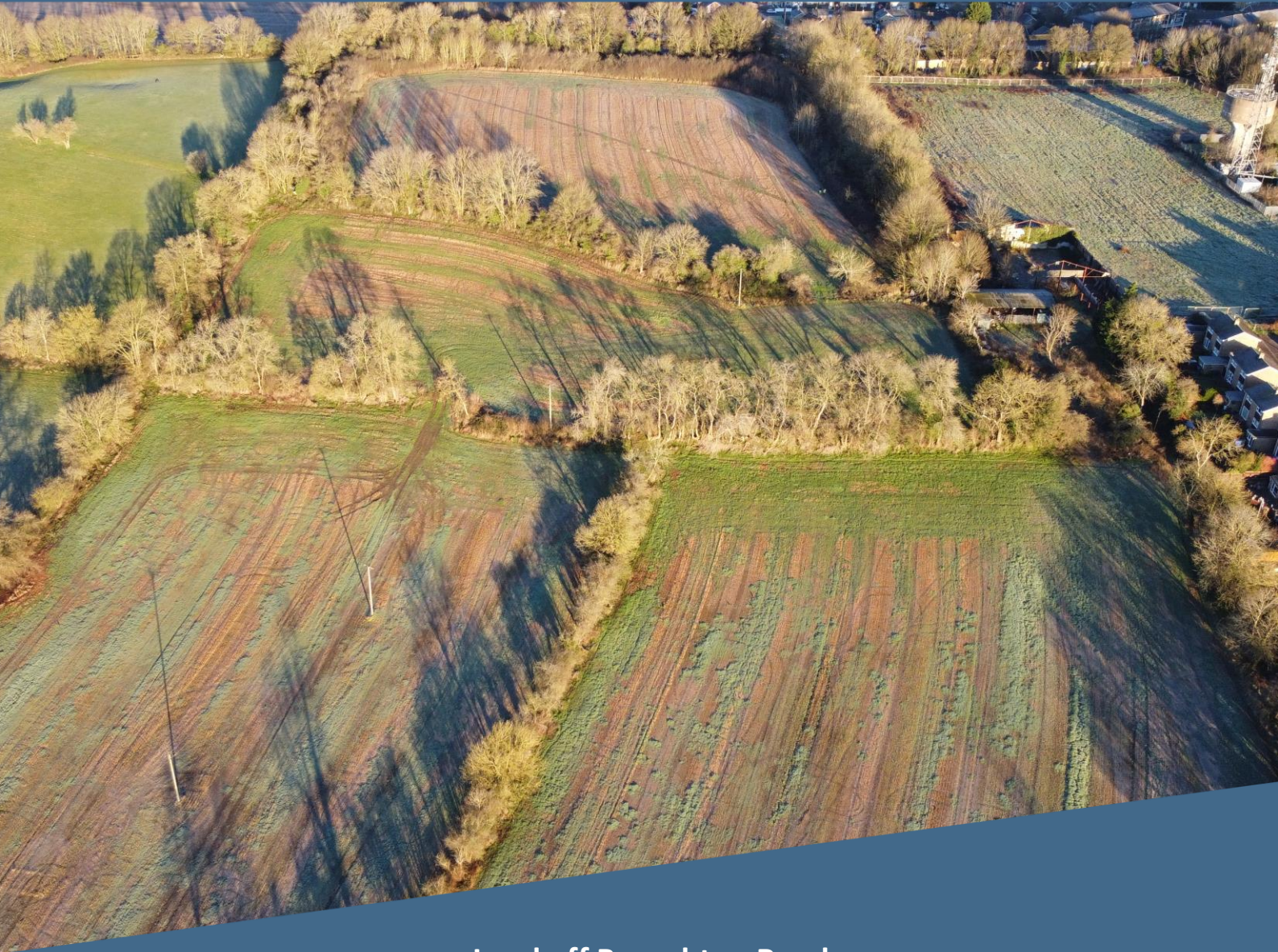


Archaeological Field Evaluation



**Land off Broughton Road
Bretch Hill
Banbury
Oxfordshire**

On behalf of

Environmental Dimension Partnership Ltd

April 2022

GENERAL ENQUIRIES

e: info@borderarchaeology.com **t:** 01568 610101 **w:** borderarchaeology.com

Administration

The Plaza, Owen Way, Leominster Enterprise Park, Leominster, HR6 0LA

Post-Ex Facility – Leominster

t: 01568 610101
e: postex@borderarchaeology.com

Post-Ex Facility – Milton Keynes

t: 01908 533233
e: postexmk@borderarchaeology.com

REGIONAL OFFICES

Milton Keynes

Unit 4, Twizel Close
Stonebridge
Milton Keynes
MK13 0DX
t: 01908 533233

Leeds

No 1 Leeds
26 Whitehall Road
Leeds
LS12 1BE
t: 0113 8187959

London

4-4a Bloomsbury Square
London
WC1A 2RP
t: 02033 015670

Newport

Merlin House
No1 Langstone Business Park
Newport
NP18 2HJ
t: 01633 415339

Bristol

First Floor,
Citibase Bristol Aztec West
Aztec Centre, Aztec West
Almondsbury
Bristol
BS32 4TD
t: 0117 9110767

Winchester

Basepoint Business Centre
Winnall Valley Road
Winchester
SO23 0LD
t: 01962 832777



COMPILATION

Mark Sargent BA (Hons.) PCIfA

ARTWORK

Holly Litherland BA (Hons.)

Stuart Forsythe BSc (Hons.) ACIfA

FINAL EDIT & APPROVAL

Lyndsey Clark BSc (Hons.) ACIfA

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Contents:

1	Non-Technical Summary.....	4
2	Introduction.....	5
3	Site Description.....	5
3.1	Soils & geology.....	5
4	Brief Historical & Archaeological Background.....	5
4.1	Prehistoric & Romano-British	6
4.2	Medieval	6
4.3	Post-medieval & Modern	6
4.4	Previous Investigations.....	7
4.5	Geophysical Survey.....	7
5	Aims & Objectives.....	7
6	Methodology	7
6.1	Site specific	8
6.2	Recording.....	8
6.3	Palaeoenvironmental/Palaeoeconomic Sampling	9
6.4	Recovery, Processing and Curation of Artefactual Data	9
7	Results	10
7.1	Trench 001.....	10
7.2	Trench 002.....	10
7.3	Trench 003.....	12
7.4	Trench 004.....	14
7.5	Trench 005.....	15
7.6	Trench 006.....	15
8	Discussion and significance of results	16
9	Copyright	17
10	References	18
11	Appendix 1: Figures & Plates	19
12	Appendix 2: Context Tabulation	38
13	Appendix 3: Assessment of the Pottery	48
13.1	Introduction.....	48

13.2 Methodology	48
13.3 Fabrics.....	49
13.4 Dating	50
13.5 Discussion	51
13.6 Recommendations.....	51
13.7 References	51
14 Appendix 4: Palaeoenvironmental Report	52
14.1 Non-Technical Summary.....	52
14.2 Introduction.....	52
14.2.1 Site Description	52
14.2.2 Soils and Geology.....	53
14.3 Methodology	53
14.3.1 Objectives	53
14.3.2 Methodology	53
14.3.3 Personnel	53
14.4 Description and methodology of materials.....	53
14.4.1 Finds	54
14.4.2 Bone	54
14.4.3 Shell.....	54
14.4.4 Charcoal	55
14.4.5 Slag.....	55
14.4.6 Uncharred archaeobotanical material.....	55
14.4.7 Charred archaeobotanical material	56
14.5 Description of results.....	56
14.5.1 [001004]: (001005)	56
14.5.2 [002004]: (002005)	57
14.5.3 [002006]: (002007)	57
14.5.4 [002008]: (002009)	57
14.5.5 [002010]: (002011)	57
14.5.6 [003004]: (003005)	57
14.5.7 [003006]: (003007)	58
14.5.8 [003008]: (003009)	58

14.5.9 [003010]: (003011)	58
14.5.10 [003012]: (003013)	58
14.5.11 [003015]: (003016)	59
14.5.12 [003017]: (003018)	59
14.5.13 [003019]: (003020)	59
14.5.14 [003021]: (003027)	59
14.5.15 [003022]: (003028)	60
14.5.16 [003026]: (003030)	61
14.5.17 [004004]: (004005)	61
14.5.18 [005006]: (005007)	61
14.5.19 [006004]: (006005)	61
14.5.20 [006006]: (006007)	62
14.5.21 [006008]: (006009)	62
14.6 Table of results	62
14.7 Conclusions and recommendations	64
14.7.1 Recommendations	64
14.8 Copyright	64
14.9 References	64
15 Appendix 5: Faunal Assessment	67
15.1 Introduction	67
15.2 Methodology	67
15.3 Results	67
15.3.1 Preservation	67
15.3.2 Species Representation	67
15.3.3 Ageing	68
15.3.4 Butchery	69
15.3.5 Pathology	69
15.4 Environmental Sampling Recovery	75
15.5 Conclusions	75
15.6 Recommendations	75
15.7 References	75

1 Non-Technical Summary

This report details the results of a programme of Archaeological Field Evaluation undertaken between the 17th and 28th January 2022 in connection with a proposed residential development on Land off Broughton Road, Bretch Hill, Banbury (NGR: SP 43745 39867). The works were carried out for Environmental Dimension Partnership Ltd (EDP) on behalf of Lone Star Land Ltd following a request by Richard Oram, Lead Planning Archaeologist Oxfordshire County Council (LPAOCC).

The Site, which was located on the SW outskirts of Banbury, measured c. 31100sqm and occupied four pastoral fields delineated by the trees and hedgerows of the surrounding farmland to the W and N, Broughton Road to the S, with housing and areas of agreed development bounding its eastern extent.

A total of nine evaluation trenches, representing 2% of the development area, were set out across the Site to target the anomalies identified in the geophysical survey (Cockcroft and Gater 2021) and to provide a comprehensive assessment of the Site's archaeological and palaeoenvironmental potential. Seven of these were located on a plateau to the N where the geophysical survey identified three circular features that were interpreted as possible roundhouses, along with remains of other possible structures and features (Cockcroft and Gater 2021); the other two trenches were excavated to the S along the proposed drainage route toward Broughton Road and the location of a proposed drainage basin.

Of the nine trenches excavated, six contained archaeological features of interest (Trenches 001-006), comprising several ditches, pits and a possible trackway/surface. The dating of these features is based on the recovered pottery assemblage, which is largely of Iron Age date. Several Post-medieval features conforming to the former ridge and furrow cultivation patterns identified on the geophysical survey (Cockcroft and Gater 2021) were also present within Trenches 003, 004, 005 and 007, while a possible quarry pit of Post-medieval or modern date was identified within Trench 002.

The results of this programme of AFE confirm the presence of Iron Age settlement and agricultural activity.

2 Introduction

Border Archaeology (BA) was instructed by Environmental Dimension Partnership Ltd (EDP) on behalf of Lone Star Land Ltd to carry out a programme of Archaeological Field Evaluation (AFE) of Land off Broughton Road, Bretch Hill, Banbury (NGR: SP 43745 39867; *fig.1*) in connection with the erection of up to 49 dwellings, associated open space, sustainable urban drainage systems and access from Balmoral Avenue.

The AFE, which was undertaken at the request of Richard Oram, Lead Planning Archaeologist Oxfordshire County Council (LPAOCC), was carried out between the 17th and 28th January 2022. This report details the results of the programme of archaeological works and is for submission to the LPAOCC.

3 Site Description

The Site was located on the SW outskirts of Banbury. It measured c. 31100sqm and occupied four pastoral fields comprising a plateau to the N – at an approximate height of 155m above Ordnance Datum (AOD) – with the remaining fields sloping downwards to the southern edge (c. 135m AOD). It was bounded to the S by Broughton Road, with housing and areas of agreed development to the E; to the W and N the land was delineated by trees and the mature hedgerows of the surrounding farmland.

3.1 Soils & geology

The British Geological Society (BGS) identifies bedrock of the Chipping Norton Limestone, Horsehay Sand, Northampton Sand and Whitby Mudstone Formations, which formed in a local environment previously dominated by shallow seas between 166 to 183 million years ago; no superficial deposits are recorded in the area (BGS 2022).

No historic borehole data is available for the Site or its immediate environs (BGS 2022).

4 Brief Historical & Archaeological Background

An assessment of the archaeological and historical heritage assets within a 1km study area around the Site was previously submitted as part of the planning application (EDP 2021) and has since been updated. The following summarises the information contained within this assessment. The results of a geophysical survey carried out in November 2021 are also discussed below.

4.1 Prehistoric & Romano-British

No archaeological evidence of prehistoric or Romano-British activity has been identified in the immediate vicinity of the site based on consultation of the Oxfordshire HER, although several sites and findspots are recorded within the wider study area, including: a Neolithic stone axe (962) recorded c. 590m to the SW of Site; Neolithic scrapers and a leaf-shaped arrowhead (EOX2812) recovered from c. 525m to the SE of Site; a Late Iron Age farming settlement (EOX3259) identified c. 980m to the SE of Site; the foundations of a Romano-British building (5378) identified c. 730m to the SW of Site; Romano-British pottery sherds (15622) recovered from c. 115m to the E of Site; and a collection of c. 20 sherds of mostly late Romano-British date (26161) recovered from c. 780m to the SW of the Site. In addition, a geophysical survey (EOX6158) c. 500m to the NW of the Site identified the remains of possible enclosures, kilns, isolated ditches, pit alignments and two round barrows, although a subsequent trial trench evaluation (EOX6391) only located a single undated ditch. On this occasion, the investigators postulated that the remains identified by the geophysical survey were so shallow that they had been imperceptible during the intrusive investigation.

Other records of probable prehistoric archaeology in the study area relate to unproven features, the majority of which have been identified through geophysical survey.

4.2 Medieval

The National Mapping Programme data identified cropmarks relating to former ridge and furrow cultivation within the southern two fields of the development area, while geophysical survey (EOX3534) also identified ridge and furrow (28283) c. 455m to the S of the Site. In addition, Medieval pottery sherds (15850) were recovered from the foot of Crouch Hill, c. 255m to the S of Site, with the possible location of a former deer park (11119) recorded c. 660m in the same direction.

4.3 Post-medieval & Modern

The study area records seven sites of Post-medieval or modern date on the Oxfordshire HER, these include: the former location of a brickworks and kiln (79) recorded c. 240m to the E of the Site, with a second brickyard and claypit (12572) recorded c. 630m to the S and associated disused quarry pits (78 & 85) located nearby; demolished malt houses (75 & 76) located c. 750m and c. 975m to the E of the Site; and Post-medieval plough furrows (EOX6392) recorded c. 950m to the N.

Two listed buildings of this period are also recorded in the vicinity. Withycombe Farmhouse and attached stable (1046858) is a Grade II listed early to mid-17th Century structure with later alterations located c. 350m to the NW, while the late 17th Century Grade II listed Crouch Farmhouse (119211) is located c. 750m to the S of the Site.

The development area itself is depicted on the 1st Edition Ordnance Survey (OS) map of 1882 as three agricultural fields, the northernmost of which was crossed by an E-W aligned path; an outfarm is located immediately to the E

of the Site. By the time of the 1888 Edition OS map the outfarm had been expanded to include a small U-shaped range on the E edge of the Site, although this had been demolished and replaced by a smaller modern building by the 1967-73 Edition; this later map is also the first to show the Site in its current four-field arrangement.

4.4 Previous Investigations

Several investigations have been carried out within the study area, including: an evaluation and excavation to the N of the Site; a magnetometer survey (EOX6101), which identified ridge and furrows and the possible corner of a rectilinear field c. 270m to the SE of the Site; and a 'negative' trial trench evaluation (EOX6100) c. 780m to the S.

4.5 Geophysical Survey

A magnetometer survey carried out at the Site by SUMO Geophysical Ltd in December 2021 (Cockcroft and Gater 2021) identified three circular features that were thought to be roundhouses in the N of Site, along with other possible structures and a concentration of probable rubbish/storage pits and burnt features; these results were interpreted as likely indicating the presence of an Iron Age farmstead or small settlement. A number of uncertain responses and ridge and furrow cultivation patterns were also recorded, although the area to the S was magnetically disturbed throughout (*figs. 1 & 2*).

5 Aims & Objectives

The evaluation sought to:

- ascertain the extent, depth below ground surface, depth of deposit, character, date, significance and condition of any archaeological remains on site;
- establish the extent to which previous development and/or other processes had affected archaeological deposits at the site;
- establish the likely impact on archaeological deposits of the proposed development; and
- inform a further programme of mitigation, should such be required.

Additionally, the work aimed to address specific areas of interest as set out in the *Solent-Thames Research Framework for the Historic Environment: Resource Assessments and Research Agendas (STRF; Hey & Hind 2014)*, with the results being integrated into the wider historic and archaeological context of the landscape.

6 Methodology

All archaeological site works were undertaken in accordance with BA's *Archaeological Field Recording Manual* (2021), together with accepted professional standards, including *Management of Research Projects in the Historic*

Environment: The MoRPHE Project Managers' Guide (Lee 2015), *Standard and guidance for archaeological field evaluation* (ClfA 2020a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2020b). BA was cognisant of the requirements of the *ClfA Code of conduct* (2019) throughout the project.

6.1 Site specific

As outlined in the approved WSI (2022), a total of nine evaluation trenches were excavated (*plates 1-9*); eight of these measured c. 1.8m × 30m and one measured c. 1.8m × 15m, this equated to 2% of the development area. The trenches were laid out to target anomalies identified in the geophysical survey (Cockcroft and Gater 2021; *figs. 1 & 2*) and to provide a comprehensive assessment of the Site's archaeological and palaeoenvironmental potential.

Trenches were opened by machine using a wide-bladed toothless ditching bucket operating under archaeological supervision. Undifferentiated topsoil and overburden of recent origin was removed in level spits by the machine down to the first significant archaeological or geological horizon.

Each trench was cleaned by hand sufficiently to allow the identification and planning of archaeological features and scanned with a metal-detector. Each trench was planned at an appropriate scale. Spot levels were taken as appropriate.

6.2 Recording

The following reference numbers have been assigned to this fieldwork project:

- Site code: LBB22;
- OASIS ID: borderar1-503619;
- Museum Accession No.: OXCMS : 2022.14.

Full written, graphic and photographic records were made in accordance with BA's *Archaeological Field Recording Manual* (2021). The written record was compiled using standard numbered context and trench recording sheets. The drawn record was produced on gridded, archive-stable polyester film at appropriate scales. Measured representative sections of empty trenches were prepared as appropriate and practicable, strictly within established safety parameters.

Temporary benchmarks (TBMs) were established and plans and sections contain level information relative to OS data. All drawings were numbered and listed in a drawing register; these drawing numbers being cross-referenced to written site records.

A high-resolution digital photographic record was made comprising photographs of all stratigraphic units. An appropriate scale was included in each photograph and all photographic records were indexed and cross-

referenced to written site records. Details concerning subject and direction of view were maintained in a photographic register, indexed by frame number.

The progress of the works was recorded and assessed using the Company's ISO 9001 procedures.

6.3 Palaeoenvironmental/Palaeoeconomic Sampling

Sampling methodology followed the *Palaeoenvironmental Department Manual* (BA 2017) for environmental sampling and processing, with reference to Historic England guidance (Campbell *et al.* 2011), and was consistent with procedures set out in the WSI (BA 2022). On site, the samples were collected in sample buckets and identified by context and sample number. Following receipt into the Palaeoenvironmental Department, they were assigned bucket numbers for tracking purposes. The samples were not be subject to sub-sampling and their entirety was processed by means of flotation.

6.4 Recovery, Processing and Curation of Artefactual Data

Procedures for the recovery and processing of artefacts were consistent with the methodology set out in the WSI (BA 2022), with all finds collected and processed. In accordance with *ClfA Standard and guidance* (2020b) and *First Aid for Finds* (Watkinson & Neal 2001), all such materials were labelled with the Site code and context number before being removed off-site. They are being stored in accordance with *First Aid for Finds* (*ibid.*) and with Historic England technical standards and other relevant sources of information, including standards for data-gathering set out by Brown (2011, 18-20). Each retained assemblage will be examined according to typological or chronological criteria and conservation needs will be identified.

7 Results

Of the nine trenches excavated, only six contained archaeology of note, all of which were contained within the main northern field (*fig. 2*); these are detailed below (see Appendix 2 for full context descriptions). In addition, several features of Post-medieval date were also encountered, including evidence of ridge and furrow within Trenches 003, 004, 005 and 007, which align with the former cultivation features identified on the geophysical survey (Cockcroft and Gater 2021); within Trenches 004 and 007 these were identified but not recorded.

Each trench contained a similar sequence of deposits, namely a dark grey brown clayey silt topsoil, overlying a mid orange brown clayey silt subsoil; the underlying natural geology, which was encountered at a depth of between c. 0.22m and 0.8m below ground level (bgl), comprised a light brown grey to white silty clay with intermittent patches of bedrock. The topsoil and subsoil both contained occasional inclusions of modern waste, including pottery, animal bone fragments and Ceramic Building Material (CBM), which were not retained (NR).

7.1 Trench 001

Trench 001 was orientated NNE-SSW (*plate 1*). The only feature of archaeological interest present was a linear ditch [001004] orientated WNW-ESE (*plate 10*). This measured >1.8m long x 3.13m wide x 0.46m deep, presenting uneven, moderately sloping sides and an undulating base; its single fill, mid grey brown clayey silt (001005), contained two sherds of pottery (2g) dating from the Mid to Late Iron Age (Appendix 3), while palaeoenvironmental sampling indicated a sheltered ditch habitat within a grassland environment with residual inclusions of anthropogenic material (Appendix 4). The shallow wide profile of ditch [001004] suggests that it probably functioned as some form of boundary, although its full extent remains unknown as it was not seen in any other trenches.

Whilst additional anomalies were also noted by the geophysical survey in this location, no corresponding buried remains were found and they are not thought to relate to archaeology.

7.2 Trench 002

Trench 002 was aligned ENE-WSW (*plate 2*) and contained six features of archaeological interest: four ditches and two pits. The ditches – [002004], [002006], [002008] and [002010] – shared the same NNW-SSE orientation and likely represented a series of divisional or drainage features that had been re-cut as part of the continued use of the area (*plate 11*).

The earliest of these was ditch [002008], which displayed a steep U-shaped profile, measuring >1.8m long x 0.74m wide x 0.64m deep. It contained a single fill, mid-grey brown clayey silt (002009), which produced one sherd (1g) of wheel-thrown pottery of an unknown date (Appendix 3). Palaeoenvironmental sampling of (002009) indicated a sheltered ditch habitat within a grassland environment potentially at some distance from habitation, although it

is also possible that it was quickly infilled (Appendix 4). This feature had been truncated along its eastern edge by ditch [002010], and along its western edge by the ditch [002006].

Ditch [002010] was the easternmost of the four ditches. This had a shallow U-shaped profile, measuring >1.8m long x 0.89m wide x 0.36m deep; the singular fill (002011) comprised a mid grey brown clayey silt. Palaeoenvironmental sampling of (002011) produced limited results but was suggestive of a sheltered ditch habitat; it produced one sherd of pottery that likely dated to the Iron Age (Appendix 4).

The third ditch [002006] measured >1.8m long x 0.94m wide x 0.54m deep. It had a shallow concave profile, which contained single fill (002007), a very dark grey brown clayey silt that produced four sherds (32g) of Mid to Late Iron Age/Romano-British pottery (Appendix 3) and four fragments of animal bone (Appendix 5). Palaeoenvironmental sampling of (002007) indicated a sheltered ditch environment at some distance from habitation due to the limited inclusions of anthropogenic material, although this may also be due to rapid infilling (Appendix 4). This feature had been truncated along its western edge by ditch [002004].

Ditch [002004] was the westernmost of the four ditches. It had a general U-shaped profile and measured >1.8m long x 1.01m wide x 0.54m deep. Its fill, mid to light grey brown clayey silt (002005), yielded six fragments of animal bone, including one fragment of rib from a medium to large-sized mammal (Appendix 5). Palaeoenvironmental sampling of (002005) indicated a sheltered ditch environment, although the inclusion of anthropogenic material was limited suggesting distance from habitation or rapid infilling (Appendix 4).

The two pits (*plate 12*) were located towards the ENE end of the trench. Pit [002012] had been heavily truncated by later activity and was only visible following the machine excavation of pit [002014] (see below); its function therefore remains unknown at present. It had visible dimensions of 1.57m long x >0.6m wide x 0.54m deep and contained a single fill, a light to mid-grey brown clayey silt (002013), which yielded three sherds (44g) of Mid to Late Iron Age pottery (Appendix 3) and two fragments of animal bone, including one metapodial fragment from a medium-sized mammal (Appendix 5).

Pit [002014] was a sizeable feature measuring 11.05m long x >2m wide x 1.25m deep; due to its size, it was not initially identified during the machine stripping of the trench, only being apparent in section. This feature contained a single fill (002015), which was very similar to the topsoil (002001). It was identified as being of Post-medieval or modern date and may relate to the nearby quarry activity; it conformed to a large amorphous feature identified on the geophysical survey (Cockcroft and Gater 2021).

The geophysical survey had identified part of a sub-circular enclosure in this location, but no evidence for this was identified by the trial trenching. The anomaly may be of non-archaeological origin, or so heavily truncated that it is all but entirely removed by later activity.

7.3 Trench 003

Running in a WNW-ESE direction, Trench 003 (*plate 3*) revealed several features that appear to conform to two penannular anomalies identified on the geophysical survey (Cockcroft and Gater 2021); these include a series of ditches, one of which was stone-filled, and a stone-lined pit.

One of the earliest ditches identified in Trench 003 was [003006], which was orientated NE-SW and measured >1.88m long x 0.97m wide x 0.41m deep (*figs. 3-4; plate 13*). It had moderately sloping sides and a concave base and contained a single fill, light brown grey clayey silt (003007). While this feature yielded no finds, it was truncated by ditches [003004] and [003008], which provide it with an Iron Age *terminus ante quem*. It is also notable that the palaeoenvironmental sampling of (003007) contained no artefactual material and the low return of material in general meant no environmental conclusions could be drawn (Appendix 4). The sterility of this early ditch is considered informative and indicative of a location away from settlement.

Ditch [003010] was another early feature within this trench. This had moderately sloping sides and a concave to near flat base and was also orientated NE-SW (*figs. 3-4; plates 13-4*). It measured >1.88m long x 1.1m wide x 0.91m deep and held a single, light brown grey clayey silt fill (003011). Like ditch [003006], this feature yielded no finds in the field; however, it was truncated by ditch [003008] and gully [003012], which provide it with an Iron Age *terminus ante quem*. Palaeoenvironmental sampling of (003011) did reveal fragments of indeterminate ceramic or pottery but the general low return of materials prohibited any further conclusions (Appendix 4). Ditch [003010] and gully [003012] appear not to have been identified by the geophysical survey, although this may be due to them being 'overshadowed' by the tight concentration of anomalies in this part of the Site.

Truncating the WNW side of ditch [003006] was ditch terminus [003004]. This measured >1.1m long x 0.83m wide x 0.49m deep, with a regular U-shaped profile (*fig. 3; plate 13*). Its single fill, mid grey brown clayey silt (003005), produced three sherds (24g) of Mid to Late Iron Age pottery (Appendix 3) and nine fragments of animal bone, including a proximal condyle fragment from a medium to large-sized mammal and a complete (likely bovid) talus bone (Appendix 5). Palaeoenvironmental sampling of (003005) supported the ditch terminus interpretation as the molluscan assemblage was limited (Appendix 4). Ditch [003004] had been truncated by possible post-pad [003019] on its W side.

Ditch [003008] truncated ditch [003006] along its ESE side, and ditch [003010] along its WNW side (*figs. 3-4; plates 13-14*). It was also orientated NE-SW, measuring >1.88m long x 2.25m wide x 0.9m deep. It had moderate to steeply sloping sides and a concave to near flat base and was filled by light brown grey clayey silt (003009); this produced 12 sherds (263g) of pottery of Mid to Late Iron Age date (Appendix 3) and 33 fragments of animal bone, one of which displayed parallel butchery marks (Appendix 5). Palaeoenvironmental sampling of (003009) revealed charred cereal and other anthropogenic materials but the otherwise low returns prohibited further environmental interpretations (Appendix 4).

Also truncating ditch [003010] was gully [003012], which had an ENE-WSW orientation, measuring > 1.88m long x 0.34m wide x 0.25 m deep (*fig. 4; plate 15*). This contained a single fill, mid-grey brown clayey silt (003013), which contained frequent large-sized stones that appeared to have been intentionally deposited within the cut. It also

produced and six fragments of animal bone, including one rib fragment from a large-sized mammal (Appendix 5). Palaeoenvironmental sampling of (003013) demonstrated low return of materials that prohibited any meaningful conclusions (Appendix 4).

Possible post-pad [003019], which truncated ditch terminus [003004], was an oval feature with a U-shaped profile, measuring 0.58m wide x 0.25m deep. Its single fill comprised a mid-grey brown clayey silt (003020) with frequent large-sized stones throughout (*plate 16*). Palaeoenvironmental sampling of (003020) demonstrated low return of materials that prohibited any meaningful conclusions and may be due to the nature of a post-pad deposit (Appendix 4).

At the ESE end of the trench were a deposit initially interpreted as a working surface [003015] and ditch [003017] (*plate 17*). The former was a sub-circular feature with gently sloping sides and a near flat base. It had visible dimensions of >1.2m long x 1.47m wide x 0.23m deep and was filled by dark grey brown clayey silt (003016), which yielded six sherds (26g) of Mid to Late Iron Age pottery (Appendix 3). Palaeoenvironmental sampling of (003016) suggested a sheltered environment but this proxy evidence coupled with the low fragmentation of the charcoal and the morphological preservation of the charred cereal grains strongly suggests that the deposit was not disturbed (Appendix 4). It is therefore plausible that fill (003016) is not that of a working surface but a dump of burnt stones. This feature had been heavily truncated by ditch [003017].

Small ditch [003017] had an ENE-WSW alignment with moderately sloping sides and a near flat base (*plate 17*). It measured >2.6m long x 1.55m wide x 0.18m deep and was filled by (003018), a light grey brown clayey silt that contained 25 fragments of animal bone – including three fragments of rib from a medium to large-sized mammal, seven sheep/goat molars and one possible feline premolar – (Appendix 5) and one fragment of possible slag. Palaeoenvironmental sampling of (003018) revealed the presence of a freshwater snail, although the majority of the assemblage indicated an open environment instead of a sheltered or wet ditch habitat (Appendix 4).

This feature was not individually identified by the geophysical survey, possibly having been ‘overshadowed’ by the tight concentration of anomalies in this part of the Site.

Situated directly to the ESE of feature [003015] was a stone-lined pit [003021] (*fig. 5; plate 18*). This had a subcircular to oval shape in plan, with steeply sloping sides and an undulating base; it measured >1.48m long x 1.34m wide x 0.5m deep and had been dug into the underlying bedrock. The base itself had been covered with three intentionally shaped stones, with the gaps between these seemingly plugged by other large unworked stones; the sides were lined by stones of a similar size and shape.

The pit was filled by a dark grey brown clayey silt deposit (003027), which also contained frequent medium to large-sized stones throughout, along with three sherds (60g) of Mid to Late Iron Age pottery (Appendix 3). Palaeoenvironmental sampling of (003027) revealed the richest assemblage from the Site and contained cereals that suggested an occasion of crop drying had resulted in accidental firing of the cereals and chaff (namely glume bases) and their subsequent disposal as waste (Appendix 4). Further environmental evidence showed that while pit [003021] was infilling it was likely catching uncharred organics from the surroundings or that they were being dumped into the pit as part of general waste disposal. It is assumed that the waste pit function was secondary

following redundancy of the pit's primary purpose/function. The environmental conditions of the pit could be discerned from the molluscan evidence to be that of a partly wet and sheltered habitat within a grassland environment (Appendix 4).

The location of pit [003021] next to the dump of burnt stones in feature [003015] may be due to its original function, although it is clear that pit [003021] was latterly used for refuse disposal.

Ditch [003022] (*plate 19*) was located to the ESE of pit [003021]. Orientated NNE-SSW, this feature measured >1.8m long x 1.31m wide x 0.13m deep and had a general U-shaped profile. Its single fill consisted of a dark grey brown clayey silt (003028), which yielded three sherds (26g) of Mid to Late Iron Age pottery (Appendix 3) and five fragments of animal bone, including one vertebrae fragment from a medium-sized mammal (Appendix 5); palaeoenvironmental sampling suggested some degree of nearby occupation (Appendix 4). Ditch [003022] was truncated by Post-medieval plough furrow [003024].

The final ditch identified within Trench 003 was NNE-SSW aligned [003026], which measured >1.8m long x 4.01m wide x 0.8m deep and had gently to steeply sloping sides and a concave base. This was filled by frequent large-sized stones within a matrix of dark grey brown clayey silt (003030), which seemed to form a stone surface measuring >1.8m long x 2.46m wide x 0.8m deep (*plate 20*). The stones were packed tightly together within the cut, with larger stones generally found at the base of the feature. A total of eight Mid to Late Iron Age pottery sherds (38g; Appendix 3), 22 fragments of animal bone – including a single horse molar, a partial likely bovid molar and a mandibular ramus fragment from a small to medium-sized mammal – (Appendix 5), one fragment of CBM and two iron (Fe) objects were recovered. Palaeoenvironmental sampling suggested a sheltered environment within the stones (Appendix 4).

The latest features identified within Trench 003 were two Post-medieval plough furrows [003014] and [003024].

Truncating the features at the WNW end of Trench 003, plough furrow [003014] was orientated NNE-SSW and had a shallow concave profile measuring > 1.88m long x 4.05m wide x 0.21 m deep (*figs. 3-4; plate 13*); its single fill comprised a dark red brown clayey silt (003023).

Plough furrow [003024] truncated ditch [003022] located in the ESE part of Trench 003. This ran in an NNW-SSE direction, measuring >2.16m long x 1.56m wide x 0.35m deep (*plate 19*). It was filled by a very dark orange brown clayey silt (003029).

7.4 Trench 004

Trench 004 was aligned N-S on the western side of the field (*plate 4*). It contained a single, E-W orientated linear ditch [004004], which measured >1.8m long x 1.75m wide x 0.25m deep and had a shallow concave profile (*plate 21*). The singular fill (004005) comprised a light grey brown silty clay containing two fragments of small to large-sized mammal bone (Appendix 5) and an oyster shell. Palaeoenvironmental sampling of (004005) had a low return of materials which prohibited further conclusions (Appendix 4).

This feature may represent part of the penannular roundhouse/enclosure anomaly identified on the geophysical survey (Cockcroft and Gater 2021), although its location appears to be marginally N of that feature on the survey (*fig. 2*). Trench 004 also contained an NNW-SSE running plough furrow, which was identified but not recorded.

7.5 Trench 005

Running in a NE-SW direction, Trench 005 (*plate 5*) contained two linear features; a ditch [005006], which appears to conform to the penannular roundhouse/enclosure anomaly identified on the geophysical survey (Cockcroft and Gater 2021), and a plough furrow [005004]. An anomaly at the SW end of the trench, identified in the geophysical survey (Cockcroft and Gater 2021), was not found to relate to any archaeological remains.

Ditch [005006] was orientated NW-SE and measured >1.86m long x 2.18m wide x 0.67m deep (*fig. 7; plate 22*). It displayed steeply sloping sides and a near flat base and was filled by (005007), a light grey brown silty clay deposit that had a slightly greenish hue towards the bottom of the fill, possibly indicating the presence of animal faeces. This deposit also contained three sherds (31g) of Mid to Late Iron Age pottery (Appendix 3) and 18 fragments of animal bone, including one likely bovid phalange and a partial sheep mandible (Appendix 5). Palaeoenvironmental sampling had a low return of materials prohibiting further conclusions (Appendix 4). Ditch [005006] was truncated by plough furrow [005004] along its length.

Post-medieval plough furrow [005004] cut the subsoil (005002) along the same NW-SE line as ditch [005006] (*plate 22*). It measured >1.86m long x 1.68m wide x 0.28m deep and had a shallow concave profile with a single mid to dark orange brown clayey silt fill (005005).

7.6 Trench 006

Trench 006 was orientated N-S (*plate 6*), with three features of archaeological interest found; these were all identified as pits, although their intended function is not immediately apparent. Once again, they appeared to conform to discrete anomalies identified on the geophysical survey (Cockcroft and Gater 2021). It is of note that the palaeoenvironmental sampling (Appendix 4) was able to discern that these three pits contained probable domestic waste whereas this was generally not apparent across the remainder of the Site.

The northernmost of the pits was [006006], which had a sub-circular shape in plan, measuring 1.7m in diameter x 0.42m deep (*plate 23*). This pit contained a single fill, dark grey brown clayey silt. (006007), which produced 17 sherds (205g) of Mid to Late Iron Age pottery (Appendix 3) and 16 fragments of animal bone, including three rib fragments – one of which had possible cut marks – and a likely bovid radius/ulna fragment with evidence of possible gnawing (Appendix 5). Palaeoenvironmental sampling of (006007) suggested disposal of domestic waste (Appendix 4).

Directly S of pit [006006] was sub-circular pit [006008] (*plate 23*); this had visible dimensions of 1m x 0.69m deep, continuing beneath the eastern baulk of the trench. It contained a single dark grey clayey silt fill (006009), which

produced two sherds (72g) of Mid to Late Iron Age pottery (Appendix 3) and one fragment of medium to large-sized mammal bone (Appendix 5); palaeoenvironmental sampling of (006009) also suggested disposal of domestic waste (Appendix 4).

The final pit [006004] was also sub-circular in plan, measuring 1.64m long x 1.38m wide x 0.38m deep (*plate 24*). Its fill (006005) consisted of a dark grey brown clayey silt, which yielded six sherds (112g) of pottery dating to the Mid to Late Iron Age (Appendix 3) and eight fragments of animal bone, including one rib fragment from a medium-sized mammal that may be slightly polished (Appendix 5). Palaeoenvironmental sampling again suggested disposal of domestic waste and the presence of glume bases was noted (Appendix 4).

8 Discussion and significance of results

The programme of AFE carried out at Land off Broughton Road, Bretch Hill, Banbury indicates a period of probable domestic and agricultural activity that was tightly focussed in the centre of the N end of the Site with some outlying features on its periphery. The recovered pottery assemblage suggests a likely Mid to Late Iron Age date for the main occupation of the Site, while the palaeoenvironmental sampling showed isolated evidence for the disposal of domestic waste that hints at a highly organised settlement with spatial differentiation. No certain Romano-British activity was identified, although two sherds of pottery dating to this period were recovered. The central and southern fields of the Site produced no archaeological remains of interest whatsoever.

Evidence for the penannular roundhouse/enclosure anomalies previously identified on the geophysical survey (Cockcroft & Gater 2021) were recorded in Trenches 003, 004 and 005, represented by a series of generally concave to U-shaped ditches that measured between 0.83m-2.25m in width and 0.13m-0.91m in depth. The deeper examples appear less likely to be related to roundhouses and instead may relate to enclosures. Possible penannular anomalies recorded by the geophysical survey in Trenches 001 and 002 were not found to relate to any identifiable buried archaeology, and may instead have been all but entirely truncated away or have non-archaeological origins. The remaining ditches recorded by the AFE in Trenches 001 and 002 likely had a divisional/drainage or boundary function relating to the peripheral agricultural landscape of the Site.

Within Trench 003 there was also evidence of intercutting features, although it is unclear at present whether these represent recuts or distinct phases of activity; either way, it suggests a relatively prolonged period of activity in this area, albeit contained within the Iron Age. This is supported by the presence of stone-filled ditch [003026], which possibly formed part of a trackway/surface – the compacted stones within this feature likely forming a sturdy surface that would have aided movement and stopped the ground becoming trampled and boggy through use. Comparing this to the geophysical survey, the surface appears to extend for a c. 20m length. The function of feature [003015] and stone-lined pit [003021] is, at present, undetermined, although the palaeoenvironmental sampling suggested the former may be a dump of burnt stones and that the latter was likely reused as a waste pit.

The three pits identified in Trench 006 – which conformed to discrete anomalies located on the geophysical survey (Cockcroft and Gater 2021) – all contained pottery and animal bone fragments that were recovered in the field, as well as charred cereal remains that were recovered from the sampling. This strongly indicates a waste pit function

and does suggest the use of the Site was either domestic or, given the relatively sparse environmental finds from most of the other features, on the periphery of such activity.

In addition to this activity, several Post-medieval features conforming to the former ridge and furrow cultivation patterns identified on the geophysical survey (Cockcroft and Gater 2021) were also present within Trenches 003, 004, 005 and 007, while a possible quarry pit of Post-medieval or modern date was identified within Trench 002. Several of these later features had truncated some of the Iron Age features discussed above.

The geophysical survey appears to have been accurate in identifying the concentration of archaeological remains. Whilst some additional features were identified, these were regardless within the tight focus of anomalies in the centre of the north field and may have been ‘overshadowed’ by nearby anomalies producing stronger signals. Of note is the absence of the penannular anomalies in Trenches 001 and 002, which, as discussed above, may have been so heavily truncated by later activity that they have been all but entirely removed. Alternatively, the anomalies may have non-archaeological origins.

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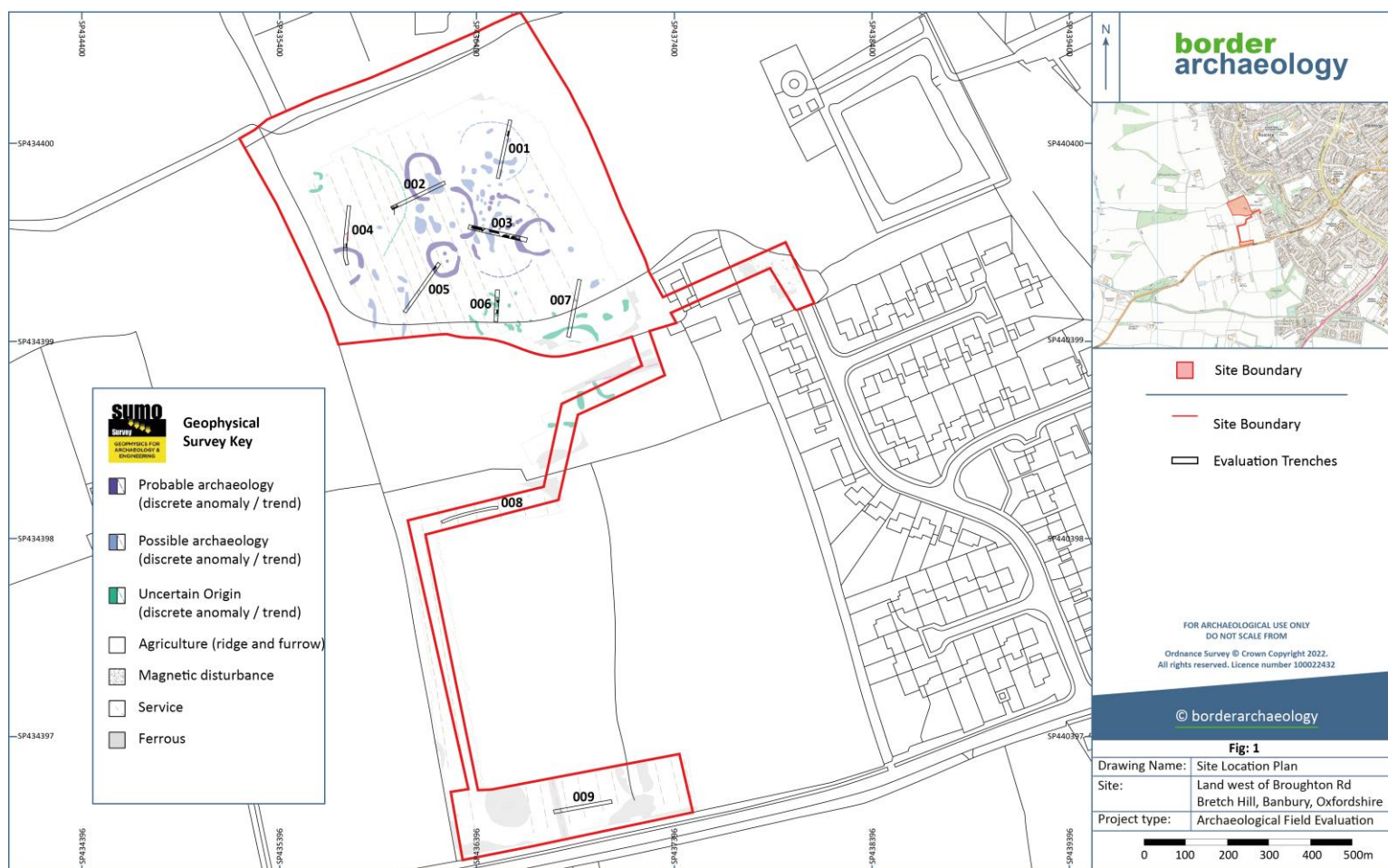
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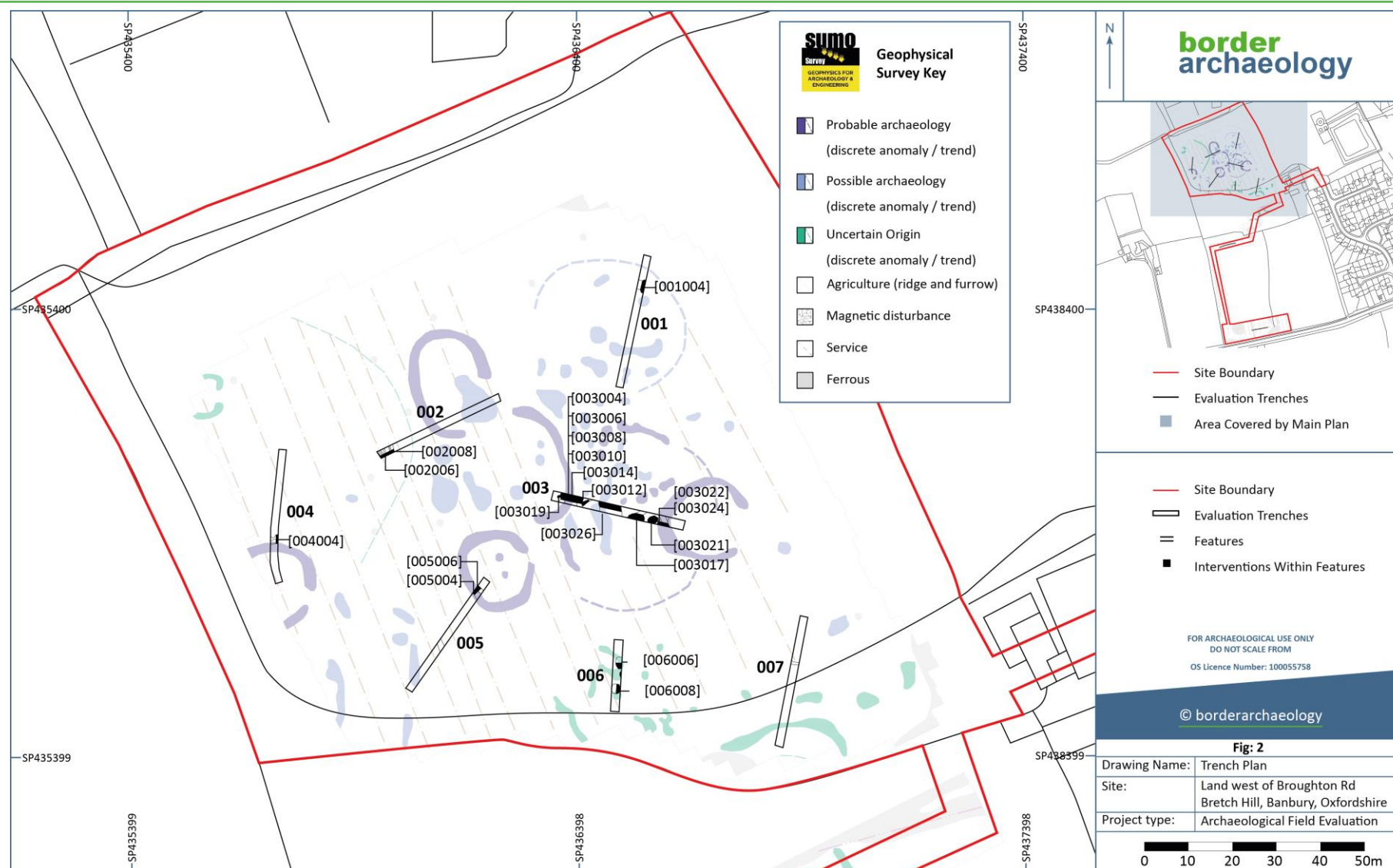
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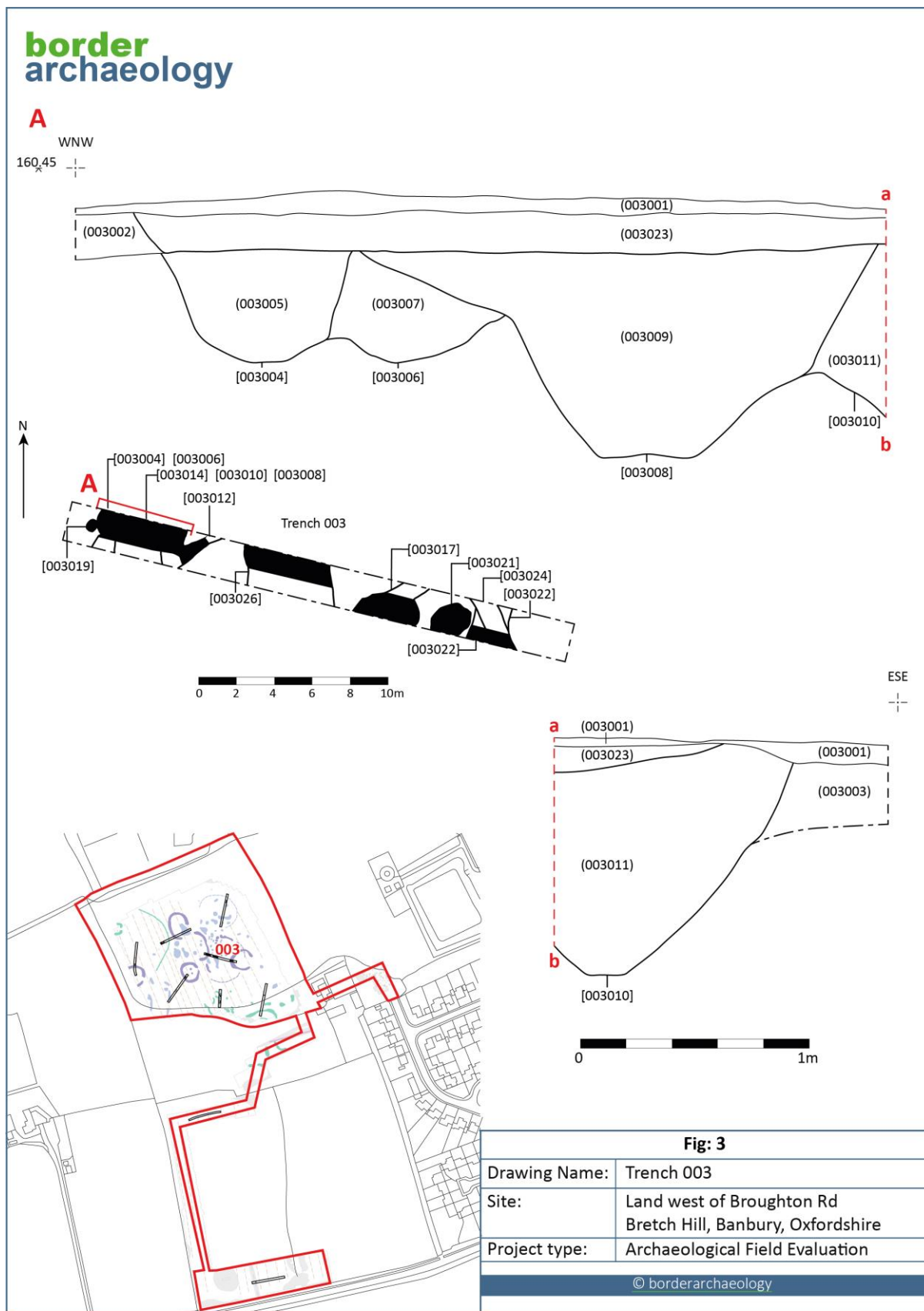
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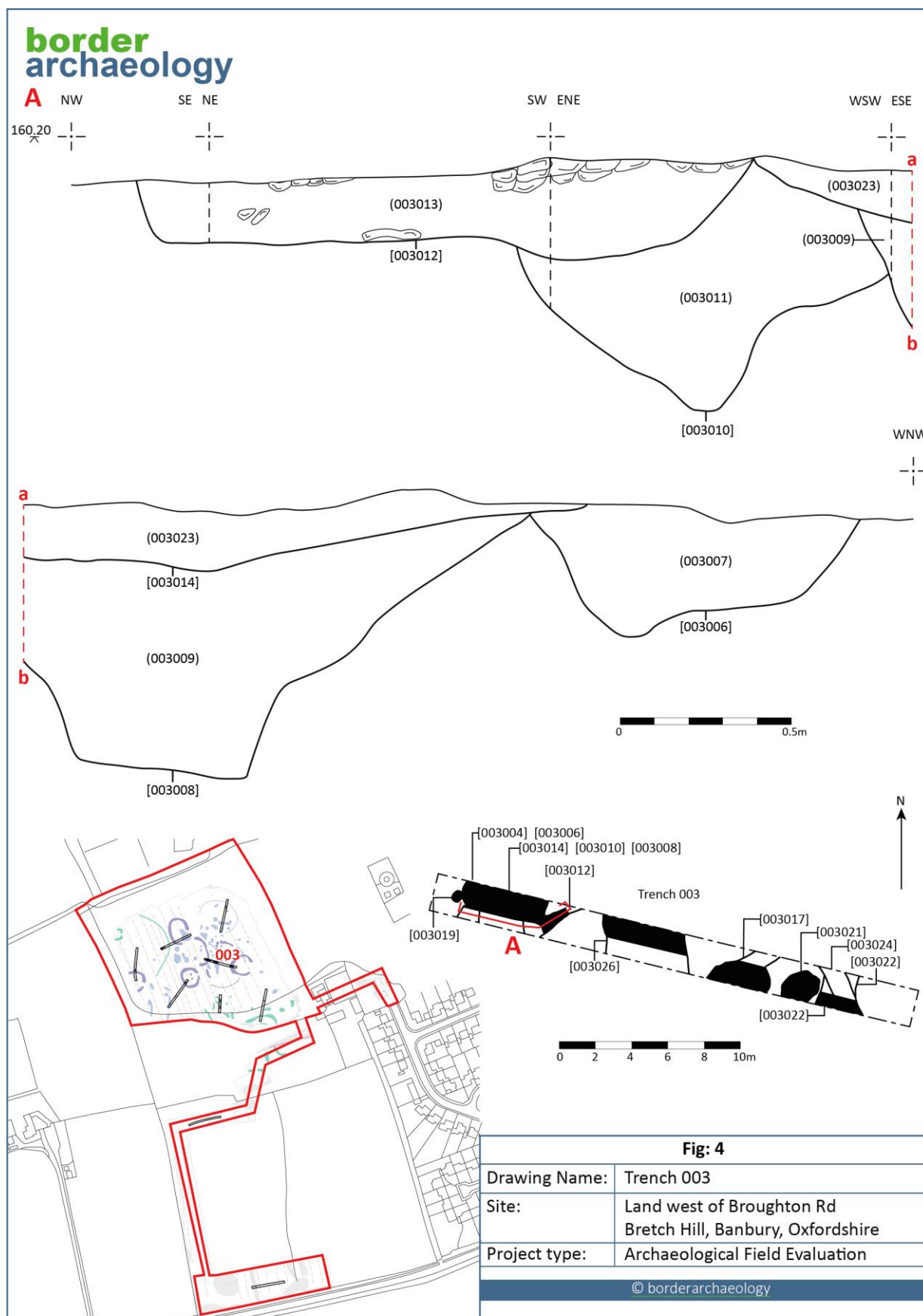
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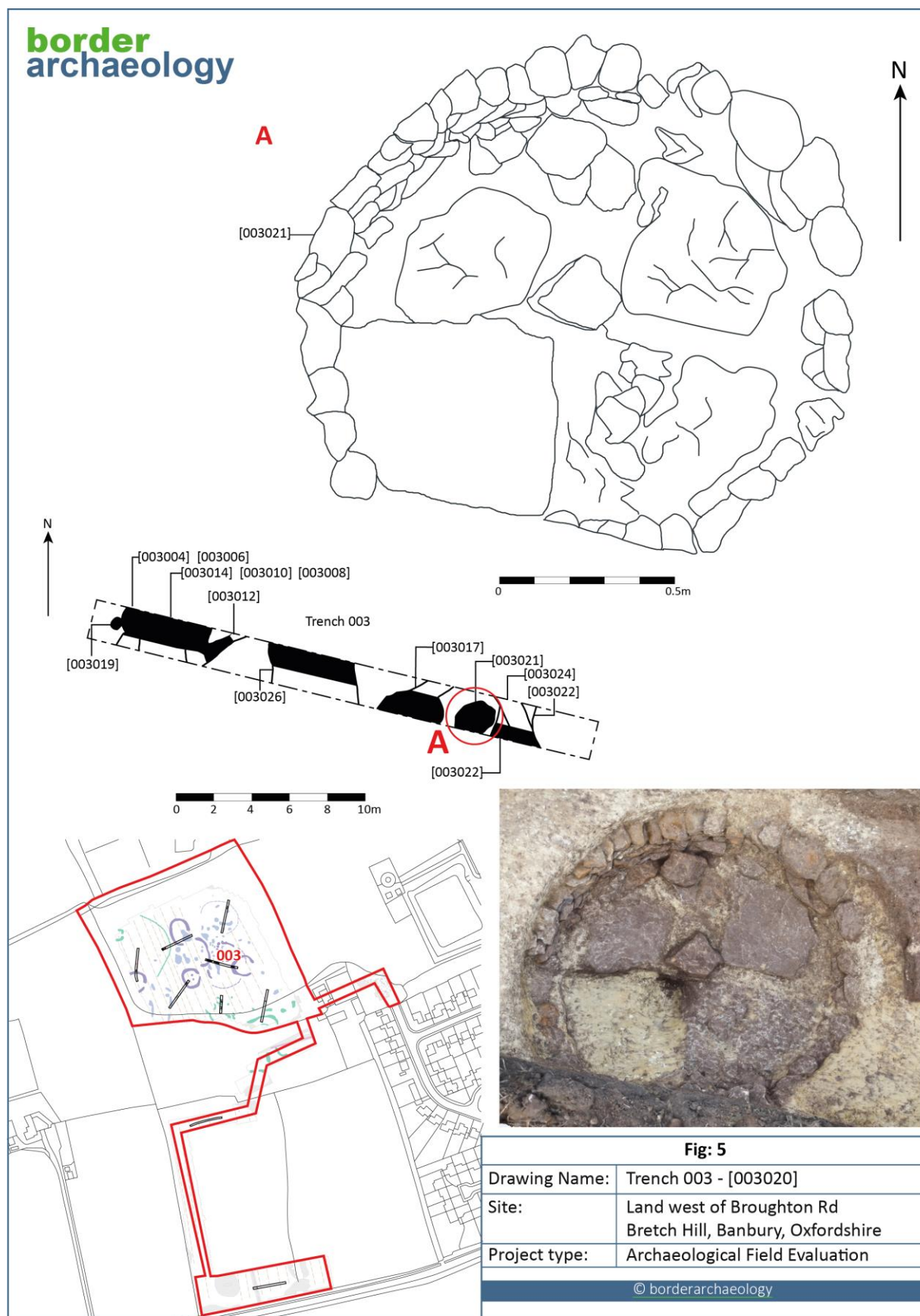
11 Appendix 1: Figures & Plates

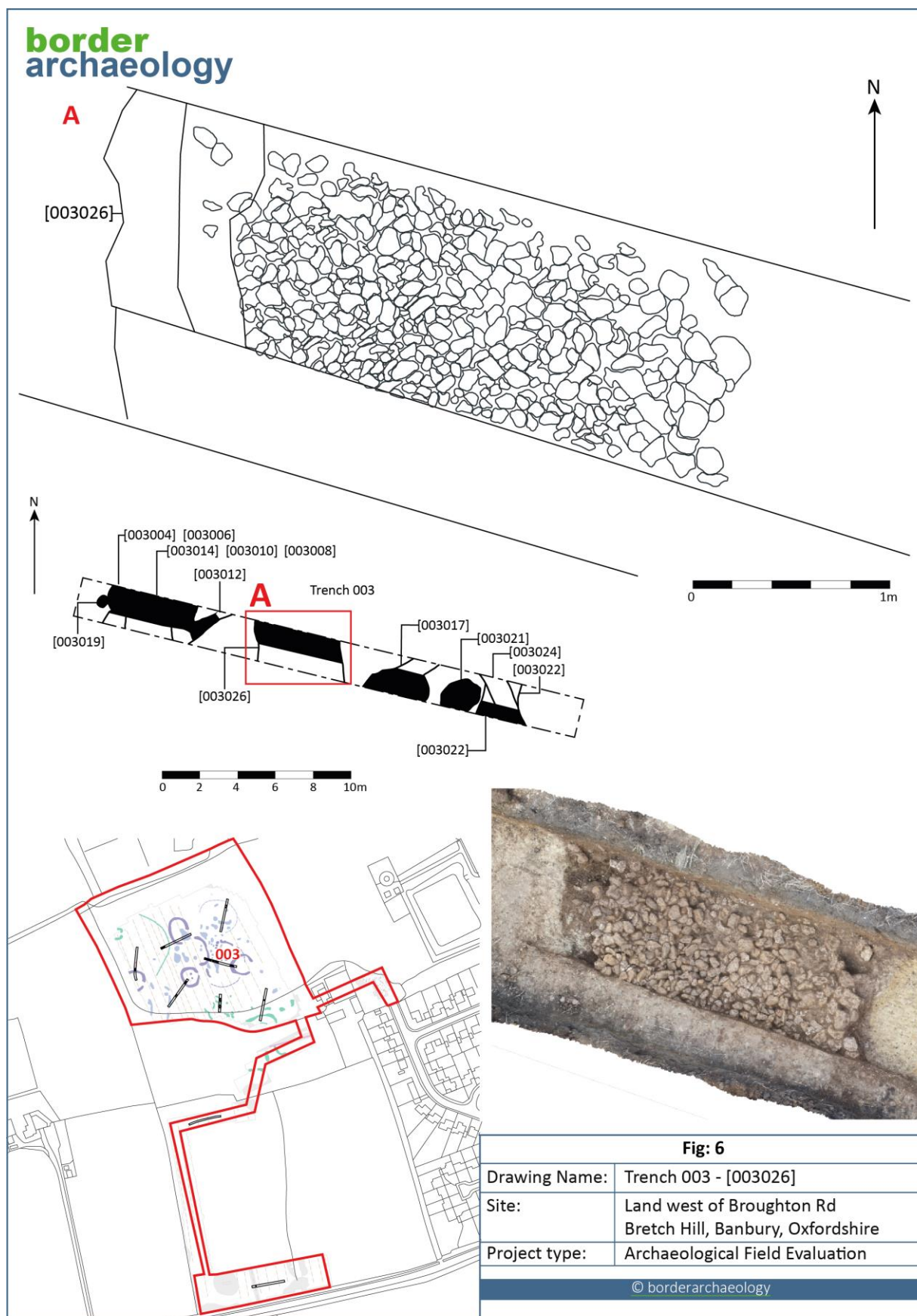












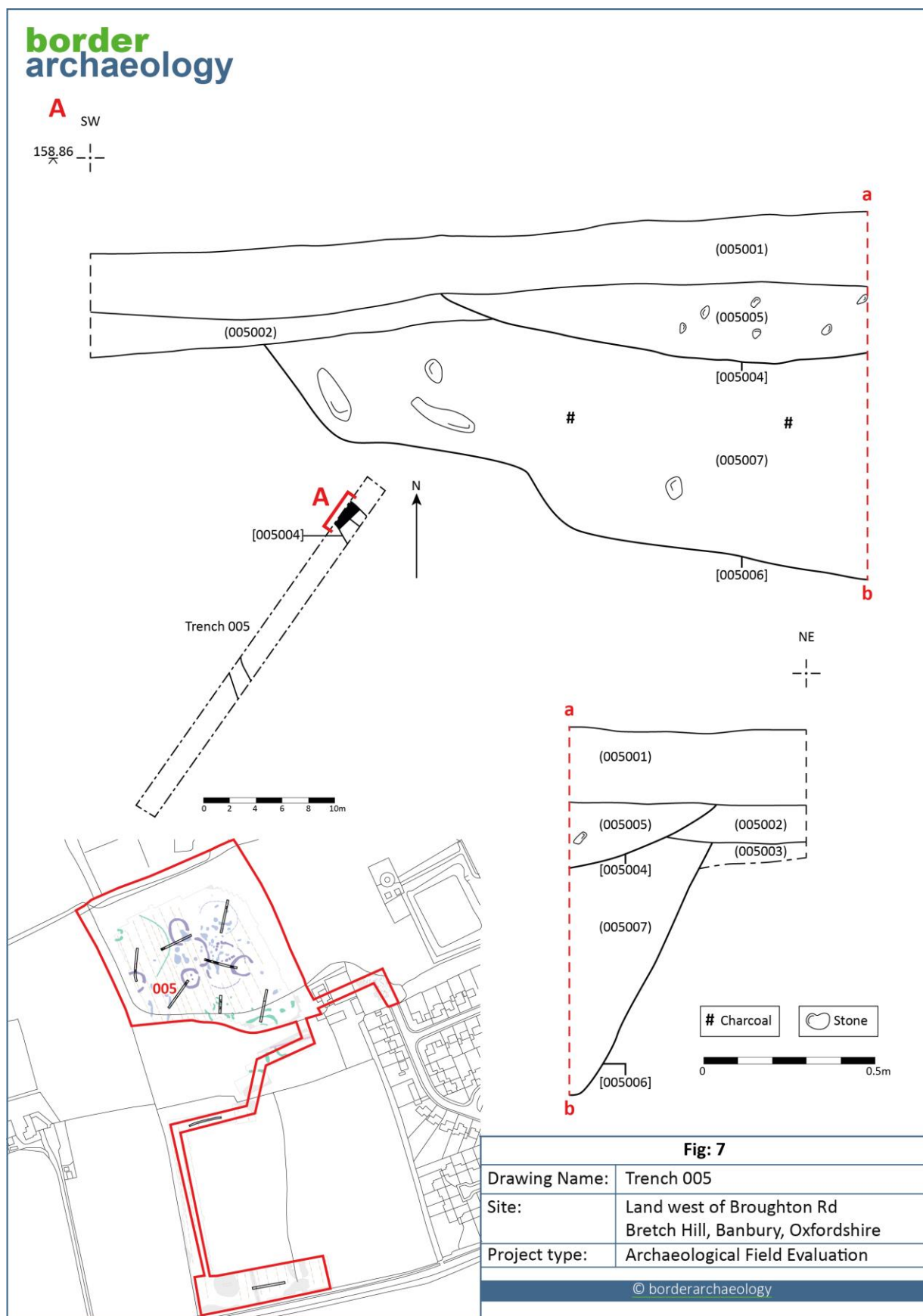




Plate 1: Post-excitation view of Trench 001, viewed SSW



Plate 2: Post-excitation view of Trench 002, viewed WSW



Plate 3: Post-excitation view of Trench 003, viewed ESE



Plate 4: Post-excitation view of Trench 004, viewed SSW



Plate 5: Post-excitation view of Trench 005, viewed NE



Plate 6: Post-excitation view of Trench 006, viewed NNE



Plate 7: Post-excitation view of Trench 007, viewed SSW



Plate 8: Post-excitation view of Trench 008, viewed WSW



Plate 9: Post-excitation view of Trench 009, viewed ENE



Plate 10: WNW-facing section of boundary ditch [001004]



Plate 11: SSE-facing section of ditches [002004], [002006], [002008] & [002010]

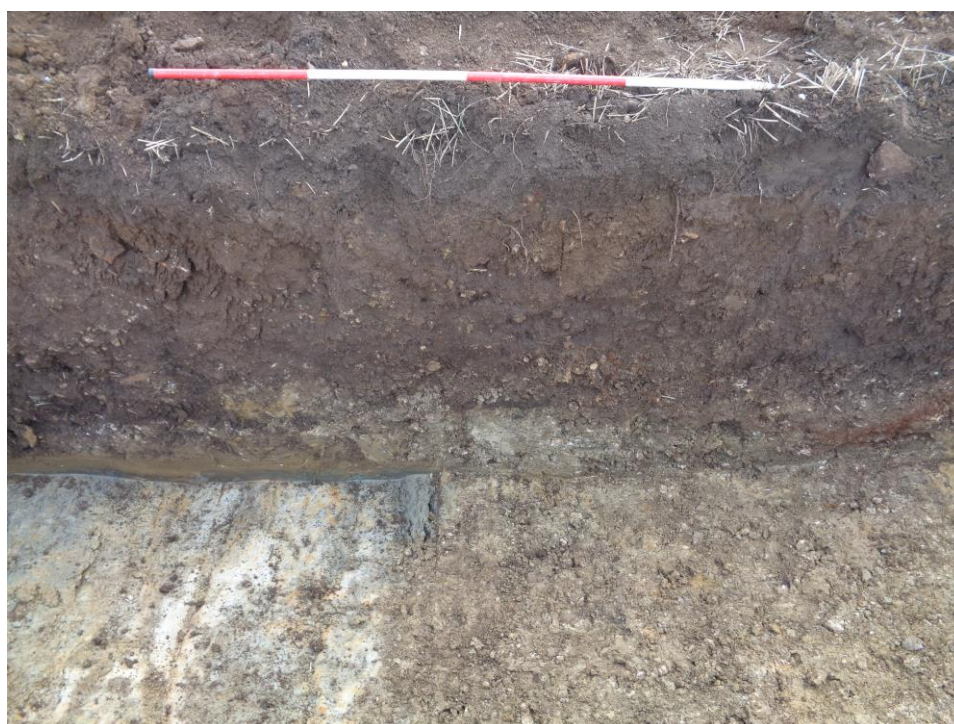


Plate 12: NNW-facing section of pits [002012] and [002014]



Plate 13: SSW-facing section of ditches [003004], [003006], [003008] & plough furrow [003014]



Plate 14: SSW-facing section of ditches [003008] and [003010]



Plate 15: S-facing plan of gully [003012]



Plate 16: W-facing section of possible post-pad [003019]



Plate 17: NNE-facing section of feature [003015] and ditch [003017]



Plate 18: S-facing plan view of stone lined pit [003021]



Plate 19: NNE-facing section of linear [003022], plough furrow [003024] and pit [003021]



Plate 20: NNE facing plan of stone surface (003030) and ditch [003026]



Plate 21: E-facing section of boundary ditch [004001]



Plate 22: SE-facing section of furrow [005004] and ditch [005006]



Plate 23: Running section of pits [006006] and [006008]



Plate 24: E-facing section of pit [006004]

12 Appendix 2: Context Tabulation

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
001	(001001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.23m; overlies (001002).	Topsoil	CBM (NR)	-	Modern
	(001002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional charcoal flecks; T: 0.13m; underlies (001001); overlies (001003) & (001005).	Subsoil	-	-	Post-medieval
	(001003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; Underlies (001002); cut by [001004].	Natural geology	-	-	Geological
	[001004]	Cut	(001005)	-	Linear feature orientated WNW-ESE; moderate breaks of slope; moderately sloping sides; undulating base; L: >1.8m; W: 3.13m; D: 0.46m; cuts (001003).	Cut of boundary ditch	-	-	Mid to Late Iron Age
	(001005)	Fill	-	[001004]	Moderately compacted mid grey brown clayey silt; occasional small-sized stones; T: 0.46m; underlies (001002).	Single fill of boundary ditch [001004]	Pottery	<001001>	Mid to Late Iron Age
002	(002001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.25m; overlies (002002) & (002015).	Topsoil	CBM (NR)	-	Modern

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
002	(002002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional charcoal flecks; T: 0.13m; underlies (002001); overlies (002003), (002005), (002007) & (002011).	Subsoil	-	-	Post-medieval
	(002003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (002002); cut by [002008] & [002012].	Natural geology	-	-	Geological
	[002004]	Cut	(002005)	-	Linear feature orientated NNW-SSE; gradual breaks of slopes; steeply sloping side; near flat base; L: >1.8m; W: 1.01m; D: 0.54m; cuts (002007).	Cut of Boundary ditch	-	-	Iron Age
	(002005)	Fill	-	[002004]	Moderately compacted mid to light grey brown clayey silt; occasional small to medium-sized stones; T: 0.54m; underlies (002002).	Single fill of boundary ditch [002004]	Bone	<002001>	Iron Age
	[002006]	Cut	(002007)	-	Linear feature orientated NNW-SSE; gradual breaks of slope; concave sides; flat base; L: >1.8m; W: 0.94m; D: 0.54m; cuts (002009).	Cut of ditch	-	-	MIA-LIA/ Romano-British
	(002007)	Fill	-	[002006]	Moderately compacted very dark grey brown clayey silt; occasional small to medium-sized stones; T: 0.54m; cut by [002004]; underlies (002002).	Fill of ditch [002006]	Pottery Bone	<002002>	MIA-LIA/ Romano-British
	[002008]	Cut	(002009)	-	Linear feature orientated NNW-SSE; sharp breaks of slope; steeply sloping sides; concave base; L: >1.8m; W: 0.74m; D: 0.64m; cuts (002003).	Cut of boundary/water management feature	-	-	Iron Age

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
002	(002009)	Fill	-	[002008]	Moderately compacted mid grey brown clayey silt; occasional small to medium-sized stones; T: 0.64m; cut by [002006] & [002010].	Single fill of boundary/water management feature [002008]	Pottery	<002003>	Iron Age
	[002010]	Cut	(002011)	-	Linear feature orientated NNW-SSE; gradual breaks of slope; moderately sloping sides; slightly concave base; L: >1.8m; W: 0.89m; D: 0.36m; cuts (002009).	Cut of ditch	-	-	Iron Age
	(002011)	Fill	-	[002010]	Moderately compacted mid grey brown clayey silt; moderate small to medium-sized stones; T: 0.36m; underlies (002002).	Single fill of ditch [002010]	Pottery	<002004>	Iron Age
	[002012]	Cut	(002013)	-	Undefined feature; moderate breaks of slope; gently sloping sides; base not reached; L: 1.57m; W: >0.6m; D: >0.54m; cuts (002003).	Cut of pit	-	-	Mid to Late Iron Age
	(002013)	Fill	-	[002012]	Compact light to mid grey brown clayey silt; occasional stones; T: >0.54m; cut by [002014].	Single fill of pit [002012]	Pottery Bone	-	Mid to Late Iron Age
	[002014]	Cut	(002015)	-	undefined feature; breaks of slope not visible; straight sides; base not reached; L: 11.05m; W: >2m; D: 1.25m; cuts (002013).	Cut of possible quarry pit	-	-	Post-medieval to Modern
	(002015)	Fill	-	[002014]	Loosely compacted dark grey brown clayey silt; occasional small to large-sized stones; T: 1.25m; underlies (002001).	Fill of possible quarry pit [002014]	-	-	Post-medieval to Modern
003	(003001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.25m; overlies (003002), (003023) & (003029).	Topsoil	CBM (NR)	-	Unknown

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
003	(003002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional charcoal flecks; T: 0.13m; underlies (003001); cut by [003024]; overlies (003003), (003013), (003018), (003020), (003027) & (003028).	Subsoil	-	-	Post-medieval
	(003003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (003002); cut by [003006], [003010], [003015], [003021], [003022] & [003026].	Natural geology	-	-	Geological
	[003004]	Cut	(003005)	-	Linear feature; sharp breaks of slope; steeply sloping sides; concave to U-shaped base; L: >1.1m; W: 0.83m; D: 0.49m; cuts (003007).	Cut of boundary ditch terminus	-	-	Mid to Late Iron Age
	(003005)	Fill	-	[003004]	Moderately compacted mid grey brown clayey silt; occasional small-sized stones; occasional charcoal flecks; T: 0.49m; cut by [003014] & [003019].	Single fill of boundary ditch terminus [003004]	Pottery Bone	<003002>	Mid to Late Iron Age
	[003006]	Cut	(003007)	-	Linear feature orientated NE-SW; moderately sloping sides; concave base; L: >1.88m; W: 0.97m; D: 0.41m; cuts (003003).	Cut of ditch	-	-	Iron Age
	(003007)	Fill	-	[003006]	Moderately compacted light brown grey clayey silt; occasional small to medium-sized stones; T: 0.41m; cut by [003004] & [003008].	Single fill of ditch [003006]	-	<003004>	Iron Age
	[003008]	Cut	(003009)	-	Linear feature orientated NE-SW; moderate to steeply sloping sides; concave to near flat base; L: >1.88m; W: 2.25m; D: 0.9m; cuts (003007) & (003011).	Cut of ditch	-	-	Mid to Late Iron Age

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
003	(003009)	Fill	-	[003008]	Moderately compacted light brown grey clayey silt; occasional small to medium-sized stones; T: 0.9m; cut by [003014].	Single fill of ditch [003008]	Pottery Bone	<003003>	Mid to Late Iron Age
	[003010]	Cut	(003011)	-	Linear feature orientated NE-SW; moderate sloping sides; concave to near flat base; L: >1.88m; W: 1.1m; D: 0.91m; cuts (003003).	Cut of ditch	-	-	Iron Age
	(003011)	Fill	-	[003010]	Light brown grey clayey silt; occasional medium-sized stones; T: 0.91m; cut by [003008] & [003012].	Single fill of ditch [003010]	-	<003010>	Iron Age
	[003012]	Cut	(003013)	-	Linear feature orientated ENE-WSW; moderate to sharp breaks of slope; moderate to steeply sloping sides; concave base; L: >1.88m; W: 0.34m; D: 0.25m; cuts (003011).	Cut of gully	-	-	Iron Age
	(003013)	Fill	-	[003012]	Soft to moderately compacted mid grey brown clayey silt; moderate small-sized stones; frequent large-sized stones; T: 0.25m; underlies (003002).	Single fill of gully [003012]	Bone	<003005>	Iron Age
	[003014]	Cut	(003023)	-	Linear feature orientated NNE-SSW; moderate breaks of slope; gently sloping sides; concave base; L: >1.88m; W: 4.05m; D: 0.21m; cuts (003005) & (003009).	Cut of plough furrow	-	-	Post-medieval
	[003015]	Cut	(003016)	-	Sub circular feature; moderate breaks of slope; gently sloping sides; near flat base; L:> 1.2m; W: 1.47m; D: 0.23m; cuts (003003).	Cut of unknown feature	-	-	Mid to Late Iron Age
	(003016)	Fill	-	[003015]	Moderately compacted dark grey brown clayey silt; occasional medium-sized stones; frequent heat affected stones; frequent flecks of charcoal; T: 0.23m; cut by [003017].	Single fill of unknown feature [003015]	Pottery Bone	<003008>	Mid to Late Iron Age

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
003	[003017]	Cut	(003018)	-	Linear feature orientated ENE-WSW; moderate breaks of slope; moderately sloping sides; near flat base; L: >2.6m; W: 1.55m; D: 0.18m; cuts [0030015].	Cut of ditch	-	-	Iron Age
	(003018)	Fill	-	[003017]	Moderately compacted light grey brown clayey silt; T: 0.18m; underlies (003002).	Single fill of ditch [003017]	Bone Slag	<003009>	Iron Age
	[003019]	Cut	(003020)	-	Oval feature; sharp breaks of slope; steeply sloping sides; near flat base; L: N/A; W: 0.58m; D: 0.25m; cuts (003005).	Cut of possible post-pad	-	-	Iron Age
	(003020)	Fill	-	[003019]	Moderately compacted mid grey brown clayey silt; frequent large-sized stones; occasional flecks of charcoal; T: 0.25m; underlies (003002).	Single fill of possible post-pad [003019]	-	<003001>	Iron Age
	[003021]	Cut	(003027)	-	Sub circular to oval feature; sharp break of slopes; steeply sloping sides; undulating base; L: >1.48m; W: 1.34m; D: 0.5m; cuts (003003).	Cut of stone-lined pit	-	-	Mid to Late Iron Age
	[003022]	Cut	(003028)	-	Linear feature orientated NNE-SSW; moderate breaks of slopes; moderately sloping sides; near flat base; L: >1.8m; W: 1.31m; D: 0.13m; cuts (003003).	Cut of ditch	-	-	Mid to Late Iron Age
	(003023)	Fill	-	[003014]	Softly compacted dark red brown clayey silt; occasional to moderate stones; T: 0.21m; underlies (003001).	Single fill of plough furrow [003014]	-	-	Post-medieval
	[003024]	Cut	(003029)	-	Linear feature orientated NNW-SSE; moderate breaks of slope; moderately sloping sides; undulating base; L: >2.16m; W: 1.56m; D: 0.35m; cuts (003002).	Cut of plough furrow	-	-	Post-medieval
	(003025)	Void							
003	[003026]	Cut	(003030)	-	Linear feature orientated NNE-SSW; gradual to sharp breaks of slope; gently sloping side to E; steeply sloping sides to W; concave base; L: >1.8m; W: 4.01m; D: 0.8m; cuts (003003).	Cut of ditch	-	-	Mid to Late Iron Age

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
	(003027)	Fill	-	[003021]	Moderately compacted dark grey brown clayey silt; frequent medium to large-sized stones; very occasional flecks of charcoal; T: 0.5m; underlies (003002).	Single fill of stone-lined pit [003021]	Pottery Bone	<003006>	Mid to Late Iron Age
	(003028)	Fill	-	[003022]	Soft to Moderately compacted dark grey brown clayey silt; very occasional small-sized stones; T: 0.13m; underlies (003002).	Single fill of ditch [003022]	Pottery Bone	<003007>	Mid to Late Iron Age
	(003029)	Fill	-	[003024]	Softly compacted very dark orange brown clayey silt; occasional small to medium-sized stones; T: 0.35m; underlies (003001).	Single fill of plough furrow [003024]	-	-	Post-medieval
	(003030)	Fill	-	[003026]	Firmly compacted frequent large-sized stones (larger stones at the bottom) within a matrix of dark grey brown clayey silt; T: 0.8m; underlies (003002).	Stone fill of ditch [003026]	Pottery Bone CBM Fe objects	<0030011>	Mid to Late Iron Age
004	(004001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.25m; overlies (004002).	Topsoil	CBM (NR)	-	Modern
	(004002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional charcoal flecks; T:0.13m; underlies (004001); overlies (004003) & (004005).	Subsoil	-	-	Post-medieval
004	(004003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (004002); cut by [004004].	Natural geology	-	-	Geological
	[004004]	Cut	(004005)	-	Linear feature orientated E-W; gradual breaks of slope; gently sloping sides; concave base; L: >1.8m; W: 1.75m; D: 0.25m; cuts (004003).	Cut of ditch	-	-	Unknown

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
	(004005)	Fill	-	[004004]	Compact light grey brown silt clay; T: 0.25m; underlies (004002).	Single fill of ditch [004004]	Bone Oyster shell	-	Unknown
005	(005001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.25m; overlies (005002) & (005005).	Topsoil	CBM (NR)	-	Modern
	(005002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional flecks of charcoal; T: 0.13m; underlies (005001); cut by [005004]; overlies (005003).	Subsoil	-	-	Post-medieval
	(005003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (005002); cut by [005006].	Natural geology	-	-	Geological
	[005004]	Cut	(005005)	-	Linear feature orientated NW-SE; gradual breaks of slope; gently sloping sides; concave base; L: >1.86m; W: 1.68m; D: 0.28m; cuts (005002).	Cut of plough furrow	-	-	Post-medieval
	(005005)	Fill	-	[005004]	Softly compacted mid to dark orange brown clayey silt; frequent stone inclusions; T: 0.28m; underlies (005001).	Single fill of plough furrow [005004]	-	-	Post-medieval
	[005006]	Cut	(005007)	-	Linear feature orientated NW-SE; sharp breaks of slope; steeply sloping sides; near flat base; L: >1.86m; W: 2.18m; D: 0.67m; cuts (005003).	Cut of boundary ditch [005006]	-	-	Mid to Late Iron Age
005	(005007)	Fill	-	[005006]	Moderately compacted light grey brown silty clay; greenish hue towards the base; occasional small to large-sized stones; T: 0.67m; underlies (005002).	Single fill of boundary ditch [005006]	Pottery Bone	<005001>	Mid to Late Iron Age
006	(006001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones; occasional flecks of charcoal; T: 0.11m; overlies (006002).	Topsoil	CBM (NR)	-	Modern

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
	(006002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional flecks of charcoal; T: 0.13m; underlies (006001); overlies (006003), (006005), (006007) & (006009).	Subsoil	-	-	Post-medieval
	(006003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (006002); cut by [006004], [006006] & [006008].	Natural geology	-	-	Geological
	[006004]	Cut	(006005)	-	Sub-circular feature; sharp breaks of slope; steeply sloping sides; near flat base; L: 1.64m; W: 1.38m; T: 0.38m; cuts (006003).	Cut of pit	-	-	Mid to Late Iron Age
	(006005)	Fill	-	[006004]	Moderately compacted dark grey brown clayey silt; T: 0.38m; underlies (006002).	Single fill of pit [006004]	Pottery Bone	<006001>	Mid to Late Iron Age
	[006006]	Cut	(006007)	-	Sub-circular feature; sharp breaks of slopes; steeply sloping sides; near flat base; Dia.: 1.7m; D: 0.42m; cuts (006003).	Cut of pit	-	-	Mid to Late Iron Age
	(006007)	Fill	-	[006006]	Moderately compacted dark grey brown clayey silt; T: 0.42m; underlies (006002).	Single fill of pit [006006]	Pottery Bone	<006002>	Mid to Late Iron Age
	[006008]	Cut	(006009)	-	Sub-circular feature; sharp breaks of slope; steeply sloping sides; near flat base; Dia.: 1m; D: 0.69m; cuts (006003).	Cut of pit	-	-	Mid to Late Iron Age
006	(006009)	Fill	-	[006008]	Moderately compacted dark grey brown clayey silt; T: 0.69m; underlies (006002).	Single fill of pit [006008]	Pottery Bone	<006003>	Mid to Late Iron Age
007	(007001)	Deposit	-	-	Softly compacted dark grey brown clayey silt; occasional small-sized stones and flecks of charcoal; T: 0.11m; overlies (007002).	Topsoil	CBM (NR)	-	Modern

Trench	Context	Type	F/B	F/O	Description	Interpretation	Finds	Sample No	Provisional Date
	(007002)	Deposit	-	-	Softly compacted mid orange brown clayey silt; occasional small to medium-sized stones; very occasional flecks of charcoal; T: 0.13m; underlies (007001); overlies (007003).	Subsoil	-	-	Post-medieval
	(007003)	Deposit	-	-	Soft to firmly compacted very light brown grey to white silty clay with intermittent bedrock; occasional small to large-sized stones; underlies (007002).	Natural geology	-	-	Geological
008	(008001)	Deposit	-	-	Moderately compacted dark brown silty clay; occasional mixed stones; T: 0.6m; overlies (008002).	Topsoil	-	-	Modern
	(008002)	Deposit	-	-	Compact light grey brown silty clay; occasional mixed stones; T: 0.1m; underlies (008001); overlies (008003)	Subsoil	Pottery (NR)	-	Post-medieval
	(008003)	Deposit	-	-	Compact light orange yellow clay; frequent mixed stones; underlies (008002).	Natural geology	-	-	Geological
009	(009001)	Deposit	-	-	Moderately compacted dark brown silty clay; occasional mixed stones; T: 0.3m; overlies (009002).	Topsoil	-	-	Modern
	(009002)	Deposit	-	-	Compact light grey brown silty clay; T: 0.8m; underlies (009001); overlies (009003).	Subsoil	Pottery Bone CBM	-	Post-medieval
	(009003)	Deposit	-	-	Compact light yellow orange clay; frequent mixed stones; underlies (009002).	Natural geology	-	-	Geological

13 Appendix 3: Assessment of the Pottery

Kostas Papagiannakis BA MA ACIfA, Border Archaeology Ltd

13.1 Introduction

A total of 127 sherds weighing 1.110kg were recovered from 19 contexts within six of the nine excavated evaluation trenches at Land off Broughton Road, Bretch Hill, Banbury; this included 53 sherds (165g,) recovered from the bulk palaeoenvironmental samples, which were scanned for diagnostic sherds but were not included in the quantified analysis presented here.

This is a provisional assessment of the 74 hand-collected sherds, which weighed 945g and included two bases and three rim sherds.

13.2 Methodology

The pottery was examined by context and recorded based on fabric types, quantified by sherd count and weight (g), with all diagnostic features and observations also recorded (*Table 1*).

The majority of the material was recovered from ditches and gullies, with a smaller quantity retrieved from pits (Border Archaeology 2022).

Context No:	Cut No:	Feature Type	Trench No	Pottery		Fabric	Provisional Date	Comments
				No. of sherds	(g)			
(001005)	[001004]	Ditch	001	2	2	Coarse shell tempered	MIA-LIA	Body sherds
(002007)	[002006]	Ditch	002	4	32	Hand-made Grog tempered, wheel-made fine sandy	MIA/LIA-Romano-British	Body sherds Grey ware
(002009)	[002008]	Linear	002	1	1	Wheel-made fine sandy	?	Body sherd
(002013)	[002012]	Pit	002	3	44	Hand-made grog	MIA-LIA	Body sherds
(003005)	[003004]	Ditch	003	3	24	Hand-made grog	MIA-LIA	Body sherds
(003009)	[003008]	Ditch	003	12	263	Hand-made grog, coarse shell tempered	MIA-LIA	Body sherds
(003016)	[003015]	Unknown feature	003	6	26	Hand-made grog	MIA-LIA	Body sherds

Context No:	Cut No:	Feature Type	Trench No	Pottery		Fabric	Provisional Date	Comments
				No. of sherds	(g)			
(003027)	[003021]	Pit	003	3	60	Hand-made grog, shell tempered	MIA-LIA	Rim, base sherds
(003028)	[003022]	Ditch	003	3	26	Hand-made grog, shell tempered	MIA-LIA	Base sherds
(003030)	[003026]	Ditch	003	8	38	Hand-made grog	MIA-LIA	Body sherds
(005007)	[005006]	Ditch	005	3	31	Hand-made grog, shell tempered	MIA-LIA	Body sherds
(006005)	[006004]	Pit	006	6	112	Hand-made grog, coarse shell tempered	MIA-LIA	Body sherds
(006007)	[006006]	Pit	006	17	205	Hand-made grog, shell tempered	MIA-LIA	Two rim sherds, incised geometric decoration of EIA tradition-shoulder-upper body part
(006009)	[006008]	Pit	006	2	72	Shell tempered, sandy	MIA-LIA	Incised geometric decoration of EIA tradition-shoulder-upper body part
(007002)	-	Subsoil	007	1	9	Wheel-made fine sandy	Romano-British	Body sherd (Oxfordshire ware?)
Total				74	945			

Table 1: Pottery assessment by context

13.3 Fabrics

Three fabrics were identified and are described in Table 1. The most common fabric was hand-made Grog, comprising 51 sherds weighing 537g. This was followed by shell tempered, which was represented by a total of 19 sherds weighing 390g, with Fine Sandy wares limited to 4 sherds that weighed 18g.

13.4 Dating

The range of fabrics present are consistent with those recorded in Iron Age assemblages from the region, with the majority probably originating within the Middle Iron Age. Nearly all of the assemblage is hand-made, with the exception of two wheel-thrown sherds of possible Romano-British date.

Of note were two shoulder or upper body sherds from contexts (006007) and (006009). These displayed incised geometric designs and were of a well-finished fine fabric (*Plate 1*), Early Iron Age parallels of which can be found in East Anglia and Peterborough (Cunliffe 1991).



Plate 1: Decorated pottery sherd from Pit [006008]

13.5 Discussion

This is a typical group of Middle to Late Iron Age pottery, with Early Iron Age traditions seen in the sherds from (006007) and (006009); four sherds of Romano-British date were also present, all of which derived from a single fill.

The material fits in with the regional pattern of pottery fabrics, with carinated bowls and jars as predominant shapes – as might be expected in a domestic assemblage – with some less well-finished coarse wares and some burnished, where shell and calcitic inclusions have leached out of the fabric.

13.6 Recommendations

The assemblage is definitely of local and probably of regional interest. Given that little excavation has taken place in the area, full analysis on this assemblage is warranted if further archaeological work is conducted on site and a larger assemblage is recovered.

13.7 References

Border Archaeology Ltd., 2022, *Archaeological Field Evaluation. Land off Broughton Road, Bretch Hill, Banbury, Oxfordshire. On behalf of Environmental Dimension Partnership Ltd.*

Cunliffe, B., 1993, *Iron Age Communities in Britain*. (3rd ed), London & New York: Routledge.

Gibson, A., 2012, *Prehistoric Pottery in Britain & Ireland*, The History Press.

14 Appendix 4: Palaeoenvironmental Report

Peter Rose BA, Border Archaeology Ltd

14.1 Non-Technical Summary

This report has been prepared by the Palaeoenvironmental Department at Border Archaeology Ltd to facilitate and elucidate the palaeoenvironmental, palaeoeconomic and palaeodietary interpretations of a sequence of features discovered during Archaeological Evaluation at Land off Broughton Road, Bretch Hill, Banbury, Oxfordshire.

A total of 21 samples were processed by flotation having originated from a sequence of features largely identified as Iron Age pits and ditches.

The charred material suggested that stone-lined pit [003021] was used for refuse, likely as a secondary function. Trench 006 also contained assemblages indicative of features being used for waste disposal. Trenches 001 and 002 contained ditches that showed evidence of a sheltered environment within a grassland, the residual anthropogenic material suggesting they were at some distance from habitation. Trench 003 was a trench of contradictions with features either demonstrating low recovery of materials or containing the richer environmental assemblages. Trenches 004 and 005 had low recovery suggesting a significant distance from habitation.

14.2 Introduction

This report details the results derived from 14 ditches, four pits, two surfaces, and one possible post-pad investigated during Archaeological Evaluation at Land off Broughton Road, Bretch Hill, Banbury, Oxfordshire.

In accordance with the *Written Scheme of Investigation* (WSI; BA 2022), at least 40% or 100% of the deposits were sampled. However, due to the restrictions inherent in evaluation trenching, this resulted in 21 samples comprising 550% of material being received by the Palaeoenvironmental Department. Between 10% and 40% was taken in each sample dependent on the ability to sample secure contexts. The results are presented by context in Section 13.5 below.

The samples were processed by means of flotation with the resultant archaeological and archaeobotanical material, from both the floating element and the heavier residue/retent, sorted and visually identified. The nature and interpretative significance of the recovered remains is detailed in Section 13.4 below.

14.2.1 Site Description

The land comprising the evaluation totalled approximately 31100m² and occupied four fields. While the fields may have been traditionally pastoral, they had recently been cropped.

14.2.2 Soils and Geology

The surrounding geology was a slowly permeable, seasonally wet and slightly acid but base-rich loamy and clayey soil. This geology would favour the survival of charred plant remains (SSEW 1983).

14.3 Methodology

14.3.1 Objectives

The purpose of the palaeoenvironmental sampling strategy implemented during archaeological evaluations is the retrieval of non-specific palaeoenvironmental remains and the further characterisation of features that cannot be fully investigated due to the confines of the evaluation parameters. An additional purpose to palaeoenvironmental reporting in the case of archaeological evaluations is the recommendation of further, potentially specific, palaeoenvironmental sampling in further archaeological mitigation.

14.3.2 Methodology

Sampling methodology followed the *Palaeoenvironmental Department Manual* (BA 2017) with reference to Historic England guidance (Campbell *et al.* 2011). On site, the samples were collected in 10ℓ sample buckets and identified by context and sample number.

The samples were not subject to sub-sampling and their entirety was processed by means of flotation. Flotation was undertaken in Siraf-style tanks (Williams 1973) with a 500µm retent mesh and 250µm flot sieve. No refloating was required for these samples. Retents were initially scanned by magnet to retrieve any archaeometallurgical debris and a sieve bank was used to facilitate visual sorting with the smaller fractions sorted by means of magnifying lamp and/or illuminated stereo zoom microscopy ($\leq \times 10$). The flots were sorted entirely by means of illuminated stereo zoom microscopy ($\leq \times 10$). The results of this analysis are reported with the flot and retent data recombined due to limited to no variance in the species being reported.

14.3.3 Personnel

Flotation and analysis was undertaken within the Palaeoenvironmental Department under the guidance of Craig Lathwell BSc and Amy Bunce BSc MA MCIfA. External and internal specialists were consulted for archaeological finds, archaeometallurgical material and archaeozoological assemblages.

14.4 Description and methodology of materials

Detailed below are the general implications of the discovery of certain materials within the palaeoenvironmental samples and their specialised methodological considerations. Section 13.5 details such information by context.

14.4.1 Finds

Archaeological finds within palaeoenvironmental samples are fairly common and help confirm that the sampling of the material was not biased in any manner.

In this case, sampling produced pottery and ceramic building material (CBM). All finds were in poor abundance, except pottery in (006007) and (006009) of which there was an occasional abundance.

14.4.2 Bone

Both burnt and unburnt bone may be present within palaeoenvironmental samples with taphonomic conditions occasionally proportionately affecting their preservation. Burnt bone is reasonably conclusively of anthropogenic origin, deriving from domestic activities as well as some industrial and funeral practices. Unburnt bone may have become incorporated due to animal death in the vicinity of the context, incidences of the inadvertent inclusion of unburnt bone from decomposed individuals, especially of small mammals and reptiles, can highlight specific ecological niches. However, unburnt bone from large mammals is a good indicator of nearby settlement and potential butchery.

Sampling produced unburnt mammal bone, small animal bone and burnt mammal bone. This was generally in poor abundance except in contexts (006007) and (006009).

14.4.3 Shell

Terrestrial shell comprises that from snails that may have been present in the area during deposition of the fills. Identification of the species represented highlights any ecological niches preferred by certain species in the environments they inhabited.

Archaeomalacological identification is undertaken in-house on the basis of apical and diagnostic fragments utilising reference texts (Cameron 2008; Evans 1972; Kerney & Cameron 1979; & Welter-Schultes 2012). Environmental interpretations follow Davies (2008) with ecological groups for terrestrial and freshwater species as designated by Evans (1972) and Sparks (1961) and ecological preferences inferred by reference to Kerney and Cameron (Kerney & Cameron 1979). Taphonomic uncertainty (Lowe & Walker 1997) is recognised and unknown habitat and associations (Bush 1988) accepted.

The molluscan death assemblage was of overall low abundances with the exception of *Cecilioides acicula* (Blind snail) which was present in every sample, making up 79% of the total molluscan incidences. The presence of *C. acicula* can suggest an open environment such as clearings (Davies 2008), however the snail also limits interpretation, as *C. acicula* is a burrowing snail which commonly invades contexts, potentially causing cross-contamination.

14.4.4 Charcoal

Charcoal is ubiquitous in palaeoenvironmental samples as it is used in domestic, funerary and industrial settings or may be present as a result of accidental firings. Identification of the wood species making up the charcoal assemblage can add valuable data as to wood selection and anthracological analysis can indicate the ecology.

While often relied upon for dating, in particular ^{14}C , charcoal is not the best material to use. Charcoal is subject to the 'Old Wood problem', whereby wood is known to be frequently reused and charcoal redeposited. In addition, wood grows over many years and it is not possible to know precisely where within the tree a charcoal fragment has derived.

Anthracological analysis is undertaken in-house, utilising reference keys (Hather 2000; Schweingruber 1990a; & Schweingruber 1990b), at $\times 100$ magnification with higher magnifications to $\times 400$ used where necessary. Lighting is by incident lighting with transmitted lighting where necessary. Charcoal is transversally sectioned with tangential or radial sectioning undertaken where required.

Growth ring curvature and diameter size classification is by reference to Ludemann-Nelle (L-N) templates (Ludemann 2002; & Nelle 2002) whereby classes I, II, III, IV & V represent diameters $<20\text{mm}$, $20\text{-}30\text{mm}$, $30\text{-}50\text{mm}$, $50\text{-}100\text{mm}$ and $>100\text{mm}$ respectively. Growth ring curvature is additionally classified by reference to Marguerie-Hunot (M-H) test cards (Marguerie & Hunot 2007) whereby weak, moderate and strong curvature are categorised 1, 2 and 3 respectively.

Charcoal was present in most samples in poor abundance in the $<2\text{mm}$, $2\text{-}4\text{mm}$ and $>4\text{mm}$ fractions as indeterminate fragments. This can only suggest residual burning in the surrounding area.

14.4.5 Slag

Archaeometallurgical debris may be present in the form of unspecific slag fragments, diagnostic slag fragments, vitrified structures and, more commonly for environmental samples, as hammerscale of the spheroidal or flake variety. Slag may be retrieved from both the flot and retent; this apparent contradiction, in that slag would normally be too heavy to float, is due to air vesicles.

Slag was present in (003005), (003009) and (006007) in poor abundance.

14.4.6 Uncharred archaeobotanical material

In the vast majority of instances of uncharred archaeobotanical material in palaeoenvironmental samples, it must be disregarded as of potentially modern origin. However, waterlogged conditions and some other preservational conditions can allow uncharred archaeobotanical remains to be considered.

Sampling produced only low abundances of uncharred wild taxa, with the highest incidences present being of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), this comprised 33% of the archaeobotanical assemblage, with *Urtica dioica* (Common Nettle) present as the second highest abundance at 23%. *Chenopodium/Atriplex* sp.

cannot be easily differentiated between their charred and uncharred external appearance and occur in large and varied habitats so are of limited value palaeoenvironmentally. The abundance of the species and nature of the geology would suggest modern contamination in this case.

14.4.7 Charred archaeobotanical material

Charred archaeobotanical material is generally the most illustrative palaeoeconomic remnant. Charring is generally accepted to be almost solely of anthropogenic origin and the material can therefore be used to directly reconstruct the past agricultural or consumer economy and diet with acceptance of the intrinsic bias of a charred assemblage over unpreserved plant remains.

Archaeobotanical identification is undertaken in-house utilising reference texts that include the most relevant to the British assemblages (Anderburg 1994; Berggren 1969; Berggren 1981; Groningen Institute of Archaeology 2006-present; Jacomet 2006; Martin & Barkley 2000; Renfrew 1973; & Schoch *et al.* 1988) with classification following Stace (Stace 2010).

The carbonised wild taxa assemblage comprised a single incidence of *Rumex* sp. (Knotweed).

The carbonised cereal assemblage comprised *Avena* sp. (Oat), *Hordeum vulgare* (Hulled Barley), *Triticum aestivum/durum* (Bread/Durum Wheat), *Triticum spelta* (Spelt Wheat) and Poaceae (Grass) caryopses. Chaff was also present, identified as four *T. spelta* glume bases and four indeterminate glume bases. All cereal present was in very low abundance, with 78% of all non-fragmentary incidences being present in stone-lined pit [003021].

14.5 Description of results

Detailed below are the palaeoenvironmental remains from each context, an assessment of the localised palaeoenvironment reconstruction is attempted. Results for all contexts can be observed in the table in Section 13.6 below.

14.5.1 [001004]: (001005)

(001005) was the fill of boundary ditch [001004]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone and burnt mammal bone. The uncarbonised wild taxa assemblage comprised four incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes). Indeterminate charcoal was present at the <2mm fraction in poor abundance. The molluscan death assemblage comprised 17 incidences of *Cecilioides acicula* (Blind snail), four incidences of Hygromiidae (Leaf snails), two incidences of *Vallonia excentrica* (Eccentric Vallonia) and single incidences of *Vallonia pulchella* (Lovely Vallonia), *Vertigo* sp. (Whorl snails) and cf. *Vertigo* sp. (Whorl snails) with nine indeterminate incidences. This may indicate a sheltered ditch within a grassland environment with residual inclusions of anthropogenic material.

14.5.2 [002004]: (002005)

(002005) was the fill of divisional/drainage ditch [002004]. The artefactual assemblage was of pottery with unburnt mammal bone also present. The uncarbonised wild taxa assemblage comprised two incidences of *Urtica dioica* (Common Nettle) and a single incidence of Polygonaceae (Buckwheats). Indeterminate charcoal was present at the <2mm fraction in poor abundance. The molluscan death assemblage comprised 99 incidences of *Cecilioides acicula* (Blind snail), six incidences of Hygromiidae (Leaf snails), seven incidences of *Vallonia excentrica* (Eccentric Vallonia), four incidences of *Vallonia pulchella* (Lovely Vallonia), eight incidences of *Pupilla* cf. *muscorum* (Moss Chrysalis snail), four incidences of cf. *Vertigo* sp. (Whorl snails), a single incidence of *Vertigo* sp. (Whorl snail) with 12 indeterminate incidences. The molluscan evidence indicates a sheltered ditch but the inclusion of anthropogenic material was limited.

14.5.3 [002006]: (002007)

(002007) was the fill of divisional/drainage ditch [002006]. The artefactual assemblage was of pottery. Indeterminate charcoal was present at the <2mm fraction in poor abundance. The molluscan death assemblage comprised 52 incidences of *Cecilioides acicula* (Blind snail), two incidences of *Vallonia pulchella* (Lovely Vallonia), six incidences of *Pupilla muscorum* (Moss Chrysalis snail) and a single incidence of Hygromiidae (Leaf snails) with two indeterminate incidences. This may indicate a sheltered ditch at some distance from habitation due to the limited inclusion of anthropogenic material.

14.5.4 [002008]: (002009)

(002009) was the fill of divisional/drainage ditch [002008]. The artefactual assemblage was of pottery with unburnt mammal bone also present. Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised 21 incidences of *Cecilioides acicula* (Blind snail), two incidences of Hygromiidae (Leaf snails), three incidences of *Pupilla muscorum* (Moss Chrysalis snail) and single incidences of *Vallonia pulchella* (Lovely Vallonia), *Vallonia constata* (Ribbed Grass snail) and *Cochlicopa* sp. (Pillar snails) with four indeterminate incidences. This may indicate a sheltered ditch within a grassland environment, potentially at some distance from habitation.

14.5.5 [002010]: (002011)

(002011) was the fill of divisional/drainage ditch [002010]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone. The uncarbonised wild taxa assemblage comprised three incidences of *Urtica dioica* (Common Nettle). Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised eight incidences of *Cecilioides acicula* (Blind snail), two incidences of Hygromiidae (Leaf snails), three incidences of *Pupilla muscorum* (Moss Chrysalis snail) and a single incidence of *Vallonia excentrica* (Eccentric Vallonia). Although limited, this indicates a sheltered ditch environment.

14.5.6 [003004]: (003005)

(003005) was the fill of ditch terminus [003004]. The artefactual assemblage was of CBM with indeterminate slag as well as unburnt mammal bone and burnt mammal bone. The uncarbonised wild taxa assemblage comprised

singular incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), cf. *Ranunculus* sp. (Buttercup) and *Aethusa cynapium* (Fool's Parsley). Indeterminate charcoal was present at the 2-4mm fraction in poor abundance. The molluscan death assemblage comprised 31 incidences of *Cecilioides acicula* (Blind snail), two incidences of Hygromiidae (Leaf snails) and a single incidence of *Vallonia excentrica* (Eccentric Vallonia). The molluscan evidence supports a ditch terminus while the anthropogenic material suggests residual inclusion.

14.5.7 [003006]: (003007)

(003007) was the fill of ditch [003006]. No artefactual material was present. The uncarbonised wild taxa assemblage comprised three incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes). Indeterminate charcoal was present at the 2-4mm fraction in poor abundance. The molluscan death assemblage comprised 20 incidences of *Cecilioides acicula* (Blind snail), two incidences of *Vallonia pulchella* (Lovely Vallonia) and single incidences of *Vallonia excentrica* (Eccentric Vallonia) and cf. *Anisus leucostoma* (White-lipped Ramshorn snail) with three indeterminate incidences. Low return of materials prohibits any meaningful conclusions.

14.5.8 [003008]: (003009)

(003009) was the fill of ditch [003008]. Slag, unburnt mammal bone and small animal bone was present. The carbonised cereal assemblage comprised a single indeterminate cereal caryopsis. The uncarbonised wild taxa assemblage comprised a single incidence of *Rumex* sp. (Knotweeds). The molluscan death assemblage comprised 73 incidences of *Cecilioides acicula* (Blind snail) with single incidences of Hygromiidae (Leaf snails), *Vallonia excentrica* (Eccentric Vallonia) and *Vertigo* sp. (Whorl snails) with three indeterminate incidences. Despite the presence of charred cereal and other anthropogenic materials, low return prohibits any meaningful conclusions.

14.5.9 [003010]: (003011)

(003011) was the fill of ditch [003010]. The artefactual assemblage was of pottery alongside unburnt mammal bone. Indeterminate charcoal was present at the <2mm and >4mm fractions in poor abundance. The molluscan death assemblage comprised 14 incidences of *Cecilioides acicula* (Blind snail), three incidences of *Vallonia excentrica* (Eccentric Vallonia) and two incidences of *Pupilla muscorum* (Moss Chrysalis snail) with two indeterminate incidences. Low return of materials prohibits any meaningful conclusions.

14.5.10 [003012]: (003013)

(003013) was the fill of gully [003012]. Unburnt mammal bone was present. The uncarbonised wild taxa assemblage comprised five incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes) and 21 incidences of *Urtica dioica* (Common Nettle). Indeterminate charcoal was present at the <2mm fraction in poor abundance. The molluscan death assemblage comprised 30 incidences of *Cecilioides acicula* (Blind snail), two incidences of Hygromiidae (Leaf snails) and single incidences of *Vallonia* sp. (Grass snails) and *Pupilla muscorum* (Moss Chrysalis snail) with two indeterminate incidences. Low return of materials prohibits any meaningful conclusions.

14.5.11 [003015]: (003016)

(003016) was sampled from feature [003015]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone. The carbonised cereal assemblage comprised single incidences of *Avena* sp. (Oat), *Hordeum vulgare* (Hulled Barley) and *Triticum* sp. (Wheat) caryopses with two indeterminate cereal caryopses. The uncarbonised wild taxa assemblage comprised three incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes) with single incidences of *Picris echioides* (Bristly Ox-tongue) and *Rubus* sp. (Brambles). Indeterminate charcoal was present at the <2mm, 2-4mm and >4mm fractions in poor abundance. The molluscan death assemblage comprised 28 incidences of *Cecilioides acicula* (Blind snail), four incidences of Hygromiidae (Leaf snails), five incidences of *Vallonia excentrica* (Eccentric Vallonia) and a single incidence of *Vertigo antivertigo* (Marsh Whorl snail) with 18 indeterminate incidences. The molluscan evidence may suggest a sheltered environment, coupled with the low fragmentation of the charcoal and the morphological preservation of the cereal grains, this would suggest (003016) was fairly undisturbed. It may therefore be the case that (003016) represents dumping of burnt stones instead of a surface.

14.5.12 [003017]: (003018)

(003018) was the fill of ditch [003017]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone and burnt mammal bone. The uncarbonised wild taxa assemblage comprised four incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), two incidences of *Rubus* sp. (Brambles) and a single incidence of *Veronica hederifolia* (Ivy-leaved Speedwell). Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised six incidences of *Cecilioides acicula* (Blind snail), 10 incidences of Hygromiidae (Leaf snails), 11 incidences of *Vallonia excentrica* (Eccentric Vallonia), five incidences of *Vallonia pulchella* (Lovely Vallonia), two incidences of *Cochlicopa* sp. (Pillar snails), eight incidences of *Anisus leucostoma* (White-lipped Ramshorn snail) and single incidences of *Vallonia constata* (Ribbed Grass snail), *Pupilla* cf. *muscorum* (Moss Chrysalis snail) and *Cepaea* sp. (Grove snails) with 31 indeterminate incidences. Although the molluscan assemblage included the presence of a freshwater snail, the majority of the assemblage indicated an open environment instead of a sheltered or wet environment. Consequently, the environment of (003018) is inconclusive.

14.5.13 [003019]: (003020)

(003020) was the fill of possible post-pad [003019]. The artefactual assemblage was of CBM with burnt mammal bone also present. The uncarbonised wild taxa assemblage comprised a single incidence of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes). Indeterminate charcoal was present at the 2-4mm fraction in poor abundance. The molluscan death assemblage consisted of 63 incidences of *Cecilioides acicula* (Blind snail) and single incidences of Hygromiidae (Leaf snails), *Vallonia excentrica* (Eccentric Vallonia), *Pupilla* cf. *muscorum* (Moss chrysalis snail) with three indeterminate incidences. Low return of materials prohibits any meaningful conclusions.

14.5.14 [003021]: (003027)

(003027) was the fill of stone-lined pit [003021]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone, unburnt small animal bone and burnt mammal bone.

The carbonised cereal assemblage comprised two incidences of *Hordeum vulgare* (Hulled Barley), five incidences of cf. *Hordeum vulgare* (Hulled Barley), seven incidences of Poaceae (Grass), four incidences of *Triticum aestivum/durum* (Bread/Durum Wheat), six incidences of *Triticum* cf. *aestivum/durum* (Bread/durum Wheat), three incidences of *Triticum* cf. *spelta* (Spelt Wheat), 17 incidences of *Triticum* sp. (Wheat) and single incidences of cf. *Avena* sp. (Oat), *Triticum spelta* (Spelt Wheat) and cf. *Triticum* sp. (Wheat) caryopses with 99 indeterminate cereal caryopses and 156 indeterminate cereal fragments. Three incidences of cereal chaff were also identified as *Triticum* cf. *spelta* (Spelt Wheat) glume bases.

The uncarbonised wild taxa assemblage comprised 20 incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), six incidences of Polygonaceae (Buckwheats), 7 incidences of *Galium* sp. (Bedstraw), three incidences of *Rumex* spp. (Knotweeds) and single incidences of *Betula* sp. (Birch), *Silene* sp. (Catchflies), *Sonchus oleraceus* (Common Sow-thistle) and *Veronica hederifolia* (Ivy-leaved Speedwell) with five indeterminate incidences.

Indeterminate charcoal was present at the <2mm fraction in poor abundance.

The molluscan death assemblage comprised 700 incidences of *Cecilioides acicula* (Blind snail), nine incidences of *Anisus leucostoma* (White-lipped Ramshorn snail), six incidences of Hygromiidae (Leaf snails), 10 incidences of *Vallonia excentrica* (Eccentric Vallonia) and two incidences of *Vertigo* sp. (Whorl snails) with single incidences of *Pupilla muscorum* (Moss Chrysalis snail), *Vallonia pulchella* (Lovely Vallonia), *Vallonia* cf. *constata* (Ribbed Grass snail) with 43 indeterminate incidences. The high abundance of *C. acicula* present could suggest an open environment (Davies, 2008) but due to the snail's burrowing nature, this cannot be conclusive.

The cereal evidence from (003027) strongly suggests disposal of material from accidental charring during crop drying. Additionally, the quantity of uncharred material from (003027) could suggest that pit [003021] was catching organic material or that other organics were disposed of, instead of the presence of uncharred material being due to contamination. Finally, the molluscan evidence is suggestive of wet, sheltered and grassland environments which may indicate multiple environmental conditions within the pit, that molluscan material was transported with refuse dumped into the pit, and/or that pit [003021] was catching material from the surroundings. The inclusion of artefactual and faunal material may be due to deliberate dumping or residual inclusion.

14.5.15 [003022]: (003028)

(003028) was the fill of ditch [003022]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone and burnt mammal bone. The carbonised cereal assemblage comprised single incidences of Poaceae (Grass) and *Triticum* cf. *spelta* (Spelt Wheat) caryopses with two indeterminate cereal caryopses. The uncarbonised wild taxa assemblage comprised single incidences of cf. *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes) and *Rumex* sp. (Knotweeds). Indeterminate charcoal was present at the <2mm, 2-4mm and >4mm fractions in poor abundance. The molluscan death assemblage comprised eight incidences of *Cecilioides acicula* (Blind snail), two incidences of *Carychium minimum* (Short-toothed Herald snail), three incidences of *Vallonia pulchella* (Lovely Vallonia) and a single incidence of *Vertigo* sp. (Whorl snails) with three indeterminate incidences. The presence of anthropogenic materials suggests nearby occupation to some extent.

14.5.16 [003026]: (003030)

(003030) was sampled from stone surface [003026]. The artefactual assemblage was of pottery with unburnt mammal bone, unburnt small animal bone and burnt mammal bone also present. Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised 23 incidences of *Cecilioides acicula* (Blind snail), seven incidences of Hygromiidae (Leaf snails), 12 incidences of *Pupilla* cf. *muscorum* (Moss Chrysalis snail), 16 incidences of *Vallonia excentrica* (Eccentric Vallonia) with single incidences of *Discus rotundatus* (Rotund Disc snail) and *Vertigo* sp. (Whorl snails) with 24 indeterminate incidences. This is suggestive of a sheltered environment within the stone surface.

14.5.17 [004004]: (004005)

(004005) was the fill of linear ditch [004004]. Unburnt mammal bone and burnt mammal bone was present. The uncarbonised wild taxa assemblage comprised five incidences of *Urtica dioica* (Common Nettle) with single incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), Lamiaceae (Mints/Deadnettles) and *Veronica hederifolia* (Ivy-leaved Speedwell). Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised seven incidences of *Cecilioides acicula* (Blind snail), two incidences of *Vallonia pulchella* (Lovely Vallonia) and a single incidence of *Vertigo antivertigo* (Marsh Whorl snail). Low return of material prohibits any meaningful conclusions.

14.5.18 [005006]: (005007)

(005007) was the fill of ditch [005006]. The artefactual assemblage was of pottery with unburnt mammal bone and burnt mammal bone also present. The uncarbonised wild taxa assemblage comprised a single incidence of *Betula* sp. (Birch) but this seed can travel distance. Indeterminate charcoal was present at the <2mm and 2-4mm fractions in poor abundance. The molluscan death assemblage comprised two incidences of *Cecilioides acicula* (Blind snail), three incidences of *Pupilla muscorum* (Moss Chrysalis snail) and a single incidence of Hygromiidae (Leaf snails) with three indeterminate incidences. Low return of material prohibits any meaningful conclusions.

14.5.19 [006004]: (006005)

(006005) was the fill of sub-circular pit [006004]. The artefactual assemblage was of CBM with unburnt mammal bone and burnt mammal bone also present. The carbonised cereal assemblage comprised a single incidence of Poaceae (Grass) caryopsis with seven indeterminate cereal caryopses and a single incidence of *Triticum* cf. *spelta* (Spelt Wheat) glume base with four indeterminate cereal glume bases. The uncarbonised wild taxa assemblage comprised three incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes), three incidences of *Galium* sp. (Bedstraw), two incidences of *Veronica hederifolia* and a single incidence of Lamiaceae (Mints/Deadnettles). Indeterminate charcoal was present at the <2mm fraction in poor abundance. The molluscan death assemblage comprised 47 incidences of *Cecilioides acicula* (Blind snail) and single incidences of Hygromiidae (Leaf snails) and *Vallonia* sp. (Grass snails) with three indeterminate incidences. The presence of glume bases is suggestive of waste disposal.

14.5.20 [006006]: (006007)

(006007) was the fill of sub-circular pit [006006]. The artefactual assemblage comprised pottery and CBM alongside slag, unburnt mammal bone, unburnt small animal bone and burnt mammal bone. The carbonised cereal assemblage comprised single incidences of cf. *Avena* sp. (Oat), cf. Poaceae (Grass) and *Triticum* cf. *aestivum/durum* (Bread/Durum Wheat) with five indeterminate cereal caryopses and four indeterminate cereal fragments. The uncarbonised wild taxa assemblage comprised two incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes) with single incidences of *Aethusa cynapium* (Fool's Parsley) and *Galium* sp. (Bedstraw). Indeterminate charcoal was present at the <2mm, 2-4mm and >4mm fractions in poor abundance. The molluscan death assemblage comprised 85 incidences of *Cecilioides acicula* (Blind snail) and single incidences of Hygromiidae (Leaf snails) and *Vertigo antivertigo* (Marsh Whorl snail) with a single indeterminate incidence. The anthropogenic material suggests waste disposal.

14.5.21 [006008]: (006009)

(006009) was the fill of sub-circular pit [006008]. The artefactual assemblage comprised pottery and CBM alongside unburnt mammal bone, unburnt small animal bone and burnt mammal bone. The carbonised cereal assemblage comprised two incidences of Poaceae (Grass), three incidences of *Triticum* cf. *aestivum/durum* (Bread/Durum Wheat) alongside single incidences of cf. *Avena* sp. (Oat) and cf. *Triticum* sp. (Wheat) caryopses. Indeterminate remains were also present as three cereal caryopses and 10 cereal fragments. The uncarbonised wild taxa assemblage comprised five incidences of *Chenopodium/Atriplex* sp. (Goosefoots/Saltbrushes) and single incidences of *Galium* sp. (Bedstraw), cf. *Sambucus nigra* (Elder) and *Sonchus asper* (Prickly Sow-thistle). Indeterminate charcoal was present at the <2mm, 2-4mm and <4mm fractions in poor abundance. The molluscan death assemblage comprised 119 incidences of *Cecilioides acicula* (Blind snail) and single incidences of Hygromiidae (Leaf snails) and *Vallonia pulchella* (Lovely Vallonia) with eight indeterminate incidences. The cereal and anthropogenic material indicates waste disposal.

14.6 Table of results

The following table details the abundance results from both the archaeobotanical material and the archaeological finds. Weight and quantity records have been recorded but are not presented here due to the variation between materials.

Abundance key: + = rare; ++ = occasional; +++ = common; ++++ = abundant.

Context no.	001005	002005	002007	002009	002011	003005	003007	003009	003011	003013	003016	003018	003020	003027	003028	003030	004005	005007	006005	006007	006009
Cut no.	001004	002004	002006	002008	002010	003004	003005	003008	003010	003012	003015	003017	003019	003021	003022	003026	004004	005006	006004	006006	006008
Sample no.	001001	002001	002002	002003	002004	003002	003004	003003	003010	003015	003008	003009	003001	003006	003007	003011	004001	005001	006001	006002	006009
Sample part	1/4-4/4	1/4-4/4	1/1	1/1	1/1	1/3-3/3	1/1	1/2-2/2	1/2-2/2	1/1	1/4-4/4	1/4-4/4	1/1	1/4-4/4	1/4-4/4	1/3-3/3	1/1	1/4-4/4	1/4-4/4	1/4-4/4	1/2-2/2
Bucket no.	27992-5	27996-9	28001	28002	28003	28005-7	28010	28008-9	28031-2	28011	28020-3	28024-7	28004	28012-5	28016-9	28028-30	28000	28033-6	28037-40	27988-91	27986-7
Sample vol. (ml)	1410	6025	1415	1210	958	1610	770	1540	940	1206	6699	2845	2028	3745	2060	3515	410	1275	4090	3030	1808
% sample analysed	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Refloated?	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part																			
Carbonised cereal																					
<i>Avena</i> sp.	Oat	caryopsis									1									1	1
cf. <i>Avena</i> sp.	Oat	caryopsis												1							
<i>Hordeum vulgare</i>	Hulled Barley	caryopsis									1			2							
cf. <i>Hordeum vulgare</i>	Hulled Barley	caryopsis												5							
Poaceae	Grass	caryopsis												7	1				1		2
cf. Poaceae	Grass	caryopsis																		1	
<i>Triticum aestivum/durum</i>	Bread/Durum Wheat	caryopsis												4							
<i>Triticum spelta</i>	Spelt Wheat	caryopsis												1							
<i>Triticum</i> cf. <i>aestivum/durum</i>	Bread/durum Wheat	caryopsis												6						1	3
<i>Triticum</i> cf. <i>spelta</i>	Spelt Wheat	caryopsis												3	1						
<i>Triticum</i> cf. <i>spelta</i>	Spelt Wheat	chaff												3					1		
<i>Triticum</i> sp.	Wheat	caryopsis									1			17							
cf. <i>Triticum</i> sp.	Wheat	caryopsis												1							1
Cereal indet.	Indeterminate	caryopsis						1			2			99	2				7	5	3
Cereal indet.	Indeterminate	chaff																	4		
Cereal indet.	Indeterminate	Fragments												156						4	10
Carbonised wild taxa																					
<i>Rumex</i> sp.	Knotweeds	seed																	1		
Uncarbonised wild taxa																					
<i>Aethusa cynapium</i>	Fool's Parsley	seed				1													1		
<i>Betula</i> sp.	Birch	seed												1				1			
<i>Chenopodium/Atriplex</i> sp.	Goosefoots/Saltbushes	seed	4			1	3			5	3	4	1	20			1		3	2	5
cf. <i>Chenopodium/Atriplex</i> sp.	Blackthorn	seed													1						
Lamiaceae	Mints/Deadnettles	seed															1		1		
Polygonaceae	Buckwheats	seed		1										6							
<i>Picris echioides</i>	Bristly Ox-tongue	seed									1										
<i>Galium</i> sp.	Bedstraw	seed												7					3	1	1
cf. <i>Ranunculus</i> sp.	Buttercup	seed				1															
<i>Rubus</i> sp.	Brambles	seed									1	2									
<i>Rumex</i> sp.	Knotweeds	seed						1							1						
<i>Rumex</i> spp.	Knotweeds	seed												3							
cf. <i>Sambucus nigra</i>	Elder	seed																			1
<i>Silene</i> sp.	Catchflies	seed												1							
<i>Sonchus asper</i>	Prickly Sow-thistle	seed																			1
<i>Sonchus oleraceus</i>	Common Sowthistle	seed												1							
<i>Urtica dioica</i>	Common Nettle	seed		2		3				21							5				
<i>Veronica hederifolia</i>	Ivy-leaved Speedwell	seed									1			1			1		2		
Indeterminate	Indeterminate	seed												5							
Charcoal																					
Indeterminate <2mm	Indeterminate	fragments	+	+	+	+	+			+	+	+		+	+	+	+	+	+	+	+
Indeterminate 2-4mm	Indeterminate	fragments				+	+	+		+		+	+			+	+	+	+	+	+
Indeterminate >4mm	Indeterminate	fragments								+		+				+			+	+	+
Archaeometallurgical																					
Slag	-	-					+		+												+
Artefactual																					
Ceramic/pottery	-	-	+	+	+	+	+			+		+	+		+	+	+		+	++	++
CBM	-	-	+				+	+			+	+	+	+	+				+	+	+
Faunal																					
Mammal (unburnt)	Indeterminate	-	++	+		+	+	+		+	+	+	++	+		+	+	+	+	++	+++
Small Animal (unburnt)	Indeterminate	-								+					+		+			+	+
Mammal (burnt)	Indeterminate	-	+					+					+	+	+	+	+	+	+	+	+
Molluscan																					
<i>Anisus leucostoma</i>	White-lipped Ramshorn	-										8		9							
cf. <i>Anisus leucostoma</i>	White-lipped Ramshorn	-						1													
<i>Carychium minimum</i>	Short-toothed Herald sn	-													2						
<i>Cecilioides acicula</i>	Blind snail	-	17	99	52	21	8	31	20	73	14	30	28	6	63	700	8	23	7	2	47
<i>Cepaea</i> sp.	Grove snails	-												1							
<i>Cochlicopa</i> sp.	Pillar snails	-				1								2							
<i>Discus rotundatus</i>	Rotund Disc snail	-														1					
Hygromiidae	Leaf snail	-	4	6	1	2	2	2		1		2	4	10	1	6		7		1	1
<i>Pupilla muscorum</i>	Moss Chrysalis snail	-			6	3	3			2	1			1					3		
<i>Pupilla</i> cf. <i>muscorum</i>	Moss Chrysalis snail	-		8									1	1			12				
<i>Vallonia constata</i>	Ribbed Grass snail	-				1							1								
<i>Vallonia excentrica</i>	Eccentric Vallonia	-	2	7			1	1	1	1	3		5	11	1	10	3	16			
<i>Vallonia pulchella</i>	Lovely Vallonia	-	1	4	2	1			2				5		1			2			1
<i>Vallonia</i> cf. <i>constata</i>	Ribbed Grass snail	-													1						
<i>Vallonia</i> sp.	Grass snails	-									1									1	
<i>Vertigo antiveritigo</i>	Marsh Whorl snail	-										1						1			1
<i>Vertigo</i> sp.	Whorl snail	-	1	1					1						2	1	1				
cf. <i>Vertigo</i> sp.	Whorl snail	-	1	4																	
Terrestrial	Indeterminate	-	9	12	2	4			3	3	2	2	18	31	3	43	3	24		3	3

14.7 Conclusions and recommendations

The aims of the non-specific palaeoenvironmental sampling were met in that the sampling provided further evidence on the environmental conditions and how they related to human activity during context formation.

The charred material was mostly contained within the stone-lined pit [003021], with 78% of all non-fragmentary incidences occurring here. This would suggest the use of the pit for refuse, likely as a secondary function after its original purpose was redundant. The presence of charred material within other contexts demonstrates residual deposition across Site and may indicate infilling during an abandonment phase.

Some spatial environmental niches were identifiable and can be illustrated by trench. Trenches 001 and 002 contained ditches that showed evidence of a sheltered environment within a grassland, the residual anthropogenic material suggesting they were at some distance from habitation. Trench 003 was a trench of contradictions with features either demonstrating low recovery of materials or containing the richer environmental assemblages. Trenches 004 and 005 had low recovery suggesting a significant distance from habitation while Trench 006 contained assemblages indicative of features being used for waste disposal.

14.7.1 Recommendations

Due to the nature of the materials recovered and the full analysis undertaken, no further work is recommended.

Retention of the materials detailed in this report, as an incorporation of the Site archive for deposition with the museum, is recommended.

14.8 Copyright

Border Archaeology shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988, with all rights reserved, excepting that it hereby provides a licence to Environmental Dimension Partnership Ltd, Lone Star Ltd, Cherwell District Council and Oxfordshire County Council for the use of the report by Environmental Dimension Partnership Ltd, Lone Star Ltd, Cherwell District Council and Oxfordshire County Council in all matters directly relating to the project as described in the Project Specification to use the documentation for their statutory functions and to provide copies of it to third parties as an incidental to such functions.

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15 Appendix 5: Faunal Assessment

Janice McLeish MA Hons ACIfA

15.1 Introduction

During January 2022, Border Archaeology Ltd carried out a programme of Archaeological Field Evaluation at Land off Broughton Road, Banbury. A small assemblage of animal bone was recovered primarily as hand recovery (1.89kg) with a small volume from environmental sampling (348g), totalling just over 2.2kg.

15.2 Methodology

The methodology used in the assessment of the animal bone follows a modified version of that used by Davis (1992). Due to the small volume and fragmented nature of the material a single table has been created to summarise the bulk findings. The anatomical element and taxa have been recorded as U (unknown) unless otherwise stated (Table 1). The unknown taxa have therefore been classified as small (sm), medium (m) and large (lge) mammal.

15.3 Results

15.3.1 Preservation

The assemblage was very fragmented with old and modern breaks noted and some root action visible creating moderate erosion of the surface. Occasional surface gnawing marks were visible from Trench 003 material (003009) and (003013). The overall animal bone preservation was in a poor to moderate condition, with the exception of an almost complete unfused humerus in relatively good condition from Trench 003 context (003009). Trench 003 contained the largest volume of material at 63% of the entire bulk assemblage, with context (003009) containing 21%.

15.3.2 Species Representation

From the overall assemblage only three bone elements were identifiable as most likely bovid, with occasional sheep/goat teeth also noted and with the palaeoenvironmental sampling producing a single pig mandible fragment from context (003027). The remainder were predominantly listed as ranging from medium to large-sized mammals. A single small mammal incomplete juvenile humerus was noted in (003009), identification was not possible at present.

15.3.3 Ageing

Due to the fragmented nature of the assemblage very little epiphyseal fusion was noted with the exception of context (003009), which contained an unfused humerus (*plate 1*). The majority of fragmented material could be attributed to adult aged animals due to the overall appearance and robusticity.



Plate 1: (003009) unfused humerus

15.3.4 Butchery

Very little evidence of butchery was noted within the assemblage, although context (003009) displayed one fragment with parallel cut marks (*plate 2*).



Plate 2: (003009) cut marks

15.3.5 Pathology

No pathology was noted within the assemblage.

Table 1: Summary of assemblage

Context No:	Feature Type	Bone No: / (g)	Element	Taxa	Preservation	Fusion	Butchery	Gnaw	Burn	Teeth	Comments
002005	Ditch	6/38g	1x rib fragment	Med-lge	Mod	-	-	-	-	-	Very fragmented
			5 x U								
002007	Ditch	4/11g	4 x U	Med	Poor-med	-	-	-	-	-	Fragmented and abraded
002013	Pit	2/45g	1 x metapodial fragment	Med	Med	Yes	-	-	-	-	Weathered fragments
			1 x U	Med	Med	-	-	-	-	-	
003005	Ditch Terminus	9/136g	1 x proximal condyle fragment	Med-lge	Poor-mod	Yes	-	-	?	-	Surface weathering and fragmented
			7 x U	Med-lge	Poor	-	-	-	-	-	Abraded fragments
			1 x Talus	Lge (bovid)	Mod	Yes	-	-	-	-	Complete talus, most likely bovid
003009	Ditch	33/767g	10 x rib fragments	Small-lge	Poor-mod	-	-	-	-	-	Abraded fragments
			15 x U	Med-lge	Poor-mod	-	-	-	-	-	Abraded and weathered fragments

Context No:	Feature Type	Bone No: / (g)	Element	Taxa	Preservation	Fusion	Butchery	Gnaw	Burn	Teeth	Comments
			1 x humerus	Lge	Mod	Yes	-	Yes	-	-	Unfused humerus incomplete with visible gnaw marks
			1 x distal scapula fragment	Lge	Poor-mod	Yes	Yes	-	-	-	Partial fragment of scapula distal neck and base
			1 x Tibia-Fibula fragment	Lge (bovid)	Mod	Yes	-	Slight	-	-	Distal fragment with slight gnawing marks visible
			1 x Radius-ulna fragment	Lge (bovid)	Mod	Yes	-	-	-	-	Proximal fragment
			3 x teeth	Med-lge	Mod	-	-	-	-	Yes	2x capra/ovid molars in situ, 1x loose. 1x bovid molar
			1 x juvenile humerus	Small mammal	Mod-poor	No	-	-	-	-	Incomplete small mammal juvenile humerus
003013	Gully	6/66g	1 x rib fragment	Lge	Mod-poor	-	-	-	-	-	Fragmented rib
			5 x U	Med	Mod-poor	-	-	Slight	-	-	Abraded fragments
003018	Ditch	25/99g	14 x U	Med	Poor	-	-	-	-	-	Heavily abraded fragments
			3 x rib fragments	Med-lge	Mod	-	-	-	-	-	Abraded rib fragments

Context No:	Feature Type	Bone No: / (g)	Element	Taxa	Preservation	Fusion	Butchery	Gnaw	Burn	Teeth	Comments
			8 x teeth	Sm-med	Poor	-	-	-	-	Yes	7 x capr/ovid molars (one in situ). 1 x possible small mammal (feline) premolar?
003028	Ditch	5/34g	4 x U	Med-lge	Mod-poor	-	-	Slight	-	-	Abraded fragments
			1 x vertebrae fragment	Med	Poor	-	-	-	-	-	Abraded neural spine fragment
003030	Ditch	22/176g	19 x U	Med	Mod-poor	-	-	-	-	-	Abraded fragments
			1 x tooth	Equus	Mod	-	-	-	-	Yes	Single Equine molar
			1x partial tooth	Lge	Poor	-	-	-	-	Yes	Partial large mammal (bovid) molar
			1x mandibular ramus fragment	Sm-med	Poor	-	-	-	-	-	Abraded fragment
004005	Ditch	2/25g	2 x U	Sm-lge	Poor	-	-	-	-	-	Abraded and weathered fragments
005007	Ditch	18/197.5g	16 x U	Med-lge	Poor	-	-	-	-	-	Abraded fragments
			1x phalange	Lge (bovid)	Mod	-	-	-	-	-	Intermediate phalange most likely bovid

Context No:	Feature Type	Bone No: / (g)	Element	Taxa	Preservation	Fusion	Butchery	Gnaw	Burn	Teeth	Comments
			1 x mandible fragment	Med	Mod-poor	-	-	-	-	Yes	Partial right mandible fragment likely sheep
006005	Pit	8/24g	7 x U	Med	Poor	-	-	-	-	-	Splintered fragments
			1 x rib frag	Med	Mod	-	-	-	-	-	Appears to feel slightly polished
006007	pit	16/252g	10 x U	Med-lge	Mod	-	-	-	-	-	Abraded fragments
			3 x rib fragments	Med-lge	Mod-poor	-	Slight	Slight	-	-	1 x Possible slight cut marks on lateral edge
			1 x radius/Ulna	Lge (bovid)	Mod	Yes	-	Slight	-	-	Possible gnawing at distal edge
			1 x innominate fragment	Med	Mod-poor	Yes	-	-	-	-	Possible acetabulum fragment

Context No:	Feature Type	Bone No: / (g)	Element	Taxa	Preservation	Fusion	Butchery	Gnaw	Burn	Teeth	Comments
			1 x phalange	Med	Mod	Yes	-	-	-	-	1 x proximal phalange possible sheep
006009	pit	1/27g	1 x U	Med-lge	Mod	-	-	-	-	-	Single long bone fragment
Total		157/ 1897.5g									

U=unknown Element & Taxa, **sm** = small mammal, **med** = medium mammal, **lge** = large mammal

15.4 Environmental Sampling Recovery

A small volume of material was recovered from the palaeoenvironmental soil sampling, totalling just under 350g, averaging at 18g per context. The material was categorised as unburnt mammal bone, burnt mammal bone and small/micro mammal bone. The vast majority of the unburnt assemblages were unidentifiable fragments in poor condition but a single sus (pig) mandible fragment was noted from context (003027) and a single small mammal scapula fragment from context (006007). The small/micro mammal group contained 0.47g of material, with an average weight of 0.09g per element, and appeared to be predominantly limb bones (no comparisons available at present). The burnt category contained 13.04g of material, most of which showed slight heat-affected areas, whilst contexts (005005) and (005007) both exhibited higher heat damage and appear white/blue in colour.

15.5 Conclusions

The animal bone assemblage from Land off Broughton Road, Bretch Hill, Banbury produced a small volume of material in a fragmentary condition with surface abrasion and weathering also noted. Only a small volume of material was identifiable to species, namely cow, with occasional sheep/goat and a single pig mandible. This assemblage ties in well with expected species within these broad time periods. The pottery dates available for this site indicate broadly Mid Iron Age – Late Iron Age with a little Romano-British material recovered, therefore the animal bone assemblage is suggestive of a pattern of mixed farming and the subsequent domestic refuse.

The only evidence of burning was noted within the palaeoenvironmental assemblage, discussed above, so limited information is available on any cooking/discard processes that may have occurred within the site.

15.6 Recommendations

Context (003018) contained a possible single feline premolar, which would benefit from clearer identification. The current assemblage may warrant further study as noted above and should be retained to amalgamate with any future excavations within the vicinity, although final retention is not warranted at this stage.

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Plans

Plan EDP 1	Designated Heritage Assets (edp7133_d002a 19 October 2021 DJ/MM)
Plan EDP 2	Known Non-designated Heritage Assets (edp7133_d003c 06 January 2022 DJ/MM)
Plan EDP 3	Extracts from Historic Maps (edp7133_d004c 25 March 2022 DJ/MM)
Plan EDP 4	LiDAR Data (edp7133_d013a 25 March 2022 VMS/MM)

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