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Dark Lane, Leintwardine, Herefordshire
archaeological evaluation

Graham Arnold
2008

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*Dark Lane, Leintwardine, Herefordshire: archaeological evaluation
2008*

The fieldwork was carried out with the assistance of Graham Britton; Martin Roseveare of Archaeophysica Ltd worked closely with the project.

The author would like to thank Dr George Nash for sharing his expert knowledge of some of the archaeological work carried out in the past at Leintwardine.

client: M Kirby, landowner

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cover photograph: the site during the geophysical survey

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Contents:

Summary.....	1
1 Introduction	3
2 Geological, historical and archaeological background	3
Geological background and land use	3
Historical and archaeological background.....	3
3 Project aims and objectives	6
4 Methodology.....	6
5 Results	6
Stratigraphy.....	6
The finds	12
Radiocarbon dating	13
Environmental sampling – Wendy Carruthers	14
6 Conclusions	14
7 Archive deposition.....	15
8 Publication and dissemination proposals	15
Bibliography	16

Figures:

figure 1: site location within Herefordshire and the UK.....	2
figure 2: the site's relationship to the Romano-British town.....	2
figure 3: the geophysical survey results	4
figure 4: trench locations	5
figure 5: feature 5.....	7
figure 6: half-sectioning feature 5, in progress	7
figure 7 : half-sectioning and sampling feature 5, looking north	8
figure 8: feature 5 half-sectioned, looking west	8
figure 9 : plan of trench 4 including oven/hearth feature	9
figure 10: detailed plan of features 5 and 6 after half-sectioning.....	10
figure 11: trench 4, south-facing section	11
figure 12: field drain 9 and 10 in trench 6, looking north.....	12
figure 13: field drain 9 and 10 in trench 6, looking south.....	12
figure 14: graph showing the calibration of radiocarbon age to calendar years	13

Tables:

table 1: measurements of top and bases of trenches in metres OD.....	6
table 2: identified fabric types by context	13
table 3: weight of animal bone by context	13

Summary

The Romano-British settlement at Leintwardine (Branogenio) is believed to have originated as a vicus attached to a fort at Jay Lane, itself built in about 70 AD.

The site, slightly less than one hectare in area, lies immediately north of modern (and Roman) Leintwardine, on a Roman road which ultimately connected Chester with Caerleon.

A magnetometric and topographic survey identified anomalies, which may have had an archaeological origin (pits, fires for example).

A feature found by trial trenching, which was not identified by the geophysical survey, was a keyhole-shaped hearth or oven feature. This was radiocarbon dated to Cal AD 10 to 120 (intercept date of 60 AD) and evidence from the environmental samples suggested that it was used for industrial rather than domestic purposes. The date is extremely early for activity associated with Branogenio and indeed the earlier part of the range predates Roman occupation of this area.

It is likely that significant archaeology survives on this site. This has the potential to radically alter our perception of the origins of Leintwardine.

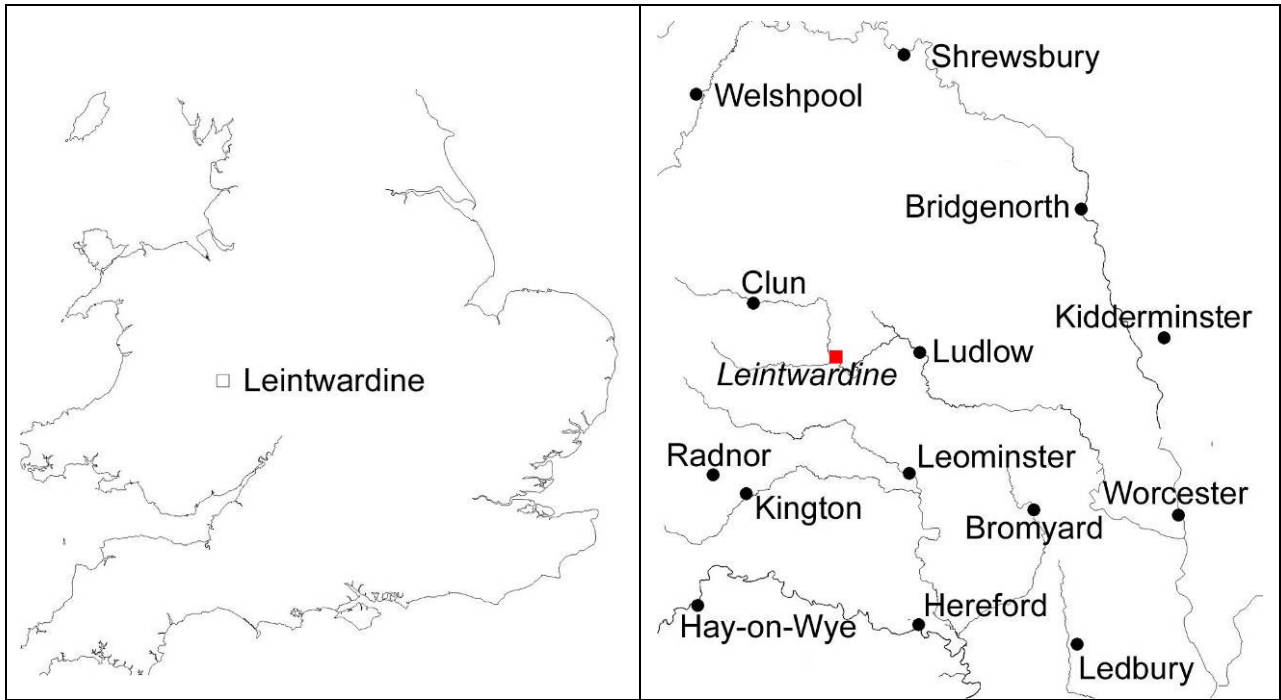


figure 1: site location within Herefordshire and the UK

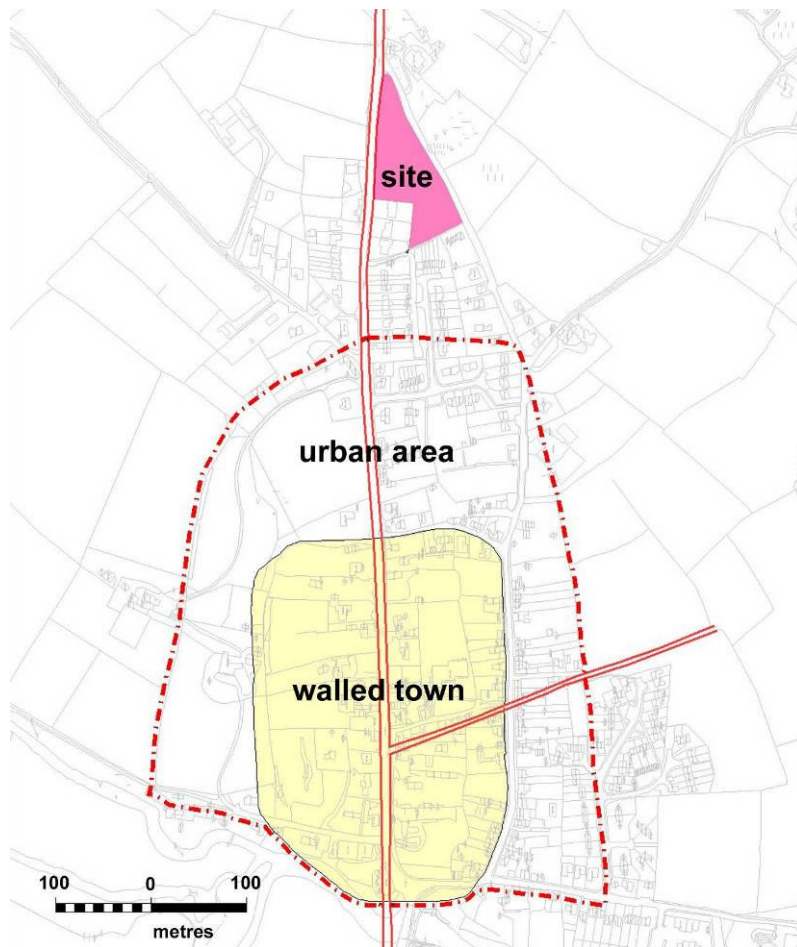


figure 2: the relationship of the site to the modern village and the Romano-British town (after Dalwood 1997): based on OS Superplan Data reproduced under licence 00128600

1 Introduction

HER event number: SMR No: 45164

Grid reference: SO 34042 27460

Planning authority: Herefordshire County Council

Planning Application Number: DCNW2007/3767/O

Mr Malcolm Kirby (the client) had applied for planning consent to develop 15 houses and garages at Dark Lane, Leintwardine covering an area of 0.78 hectares. Archenfield Archaeology Ltd produced a written scheme of investigation (WSI) which outlined a programme of archaeological works to be carried out prior to any development taking place, fulfilling a condition in the planning approval. Consequently six trenches measuring a total of 116 square metres were targeted for excavation following a geophysical survey by Archaeophisica Ltd (Lafuente & Roseaveare, 2008).

2 Geological, historical and archaeological background

Geological background and land use

The solid geology underlying Leintwardine consists of Much Wenlock Limestone Formation and Gorstian Siltstone. Overlying these rocks are till drift deposits from the Devensian (British Geological Survey 1:250,000, sheet 52°N-O.4°W). The soils are silty stagnogleys or stagnogleyic brown earths of the Rowton association (Soil Survey of England and Wales, Ragg *et al*, 1984). The northern part of the site had recently been ploughed, the south section had recently been an orchard with natural tree root bowls and scrubbed out bushes.

Historical and archaeological background

The main Roman road here is probably associated with the establishment of a frontier zone along a line from Whitchurch to Usk by Publius Ostorius Scapula in AD 50. It is however with a slightly later period that a Roman camp within the Iron Age hillfort on Brandon Hill, 1.5 km south of Leintwardine, is likely to be associated.

The Romano-British settlement at Leintwardine (*Branogenio*)¹ is believed to have originated as a *vicus* attached to a fort at Jay Lane, itself built in about 70 AD. The town possessed a bath-house, and from the later 2nd century was surrounded by substantial ramparts. A more comprehensive history is included in the Central Marches Historic Town Survey of Leintwardine (Dalwood, 1997) and a summary on Herefordshire SMR Online (Brown, 1996).

In the 1990s, the digging of foundations for the houses facing the main road on the south-west of the site was archaeological monitored. The suspicion that this was a likely site for a cemetery was not supported and archaeological staff of the former Hereford and Worcester County Council observed nothing of any archaeological significance.² In 1996, an evaluation at the site of old farm buildings at Plough Farm, 150 metres to the west of the present site, also failed to find archaeological features (Boucher, 1998).

Previous archaeological work within the village of Leintwardine includes an evaluation in the area of the Roman bath-house and vallum, now occupied by the village garage in Mill Lane (Nash, 2002; Nash & Children, 2002).

1 Taken from the Antonine Itinerary by Ptolemy, but also later transcribed as Bravonium. The name has been debated, see Duncan Brown's explanation
www.smr.herefordshire.gov.uk/roman/leintwardine_db2.htm

2 Herefordshire SMR no 20551

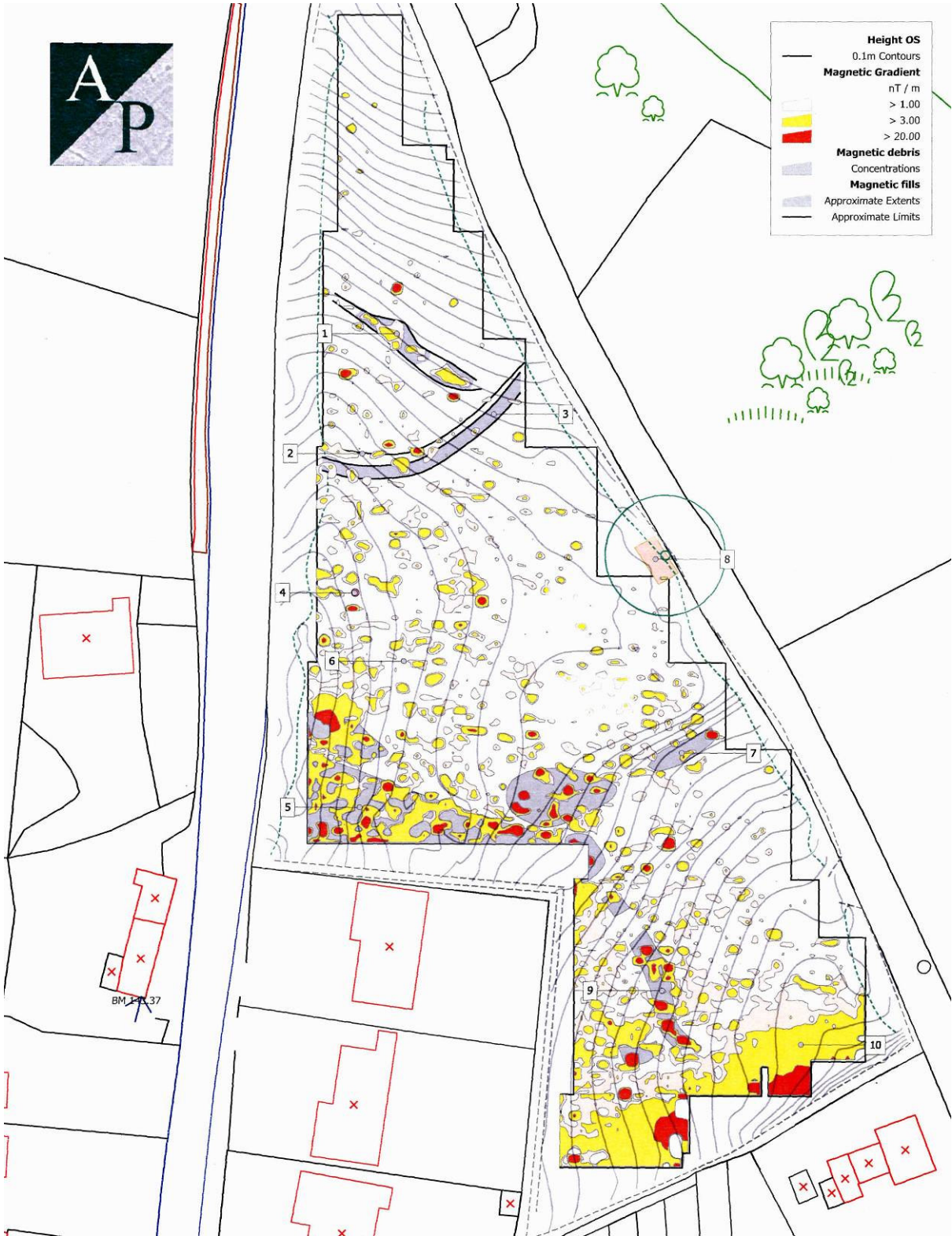


figure 3: the geophysical survey results – ArchaeoPhysica Ltd

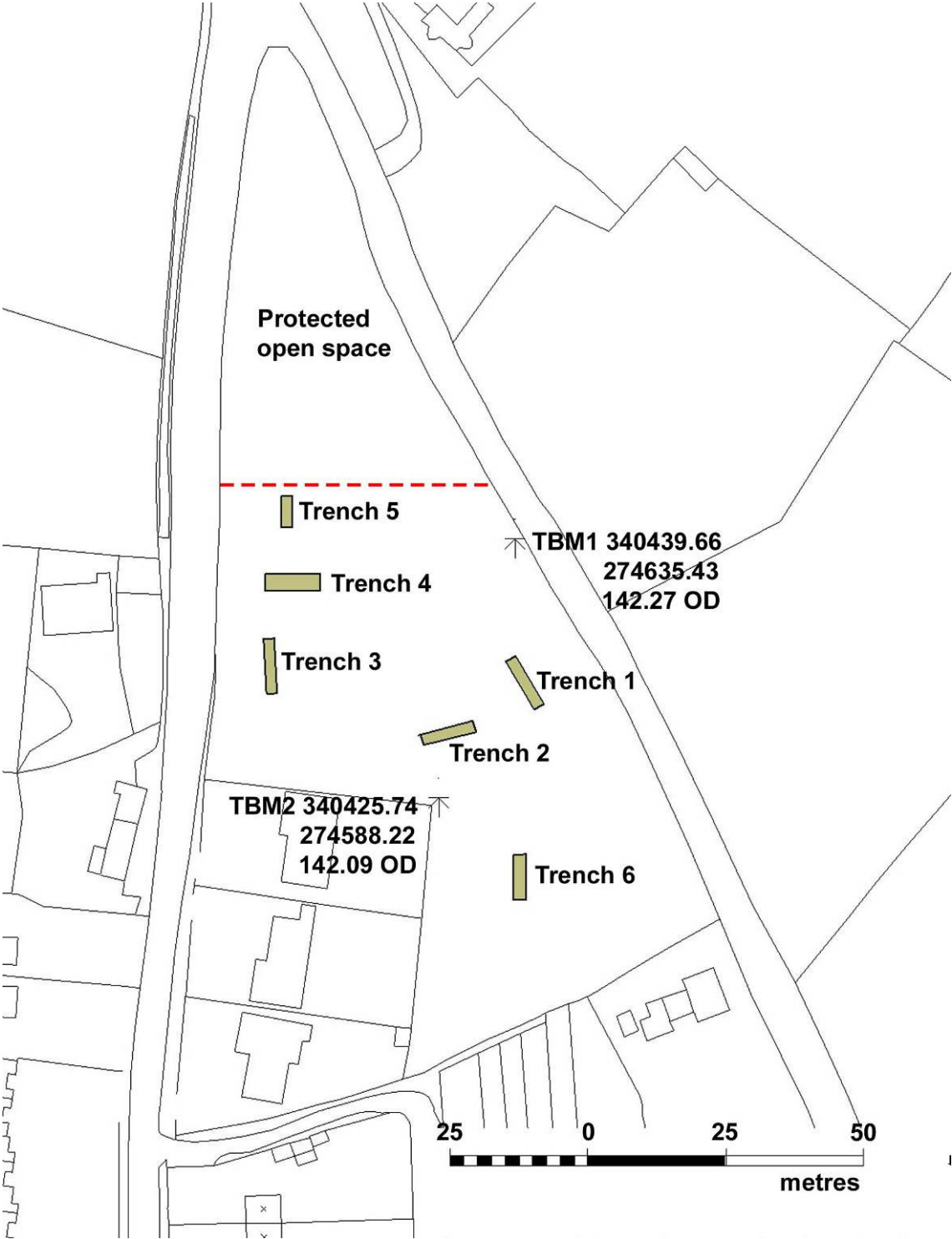


figure 4: trench locations

3 Project aims and objectives

The aim of the project was to assess the archaeological evidence over the site in order to better understand the archaeological resource and how this fits with the current model of the development of Leintwardine. In particular, the site seemed a likely location for a cemetery associated with the settlement.

The objectives were to test by excavation the findings of the geophysical survey, to date any archaeological activity in the area and to recover and assess any environmental material present in the archaeological deposits.

4 Methodology

A series of trenches were excavated across the site at locations influenced by the results of geophysical survey. The recovery and recording of archaeological evidence was carried out as appropriate and in accordance with standard practices.

Staff carrying out the evaluation excavation followed the guidelines laid down in the Archenfield Archaeology Health and Safety Policy and completed all relevant documentation relating to the risk assessment for the project

Archenfield Archaeology conforms to the Institute of Field Archaeologists' Code of Conduct and Code of Approved Practice for the Regulation of Contractual arrangements in Field Archaeology. The project was carried out in accordance with IFA Standards and Guidance.

5 Results

Stratigraphy

Trenches 1, 2, 3 and 5

The stratigraphic sequence was similar in trenches 1, 2, 3 and 5. Context 1 was a thin layer of topsoil, turfed and containing vegetation roots. It was loosely compacted very dark greyish brown silty loam varying in thickness across the site. The subsoil (context 2) was a moderately compacted yellow brown silty clay plough soil 0.4 metres in depth. This was described as plough soil from the north of the site and trench 1 contained occasional pottery sherds, glass, clay pipe and ceramic building material (CBM).

Layer 3 was natural bedrock composed of degraded sandstone and light yellowish brown marl. Thickness varied across the site starting at approximately 1 metre. Layer 4 in trench 2 was below the subsoil and was very clayey.

Following the full excavation of these four trenches, the following measurements in metres OD were recorded.

Trench one		Trench two		Trench three		Trench five	
top	bottom	top	bottom	top	bottom	top	bottom
142.34	141.01	142.28	141.38	141.08	140.07	142.79	141.74

table 1: measurements of top and bases of trenches in metres OD

Trench 4

This trench measured 3 by 10 metres and was orientated east/west. The stratigraphy consisted of topsoil (1), 0.20 metres deep above the silty clay subsoil (2), 0.25 metres deep.

At the base of the trench cut into the natural (3) was a keyhole-shaped feature measuring 1.7 x 1.2 metres (6). The fill (5) of this feature was 0.15 metres deep and contained burnt red clay within which were concentrations of charcoal. The trench was later extended north to allow further investigation. A circle of charcoal at the centre had a flint sealed within it but no

other dateable finds were recovered. A total sample of the charcoal concentration from context 12 at the north-western edge of the feature was taken for environmental analysis and radiocarbon dating (see below for results)..

A cut for a modern telegraph pole 0.50 metres deep with curved sides and a flat base (7) was filled with mixed topsoil and gravel (8).

The base of the natural was at 141.97 metres OD whilst the base of feature 5 was at 141.82 metres OD.

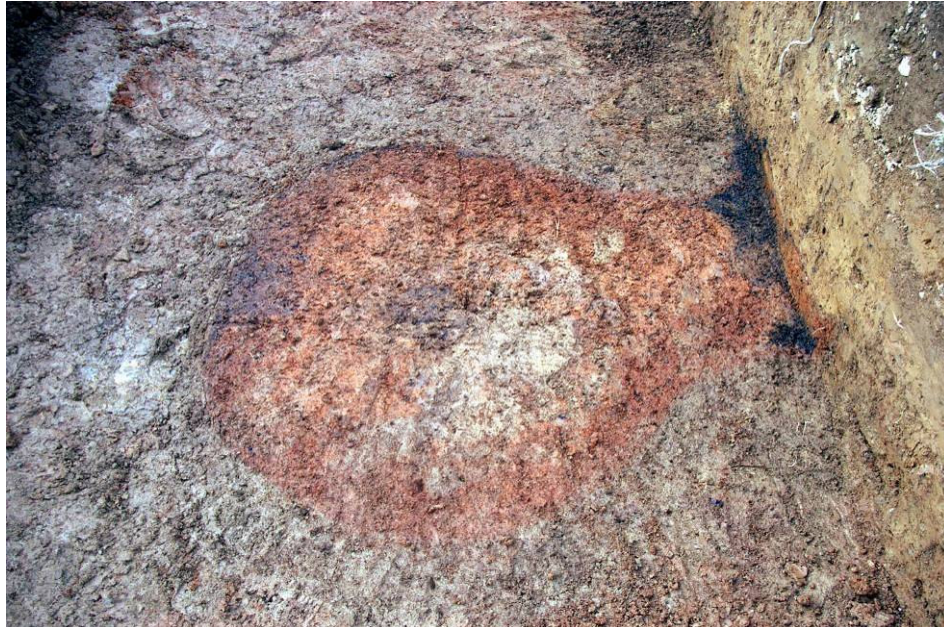


figure 5: feature 5



figure 6: half-sectioning feature 5, in progress



figure 7 : half-sectioning and sampling feature 5, looking north



figure 8: feature 5 half-sectioned, looking west

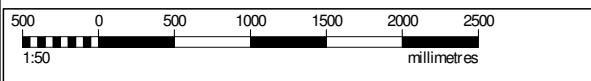
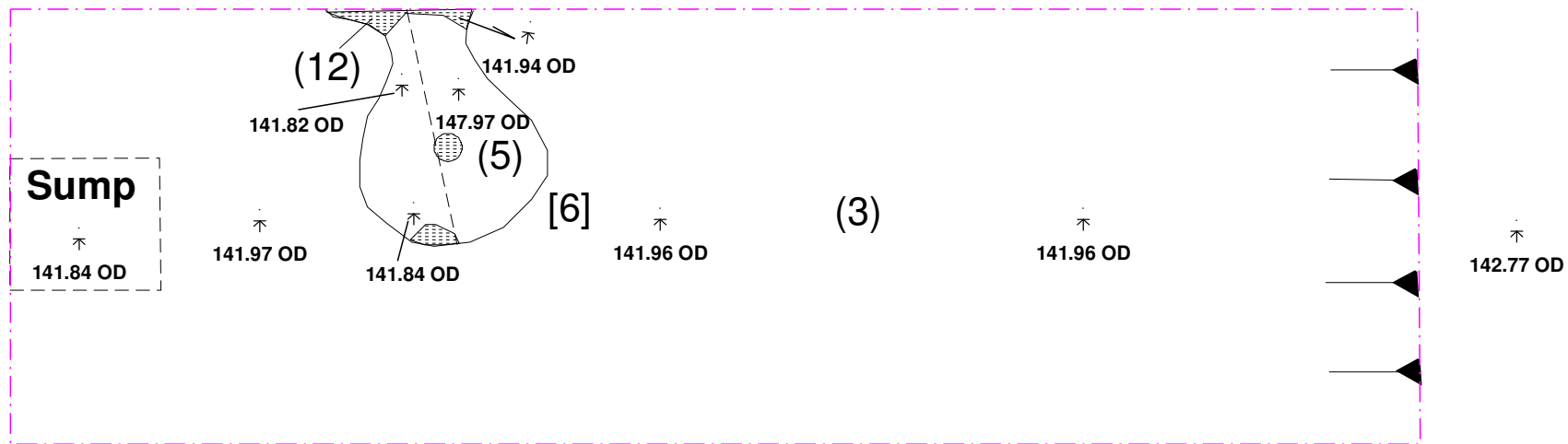
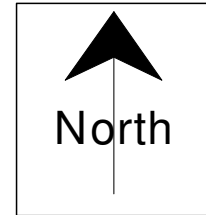


figure 9 : plan of trench 4 including oven/hearth feature

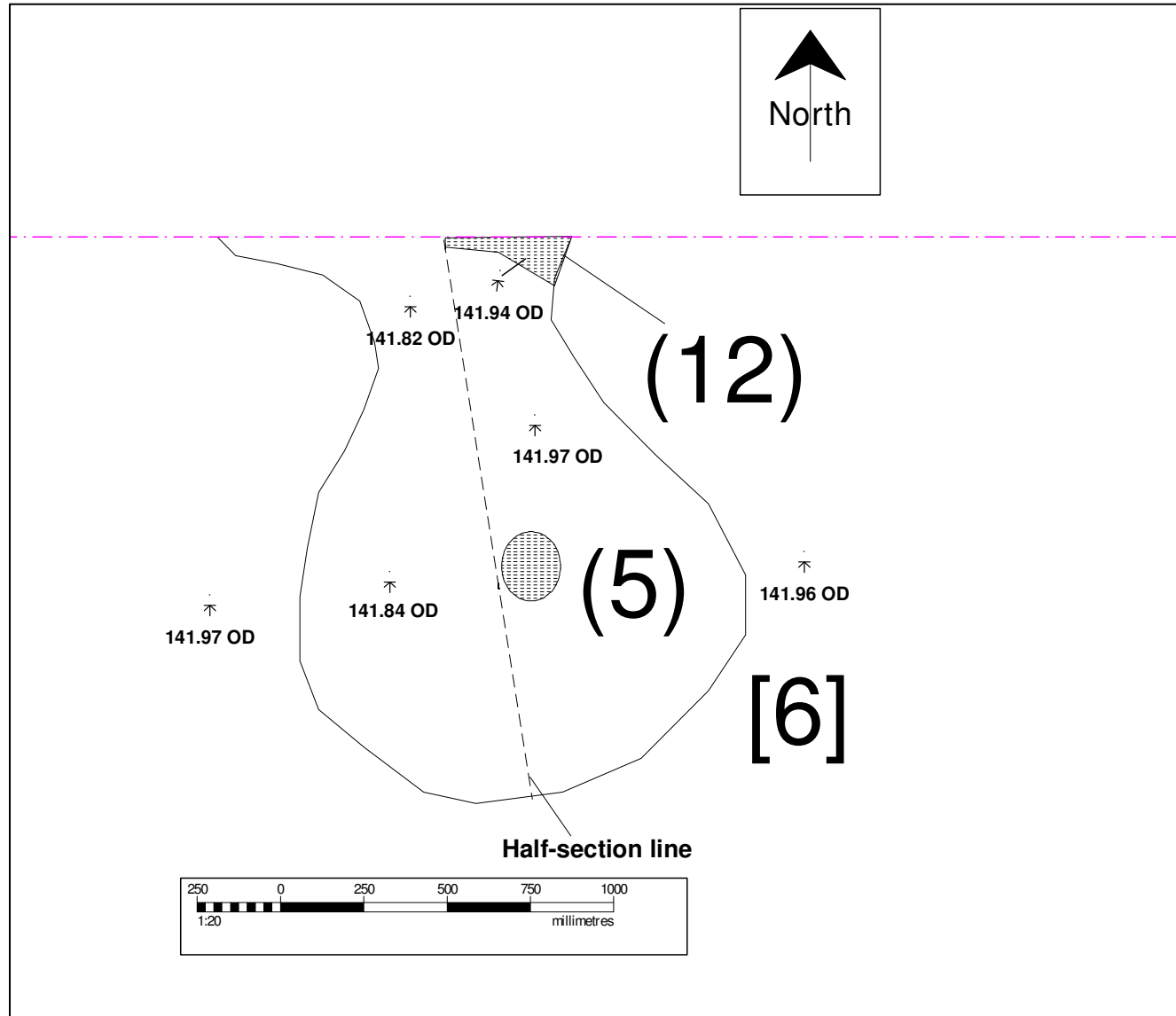


figure 10: detailed plan of features 5 and 6 after half-sectioning

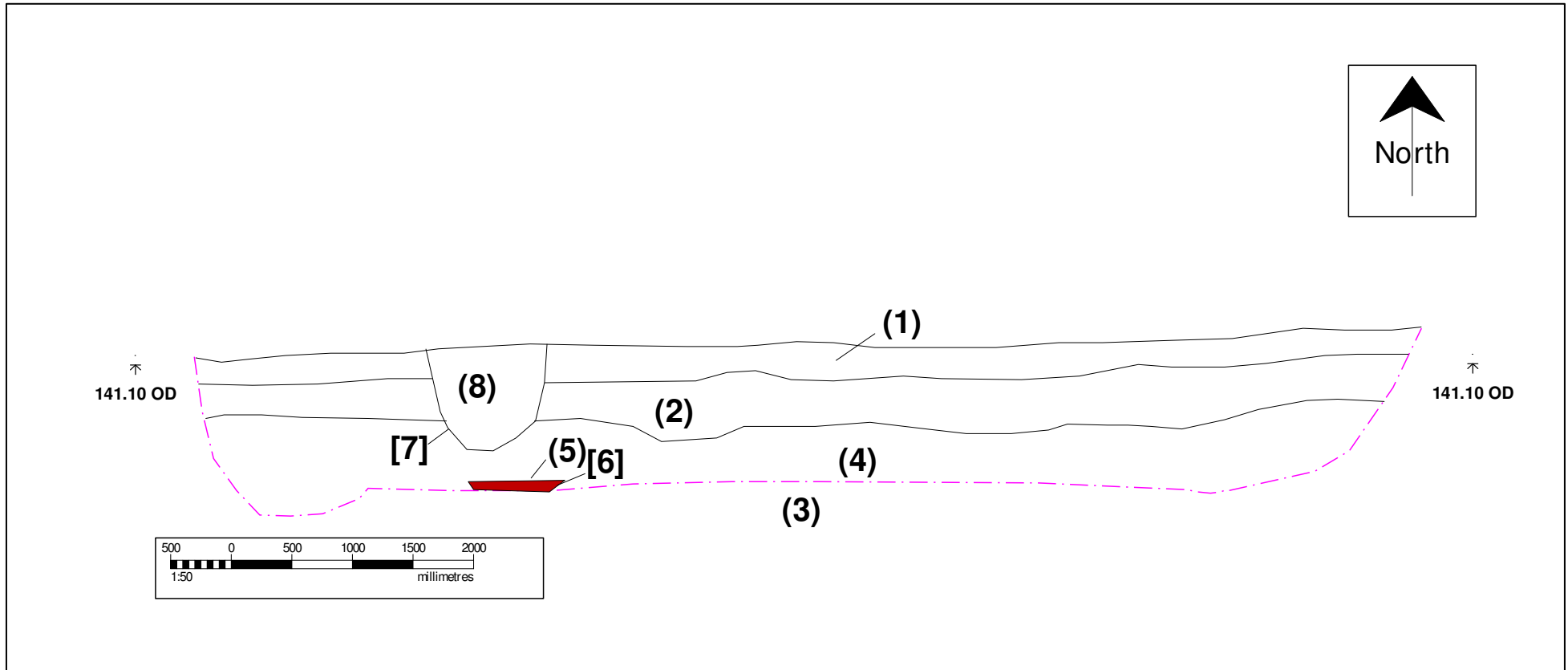


figure 11: trench 4, south-facing section (centre of trench that was later extended north)

Trench 6

Trench 6 was orientated north/south and measured 8 metres in length and 2 metres in width. It was located to investigate anomalies in the area that was previously an orchard. A modern land drain was discovered with large sandstone rubble filling a channel, running north/west, south/east across the trench (contexts 9 and 10, figures 12 and 13).



figure 12: field drain 9 and 10 in trench 6, looking north



figure 13: field drain 9 and 10 in trench 6, looking south

The finds

Finds from the excavation were cleaned, identified, catalogued and weighed by context. Although one knapped flint was recovered from the centre of feature 6 no dateable finds were recovered *in situ*. Across the site small amounts of unstratified pottery (some of which was of probable 1st to 2nd century date), glass, clay pipe and CBM was present.

Pottery

context number	fabric description	sherd count	spot date
unstrat (13)	Severn Valley Ware	8	1st century AD
unstrat (13)	Black Slipware	7	post-medieval
unstrat (13)	China Porcelain	3	19 – 20th century

table 2: identified fabric types by context

Bone

context number	weight
Unstratified plough soil (13)	14g

table 3: weight of animal bone by context

Radiocarbon dating

The charcoal samples from context 12 were sent for radiocarbon dating to the Beta Analytic Laboratory in Florida, USA. Below are the results which shows that the charcoal probably dates from AD60.

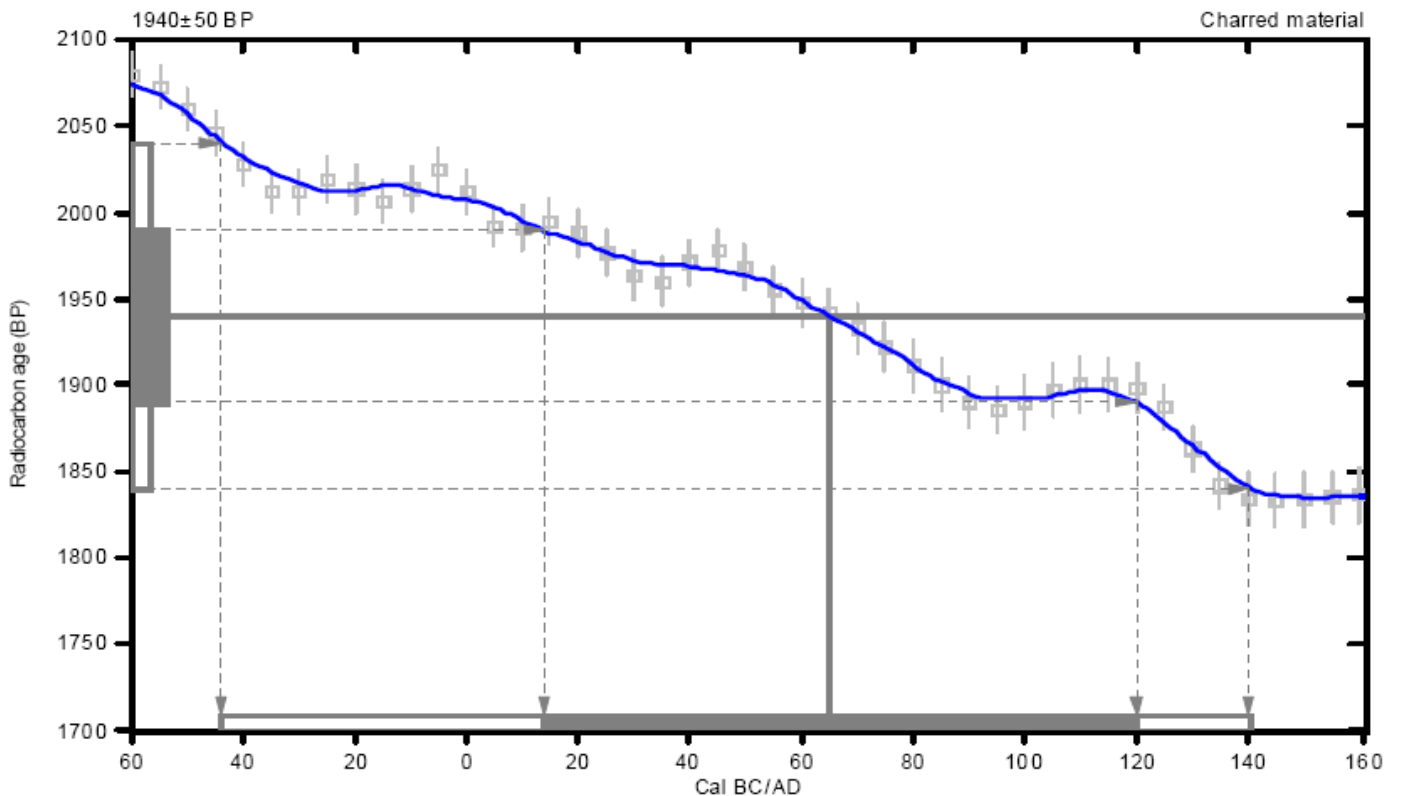


figure 14: graph showing the calibration of radiocarbon age to calendar years

Environmental sampling – Wendy Carruthers

Methodology

The one-litre soil sample was processed using standard methods of bucket floatation. A 250 micron mesh was used to retain the flot and a 500 micron mesh was used to hold the residue. The floatation was repeated three times in order to ensure most of the charred material was recovered. However, as notable quantities of charcoal were still observed in the residue, even though no more material was floating, the residue was dried and sorted microscopically, as well as the flot.

Results

The soil sample was very ashy in appearance, and it was fairly easy to process. A 50ml flot and 100ml residue were obtained, with frequent sandstone fragments being present in the residue.

The following charred plant macrofossils were recovered from the flot and residue:

Taxon	Common name & description	Habitat preferences	Quantity
Ranunculus acris/bulbosus/repens	Buttercup achene (fruit)	Grassland, cultivated land, disturbed ground	1
Quercus sp.	Oak charcoal fragments	Woods, scrub, hedgerows	17
Pomoideae	Apple/pear/hawthorn/whitebeam charcoal fragments	Woods, scrub, hedgerows	6
Prunus sp.	Sloe/cherry/plum charcoal fragments	Woods, scrub, hedgerows	3

Discussion

The only charred fruit/seed recovered from the sample was a buttercup achene (*Ranunculus acris/repens/bulbosus* fruit). This probably became charred amongst hay being used to kindle the fire. There was no evidence of cereals, so the hearth/oven/kiln does not appear to have been used as a corndrier. Domestic hearths also often produce a few cereal grains, chaff fragments, weed seeds or discarded food waste such as hazelnut shell fragments, so from the evidence of this single sample, the feature was most likely used as a kiln, or an industrial hearth. However, since only a single small sample has been examined so far, this interpretation is very tentative.

The charcoal was reasonably well preserved, although the oak fragments did show signs of high temperature damage. The oak fragments appeared to mainly be from large, fast growing timber. The recovery of only oak (*Quercus* sp.), *Pomoideae* (probably hawthorn, but possibly apple/pear/*Sorbus*) and sloe/cherry/plum (*Prunus* sp.) suggests that fuel wood was readily available, since only woods that burn well were present. No roundwood (from branches and twigs) was present. This is further evidence to suggest that the oven/kiln/hearth was probably being used for an industrial purpose, rather than domestic use. However, more samples would be needed to confirm this provisional interpretation. All of these taxa were likely to have been growing locally, in woods, scrub or hedgerows.

6 Conclusions

The evaluation uncovered a keyhole-shaped oven or hearth with burnt clay and heavy charcoal inclusions on the west of the site. Directly above this lay a pit that had held a modern telegraph pole, backfilled with gravel and mixed topsoil when it was removed from the site. Ferrous metal within the fill may have masked the magnetic geophysics reading at first glance, but after further analysis of the geophysics results another two possibilities for similar features could be seen at the northern end of the field.

In terms of the future development of the site, however, these features lie within an area designated as protected open grassland and will not be affected by the current or future development. It is clearly imperative from the archaeological perspective that this remains the case. If any variation to the current scheme is envisaged the presence of further potential features of this type must not be overlooked as they have a high potential to add to our understanding of the activity on the site in the first century AD.

No artefact dating evidence was recovered from the keyhole-shaped oven or hearth; however, significant and undisturbed *in situ* charcoal samples have been radiocarbon dated. The intercept date from this analysis is AD 60, a date before the accepted beginnings of Roman Leintwardine. The soil samples were assessed for the presence of any grain or other macro-fossils to attempt to interpret the function of the feature. It was concluded that the hearth was likely to have been used for industrial rather than domestic purposes.

Severn Valley Ware dating to the first century was recovered from the ploughsoil during the evaluation, but none came from within a stratified sequence. Overall, the picture emerging from the results of this evaluation is that of a scatter of roadside activity of fairly short-lived but intense events relating to small-scale either domestic or industrial activity in the later mid-first century AD. At this stage, the activity cannot be definitely dated to after the beginning Roman occupation in the area and it does not comfortably fit in with our current model for the development of Roman Leintwardine. These results will need careful consideration and are likely to remain problematical without further fieldwork.

7 Archive deposition

The primary project archive, consisting of the excavated material and any original paper records, will be prepared and stored in accordance with the guidelines laid down in the Institute of Field Archaeologists' guidelines for the preparation and storage of archives. The primary archive will be stored with Hereford Museum.

A copy of the digital archive, stored on CD and consisting of context, artefact and ecofact data, together with the site plan and selected photographs, will accompany the primary archive.

The client, in consultation with the project manager, will make provision for the deposition of all finds from the excavation with the Hereford Museum. On completion of the fieldwork and the processing, collation, recording and analysis of the finds from the excavation all finds will be handed over to the museum staff, along with the project archive. Arrangements will be made with the museum for the transfer of title.

8 Publication and dissemination proposals

Paper copies of this report will be lodged with the Archaeological Adviser to Herefordshire Council, Herefordshire Sites and Monuments Record and Hereford Library. A short note on the project will be prepared for publication in the Transactions of the Woolhope Naturalists' Field Club. All Archenfield Archaeology reports are made available through OASIS (<http://ads.ahds.ac.uk>).

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