LAND ADJACENT TO
14 HARDWICK VILLAGE
HARDWICK
NORTHAMPTONSHIRE

ARCHAEOLOGICAL STRIP, MAP AND SAMPLE INVESTIGATION AND PUBLICATION

Albion
archaeology

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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

Acknowledgements

The project was commissioned by Jeffery and Fiona Underdown and monitored on behalf of the Local Planning Authority by Liz Mordue, Assistant Archaeological Advisor for Northamptonshire County Council. All Albion projects are under the overall management of Drew Shotliff (Operations Manager).

This report has been prepared by Victoria Hainsworth (Archaeological Supervisor), who also undertook the fieldwork along with Anna Rebisz-Niziolek (Assistant Supervisor and Matt Billings (Assistant Supervisor). The finds were analysed by Jackie Wells (Artefacts Officer) and illustrations prepared by Joan Lightning (CAD Technician). The charred plant remains were analysed by John A Giorgi.

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Key Terms

The following terms or abbreviations are used throughout this report:

AAA	Assistant Archaeological Advisor for NCC
CI*f*A	Chartered Institute for Archaeologists
Client	Jeffrey and Fiona Underdown
DA	Development area
HE	Historic England (formerly English Heritage)
HER	Historic Environment Record
NCC	Northamptonshire County Council
WSI	Written Scheme of Investigation

Non-Technical Summary

Planning permission (WP/2014/0102/FUL) was granted by the Borough Council of Wellingborough for the construction of a four-bedroom, two-storey dwelling, with a garage and access, on land adjacent to 14 Hardwick Village, Hardwick, Northamptonshire.

As the development area lies in a known area of medieval settlement, a condition (no. 3) was attached to the planning permission (in line with NPPF paragraph 141), requiring the implementation of a programme of archaeological work prior to the commencement of any development.

The Northamptonshire County Council Assistant Archaeological Advisor stated that a mitigation programme of archaeological strip, map and sample investigation and publication was required, targeted on the areas of new construction. A brief was issued, specifying the required work (NCC 2015).

Albion Archaeology was commissioned to carry out the archaeological works, the approach to which was specified in a written scheme of investigation (Albion Archaeology 2015).

An area totalling c. *230m^2 in extent was subject to archaeological investigation. A number of ditches, pits and post-holes were recorded. These are likely to be associated with one or more settlement enclosures, fronting on to one of the roads close to the village centre. Pottery from the excavated features suggests occupation from the 10th to the 14th century. The presence of animal bone and an assemblage of charred plant remains provide further evidence for domestic activity. Free-threshing wheat and oats appear to have been the main cereals cultivated and used by the settlement's inhabitants.*

Development of the site has provided the opportunity for the first archaeological investigation within Hardwick. Although limited in scale, the results of the work add to our knowledge and understanding of the origin, development and economy of rural settlements in eastern Northamptonshire, thereby contributing to research objectives identified in the regional research agenda.

1 INTRODUCTION

1.1 Project Background

Planning permission (WP/2014/0102/FUL) was granted by the Borough Council of Wellingborough for the construction of a four-bedroom, two-storey dwelling, with a garage and access, on land adjacent to 14 Hardwick Village, Hardwick, Northamptonshire.

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Albion Archaeology was commissioned to carry out the strip, map and sample investigation and publication, the approach to which was set out in a written scheme of investigation (WSI) (Albion Archaeology 2015).

1.2 Site Location, Topography and Geology

The village of Hardwick lies in the district of Wellingborough, in central Northamptonshire. Wellingborough is 4km to the south-east and Northampton is 13km to the south-west. A tributary of the River Ise flows broadly north to south on the east side of the village.

The DA is located towards the southern end of the village, west of St Leonard's Church and south of the main road running through the village. Number 14 is situated on the east side of the road known as Hardwick Village. It is bounded by residential properties to the north and east and by the road to the west. Topographically the site is reasonably level and lies at *c*. 107m OD. It is centred at grid reference SP 84995 69816.

The underlying geology comprises Blisworth Limestone Formation - limestone, overlain by Oadby Member Diamicton.[1]

1.3 Archaeological Background

The DA lies within an area of known medieval settlement. The existence of ploughlands, households, and 7 acres of meadow were recorded within Hardwick in the Domesday Survey of 1086. Hardwick appeared in two entries as one hide in Orlingbury Hundred and another in Hamfordshire Hundred. They

[1] Contains British Geological Survey materials © NERC [2015]

were held by 'Alan' for Countess Judith, niece of William I. Prior to the Norman Conquest the manor was held by Ulf in 1066[2].

Earthworks pertaining to this period are recorded to the south, north and east of the modern village (RCHME 1979, 72–3). Those to the south have been damaged by subsequent quarrying. To the north of the quarrying are the remains of roads bounding a former village green; while to the east is a complex of fishponds and water management features, which are of probable manorial origin. Evidence of medieval agriculture, in the form of ridge and furrow earthworks, is still visible in the fields surrounding the village.

St Leonard's Church and the manor house lie to the east of the DA. The grade II listed church (HER 1040750) is of 13th- and 14th-century date with mid-19th-century renovations. The grade II listed manor house (HER 1293700) is of 14th- and 16th-century date; date stones of 1775 and 1887 refer to renovations. The 14th-century manor house stands to the south-east of the church, but was altered and largely rebuilt in the 16th century and is now part of a farm.

The DA is within an area shown as manor house land on a map of 1587. Buildings are shown on the map to the east and south of the site but the accuracy of this map is uncertain.

No other archaeological remains are known within the village, but sherds of Roman pottery have been recovered from a field 1km to the north-east and a possible Roman enclosure is known in the parish of Little Harrowden that lies 2km to the north-east.

1.4 Project Objectives

Based on evidence from historical sources and the surviving earthworks it was likely that the DA preserved evidence for medieval Hardwick.

The research agenda for the East Midlands states that regional manorial centres are under-investigated, in particular non-moated sites. Excavation of these sites should focus on landholdings associated with these centres, the nature of associated earthworks and manorial development, which may have roots in the pre-Conquest period (Knight et al. 2012, 101; Objective 7.3) and their relationship with urban centres.

In addition, a better understanding of nucleated villages is required, particularly focusing on surviving settlements (Cooper 2006, 211). Any evidence of their pre-Conquest history and subsequent development and clarification of the processes that led to settlement desertion and shrinkage is needed (Cooper, 211; Knight et al. 2012, 100; Objective 7.2). Further work on comparing and contrasting evidence of former land management and exploitation, access and changing boundaries will also be valuable to an understanding of the development of open-field systems (Knight et al. 2012, 104; Objective 7.6).

[2] http://opendomesday.org/place/SP8569/hardwick/

In summary, the aims of the archaeological investigation were:

- To establish whether any evidence for medieval settlement existed on the DA;
- To determine and understand the date, nature, function and character of any past activity within the DA, in terms of its cultural and environmental setting;
- To recover artefactual and environmental materials to assist in understanding the cultural and economic basis of former settlements, and indications of change over time;
- To produce a site archive for future deposition with an appropriate museum, and to provide information for accession to the Northamptonshire HER.

The research aims were reviewed throughout the project to ensure that:

- they were still relevant to the data being uncovered;
- methodologies were still appropriate.

A preliminary key review stage took place once all overburden had been removed. It was at this stage that all features were visible and detailed strategies for their sample excavation could be established.

2 METHODOLOGY

2.1 Standards

The standards and requirements set out in the following documents were adhered to throughout the project:

• Albion Archaeology	*Procedures Manual: Volume 1 Fieldwork* (2nd edn, 2001).
• English Heritage	*Environmental Archaeology: A Guide to the Theory and Practice of Methods, from sampling and recovery to post-excavation* (2011)
• Historic England	*Management of Research Projects in the Historic Environment* (MoRPHE) (2015)
• CI*f*A	*Charter and by-law* ; *Code of conduct* (2014)
	Standard and guidance for archaeological excavation (2014)
	Standard and guidance for the collection, documentation, conservation and research of archaeological materials (2014)
	Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (2014)
• NARC	*Northamptonshire Archaeological Archives Standard* (June 2014)

2.2 Archaeological Investigation and Recording

Archaeological works took place between 18th August and 5th September 2016. The extent of the works was agreed in advance by the AAA. There were two components (Figure 1):

1. Strip, map and sample investigation within the footprint of the proposed new house and driveway, encompassing an area of *c.* 200 m^2.
2. Strip, map and sample investigation within the footprint of the proposed new garages, encompassing an area of *c.*30 m^2.

The overburden was removed by a mechanical excavator fitted with a flat-edged 'ditching' bucket, operating under close archaeological supervision. Once archaeological remains or the upper surface of undisturbed geological strata were reached, machine excavation ceased.

All archaeological features were investigated by hand and recorded using Albion Archaeology's *pro formae* sheets; they were also drawn and photographed as appropriate. All deposits revealed were recorded using a unique number sequence, commencing at 1. Context numbers in square brackets refer to the cuts [**] and round brackets to fills or layers (**). The site was inspected by the AAA during the investigation of the house footprint. A full methodology is provided in the WSI (Albion Archaeology 2015).

During post-excavation analysis, individual contexts were assigned to higher-

level interpretive units, known as “Groups”; they are prefixed by the letter G. Groups are used in this report to identify the features investigated on site, e.g. Ditch G1 encompasses the three ditch segments excavated and recorded as contexts [24], [37] and [43].

2.3 Archive

On completion of the final report, the archive of materials (subject to the landowner’s permission) and records will be deposited at the Northamptonshire Archaeological Resource Centre (NARC).

Details of the project and its findings will be submitted to the OASIS database (ref. albionar1-2156180) in accordance with the guidelines issued by English Heritage and the Archaeology Data Service.

In line with English Heritage guidelines, Albion will seek to obtain ‘in principle’ agreement from the landowner to donate the recovered artefacts to the Museum (subject to statutory laws concerning human remains and treasure trove).

Albion Archaeology employs a full time Archives Officer to ensure that all archives are completed to the correct standards and deposited according to the relevant guidelines.

3 RESULTS

3.1 Introduction

All deposits and features revealed within the DA are described below and discussed by area and chronology. Plans, sections and photographs are shown in Figures 2 and 3.

3.2 House and Driveway Footprint

Overburden comprised dark grey clayey silt topsoil (G18) that was 0.15–0.27m thick over mid yellow-brown clay silt subsoil (G17) that was 0.06–0.22m thick. Both deposits contained fragments of modern ceramic building material and other modern detritus, and were equally rooted due to vegetation growth prior to development. The combined thickness of overburden varied from 0.28–0.42m between the southern and northern corners of the area respectively.

Undisturbed geological strata (G15) predominantly comprised light yellow-brown silt clay with occasional stones. This deposit was also moderately rooted due to the vegetation. Archaeological features were visible cutting into this deposit and were concentrated in the northern half of the area.

3.2.1 Late Saxon/early medieval ditches

Five NW-SE aligned ditches terminated within the house footprint. The smallest (G7) was 0.48m wide and 0.28m deep; the largest (G4) was 0.68m wide and 0.09m deep.

Ditch G2 was truncated by ditches G1 and G3 to the south and north respectively, indicating prolonged use of the boundaries. Ditches G3 and G4 were separated by a narrow gap, less than 0.5m wide, which may represent an entranceway between enclosures. NW-SE aligned ditch G7 was slightly isolated from the other ditches but its similar alignment and size suggest a similar function.

Two perpendicular ditches G5 and G6 were located in the northern part of the house footprint. They were similar in size and form to the NW-SE aligned ditches and represent further sub-divisions within the late Saxon/early medieval croft.

All the ditches contained a single, similar fill of grey-brown to brown-grey clay silt with moderate stones and occasional charcoal fleck inclusions. The ditches contained both pottery and animal bone fragments. The pottery principally comprised late Saxon St Neots-type ware and early medieval shelly coarse ware. Sample <1> from the terminus of ditch G3 produced the largest assemblage of charred plant remains from the site.

3.2.2 Pits and post-holes

Three pits and two post-holes were identified within the excavation area. Pits G8 and G11 were similar in shape and measured *c.* 1.25m x 1.25m. They were located either side of the NW-SE aligned ditches, presumably within separate enclosures. Another small pit G9, measuring 0.75m x 0.5m, was located near to

the terminals of the NW-SE aligned ditches and was truncated by 0.5m-diameter post-hole G10.

An isolated post-hole G12 was located to the north of the NW-SE aligned ditches; it was 0.35m in diameter and 0.07m deep.

Like the ditches, the pits and post-holes contained late Saxon and early medieval pottery. In some cases it was possible to identify a clear sequence of activity, e.g. pit G11 (containing late Saxon pottery) was cut by ditch G5 (containing early medieval pottery). Sample <2> was taken from pit G11 for the recovery of charred plant remains.

3.2.3 Modern activity and natural intrusions

Natural root damage was present across the excavation area, particularly towards the south and in the north-west corner. A number of these tree throws were investigated to confirm their nature but they were not recorded. The archaeological features were clearly identifiable within the rooted areas. A small, modern rubbish pit was located to the east of the excavation area; it contained large amounts of modern window glass.

3.2.4 Undated ditches

The new access from the main road required the removal of 0.3–0.4m of modern overburden. This revealed two ditches (G16) that were aligned parallel to the road. Both contained similar mid yellow-brown silty clay fills with occasional charcoal flecks; no artefacts were visible at the surface. The ditches were not further investigated but were left *in situ* beneath the geotextile and Type 1 that were laid for the new site access. Given the nature of their fills and their alignment, they are likely to be contemporary with the other archaeological features investigated on the site.

3.3 Garage Footprint

Overburden within the garage footprint comprised 0.26m of topsoil (G18) with modern debris above 0.18m of grey-brown clayey silt subsoil (G17). As with the main building footprint, there was evidence of modern rooting disturbance.

The undisturbed geology (G15) in this area was mid brown-orange silty clay with limestone and ironstone fragments. As with the overburden, the natural strata had moderate root disturbance, within which a single archaeological feature was visible.

3.3.1 Late Saxon/early medieval pit

An isolated pit G13 was identified in the northern corner of the garage footprint. It was oval in shape, measuring 1.6m x 1.4m x 0.3m deep. It contained a mid greenish brown silty clay fill that produced late Saxon St Neots ware and a small quantity of other domestic waste. Sample <3> was taken for the recovery of charred plant remains. This pit was similar in shape and size to the two found within the house footprint.

3.3.2 Natural intrusion

The eastern half of the garage footprint contained a large area of root damage G14. A small part of it was investigated to confirm its nature. It was < 0.13m deep and had an irregular profile and mottled orange-brown fill.

4 ARTEFACTS

4.1 Introduction

A small assemblage comprising pottery, animal bone, amorphous fired clay fragments and fuel ash was recovered from seventeen deposits (Table 1).

G	Description	Feature	Fill	Date range	Finds summary
1	Ditch	37	38	Late Saxon	Pottery (51g); animal bone (21g)
	Ditch	43	44	Early medieval	Pottery (9g)
3	Ditch	14	15	Early medieval	Pottery (45g); animal bone (9g)
	Ditch	41	42	Early medieval	Pottery (19g); animal bone (27g)
4	Ditch	20	21	Late Saxon	Pottery (21g); animal bone (9g)
5	Ditch	08	09	Early medieval	Pottery (3g); animal bone (15g)
	Ditch	35	36	Early medieval	Pottery (82g); animal bone (122g)
6	Ditch	10	11	Early medieval	Pottery (44g)
7	Ditch	12	12	Late Saxon	Pottery (12g); fired clay (39g)
9	Pit	16	17	Early medieval	Pottery (7g); fuel ash (1g)
10	Post-hole	18	19	Late Saxon	Pottery (26g)
11	Pit	32	34	Late Saxon	Pottery (77g); animal bone (3g)
12	Post-hole	30	31	Undated	Animal bone (28g)
13	Pit	47	48	Late Saxon	Pottery (6g); animal bone (19g); fuel ash (6g)
14	Tree-throw	51	52	Post-medieval	Pottery (29g)
18	Topsoil	01	-	Post-medieval	Pottery (46g)
	Topsoil (garage)	49	-	Early medieval	Pottery (10g)

Table 1: Artefact summary by feature

4.2 Pottery

Fifty-four pottery sherds, representing forty-eight vessels (487g) were collected. The material is well-fragmented, with a mean sherd weight of 9g, although is relatively unabraded, and survives in fair condition. Fabrics are identified in accordance with the Northamptonshire Ceramic Type Series and are predominantly of late Saxon and early medieval date (Table 2).

Fabric Code	Common Name	Date Range	Sherd No.	Wt. (g)	Fill / No. Sherd
F100	St Neots ware	*c.* 850-1100	11	44	(15):2, (21):1, (34):4, (36):1, (48):3
F200	T1 (2) type St Neots ware	*c.* 1000-1200	14	150	(11):1, (13):1, (19):1, (34):7, (36):1, (38):1,(49):2
F205	Stamford ware	*c.* 850-1250	3	10	(15):2, (17):1
F330	Shelly coarse ware	*c.* 1100-1400	21	223	(01):1, (09):1, (11):2, (15):7, (17):1, (34): 3, (36):2, (42):2, (44):1, (49):1
F360	Sandy coarse ware	*c.* 1100-1400	1	9	(52):1
F413	Mottled glazed ware	late C17th-18th	1	1	(52):1
F426	Iron-glazed earthenwares	late C17th-18th	3	41	(01):1, (52):2

Table 2: Pottery type series

Late Saxon pottery comprises three glazed Stamford ware sherds (10g) and 25 sherds (194g) of wheel-thrown, shell-tempered St Neots-type ware. A jar with a simple everted rim (diameter 160mm) is the only diagnostic form. Six features contained solely late Saxon pottery (ditches G1, G4, G7, pits G11, G13 and post-hole G10). Where pottery deposits of mixed date occurred (ditches G1, G3,

G5, G6) late Saxon wares are mainly represented by St Neots variant F200, the use of which is likely to have continued into the early medieval period.

Twenty-four wheel-thrown shelly coarse ware sherds (223g) of 12th–13th-century date constitute the majority of the early medieval assemblage. They are likely to derive from production sites on the Bedfordshire / Northamptonshire border. Diagnostic elements are a bowl with a rim diameter of 220mm and part of a vertical applied thumbed strip, possibly deriving from a jug. Seven sherds are sooted, suggesting they represent cooking pots. A similarly dated sand-tempered coarse ware sherd of probable local manufacture also occurred.

Three sherds (41g) deriving from late 17th–18th-century glazed earthenware bowls (41g) were collected from topsoil G18 and tree-throw G14. The latter also yielded a tiny sherd (1g) of post-medieval mottled glazed ware.

5 ECOFACTS

5.1 Animal Bone

Twenty-five animal bone fragments (253g) were collected from nine features, the largest deposit (137g) from ditch G5. Individual pieces have a mean weight of 10g and are moderately abraded. Their small size precludes species identification. Diagnostic bone elements are limb and foot bones, rib, vertebra, pelvis(?), mandible and skull fragments.

5.2 Charred Plant Remains

5.2.1 Introduction

Three environmental bulk soil samples were taken from the fill of the terminus of ditch G3, the fill of pit G11 and the fill of pit G13, all of which were dated to the late Saxon/early medieval period.

The samples ranged in size from 15–20l and were processed by flotation onto a 0.3mm sieve followed by wet-sieving of the residues through a 1mm mesh. The residues were dried and sorted for biological and artefactual remains. The three samples all produced flots varying in size from 5–65ml; these were also dried, divided into fractions using a stack of sieves, and sorted and identified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers et al. 2006; Jacomet 2006). All identifiable charred plant remains from the samples were quantified with the exception of small cereal grain fragments (<2mm), indeterminate items and charcoal, estimated frequencies of which were made on the basis of the following scale: + =1-10; ++ = 11-50; +++ = 51-150; ++++ = 151-250; +++++ = >250 items.

5.2.2 Results

The charred plant remains are shown in *Table 3*. Taxonomic order for the wild plants follows Stace (2005), which was also used for ecological data together with Hanf (1983) and Wilson et al. (2003). The three samples produced large amounts of identifiable charred plant remains mainly from ditch G3 and pit G11, with over 1,500 items being counted. The remains consisted largely of cereal grains (85% of the quantified material) with only traces of cereal chaff (<1%) being recovered. Pulses and wild plants/weed seeds made up the other 15%. There was also a high item density ranging from 8.5 to 49 per litre of processed soil.

	Group no.	**G3**	**G11**	**G13**
	Feature type	**Ditch**	**Pit**	**Pit**
	Cut no.	**14**	**32**	**47**
	Context no.	**15**	**34**	**48**
	Sample no.	**1**	**2**	**3**
	Vol. sample (l)	**20**	**19**	**10**
	Vol. flot (ml)	**65**	**42**	**5**
Latin name	**English name**			
Cereal grains				
Triticum aestivum/turgidum type	free-threshing wheat	103	39	5
T. cf. a*estivum/turgidum* type	?free-threshing wheat	123	46	6
Triticum spp.	wheat	18	16	3
cf. *Triticum* spp.	?wheat	41	36	6
Triticum/Secale cereale L.	wheat/rye		1	
cf. *Secale cereale*	?rye	2	1	
Hordeum vulgare L.	barley, hulled twisted		1	
H. vulgare L.	barley, hulled indet	1	1	2
H. vulgare L.	barley, indet	2	1	1
cf *H. vulgare*	?barley	10	1	
Avena spp.	oat	29	6	4
cf. *Avena* spp.	?oat	103	15	3
Cerealia indet	indet. cereal (estimate)	372	302	52
Cerealia indet	indet cereal fragments <2mm	+++++	+++++	++
Cereal chaff				
Triticum aestivum type	hexaploid wheat rachis fragments		1	
T. aestivum/turgidum type	free-threshing wheat rachis	1	2	
Hordeum sp.	barley rachis fragments	1		
Other plant remains				
Ranunculus acris/repens/bulbosus	buttercup	1		
Corylus avellana L.	hazel nut shell fragments	7	5	
Chenopodium sp.	goosefoot etc		1	
Stellaria media (L.) Vill.	common chickweed	1	2	
Rumex spp.	docks	5	3	
Polygonaceae indet.		1		1
Malva spp.	mallow	2		
cf. *Pisum sativum*	?pea	2		
Vicia faba L.	broad bean	1		
Vicia sp(p).	?bean fragments	2	1	
Vicia/Pisum spp.	pea/bean fragments	7	2	
Vicia/Lathyrus/Pisum spp.	vetch/tare/vetchling/pea (>2mm)	23	3	
Vicia/Lathyrus sp.	vetch/tare/vetchling (<2mm)	9	3	
Vicia/Lathyrus/Pisum sp(p).	vetch/tare/vetchling/pea (<2mm)	20	1	
Medicago/Trifolium spp.	medicks/clovers	5	2	
Fabaceae indet	small fragments/cotyledons (<2mm)	10	5	

	Group no.	G3	G11	G13
	Feature type	**Ditch**	**Pit**	**Pit**
	Cut no.	**14**	**32**	**47**
	Context no.	**15**	**34**	**48**
	Sample no.	**1**	**2**	**3**
	Vol. sample (l)	**20**	**19**	**10**
	Vol. flot (ml)	**65**	**42**	**5**
Latin name	**English name**			
Fabaceae indet	small rounded legumes	14	2	1
Euphorbia peplus L.	petty spurge		1	
Euphrasia/Odontites sp.	eyebright/bartsia	1		
Sherardia arvensis L.	field madder		1	
Galium aparine L.	cleaver	2		
Anthemis cotula L.	stinking chamomile	26	6	
Eleocharis palustris/iuniglumis	spike-rush	2		
Carex sp(p).	sedge	8	1	
cf. *Poa* spp.	?meadow-grass	3	3	
Bromus spp.	brome	5		
cf. *Bromus* spp.	?brome	3	3	
Poaceae indet.	grasses (large seeds)	7	6	
Poaceae indet.	grasses (small seeds)	4	3	1
Poaceae indet.	grass/cereal node/internode fragments	2	2	
indeterminate	wood charcoal	+++++	+++++	+++++
indeterminate	items	+	+	
	TOTAL	**979**	**525**	**85**
	item density (per litre of processed soil)	***49***	***27.6***	***8.5***

Item frequency: + =1-10; ++ = 11-50; +++ = 51-150; ++++=151-250; +++++ = 250+ items

Table 3: Charred plant remains

In addition to the charred plant remains there were also small numbers of un-charred seeds in the three samples; they are probably intrusive given the large amounts of roots in all three flots. There is the possibility, however, that some of the more robust woody fruit seeds of *Sambucus* (elder) and *Rubus* (blackberry/raspberry) could be contemporary with the sampled features, such remains having previously been found to survive for long periods of time in the soil. In this respect it was interesting to note the presence of a *Vitis vinifera* (grape) pip in ditch G3; while this could be simply intrusive, there is evidence for viticulture during the late Saxon/early medieval period in what is commonly referred to as the Medieval Warm Period (*c*. AD 900–1300).

There follows a discussion of the different categories of plant material.

Cereals

Cereal grains dominated the charred plant assemblages, although preservation was generally very poor with a high degree of fragmentation — over 50% of the

grains and large amounts of small unquantifiable fragments could not be identified further.

The majority of the identifiable grains in all three samples belonged to wheat (*Triticum*). The well-preserved remains were all from free-threshing wheat, either hexaploid bread wheat (*Triticum aestivum*) or tetraploid rivet wheat (*Triticum turgidum*). There were traces of free-threshing rachis fragments in the two richest samples, one sufficiently intact rachis fragment showing the presence of hexaploid bread wheat; indeed the majority of the free-threshing wheat grains, with a short squat rounded morphology and a flat dorsal side, are more reminiscent of bread rather than rivet wheat. The archaeobotanical record also suggests that bread wheat was more extensively grown than rivet wheat in England during the medieval period (Moffet 2006, 49) although *Triticum turgidum* has been found at other medieval sites in Northamptonshire, for example at Raunds (Greig 1988, 110). The only other cereal represented by significant numbers of grains was oat (*Avena*), also recorded in all three samples. There were also a very small number of barley (*Hordeum vulgare*) grains, including a twisted hulled grain indicative of six-row hulled barley. This cereal was also represented by a rachis fragment. Several grains in two samples were tentatively identified as rye (*Secale cereale*).

Free-threshing (including bread) wheat and oat are two of the main grains along with hulled barley and rye found in both Saxon and medieval sites in England (Greig 1991, 315, 321). Other sites in Northamptonshire have produced similar results; for example, free-threshing (including bread) wheat was the best represented cereal along with barley, oats and rye in late Saxon and medieval deposits from Marefair, Northampton (Giorgi 2005, 65; Robinson and Wilson 1987, 62) while wheat was also the main cereal with smaller amounts of barley and oats in an early 15th-century drying oven at St Peter's Street, Northampton (Keepax et al. 1979).

The cereal grains may have been used for food, drink and fodder during the Saxon and medieval periods. Free-threshing wheat, the main cereal in the samples, would have been the preferred bread-making grain (Hagen 1994, 125, Hammond 1995, 2) using bread wheat rather than rivet wheat, the latter producing poorer quality flour (Moffet 2006, 49). Wheat flour was also used for pies and pastries. Oats, the other main cereal in the samples, may have been used as part of mixes for bread, although this grain was also extensively used as animal fodder. All the cereals may have been used for gruel or porridge as well as for biscuits and cakes or added to pottage (Campbell et al 1993, 25; Wilson 1991, 197). Another potential use of the cereals would have been for ale, although none of the grains had germinated to suggest on-site brewing.

Pulses

The remains of pulses made up a significant component of the other charred plant remains from the site, although poor preservation and fragmentation made it difficult to identify the majority of the legumes and establish whether they belong to cultivated and/or wild pulses. Several larger seeds in ditch G3, however, included one broad bean (*Vicia faba*) and two possible peas (*Pisum sativum*) while the larger legume fragments in the samples are also probably

from beans and peas or other cultivated pulses. The smaller leguminous seeds, however, may be from weeds and/or wild plants.

Beans and peas are frequently found in Saxon and medieval deposits in England but usually only in small amounts (Greig 1991, 317, 323; Moffet 2006, 53), including sites in Northamptonshire; for example, beans were found in late Saxon and medieval contexts and pea in late medieval deposits at Marefair, Northampton (Giorgi 2005, 67; Robinson and Wilson 1987, 62). Beans and peas would have been used for human food, together with cereals for bread and in pottage, particularly by the poor and following failed cereal harvests (Wilson 1991, 201–2) as well as for animal feed. Pulses may have also been dried after harvest and stored for long-term use. They were also grown as a means of restoring nitrogen to the soil as part of crop rotations (Campbell et al. 1993, 134).

Wild food resources
A small number of charred *Corylus avellana* (hazel) nut shell fragments were found in two of the samples. They may represent the residues of collected and gathered wild foods, hazelnuts being a useful food resource for storage; among the uses of hazelnuts in Saxon times was in dessert dishes (Hagen 1994, 64). The un-charred seeds of elder and blackberry/raspberry in the flots, if contemporary with the sampled features, could also be the residues of collected and used wild fruits.

Wild plants/weed seeds
Wild plants/weed seeds made up only a small percentage (*c*. 10%) of the quantified charred plant remains from the site. They represent a modest range of species that, given their presence in grain assemblages, are probably mostly from arable weeds, incidentally imported onto the site with the cereals.

The few arable weeds identifiable to species included: a relatively good representation of *Anthemis cotula*, a weed usually found on calcareous soils but often on heavier soils; occasional seeds of *Galium aparine* (cleaver), associated with loams and clay soils; and *Sherardia arvensis* (field madder), a plant of light calcareous loams. These results may point to the cultivation of the local soils around the village. They consist of fertile lime-rich loamy and clayey soils (www.landis.org.uk services/ soilscapes.cfm) and would have suited the two main cereals in the samples, bread wheat growing best on both heavy and rich soils (Moffet 2006, 48) and oats growing well on loams and clay loams (Jones 1981, 108). Beans also grow best on heavier soils, although peas prefer lighter ones. Traces of *Stellaria media* (common chickweed) and *Galium aparine* may tentatively point to the cultivation of spring and autumn sown crops respectively, bread wheat usually being winter sown and oats typically sown in spring.

A few wetland plants, *Carex* (sedges) and *Eleocharis* (spike-rush) represented in the samples, may suggest the use of damper areas of ground for growing crops, or together with the some of the indeterminate grasses (Poaceae), could be debris from the collection of vegetation from wet grasslands/meadows including possibly areas close to the river, east of the village. The charred remains of these plants suggest that they were used as fuel, although some of these plants

may have been collected and initially used for other purposes, for example, the sedges and grasses as thatching and flooring materials and (together with traces of possible cereal straw in two of the samples) as animal bedding. Oat and barley straw may have also been used for fodder (Barker 1985, 45).

5.2.3 Discussion

The charred plant remains suggest that free-threshing wheat and oats were the main cereals being cultivated and used at the site during the late Saxon to early medieval period. A little evidence suggests the use of hulled barley and possibly rye, the few grains of which may be remnants from previous harvests. Beans and probably peas may have also have been grown and used, possibly part of a crop rotation system to restore nitrogen to the soil. The weed seeds point to the local cultivation of the chalky boulder clay soils around the site; ridge and furrow earthworks in the fields around the village are also evidence of past arable agriculture. Domesday mentions plough lands as well as meadows, from which sedges and grasses may have been gathered for a variety of purposes.

Ditch G3 produced the largest amount and greatest concentration of charred plant remains (62% of all quantified remains), followed by pit G11 (33%) and pit G13 (5%). The composition of the three assemblages, however, was broadly similar. All were dominated by cereal grains (82% to 96% of each assemblage) of mainly free-threshing wheat and oats, and with only traces of chaff. The remaining charred plant remains consisted of fairly similar amounts of leguminous seeds (including cultivated pulses) and wild plant/weed seeds.

The dominance of cereal grains suggests that most of the remains are from activities associated with the final stages of grain cleaning and food preparation — the grains accidentally burnt while being dried before storage and/or hardened before milling or as a result of cooking accidents. These activities may have been carried out within the boundaries of each croft on a domestic scale by individual families. The distribution of the charred plant remains shows that the richest two assemblages from ditch G3 and pit G11 were in close proximity to one another and were probably from similar activities within the same plot. The smaller charred plant assemblage from pit G13 was from another area of the site.

Other than a few rachis and straw fragments, there is virtually no evidence for the initial stages of crop-processing, including threshing and winnowing. Such activities were probably carried out in the fields before the cereals were bought back to the settlement in a semi-cleaned state. The relatively few small weed seeds, for instance *Rumex* (dock), *Anthemis cotula*, *Euphrasia/Odontites* (eyebright/bartsia), and possibly the small-seeded legumes including *Medicago/Trifolium* (medick/clover) and grasses, would have been removed by fine sieving using the 'wheat' sieve, a stage often but not always carried out before storage of cereals. The larger weed seeds including *Bromus* (brome), *Galium aparine,* are also often found in virtually clean cereal deposits; because they are of a similar size to the grains these weed seeds are difficult to separate other than by hand-sorting. All the weed seeds may have subsequently been used as fuel. In addition to the crop debris, the samples produced other biological remains also associated with food processing including animal bone (some of which was burnt), spent fuel (charcoal) and pottery, suggesting that the

pits and ditch were used for rubbish disposal from a number of un-connected activities.

6 DISCUSSION

6.1 Summary of Results

The development area lies in a known focus of medieval settlement and the results of the archaeological investigations have provided further evidence for the nature of that settlement and the agrarian regime that provided its economic basis.

The two investigation areas totalled *c*. 230m^2 in extent. The archaeological features were sealed by overburden (topsoil and subsoil) with a combined thickness of 0.28–0.42m.

A number of ditches, pits and post-holes were recorded. These are likely to be associated with one or more settlement enclosures, fronting on to one of the roads close to the village centre.

The dating of the features relies exclusively on pottery. The commonest individual type is shelly coarse ware (F330), which dates to the 12th–14th century. However, the assemblage also contains a significant amount of St Neots ware, both the late Saxon (10th–11th century) type (F100) and the later variant (F200), which is likely to be partly contemporary with the shelly coarse ware. Some features contained solely late Saxon pottery (e.g. ditches G4, G7; pits G11 and G13) and in some cases (pit G11) were stratigraphically earlier than features containing early medieval pottery. However, other features containing solely late Saxon pottery (post-hole G10) were stratigraphically later than features containing early medieval pottery.

Overall, the assemblage of features is too small and too localised in extent to enable precise phases of activity to be identified. However, the remains do demonstrate occupation in the 10th–11th century (contemporary with the Domesday record), continuing into the 14th century, after which the site no longer appears to have been a focus of settlement.

The presence of animal bone and an assemblage of charred plant remains provide further evidence for domestic activity in the vicinity. Free-threshing wheat and oats appear to have been the main cereals cultivated and used during the late Saxon to early medieval period. The predominance of cereal grains suggests that the assemblage largely derives from accidental burning during the final stages of grain cleaning and food preparation. The weed seeds are characteristic of the cultivation of the soils derived from the chalky boulder clay on which the village sits. Ridge and furrow earthworks in the area still attest to the agriculture basis of the medieval village.

6.2 Significance of Results

Development of the site has provided the opportunity for the first archaeological investigation within Hardwick. Although limited in scale, the results of the work add to our knowledge and understanding of the origin, development and economy of rural settlements in eastern Northamptonshire. These are all

research objectives identified in the regional research agenda (Knight et al., 2012, 82, 94).

No further analysis of the results of the investigations is required beyond that presented in this report, which will be uploaded onto the OASIS website (ref: albionar1-215618). The archive of materials (subject to the landowner's permission) and records will be prepared for deposition at the Northamptonshire Archaeological Resource Centre (NARC).

7 OASIS SUMMARY

OASIS ID: albionar1-215618

Project details

Project name	Land adjacent to 14 Hardwick Village, Hardwick
Short description of the project	Planning permission was granted by the Borough Council of Wellingborough for the construction of a four-bedroom, two-storey dwelling, with a garage and access, on land adjacent to 14 Hardwick Village, Hardwick, Northamptonshire. Albion Archaeology was commissioned to carry out the archaeological works, the approach to which was specified in a written scheme of investigation (Albion Archaeology 2015). An area was subject to archaeological investigation. A number of ditches, pits and post-holes were recorded. These are likely to be associated with one or more settlement enclosures, fronting on to one of the roads close to the village centre. Pottery from the excavated features suggests occupation from the 10th to the 14th century. The presence of animal bone and an assemblage of charred plant remains provide further evidence for domestic activity. Free-threshing wheat and oats appear to have been the main cereals cultivated and used by the settlement's inhabitants. Development of the site has provided the opportunity for the first archaeological investigation within Hardwick. Although limited in scale, the results of the work add to our knowledge and understanding of the origin, development and economy of rural settlements in eastern Northamptonshire, thereby contributing to research objectives identified in the regional research agenda.
Project dates	Start: 18-08-2016 End: 05-09-2016
Previous/future work	No / No
Any associated project reference codes	HV2674 - Contracting Unit No. WP/2014/0102/FUL - Planning Application No. ENN108434 - HER event no.
Type of project	Recording project
Monument type	DITCHES Early Medieval PITS Early Medieval POST HOLES Early Medieval DITCHES Uncertain
Significant Finds	POTTERY Early Medieval ANIMAL BONE Early Medieval
Investigation type	"Recorded Observation"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	NORTHAMPTONSHIRE WELLINGBOROUGH HARDWICK Land adjacent to 14 Hardwick Village, Hardwick
Study area	230 Square metres
Site coordinates	SP 8499 6981 Point

Project creators

Name of Organisation	Albion Archaeology

Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Albion Archaeology
Project director/manager	Drew Shotliff
Project supervisor	Victoria Hainsworth

Project archives

Physical Archive recipient	Northamptonshire Archaeological Resource Centre
Physical Contents	"Animal Bones" ,"Ceramics",' 'Environmental"
Physical Archive notes	To be held at Albion Archaeology until the NARC opens
Digital Archive recipient	ADS
Digital Contents	"Animal Bones", "Ceramics" ,"Environmental"
Digital Media available	"Database" ,"Images raster / digital photography" ,"Text"
Paper Archive recipient	Northamptonshire Archaeological Resource Centre
Paper Contents	"Animal Bones" ,"Ceramics", "Environmental",' 'other"
Paper Media available	"Context sheet" ,"Correspondence" ,"Drawing", "Miscellaneous Material" ,"Photograph" ,"Report"
Paper Archive notes	To be held at Albion Archaeology until the NARC opens

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land adjacent to 14 Hardwick Village, Hardwick: Archaeological Strip, Map and Sample Investigation
Author(s)/Editor(s)	'Hainsworth, V'
Other bibliographic details	2016/188
Date	2016
Issuer or publisher	Albion Archaeology
Place of issue or publication	Bedford

Entered by	Helen Parslow (hl.parslow@albion-arch.com)
Entered on	17 January 2017

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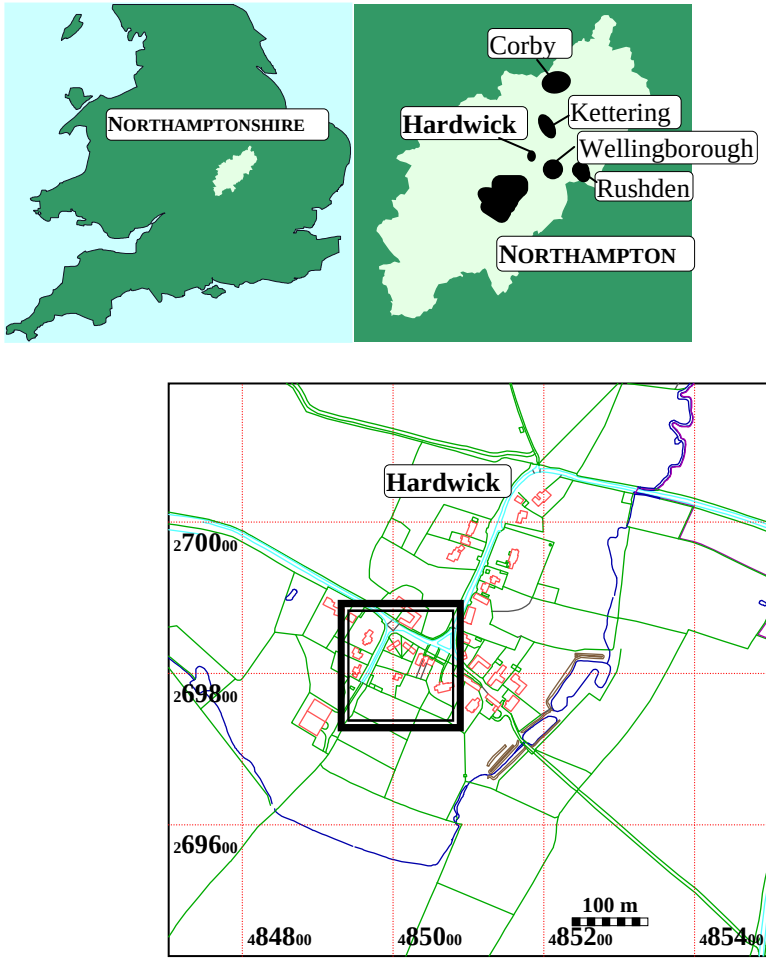
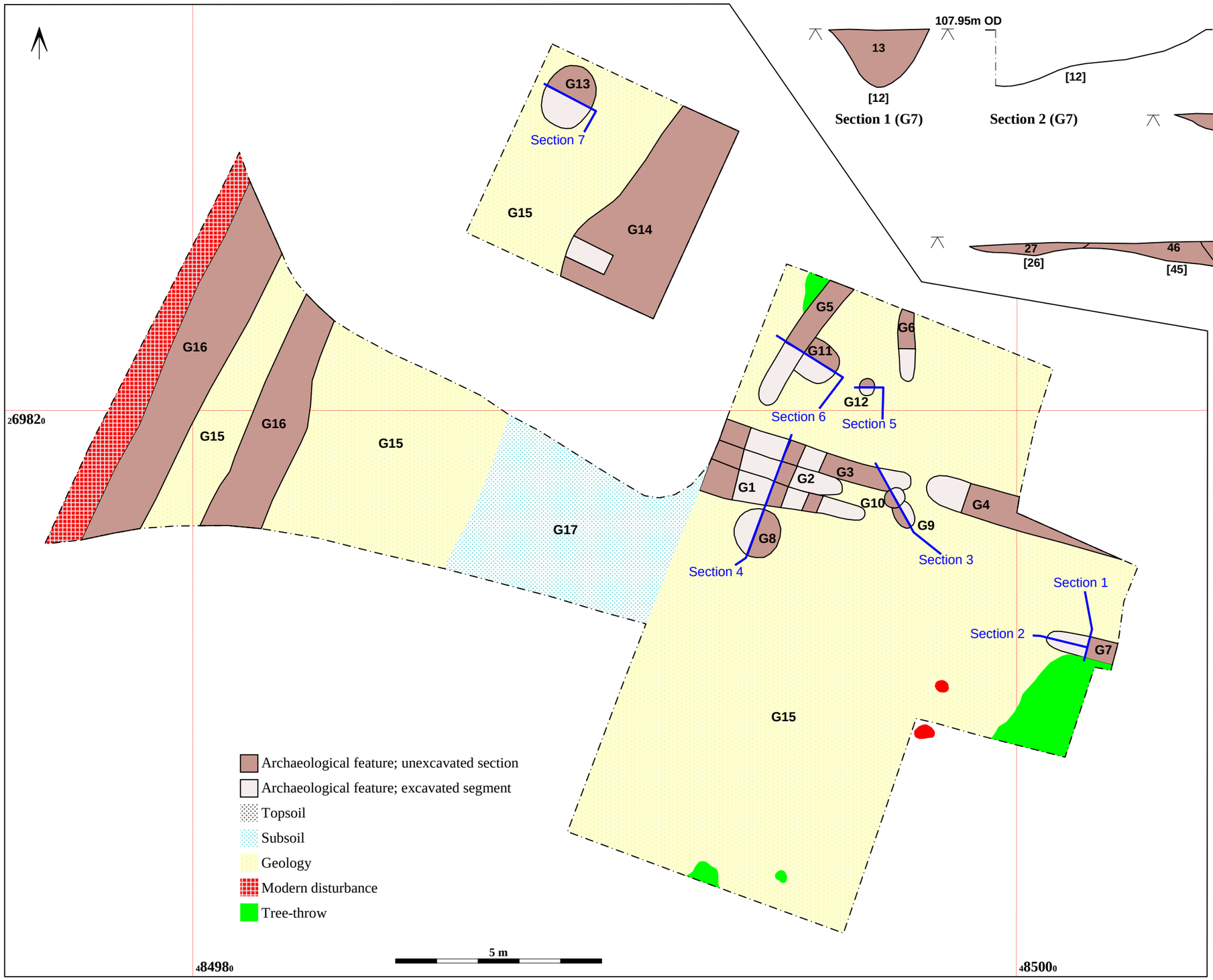
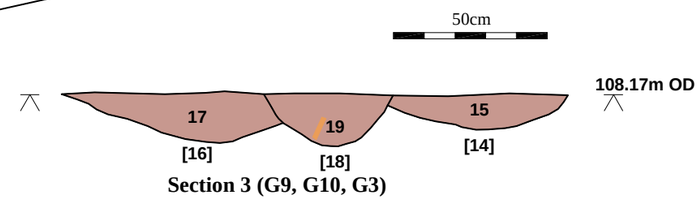
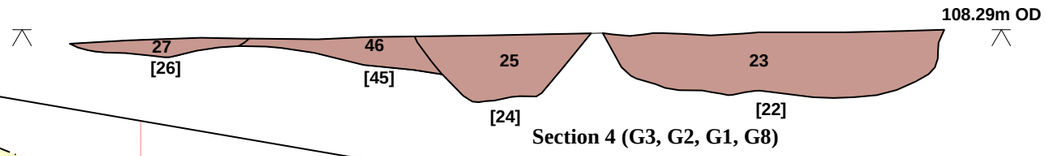
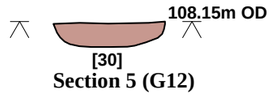


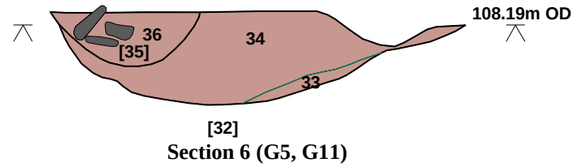
Figure 1: Site location plan











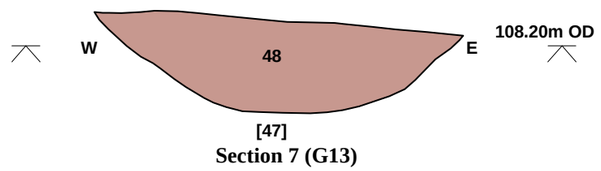


Figure 2: All-features plan and sections

Machining of house footprint, looking south

Ditch G7 looking east (Section 1)

Pit G9, post-hole G10, ditch G3, looking south-west (Section 3)

Ditch G5 and pit G11, looking north-east (Section 6)

Pit G13, looking north-east (Section 7)

Excavated features on house footprint, looking south

Figure 3: Selected photographs (cross-referenced to sections on Figure 2)

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