LAND AT THE LIMES
RECTORY LANE
HOUGHTON CONQUEST
BEDFORDSHIRE

ARCHAEOLOGICAL INVESTIGATION

Albion archaeology

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Project: LHC2352
Museum accession no.: BEDFM 2014.14
OASIS ref.: albionar1-172101

Document: 2014/156
Version 1.0

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12th December 2014

Prepared for:

DKP Developments Ltd

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Preface

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.

This document has been prepared by Gary Edmondson (Project Manager) and Jackie Wells (Artefacts Officer) and approved by Drew Shotliff (Operations Manager). The animal bone was analysed by Dr Mark Maltby and the charred plant remains by John Giorgi.

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Version History

Version	Issue date	Reason for re-issue
1.0	12/12/ 2014	n/a

Structure of this Report

Section 1 serves as an introduction to the project, describing the site's location, its archaeological background and the aims of the archaeological work. Section 2 describes the methodology and Section 3 summarises the results of the various components of the archaeological works. Section 4 is a bibliography. The three Appendices (Sections 5–7) contain information relating to pottery, animal bone and charred plant remains respectively.

Key Terms

Throughout this document the following terms or abbreviations are used:

CBCA	Central Bedfordshire Council Archaeologist
HER	Historic Environment Record
IfA	Institute for Archaeologists
MAP2	*Management of Archaeological Projects*, 1991, English Heritage
SARM	Scheme of Archaeological Resource Management
WSI	Written Scheme of Investigation

Non-Technical Summary

Albion Archaeology was commissioned by DKP Developments Ltd to undertake a programme of archaeological mitigation works at the 'The Limes', Rectory Lane, Houghton Conquest, Bedfordshire. This was to fulfil the requirement of Condition 4, attached to the planning permission granted by Central Bedfordshire Council (CB/09/06123/FULL) for the erection of three new dwellings at the site. The site is centred on TL 0135 1532, within the core of the historic settlement, at the junction of the High Street and Rectory Lane, some 120m from the parish church.

The site is located on the southern edge of the Marston Vale, a clay vale lying between the valley of the Great Ouse to the north and the Greensand Ridge; the scarp slope of the Greensand Ridge is c. *1km to the south. The land slopes gently upwards from north to south at a height of* c. *50m OD. The geology comprises impermeable clay with patches of gravel, which is recorded as overlying Oxford Clay.*

In 2004 Albion undertook an earthwork survey and evaluation in support of a previous development proposal. The survey defined the extent of a medieval moat, the position of which was subsequently confirmed by one of the four evaluation trenches. The other trenches within the garden targeted a mound of material and an open grassed area to the west. Modern material was recovered from the moat's fills, right down to the base of the cut, indicating that it had been cleaned out and infilled in recent times. Investigation of the mound revealed that it was a modern feature. The other trenches did not identify any features below the thick cultivation soil, which was probably associated with a garden plot rather than arable cultivation.

The subsequent mitigation works had two components: preservation of the moat; and investigation of the house footprints in advance of construction works. Prior to the commencement of the investigation an area around the moat was fenced off to the satisfaction of the Central Bedfordshire Council Archaeologist (CBCA) to protect it from construction-related activity. Subsequently it was agreed with the CBCA that the best means of preserving the moat was to build-up the area in order to create a level garden to the rear of the new properties. A methodology for this was devised in collaboration with the developer and the CBCA.

The investigation focused on the main impact of the development — the footprints of the new buildings. This was undertaken in late March 2014, revealing several phases of activity, which would appear to extend from possibly the late Saxon period to the late medieval / post-medieval period. The activity included evidence for enclosures, timber buildings of contrasting methods of construction, and pit-digging. It would appear that most of this activity pre-dated the construction of the moat.

The evidence from this investigation, when taken in combination with previous work in the immediate vicinity, adds to the growing understanding of the development of this part of the village.

The project archive will be deposited with Bedford Museum (accession number BEDFM 2014.14). This report will be uploaded to the OASIS website (reference no. albionar1-172101).

1. INTRODUCTION

1.1 Planning Background

Central Bedfordshire Council granted planning permission (CB/09/06123/FULL) for the erection of three new dwellings at The Limes, Rectory Lane, Houghton Conquest, Bedfordshire.

As the development had the potential to impact on the significance of archaeological remains, a condition (no. 4) was attached to the planning permission requiring the implementation of a Scheme of Archaeological Resource Management (SARM). This was in line with policy HE12.3 of *PPS 5: Planning for Historic Environment*, which states that where appropriate, the Local Planning Authority (LPA) should require developers to record and advance understanding of the significance of heritage assets before they are lost.

The Central Bedfordshire Council Archaeologist (CBCA) issued a brief, setting out the scheme of works required to address the condition (CBC 2014). In response to the brief, Albion Archaeology was commissioned by DKP Developments Ltd to prepare a SARM for LPA approval. The SARM comprised two components: the protection of the moat within the site; and the investigation of the footprint of the two building plots for the three new dwellings. The SARM was approved by the CBCA prior to the commencement of the investigation.

1.2 Site Location and Description

The site lies centrally within the village of Houghton Conquest, at TL 0135 1532, some 120m to the east of All Saints' parish church, at the junction of the High Street and Rectory Lane (Figure 1). The site fronts Rectory Lane and is *c*. 0.35ha in extent. It has a generally regular form in plan, although the northern side tapers to the east from 66m to 29m. To the north, west and south the site is bounded by residential development. The site was occupied by an existing dwelling — 'The Limes', situated in the northern part of the area, with associated garden to the south and west. The garden area contained the two building plots (red areas on Figure 1), located within the line of the moat.

Topographically the site is on the southern edge of the Marston Vale, a clay vale lying between the valley of the Great Ouse to the north and the Greensand Ridge; the scarp slope of the Greensand Ridge is *c*. 1km to the south. The land slopes gently upwards from north to south at a height of *c*. 50m OD.

The geology comprises glacio-lacustrine clay in the form of light brown to yellow-brown clay and silty clay with patches of orangey gravel. The solid geology is recorded as Oxford Clay.

1.3 Archaeological Background

In 2004 the site was subject to archaeological field evaluation in connection with an earlier development proposal (Albion Archaeology 2009). The evaluation consisted of an earthwork survey and trial trenching, designed to investigate the south-east corner of a medieval moated site (HER 3391) that was known to exist

within the site. The peak period of moat construction is thought to have been between 1250 and 1350, although their construction continued into the 15th century.

The HER records the presence of seven other *possible* moated sites (HER 3282, 3390, 3392, 3393, 4465, 5222 and 5523) and one *definite* moated site (HER 3236) within 1.5km of 'The Limes'. These are all within the parish of Houghton Conquest and together constitute a relatively high concentration for a Bedfordshire parish.

The evaluation showed that the moat survived as a substantial feature. It was up to 1.6m deep and 12–14m wide, with a U-shaped profile. This moat had survived until the 1970s, after which it had been largely infilled with modern rubbish. The trial trenches within the platform of the moat did not reveal any contemporary archaeological features, although they did suggest that significant landscaping, possibly in the early 20th century, had taken place.

The results of the evaluation allowed the identification of a preservation area for the moat along the eastern and southern boundaries of the site; the preservation area included a 2m-wide buffer zone (Albion Archaeology 2009, fig. 9).

To the north of the site an archaeological excavation in advance of housing development identified five phases of former settlement, spanning the late Saxon to post-medieval periods (Walker 2011). This included part of the same moat as survives within 'The Limes'; it appeared to have remained in use until the mid-16th century. Although no evidence to indicate its construction date was recovered, it was assumed to have been imposed on an earlier system of plot boundaries at some point during the 13th or 14th centuries. No evidence for manorial buildings was identified within the site, but a number of higher-status artefacts did suggest that the moat was occupied by someone of more than just peasant class. Considerable evidence for the planned settlement pre-dating the construction of the moat was also found.

1.4 Historical Maps

The earliest map evidence for Houghton Conquest dates to the early 19th century and comprises the 'Inclosure' Map of 1801 and the Tithe Map of 1842.

The 1883 first edition Ordnance Survey map indicates a marked contrast between the north and south sides of the High Street (Figure 2). At this time, the north side was occupied by a multitude of dwellings, whilst the south side was open, with little development shown. Two perpendicular linear features defined the SE corner of the moat.

1.5 Project Objectives

The primary purpose of the archaeological mitigation works as set out in the approved SARM (Albion 2014) was to safeguard the heritage significance of the surviving buried archaeological remains within the development site and to advance the understanding of the local historic environment.

The specific objectives were to:

- protect and manage archaeological remains *in situ*;
- record the surviving archaeological remains within the area impacted by the new dwellings and associated garage.

Medieval moated sites and medieval settlement remains within modern villages in general, have been identified as valuable topics for research in the eastern region of England. Other relevant topics include the characterisation of late Saxon and medieval rural settlement (Oake 2007, 14), along with late Saxon and medieval rural settlement diversity (Wade 2000, 24) and the origins and development of medieval rural settlement (Medlycott 2011, 70). It was recognised that the investigations had the potential to reveal evidence that could provide further insight into how the interior of the moat was used or what type of activity preceded its construction.

2. METHOD STATEMENT

Throughout the project the standards set out in the following documents were adhered to:

Albion Archaeology	*Procedures Manual: Volume 1 Fieldwork* (2nd edn, 2001).
Bedford Borough Council	*Procedure for Preparing Archaeological Archives for Deposition with Registered Museums in Bedfordshire. Version 2.8* (2010)
English Heritage	*Management of Research Projects in the Historic Environment* (2009) *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (2nd edn, 2011)
East Anglian Archaeology Occasional Paper 14	Gurney, D. *Standards for Field Archaeology in the East of England* (2003)
I*f*A	*By-Laws and Code of Conduct* *Standard and Guidance for Archaeological Excavation* (2008)

The approved mitigation strategy comprised two components:

- Protection and management of archaeological remains *in situ*, which involved protecting the area of the moat, including a 2m stand-off, from disturbance associated with both the investigation and subsequent construction activity. Initially this involved defining the protection area and creating a suitable barrier to exclude construction activity. This was inspected by the CBCA on 13th March 2014. Subsequently it was determined that the best way to protect the area would be to raise the level of the gardens over the depression of the moat. A methodology for undertaking this work was agreed with the developer and CBCA.
- Archaeological investigation the footprints of the buildings which would impact any buried archaeological remains (Figure 3). This comprised investigation and recording of two areas in advance of development, in order to determine and understand the nature, function and character of archaeological remains in their cultural and environmental setting. The western area (Area 2) comprised both the footprint of the dwelling and detached garage, to create a single larger area.

Both areas of archaeological investigation were opened by a small mechanical excavator fitted with a flat-edged bucket, operated by an experienced driver under close archaeological supervision. Any possible archaeological deposits were noted, cleaned, excavated by hand and recorded using Albion Archaeology's *pro forma* sheets. All archaeological excavation and recording was carried out by experienced Albion Archaeology staff. Once investigation and recording were completed to the satisfaction of the CBCA, discharge of the condition was sought to permit construction works to commence.

3. RESULTS

3.1 Introduction

Following creation and approval of the protection zone for the moat, stripping and investigation of the building footprints was undertaken between 20th and 28th March 2014, in a period of variable, though generally dry weather. Each investigation area was assigned a separate block of records with the eastern semi-detached dwellings, Area 1, commencing at (500). In the west, Area 2 incorporated both the footprint of the detached dwelling and its associated garage; records commenced at context (600).

Where possible, the results of the archaeological investigation are discussed sequentially by phase from earliest to latest. Finds and ecofacts information has been integrated into the site discussion. Figure 3 shows the all-features plan of the investigation, colour-coded by phase, together with relevant sections (Figures 3 and 4). Images of selected features are shown on Figures 5–9. In the discussion the features are referred to by group numbers, prefixed by G, assigned during post-fieldwork structural analysis, which combined related contexts.

3.2 Overburden and Geological Deposits

Below a recent landscaping layer of topsoil, *c.* 0.2m thick, was a more yellow-brown make-up deposit, up to 0.3m thick, which in turn overlay a dark grey buried soil horizon up to 0.3m thick (Figure 4: section 18 and Figure 8: image 8), that merged into the geological strata. The buried soil would appear to be an old cultivation soil, based on its dark colour and thickness. Formation of this deposit would appear to have resulted in the general truncation of the underlying archaeological features.

The geological stratum was generally light brown to yellow-brown clay to silty clay with patches of orangey gravel to the west.

3.3 Archaeological Features

The majority of features identified in the two areas of investigation could be assigned to a phase, based either on associated finds, stratigraphic relationships or location and form (Figure 3).

3.3.1 Phase 1: ?late Saxon land divisions

A substantial ditch G1 was aligned roughly ENE-WSW, with two perpendicular fencelines G2 and G7, aligned NNW-SSE defining partitions of the area to the north (Figure 3 – dark grey features). Only a small assemblage of finds was recovered, with no datable material; the tentative dating is based on phasing of features in the area to the north (Walker 2011).

Ditch G1

The ditch was relatively substantial at up to 1.56m across and 0.55m deep with a V-shaped to steep concave profile (Figure 3: sections 1–3, Figure 5: images 1 and 2). This substantial land division was identified in both areas. However, it is not

clear if the slight difference in alignment of the two components is due to an opening or the possible sinuous form of the boundary.

The fills varied along the length of the ditch. They generally comprised a lower darker fill, probably derived from an unstable soil profile. The roughly horizontal upper boundary to the lower fill may indicate that it accumulated in wet conditions (Figure 3: sections 1 and 2). A sample <1> from this deposit contained one glume base of the hulled wheat *Triticumspelta* (spelt) and a weed seed of *Anthemiscotula* (stinking chamomile). The paucity of material limits further comment, although spelt wheat is usually found in earlier prehistoric and Roman contexts, which suggests it could be residual or a relic from previous harvests.

Above this was a more yellow-brown deposit, up to 0.24m thick, which was similar to the adjacent geological strata. This may be backfilled material, either derived from an adjacent bank or upcast from the excavation of an adjacent ditch.

Thirty-five animal bone fragments were recovered — the majority from the sample, all of which were from unidentified mammals. A cattle lower molar and a small fragment of cattle mandible were the only identified bone elements from the ditch.

Eastern fenceline G7

This comprised six postholes forming a NNW-SSE alignment, at least 5m long, with a *c.* 1.6m-wide gap to the edge of ditch G1. Generally the postholes were 0.25–0.35m across and 0.1–0.25m deep with near vertical sides and flat bases (Figure 3: sections 4–8 and Figure 6: image 3). A larger oval posthole, 0.8m by 0.6m and 0.35m deep, with a U-shaped profile (Figure 3: section 4) formed the southern end of the fence. This considerably more substantial feature may represent an anchor post for the fence or the position of a gate to the south (although no opposed posthole was identified).

Western fenceline G2

Some 26m to the west was a second fenceline G2, at least 7.5m long, with individual posts at least 3m apart. The individual postholes varied from circular to oval in plan, *c.* 0.3–0.5m across. They had U-shaped profiles, up to 0.2m deep in the north, but only 0.06m deep towards the moat in the south (Figure 3: sections 9–11 and Figure 6: image 4). Two unidentified mammal bone fragments were recovered from the fills of separate postholes.

Summary

Phase 1 represents the earliest enclosure of the landscape. No datable finds were recovered. However, evidence from the open area investigation immediately to the north suggests the features are part of a late Saxon enclosure system. Another parallel sinuous boundary, located some 45m to the north, (Walker 2011, fig. 6) would appear to be the spacing for the main land divisions. In the open area investigation to the north, the plot divisions were generally defined by ditches; the only defined plot was *c.* 15.6m wide. The two fencelines within the current investigation were offset relative to the boundaries to the north.

3.3.2 Phase 2: Saxo-Norman pitting

Sub-circular pit G11 extended southwards from the northern baulk of Area 1 (Figure 3 – orange feature). It was at least 0.75m long by 0.65m wide with an irregular steep concave profile 0.46m deep (Figure 3: section 12 and Figure 8: image 8). It was partly masked by later features. The fill contained four body sherds of St Neots ware pottery (fabric B01: 10g), and twelve animal bone fragments**.** Six were unidentified mammal fragments but a fairly complete lumbar vertebra of a sheep/goat was also recovered. The remaining five bones belonged to a young puppy. Both mandibles and both femora were represented along with the left tibia. All the bones were porous and the limb bone epiphyses were unfused. The deciduous premolars and incisors of the mandible had erupted and were in wear but the first molars had not erupted. This indicates that the puppy was probably between two and four months old.

Only five bones of this skeleton were recovered and it is possible that these bones were redeposited and originally came from a carcass deposited elsewhere. However, both mandibles had retained nearly all of their teeth and both femora and one of the adjacent tibiae were also recovered. In addition, all the bones were very well preserved. This suggests that the skeleton was at least still partially articulated and had not been subjected to a long period of exposure prior to its final deposition.

3.3.3 Phase 3: early medieval domestic buildings

Structural evidence was identified in both areas (Figure 3 – green features).

Western posthole building: G3, G4 and G5

Aligned WNW-ESE, the building was at least 6.25m long by 3.25m, continuing into the baulk, with the main posts spaced *c.* 2.5m apart centre to centre (Figure 3 and Figure 7: image 5). A clustering of postholes towards the eastern surviving limit may define infill or possible repairs to the wall. The postholes were better preserved in the west, towards the gable end, having oval forms up to 0.6m by 0.5m and 0.2m deep with a U-shaped profile (Figure 4: sections 14–16 and Figure 7: image 6). To the east the features were *c.* 0.3m in diameter and 0.05–0.09m deep, with U-shaped to shallow concave profiles (Figure 4: section 17).

In the west a single offset post (G5), 0.75m from the wall-line may define a buttress rather than a lean-to or entranceway, situated in the gable end of the building (Figure 4: section 13 and Figure 7: image 6). The fill of this feature contained an amorphous fired clay fragment (5g) in a coarse oxidised sand-tempered fabric. The two oval postholes of G4 may define internal activity within the building (Figure 3 and Figure 7: image 5). They were 0.5–0.62m long and *c.* 0.4m wide with concave profiles up to 0.07m deep.

Finds were recovered from the fills of two postholes defining the western gable of the building. Pottery comprised two Saxo-Norman (B01, B01A: 13g) and three early medieval sherds (C04, C59B: 26g). An everted rim of a St Neots ware jar was the sole diagnostic vessel form. A sample <3> taken from the dark fill of the posthole defining the northern extent of the western gable contained a very small number of cereal grains, including one of free-threshing *Triticum aestivum* (bread type) and one of *Avena* (oat) plus single weed seeds of *Centaurea* (knapweed)

and *Anthemiscotula*. The grains may have been accidentally burnt during domestic activities associated with food preparation/cooking, possibly within the building itself, the remains subsequently being incorporated into the fill along with the other general debris in the posthole.

All of the animal bones came from the fills of two postholes of G3. Fourteen fragments were recorded, of which nine unidentified fragments were retrieved in a sieved sample. A cattle occipital condyle and a molar fragment were the only elements identified.

Eastern beamslot building: G8

This L-shaped feature extended from the northern baulk of Area 1 for *c*. 2.4m before turning to the east for 1m; it had a rounded eastern limit (Figure 3 and Figure 8: image 7). The slot was generally *c.* 0.45m wide and up to 0.2m deep, with near vertical sides and a flat base (Figure 4: sections 18 and 19). A small sub-rectangular leather fragment of uncertain date (RA1) was recovered from the fill. The piece retains no original edges, and no stitch holes, and is undiagnostic.

Other possible elements of the building comprise a curvilinear possible structural slot, with traces of two postholes. The slot was *c.* 1.2 m east of the more angular beamslot and may define a central opening and opposed wall. The southern continuation was traced for *c.* 1.5m before fading out. In section the feature was very truncated with a shallow concave profile 0.4m wide but only 0.12m deep (Figure 4: section 20). It is not clear if the contrasting forms of these two structural components define contrasting construction methods, with the more curving element being for posts in a trench, while the more angular form was associated with earth-fast timbers.

Located some 3m south of the angular beamslot of G8, was a pair of postholes (G14), which appear to continue the alignment (Figure 3 and Figure 4; section 21). Both features were oval in plan, up to 0.35m across and 0.15–0.2m deep. A single unidentified mammal bone fragment was recovered from the fill. Due to general truncation, it is not clear if they define an associated fenceline or possibly a continuation of the wall-line of the building.

Summary

The two buildings were of contrasting form comprising earth-fast posts in the west whilst beamslots were utilised in the east. They had contrasting alignments; suggesting that they were not directly associated.

3.3.4 Phase 4: Dispersed early medieval activity

This activity was identified in both areas (Figure 3 – blue features).

Pit G12

In Area 1, sub-oval pit G12 extended from the baulk. It was at least 0.7m long by 0.5m wide and 0.55m deep, with a roughly U-shaped profile (Figure 3: section 22 and Figure 8: image 8). The dark fill contained animal bone and an assemblage of small pottery sherds. Eleven animal bones were recovered, ten from a sieved sample. This produced a gnawed femur head of an immature sheep/goat; it had possibly been digested by a dog. All other fragments could not be identified to

species. The pottery included residual material, comprising a sand-tempered Saxon body sherd (A16: 2g) and 24 St Neots ware body sherds (B01, B01A: 60g) of Saxo-Norman date. Five locally manufactured early medieval body sherds (B07, C59B: 25g) also occurred; the sherds were generally abraded with a mean weight of 3g.

Sample <2> contained a very rich charred plant assemblage consisting almost entirely of cereal grains (96% of the counted remains), almost half of which, however, could not be identified. There were also a very large number of small cereal fragments (less than 2mm) that could not be quantified.

Avena (oats) was the best represented cereal, accounting for 80% of the identifiable grains, followed by much smaller amounts of *Triticum* (wheat) (17%) and *Hordeum vulgare* (barley) (3%). The oats included a single complete floret showing the presence of *Avena sativa* (common oat) while morphological characteristics and the large size (6–7mm) of most of the grains may also tentatively suggest the presence of common oats. The identifiable wheat grains were from free-threshing wheat, the very rounded squat grain shape with a flat dorsal side being more typical of hexaploid *Triticum aestivum* (bread wheat) than hexaploid *Triticum turgidum* (rivet wheat). The well-preserved barley grains included a few hulled and one twisted hulled grain indicative of six-row hulled barley. A small number of charred seeds also showed the presence of another crop, *Linum usitatissimum* (flax).

Cultivated oats, free-threshing wheat and hulled barley are all typical cereal crops in the early medieval period on the basis of archaeobotanical remains from other sites in southern Britain (Greig 1991, 321), including Bedfordshire — for example from excavations fairly close-by at Village Farm (Giorgi 2014) and Land West of Bedford (Giorgi 2011). Flax has also been recorded from medieval sites in Britain (Greig 1991, 326), including for instance, from excavations at Stotfold, Bedfordshire (Giorgi 2013).

Oats, the best represented cereal in the assemblage, was widely cultivated in the London region in the early medieval period. It was grown on the same scale and on a similar number of demesnes to the principal cereal, wheat, because of the many uses of oats (Campbell *et al* 1993, 38) not only as human food, in mixes for bread, biscuits and cakes or in pottage, but also (along with barley) as animal fodder. Wheat, on the other hand, would have probably been used exclusively for human food, being the preferred bread-making grain in the medieval period (Hammond 1995, 2). There was no evidence that any of the cereals were being used for brewing ale. Flax seeds may have been used in soups and stews and the fibres of the plant used for textiles.

The charred remains of other potential foodstuffs were represented by a few *Corylus avellana* (hazelnut) shell fragments, *Prunus spinosa* (sloe/blackthorn) fruit stones and single seeds of *Rubus fruticosus/idaeus* (blackberry/raspberry) and *Malus / Pyrus* (apple/pear), all of which (with the possible exception of apple/pear) may represent wild foods gathered from hedgerows and woodland borders close-by.

There were very few weed seeds in the sample, making up just 2% of the quantified remains, representing a small range of species including legumes (which may be from wild and/or cultivated pulses) and wild grasses (Poaceae) although only *Anthemis cotula* (stinking chamomile) was identified to species. This is a common arable weed, also present in Phases 1 and 3, often found on heavier soils, similar to the clay loams found around Houghton Conquest, which would have suited the cultivation of bread wheat and oats, both of which grow well on deep clay loams (Jones 1981, 107–8).

The dominance of grains in the sample suggests that the charred remains originate from virtually clean cereal deposits. The grains may have been accidentally burnt while being dried (possibly in an oven) before storage and/or milling, or during cooking while the few weed seeds may be from the use of crop-processing debris as fuel. The backfilled deposit incorporates artefacts, including material associated with adjacent activity.

Pitting G6

In Area 2, two pits situated to either end of a linear feature may be associated (Figure 2 – blue features). The large pit emerging from the northern baulk was at least 1.43m across and up to 0.3m deep (Figure 4: section 23 and Figure 9: image 9); whilst the southern pit was 0.76m across and up to 0.18m deep with an asymmetric concave profile. The associated fills were relatively dark, with a small quantity of animal bone and pottery being recovered. Eleven animal bone fragments were present; identified elements consisted of a small fragment of cattle horn core, two molars of adult sheep/goat, a sheep/goat tibia fragment, a mandible fragment of a juvenile pig and a premolar of an older, but still immature, pig. The pottery comprised two residual Saxo-Norman sherds (B01, B01C: 8g), including a jar rim fragment; and six early medieval body sherds (B07, C01, C03, C59B: 29g). Three sand-tempered fired clay fragments (43g) were also collected.

The two pits were linked by a roughly linear feature some 2.3m long and up to 0.52m wide, with concave sides and a flat base. It is not clear if this was a gully or possibly the truncated base of a beamslot.

3.3.5 Phase 5: late medieval / early post-medieval boundary

Phase 5 evidence was confined to Area 1. It comprised a short length of ditch and two adjacent postholes (Figure 3 – brown features). Aligned NNW-SSE, ditch G9 extended 2.5m from the northern baulk, with a well-defined rounded terminal in the south. The ditch was 0.87m wide but only 0.28m deep, with a concave profile (Figure 4: section 24 and Figure 9: image 10). The two symmetrical fills were relatively dark, suggesting material derived from an unstable soil profile, which accumulated in dry conditions. Two fragments of late medieval / early post-medieval ceramic roof tile (78g), and an abraded sand-tempered sherd of residual 12th–13th-century pottery (C59B: 8g) were recovered from the upper fill. The fills contrast with those of Phase 1 ditch G1, suggesting that the features were not associated.

Approximately 2m to the south of the ditch were a pair of conjoined postholes of similar size and form, 0.37m across and 0.17m deep, with steep sides and flat

bases (Figure 4: section 25). These may have defined a gate associated with the ditch.

This boundary is very close to both the moat and ditch G1.

3.4 Summary

The investigations revealed evidence for a variety of activities, which developed over time — initially enclosures and then elements of domestic settlement. The initial evidence comprised partition of the land, possibly in the late Saxon period. From the Saxo-Norman period a focus of settlement activity was identified, initially in the form of pit-digging and then by buildings in the early medieval period. The area subsequently reverted to enclosures in the later medieval period.

Given the relatively small area of investigation, it is hard to determine the impact of the moat on the utilisation of the site. The form and alignment of the features on the site do not appear to relate to the moat. However, it is not clear if any of the early medieval activity is associated with the moat.

The finds assemblages provide a limited indication of the nature of the activity on the site. The faunal assemblage included evidence for cattle, sheep/goat, pig and dog — all species commonly found on Saxon and medieval sites in Britain. There was no evidence for horse or any wild species. Despite sieving, no fish or bird bones were recovered. A striking find was the partial skeleton of a young puppy in Phase 2. The presence of this young animal along with the evidence for the digested sheep/goat femur in Phase 4 indicates that dogs were being kept within the settlement. Charred cereal remains have also provided an indication of the types of crops being grown and processed by the inhabitants of the settlement.

The evidence from this investigation, when taken in combination with previous work in the immediate vicinity adds to the growing understanding of the development of this part of the Houghton Conquest, in particular the apparently extensive nature of the late Saxon enclosure system. However, little further light has been shed on the function and dating of the moat.

The data recovered from the investigations has no further analytical potential. The project archive will be deposited with Bedford Museum (accession number BEDFM 2014.14). This report will be uploaded to the OASIS website (reference no. albionar1-172101).

4. BIBLIOGRAPHY

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5. APPENDIX 1: POTTERY

Pottery fabrics are listed below (Table 1) in chronological order, using ware codes and common names in accordance with the Bedfordshire Ceramic Type Series.

Ware Code	Common name	No. Sherds	Wt (g)
Saxon (c. 400–850)			
A16	Coarse quartz	1	2
Late Saxon (c. 850–1150)			
B01	St Neots-type ware	22	70
B01A	St Neots-type ware (orange)	9	17
B01C	St Neots-type ware (mixed inclusions)	1	4
Early medieval (c. 1150–1250)			
B07	Shell	6	26
C01	Sand	2	12
C03	Fine sand	1	1
C04	Coarse sand	1	6
C59B	Harsh sand	6	44

Table 1: Pottery Type Series

6. APPENDIX 2: ANIMAL BONE METHODOLOGY

Mark Maltby: Faculty of Science and Technology, Bournemouth University

All the animal bones recovered from the excavation from both hand-collected and sieved samples were recorded individually onto a relational database (Microsoft Access), which forms part of the site archive. In the main database table the following information was recorded where appropriate for each specimen: context; species; anatomical element; zones of element present; approximate percentage of element present; gnawing damage; erosion; weathering; burning; fusion data; associated bone group number; sieved sample number; other comments. Separate tables linked to the main table were created for the tooth ageing data.

Animal bones were recovered from 14 contexts. The assemblages from most contexts were quite well preserved with good surface preservation. However, most specimens were fragmentary and had occasionally been damaged by animal gnawing, or burning. No butchery marks were observed and none of the bones were measurable.

A total of 86 animal bone fragments were recorded. Sieved samples produced 49 of these fragments, but only one of these was identified because of their highly fragmented nature. Altogether, only 17 fragments were identified. These are described above in the relevant section of the results.

7. APPENDIX 3: CHARRED PLANT REMAINS METHODOLOGY

John A Giorgi

Three environmental bulk soil samples were collected for the potential recovery of charred plant remains and information on the agrarian economy and human activities at the site.

The samples were 30*l* in size, 10*l* of samples 1 and 3 and all the soil from sample 2 being processed using a Siraf-style type flotation tank and meshes of 0.3mm and 1mm for the recovery of the flot and residue respectively. Once dried, the charred botanical remains were sorted from the flots 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 charred plant remains were quantified except for un-sorted indeterminate cereal grain fragments (smaller than 2mm), indeterminate items and charcoal, estimated frequencies of which were made on the basis of the following rating system: + =<5; ++ = 5-25; +++ = 26-100; ++++ = 101-300; +++++ = >300 items.

The results are shown in Table 2 with nomenclature and taxonomic order for the wild plants following Stace (2005) also used for ecological data together with Brenchley (1911, 1913), Hanf (1983) and Wilson *et al* (2003) with soil information from King (1969). Virtually all the charred plant remains (mainly cereal grains) were recovered from the fill early medieval pit G12, with only traces of botanical material in the other two samples. These are described above in the relevant section of the results.

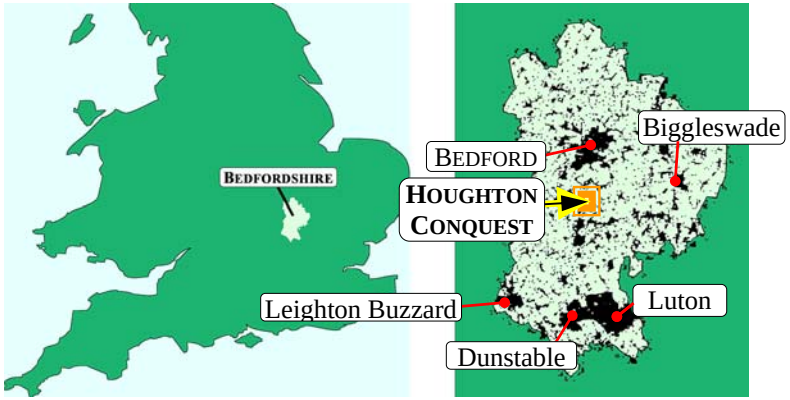
	Phase	**1**	**3**	**4**
	Group	**1**	**3**	**12**
	Feature	**DITCH**	**PH**	**PIT**
	cut number	506	644	521
	context number	507	645	522
	sample number	1	3	2
	vol sample (l)	10	10	30
	vol flot (ml)	<1	<1	85
LATIN_NAME	ENGLISH NAME			
Cereal grains				
Triticum aestivum type	free-threshing wheat		1	13
T. cf. *aestivum* type	?free-threshing wheat			39
Triticum spp.	wheat			34
cf. *Triticum* spp.	?wheat			38
Hordeum vulgare L.	barley, hulled twisted			1
H. vulgare L.	barley, hulled straight			1
H. vulgare L.	barley, hulled			3
H. vulgare L.	barley, indet			7
cf. *H. vulgare*	?barley			11

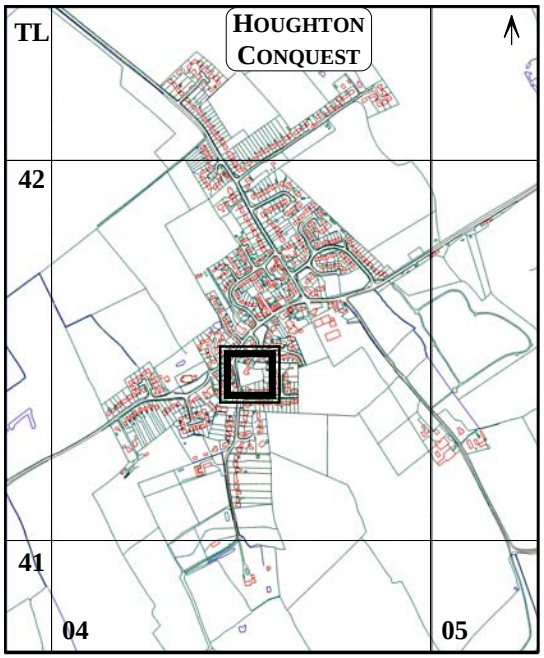
	Phase	**1**	**3**	**4**
	Group	**1**	**3**	**12**
	Feature	**DITCH**	**PH**	**PIT**
	cut number	506	644	521
	context number	507	645	522
	sample number	1	3	2
	vol sample (l)	10	10	30
	vol flot (ml)	<1	<1	85
LATIN_NAME	ENGLISH NAME			
Avena sativa L.	common oat floret			1
Avena sp(p).	oat		1	306
cf. *Avena* spp.	?oat			291
Cerealia	indet. cereal		5	592
Cerealia	indet cereal fragments <2mm			++++
Cereal chaff				
Triticum spelta L.	spelt wheat glume base	1		
Avena spp.	oat floret fragments			2
Other plant/weed seeds				
Corylus avellana L.	hazel nut shell fragments			3
Rumex spp.	dock			3
Rubus fruticosus/idaeus	blackberry/raspberry			1
Prunus spinosa L.	sloe/blackthorn			4
Pyrus/Malus spp.	pear/apple			1
Vicia/Lathyrus spp.	vetch/tare/vetchling			3
Vicia/Lathyrus/Pisum spp.	vetch/tare/vetchling/pea			2
Fabaceae indet	small rounded legumes			3
Linum usitatissimum L.	flax			4
L. cf *usitatissimum*	?flax			8
Galium sp.	bedstraw			1
Centaurea sp.	knapweeds		1	
Anthemis cotula L.	stinking chamomile	1	1	11
Lolium/Festuca sp.	rye-grass/fescue			1
Poa spp.	meadow-grasses			3
Bromus spp.	brome			2
Poaceae indet.	grasses (small seeds)			1
indeterminate	wood charcoal	++	+++	+++++
indeterminate				+
	TOTAL	**2**	**9**	**1390**
	item density (per litre of processed soil)	***0.2***	***0.9***	***46.3***

Item frequency: + =<5; ++ = 5-25; +++ = 26-100; ++++=101-300; +++++ = >300 items

PH = post-hole

Table 2: The Charred Plant Remains





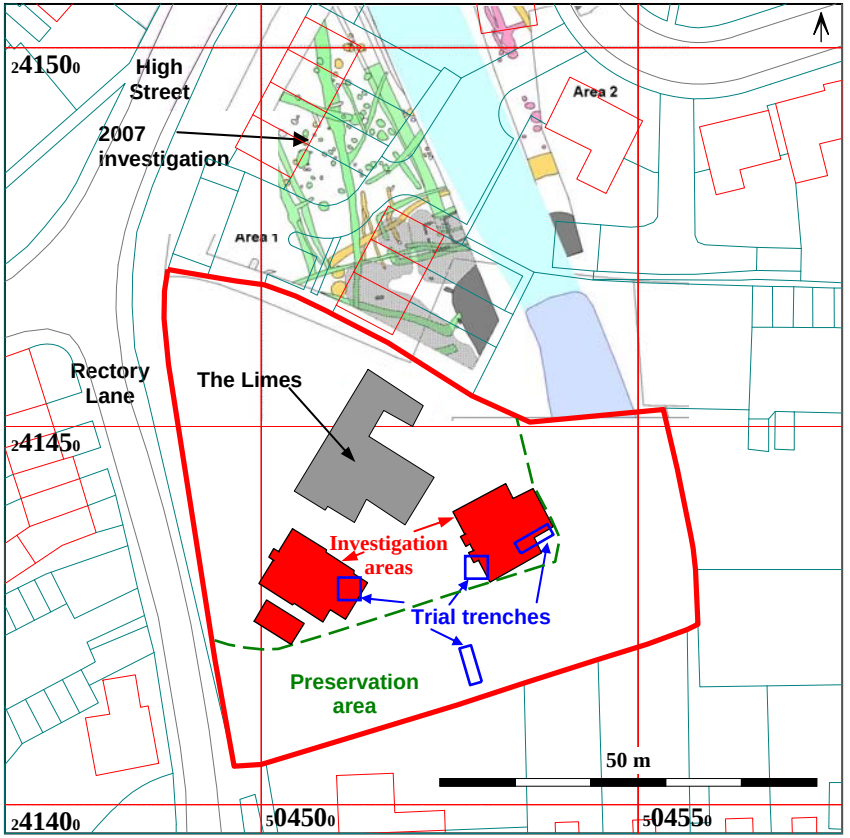


Figure 1: Site location and investigation areas (2007 investigation after Walker (2011))

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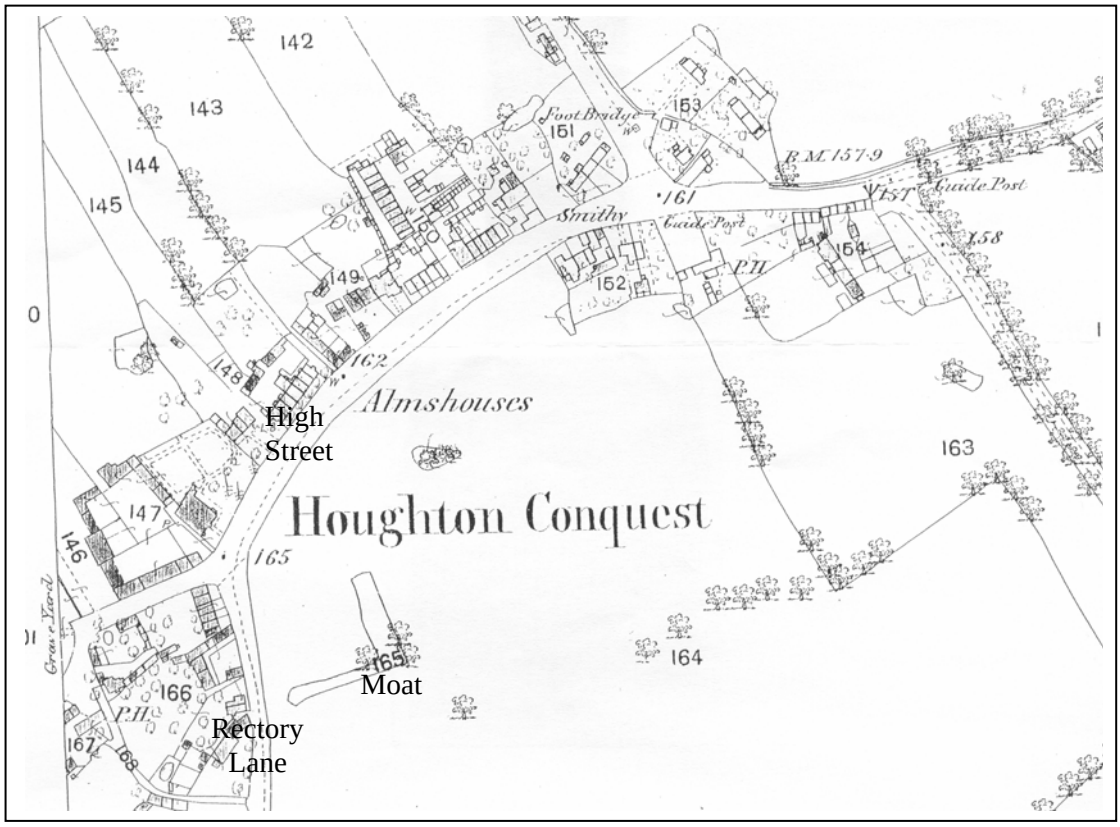

Figure 2: 1883 First edition Ordnance Survey map

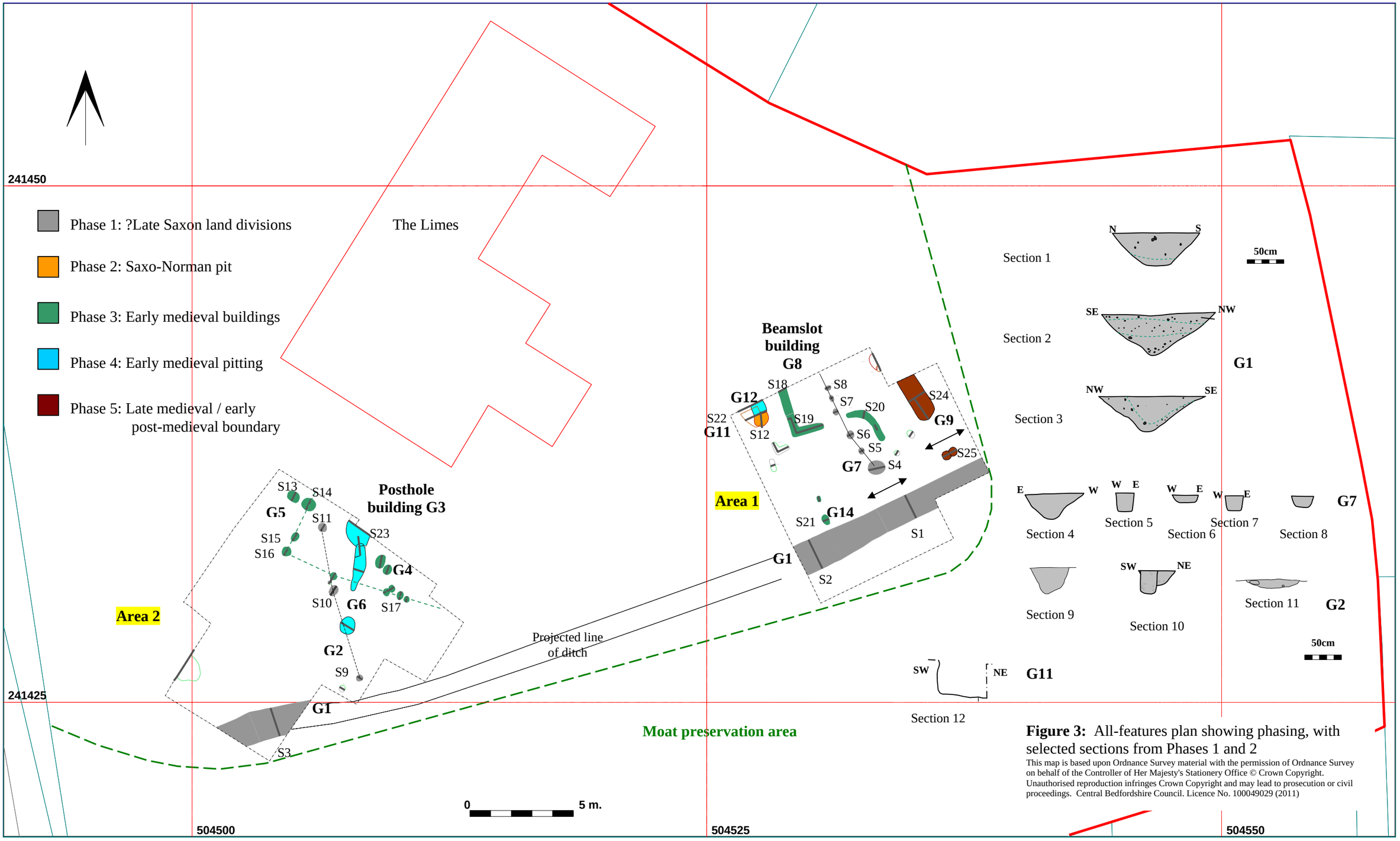

Figure 3: All-features plan showing phasing, with selected sections from Phases 1 and 2

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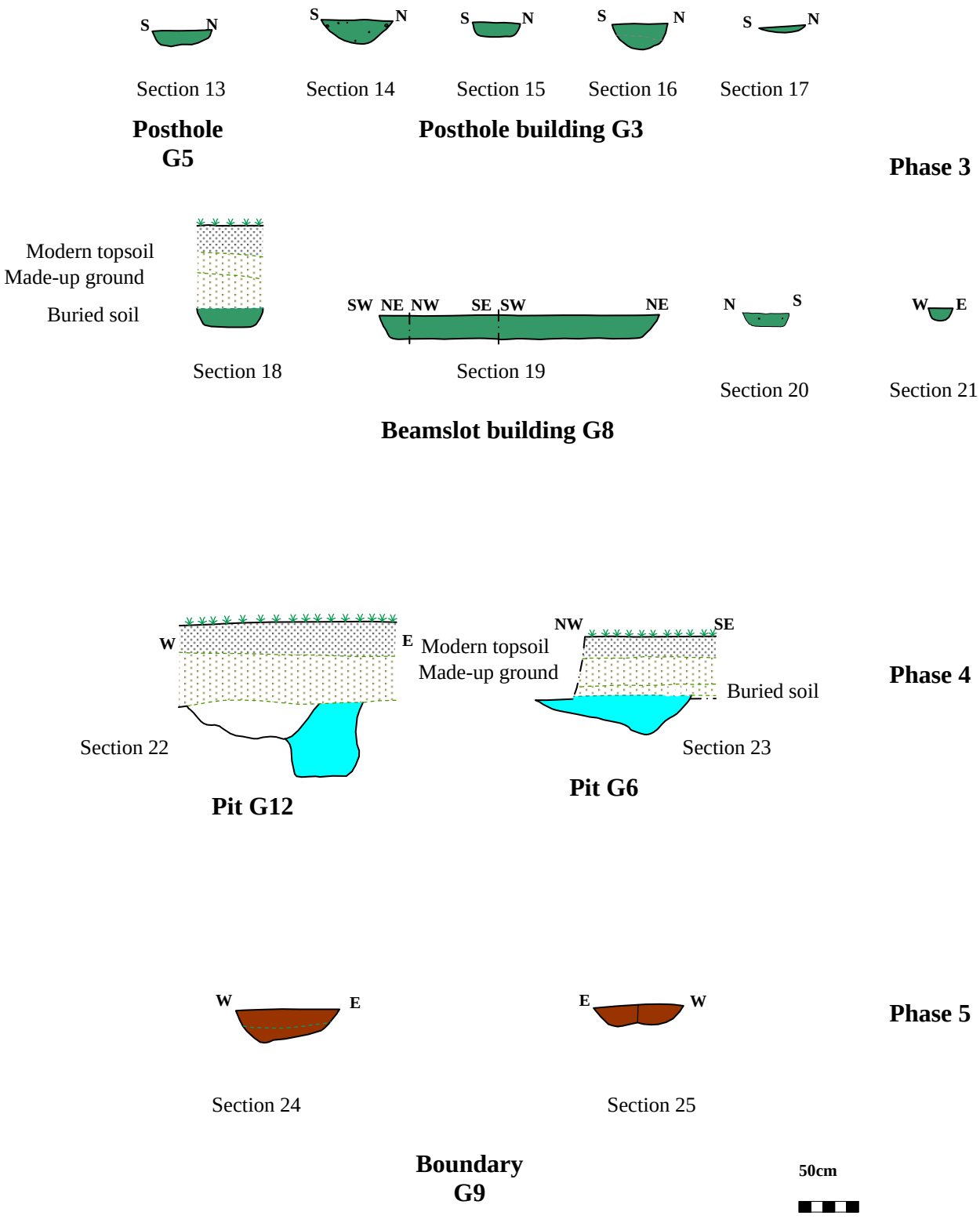

Figure 4: Selected sections from Phases 3–5

Image 1: General view of Area 1 looking east, showing ditch G1. Scale 1m in 50cm divisions.

Image 2: Excavated section through ditch G1. Scale 1m in 50cm divisions.

Figure 5: Selected Images 1 and 2

Image 3: General view of northern part of eastern fenceline G7, looking towards the NE corner. Scale 1m in 50cm divisions.

Image 4: Half-section of postholes forming part of western fenceline G2. Scale 30cm in 10cm divisions.

Figure 6: Selected Images 3 and 4

Image 5: General view of posthole building G3, looking towards the SW corner. The location of the building is shown by the yellow line.

Image 6: General view of half-sectioned postholes forming the south-western side of posthole building G3, with off-set posthole G5 to top right of image. Scale 1m in 50cm divisions.

Figure 7: Selected Images 5 and 6

Image 7: Western angular beamslot of building G8. Scale 1m in 50cm divisions.

Image 8: Intercutting features near north-west corner of Area 1, with the dark fill of pit G12 visible in the deeper part of the section. Scale 1m in 50cm divisions.

Figure 8: Selected Images 7 and 8

Image 9: Early medieval gully of G6 within Area 2. Scale 0.3m in 10cm divisions.

Image 10: Terminal of later medieval / post-medieval boundary ditch G9 within Area 1. Scale 1m in 50cm divisions.

Figure 9: Selected Images 9 and 10

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