

Archaeological excavation of land at Harley Way Benefield, Northamptonshire September – November 2012

Report No. 16/154

Text: Claire Finn

Illustrations: Claire Finn, James Ladocha and Izabela Jurkiewicz





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Project Managers: Steve Parry and Anthony Maull

Site Code: BHW12 NGR: TL 00608 87903 MOLA Bolton House Wootton Hall Park Northampton NN4 8BN 01604 809800 www.mola.org.uk sparry@mola.org.uk

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MOLA Bolton House Wootton Hall Park Northampton NN4 8BN 01604 809800 www.mola.org.uk sparry@mola.org.uk

STAFF

Project Managers: Steve Parry BA MA MCIfA FSA

Anthony Maull Cert Arch

Text and Illustrations Claire Finn BA MA PhD
Artefact illustrations James Ladocha BA

Izabela Jurkiewicz BA MA

Fieldwork Directors: Anthony Maull

Edmund Taylor BSc

Fieldwork: Paul Clements BA

Graham Dixon
Oliver Dindol BSc
Peter Haynes
Amy Sinclair
Ian Fisher BSc
Garreth Davey BA

Geology: Steve Critchley BSc, MSc

Worked flint: Yvonne Wolframm-Murray BSc PhD
The Roman pottery: Rob Perrin BA, MLitt, PGCE, MCIfA, FSA

The medieval pottery Paul Blinkhorn BTech

Small finds: Tora Hylton

Roman coin: Paul Clements BA

Ceramic building materials: Pat Chapman BA ACIfA

Querns and metalworking debris: Andy Chapman BSc MClfA FSA

The animal bone: Stephanie Vann PhD Plant macrofossils: Val Fryer BA MCIfA

Charcoal: Imogen van Bergen Poole BSc PhD

OASIS REPORT FORM

PROJECT DETAILS	OASIS No: molanort1-242170
Project title	Archaeological excavation of land at Harley Way, Benefield, Northamptonshire September – November 2012

Summary: In 2012 Northamptonshire Archaeology, now MOLA (Museum of London Archaeology), was commissioned by CgMs Consulting to undertake a programme of archaeological excavation of land at Harley Road, Benefield, Northamptonshire.

An area of late Iron Age and Roman settlement, dated to the 1st-2nd century AD, comprised three large ditched enclosures constructed in two phases, as well as numerous quarry pits, other pits, postholes, a trackway and a limestone surface. At least one T-shaped corn-drying oven was located within an enclosure, and there was evidence for secondary iron smelting and other industrial activity. There was also some later activity in the 4th century AD.

A second area comprised parts of four plots that would have lain at the eastern end of the deserted medieval hamlet of Churchfield. Initial boundary ditches were constructed in the later 12th century. Two plots contained partially surviving building ranges in limestone dated to the 13th to mid-14th centuries. A further plot was inserted between the other two in the second half of the 14th century, and this contained a single building. The site was abandoned by the end of the 14th century. The pottery assemblage is dominated by local Lyveden/Stanion wares.

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2011),	Geophysical survey (Butler and Walford 2011), Trial Trench Evaluation (Walker 2011), Heritage Desk-Based Assessment (Dawson 2011)		
Future work Unkno	Unknown		
Land use Forme	rly pasture		
Monument type Romai	n field enclosures and	corn dryer; medieval settlement	
and period	I and the state of the same same same same same same same sam		
	n and medieval potter	y, Roman querns, worked flint, metal-working debris	
PROJECT LOCATION			
	amptonshire		
Site address Land a	t Harley Way, Benefic	eld	
OS co-ordinates TL 006	608 87903		
Area hectares 6.4ha			
Height OD 46m -	54m		
PROJECT CREATORS			
Organisation Northa	mptonshire Archaeol	ogy (now MOLA)	
	Consulting		
originator			
	Northamptonshire Archaeology (now MOLA)		
originator			
	Anthony Maull, Edmund Taylor		
	Anthony Maull		
Sponsor or funding CgMs	CgMs Consulting		
body			
PROJECT DATE			
	03/09/2012		
	30/11/2012		
	ation	Content (eg pottery, animal bone etc)	
Physical		Pottery, animal bone, slag, flints, querns, CBM,	
	MOLA	charred plant macrofossils, charcoal,FE nails	
Paper	BHW12	Plans and sections on permatrace, client report	
Digital		Mapinfo Plans, client report	
	Journal/monograph, published or forthcoming, or unpublished client report (NA report)		
Septer	Archaeological excavation of land at Harley Way, Benefield, Northamptonshire, September – November 2012		
Serial title & volume 16/154			
Author(s) Claire	1 11111		
. ,		tables and illustrations	

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ABSTRACT

In 2012 Northamptonshire Archaeology, now MOLA (Museum of London Archaeology), was commissioned by CgMs Consulting to undertake a programme of archaeological excavation of land at Harley Road, Benefield, Northamptonshire.

An area of late Iron Age and Roman settlement, dated to the 1st-2nd century AD, comprised three large ditched enclosures constructed in two phases, as well as numerous quarry pits, other pits, postholes, a trackway and a limestone surface. At least one T-shaped corn-drying oven was located within an enclosure, and there was evidence for secondary iron smelting and other industrial activity. There was also some later activity in the 4th century AD.

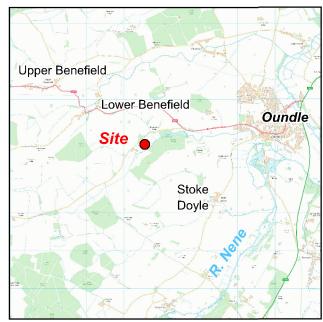
A second area comprised parts of four plots that would have lain at the eastern end of the deserted medieval hamlet of Churchfield. Initial boundary ditches were constructed in the later 12th century. Two plots contained partially surviving building ranges in limestone dated to the 13th to mid-14th centuries. A further plot was inserted between the other two in the second half of the 14th century, and this contained a single building. The site was abandoned by the end of the 14th century. The pottery assemblage is dominated by local Lyveden/Stanion wares.

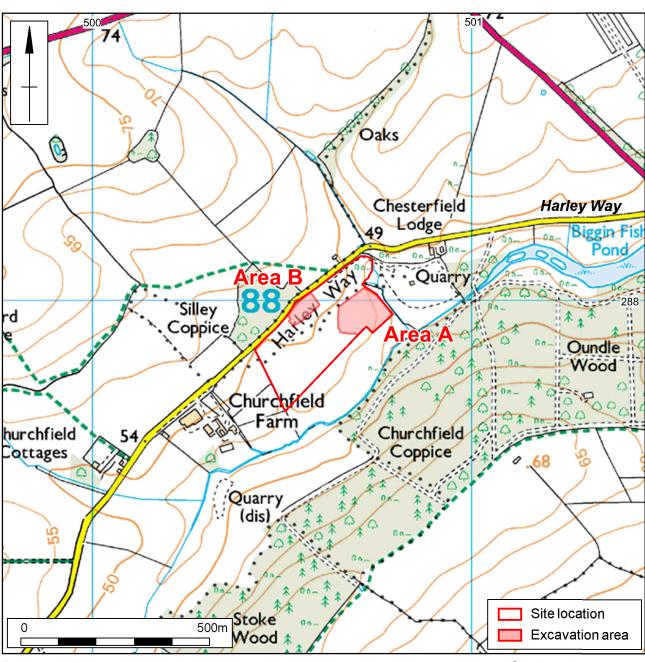
1 INTRODUCTION

Northamptonshire Archaeology, now MOLA (Museum of London Archaeology) was commissioned by CgMs Consulting, on behalf of their clients PGR Construction, to undertake a programme of archaeological excavation on land off Harley Road, Benefield, Northamptonshire (TL 00608 87903; Fig 1). The works were undertaken in advance of the proposed extension of Churchfield Quarry to the north of the site (Planning Application: NCC-12/00001/MIN, ENC-EN/12/00135/NCC). The archaeological excavation was undertaken to comply with paragraph 141 of the National Planning Policy Framework (DCLG 2012).

This report follows several previous phases of work on the site including geophysical survey (Butler and Walford 2011), desk-based assessment (Dawson 2011), and trial trench evaluation (Walker 2011), as well as a programme of research excavation undertaken between 1960 and 1964 around 330m to the south-west of the current works. The current mitigation works were undertaken in accordance with a brief prepared by Northamptonshire County Council (Mather 2012), and with a Written Scheme of Investigation produced by Northamptonshire Archaeology (NA 2012) which was approved prior to the commencement of fieldwork. The work mitigated the construction impacts on the archaeological resource within the approved scheme of works. All archaeological works were undertaken in accordance with the Institute for Archaeologists' *Standard and Guidance for Archaeological Excavation* (IfA 2008; now the Chartered Institute for Archaeologists, CIfA 2014b) and the English Heritage procedural document *Management of Research Projects in the Historic Environment* (EH 2006; now Historic England, HE 2015).







Scale 1:10,000 Site location Fig 1

2 BACKGROUND

2.1 Location, geology and topography

The site of the proposed quarry expansion was a 6.4ha area contained within a single arable field in the Lyveden valley in Northamptonshire. The northern boundary is formed by Harley Way, the eastern boundary by the existing quarry, the southern boundary by Churchfield Coppice and the western boundary by Churchfield Farm.

Topographically, the study area is situated on the north side of the Lyveden valley, with the topography sloping sharply down towards the River Nene, from approximately 54m aOD in the north-west, to *c*46m on the south-east of the site. The unusual nature of settlement patterns in the Lyveden valley are considered to be rare within the county, due to semi-dispersed settlements and "fragmented township, manorial and parochial structure" (RFT 2016).

The underlying geology of the area is divided across the site, comprising Blisworth Oolitic limestone formation to the east, and Blisworth Clay formation to the west, overlain by superficial deposits of clay. Further discussion of the geology is made below. The soil type on the site is mapped as Moreton association, well-drained calcareous clayey and fine loamy soils over limestone. More detailed geological discussion is given in each site section.

2.2 Historical and archaeological background

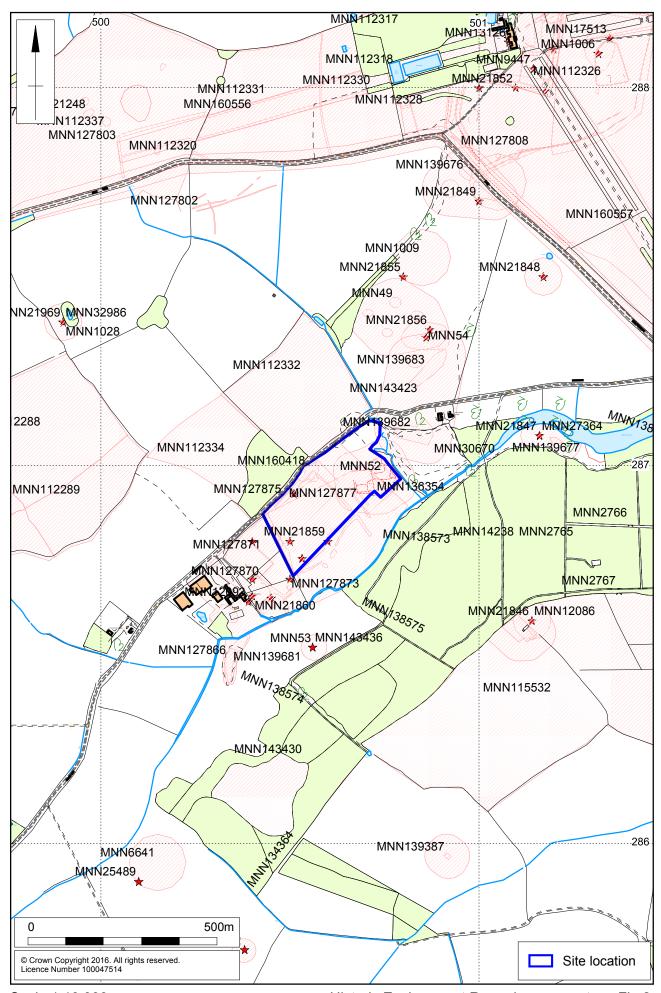
The outline development area has been examined by Heritage Assessment (Dawson 2011) which collated Historic Environment Record (HER) data and cartographic sources. The development area has also been subject to a geophysical survey (Butler and Walford 2011) and archaeological trial trench evaluation (Walker 2011). The following archaeological background is taken from these sources, and selected sites are displayed in Fig 2.

Palaeolithic, Mesolithic, Neolithic and Bronze Age

Prehistoric activity in the Lyveden Valley before the Iron Age is all but unknown, with the exception of a site of Neolithic activity recorded around 600m north-east of the study area (HER9424).

Iron Age and Roman

There are numerous records of Iron Age and Roman remains in the vicinity as well as within the development area. The geophysical survey supported the idea of settlement within the south-eastern part of the site, although without excavation it was difficult to apportion a date. South of the site is a putative Iron Age settlement and there are a number of Roman sites recorded to the south (HER9434) and north (HER2400, 2392, 2486). Situated c500m to the north of Harley Way are cropmarks of an indistinct rectangular enclosure containing two small square enclosures, and flanked by a ditched trackway. The date of this feature is unknown (RCHME 1975). Situated 1.75km to the south-east, a proposed Roman settlement or possible villa site had been identified from aerial photographs showing a group of conjoined rectangular enclosures, arranged in a line. Pottery of the 3rd and 4th centuries AD and a scatter of large stones have been found (RCHME 1975). A site of possible Roman occupation, identified by Roman pottery and a ditch along with some Iron Age finds, were found around 2km to the south of the site. Close to this latter site were also observed cropmarks of a large sub-rectangular subdivided enclosure covering about 12ha (RCHME 1975). A site of Roman ironworkings is recorded to the east within Oundle Wood (HER2391). Further afield, another probable villa site is known from around 2.5km south-east at Stoke Doyle (RCHME 1975).



The Historic Environment Record (HER) site records a possible Romano-British farmstead (HER 9433) within the proposed development area to the east on the basis of a number of finds that have been retrieved in the past. The nature of the artefacts may suggest that the underlying ironstone was being quarried and processed in the vicinity.

Saxon

A possible late Saxon settlement is recorded to the north-east of the site (HER2401). Although it has been suggested that the valley reverted entirely to forest between 4th-8th centuries (Bryant and Steane 1969), a small number of late Saxon settlements are recorded within the valley which did not develop into medieval settlements, including Hardwick in Biggin (RFT 2016). The possible Saxon origins for a settlement at Churchfield have been debated, and the possible presence of a Saxon chuch on the site has been hypothesised from etymological evidence (Murray and Clegg 1961), dated c.964, namely ciric — church and feld — field, recorded in the Cartularium saxonium (Birch 1885). The Oundle Charter indicates that the Lyveden valley above Churchfield was still under woodland in the mid 10th century (Foard, Hall and Partida 2009).

Medieval Churchfield and the Lyveden valley

Part of the deserted medieval village of Churchfield is located within the development area. Much of the village, apart from a small area of extant earthworks near the farm to the west and beyond the development area, has been damaged by ploughing. Excavations of the earthworks took place in the 1960s, identifying a number of significant stone structures, as well as finds of 12th-century and 13th-14th-century pottery, a 12th-century window head, and evidence for ironworking (Bryant and Steane 1969; 1971; and Steane and Bryant 1975). The current site of excavation, which lies to the north-east of the established location of Churchfield hamlet is overlain by a scatter of limestone and pottery dating from the 12th to the early 13th centuries, primarily local Lyveden ware (see Fig 3).

The village was first mentioned in the AD 963 Oundle Charter. Half of the Churchfield manor was taken into the forest soon after 1066 (Foard 1991), and a chapel was in existence at least by 1189 when it formed the subject of a grant to the Abbey of Peterborough (Gover, Mawer and Stenton 1975). The etymological evidence for Churchfield is given above. Harley Way was recorded in 1223 as *Hareleia* or *Harleymere* in 1337. The origins of the name probably derive from *har* and *leah* for 'boundary wood', indicating that the road lay along the boundary between Bridgestock parish and Rockingham Forest. The *mere* element may refer to a nearby pond (Gover, Mawer and Stenton 1975). Silley Coppice, which stands just to the north of the excavation area, appears in its earliest recording in 1570 as *Sallowe Coppice* (ibid).

The Lyveden valley is known to be the only area within Rockingham Forest which developed an extensive dispersed settlement pattern during this period, comprising an unusually high concentration of isolated farms and hamlets that is a pattern more typical elsewhere (Foard 2001). In general, Saxon and medieval woodland occupied extensive areas of boulder clay, while medieval villages and open fields were concentrated on permeable or mixed geologies. In Northamptonshire, and particularly the Rockingham Forest area, this meant that woodland, settlement and open-field areas were in close proximity, with the open-field arable land lying along the mixed geology of the Nene valley. Tributary valleys, such as the Lyveden valley which lay within the woodland zone, were occupied by lesser 'felds', which typically each contained one or occasionally paired hamlets across a stream (*ibid*). Benefield and Churchfield are both examples of medieval settlements associated with 'felds' from the late Saxon period, along with other probable single farms in the valley. Benefield grew

into a substantial settlement by the 14th century due to clearance area of medieval forest allowing for expansion, while at Churchfield there was little woodland which could be cleared for arable purposes, and the settlement therefore remained a small hamlet (*ibid*).

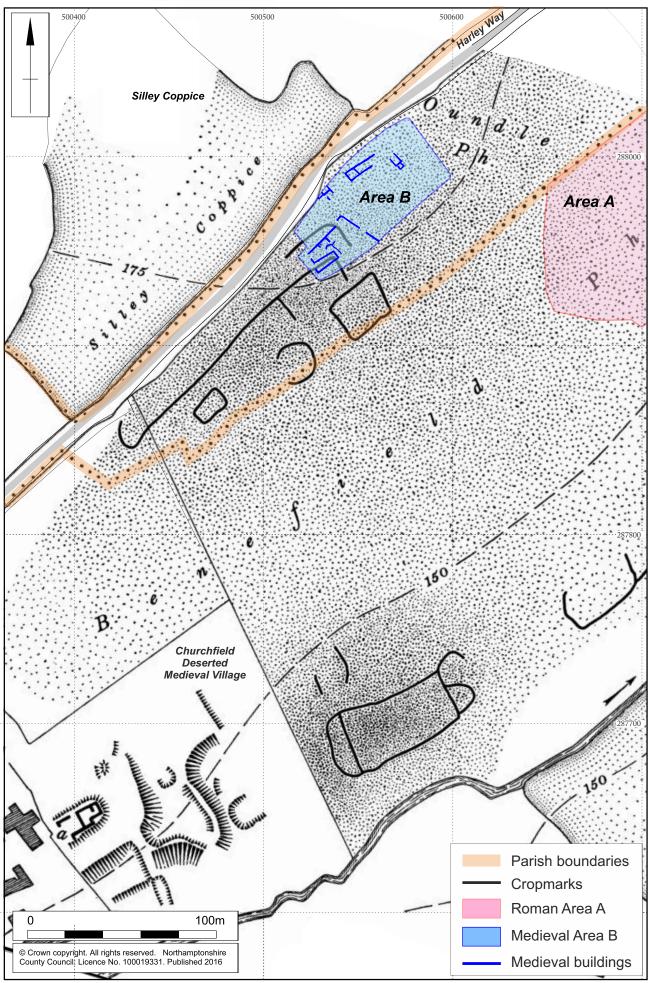
Throughout the medieval period, industrial production including ironworking, charcoal production and pottery, grew within the forest. This led to the expansion of some villages and hamlets, like Stanion and Potters Lyveden, and in the Lyveden valley this may also have led to the establishment of new permanent settlements. Additionally, the dispersed settlement pattern may be related to the high degree of fragmentation in medieval manorial structure in the valley. At least seven separate small manors had holdings in Churchfield and Lyveden (*ibid*).

Churchfield is recorded as being held by the Angevin family in the 12th century, from whom it passed to Hugh de Gorham in 1289 (Brown and Taylor 1975). In the 13th-century, part of the hamlet was contained within the Oundle township. The Churchfield fee included tenants of Oundle, although fees in Stoke Dole also included Churchfield holdings. The medieval occupation remains are recorded as straddling the Oundle township boundary, the larger portion to the south being a separate township with its own separate, self-contained field system (Fig 3; Brown and Taylor 1975; Foard 1991 fig 2). In 1301, nine taxpayers were listed under Churchfield (RCHME 1975), and both Oundle and Biggin manors had tenants in Churchfield at this time (Foard 1991). The Churchfield lands were sold to Robert Wyvill, bishop of Sailsbury in 1332 (Brown and Taylor 1975). Account rolls of 1372-3 for Biggin include 11 cottages in Churchfield, two of which were vacant (Foard, Hall and Partida 2009). Tenants at Churchfield were last mentioned in a roll of 1403, and the lands were under sheep-pasture in the 1540s, indicating the date of abandonment fell somewhere during the 15th century (Brown and Taylor 1975).

The later history of Churchfield is linked to Lyveden to the west, which itself has a confusing history. Lyveden is not a parish, but is shared between the parishes of Aldwincle, Benefield, Pilton and possibly Brigstock (as well as Oundle if Churchfield belongs to it). Documents point to a number of settlements with the name Lyveden and there are several deserted settlement sites to the west of Churchfield that may have been one of the Lyvedens, as well as a large number of more minor settlements. The main settlements are located on the sides of the Lyveden Brook, similar to Churchfield.

Other medieval and post-medieval activity

Within the wider landscape, two Scheduled Monuments of medieval date are worthy of note. Situated around 1.9km to the north-west of the site is Benefield Castle (Historic England List UID 1015535), comprising the earthworks, moat and buried remains of a medieval ringwork castle believed to have been constructed in the mid-12th century, and falling in disuse by 1315. There are now no architectural features surviving above ground. The castle is thought to have originated as a defended manor which was later superseded in the 14th century by a manor house adjacent to the site to the north-east. Around 1.7km to the south-west of the site lies a small moated site (HE List UID 1010662) and fishponds associated with Lyveden Manor and the Deserted Medieval Village of Upper Lyveden which lies to the south-west. The moat island is about 25m square, bounded by a flat-bottomed ditch up to 2m deep. The moat is historically documented as being a prestigious residence associated with the medieval village to the west. Finds in the vicinity have included remains of a medieval tile kiln with large quantities of floor and ridge tile wasters, and medieval pottery including St Neots ware.



Scale 1: 2000 Mitigation areas in relation to the Churchfield DMV earthworks (adapted from RCHME 1975)

Fig 3

Around 700m to the south-east the site of a medieval moat was recorded in the 19th century. It is now in poor condition, and only partially surviving (Allison, Beresford and Hurst 1966, 37). Approximately 1.5km to the south is another probable medieval moated site; this is unlisted. Finds of Roman pottery may indicate a possible Roman settlement at the same location (RCHME 1975, 91). The RCHME also records another deserted medieval village around 2km to the south of the site, at Bearshanks Wood. At least ten distinct areas of limestone rubble, perhaps former house sites, have been recorded, along with burnt stone and medieval pottery. It is considered to perhaps the location one of the Lyvedens. Around 1.2km to the north-west of the site is another site area of proposed medieval settlement, identified by finds of medieval pottery including St Neots and Lyveden wares, and two iron arrowheads (RCHME 1975).

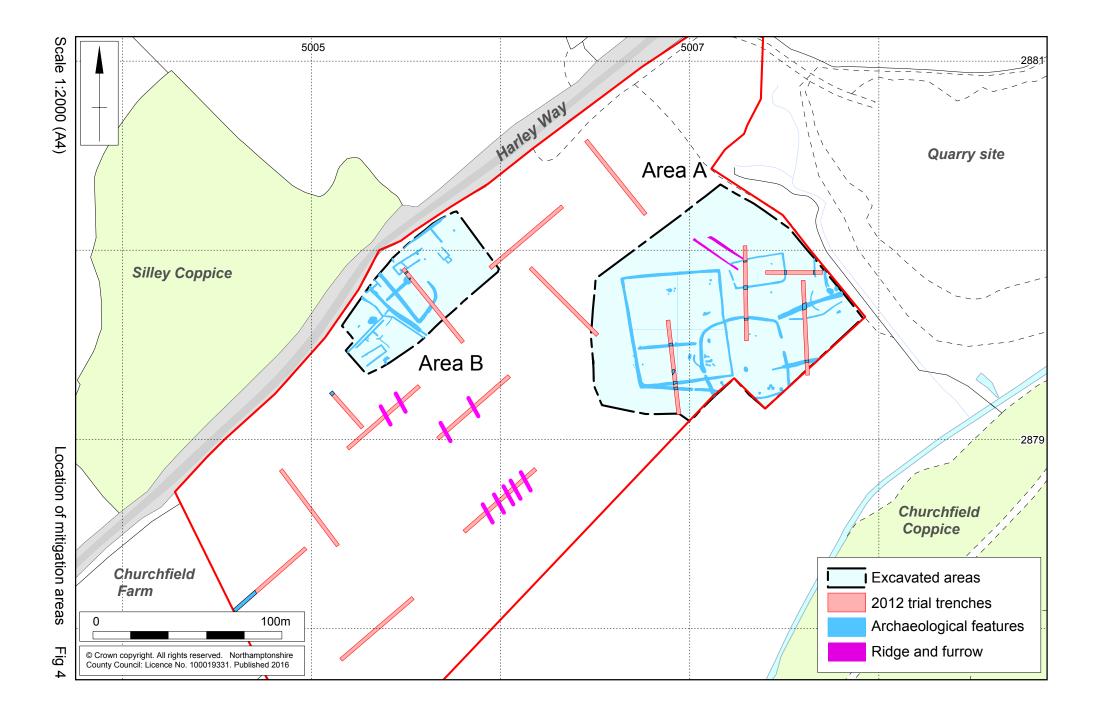
Villages in the Rockingham Forest area of Northampton suffered major depopulation in the 14th century due to famine and plague (Foard, Hall and Partida 2009). A small number of hamlets and settlements were entirely abandoned, and many showed major shrinkage. The Lyveden valley underwent significant desertion at this time, with settlements of Potters Lyvden, Upper Lyvden, Churchfield and other farms being abandoned (*ibid*). Only two sites in the valley have produced 15th-century pottery suggesting occupation into the later period. These include a small moated site cut by the Tudor earthworks of Lyveden New Bield, and a small site across the valley, which produced at least one kiln producing late-medieval floor and roof tiles (Steane and Bryant 1975).

The Holt family held the land at Churchfield until 1420 when it was acquired by the Tresham family (Brown and Taylor 1975). By 1540, the land was under pasture, ,and at this time Thomas Tresham was given a licence to impark 120 acres of wood, 250 acres of pasture and 50 acres of meadow into Lyveden Park (Steane and Bryant 1975). Churchfield's lands were already enclosed by 1565 when the Oundle field book refers to Churchfield Closes (Hall 1995).By 1674 only a single house was listed under the Hearth Tax Returns for the village at Churchfield (Dawson 2011). In the present day, this single farmhouse is still extant.

Previous archaeological work

The geophysical survey and subsequent trial trench evaluation identified a number of Roman ditches, a possible trackway and a single pit dating to the 1st to early 2nd centuries AD (Fig 4 and 6) (Butler and Walford 2011; Walker 2011). The skeletal remains of a human infant were found at the top of the pit. The general paucity of artefacts and complete absence of fine pottery indicated that it was probably a low status rural farmstead. The trenching confirmed that the Roman settlement is confined to an area of just over 1ha within the eastern part of the site.

In the northern part of the field, where aerial photography identified rectilinear soil marks probably relating to the remains of Churchfield deserted medieval village, the remains of a medieval stone building were found. Pottery associated with the building dated to the 13th century. A further spread of material in another trench suggested that further building remains survived on the northern boundaries of the site; to the south evidence of remnant furrows indicated that much of the site was part of the open field system. Large pits at the west indicated quarrying had also taken place during the medieval period. Although the extent of the remains of the medieval settlement were not precisely defined, it is considered likely that they were concentrated close to the northern boundary of the site.



3 OBJECTIVES AND METHODOLOGY

3.1 Objectives and research frameworks

The primary objective of the archaeological works was to determine and understand the nature, function and character of the archaeological site within its cultural and environmental setting.

The objectives of the work as defined by the WSI were as follows:

- to expose and investigate surviving archaeological features in the vicinity of Roman field enclosures, and the single medieval building adjacent to Harley Way which were identified during the trial trench evaluation (Walker 2011);
- to determine the date, character, function and significance of any such features;
- to undertake a programme of post-excavation analysis assessing the potential of the remains to contribute to wider research agendas and the scope for dissemination of the project results to a wider audience, and;
- to produce a site archive for deposition when an appropriate archive becomes available and to provide information for accession to the Northamptonshire HER.

Research Framework

The programme of archaeological investigation was conducted within the general research parameters and objectives defined in the East Midlands research frameworks (Cooper 2006, updated by Knight *et al* 2012).

Research aims for the Roman period which may be addressed by the site include the primary research objectives:

Rural settlement, landscape and society (Taylor, in Cooper 2006)

Research Objective 5H - Investigate the landscape context of rural settlements, and;

Research Objective 5E - integration of specialist studies of material relating to subsistence, diet and health (Knight *et al* 2012), including:

- Identifying how field and boundary systems relate to earlier systems of land allotment, and how did these boundary networks develop over time;
- The patterns that can be discerned in the location of settlements in the landscape;
- To elucidate further the daily life of settlements and their role in the processing and marketing of agricultural products;
- Chart more closely the processes of agricultural intensification and expansion and the development of field systems.

Relevant research aims for the Medieval Period include:

Rural settlement (Lewis, in Cooper 2006) and:

Research Objective 7E (Knight *et al* 2012); to investigate the morphology of rural settlements, including:

• Shedding further light upon the origin and development of dispersed hamlets and farms in champion and pastoral areas;

- Improving our understanding of the form, evolution and functions of buildings within rural settlements and establish the extent of surviving medieval fabrics;
- Clarify further the processes of settlement desertion and shrinkage, especially within zones of dispersed settlement.

3.2 Methodology

The works were carried out in accordance with the approved Written Scheme of Investigation (NA 2012), as well as with national standards given by the Institute for Archaeologists (now the Chartered Institute for Archaeologists) Standard and Guidance for Archaeological Excavation (CIfA 2014b) and Code of Conduct (2014a), as well as the English Heritage guidance document (now Historic England) MoRPHE (HE 2015).

The fieldwork was managed by Anthony Maull and the Team Leader on site was Edmund Taylor.

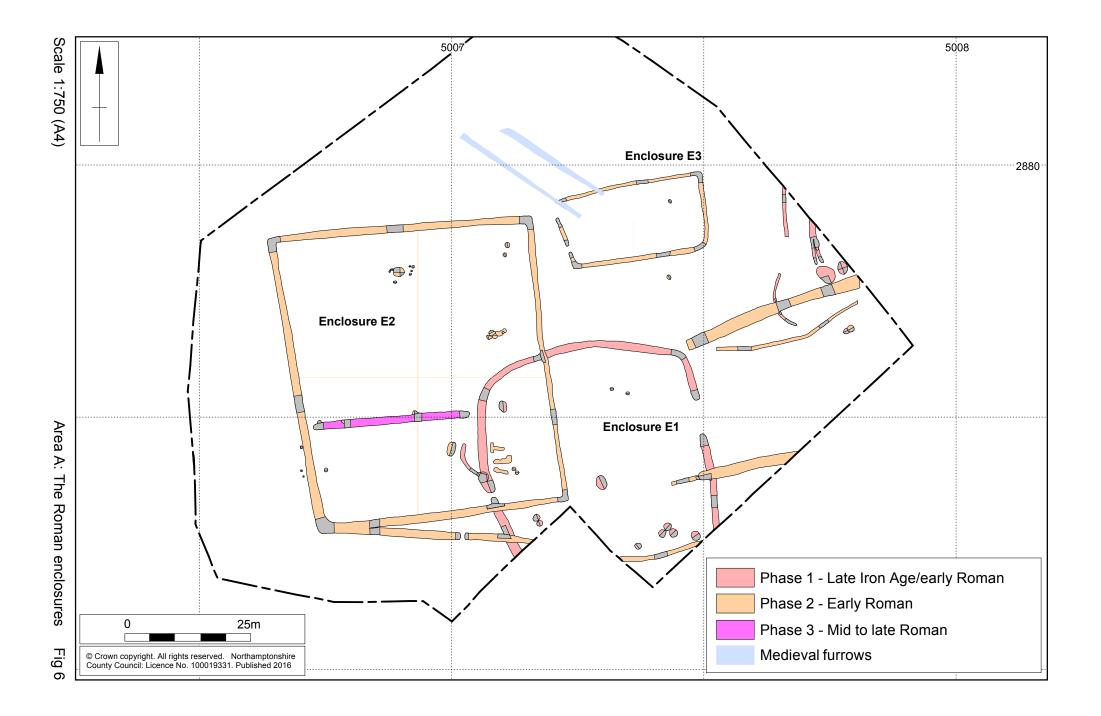
Topsoil stripping was undertaken to the relevant archaeological layer over an area approximately 6.4ha (Figs 1 and 4). The excavation area was located using a survey grade GPS (Leica System 1200). The topsoil and subsoil were removed under continuous archaeological supervision with a 360° tracked mechanical excavator fitted with a toothless ditching bucket to reveal the archaeological remains. All archaeological remains were cleaned by hand, planned to scale, and photographed. The excavation areas were cleaned sufficiently to enable the identification and definition of archaeological features. A hand-drawn site plan of all archaeological features was made at scale 1:50 and was related to the Ordnance Survey National Grid.

All archaeological deposits and artefacts encountered during the course of excavation were recorded. Recording methodology followed the standard Northamptonshire Archaeology context recording system with context sheets, cross-referenced to scale plans, section drawings and digital photographs (NA 2011; and see updated MOLA guidelines MOLA 2014). Deposits were described on *pro-forma* context sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. The record was supplemented by direct annotations of the site general plan as required. All levels were related to Ordnance Survey datum with significant structures or areas of complex stratigraphy planned in greater detail. Sections of sampled features were drawn at scale 1:10 or 1:20, as appropriate.

All discrete features were sampled to no less than 50% of the whole, and were fully excavated where deposits contained artefacts or residues of particular archaeological interest. Artefacts and soil samples were collected by hand. Hand spoil and the surface of archaeological features were scanned with a metal detector to ensure maximum finds retrieval from secure contexts. Environmental samples were sought in deposits from secure and uncontaminated contexts which had a potential for the recovery of charcoal, carbonised plant remains, industrial waste, and other ecofacts. A minimum of 40 litres was taken for flotation or 100% of the fill where this was less than 40 litres.



Pre-excavation overview of Area A, looking north-west across the entranceway of Enclosure E1 and the south-east corner of Enclosure E2 Fig 5



4 THE LATE IRON AGE AND ROMAN ENCLOSURES – AREA A

Area A contained three large rectilinear enclosures, pits, a trackway, and features for crop processing and industrial activity. The pottery assemblage indicates a probable origin of settlement in the late Iron Age, with oval enclosure E1 perhaps appearing as early as the late 1st century BC and certainly in use through the early 1st century AD. It may have been replaced by the more rectilinear enclosures E2 and E3 in the mid 1st century AD following the Roman Conquest, with these enclosures in use into the 2nd century AD. A single ditch produced most of the mid to late Roman pottery.

4.1 Geology and general stratigraphy by Steve Critchley

The topsoil in the area of the Roman settlement was friable mid-grey-brown silty clay between 0.24-0.37m thick, containing abundant limestone fragments. No subsoil was observed in this area.

The area of the site containing the Roman settlement is underlain by competent fossiliferrous marine pale yellow to off-white limestones belonging to the Middle Jurassic, Blisworth Limestone Formations Longthorpe Member. Extensive exposures were uncovered during soil stripping allowing an examination and assessment of local lithological variations both laterally and vertically within the exposed succession. Topographically, the beds had been deeply eroded to the east by fluvial action and the lower portions were obscured by a series of interbedded solifluction/colluvium/alluvial deposits. Within the northern portion of the excavation area, the dominant well-bedded limestone became increasingly marly and silty, interbedded with highly fossiliferrous beds of calcareous mudstones rich in Modiolis bivalve fossils, before giving way conformably to the lowermost beds of the overlying Blisworth Clay Formation.

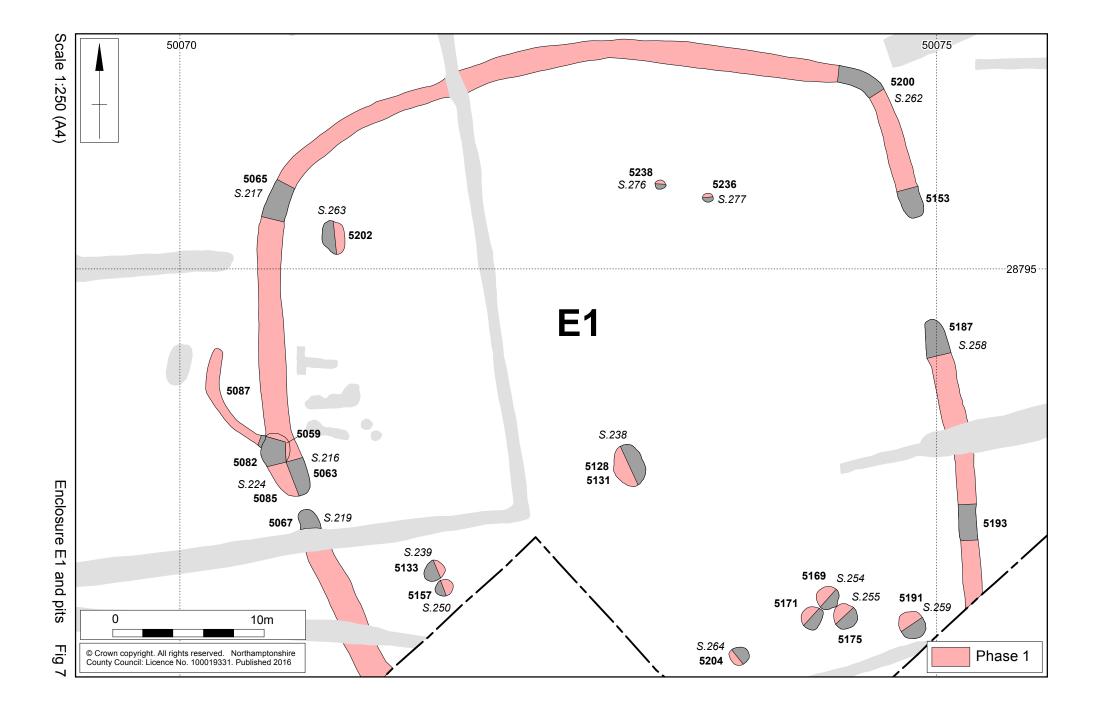
A number of irregular natural solution features were noted within the more competent limestones, filled with red-brown silty clays which were likely to be of periglacial origin.

4.2 PHASE 1 - Enclosure E1 (late Iron Age/ early Roman)

A large sub-square or oval ditched enclosure (Enclosure E1) comprised the earliest phase of activity (Figs 6 and 7). The pottery assemblage is almost entirely dark brown and red-brown shell-gritted ware in forms of the 1st century AD, together with a very small amount of grogged ware. The enclosure appeared to be around 41m wide by 42m long, although the southern edge of the enclosure was obscured by the edge of the excavation. The ditch does not seem to have been recut.

A number of sections were excavated through the ditch to examine the enclosure's construction. In the north-west corner, the ditch had a V-shaped profile, 1.25m wide by 0.58m deep [5065] (Fig 13, S.217). The fill (5064) contained animal bone. On the north edge of the enclosure, the ditch had a U-shaped profile and concave base 0.80m wide by 0.58m deep [5090]. It contained multiple silty clay fills mixed with charcoal, animal bone and eight sherds of shell-gritted pottery (5091, 5092). The profile of the ditch altered to the north-east, becoming narrower and shallower, 0.66m wide by 0.54m deep, with a steep-sided U-shaped profile [5200] (Fig 13, S.262). The upper fill contained animal bone and 27 sherds of shell-gritted pottery (5198). On the eastern edge, the ditch had a U-shaped profile 1.04m wide by 0.52m deep, with a flat base and vertical sides which were eroded at the top [5193] (Fig 8). The fill (5192) contained animal bone.

The enclosure had two entrances: one on the east and one on the west. To the east, the terminals had V-shaped profiles with flat bases between 1.42-1.67m wide, and 0.84-0.89m deep [5153, 5187] (Fig 9 and Fig 13, S.258). The fills contained frequent limestone, and fill (5151) of the northern terminal [5153] contained six sherds of shell-gritted pottery, worked flint, and animal bone.





Ditch [5193], Enclosure E1 east arm, looking south Fig 8



Ditch terminal [5153], Enclosure E1 east arm, looking north Fig 9

At the western entrance of Enclosure E1, the ditch terminal to the south, [5067], had a U-shaped cut with steep sides and a broad flat base, 1.10m wide by 0.90m deep (Fig 13, S.219). The fill, (5066), contained a sherd of pottery and animal bone.

The ditch terminal to the north of the western entrance had a complex sequence of development, not fully resolved during excavation. The simplest interpretation is that the primary ditch [5063], which was U-shaped, 1.18m wide by 0.87m deep (Figs 10 and 13, S.216), had silted up and was recut to the west [5085], by a ditch of similar profile and dimensions (Figs 12 and 13, S.224). The fills of both ditches contained some smaller pieces of limestone, as well as grog-tempered and shell-gritted pottery, flint, and animal bone (5060, 5061).



Ditch terminals [5059] and [5063], Enclosure E1, looking north Fig 10

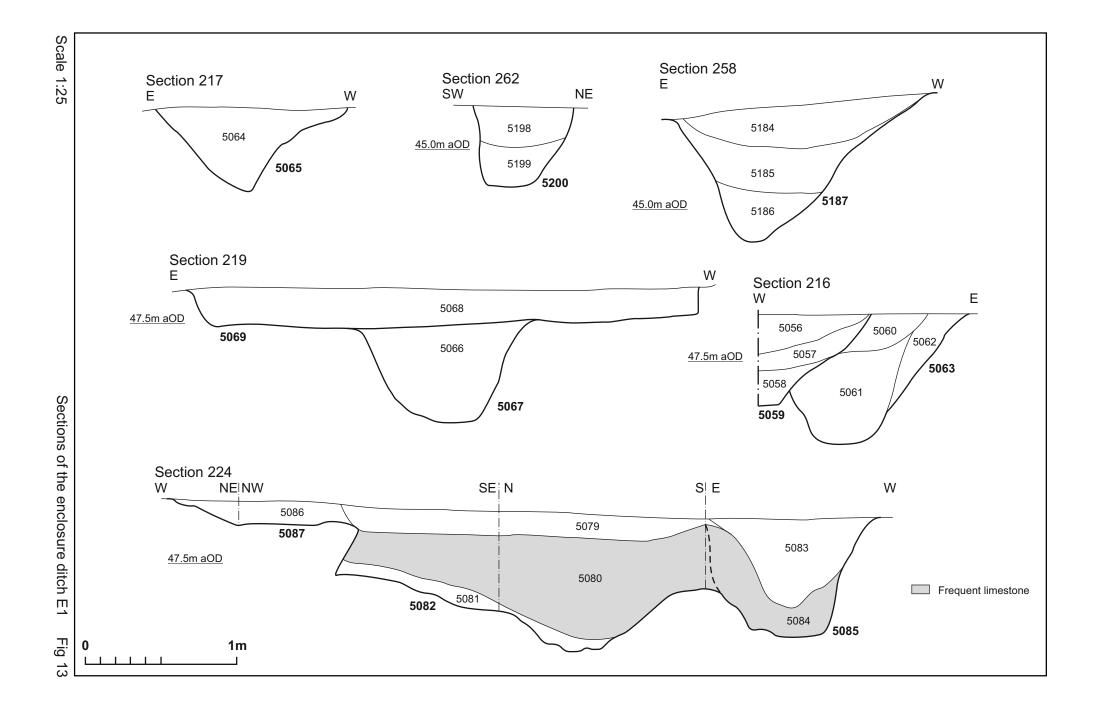
At a later date, perhaps contemporary with the T-shaped corn dryer and pits of Phase 2 lying directly to the east of the of the enclosure ditch, a large oval pit [5082/5059], at least 2m in diameter by 0.90m deep, was cut through the enclosure ditches (Figs 10, 11 and 13, S.216 and S.224). A curving gully [5087] running north-westwards from the pit may have been contemporary with it. It can be suggested that the gully drained water into the pit, which had a fill (5080) of dense medium fragments of limestone, perhaps indicating that the pit acted as a stone-filled sump (Fig 11).



Pit [5082], Enclosure E1, looking east Fig 11



Ditch [5085], Enclosure E1, looking south Fig 12



Pits within Enclosure E1

Twelve pits lying within the enclosure may be contemporary. A corn-dryer and a number of other pits were also within the bounds of Enclosure E1 on the western side. However, the pottery dating suggests that they relate to a later phase of activity in Enclosure E2. They are therefore discussed under section 4.3.

Pits [5236] and [5238]

Two pits were located in the north-east corner of E1 (Fig 15, S.276 and S.277). Pit [5236] was circular with straight sloping sides and a flat base, 0.90m wide and 0.20m deep. Pit [5238] was a similar shape and measured 0.80m wide by 0.22m deep. Both pits contained a fill of dark grey-brown silty clay with occasional limestone fragments, but no dating evidence was recovered.

Pits [5128] and [5131]

In the centre of Enclosure E1 was situated a large pit [5128]; a sub-circular pit with a broad, flat base, more than 0.70m in diameter and 0.30m deep. This pit was truncated by a later circular pit [5131] which had steep vertical sides and a broad, flat base, 2.50m in diameter and 1.10m deep (Fig 14 and Fig 15, S.238). The later pit was filled by two episodes of dumping, the upper layer of which comprised dark grey-brown silty clay loam containing frequent large limestone pieces, pottery and animal bone (5129).

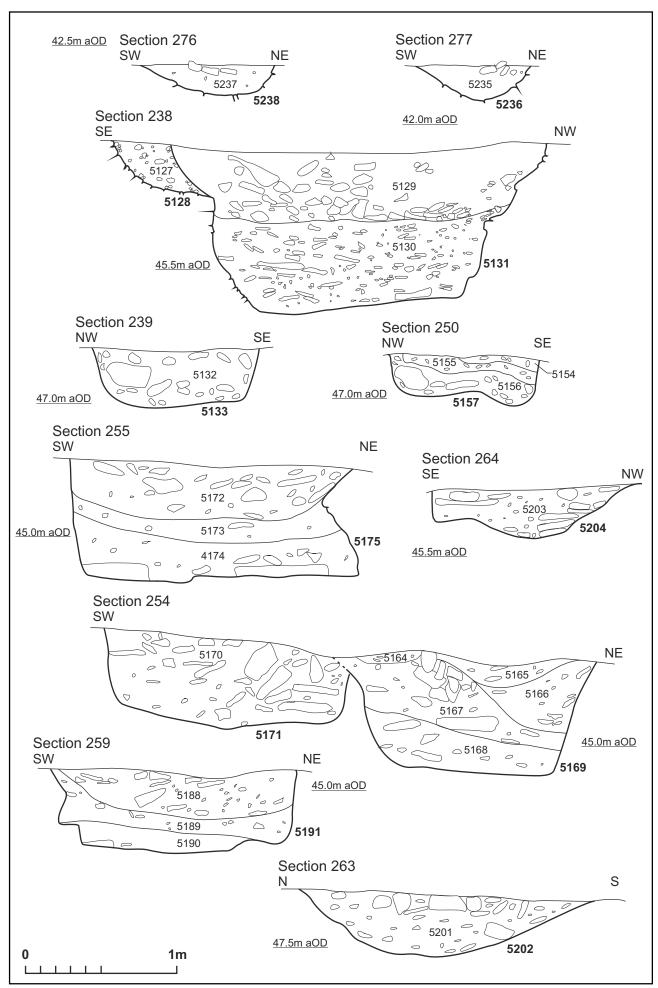


Pit 5131, Enclosure E1, looking south-west Fig 14

Pits [5133] and [5157]

Pits [5133] and [5157] were situated in the south-west corner of Enclosure E1 (Figs 15 and 15, S.239). The pits were both sub-circular in shape with steep, almost vertical sides, and flat bases. Pit [5133] was 0.87m long by 1.10m wide and 0.53m deep. The fill, of mid-dark brown silty clay, contained a large quantity of big limestone slabs, as well as animal bone and pottery (5132).

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Scale 1:25

Immediately to the south was a smaller pit [5157] 0.57m wide by 1.0m long by 0.46m deep (Figs 16 and 15, S.250). This pit contained multiple fills, one of which comprised dark red clay, with frequent small burnt stones and burnt pottery (5155). The remaining fills contained small-large limestone chunks, similar to the fill of [5133].



Pits [5133] and [5157], Enclosure E1, looking north-east Fig 16

Pit group [5204], [5171], [5169], [5175], and [5191]

A group of five pits was located in the south-eastern corner of Enclosure E1. Pit [5204], to the west of the group, was circular in shape with uneven sides and base, 1.32m wide by 0.32m deep (Fig 15, S.264). The fill comprised mid-grey-brown silty clay, and contained a mix of small to large burnt stones, frequent limestone pieces and occasional charcoal, as well as sherds of pottery (5203).

Three pits were adjacent in the centre of the group. Circular pit [5171] had vertical sides and a flat base, although its full dimensions could not be measured. It was filled with grey-brown silty clay, containing frequent limestone and rare charcoal. This pit may be cut by pit [5169] (Figs 17 and 15, S.254). This pit was circular, 1.72m wide and c0.78m deep, with vertical sides and a flat base formed by a large limestone slab. The pit fills all contained large quantities of limestone and two contained Roman pottery. Fill (5167) contained two large limestone slabs which may have been discarded building material, and fill (5166) may have contained material from burning, including charcoal and burnt stone. Fill (5168) produced 11 sherds of pottery, including five sherds of later grey ware, which may indicate this pit remained in use into Phase 2.



Pits [5171] and [5169], Enclosure E1, looking north-west Fig 17

Immediately to the east of [5169] was pit [5175], which was similar in shape and profile to the previous pits, and also seemed to have limestone slabs laid at its base. The fills comprised mixes of mid- or dark brown-grey silty clay with occasional limestone and charcoal (Fig 15, S.255). The upper fill (5172) contained ten sherds of Roman pottery.

To the south-east of this pit group was pit [5191], a circular cut pit with steep vertical sides and a flat base, 1.64m wide by 0.54m deep (Fig 15, S.259). The lower fill contained possible burnt material, charcoal and animal bone (5190). All of the fills contained Roman pottery.

Pit [5202]

In the north-west corner of the enclosure was an oval pit. It was aligned north-south, and had sloping, eroded edges, and a flat base (Fig 15, S.263). It was 1.90m long and 0.42m deep. The fill comprised dark orange-brown silty clay with frequent limestone pieces, but contained no pottery or other finds.

Other probable Phase 1 features

A cluster of features were situated in the north-east of the area, beyond the enclosures. The features are broadly contemporary with the early Phase 1 Roman activity, but could not be associated with any of the enclosures with any certainty.

Curvilinear gullies

Several narrow linear and curvilinear gullies were situated in this part of the site. These may have been used for drainage or boundary marking. To the north-east was gully [5228], aligned north-south, which passed beyond the edge of the excavation towards the stream. The gully had a U-shaped profile with sloping sides, 0.54m wide by 0.20m deep (Fig 35, S.272). No dating evidence was recovered from the silty clay fill (5227).

Parallel to [5228] to the east were curvilinear ditches [5179] and [5181]. The earliest of these ditches appears to have been [5181], which was north-east by south-west aligned, with curving sides and a rounded base, 0.45m wide by 0.18m deep (Fig 35, S. 256 and 257). The fill, which probably formed by natural silting action, contained some limestone and charcoal as well as six sherds of grey ware pottery (5180). To the south, this ditch terminated with a rounded terminal with steep sides and a rounded base, 0.45m wide by 0.06m deep [5159] (Fig 35, S.251).

Cutting this ditch to the north was [5179], a gully with a similar alignment and profile, which varied between 0.50-0.85m wide and 0.14-0.21m deep (Fig 35, S.256 and 257). The ditch also contained a similar grey-brown silty clay fill, and four pottery sherds (5178). To the south, the terminal was 0.38m wide and 0.08m deep, with an uneven base and sides. One sherd of pottery was recovered from the fill (5160) (Fig 35, S.252).

To the south of these features were two further gullies. Curvilinear gully [5244] was cut by the later trackway [403]. The gully was 0.80m wide and 0.26m deep, with a U-shaped profile (Fig 35, S.279). The silty clay fill (5243) contained two pottery sherds. To the south of the trackway [403] and following a similar alignment was curvilinear ditch [5246]. The gully was around 0.20m deep, but flooding prevented further measurement. The fill (5245) contained 22 sherds of pottery, the majority of which were red brown shell-gritted wares.

Pits [5183] and [5163]

An oval pit [5183] was cut into the drainage gully [5181]. The pit was 0.70m wide by 0.18m deep, with a sharp break of slope into a flat base. The fill (5182) comprised dark grey-brown silty clay and contained high proportion of charcoal (around 30%) as well

as burnt stones. Twelve sherds of shell-gritted and grey ware pottery were recovered. A sample of the charcoal showed that it came from a variety of woods, and had been exposed to low temperatures (<400°C).

To the south-east of the gullies was pit [5163]. This pit was circular and very shallow, with sloping sides and a broad flat base. It was 2.20m in diameter and 0.15m deep (Fig 35, S.253). The fill was burnt dark grey-brown silty clay with charcoal and limestone, containing three sherds of grey ware pottery and animal bone (5162). Both pits seemed to have been filled with burnt material from low temperate burning, unlike the probable industrial pits to the west.

Two intercutting pits were observed on the eastern edge of the site, but flooding prevented these being recorded.

Trackway [403] and stone surface [5177]

To the north-east of Enclosure E1, aligned north-east by south-west, was a section of trackway which had a metalled surface formed of a yellow-brown clay matrix within which were set a large number of worn small to medium limestone pieces [403] (Fig 34). It measured 3.5m wide and up to 0.40m deep with shallow edges and a broad, concave base. The hollow above the trackway had been filled with grey-brown clay silt, representing its abandonment. This trackway, which was excavated as part of the 2011 Trial Trench works, may have extended to the north-east corner of Enclosure E1, although this was later truncated by furrows. The trackway extended beyond the limits of the excavation to the north-east, running down the steepest part of the slope towards the stream which edged the site to the east.

Immediately to the north of the trackway was a surface made of limestone blocks, about 3m by 3m [5177]. Incorporated into the surface were two fragments of sandstone rotary quern (SF54) (Fig 18). This layer was overlain by a thin silting layer (5176), which contained 14 sherds of pottery, including South/Central Gaulish samian ware.



Limestone surface (5177), with partial quern, looking north-west Fig 18

4.3 PHASE 2 - Enclosure E2 (early Roman)

Situated to the west of and overlying Enclosure E1 was Enclosure E2 (Figs 6 and 20). This was a large straight-sided, rectangular enclosure, on a north-north-west by south-south-east alignment. The entire enclosure measured *c*48m wide by *c*56m long, and it was dug as part of the second major phase of activity on the site. The main body of the square enclosure generally seemed to have been cut as a single phase, without any observable breaks in the ditch for entranceways. A ditch [5049], aligned east-west, which intersected the enclosure to the south may be a partial recut of the enclosure on a different alignment.

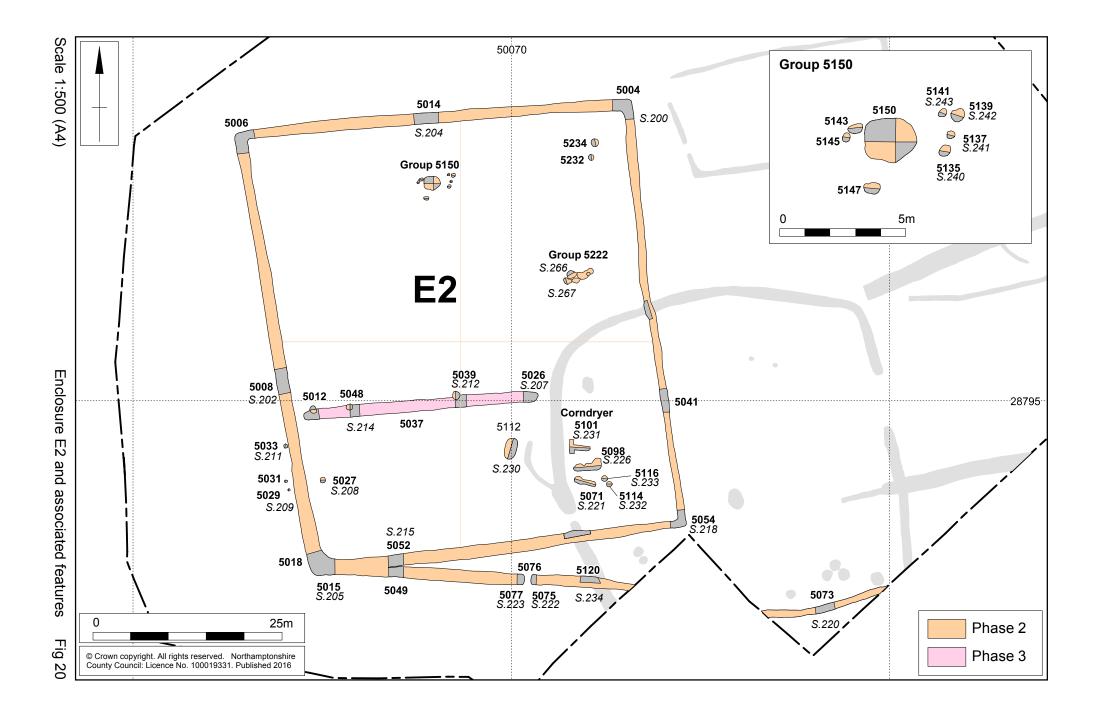
Enclosure E2 intersected the earlier Enclosure E1 twice (Fig 20). To the north, the relationship between the two ditches was not clear, but to the south, it could be demonstrated that the ditch of E2 [5069] cut through the ditch of Enclosure E1 [5067] (Figs 7 and 24, S.219).



Aerial view of Enclosure E2, looking west across Enclosure E1, with ditch [5049] to the left of the shot, and ditch [5048] to the right Fig 19

A number of other sections were made through the enclosure ditch to examine its construction. To the east of [5069], a section was placed through the south-east corner of the enclosure [5054]. Here the ditch was 0.79m wide and very shallow, at 0.21m deep. It had a rocky uneven base of natural limestone (Fig 24, S.218). The fill contained animal bone, flint, Roman pottery and one medieval potsherd (5055).

At the north-east corner of the enclosure, the ditch was shallow with curving sides and a flat base, 0.95m wide by 0.25m deep [5004] (Figs 21 and 24, S.200). The fill contained animal bone, 147 sherds of Roman pottery, and a single small sherd of Bourne ware medieval pottery (5003). To the west, in the centre of the northern arm of E2, the ditch was much wider, measuring 3.65m wide by 0.39m deep, with a flat base and U-shaped profile [5014] (Figs 22 and 24, S.204). The fill (5013) contained 21 sherds of pottery and animal bone. The north-west corner was cut 1.20m wide and only 0.10m deep, with gently sloping sides and a shallow concave base [5006]. The fill produced a little pottery and animal bone (5005).



To the south, on the enclosure's west side, the ditch gradually increased in depth to 0.20m deep and now had a width of 1.46m [5008] (Fig 24, S.202). The cut here was concave with sloping sides and a flat base. The fill, mid-red-brown silty clay (5007), contained animal bone and eight sherds of grog-tempered, shell-gritted and grey ware pottery, as well as a copper-alloy hinged pin-type brooch dating from the late 1st to 2nd century AD (SF42) (Fig 37).



Enclosure ditch [5004], north-east corner of Enclosure E2, looking south Fig 21



Enclosure ditch [5014], Enclosure E2, looking east Fig 22

On the southern edge of E2, two sections investigated the relationship between the main enclosure and a linear ditch [5049], aligned east-west, which extended from it. The southern arm of the main enclosure was shown to be the earlier feature. In the south-west corner, the enclosure ditch was U-shaped with a flat base 0.48m wide by 0.36m deep [5018] (Figs 23 and 24, S. 205). A limestone-rich primary fill was overlain by a deeper fill of mid-brown silty clay containing pottery and worked flint (5020). To the east, the enclosure ditch had shallow sloping sides and a flat base, 1.12m wide by 0.30m deep [5052] Fig 24, S. 215). The fill was a comparable clay silt, and contained limestone, animal bone, flint, and pottery, predominantly dark grey ware (5053).



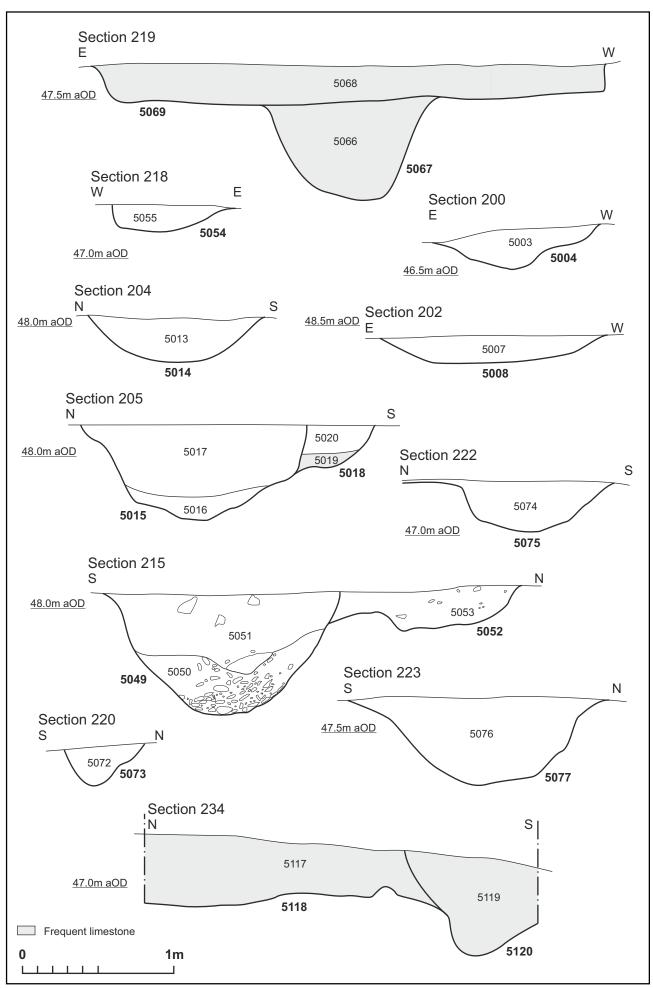
Ditch [5015] and enclosure ditch [5018], Enclosure E2, looking east Fig 23

Ditch [5049]

Extending from the south-west corner of Enclosure E2 was a ditch, aligned east-west [5049]. This ditch cut both enclosures E1 and E2, and may have been a recutting of E2 on a slightly different alignment. It contained a similar range of pottery types to the ditch of E2, and is therefore probably a contemporary feature. Unlike the original enclosure, ditch [5049] had a probable entranceway. At its western end, the ditch cut through the southern arm of E2. Here the ditch was 1.43m wide by 0.68m deep, and was U-shaped with steep sides and a flat base [5015] (Figs 23 and 24, S.205). The upper fill (5017) contained a small amount of pottery and animal bone.

To the east, the ditch was U-shaped with a flat base, 1.52m wide by 0.88m deep [5049] Fig 24, S.215). The primary fill (5050) was 0.38m deep and comprised midbrown clayey silt containing a large quantity of limestone, including some large pieces. The upper fill was similar, but contained less stone and produced worked flint, animal bone and 28 sherds of pottery, predominantly grey-brown or dark grey wares (5051).

The probable entranceway was flanked by two terminals. The western end [5077] had a broad, U-shaped profile and an uneven, flat base, 0.96m wide by 0.57m deep (Fig 24, S.223). The silty clay fill contained pottery and animal bone (5076). The eastern side of the entranceway was formed by terminal [5075], which had a steep-sided U-shaped profile, 0.35m deep by 0.66m wide (Fig 24, S.222). Between the two terminals was a shallow depression, filled with compact mid-brown silty clay, with inclusions of limestone and animal bone (5078).



Scale 1:25

To the east, the ditch cut through the western arm of Enclosure E1 [5120]. The cut had sloping sides and a flat base 0.70m wide by 0.78m deep (Fig 24, S.234). The sandy clay fill contained large pieces of limestone, as well as pottery and animal bone (5119).

The linear ditch [5049] passed beyond the limits of the excavation, although a ditch cut of similar size and alignment was observed further to the east [5073]. Due to the truncation of the feature, the ditch could only partially be investigated. It appeared to be V-shaped with a concave base, 0.50m wide by 0.30m deep (Figs 25 and 24, S.220). Animal bone and pottery were again recovered from the fill, comprising three sherds of shell-gritted ware (5072). Due to its similarities to ditch [5049], this ditch is thought to be associated with E2, and not E1.

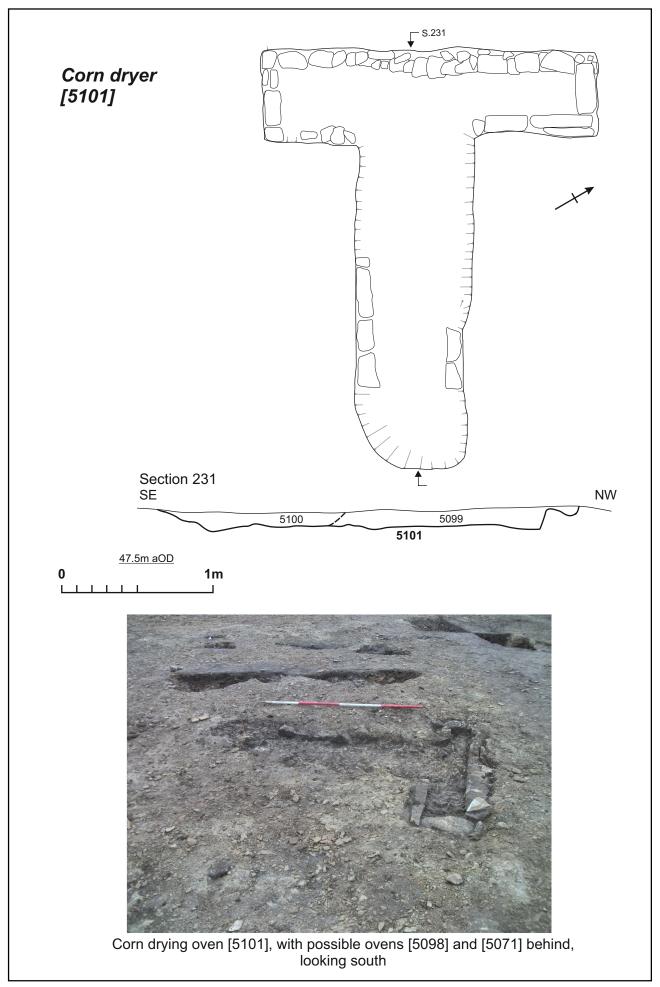


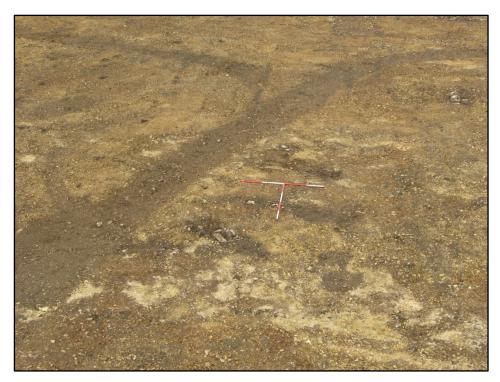
Ditch [5073], looking north-west Fig 25

Corn dryer [5101]

This feature was identified in the area that lay within the bounds of both Enclosure E2 and E1. The corn dryer comprised a T-shaped structure with a drying chamber to north-west, 2.19m long by 0.64m wide, lined with roughly-faced unbonded limestone [5101] (Figs 26 and 27). The stones were not obviously burnt or scorched as would be expected in the drying chamber of a low-temperature oven. The flue was 2.15m long by 0.76m wide, and a few stones from a former lining survived. The fire would have been set in the stokehole to the south-east, but no burnt surfaces had survived. Possibly associated with the corn dryer were a series of pits and cut features lying to the south. Although the corn dryer and the pits lie within the ditches of both enclosures E1 and E2, the later date of the pottery from these features suggests that they were associated with the use of Enclosure E2 (Fig 20 and Fig 27).

The oven contained fills of mid-orange-brown and grey-brown silty clay, with quantities of charcoal as well as 28 sherds of pottery, predominantly grey-brown wares. Samples taken from the fills of the oven contained moderate densities of cereal grains and chaff (see Appendix 2). The low densities of charcoal recovered may indicate that structure was cleaned regularly, possibly to prevent accidental fires.





Pre-excavation overview of the corn dryer [5101], and ovens [5098] and [5071], with pits [5114] and [5116] inside the ditch of E1, looking north-west Fig 27

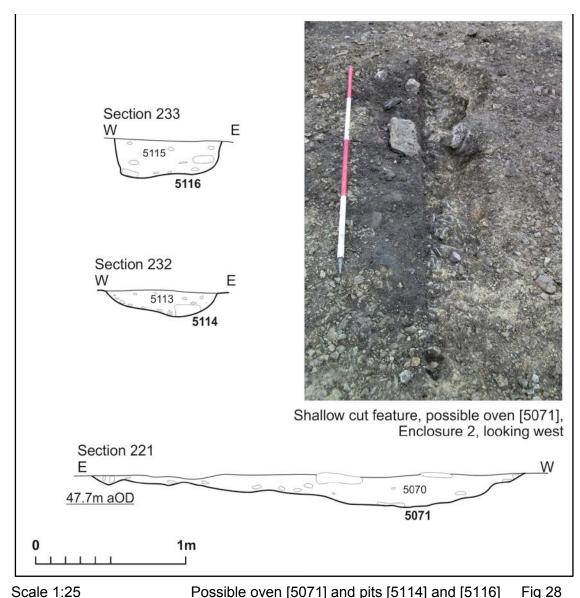
Pits and postholes associated with E2

Pits [5071], [5116] and [5114]

Several pits were situated in the south-east corner of Enclosure E2, immediately to the south of corn dryer [5101]. These pits are thought to be associated with the corn dryer as they contained quantities of burnt material. To the south was [5071], a shallowly-cut linear feature, aligned east-west. It was 2.90m long, 1.20m wide and 0.22m deep, and had gently sloping, eroded sides and a flat base (Figs 30 and 31, S.221). The fill comprised firm, mid-black-brown silty clay with limestone and charcoal, and containing animal bone and 132 sherds of pottery (5070). The pottery included 94 sherds of grey 'London ware' type imitation samian, probably dated to the second quarter of the 2nd century AD. A sample taken from the fill produced charcoal fragments which indicate that they were subject to high temperatures, possibly in excess of 600°C. This suggests that the feature may have been part of an oven, and then had waste from heating processes dumped in it.

Two pits, or possible large postholes, are probably associated with this feature. The northernmost pit was [5116] was circular with a U-shaped profile with steep, straight sides and a flat base 0.71m wide by 0.26 deep (Figs 26 and 27, S.233). The fill (5115) contained one sherd of pottery and animal bone.

The southern pit [5114] had similar proportions; 0.75m wide and 0.18m deep. The pit was circular with a flat base (Figs 27 and 28, S.232). It is possible that these pits supported a superstructure, but this cannot be known with any certainty.



Scale 1:25

Possible oven [5071] and pits [5114] and [5116]

Pits [5098], [5094] and [5096]

Lying just to the north of [5171] was another linear feature or possible pit [5098] (Fig. 29). It was aligned east-west, with gently sloping sides and an uneven base due to the bedrock below, 3.95m long, 1.80m wide and 0.30m deep. The fill comprised dark greybrown silty clay containing limestone and a medieval iron nail (SF52) (5097).

The feature was cut at both ends by pits. To the east lay [5094], a circular pit with eroded gently sloping edges and a flat base, 1.18m wide by 0.22m deep (Fig 29). The pit contained mid-red-brown silty clay (5093), with limestone and charcoal inclusions, as well as pottery and animal bone, including bone from a juvenile ovicaprid and a subadult pig mandible.

At the western end of [5098] was pit [5096], which was circular, with steep sides and a flat base. The pit measured 0.89m wide by 0.26m deep, and contained a fill of mid-redorange sandy silt with limestone (5095) (Fig 29).

Pit group [5222]

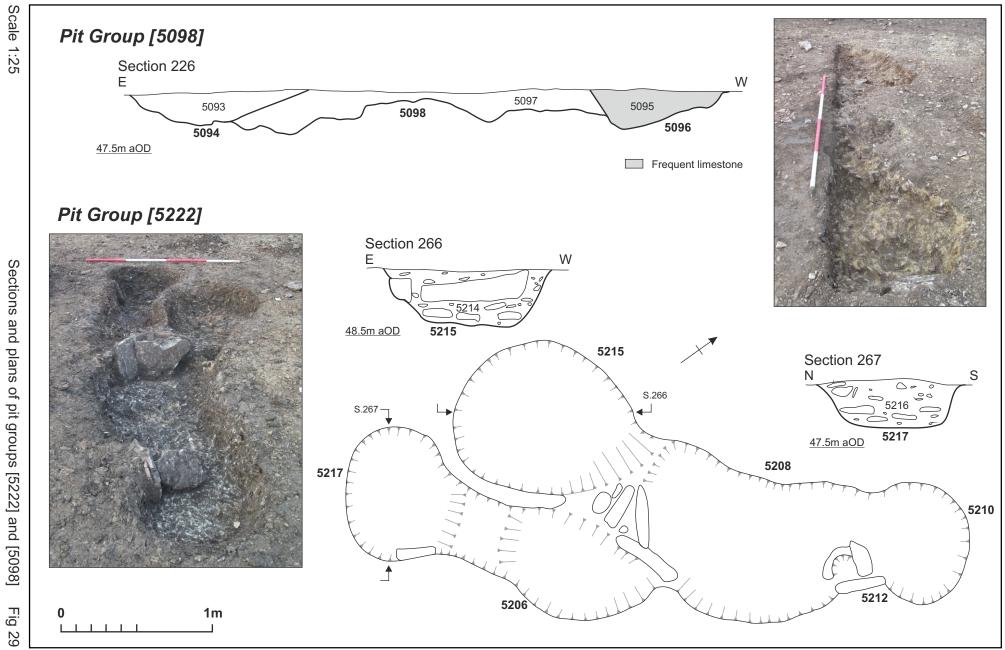
Due north of the corn dryer, and lying outside Enclosure E1, was a group of adjoining pits which included another possible oven or hearth [5206]. The pits did not appear to intercut and may have been in use contemporaneously. Several contained the remnants of a probable stone lining, although this did not show any signs of being burned.

The possible oven feature [5206] was oval and aligned east-west with straight vertical sides and a flat base. It was 0.90m long by 0.77m wide and 0.38m deep (Fig 29). The fill (5205) comprised firm mid grey-brown silty clay with limestone pieces and charcoal. It contained animal bone and seven sherds of pottery, including a piece of samian ware of Les Martres de Veyre origin, dated to the early 2nd century AD. Samples from the fill demonstrated that it contained a low density of cereal grains/chaff and weed seeds, as well as black tarry and cokey material which is the probable residue of the combustion of organic remains (including cereal grains) at very high temperatures. The charcoal could not be identified, but it too indicated having been exposed to high temperatures. These findings support the supposition of this feature functioning as a hearth or oven, or of containing material from such a feature.

Pit [5208] lay to the east Fig 29). It was east-west aligned and roughly oval in plan with straight vertical sides 1.30m long and 1.0m wide. The 0.30m deep fill of grey-brown silty clay contained frequent limestone fragments with rare charcoal, and a low density of cereal grains and chaff (5207). Recovered from the fill were animal bone and thirteen sherds of Roman pottery, including Central Gaulish samian ware. In the southeast corner of the pit was a probable circular posthole [5212], cut with near vertical sides and a flat base, 0.28m wide by 0.32m deep. It was filled with firm mid-grey-brown silty clay with occasional small stones and nine sherds of pottery (5211). The posthole was also edged by a packing of firm blue-grey clay, up to a depth of 0.16m, and vertical limestone slabs (5213).

East of pit [5208] was a smaller circular pit [5210] Fig 29). It was 0.56m wide and 0.20m deep, with a U-shaped cut and flat base. The silty clay fill contained one sherd of pottery and animal bone (5209).

On the western side of the possible oven feature [5206] were two further oval pits. To the north, pit [5215] was 1.17m long by 0.76m wide, with a depth of 0.37m (Fig 29, S.266). The silty clay fill contained some limestone and one sherd of pottery (5214). To the south was pit [5217], which was 1.20m long by 0.90m wide, cut with a U-shaped profile and flat base (Fig 29, S.267). The fill (5216) comprised firm mid-grey-brown silty clay containing a high abundance of limestone, as well as a sherd of South Gaulish samian ware, animal bone and a small quantity of windblown cereal grains/chaff and common weed seeds.



Pit [5150] and posthole group

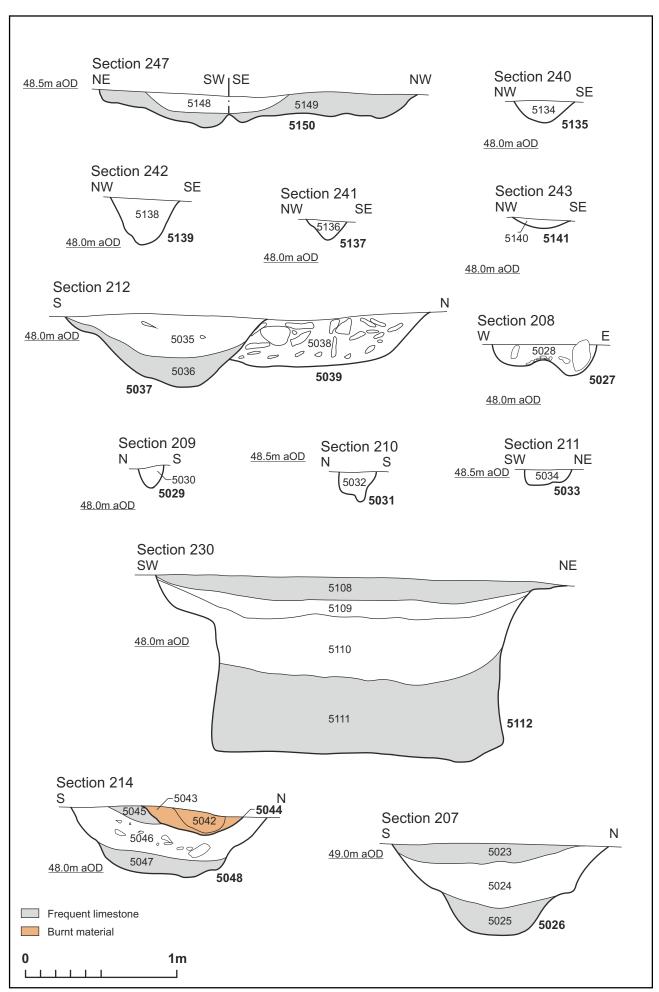
In the centre of Enclosure E2 to the north was a pit, surrounded by seven associated postholes or small pits. The pit [5150] was roughly circular or possibly square, with sloping sides and an uneven base 2.05m long by 1.68m wide and 0.25m deep (Figs 30 and 31, S.247). The pit contained what may have been a clay lining, comprising mid-yellow-brown clay with occasional limestone pieces and rare fragments of charcoal (5149). Overlying this was a fill of burnt material, made up of friable pink-red burnt silty clay sand mixed with burnt limestone pieces and a few pieces of charcoal (5148). The fragments of charcoal were shown to be of oak although the pieces were too small and infrequent to identify heating temperatures.

Surrounding the pit were seven postholes; four to the east and three to the west. Forming a very rough square around the pit were postholes [5143], [5139], [5135], and [5147]. These were generally shallow, with steep but sloping sides and a concave base, between 0.10m and 0.32m deep, and 0.40 and 0.50m in diameter (Fig 31, S.240 and 242). Three smaller postholes; [5137], [5141] and [5145], were situated between the larger cuts. These measured between 0.07m and 0.15m deep and 0.26-0.38m in diameter, and had sloping sides and a concave base (Fig 31, S.241 and 243). The postholes all contained fills of friable mid-dark grey silty clay with small limestone fragments. Fill (5134) of posthole [5135] contained two sherds of shell-gritted pottery.

Fills (5146) of posthole [5147], and (5140) of posthole [5141] both contained a large quantity of charcoal which were indicative of exposure to medium-high temperatures. These may be the result of burnt posts. Two pieces of furnace/hearth slag and a single circular disk of dense slag, a possible smithing hearth bottom, were recovered from fill (5142) of posthole [5143]. Given the highly burnt nature of the pit fill, the indications of a super-structure is given by the postholes and the recovered slag, it seems likely that secondary iron smithing was taking place at pit [5150]. It may be associated with the corn dryer and other possible oven features to the south-east.



Pit [5150], Enclosure E2, looking south-west Fig 30



Scale 1:25

Pits [5234] and [5232]

Two shallow pits were situated in the north-east corner of Enclosure E2. The southern pit was circular with gently sloping sides and a flat base, 1.01m in diameter and 0.16m deep [5232]. The pit contained dark grey-brown silty clay (5231). The second pit [5234] was circular with gently sloping sides and a flat base, 0.67m in diameter and 0.09m deep.

Pits [5039], [5012] and [5027]

Two of these features were situated in the centre of Enclosure E2, and were cut by later Roman ditch [5037]. The pit [5039], cut by the ditch, was sub-circular, with moderate sloping sides and a flat base, 1.09m wide by 0.31m deep (Fig 31, S.212). The fill comprised mid-brown silty clay containing a large quantity of limestone, including some large blocks, and animal bone (5038). This may indicate the pit was used as a dump for unwanted stone, or that it may be packing for a post.

Pit [5012], at the west end of the ditch, was cut by the terminal. It was circular, with steep sloping sides, a U-shaped, concave base, 0.60m in diameter and 0.38m deep. The posthole was filled with mid-red-brown silty clay.

South of posthole [5012] was small pit [5027]. The pit was circular, with steep sides and an irregular base, 0.77m wide and 0.26m deep. The fill (5028) was mix of mid-red-brown and mid-brown-grey clayey silt, and contained charcoal flecks and large stones, as well as animal bone. An area of burnt material was located in the centre of the pit, either as dumping or more likely from a burnt post (Fig 31, S.208).

These three pits formed two sides of a rectangle measuring 9.4m by 5.0m and, if they did once contain posts, may have been structural.

Postholes [5029], [5031] and [5033]

The small postholes were situated just outside the main enclosure ditch of E2 on the western side. They may have been associated with the pits or possible postholes [5039], [5012] and [5027], or have been a separate short alignment of posts. The postholes were all circular with uneven bases, and measured between 0.17-0.31m in diameter and 0.10-0.20m deep (Fig 31, S.209-211). The postholes were all filled with firm, mid-brown clayey silt with occasional charcoal fragments. Fill (5030) of posthole [5029] contained a small amount of fired clay/daub.

Pit [5112]

In the south of Enclosure E2 was large pit or possible well [5112]. This was sub-rectangular in plan, c2.70m long and 1.20m deep, with vertical sides and a flat base (Fig 31, S.230). The fills of the pit contained variations of brown silty clay and brown-grey sandy silt. The lower and upper fills of the pit contained small to large pieces of limestone, particularly in the primary fill (5111) which contained several flat slabs of stone, four sherds of pottery and animal bone. Fill (5109) contained charcoal animal bone, and eight sherds of grog and shell-gritted Roman pottery.

4.4 PHASE 2 - Enclosure E3 (early Roman)

North-east of Enclosure E2 was a small rectangular enclosure, E3, aligned east-west, 28m long by 14m wide. The enclosure had two entrances at the western end. There was no indication that the ditch had been cleared or recut at any point. On the northern arm, the ditch had a wide U-shaped profile, 0.73m wide and 0.25m deep [5224] (Fig 35, S.270). The silty clay fill contained a little charcoal (5223). In the north-east corner [5219], the ditch had similar profile, 0.69m wide by 0.18m deep (Fig 35, S.268). The fill, red-brown silty clay (5218) contained some small stones and charcoal, as well as five sherds of grog-tempered, shell-gritted and grey ware pottery, and an iron rod fragment (SF55). In the south-east corner, the ditch cut had a similar profile and was 0.62m wide by 0.15m deep [5226]. The silty clay fill contained ten sherds of pottery, predominantly grog tempered and grey ware (5225). On its southern arm, the ditch remained relatively consistent in profile and dimensions; 0.63m wide and 0.19 deep [5221]. In the south-west corner, the ditch was deeper and contained more stone in its fill. Ditch cut [5126] had a more U-shaped profile, with flat base 0.58m wide by 0.25m deep (Fig 32). Its silty clay fill contained as much as 30% limestone pieces (5125).



Ditch [5126], Enclosure E3, looking east Fig 32

The ditch enclosure had two entrances on the west side. The southern entrance was edged to the south by ditch terminal [5124] which had a U-shaped profile with flat base 0.64m wide by 0.30 deep (Fig 35, S.236). The fill, grey-brown silty clay, also contained a high proportion of limestone, and three sherds of pottery (5123). To the north was terminal [5122], which had straight sides and a V-shaped profile, 0.48m wide by 0.32m deep (Fig 35, S.235). The terminal contained thirteen mixed pottery sherds of shell-gritted and grog tempered and grey ware types (5121).

The entrance in the north-west corner was edged to the south by terminal [5107]. This cut had a U-shaped profile with a flat base, 0.40m wide and 0.20m deep (Fig 35, S.229). The fill of grey-brown silty clay contained limestone pieces, and seven sherds of shell-gritted and grey ware pottery (5106). The northern terminal of the main enclosure ditch, [5105], had straight sides with a sharp break of slope, and a broad flat base, 0.48m wide by 0.20m deep. The fill (5104) produced a single pottery sherd. This terminal and the enclosure ditch to the east were cut by medieval furrows, aligned north-west by south-east [5103].

The pottery from the enclosure ditches have a range of forms and fabrics, including shell-gritted and grog-tempered wares and grey ware. This is similar to the profile of

pottery recovered from E2, suggesting these enclosures may have been in contemporary use.

Pits associated with Enclosure E3

Enclosure E3 contained a single small pit in the north-east corner [5230]. This was circular, with sloping sides and a broad flat base, 0.90m wide by 0.14m deep (Fig 35, S.273). The fill was a mid-brown silty clay containing a moderate proportion of burnt stones and some charcoal, possibly dumped waste from a hearth (5229).

A pit outside Enclosure E3 to the south may be associated with the enclosure. The pit [5242] was circular, with steep sloping sides and a flat base. It was 0.84m in diameter, with a depth of 0.21m (Figs 33 and 35, S.278). The primary fill (4241) was probably a lining formed of compact mid-brown and blue-grey clay (5241). Set into the clay layer was a fill of burnt stone cobbles (5240, SF56). Overlying the stones was a 0.14m deep silting layer (5239).

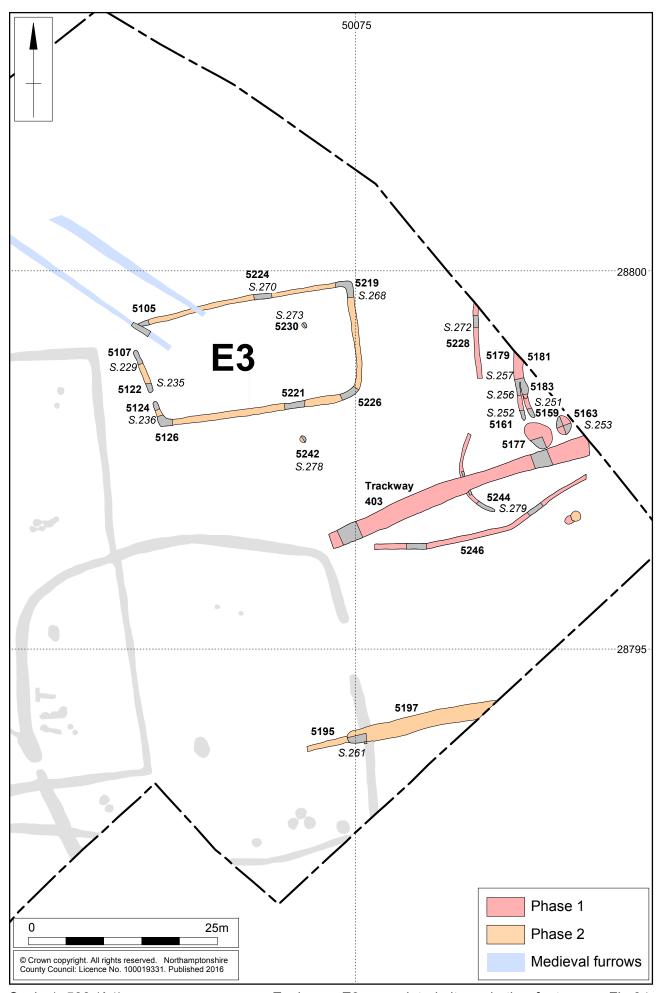


Pit [5242] with burnt cobbles, outside Enclosure E3, looking west

Fig 33

Ditches [5197] and [5195]

At the southern edge of the site was the terminal of ditch [5197] aligned east-west, which cut the eastern arm of Enclosure E1 [5193]. The ditch cut had steeply sloping, slightly concave, slides leading to a broad uneven base. It was 1.50m wide by 0.50m deep (Fig 35, S.261). The ditch fill of dark-grey-brown clay loam contained a high quantity of limestone pieces, animal bone and two sherds of pottery including grey ware (5196). This ditch [5197] cut a narrow gully [5195]. This gully was 0.60m wide and 0.30m deep, which ran on the same alignment as the later ditch. The total surviving length of the gully was less than 4m, which may have been truncated by the furrows in this area of the site (Fig 35, S.261). The fill of the gully comprised dark grey-brown clay loam with limestone fragments, and contained red-brown shell-tempered and grey ware pottery (5194). Although the relationship between gully [5195] and E1 enclosure ditch was not clear, the presence of the later grey ware pottery may indicate that this gully also dated from Phase 2.



Scale 1: 500 (A4)

Enclosure E3, associated pits and other features

4.5 PHASE 3 - Ditch (Late Roman)

Within Enclosure E2 was a single wide ditch, [5037], aligned east-west. In the centre, the ditch had steep sloping sides and a flat base, 1.32m wide by 0.49m deep [5037] (Fig 31, S.212). The fills were brown or grey-brown silty clay, with the primary fill containing one sherd of pottery (5036), and upper fill (5035) containing animal bone, worked flint, thirteen pottery sherds and Roman tile. To the west, the ditch had a U-shaped profile [5048], 1.30m wide and 0.47m deep, and fills that included large quantities of limestone, and animal bone (fill 5046) and one sherd of Central Gaulish samian ware (fill 5045) (Fig 31, S.214).

The ditch terminal to the west had a broad, U-shaped profile, 1.22m wide and 0.48m deep [5010]. The red-brown silty clay fill (5009) contained animal bone and ten sherds of grey and shell-gritted Roman pottery. The eastern terminal [5026] had a U-shaped profile with steeply sloping sides, 1.42m wide by 0.62m deep (Figs 36 and 31, S.207). The fills comprised variations of mid to dark red-brown silty clay, with frequent limestone in the primary and upper fills. The primary fill contained animal bone and four sherds of pottery (5025). Overlaying this was a 0.33m deep fill (5024) containing four worked flints and 51 sherds of pottery including shell-gritted, grog-tempered and grey wares. Fragments from a beaker and a grey colour-coated handled flagon with rouletted decoration both made of Lower Nene Valley colour coated ware were recovered, and probably date to the 3rd-4th centuries AD. An environmental sample from the fill showed plant macrofossils were scarce and probably derived from scattered refuse.

Towards the west end, the upper fills of the ditch were cut by a pit [5044]. This pit was circular, with moderate sloping sides and a concave base (Fig 31, S.214). The primary fill comprised dark grey-black silty clay with frequent charcoal (5043). Analysis of the charcoal, which was mainly of field maple and *Prunus*, with small proportion of ash, suggested the wood may have been subject to temperatures around 600-800°C, probably indicative of waste from industrial activity rather than a domestic hearth. Overlying this layer was a fill of red-orange burnt clay with burnt stone (5042).

Although it was aligned with the southern edge of the Enclosure E2, and also appeared to respect the western arm of Enclosure E1, the pottery from the fills of ditch [5037] fills suggests a later date for this feature, around the 3rd or 4th century AD.



Terminal [5026] of ditch [5037], Enclosure E2, looking west Fig 36

5 ROMAN FINDS AND ENVIRONMENTAL EVIDENCE

5.1 Worked flint by Yvonne Wolframm-Murray

Twenty pieces of worked flint were recovered as residual finds from Roman contexts. The flint comprised 18 flakes, one core, and one core fragment, summarised in Table 1

Table 1: Quantification of worked flint

Description	Whole	Fragment	Burnt	Total
Flake	8	8	2	18
Core	1	1	-	2
Total	9	9	2	20

The condition of the assemblage was mixed. The flints showed post-depositional edge damage, ranging from small edge spalls to crushing. Accidental burning of the flint was evident on two flakes in the form of thermal fracturing, crazing, and potlidding. Patination was evident on all but two pieces of flint; mostly the pieces were white.

The raw material is a vitreous flint of light to dark coloured grey-brown and grey. The light to dark brown coloured cortex present on the dorsal surface on half of the assemblage has a generally smooth, rolled and weathered surface. The raw material was likely to have comprised local gravel deposits.

One flake core had multiple platforms. In addition, a core fragment was found which had multiple striking platforms producing flakes. The majority of flints recovered consisted of waste flakes. The assemblage comprised 18 flakes, of which eight were broken and two were burnt. There was a squat flakes and one with a relatively long and flat striking platform.

The worked flints are not directly dateable but their technological characteristics suggest a broadly Neolithic/early Bronze Age date.

5.2 The late Iron Age and Roman pottery by Rob Perrin

Introduction

An assemblage of some 807 sherds, weighing just under 9kg and with an estimated vessel equivalent (EVE), based on rims, of just over seven was recovered (Table 2).

Table 2: Quantification of total Roman pottery

	Number of sherds	Weight (g)	Rim %
Excavation	760	8389	655
Evaluation	42	498	48
Unstratified	5	110	11
Total	807	8997	714

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Fabrics

The fabrics represented are various grogged, shell-gritted, reduced and oxidised wares, together with colour-coated ware from the Lower Nene Valley and imported samian ware from production sites in South and Central Gaul. Over three quarters of the pottery comprises shell gritted wares and reduced grey wares (Table 3).

Table 3: Quantification of Roman pottery fabrics

Fabric	Number of sherds	%	Weight (g)	%	Rim %	%
Grogs	58	7.2	752	8.4	39	5.5
Shell	402	49.8	5565	62	258	36
Grey	153	19	1193	13.3	192	27
Dark grey	116	14.4	866	9.6	101	14
Oxidised	51	6.3	335	3.7	69	9.7
LNVCC	20	2.5	234	2.6	36	5
SGS	2	-	26	-	12	-
CGS	5	-	26	-	7	-
Total	807	-	8997	-	714	-

A number of sub-types occur in the grogged wares, defined by colour - buff, browns, pink, hard cream and red-brown - rather than noticeable variations in the grog temper; a fabric with a mixture of grog and shell inclusions also occurs. The variations in the shell-gritted ware relate to both colour and the size of the shell inclusions, which are small, medium and large. The different-sized inclusions occur in fabrics in all of the colours (Table 4).

Table 4: Variations in shell-gritted wares

Fabric	Sherds	%	Weight (g)	%	Rim %	%
Buffs	38	9.5	866	15.6	91	35.3
Brown	39	9.7	1203	21.6	8	3
Dark brown	154	37	1290	23.2	86	33.3
Red-brown	141	37	1750	31.5	73	28.3
Red-yellow	30	7.5	456	8.2	-	-
Total	402	-	5565	-	258	-

The reduced grey and dark grey wares are all sand tempered with variations in the coarseness of the fabric, core or core-edge colour and surface finish. Two sherds have incised and stamp decoration akin to that found on so-called 'London ware'. The oxidised wares comprise a range of sand tempered buff, cream, pink and reddish-yellow fabrics

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Forms

The vessel forms were recorded using simple codes. Approximately 72 vessels were noted, based on a count of separate rims, comprising 48 jars or possible jars, six jars or bowls, five bowls, one beaker, two beakers or jars, two dishes, two bowls or dishes, one cup, three flagons or possible flagons, one flagon or jar and one colander. Twenty-seven occur in reduced grey wares, another 27 in shell-gritted wares, six in grogged wares, two in mixed grog and shell wares, six in oxidised wares, one each in South Gaulish (SGS) and Central Gaulish (CGS) samian ware and two in Lower Nene Valley colour coated ware (LNVCC).

Seven of the jars or bowls in the shell-gritted wares are globular in shape and neckless and another four have short necks. Four have a slight lid-seating and others have curved, square or everted rims; one vessel is of storage jar size. Of the three bowls in shell-gritted wares, one has an inturned flat rim, another an inturned flange and the other has external grooves high up on the rim. One jar has external vertical scoring. The two vessels in fabrics with a mixture of shell and grog temper are also globular in shape and neckless and comprise a jar and a jar or bowl. Five of the six vessels in grogged wares are jars, including two lid-seated jars in a pink grogged ware; the other vessel is a wide mouthed bowl in a hard cream grogged ware.

The reduced grey wares have the widest range of forms. There are 18 jars or possible jars: two possibly narrow-mouthed jars; one jar with nodular rustication; one wide-mouthed bowl or jar with neck grooves above a burnished wavy line; one beaker or jar with a cornice rim; one dish with a plain rim, an internal ledge and a raised central kick reminiscent of gallo-belgic forms; two dishes or bowls, one with a bead rim and the other carinated with a grooved rim; one possible flagon; one collander and a decorated 'London ware' imitation samian ware form 37 bowl. The jars mainly have curved or everted rims, though one has a lid-seated rim and another is neckless with a plain rim. Three of the jars are globular in shape and three have short necks; two have neck grooves, another girth grooves.

There are three jars, one beaker or jar, one flagon and another possible flagon in oxidised wares. Of the three jars, one has a square rim and one a bead rim, and two are globular in shape with short necks; the beaker or jar has rouletted decoration. The vessels in LNVCC comprise a single-handle flagon or jug with a grey colour coat and a beaker. The samian ware vessels comprise a SGS form 33 cup and a CGS form 18/31 dish.

Sources

It is likely that most of the pottery was locally produced. There are a number of known kiln sites within a 15km radius of Benefield including Oundle, Ashton, Warmington. Bulwick, Southwick, Corby and Gretton (Swan 1984, 144-6) and Fineshade (Turland 1991; 89-92). Early Roman kilns producing shell gritted ware were found at Haddon to the east (Rollo 1994, 96; Evans 2003, 73). The major production centre of the Lower Nene Valley is less than 20km to the north-east, though little of the Benefield pottery, other than the colour-coated ware, seems to be from this source. The River Nene and the Roman road from Irchester to Durobrivae (Margary 570) both pass a few kilometres to the south of the site, so the inhabitants may have had access via these routes to pottery produced in the many known kiln sites further to the west.

Dating

Overall

The pottery from the various fills is likely to relate to the disuse or abandonment of the features rather than the date that they were in use, but the assemblage can provide an indication of the date of activity on the site as a whole.

The globular, neckless vessels with simple plain or bead rims are essentially Iron Age in form though the type continues in use into the Roman period. Much of the grogged wares and some of the shell-gritted wares and grey ware vessels are of 1st-century AD date, as are the South Gaulish Samian vessels and the gallo-belgic-type grey ware dish. Much of the rest of the pottery would fit a 2nd-century AD date, with the LNVCC flagon or jug and the shell gritted ware bowl with an in-turned flange hinting at some later 4th-century activity.

The enclosures

Three enclosures were excavated: Enclosures 1-3. Table 5 shows the amount of pottery from the enclosure ditches.

Table 5: Pottery from the Roman enclosures

Enclosure	Number of sherds	Weight (g)	Rim %
E1	92	844	34
E2	208	2103	242
E3	56	800	50

Enclosure E1, the oval enclosure, would appear to be the earliest in use as the pottery from the ditches is almost entirely dark brown and red brown shell gritted ware, together with some grogged ware, and includes a number of neckless, globular vessels. The pottery from the ditches of the other two enclosures has a greater range of fabrics (Tables 6 and 7) and both have a similar range of jar forms. The pottery does not indicate a clear sequence, so these enclosures may have been in contemporary use.

Table 6: Pottery from Enclosure E2

Enclosure E2	Number of sherds	Weight (g)	Rim %
Grog	5	28	-
Shell	96	1412	85
Grey	11	52	40
Dark grey	56	344	56
Oxidised	40	267	61
Total	208	2103	242

The east-west ditch joining the south-east corner of Enclosure E2 contains a similar range of fabrics and forms to that from the square enclosure ditches and it is therefore not possible to say if it was a later or contemporary feature.

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Table 7: Pottery from Enclosure E3

Enclosure E3	Number of sherds	Weight (g)	Rim %
Grog	13	184	6
Shell	15	420	32
Grey	20	112	12
Dark grey	6	74	-
Oxidised	1	4	-
CGS	1	6	-
Total	56	800	50

Features within Enclosure E1

These are mainly pits, and the pottery from most of their fills matches that from the enclosure ditches. The upper fills of two of the pits, and the fill of the east-west linear ditch which cuts the eastern ditch of the enclosure contain later grey ware.

Features within Enclosure E2 - Corn dryer and hearths/ovens

Four features which have scorched elements were revealed during excavation. Although three of these could conceivably be within Enclosure E1; the presence of another to the north of Enclosure E1 ditch and within Enclosure E2 suggests they were all associated with activity within the Enclosure E2. The pottery from their fills supports this assumption (Table 8). Only 5101 can be called a corn dryer with any degree of confidence, having the classic T-shaped form; the other features could also have been ovens or hearths. The pottery from the northernmost group of reasonably shallow interlinking pits (pit group 5222), some of which had partial stone lining, includes a samian ware form 18/31 of Les Martres de Veyre origin, and that from 5071 includes the grey 'London ware' type imitation of a samian ware form 37. Les Martres de Veyre samian ware is mainly dated to the first quarter of the 2nd century AD, while vessels of similar form and decoration to the London' ware vessel have been found in contexts dating to the second quarter of the 2nd century AD (eg Perrin 1980, fig 5, form D, motifs 9 and 11; Perrin and Webster 1990, fig 5, 41, fig 12, 195).

Table 8: Pottery from the corn dryers

	Number of sherds	Weight (g)	Rim %
Dryer 5206 etc			
Grog	1	20	-
Shell	12	108	-
Grey	15	98	12
Oxidised	1	4	-
CGS	2	16	7
SGS	1	20	12
Total	32	266	31

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Dryer 5071			
Grey	4	122	13
Dark grey	1	8	-
Oxidised	1	2	-
Total	6	132	13
Dryer 5101			
Shell	1	8	-
Grey	26	165	60
Dark grey	1	4	-
Total	28	177	60

Ditch [5037] within Enclosure E2

The pottery from the fills appears to suggest a later date for this feature (Table 9). The LNVCC is from a beaker and a grey colour coated one or two handled flagon or jug with rouletted decoration. This vessel could date to the 3rd or even the 4th century AD. The upper fills also contain a coarse dark grey ware which might possibly be of Saxon date, though this is by no means certain, and some red-brown shell gritted ware which is likely to be of late Saxon/early medieval or medieval date.

Table 9: Pottery from the Ditch [5037]

Fabric	Number of sherds	Weight (g)	Rim %
Grog	7	80	-
Shell	15	178	17
Dark grey	19	142	7
Grey	26	144	-
Oxidised	2	20	-
CGS	1	2	-
LNVCC	20	234	36
Total	90	800	60

Site function and status

The range of wares and vessel forms, together with the small amount of regionally traded and imported continental wares, suggests that most of the activity within the enclosures and the associated or other features was basic utilitarian agricultural, with possibly some domestic. This interpretation would appear to fit with the nature of the features which were identified.

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5.3 Querns by Andy Chapman

From the limestone surface (5177), there are two fragments of a coarse but quite finegrained sandstone, probably Millstone Grit (SF54), that come from the same upper stone of a flat rotary quern, a typical Roman form.

The smaller piece measures 120mm by 95mm and 45mm thick, with one smoothed and one dimpled surface, and it retains a fragment of the central eye, at c100mm diameter. The larger fragment forms some 10% of an upper stone 600mm in diameter and up to 65mm thick. The upper surface is smooth, with faint traces of dimpled tool marks, with an incised groove at a radius of 120mm, but the central eye is missing. The grinding surface is dimpled, but there is a plain, slightly raised, band around the circumference, 35mm wide.

At 600mm diameter this stone is near the upper end of the size range for hand rotary querns.

5.4 Metalworking debris by Andy Chapman

From the fill (5003) of ditch [5004] in Enclosure E2, there is a small lump of dense slag, weighing 50g. From the fill (5142) of posthole [5143] there are three pieces of slag, weighing 290g. This includes two irregular pieces of undiagnostic furnace/hearth slag and a single circular disk of dense slag with a concave upper surface and a convex lower surface. This may be a smithing hearth bottom, but at only 50mm diameter it is an unusually small example. This small group of material is consistent with secondary iron smithing being carried out somewhere nearby.

5.5 Ceramic building materials by Pat Chapman

Area A

Three tile sherds and one possible tile sherd, weighing 758g, come from three ditches and a pit in Area A. A *tegula* roof tile sherd, from fill (5017) in ditch [5015] in the south-west of Enclosure E2, 23mm thick with a short, thick, flat-topped flange is made with hard dark red sandy clay. One body sherd, 20mm thick, made with fine sandy orange clay with rare gravel up to 7mm, comes from fill (5035) of ditch [5037], the internal ditch in E2. A fragment from fill (5060) of ditch [5063] is made with sandy orange-brown clay with a black core and frequent gravel. From fill (5129) in pit [5131] within Enclosure E1, comes either a tile fragment or a piece of fired clay in very hard fine black sandy clay.

Area B

A sherd of curved *imbrex* roof tile was recovered from layer (2141). It is 15mm thick and made with fine sandy orange clay.

Discussion

There is a paucity of ceramic building material from the Roman site. The Roman roof tile may have been restricted to one building then scattered during the intervening centuries.

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5.6 The other finds by Tora Hylton, with Paul Clements

With the exception of a single Roman coin (reported on by Paul Clements) and an armlet from Area B, Roman finds were recovered from archaeological deposits in Area A. The assemblage includes a copper alloy brooch and a nail from Enclosure E2 and a rod fragment from the north-east corner of Enclosure E3.

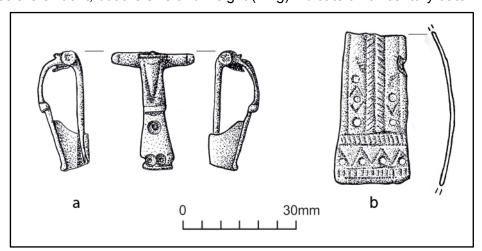
Each object has been described and measured, and a descriptive catalogue is retained in archive. The Roman artefacts were recovered by hand. One iron object from the Roman site was submitted for X-ray, this was undertaken by Beth Werret of Wiltshire Conservation Service, Wiltshire County Council. This not only provided a permanent record, but it enabled identification and revealed technical details not previously visible. No stabilisation was carried out. All sensitive finds are packaged in air tight plastic containers with silica gel and an indicator card, to maintain a low humidity and reduce deterioration.

Items associated with dress include a brooch (SF42) and an armlet (SF57). The former was recovered from the western boundary ditch of Enclosure E2, it is a complete example of Mackreth's Type CD H 6.bc (2011, plate 58, 11560). A type referred to by Mackreth as 'The Nene Group', because its distribution area mainly covers the Anglian region from Norfolk to Leicester. This brooch dates to the late 1st - 2nd century. The armlet fragment (SF57) was recovered from topsoil deposits overlying Area B [2000]. It represents a wide, flat-sectioned pen-annular form which flairs out slightly towards a straight-edged terminal (Fig 37) and it displays similarities to 1st century examples from the Verulamium (Waugh and Goodburn 1972, fig 32, 30 and 31) and Colchester (Crummy 1983, fig 40, 1586).

The other stratified finds include an ?unused iron nail (SF52) from Pit 5098 in the south east corner of Enclosure E2 (not illus). It measures 48mm in length and typologically equates to Mannings Type 1b (1985, 134ff) with a flat sub-circular flat head and tapered square-section shank. Finally a rod fragment (SF55) with a sub-circular cross-section (not illus) was recovered from the north-east corner of Enclosure 3 [5218]. Although undiagnostic, one end is forged at right angles, suggesting that it may be part of a joiner's dog or structural fitting.

A Roman coin by Paul Clements

One Roman-period coin was recovered from the topsoil in Area B (2000) via metal detector. SF49 is a heavily pitted copper alloy coin, 16mm in diameter. No discernible features are evident, but the size and weight (1.7g) indicate a 4th-century date.



Roman finds: copper-alloy brooch (SF42), and copper-alloy armlet fragment (SF57), scale 1:1 Fig 37

Catalogue of illustrated finds

Fig 37a. Colchester derivative, hinged pin type. Complete. Head of pin pierced and mounted on an axis bar housed in the wings of the brooch. Wings decorated with terminal grooves; bow decorated with two zones of ornamentation separated by a cross-moulding. The upper section of the bow is decorated with a triangle, curved in section and bordered by a groove. The lower section, a fantail foot, is decorated with three ring and dots motifs. Length: 30mm. SF42, Context 5007, Enclosure 2

Fig 37b Armlet, copper alloy. Incomplete, one terminal only. Decorated with marginal grooves and a central panel of opposing oblique incisions forming a horizontal line of close set chevrons, flanked by crudely executed lozenges and stamped circles. L: 40mm W: 17-20mm SF57, Context 2000, Topsoil

SF No.	Area/ Fill/ Cut/ Context	Material	Object	Description
55	A / 5218 / 5219 / gully	Iron	Rod frag.	Rod fragment with sub-circular section, possibly a staple. L: 40mm
56	A / 5240 / 5242 / pit	Stone	??	-
42	A / 5007	Copper alloy	Brooch	Colchester derivative, hinged pin type. Complete. Late 1st and 2nd century. L: 30mm
57	B / 2000 / topsoil	Copper alloy	Armlet	Terminal fragment from penannular armlet. Decorated. Prob 1st century. L: 40mm W: 17-20mm
49	B / 2000 / topsoil	Copper alloy	Coin	Heavily pitted, no discernible features. Probably 4th-century date. D: 16mm, Weight: 1.7g

Table 10: Catalogue of other Roman finds

5.7 The animal bone by Stephanie Vann

An assemblage of 475 fragments of animal bone was recovered from pits, ditches and gullies on the Roman site, of which 217 (45%) were identifiable. The assemblage consisted of cattle, sheep, ovicaprid, pig, horse, dog, small mammal, medium mammal and large mammal. There was no evidence of fish remains.

Method

The assemblage was subjected to macroscopic examination. Species identification was undertaken at a context level. Fragments of mammal bone that could not be attributed to a taxonomic group equal or lower than genus were categorised as either 'large mammal' or 'medium mammal'. A summary of the results is presented in Table 11. Fused and unfused elements were recorded. For the main domestic species – cattle, sheep/goat and pig – tooth wear on mandibles was recorded to calculate age where possible. Measurements followed Von den Driesch (1976).

Results

Preservation of the animal bone at this site was poor to good. Fragmentation was moderate and surface abrasion was moderate with bone exhibiting signs of erosion, weathering and other taphonomic damage in some instances. Fragmentation was the result of both old and fresh breaks. Eight Roman-period bones exhibited butchery marks and one showed potential pathology. From the Roman and medieval bone, ten bone fragments showed evidence of burning and 27 showed evidence of canid gnawing.

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Table 11: Total number of fragments per species from Roman contexts

Species	Number of excavated fragments
Cattle (Bos taurus)	38
Sheep (Ovis aries)	29
Sheep/Goat (Ovicaprid)	12
Pig (Sus scrofa)	7
Horse (Equus caballus)	6
Dog (Canis familiaris)	21
Large Mammal	69
Medium Mammal	35
Total identified	217
Unidentified	258
Total	475

Tooth wear was recorded for the mandibles that were complete enough to permit it following Grant (1982) and the results are shown in Table 12. This is a widely used, published procedure that records the stage of tooth eruption and wear based on a series of defined stages, enabling an age to be assigned to individual animals and thus analysis of age at death patterns to be undertaken.

Table 12: Ageing of animal species by tooth wear (Grant 1982)

Fill / cut / type	Species	DP4	M1	M2	М3
5003 / 5004 / ditch	Cattle	-	k	L	-
5080 / 5082 / pit	Sheep	-	g	F	-
5162 / 5163 / pit	Sheep	-	g	-	-
5093 / 5094 / pit	Pig	-	е	С	С
5188 / 5191 / pit	Pig	-	е	D	b

Those skeletal elements complete enough to be measured for total length are shown in Table 13. The total length was then used to estimate the height at the withers based upon factors devised by Matolcsi (1970) for cattle and Kouldeka (1885) for dog. Such calculations help with the visualisation of the size of a single animal and the variation of animals within a population, although it should be noted that the height calculated is approximate; the dimensions of a long bone are dependent on many factors, including genes, age, sex and nutrition.

Table 13: Measurable animal bone elements

Fill / cut / type	Species	Element	Total Length (mm)	Withers Height (mm)
5046 / 5048 / ditch	Cattle	Radius	280	1204
5078 / hollow	Cattle	Metacarpal	190	1149.5
5129 / 3131 / pit	Cattle	Metatarsal	207	1092.9
5132 / 5133 / pit	Cattle	Metacarpal	182	1101.1
5190 / 5191 / pit	Dog	Radius	142	457.2

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Discussion

Whilst it is true that the small size of the assemblage makes it difficult to draw any significant conclusions, there is nothing about it that is in any way extraordinary for a domestic assemblage of the Roman period. Cattle are regularly exploited throughout the Iron Age and Roman periods, along with other domestic species such as ovicaprids (sheep/goat) and pigs (Maltby 1981) and this continues to be the case into later periods. The dominance of such remains within the assemblage from Benefield is therefore not unusual. The good survivability of large, strong bones such as those of cattle and horse does also need to be taken into consideration, however, as this dominance may be a reflection of preservation rather than husbandry practices at this site.

Following the York System (Table 14), the cattle mandible from fill (5003) would be classified as subadult. The sheep mandibles would be classified as subadult. Although the postmortem loss of the third molar in both instances makes it difficult to determine the maximum age range. The pig mandible from fill (5093), where the third molar is unerupted and in the crypt, is younger than that of fill (5188), where the third molar is in wear. The younger pig would be classified as subadult (stage SA1), the older to adult (stage A1). Adult stages are defined by reference to Tooth Wear Stage sensu Grant (1982; also Reitz and Wing 1999: 163-5), after O'Connor (2003: table 31).

Table 14: Definitions of dental eruption and attrition stages used in analysis of age at death, using mandibles with at least one recordable molar or 4th premolar.

Code	Phase	Definition
Cattle an	d Sheep Mand	libles
N	Neonatal	DP4 Unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, M1 not in wear
1	Immature	M1 in wear, M2 not in wear
SA	Subadult	M2 in wear, M3 not in wear
SA1		M3 forming, to just erupting
SA2		M3 erupting
Α	Adult	M3 in wear
A1		M3 up to minor dental exposure (stages a and b)
A2		M3 dentine exposure across central column (stages c and d)
A3		M3 dentine exposure on distal column (stages e to h)
E	Elderly	Dentine exposure to or beyond stage j
Pig Mand	dibles	
N	Neonatal	DP4 Unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, M1 not in wear
I	Immature	M1 in wear, M2 not in wear
I1		M2 present in crypt
12		M2 erupting
SA	Subadult	M2 in wear, M3 not in wear
SA1		M3 present in crypt
SA2		M3 erupting

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Code	Phase	Definition
Α	Adult	M3 in wear
A1		M3 with enamel attrition only (stage a)
A2		M3 with minor dentine exposure (stages b to d)
A3		M3 dentine exposure merging on mesial cusps (stages e to h)
Е	Elderly	Three main zones of dentine exposure across M3 merging (stage j

Following the fusion stages (Reitz and Wing 1999) the total number of fused and unfused skeletal elements for the main domesticates (Table 15) shows that most were above the early fusing stage at the time of death. One exception is an ovicaprid proximal first phalanx, indicating a sheep/goat of less than 6-16 months (5093).

The middle and late-fusing elements of cattle are mostly fused during the Roman period indicative of animals over the age of 42 - 48 months (3.5 - 4 years) (Reitz and Wing). However, the late-fusing ovicaprid elements are all unfused, indicating they were less than 36 - 42 months (3 - 3.5 years) (Reitz and Wing) at the time of death. This is compatible with the tooth wear data and suggests that ovicaprids at the site may have been slaughtered at a younger age than cattle.

Table 15: Total number of fused and unfused skeletal elements for main domesticates (after Reitz and Wing 1999) during the Roman period

	Early	Fusing	Middle	e Fusing	Late Fusing		
	Number Unfused	Number Fused	Number Unfused	Number Fused	Number Unfused	Number Fused	
Cattle	0	12	0	6	1	4	
Ovicaprid	1	4	0	1	0	0	
Total	1	16	0	7	1	4	

The skeletal elements represent a variety of parts of the body, including the axial skeleton (cranium, pelvis, scapula and vertebrae), the feet (metapodials, tarsals and phalanges) and the limbs (humerus, radius, ulna, femur, and tibia). This distribution pattern, combined with the presence of several cut and chop marks on some elements, may indicate that this is normal butchery waste, rather than the result of some other industrial process. Eight elements of ox, ovicaprid, horse, medium mammal and large mammal of Roman date show evidence of butchery. Bones were chopped through midshaft or broken open to extract the marrow.

The cattle withers height range of 1092–1204mm (or 1.09–1.20m) at Benefield is comparable to the mean cattle withers height of 1.09m of the early Roman phases at Causeway Lane in Leicester, which had a range of 1.00–1.21 m (Gidney 1999: 313). The mean in the later Roman phases of the same site is slightly greater at 1.14m (Gidney 1999: 313), but still within the range exhibited at Benefield. The animals from this site are, therefore, comparable with animals from other sites dated to the Roman period.

Canids were present on the site throughout the Roman period, as indicated by both the presence of dog bones from contexts (5078), (5162) and (5190), and from the evidence for canid gnawing on a number of bones from Roman contexts. The withers height range of the dog skeleton in context 5190 was 457mm. These are comparable

to the withers heights of Roman dogs given by Clark (1995), which had a range of 24–80cm. The withers height of the individual from fill (5190) was comparable to the withers height of the modern spaniel (45.9–48.4cm) used by Clark (1995) for comparative purposes.

An example of possible pathology is given by a cattle metacarpal from fill (5078). The bone exhibits shallow depressions on the proximal lateral articulation, 7mm by 4.5mm in size. The bone is shallow and with a porous, woven-bone appearance. Similar depressions in the proximal articulation have been seen at other sites such as the Roman site of Alchester (Vann 2008), and are thought to represent either osteochrondritic lesions or inherited (or epigenetic) traits.

5.8 Plant macrofossils by Val Fryer

Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area, and seventeen from Roman contexts were submitted for assessment. The samples were bulk floated by Northampton Archaeology and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Table 16. Nomenclature within the tables follows Stace (1997) for the plant macrofossils and Kerney and Cameron (1979) for the mollusc shells. All plant remains were charred. Modern roots, seeds, chaff and arthropod remains were abundant within all Roman assemblages.

Results

Cereal grains/chaff and seeds of common weeds were present at a low to moderate density within all but one of the Roman assemblages. Preservation was variable; some plant macrofossils were well preserved, but other grains and seeds were puffed and distorted, probably as a result of combustion at very high temperatures.

Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains were recorded, within wheat being predominant throughout. Most of the recorded wheat grains were of an elongated 'drop' form typical of spelt (T. spelta), although occasional more rounded hexaploid type forms were also noted. Spelt glume bases were present within nine assemblages, whilst bread wheat (T. aestivum/compactum) type rachis nodes were noted within only three samples. Detached sprouts from germinated cereal grains were noted within three assemblages.

Weed seeds were very scarce, with most occurring as single specimens within an assemblage. Most were of common segetal weeds, with taxa noted including brome (Bromus sp.), black bindweed (Fallopia convolvulus), grasses (Poaceae) and dock (Rumex sp.). A single charred seed of henbane (Hyoscyamus niger), a plant often found growing near dung-heaps, was noted within the assemblage from sample 20 (enclosure ditch fill [5061]). Small fragments of possible hazel (Corylus avellana) nutshell were recovered from samples 7 (posthole [5147]) and 8 (pit [5150]). Charcoal/charred wood fragments were present throughout, although rarely at a high density. Other plant macrofossils included indeterminate buds, culm nodes and fruit stone/nutshell fragments.

The fragments of black porous and tarry material were all probable residues of the combustion of organic remains (including cereal grains) at very high temperatures. Other remains occurred infrequently, but did include small pieces of bone (some of which were burnt/calcined), pellets of burnt or fired clay and ferrous flakes. Small mammal/amphibian bones were present within a number of assemblages, but as most were extremely well preserved, it was considered likely that some (or all) were modern contaminants introduced via bioturbation. Later disturbance of the soil column may

also have been responsible for the introduction of the mollusc shells, which were recorded within all seventeen assemblages. Although some were fragmented and abraded, most were extremely well preserved, retaining both delicate surface structures and excellent coloration. Open country species, particularly those associated with short-turfed grassland habitats, were predominant in most instances.

Roman pit assemblages (Table 16)

The eight pit assemblages are generally sparse, with sample 4 (pit [5044]) containing little other than small fragments of charcoal/charred wood. Cereal grains/chaff and seeds of common weeds are present, but at such a low density that the primary deposition of the remains within the pits is not indicated. It is considered most likely that the material is largely derived from scattered or wind-blown refuse, which was accidentally incorporated within the pit fills.

Roman posthole assemblages (Table 16)

Two samples were taken from possible posthole fills. Sample 6 (fill 5140) is particularly sparse, but the assemblage from sample 7 is similarly composed to those from the pit fills, and would appear to be derived from a similar source.

Roman corn dryers (Table 16)

Three samples were taken, one from structure [5071] (sample 5) and two from structure [5101] (samples 10 and 11). All contain moderate densities of cereal grains and chaff but, perhaps a little surprisingly, charcoal fragments are very scarce. It would appear most likely that the recorded remains are principally derived from the cereals which were either parched or dried within the ovens, but it would also appear that the structures were cleaned regularly, probably as a means of preventing accidental fires.

Roman ditch assemblages (Table 16)

Four samples were taken from the ditches surrounding Enclosure E2, the subsidiary Enclosure E3 to the north east, and from Ditch [5037] within the southern half of the main enclosure. As with the pit and posthole assemblages, plant macrofossils are generally scarce, with most probably being derived from scattered refuse.

Conclusions

In summary, the assemblages are all small (0.1 litres in volume or less), and although plant macrofossils are recorded, the density of material is generally low. The primary deposition of materials within any of the contexts is not indicated, and as cereals are predominant throughout, it is tentatively suggested that the majority of the remains are derived from the rake-out waste from the ovens. Such material would be readily dispersed by the wind or by animal or human agents, particularly if it was placed on middens after removal, and it is probably of note that at least twelve of the sampled contexts are within reasonably close proximity to the two ovens. Although ovens were an essential element of cereal processing, being used to parch the glumed wheat ears prior to threshing as well as drying all grain types prior to storage, they were also multifunctional structures which were almost certainly also used for the preparation of bread and other foodstuffs. This may explain the presence of a number of small bone fragments within certain of the pit assemblages.

Table 16: Plant macrofossils from Roman contexts

x = 1 - 10 specimens xx = 11 - 50 specimens xxx = 51 - 100 specimens xxxx = 100+ specimens x

Sample No. Context No.	4 5043	8 5148	12 5216	13 5205	14 5207	15 5166	16 5167	17 5168	6 5140	7 5146	5 5070	10 5099	11 5100	18 5051	20 5061	21 5106	19 5024
Feature No.	5044	5150	5217	5206	5208	5169	5169	5169	5141	5147	5071	5101	5101	5049	5063	5107	5026
Feature type	Pit	?oven	Pit	?oven	Pit	Pit	Pit	Pit	Post hole	Post hole	Pit	Corn dryer	Corn dryer	Encl Ditch	Encl Ditch	Encl Ditch	Ditch
Cereals																	
Avena sp. (grains)	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Hordeum sp. (grains)	-	-	-	X	-	-	X	-	-	-	X	-	xcf	-	-	-	-
(rachis internode)	-	-	-	xcf	-	-	-	-	-	-	-	-	-	-	-	-	-
Triticum sp. (grains)	-	X	X	X	xx	-	-	X	-	xcf	хx	x	x	X	-	-	-
(glume bases)	-	-	X	-	X	-	-	X	-	-	-	хх	ХX	X	-	-	X
(spikelet bases)	-	-	-	X	X	-	-	X	-	-	-	x	x	-	-	-	-
T. spelta L. (glume bases	-	-	-	X	X	X	X	X	-	-	X	x	xx	-	-	-	X
T. aestivum/ compactum type (rachis nodes)	-	-	-	X	-	-	-	-	-	-	-	x	x	-	-	-	-
Cereal indet. (grains)	-	X	X	X	XX	X	X	xcf	X	xcf	XX	X	XX	xfg	X	X	-
(detached sprouts)	-	-	-	-	X	-	-	-	-	-	-	X	X	-	-	-	-
Herbs																	
Bromus sp.	-	-	-	-	xcf	-	-	-	x	-	xcf	-	-	xcf	-	-	-
Fabaceae indet.	-	-	-	-	-	-	-	-	-	Xcf	-	-	-	X	-	-	-
Fallopia convolvulus (L.)A.Love	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	Xcf
Hyoscyamus niger L.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-
<i>Medicago/Trifolium/Lotus</i> sp.	-	-	-	-	xcf	-	-	-	-	-	-	-	-	-	-	-	-
Small Poaceae indet.	-	-	-	X	-	-	X	-	-	-	-	-	X	-	-	-	-
Large Poaceae indet.	-	-	-	-	X	-	-	-	-	-	X	-	-	-	-	-	-
Polygonum aviculare L.	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Rumex sp.	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample No. Context No.	4 5043	8 5148	12 5216	13 5205	14 5207	15 5166	16 5167	17 5168	6 5140	7 5146	5 5070	10 5099	11 5100	18 5051	20 5061	21 5106	19 5024
Feature No.	5044	5150	5217	5206	5208	5169	5169	5169	5141	5147	5071	5101	5101	5049	5063	5107	5026
Feature type	Pit	?oven	Pit	?oven	Pit	Pit	Pit	Pit	Post hole	Post hole	Pit	Corn dryer	Corn dryer	Encl Ditch	Encl Ditch	Encl Ditch	Ditch
Sherardia arvensis L.	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Tree/shrub macrofossils Corylus avellana L.	-	xcf	-	-	-	-	-	-	-	xcf	-	-	-	-	-	-	_
Other plant macrofossils Charcoal <2mm	xxxx	xx	x	xx	xx	xxxx	xxxx	xxx	xx	xxxx	x	x	xx	х	xxx	_	х
Charcoal >2mm	xxxx	x	-	x	xx	xx	хх	xx	X	xxx	x	-	x	X	хх	-	X
Charcoal >5mm	x	-	-	-	-	-	-	-	-	x	-	-	-	X	x	-	X
Charred root/stem	x	-	-	-	X	-	X	X	-	-	-	-	-	-	x	-	-
Indet,bud	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
Indet.culm nodes	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Indet.fruitstone/nutshell frag.	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-
Indet.seeds	-	-	-	-	X	-	X	-	-	X	X	-	-	-	-	-	-
Other remains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Black porous 'cokey' material	X	-	XX	XXX	XX	X	-	X	X	X	XX	X	X	X	-	X	X
Black tarry material	X	X	-	XXXX	X	-	-	X	X	X	X	X	X	-	-	-	-
Bone	-	-	-	-	X	x xb	X	x xb	-	-	-	-	-	-	-	-	X
Burnt/fired clay	X	-	-	X	X	-	X	-	-	X	X	-	X	-	-	-	-
Ferrous frags.	X	X	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-
Small coal frags.	-	-	-	xxx	X	-	X	x	-	-	-	X	x	X	-	-	X
Small mammal/amphibian bones	Xpmc	-	Xpmc	xpmc	Xxpmc	xpmc	xpmc xb	xpmc	-	-	Xpmc	xpmc	xpmc	xpmc	xpmc	-	-
Vitreous material	-	-	-	-	-	-	x	-	_	-	-	-	-	_	x	-	-

Sample No. Context No.	4 5043	8 5148	12 5216	13 5205	14 5207	15 5166	16 5167	17 5168	6 5140	7 5146	5 5070	10 5099	11 5100	18 5051	20 5061	21 5106	19 5024
Feature No.	5044	5150	5217	5206	5208	5169	5169	5169	5141	5147	5071	5101	5101	5049	5063	5107	5026
Feature type	Pit	?oven	Pit	?oven	Pit	Pit	Pit	Pit	Post hole	Post hole	Pit	Corn dryer	Corn dryer	Encl Ditch	Encl Ditch	Encl Ditch	Ditch
Molluscs												,	u. y c.				
Woodland/shade loving species Acanthinula aculeata	xcf	_	-	-	-	-		X	-	-	-	-		X		-	-
Aegopinella sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
Carychium sp.	-	-	-	X	-	-	-	X	-	-	-	-	-	xxx	-	-	-
Clausilia sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	xx	-	-	-
Discus rotundatus	-	x	-	-	-	-	-	X	-	-	-	-	x	x	x	-	-
Oxychilus sp.	-	-	x	-	-	-	X	x	-	-	x	-	-	x	x	-	-
Punctum pygmaeum	-	-	-	-	-	-	-	-	-	-	x	-	-	-	-	-	-
Vitrea sp.	-	-	X	-	-	-	x	хх	-	-	xcf	-	X	xx	x	-	-
Zonitidae indet.	xcf	x	-	-	X	x	x	x	-	-	-	-	-	x	x	-	-
Open country species																	
Helicella itala	xcf	-	x	x	X	x	x	x	-	-	x	x	x	x	x	x	-
Helicidae indet.	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
Pupilla muscorum	x	x	x	x	X	x	x	x	X	-	x	X	X	X	-	X	X
Truncatellina sp.	-	-	-	-	X	-	x	x	-	-	x	-	X	-	-	X	-
Vallonia sp.	x	x	xx	x	xx	x	xx	xx	X	X	xx	X	-	xxx	x	X	-
V. costata	x	x	-	x	X	-	x	x	X	-	x	-	x	xx	x	-	X
Vertigo pygmaea	x	x	X	x	X	x	x	x	-	-	x	x	x	x	x	-	X
Catholic species																	
Cochlicopa sp.	-	x	X	x	X	x	x	X	-	-	x	x	x	x	X	-	X
Nesovitrea hammonis	x	-	-	-	-	-	-	-	-	-	-	-	-	xcf	-	-	-
Trichia hispida group	x	x	XX	x	xx	x	X	X	-	-	xx	x	X	XXX	X	x	xxx
Volume of flot (litres) % flot sorted	<0.1 100%	<0.1 100%	<0.1 100%	<0.1 100%	<0.1 100%	<0.1 100%											

5.9 Charcoal wood samples by Imogen van Bergen Poole

Material and Methods

The charcoal fragments from each context were mainly relatively large in transverse diameter (>3mm up to a maximum of >10mm) although fragments from some contexts were ≤3mm and thus not big enough to secure precise identification.

From each context, unless the number of fragments dictated otherwise, a random selection of at least 100 fragments were studied to determine the taxonomic identity, the state of preservation and whether any material was suitable for radiocarbon dating. Charcoalified fragments were prepared using standard methods (Gale and Cutler 2000). Anatomical structures were examined using reflected light on an Olympus BX41 compound microscope with magnifications up to x200.

Material was identified with the aid of relevant literature (eg Schweingruber 1990; Gale and Cutler 2000) whenever necessary. It must be noted that wood anatomy alone is often not enough to secure identification to individual species and thus the samples have been identified to generic level only (especially when more than one native species exists in the British flora) unless only one native species exists in the British flora. Whenever possible the maturity of the wood (i.e. whether the specimen is of twig wood, heartwood or round wood) was assessed.

Fragments from each sample were grouped according to taxon and assigned a number (Table 17) to facilitate future reference if necessary. If there was some degree of doubt regarding taxonomic identity (due to, for example, fragment size, preservation etc.) the number is preceded by a question mark. All fragments were handled using tweezers to minimise carbon contamination and like-fragments were placed in separate aluminium foil envelopes labelled with an arbitrary number.

Results

The majority of the wood is considered to be round wood, probably originating from a relatively small diameter axis such as branch material based on growth ring curvature. If the fragments reveal evidence of being heart wood or twig wood this has been recorded in Table 17. The fragments all showed evidence of rounding which indicates that they may have been subject to some weathering or abrasion post charcoalification. Preservation was relatively good with some fragments exhibiting well-preserved anatomy and good reflectivity whilst others showed evidence of distorted anatomy and homogenised cell walls usually coupled with high reflectivity. A summary of the taxonomic finds from all the contexts are provided in Table 17 whilst Table 18 provides the details of all fragments studied from each context at this site.

Table 17: Summary of the taxonomic identity of the charcoal

Family	Genus and species	Common name
Betulaceae	Corylus avellana	hazel
	Quercus sp.	oak
	Quercus/Castanea sp.	oak/sweet chestnut
Oleaceae	Fraxinus excelsior	ash
Rosaceae	Prunus sp.	(probably) cherry
Salicaceae	Populus/Salix	poplar/willow
	Salix sp.	willow
Sapindaceae	Acer campestre	field maple

Familial classification follows that of the Angiosperm Phylogeny Group (2009)

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Table 18: Summary of the charcoalified wood fragments in ten Roman contexts

Fill / cut / type	Sample	Taxonomic status	Bag number	Number of fragments	Notes
5043 / 5044 / pit	4	Prunus	1	20	
•		Acer campestre	2	31	
		?Acer?Prunus	3	8	
		Unidentifiable	4	32	
		Fraxinus	5	8	
		?Prunus	6	2	
		Unidentifiable	7	2	suitable for radiocarbon
		twig	,	2	dating
5070 / 5071 / corn dryer	5	Acer campestre	1	4	
		Prunus	2	2	
		Unidentifiable	3	1	
		Fraxinus	4	1	
5140 / 5141 / posthole	6	Quercus	1	100	heart wood with tyloses present
5146 / 5147 / posthole	7	Quercus	1	25	
-		Acer campestre	2	3	
		Fraxinus	3	3	
		Corylus	4	3	
		Populus/Salix	5	1	
		Unidentifiable	6	14	
5148 / 5150 / pit	8	Quercus	1	10	heart wood with tyloses present
P.		Unidentifiable	2		including possible Quercus
5166 / 5169 / pit	15	Quercus	1	12	
		Populus/Salix	2	2	
		Unidentifiable twig	3	8	pith and cortex present; suitable for radiocarbon
		?Acer	4	4	dating
		campestre	_	1.1	cize and processation
		Unidentifiable ?Fraxinus	5 6	14	size and preservation
5167 / 5169 /	16	Acer campestre	<u>6</u> 1	19	
pit		Quercus/		4	
		Castanea	2		
		?Fraxinus	3	1	
		Unidentifiable	4	13	
		Unidentifiable twig	5	1	suitable for radiocarbon dating
5168 / 5169 / pit	17	?Acer campestre	1	5	
		Unidentifiable	2	12	
		?Fraxinus	3	1	
		Quercus/ Castanea	4		
5182 / 5183 / pit	9	Corylus	1	18	
		Salix	2		

Fill / cut / type	Sample	Taxonomic status	Bag number	Number of fragments	Notes
		Fraxinus	3	32	
		unidentifiable	4	8	outer cortex of round wood
5182 / 5183 / pit	9	Acer campestre	1	8	
Flot		Fraxinus	2	37	
		Quercus	3	24	
		Populus/Salix	4	17	
		Corylus	5	15	
		Populus/Salix	6	1	twig wood with pith; suitable for radiocarbon dating
		Fraxinus	7	1	twig wood with pith; suitable for radiocarbon dating
		Quercus	8	1	heartwood with tyloses present
5205 / 5206 / pit	13	Unidentifiable	1	24	preservation

Contexts

Pit fill (5043)

The fragments from this context were found in the fill of pit [5044]. The charcoalified material was generally >3 mm in diameter (many appearing to be splinters of larger fragments) with good reflectivity, friable and some evidence of distorted anatomy. This indicates that the wood could have been subject to temperatures in excess of 400°C probably more likely in the region of 600-800°C (cf. Braadbaart and Poole 2008).

About one third of the fragments were unidentifiable due to their small size and poor preservation. One unidentifiable twig was packaged separately in case since it is suitable for radiocarbon dating and might be useful in this respect in the future. Of the identifiable fraction three distinct taxa could be recognised: ?cherry (*Prunus*) (34%), field maple (*Acer campestre*) (53%) and ash (*Fraxinus*) (13%). The majority of the identifiable fragments were field maple and *Prunus* with small proportion of ash.

Fill of corn dryer (5070)

The eight dark grey charcoal fragments from this context were found in close proximity to the corn dryer [5071]. The colour of the charcoal coupled with the degree of homogenisation of the cell walls of the ground tissue suggests that they were subject to high temperatures, possibly in excess of 600°C (cf. Braadbaart and Poole, 2008). Taxa identified include field maple (*Acer campestre*),?cherry (*Prunus*) and ash (*Fraxinus*).

Posthole fill (5140)

This sample came from the fill of posthole [5141] which lay in the north of E2. The charcoal fragments from this context appear to be pieces (>3 mm diameter) of oak heartwood as evidenced by the presence of tyloses. The only taxon preserved is oak (*Quercus*). Reflectivity is good and the degree of homogenisation of the cell walls of the ground tissue suggest relatively high heating temperatures (cf. Braadbaart and Poole 2008).

Posthole fill (5146)

This sample came from the fill of posthole [5147] which lay in the north of E2. The majority of the fragments are <5 mm in diameter and are derived from oak (*Quercus*)

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(48%), with a lesser proportion comprising field maple (*Acer campestre*), ash (*Fraxinus*), hazel (*Corylus*) (all ~6%) and willow/poplar (*Populus/Salix*) (~1.5%). Some of the fragments show evidence of distinct homogenisation of the cell walls indicative of exposure to high temperatures, probably higher than those in the neighbouring context (5140).

Pit fill (5148)

Pit [5150] was situated in the north of E2. The few fragments retrieved from its fill (5148) are <5 mm in diameter and are all probably oak (*Quercus*) although size prohibits the identification in the 'unidentifiable' fraction. There are not enough pieces to make any inferences regarding heating temperatures etc.

Pit fill (5166)

Pit [5169] was situated to the south of the site. Three of its fills were sampled for charcoal. The fragments recovered from fill (5166) are relatively small; less than 5mm, some of which are <3mm in diameter and thus too small to warrant any further investigation. The fragments studies show good reflectivity, some cell wall homogenisation and distorted anatomy indicating that the temperatures to which they were exposed were probably in excess of 600 °C, possibly higher (cf Braadbaart and Poole, 2008). The majority of the identifiable fragments were oak (Quercus) (57%) with the remainder comprising poplar/willow (*Populus/Salix*), field maple (*Acer campestre*) and possible ash (*Fraxinus*). There was unidentifiable twig with both pith and cortex preserved which was packaged separately in case it was needed for radiometric dating at a future date. Those classified as unidentifiable were too small and badly preserved to enable a precise identification.

Pit fill (5167)

In contrast to the fragments recovered from (5166), the majority recovered from (5167) were field maple (*Acer campestre*) (79%) with oak/sweet chestnut (*Quercus/Castanea*) and ash (*Fraxinus*) making up the remainder of the identifiable portion. The 'oak' is recorded as *Quercus/Castanea* as it is possible that these samples could belong to sweet chestnut (*Castanea*) since the Romans are thought to have introduced the sweet chestnut to the British flora (Rackham 1990). The size of the fragments prevents any definite identification. This is also the case with the ash. Again there was unidentifiable twig with pith preserved which was packaged separately in case it was needed for radiometric dating at a future date. The fragments showed good reflectivity and thus exposure temperatures were probably >400 °C (cf Braadbaart and Poole, 2008).

Pit fill (5168)

This context comprised the third sample from fills of pit [5169]. The pieces were all small in size thus accounting for the high proportion of unidentifiable material. Of the identifiable fraction field maple (*Acer campestre*), probable ash (*Fraxinus*) and oak/sweetchestnut (*Quercus/Castanea*) were recorded.

Pit fill (5182)

Two bags of charcoal fragments were recovered from pit [5183] on the eastern edge of the site. One bag was labelled 'flot'. The taxonomic composition of the material recovered from this context were similar with hazel (*Corylus*), willow (*Populus/Salix*) type and ash (*Fraxinus*) being recorded in both, and field maple (*Acer campestre*) and oak (*Quercus*) present only in the 'flot' material. Unidentifiable outer cortical material was only present in the 'non flot' bag. Two pieces of twig wood with pith present were also recovered from the 'flot' material and were kept separate in case they could be of use for radiocarbon dating at a later date.

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All material was dark black in colour, relatively soft compared with the other charcoal material recovered from this site, large in size (>10mm diameter) and with a relatively low reflectivity indicating a relatively low exposure temperature (<400°C) (cf Braadbaart and Poole, 2008).

Pit fill (5205)

The fragments recovered from the fill of pit [5206] were unidentifiable due to their preservation. They are all grey in colour, friable and some show high levels of reflectivity indicating a high exposure temperature which would support the supposition of this feature functioning as a hearth or oven.

Discussion

Charcoal fragments derived from the Roman phase of this site indicate the presence of hazel, oak, ash, cherry, willow, ?poplar and field maple. These taxa are all native to British woodlands. Hazel, oak, ash, willow and field maple can all be coppiced and provide abundant (fuel) material in a short rotation and indeed it is known that the Romans were familiar with this system and planted mixed coppices (Rackham 1990). The overlap in the taxa recovered from the charcoalified remains found in a number of different contexts provides an indication these taxa were probably used expressly as fuel woods (as opposed to the casual burning of random woody material) and therefore would have been grown locally. This in turn provides an indication of the taxonomic composition of the local woodland bearing in mind that cultural selection and preservational differences can, and does, bias the archaeobotanical record.

Estimated temperatures of exposure (ie >500°C) from at least three contexts (5043, 5070, 5166, and possibly 5167) suggest that the fires were of high temperature which might infer an industrial use as opposed to domestic use (cf Braadbaart and Poole 2008) (but see note above regarding the effect of preservation in alkaline soils) for the fire(s). Whether or not these contexts mark the original locations of the fires that resulted in these charcoalified remains, and in turn can be used to infer a use for these fires (eg marking a hypocaust system, industrial hearth etc.), cannot be determined.

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6 THE MEDIEVAL SETTLEMENT – AREA B

The area of medieval settlement which was excavated in Area B comprised a number of stone buildings within plots defined by ditches or stone walls (Figs 38 and 39). At least one re-arrangement of the boundaries to insert a new plot took place. Interpretation was hampered by the small area excavated and the incompleteness of the evidence, with many walls and some boundaries no longer surviving. This left the nature of the buildings and the boundaries unclear, although some interpretation has been attempted. The activity in Area B is dated by the pottery assemblage to between 1150-1400 AD.



Aerial view of Area B, looking south-west, across Building B2 in the foreground, with B1, B4 and B3 behind Fig 38

The topography of the site slopes down to the south-east towards the Lyveden Brook. In this part of the site, conditions were extremely wet with high ground water levels. The water-logged condition of the soil impacted the excavation strategy and hindered interpretation of the relationship between features, particularly in areas of intercutting.

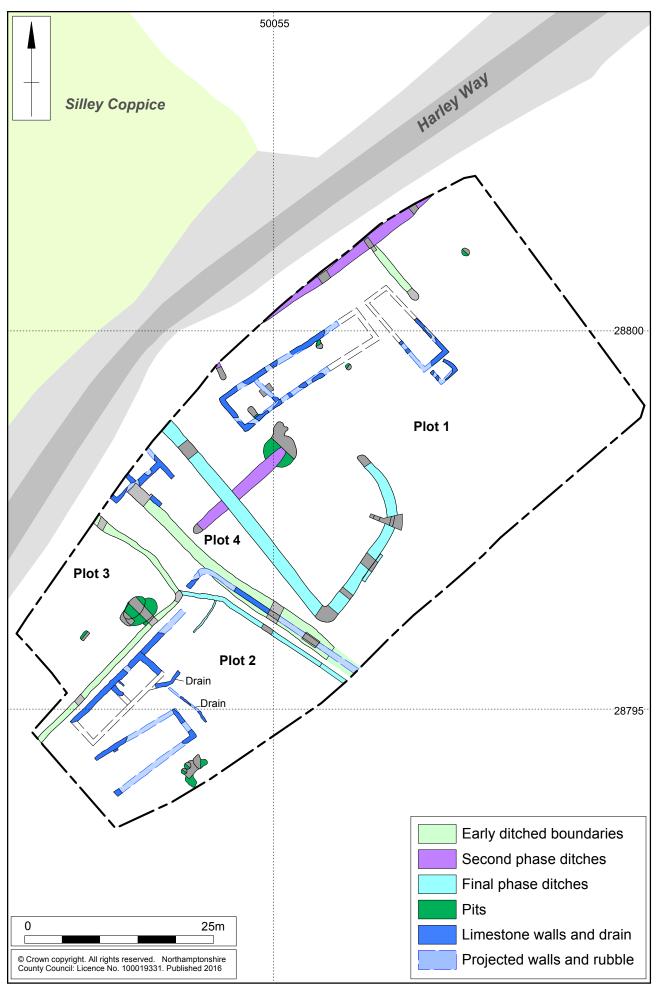
6.1 Geology and general stratigraphy by Steve Critchley

The topsoil in the area of the medieval settlement comprises friable mid-grey-brown silty clay between 0.24 and 0.33m thick, containing limestone fragments, and occasional sub-circular or angular pebbles. No subsoil was noted in this area.

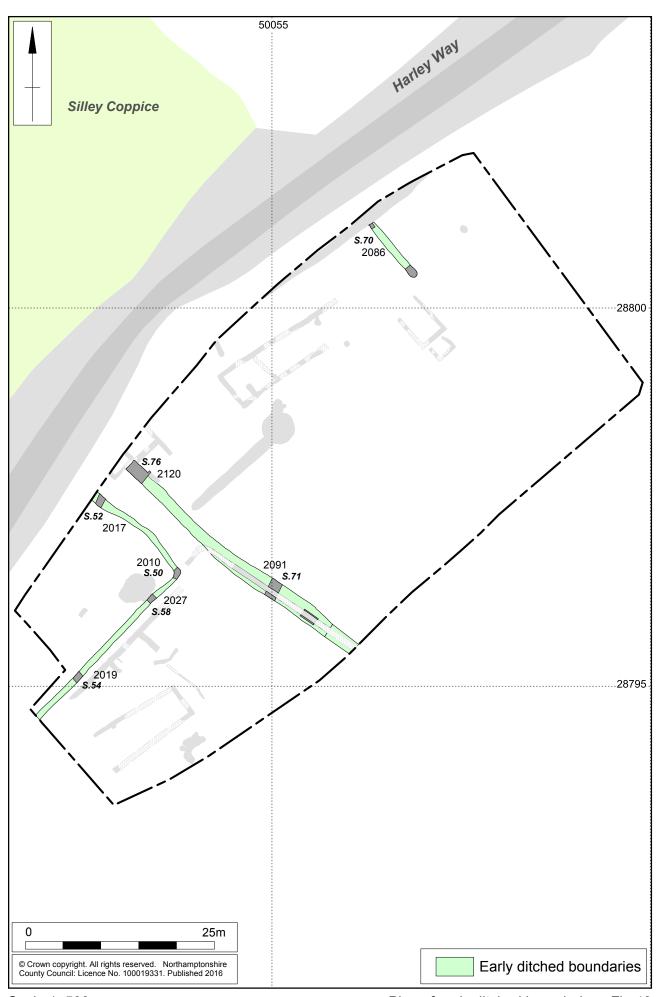
This area was underlain by dark grey to blue clays and mudstones of the estuarine deposited Blisworth Clay formation, confined to the lower to mid-point of the excavation area and overlain by the Cornbrash Formation in the remainder. The mudstones weather to an intractable sticky clay.

The overlying Cornbrash exposures were observed to be composed of irregularly bedded bioclastic pale yellow brown limestones rich in fossil remains.

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Scale 1:500 (A4) Plan of Area B Fig 39



Scale 1: 500

6.2 The early ditched boundaries (AD 1150-1250)

The first phase of activity within the medieval area of the site comprised the digging of several large boundary ditches to form a series of roughly rectangular plots extending back from the line of the road (Fig 40). Pottery evidence indicates that this activity took place between 1150 and 1250.

Boundary ditch [2010]

The pottery evidence suggests the earliest ditch on Site B was [2010]. This ditch extended back perpendicular to the road on a north-east to south-west alignment, before turning south on a right angle to run parallel to the road. The ditch formed the north and east boundaries of Plot 3. To the north, the ditch was 1.30m wide by 0.60m deep, with asymmetrical sides and a flat base [2017] (Fig 43, S.52). The fills, of mid orange-brown and grey-brown silty clay, contained small stones and Lyveden/Stanion A ware pottery, dating from AD 1150 – 1200 (2015).

At the corner, the ditch measured 1.20m wide and 0.24m deep. The fills contained gravel and charcoal flecks, as well as 19th-century pottery in the upper fill (2008) (Fig 43, S.50). At its southern end the ditch measured 0.90m wide by 0.35m deep, with steep sides and a narrow concave base (2019; Fig 43, S.54). The pottery from the ditch fill (2018) was again from the earlier period (AD 1150 – 1200). A probable late 13th-century copper-alloy annular brooch was also recovered from this ditch (SF44).

Ditch [2091]

This large ditch was orientated perpendicular to the road, on a north-east by south-west alignment, and may have formed the primary south boundary of Plot 1. It was 2.40m wide by 0.40m deep, with a U-shaped profile and flat base. The ditch fills varied along its length, with the southern end containing a charcoal-rich fill of light red-brown silty clay containing animal bone and 63 sherds of pottery dating from the 13th to mid-14th centuries (2090) (Fig 48, S.71). The ditch narrowed to the west, measuring 1.30m wide by 0.35m deep, and here the mid-grey-brown silty fill contained rare charcoal and occasional gravel, with 35 sherds of pottery of similar date, and a piece of metalworking tap slag (2119) (Fig 43, S.76). This fill was probably a natural silting accumulation, although after it silted up, later buildings were constructed over it (see Building B4 below).

Ditch [2086/2060]

A short section of ditch, aligned north-west to south-east and perpendicular to the road, probably defined the northern edge of Plot 1 [2086]. This ditch was between 1.0-0.75m wide and 0.40m-0.58m deep. The fills contained animal bone and pottery dating again from the 13th to mid-14th centuries (Fig 43, S.70 and S.64).

6.3 Plot 1: Buildings B1 and B2, ditches and pits (AD 1250-1350)

After the construction of the early ditched boundaries, a number of buildings of limestone were constructed within the defined plots. The northernmost plot, Plot 1, contained two buildings, B1 and B2, as well as ditches and pits (Figs 42 and 43).

Buildina B1

Buildings B1 and B2 comprised two long rectangular buildings, aligned perpendicular to each other. Building B1 (2131) was aligned north-east by south-west. Only three walls were remaining, although it could be estimated that the original length of the building was greater than 18m long, probably around 22m long. It had an internal diameter between 3.80-4.20m wide. The walls survived between one and two courses

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and comprised roughly-faced limestone blocks with no bonding material, between 0.55-0.65m wide (2132, 2133, 2134; Fig 42). Pottery found associated with walls (2132) and (2134) was dated from the 13th to mid-14th centuries.

A dividing wall separated off the western room of the structure (2136), although the wall survived mainly as a stone scatter. The western room was *c*4.25m wide by 4.40m long. Although no further partition walls survived, medieval buildings of this length typically have around four bays. Within the western room of the structure was an oval pit, 0.70m wide by 0.30m deep, with vertical sides (2111; Fig 43, S.78). An area of scorched earth, firm dark red-brown sandy clay with rare gravel, 0.40m wide by 0.03m deep, was situated in the eastern end of the building (2135). This may indicate the position of a hearth.



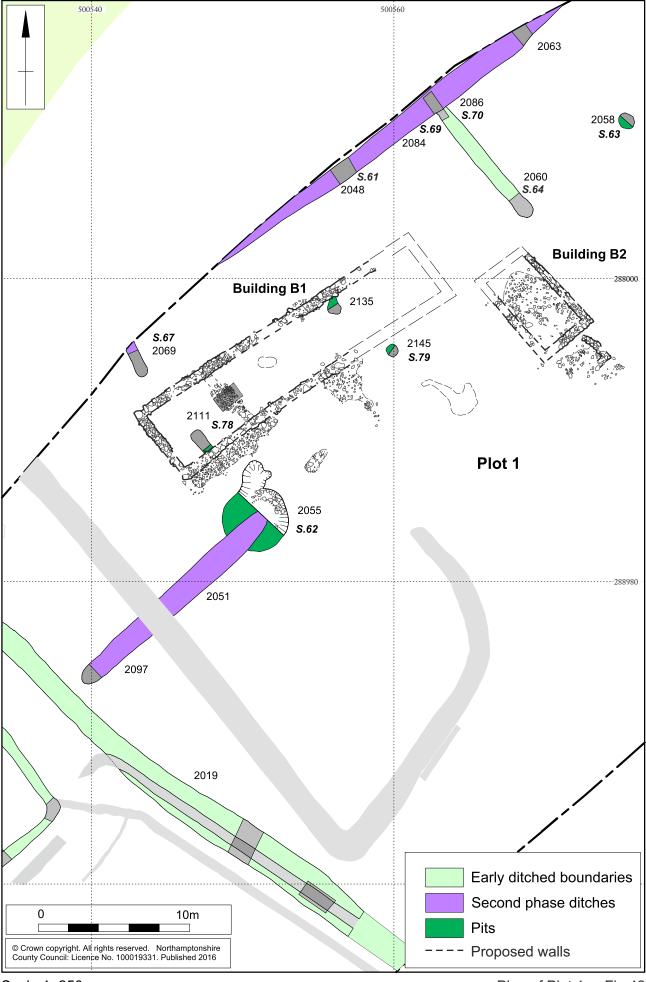
Building B1 with B4 beyond, looking south-west Fig 41

Building B2

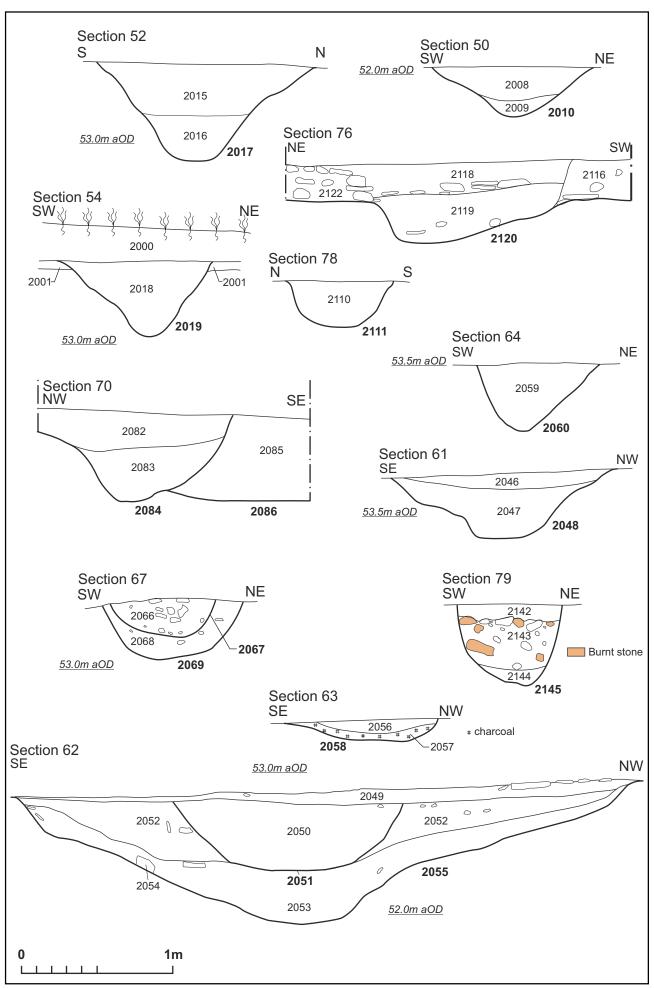
To the north-east of Building B1 was Building B2, aligned south-east by north-west (2125; Fig 42). It was formed of walls (2126) and (2127), each composed of one surviving course of roughly-faced unbonded limestone blocks narrower than the walls in ranges B1 and B3, being between 0.50-0.55m wide. The building itself was also narrower, being *c*3.10m wide.

The end wall to the north-west had not survived, and while it is possible that the building was c12m long, similar to building B1, the alternative is that B2 was an ancillary building, perhaps 7.0m long, and comprising no more than two bays. An additional single-celled square chamber (2138), perhaps 1.8-2.0m wide, had been added on to the structure to the south. The southern (2140) and eastern (2139) walls partially survived to one course of roughly-faced limestone blocks c0.50m wide. A 0.25m deep demolition spread inside the cell contained animal bone and three sherds of pottery dated to 1200-1350 (2141). This cell may never have had a third western side, being instead an abutting chamber, similar to the open-ended and open-sided shelter sheds or cart sheds recorded on a number of the ranges at West Cotton, Raunds (Chapman 2010, 219, Fig 9.67).

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Scale 1: 250 Plan of Plot 1 Fig 42



Scale 1:25

Ditches [2063] and [2048/2084]

After ditch [2086] and [2060] had become infilled, the plot was defined to the north-west by a ditch aligned parallel to the road [2048]. This was 1.40m wide and 0.45m deep, and passed beyond the limit of excavation to the south-west (Figs 42 and 43, S.61, and Fig 55, S.69). The ditch cut earlier boundary ditch [2060], and fills contained pottery dated 1200 – 1350. A ditch terminal to the west of Building B1 was aligned north-south. The ditch was 1.35m wide by 0.42m deep, with steeply sloping sides and a flat base [2069]. It was recut on the same alignment, 1.35m wide by 0.27m deep [2067]. Neither cut could be dated (Fig 43, S.67).

Stone-lined pit [2055]

Situated adjacent to the south wall of Building B1 was a large stone-lined pit [2055], 4.10m wide by 0.83m deep. It was circular, with angled convex sides and a stepped face to the north-west. The base was flat (Figs 44 and 43, S.62). The stone lining was formed of light grey-white limestone slabs (2054). The purpose of the pit is not clear, although it contained several fills of silty clay mixed with degraded sandstone and limestone, as well as 40 sherds of pottery dated 1200-1350 and four iron nails (SF59).



Stone-lined pit [2055], looking north-west Fig 44

Ditch [2051/2097]

To the south-west, pit [2055] was cut by a ditch [2051], aligned north-east by south-west and parallel to the road. The ditch and pit may have together formed an early rear boundary of Plot 1, perhaps prior to the construction of Building B2. The ditch was between 1.20-1.53m wide and 0.40-0.46m deep, with a U-shaped profile and rounded base. The primary fill contained limestone, charcoal, and pottery dating from the mid 12th to mid 14th century. Later fills contained large blocks of limestone (2095) and later pottery, dated from the 13th to mid-14th century (2094, 2095). A medieval copper-alloy buckle plate was recovered from one fill (SF37). The ditch terminal was overlain by a spread of dark grey-brown silty clay to a depth of 0.12m, containing 13th-century pottery, charcoal, animal bone, an iron padlock bolt and piece of iron rod (SF50, 51).

Pit [2145]

To the east of Building B1 was a small pit or posthole [2145], 0.70m in diameter and 0.55m deep. The pit was sub-circular in plan, with steep, slightly concave sides and a narrow concave base. After a period of silting, the pit was filled with a 0.32m deep dump of firm dark grey silty clay with frequent burnt stone inclusions and charcoal,

probably the waste from a domestic hearth (2142). The pottery recovered from this fill was dated to the second half of the 12th century (2143). Overlying this was a layer containing a large quantity of pottery dated 13th-mid 14th centuries (Fig 43, S.79).

Pit [2058]

To the east of the boundary ditch [2086], towards the limit of excavation, was pit [2058] (Fig 43, S.63). It may be related to Plot 1, or to other uncovered features to the north. The pit was circular, 1.0m in diameter by 0.17m deep, with steep sides and a concave base. The primary fill (2057) comprised very dark grey-brown silty clay, with frequent charcoal, and rare burnt stone. The charcoal was identified as large pieces of oak heartwood, which had been burnt at around 400-600°C. This may indicate hearth waste. A single sherd of late 12th-century Lyveden/Stanion A ware pottery was recovered from fill (2056).

6.4 Plot 2: Building B3, pits and other walled features (AD 1250-1350)

Plot 2, situated to the south of Plot 1, was initially bounded by ditches to the north-east [2091] and north-west [2019]. Later, both ditches were replaced by boundary walls, with the wall to the west post-dating and abutting the walls of Building B3 (see section 6.7). Multiple phases of stone structures on slightly different alignments were observed within the plot, along with drains and pits (Figs 45 and 47).



Building B3, with wall (2158) and floor (2159), looking north-east Fig 45

Stone walls 2162 and 2163

In the south-east of the plot were the partial remnants of two long walls with a connecting north-east end wall, which was not quite square to the long walls (2162, 2163, Fig 46). The western wall was c0.60m wide and was between 12.0-13.0m long. During excavation, it seemed that the two long walls were not parallel, suggesting that this was not a single building. However, the fragmentary nature of the southern wall inhibits interpretation, and it is possible that these walls did form a contemporary range, which would have had an internal width of 3.7m and perhaps 12m long.

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Although it appears that the two buildings would have been close to meeting at their south-western ends, pottery recovered from three contexts within the structure was dated 1200 – 1350, suggesting the buildings may not have ben contemporary as this pre-dates other features in Plot 2.

Pits [2021], [2023], and [2025]

To the south-east, a number of small pits appear to have been dug, contemporary with the earlier building. The two clearest features were [2021] and [2023], which were both sub-circular/ovoid, between 0.74-5m long and 0.74-6m wide, and 0.02-14m deep, with gently sloping sides and flat bases (Fig 48, S.55 and 57). Pit [2021] contained a shallow fill of burnt grey-red mottled silty clay, with charcoal, possible a dump of hearth waste (2020).

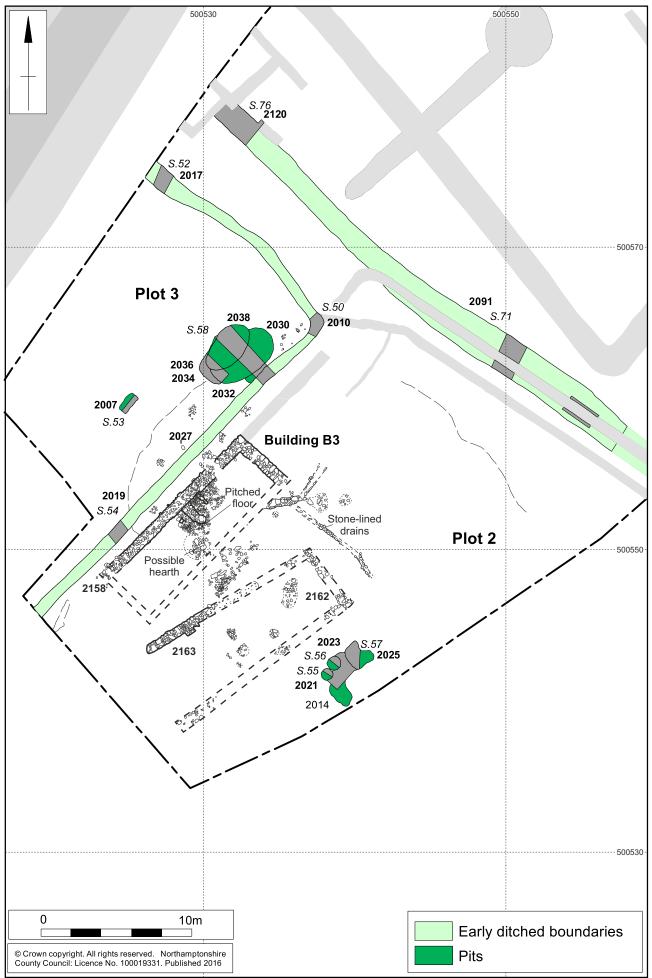
To the east of the pits was a shallow irregular pit feature, 0.90m wide and 0.08m deep [2025] (Fig 48, S. 57). A large quantity of animal bone and pottery, including 82 sherds of Lyveden/Stanion A ware dating from the 13th to mid-14th centuries, were recovered from its fill (2024). Overlying the pits was a spread of grey-brown silty clay and limestone, 2.40m long, 1.30m wide and 0.14m deep (2014). Thirty-two pottery sherds of the same date, along with animal bone and slag, was recovered from the spread.

Building B3

Building B3 was situated to the north of the earlier phases of structure. The surviving long wall (2158), which lay parallel with the boundary ditch [2019], was 0.75-0.80m wide, formed of roughly faced limestone blocks with a core of smaller stone, constructed without mortar and surviving up to one course high (Fig 45). A gable end wall to the north-east was also well preserved; this was a little broader, at 0.80-0.85m wide, with roughly-squared facings in limestone and a core of smaller rubble (Fig 46). No traces of the southern and western walls had survived, but approximate positions have been postulated, suggesting that it would have had an internal length of at least 12-13m, and may have comprised at least three rooms each c4m long. A break in the northern wall and a scatter of larger stones inside the building was a product of later disturbance.



North-east end of Building B3, looking north-west along the gable end wall Fig 46



Scale 1: 250 Plan of Plot 2 and Plot 3 Fig 47

A remnant of an inner partition wall may be observed within the building to the east, separating a square room, c4.0m long by c4.0m wide. Two phases of stone-lined drain, which extend to the under the wall in the south-eastern corner, may have been associated with this room. The early drain ran directly south-eastwards. The later and better preserved drain ran obliquely beneath the wall, and here the capping stones were still in-situ. Immediately beyond the postulate wall, the drain turned abruptly to the north-east, on a similar alignment to the long walls of the building.

Within the central room of the building, an area of pitched stone surface, perhaps 2.0m square, abutted the north wall (2159). Although no such feature survived, it is possible that this surface was associated with a rectangular feature, such as a stone trough, c1.7m long by 0.7m wide. A medieval copper-alloy buckle was recovered from the surface (SF25). The remnant of a central hearth may be suggested by an area of larger flat-lying stones around 1m square, some of which were burned. These are positioned to the south-west within the room. While these features were all heavily disturbed, they are consistent in form with better preserved kitchen rooms, such as those seen at Raunds, West Cotton (Chapman 2010, 232-236).

Pottery from inside the structure and the demolition layers around the building have been dated to the second half of the 14th century, indicating that the building and its features dated later than the other walls to the south in Plot 1.

6.5 Plot 3: Pits (AD 1250-1400)

Plot 3 was defined by boundary ditches [2017]-[2010]-[2019]. Unlike the other medieval plots, no evidence for stone-built structures was observed (Fig 47). A layer of demolition rubble, from the former building B3 in Plot 2, overlay the eastern side of the plot. This layer produced 22 sherds of pottery dating from the second half of the 14th century (2160).

Pit Group [2028-2038]

A group of intercutting pits were located on the eastern edge of the plot, up against boundary ditch [2010]. This group comprised five pits and a spread (Fig 48, S. 58). The pits are likely to have been cut as quarrying pits for clay extraction. Three pits were heavily truncated by later cuts, and were between 0.50m and 0.76m wide, and 0.22m-0.37m deep; [2034], [2036] and [2038]. The pits were steep-sided with flat bases. Fills (2035) of pit [2036] and (2037) of pit [2038] contained several sherds of 13th- to early 14th-century pottery, with fill (2033) of pit [2034] containing later 14th-century pottery.

Pit [2034] was cut by pit [2032], which was 1.45m wide by 0.38m deep, with steep sides and a flat base. The fill contained frequent small to medium angular limestone pieces, as well as charcoal, and 74 sherds of pottery dated 1350 – 1400. The pottery assemblage included a rimsherd from a bowl with multiple pouring lips.

Pit [2030] cut the three pits of the earlier phase. It measured 1.30m wide by 0.40m deep, with steep sides and a flat base. The silty clay fill contained limestone and charcoal pieces, as well as 104 sherds of pottery, giving a date in the second half of the 14th century.

Overlying the pits was a spread comprising firm dark grey-brown silty clay and limestone, 2.60m wide by 0.16m deep (2028). The spread contained animal bone, 122 sherds of pottery dating to the second half of the 14th century, iron nails and a staple (SF39), a 14th-15th-century copper-alloy buckle (SF40), and an iron buckle (SF41).

Pit [2007]

South-west of the main pit group in this area was a single isolated pit [2007] (Fig 48,

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S.53). This was sub-rectangular in shape, aligned north-east by south-west, 1.40m long by 0.70m wide and between 0.20m-0.30m deep. It had steep sides and a flat base, with a central depression. The fill of dark grey-brown silty clay contained frequent limestone, and a small amount of pottery dated AD 1350 – 1400.

6.6 Plot 4: Re-organisation of the plot boundaries, Building B4 (1350-1400)

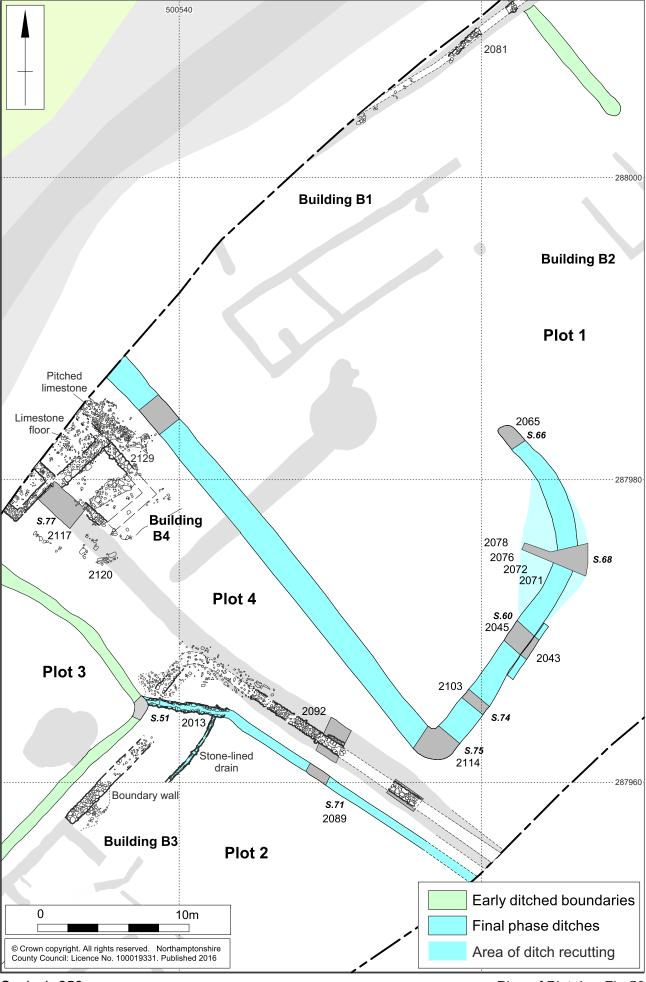
Reorganisation of boundaries and ditch [2045]

After the initial layout of the three plots, several of the boundaries appear to have been reorganised to allow for the creation of an additional plot between Plots 1 and 3 (Fig 50). Ditch [2091], which previously formed the boundary between Plots 2 and 3 and Plot 1, seems to have silted up by this time, and a new boundary ditch was cut further to the north on the same north-west by south-east alignment. To the west its upper fill contained fifty sherds of pottery dated from the second half of the 14th century (2155) [2157]. At its eastern end the ditch turned sharply north-east through about 75 degrees [2114, Fig 48, S.75], possibly to form the rear of Plot 1 [2045]. It turned again north-west before terminating in the centre of the plot [2065; Fig 48, S.66]. The ditch was steep-sided, and between 1.30-1.50m wide by 0.30-0.57m deep. The terminal produced two sherds of roof tile dated 1350-1500 and sixty sherds of pottery dating from the second half of the 14th century (2064).

Sections through this ditch suggest it may have been recut a number of times, particularly on its eastern side and north-eastern corner where four or five recuts were observed (Fig 48, S.68). The wet ground conditions during excavation hindered clearer interpretation of the cutting sequence. Three of the recuts produced pottery dating 1200 – 1350, suggesting there was a relatively short break between recutting (2074, 2075, 2077). A small section of narrow gully edged the ditch to the east [2043] (Fig 48, S.60). Part of the ditch on the eastern side was stone-lined with multiple courses of unbonded limestone blocks (2103, 2102; Fig 49, and Fig 55, S.74).



Stone lining [2102], part of ditch [2045], looking north Fig 49



Scale 1: 250 Plan of Plot 4 Fig 50

Although a few sherds of earlier pottery were recovered from ditch fills (2101) and (2113), the majority of the pottery recovered from the eastern arm of the ditch could be dated between 1350 and 1400, supporting the interpretation that this ditch was a later boundary of Plot 1, expanding the rear of the plot from its original boundary of ditch [2051/2097].

Building B4

Building B4 was situated on the western edge of the site, in the new Plot 4 created between Plots 1 and 3 (Fig 50). Building B4 was constructed on top of the earlier boundary ditch [2120/2091] which had originally passed through the area now given over to Plot 4 (Fig 43, S.76; Fig 55, S.77).



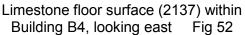
Building B4, looking north-east Fig 51

Building B4 was the best preserved building, but much of it lay beyond the excavated area (Fig 51). It comprised a range of at least two bays aligned north-west to southeast, with a smaller chamber attached to the western side of the building, while a remnant of pitched limestone surfacing lay to the immediate east (Fig 53). The internal diameter of the main range can be estimated at 3.65m. The long walls of the main range were aligned north-west to south-east and were 0.65m wide (2118, 2129, 2122), with a broader end wall, aligned north-east to south-west 0.85m wide (2130). The walls of the attached room to the south were narrower, at 0.45-0.58m wide (2117 and 2124).

The walls were constructed of blocks of limestone $c0.10 \times 0.20 \times 0.05 m$ in size, without any obvious bonding material. The walls survived up to as much as five or six courses in some areas, and were roughly faced on the exterior and interior surfaces (Fig 51). Within the main range a floor of flat-laid large slabs of limestone survived in the eastern corner (2137), with the burnt surfaces suggesting that this may have been the base of a corner oven laid between walls (2129) and (2130) (Fig 52). The only fully uncovered room, to the south-east, was 3.25m wide and perhaps 3.5m long, although the end wall to the south-east was lost

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Pitched limestone surface outside Building B4, looking south Fig 53

6.7 Other features

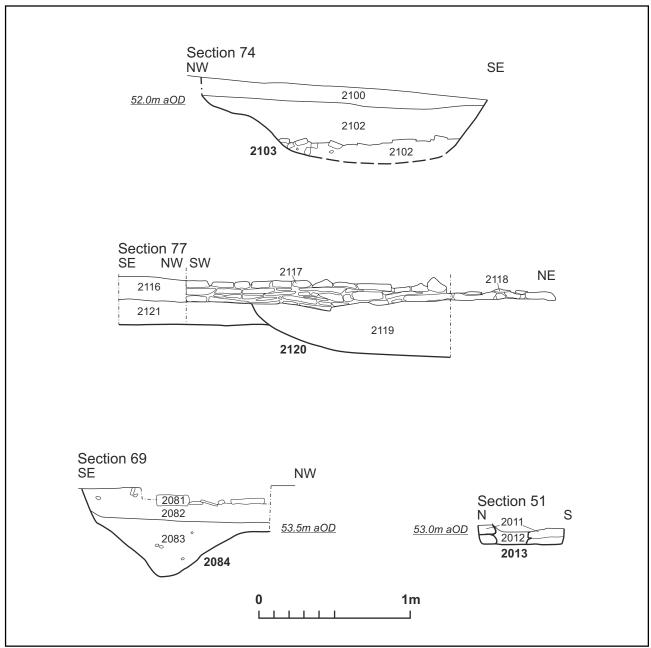
Stone boundary walls and drains

It is a recognised aspect of village development that after the late 12th century, plot boundary ditches were often replaced by boundary walls, as at West Cotton, Raunds (Chapman 2010). This is observed in several places in Area B. A small wall (2081) was constructed overlying the Plot 1 ditch [2048/2063] on the north-western edge of the site between the settlement and the road (Figs 42 and 55, S.69). It was constructed of unbonded limestone blocks, 0.75m wide and 0.10m high. This wall would have replaced the former ditched boundary on the western edge of Plot 1. No other walled boundaries are observed for this plot however, although later a stone-lined ditch was constructed at the rear of Plot 1 probably with a similar function [2103], (Fig 55, S.74).



Corner of boundary ditch [2010] and stone-lined drain [2013], looking east Fig 54

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Scale 1:25 Sections of walls and other structures Fig 55

Wall (2092) was constructed over the line of ditch [2091]. This ditch had formerly edged Plot 1 to the south. After the insertion of Plot 4, the ditch [2091] became obsolete, and the boundaries moved to the north and south. Wall (2092) became what was probably the northern boundary for Plot 2. It seemed to turn south at its western end to define the western edge of Plot 2, rather the follow the original route of the ditch up to the north-west (Fig 45). The wall was relatively narrow, being only 0.60-0.65m wide.

On the west side of Plot 2, the area had formerly been defined by a boundary ditch [2019]. At some point after the construction of Building B3, this ditch seems to have been replaced by a wall which was aligned parallel to it. This boundary wall, which was 0.80m wide, abutted the wall at the north-eastern corner of Building B3, and extended to the north-east (Fig 50).

A narrow drain with a V-shaped profile 0.80m wide and 0.45m deep, was cut parallel to wall [2089]. As it reached the north-west corner of the plot, it had been lined with limestone blocks, 0.5m wide and 0.15m deep [2013] (Figs 49 and 55, S.51). The stone-lined drain extended west from the boundary ditch [2091] and wall (2092) to the north-east corner of ditch [2010] which bordered Plot 3 (Fig 54). Extending south-west from this drain was a further narrow section of drain which continued towards Building B3.

Spreads and demolition debris

Area B contained a number of spreads of material which overlay the former buildings (2040, 2087, 2093, 2116 and 2123). The spreads mainly comprised firm dark greybrown, red-brown or orange-grey silty clay, containing fragments of limestone, gravel and charcoal to a depth between 0.12 and 0.20m. Pottery sherds recovered from the spreads primarily dated between 1200 and 1350.

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7 MEDIEVAL FINDS AND ENVIRONMENTAL EVIDENCE

7.1 The medieval pottery by Paul Blinkhorn

Analytical methodology

The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference were all recorded. This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-Roman Ceramics (MPRG 2001). All the statistical analyses were carried out using a DBase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. Any statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

The pottery

The pottery assemblage from the medieval site comprised 1,587 sherds with a total weight of 30,368g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 12.11. It was quantified using the chronology and coding system of the Northamptonshire County Ceramic Type-Series (CTS), as follows:

- F200: T1 (2) type St. Neots Ware, AD1000-1200; 1 sherd, 15g, EVE=0.
- F209: South Lincs Oolitic ware, AD975-1350; 1 sherd, 14g, EVE=0.
- F319: Lyveden/Stanion A ware, AD1150-1400; 1,272 sherds, 23,655g, EVE= 10.61.
- F320: Lyveden/Stanion B ware, AD1200-1400; 221 sherds, 4496g, EVE= 1.10.
- F322: Lyveden/Stanion D ware, AD1350-?1500; 36 sherds, 1438g, EVE=0.20.
- F324: Brill/Boarstall ware, 1200-16th centuries; 24 sherds, 267g, EVE = 0.
- F328: Grimston Ware, late 12th-14th centuries; 1 sherd, 7g, EVE = 0.
- F329: Potterspury Ware, AD1250-1600; 1 sherd, 5g, EVE = 0.
- F330: Shelly Coarseware, AD1100-1400; 1 sherd, 9g, EVE=0.08.
- F332: Surrey White ware, mid-13th-mid 15th centuries; 1 sherd, 6g, EVE = 0.
- F346: Bourne A Ware, 13th-14th centuries; 2 sherds, 250g, EVE = 0.12.
- F1000: Misc. 19th and 20th century wares; 24 sherds, 187g.
- F1001: All Roman Wares; 2 sherds, 19g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 22. Each date should be regarded as a *terminus post quem*. The range of fabric types is largely typical of sites in the north of Northamptonshire, being dominated by the products of the nearby Lyveden and Stanion industries, along with a few sherds from more distant sources. The sherd of Surrey Whiteware is the

exception. Such pottery is very rare in the county, with all the previous finds coming from Northampton (eg. McCarthy 1979, 229), and it appears to be one of the most northerly finds of the material in England (Pearce and Vince 1988, figs 2–4), although a single sherd is known from Lincoln (Young and Vince 2005, 172). However, an ironworking site at nearby Deene End, Weldon, also produced some unusual pottery (Blinkhorn 2003) including some very rare (in the region) early medieval continental imports, indicating that it was part of an extensive trading network, and perhaps monastic. The presence of the Surrey White Ware at this site suggests that it is likely that the occupants were also in contact with this network, and perhaps demonstrates that the medieval Northamptonshire iron industry was of far more than local importance.

Chronology

Each context-specific pottery group was given a ceramic phase-date (CP), based on the range of ware types present, then adjusted with reference to the stratigraphic matrix. The scheme and results are shown in Table 19. Phase 2a is regarded as a sub-phase of Phase 2, and while useful for context-dating purposes, the wares which define it are very rare in this area of the county, and so the pottery occurrence during that phase is probably not an accurate reflection of activity at the site. It is therefore amalgamated with the CP2 data for the rest of the analyses in this report.

Table 19: Ceramic phase-dating scheme and pottery occurrence per medieval phase

Ceramic Phase	Date	Defining Wares	Number of sherds	Weight (g)	EVE
CP1	1150 - 1200	Lyveden/Stanion A ware	17	285	0.04
		Lyveden/Stanion B ware			
CP2	1200 - 1350	Brill/Boarstall ware Grimston Ware Bourne A Ware	891	17203	7.33
CP2a	1250 - 1350	Potterspury Ware, Surrey White ware	61	1454	0.56
CP3	1350 - 1400	Lyveden/Stanion D ware	594	11239	4.18
Total	-	-	1563	30181	12.11

The range of pottery types present suggests that there was very little activity before the beginning of the 13th century, and that the site was probably abandoned in the second half of the 14th century.

Perhaps the most significant aspect of the earliest medieval activity at the site is the complete lack of Stamford Ware (CTS fabric F205, cAD850-1200) and the presence of just a single sherd of St Neots Ware. Such pottery is common on 10th- and 11th-century sites in Northamptonshire, such as West Cotton, Raunds (Blinkhorn 2010), and given that this site is closer to the Stamford Ware production centre, it would be expected to be present if there was any significant late Saxon or Saxo-Norman activity. Stamford Ware and St Neots Ware were also present at Deene End, Weldon (Blinkhorn 2003), some 5km to the west of this site, and also at Southwick (Blinkhorn 2001), a few kilometres to the north-east, so its absence here can only be due to chronological factors, and thus significant activity at the site did not start until around the beginning of the 13th century.

Table 20: Pottery occurrence per ceramic phase, by major fabric type, expressed as a percentage of the phase assemblage, by weight in grammes

Ceramic Phase	CP1	CP2	CP3
St. Neots Ware	0	0.10%	0
South Lincs Oolitic ware	0	0.10%	0
Shelly Coarseware,	0	0.10%	0
Lyveden/Stanion A ware,	100%	85.30%	66.30%
Lyveden/Stanion B ware	-	12.50%	19.30%
Brill/Boarstall ware	-	0.50%	1.50%
Bourne A Ware	-	1.30%	0
Lyveden/Stanion D ware	-	-	12.80%
Total Wt (g)	285	18657	11239

In the case of the end of the life of the site, the absence of pottery types such as Late Medieval Reduced Ware (LMR - CTS fabric F365, cAD1400 - 1550) and Late Medieval Oxidized Ware (CTS fabric F401, cAD1450 - 1550) indicate that activity at the site had ceased before these common pottery types came into circulation. There were manufactories for both of these wares relatively close to this site, at Higham Ferrers, c20km to the south (Blinkhorn 2007) and at Glapthorn, 4km to the east. Both pottery types were present at Deene End and Southwick, and LMR was also noted at Warmington, c8km to the north-east of the site (Blinkhorn 2002). As with the Stamford Ware, the lack of 15th-century pottery at this site would appear to be chronological, as so it would appear that the settlement was abandoned sometime in the second half of the 14th century.

There is some typological evidence which offers further refinement to this. Pit fill (2031) of pit [2032] produced a rimsherd from a bowl with multiple pouring lips. Such vessels occurred amongst the large assemblage of kiln waste at Corby Road, Stanion, where they were dated to cAD1350-1400 (Blinkhorn 2008, 239). Glazed B Ware jars also occurred at that site, and start to occur at a similar date. Their absence here, coupled with the fact that only a single lipped bowl was noted, offers further support for the suggestion that the site fell from use in the second half of the 14th century.

Vessel Occurrence

The vessel occurrence per ceramic phase, by type, expressed as a percentage of the phase assemblage, by EVE is shown in Table 21. The general pattern is fairly typical of sites in the region

Table 21: Vessel occurrence per ceramic phase, by type, expressed as a percentage of the phase assemblage, by EVE

Ceramic Phase	Jars	Bowls	Jugs	Other	Total EVE
CP1	0	100%	0	-	0.04
CP2	67.9%	16.3%	16.0%	Skillet	7.89
CP3	60.5%	25.4%	14.1%	Dripping dish, curfew	4.18

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Some basic spatial analysis indicated that there is no particular concentration of vessel types at the site, other than the few fragments of storage jars in CP2 contexts all occurring around building 2131.

The pottery

Ceramic Phase 1, cAD1150 - 1200. 17 sherds, 285g, EVE = 0.04

All the pottery from this phase comprised Lyveden/Stanion A ware, which is a fairly typical pattern for this area of the county, given the proximity of the production centres. All the context-specific groups of this date were small, with the largest group comprising just six sherds, and almost entirely from stratigraphically isolated features. Given than F319 made up over 85% of the pottery from 13th century phases, the small assemblage size of the CP1 makes it entirely possible that they are of such date, and lack the defining 13th-century wares, although activity could have begun right at the end of the 12th century, after the end of Stamford Ware production, and just before the introduction of Lyveden/Stanion B Ware.

The assemblage consists entirely of bodysherds, other than a single small rimsherd from a bowl.

Ceramic Phase 2, cAD1200 – 1350. 952 sherds, 18657g, EVE = 7.89

The large assemblage from this phase was dominated by the products of the Lyveden/Stanion industries, along with a few sherds from more distant sources, a typical pattern for the area. The unglazed A wares made up the bulk of the assemblage (85.3%) by weight, with the bulk of the rest (12.5%) comprising glazed B wares. Most of the other ware types were presented by single sherds; two sherds of Bourne A Ware were noted, one of which was a large fragment of a glazed jug.

The rimsherd data (Table 21) shows that jars (67.9% by EVE) dominated the assemblage, along with smaller quantities of bowls (16.3%) and jugs (16.0%). The only other vessel type noted was a skillet, which was represented by a single handle. Some of the jars were very large, with one from fill (2085) of ditch [2086] having a rim diameter of 460mm, and another from fill (2143) of posthole [2145] 500mm, compared the average rim diameter for the jars from this phase was 246.9mm. These were probably storage vessels, as was a large bodysherd from an extremely large vessel with applied strip decoration which occurred in fill (2050) of ditch [2051]. Both this and the large rimsherds all came from features in the vicinity of building [2131].

The glazed Lyveden/Stanion B jugs, as is usually the case, also had slip decoration, including stamped pads. It is worthy of note that all the sherds with stamped slip-pads from the site occurred in this phase; the assemblage from the manufactory at Corby Road dated *c*AD1350 – 1400 did not include any sherds with stamped decoration (Blinkhorn 2008, 242) which suggested very strongly that such vessels date to before the mid-14th century. The evidence from this site would appear to support this, and, given their absence in Ceramic Phase 3 contexts, suggests that there is very little residual B Ware material in contexts dated to that phase.

Ceramic Phase 3, cAD1350 - 1400?. 594 sherds, 11239 g, EVE = 4.18

This ceramic phase is also dominated by Lyveden/Stanion products, and the unglazed A Wares are still dominant, but their proportion (66.3% by weight) is considerably lower than in the previous phase. This is in part to the introduction of Lyveden/Stanion D ware (12.8%), but the B ware also forms a higher proportion (19.3%) than in the previous phase. The main products of the B and D ware traditions are glazed jugs, along with a smaller number of glazed bowls and jars (eg Blinkhorn 2008, table 26). Bowls and jugs usually become more common during the passage of the medieval period, but in this phase jugs actually drop slightly as a proportion of the vessel

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assemblage (Table 21). Given that glazed wares, mainly in the form of bodysherds from jugs, are more common, this seems likely to be the result of the vagaries of archaeological sampling, although functional considerations may be the reason.

As noted above, a multi-lipped B Ware bowl, datable to the second half of the 14th century, occurred in this phase, as did a fragment of an A Ware curfew handle and a fairly large sherd from a burnt and obviously used D Ware dripping-dish. Dripping dishes were not noted amongst the wasters from Corby Road, Stanion, other than a single horizontal handle from a mid-late 15th-century group which could have been from another vessel type such as a skillet. A D Ware dripping-dish was noted at Lyveden (Webster 1975), as were A Ware curfews (Fig 26), although they were dated purely on typological grounds.

Other medieval pottery

Additional to the data above, two sherds of medieval pottery were recovered from the Roman site. These comprised a sherd of Bourne A Ware from ditch [5004], and a sherd of Lyveden/Stanion B ware from ditch [5054].

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Table 22: Pottery occurrence by number and weight (g) of sherds per context by fabric type

Context	F10	001	F2	00	F2	209	F3	30	F	319	F	320	F	324	F3	28	F	346	F	329	F3	332	F	322	F1	000
and phase	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
2004 CP3	-	-	-	-	-	-	-	-	-	-	1	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2006 CP3	_	-	-	-	-	-	-	-	4	56	_	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-
200819thC	_	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	24	187
2014 CP2	_	-	1	15	-	-	-	-	173	1906	11	183	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2015 CP1	_	-	-	-	-	-	-	-	6	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018 CP1	_	-	_	-	-	-	-	_	4	61	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-
2024 CP2	_	_	_	-	-	-	-	_	82	1263	1	17	-	-	_	-	1	8	-	_	-	-	_	-	-	-
2028 CP3	_	_	_	-	-	-	-	_	76	1224	33	645	12	126	_	-	-	-	1	5	-	-	_	-	-	-
2029 CP3	_	_	_	-	-	-	-	_	74	918	23	327	3	19	_	-	-	-	-	_	-	-	4	126	-	-
2031 CP3	_	_	_	-	-	-	-	_	43	889	25	521	2	20	_	-	-	-	-	_	-	-	4	25	-	-
2033 CP3	_	_	_	-	_	-	-	_	6	69	3	30	-	-	_	_	-	-	_	_	-	-	1	34	-	_
2035 CP2	_	_	_	-	_	-	-	_	3	33	1	17	-	-	_	_	-	-	_	_	-	-	_	-	-	_
2037 CP2	_	_	_	-	_	-	-	_	13	239	9	108	2	19	_	_	-	-	_	_	-	-	_	-	-	_
2040 CP3	_	_	_	-	_	-	-	_	30	881	6	126	-	-	_	_	-	-	_	_	-	-	4	115	-	_
2046 CP3	_	_	_	-	-	-	-	_	21	303	3	66	-	-	_	-	-	-	-	_	-	-	_	-	-	-
2047 CP3	_	_	_	-	_	-	-	_	55	1417	3	43	-	-	_	_	-	-	_	_	-	-	10	117	-	_
2050 CP2	_	_	_	-	_	-	-	_	76	2370	7	86	2	56	_	_	-	-	_	_	-	-	_	-	-	_
2052 CP2	_	_	_	-	_	-	-	_	21	441	8	325	-	-	_	_	-	-	_	_	-	-	_	-	-	_
2053 CP2	_	_	_	-	_	-	-	_	12	325	_	_	-	-	_	_	1	242	_	_	-	-	_	-	-	_
2056 CP1	_	_	_	_	_	_	-	_	1	10	_	_	-	-	_	_	-	-	-	_	_	-	_	-	-	_
2059 CP2	_	_	_	_	_	_	-	_	6	168	_	_	-	-	_	_	-	-	-	_	_	-	_	-	-	_
2061 CP2	_	_	_	_	_	_	-	_	8	173	2	28	-	-	_	_	-	-	-	_	_	-	_	-	-	_
2062 CP2	_	_	_	_	_	_	-	_	-	-	1	43	-	-	_	_	-	-	-	_	_	-	_	-	-	_
2064 CP3	_	-	-	-	_	-	-	_	33	557	10	130	-	-	-	_	-	-	-	-	-	-	4	701	_	_
2074 CP2	_	-	_	-	_	-	-	_	2	39	2	17	-	-	_	_	-	_	-	-	-	-	_	-	_	_
2075 CP2	_	-	-	-	_	-	-	_	2	112	_	-	-	-	-	_	-	-	-	-	-	-	_	-	-	-
2077 CP2	_	-	_	-	_	-	-	_	12	159	1	28	-	-	_	_	-	-	-	-	-	-	_	-	_	_
2079 CP2	_	-	_	-	_	-	-	_	2	63	1	14	-	-	_	_	-	-	-	-	-	-	_	-	_	_
2085 CP2	_	_	_	_	_	_	_	_	2	179	1	12	_	-	_	_	_	-	_	_	_	_	_	-	_	_
2087 CP2	_	_	_	_	1	14	_	_	53	957	8	185	1	9	_	_	_	-	-	_	_	-	_	-	-	-

Context	F10	001	F2	00	F2	:09	F3	30	F	319	F:	320	F	324	F3	28	F3	346	F	329	F3	332	F	322	F1	000
and phase	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
2090 CP2	-	-	-	-	-	-	-	-	58	1232	5	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2093 CP2	-	-	-	-	-	-	-	-	13	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2094 CP2	-	-	-	-	-	-	-	-	4	154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2095 CP2	-	-	-	-	-	-	-	-	-	-	1	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2096 CP1	-	-	-	-	-	-	-	-	2	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2101 CP1	-	-	-	-	-	-	-	-	3	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2113 CP2	-	-	-	-	-	-	-	-	11	170	2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2116 CP2	-	-	-	-	-	-	-	-	12	212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2119 CP2	-	-	-	-	-	-	-	-	29	918	6	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2121 CP2	-	-	-	-	-	-	-	-	9	256	2	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2123 CP2	-	-	-	-	-	-	-	-	73	1242	6	229	-	-	1	7	-	-	-	-	-	-	-	-	-	-
2132 CP2	-	-	-	-	-	-	-	-	10	127	4	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2134 CP2	-	-	-	-	-	-	-	-	6	69	2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2141 CP2	-	-	-	-	-	-	-	-	2	46	1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2142 CP1	-	-	-	-	-	-	-	-	4	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2143 CP2	-	-	-	-	-	-	1	9	23	497	5	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2155 CP3	-	-	-	-	-	-	-	-	46	656	-	-	-	-	-	-	-	-	-	-	-	-	4	161	-	-
2156 CP2	-	-	-	-	-	-	-	-	6	64	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2158 CP3	1	11	-	-	-	-	-	-	2	60	2	68	-	-	-	-	-	-	-	-	-	-	1	67	-	-
2159 CP3	-	-	-	-	-	-	-	-	13	148	3	56	-	-	-	-	-	-	-	-	-	-	2	6	-	-
2160 CP3	-	-	-	-	-	-	-	-	18	232	3	37	-	-	-	-	-	-	-	-	-	-	1	84	-	-
2161 CP2	-	-	-	-	-	-	-	-	37	648	2	29	2	18	-	-	-	-	-	-	-	-	-	-	-	-
2162 CP2	-	-	-	-	-	-	-	-	12	360	4	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2163 CP2	-	-	-	-	-	-	-	-	9	77	3	171	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2164 CP2a	1	8	-	-	-	-	-	-	50	1220	9	220	-	-	-	-	-	-	-	-	1	6	-	-	-	-
Total	2	19	1	15	1	14	1	9	1272	23655	221	4496	24	267	1	7	2	250	1	5	1	6	36	1438	24	187

7.2 Metalworking debris by Andy Chapman

There are five small pieces of tap slag that have come from a slag-tapping iron smelting furnace (Table 23). There is too little material, and no other evidence that iron working was being carried out within the excavated part of the site, but as this lies at the margins of a larger medieval settlement, it is likely that it has come from somewhere within the larger settlement.

Table 23: Quantification of metalworking debris

Context/ feature/ type	Weight (g)	Description
2101/ 2103/ ditch	35	Tap slag
2119/ 2120/ ditch	60	Tap slag
2123/ spread	340	Tap slag
Total	435	-

7.3 Ceramic building materials by Pat Chapman

Medieval tile

Three pieces of ceramic building material were discovered on the medieval site, weighing 654g. Two roof tile sherds weigh 110g. A ridge tile sherd, from fill (2064) ditch [2065], is 10mm thick and green glazed with rows of stabbing points to reduce firing time. The fabric is hard with fine dense shell fired to orange-brown with grey, similar to local Lyveden/Stanion pottery D ware, dated around 1350-1500 (Chapman 2008, 255-257). A plain flat tile sherd, 15mm thick and made with orange fine silty clay comes from (2075) ditch [2076].

Modern material

From topsoil (2001) there was a modern red quarry floor tile, 12mm thick, and a brick fragment, 65mm thick, with a deep frog.

Discussion

There is a paucity of material from the medieval site, suggesting buildings mainly roofed with thatch or wooden shingles, or that any medieval tile may have been removed for use elsewhere.

7.4 Other finds by Tora Hylton, with Paul Clements

Introduction and methodology

The excavations at Harley Way, Benefield produced a small group of Roman and Medieval finds. The majority of finds are medieval in date and these were mainly recovered from soil spreads and demolition deposits relating to the medieval hamlet of Churchfield and the overlying topsoil (Area B).

In total there are 37 individual or group recorded small finds, providing a total number of 53 individual objects in four material types. Each object has been described and measured, and a descriptive catalogue is retained in archive. The majority of artefacts were recovered by hand, but the use of a metal detector at regular intervals during the excavation increased the recovery of medieval objects from topsoil deposits.

The small finds may be quantified by material type as follows:

Table 24: Quantification of material types of medieval small finds

Material	Total
Copper alloy (excluding coins)	27
Iron objects	6
Lead	2
Stone	2
Total	37

Seven iron objects were submitted for X-ray, this was undertaken by Beth Werret of Wiltshire Conservation Service, Wiltshire County Council. This not only provided a permanent record, but it enabled identification and revealed technical details not previously visible. No stabilisation was carried out. All sensitive finds are packaged in air tight plastic containers with silica gel and an indicator card, to maintain a low humidity and reduce deterioration.

Very few of the finds were recovered from actual features or could be attributed to specific structures or plots, since most of them were recovered from a silty spread which covered parts of the site (x 13), demolition/rubble deposits (x 7) or topsoil (x 18). Presumably, successive episodes of ploughing or earthmoving, together with the remains of a widespread silt deposit has resulted in a predominantly residual assemblage.

The assemblage comprises a small range of finds and is by no means representative of the full range that would have been in use during the lifetime of the settlement. There is a dearth of items for domestic use, structural equipment, nails and tools and this suggests that much of the metal work had been removed, presumably for recycling, prior to abandonment. The assemblage is however dominated by small portable items which may have been casually lost and these include a range of dress accessories (buckles, buckle-plates, strap-ends and a mount) and a brooch. Other finds include whetstones for the sharpening of metal blades and the need for security is attested by the presence of a barrel padlock. Some of the finds recovered may be compared typologically to those recovered from the nearby deserted medieval settlement at Lyveden (Bryant and Steane 1971, Steane and Bryant 1975). In tandem with the pottery evidence, the stylistic traits observed suggest a 12th-14th/15th century date for the assemblage.

The small finds may be quantified by area and functional category as follows:

Table 25: Quantification of functional categories for medieval small finds

Functional Category	Quantity
Personal Possessions	
Jewellery	1
Costume fittings	19
Equipment and furnishings	
Building equipment - structural fittings	3
Building equipment – nails	17

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Functional Category	Quantity
Household equipment	
General	-
Locks	2
Whetstone	2
Horse furniture	3
Miscellaneous/unidentified	
Copper alloy	1
Iron	3
Lead	2
Total	53

Personal possessions

This category comprises small portable items which would have formed part of a person's clothing (costume fittings), or worn as jewellery. The assemblage includes eight buckles, seven buckle-plates, three strap-ends, one mount and one brooch. Objects for personal use, like toilet equipment and recreational objects are not represented within the assemblage.

Costume fittings

Buckles and buckle-plates

There are eight buckle frames, none retain their associated-plates, but there are seven separate buckle-plates. With the exception of one buckle (SF25) from a floor surface south of wall A (Plot 2) and another (SF23) from Spread 2093, all the buckles (SF26, 27, 43, 45, 46,62) were recovered from topsoil [2000].

There are a variety of buckle forms and the types represented span the late 12th to 14th century. The majority are single looped buckles with oval frames and they include ornate examples with decorative knops on the outside edge (Fig 56a; cf. Fingerlin 1971, 68; Egan and Pritchard 1991, fig 44, 292, 302); one with a centrally placed moulding with circumferential groove, which resembles a 13th century buckle from Norwich (Margeson 1993, fig 13, 132); lipped-frames providing a protruding recess for the pin (cf. Egan and Pritchard 1991, fig 45, 306-310), and finally one with a shallow recess for the pin (cf. Ibid 1991, fig 42, 271, 274). Other forms represented include, a circular frame (cf. Ibid 1991, fig 36, 28) and a trapezoidal frame ornamented with three small equidistant cast knops on the outside edge of the bi-convex frame (Fig 56b; cf. Whitehead 1996, 110). Finally one buckle frame has an integral forked spacer, to which two sheets would have been soldered to form a buckle plate (Fig 56c; cf. Fingerlin 1971 114, 184; Steane and Bryant 1975, fig 42, 21).

Buckle-plates

There are seven incomplete and badly corroded plates for connecting buckles to straps of leather or textile. One (SF37) was recovered from a ditch site to the south of Plot 1 [2097], five (SF22, 34-36, 47) were retrieved from demolition deposits [2040, 2160] and one from topsoil (SF28). All are one piece types made from a rectangular-shaped sheet which has been folded widthways and then attached to the buckle by folding the end around the frame and securing it to the strap or belt by one or more rivets. Where rivets survive, one buckle-plate is secured by large domed-headed rivets and the

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remainder are plain. The buckle-plates range in recorded length from 14mm to 37mm and 13mm to 18mm wide; and with the exception of one example, all are recessed for the frame and have a slot for the pin. Five buckle-plates retain vestiges of a non-ferrous coating and on one badly corroded example it is just possible to determine the presence of a simple incised linear motif.

Strap-ends

There are three copper alloy strap-ends (SF24, 38, 61) one from a spread overlying ... [2164] and two from topsoil [2000]. All the strap-ends are tongue-shaped with terminal knops and they represent examples of types which have been manufactured from two or more individual pieces, in other words they are composite strap-ends. The smallest example (SF61) measures 29mm in length and it is manufactured from two copper alloy sheets secured by a single centrally placed rivet positioned close to the attachment edge. It is not dissimilar to an example from York (Ottaway and Rogers 2002, 1475, 14362). The larger strap-ends both measure 48mm in length and they are furnished with concave attachment edges. One strap-end is complete (SF24) and the other is just a back-plate from a strap-end (SF38). The former comprises two tongue-shaped plates with a forked spacer set between and secured by two rivets; the front plate is furnished with a round aperture and groove on the front plate (Fig 56d), like a late 13th and early 14th century example from London (cf. Egan and Pritchard 1991, fig 93, 664).

Mount

A strap-loop was recovered from topsoil [2000]. It comprises a five-sided arched frame (15 x 17mm) with a single internal rivet on the attachment edge. Mounts of this type would have been used to secure the loose ends of straps. Egan recalls an example seen on an archer's wrist guard from Billingsgate, London (1991, fig 143) and there is also an example from Lyveden (Steane and Bryant 1975, fig 42, 31).

Jewellery

Only one item of jewellery was recovered, a cast annular brooch from the fill of the early ditched boundary of Plot 3, ditch [2019]. The brooch is simple in appearance with a crudely executed motif comprising three equidistant panels of oblique, regularly spaced grooves sited close to the outside edge and extending for just half the width of the ring (Fig 56e). A brooch with a similar motif was recovered from a late 13th-century deposit at the medieval settlement of West Cotton, Raunds, Northamptonshire (Hylton 2010, fig 11.7, 35).

Catalogue of illustrated costume fittings

Fig 56a Buckle frame/pin, copper alloy. Cast oval frame with four knops; wire pin looped around bar which is offset and narrowed and would have held a strap measuring *c.* 13mm wide. Date: *c.* late 12th-late 14th century. Length: 18mm Width: 25mm Pin – Length: 22mm SF23, Context 2000, Topsoil

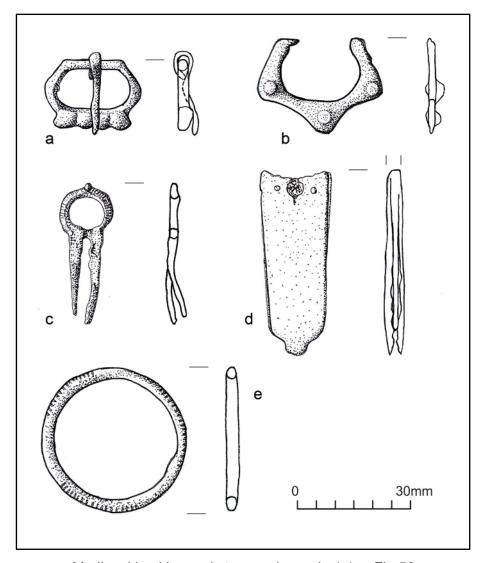
Fig 56b Trapezoidal buckle frame with off-set narrow bar (now missing, vestige survives). Outside edge of frame bi convex with three small equidistant knops. Date: 1250-1400, Width: 32mm L: 25mm SF46, Context 2000, Topsoil

Fig 56c Buckle, copper alloy. Cast, oval, lipped frame with integral forked spacer. Frame with triangular cross-section and rectangular-sectioned forked spacers. Crudely executed with file marks evident on all surfaces. Date: *c*.1350-1400 Frame: L: 14mm W: 14mm Plate - L: 23mm W: 8mm SF62, Context 2000, Topsoil

Fig 56d Strap-end, copper alloy. Complete tongue-shaped strap-end, three-piece composite type with forked spacer plate and flat lozenge knop. Concave

attachment edge with shallow notches, round aperture and groove on front plate. Strap secured by two rivets, undecorated. Length: 48mm Width: 18mm SF24, Context 2164, Spread

Fig 56e Brooch, copper alloy. Incomplete, pin missing. Cast annular brooch with sub-oval/lozenge-shaped cross-section. Good patina, decorated with three eqidistant panels of regularly spaced oblique grooves. Ext. Dia: 38mm Int. Dia: 32mm SF44, Context 2018, Ditch 2019



Medieval buckles and strap-ends, scale 1:1 Fig 56

Building equipment

There is a dearth of items which may have form part of or been attached to permanent structures. The only objects identified are two staples, a fragment of a binding strap, an iron ring and 17 nails, and all, with the exception of four nails from pit [2055], were recovered from spreads overlying the buildings (2028, 2040, 2093).

General iron work

Two types of staple are represented, U-shaped (SF39) and rectangular (SF21). The former is incomplete and only one arm survives; it has been manufactured from a

rectangular-sectioned rod which has been forged into a U-shape measuring *c*.80mm in length. The terminals are tapered enabling it to be driven into timbers leaving the protruding end to form a fixing point for hasps, chains and rings. For a similar example see Bryant and Steane 1971 (fig 17Q).

The rectangular staple is made from copper alloy plate (SF21). The width (41mm) of the staple is greater than the length (8mm) and the arms are short, tapered and are turned in at right angles to the plate (clenched). Similar examples have been recovered from Norwich (Margeson 1993, fig 104, 944) and York (Ottaway and Rogers 2002, fig 1408, 15161). This type is less robust than iron examples and their function is uncertain.

Other pieces of general iron work include a parallel-sided binding strip (L: 103mm W: 26mm) with curved profile (SF58, not illus) and an iron annular ring (SF13, not illus) with a circular cross-section (Ext dia: 27mm Int Dia: 19mm). Rings of this type would have had any number of uses from attaching chains or being used for suspension.

Nails

In total there are 17 nails, four were recovered from the fill of stone-lined pit [2055] sited in the south of Plot 1, and a further 13 were recovered from the silt spread overlying Plot 3. There are only two complete nails, both have flat sub-circular heads and measure up to 64mm in length. The remainder comprise incomplete/damaged nails measuring up to 44mm in length, some with clenched terminals.

Household/general equipment

The excavations produced very few items for use in a domestic setting and those that were recovered could also have been used elsewhere within the settlement. They include parts of two barrel padlocks, their presence attesting to the need for security, and two hones which have been imported from Northern Europe.

Locks

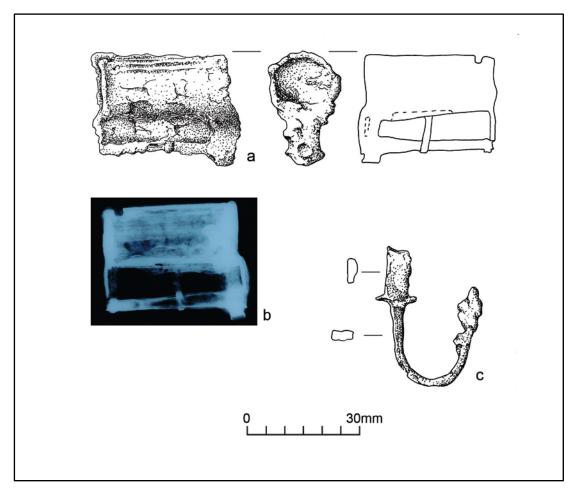
Lock furniture is represented by a barrel padlock case (SF30) and a bolt for a barrel padlock (SF51), the former was recovered from Spread deposit 2014, together with one of the mica-schist whetstones (SF12). Barrel padlocks comprise three main elements, a hollow cylindrical case, within which fits a bolt with attached spines and leaf springs. The bolt mechanism is attached to a U-shaped free arm and it is the position and the form of the housing for securing the free arm which identifies the type of padlock. This padlock has been classified according to Goodall's typology for Winchester (1990, 1001 ff) and typologically it represents Goodall's Type B, where the tube for retaining the free arm is located away from the case by means of an integral rectangular fin. The case is formed from rolled ferrous metal sheet. The tube is tapered and it is bound to the fin by three straps, a wide strap (c.7mm) is sited at the entrance to the tube and two narrow straps (c.4mm), one at the centre and the other at the opposing end. Close set horizontal rods, probably twisted, are visible on the underside of the padlock, the x-ray also reveals the presence of horizontal straps on the side of the case, rather like an example from the medieval settlement at West Cotton, Raunds, Northamptonshire (Hylton 2010, fig 11.18, 39), which has also been identified as a Goodall's Type B padlock. On the underside of the case, at one end (opposite to the bolt entry aperture), there is a transverse rectangular keyhole slot and the x-ray suggests that this too has been reinforced with straps to protect the entrance to the keyhole. The x-ray also suggests that the case was coated externally with a nonferrous metal, this acted as a braze to fix the rods and straps and preserve the lock. Although the bolt is missing from the padlock case, an example of a padlock bolt with a U-shaped free arm was recovered from spread 2093 (Fig 57a and b).

Catalogue of illustrated medieval locks:

Fig 57a Padlock case, iron. Cylindrical case with tube for free arm located away from the case; tube for free arm connected to the case by an integral rectangular fin. Length: 70mm Height: 60mm SF30, Context 2014, Spread...

Fig 57b X-ray of Padlock case

Fig 57c Padlock bolt, iron. U-shaped free arm (rectangular cross-section) with vestige of circular closing plate and one spine (no leaf springs). L: 74mm SF51, Context 2093, Spread.



Medieval padlocks and lock cases, scale 1:2 Fig 57

Hones

Two hones (SF12, 15) for sharpening ferrous metal knives and tools were recovered from rubble and silt spreads [2005, 2014] overlying pits in Plot 2. The hones are fashioned from elongated sub-rectangular sectioned rods of micaceous schist (quartz-muscovite schist) which originated from quarries in Eidsborg, Telemark, Norway. Both are examples of unperforated hones, they measure 111mm and 125mm in length and presumably they would have been for general purpose use, since they are longer, thicker and less well made than the smaller perforated hones which would have been for personal use and suspended from the waist (Fig 58).

The hones display signs of excessive wear, all four sides are worn smooth for the full length of the hone and both are taper slightly towards the terminal. Numerous examples were recovered from domestic contexts at Lyveden (Bryant and Steane 1971, fig 20; Steane and Bryant 1975, fig 53).



Medieval hone stones Fig 58

Catalogue of illustrated hone stones:

Fig 58a Hone, mica-schist (Norwegian ragstone). Incomplete one terminal missing. Sub-rectangular cross-section, slightly tapered, all surfaces smooth. Length: 111mm Width: 33-30mm Depth: 27-20mm. SF12, Context 2014, Spread

Fig 58b Hone, mica-schist (Norwegian ragstone). Incomplete, both terminals missing. Sub-rectangular cross-section, slightly tapered, all surfaces smooth. Length: 125mm Width: 20mm Depth: 18mm. SF15, Context 2005, Rubble spread

Horse furniture

The use of horses is represented by two buckles (SF40, 41) and a complete rumbler bell (SF20). The buckles were recovered from the spread overlying Plot 3 [2028] and both represent types that date to the late 13th and early 14th century. They would have been used to secure leather straps etc. One buckle is made from iron and it represents a heavy duty form (SF41). The frame is rectangular in shape and it has been manufactured in two pieces, a C-shaped frame with looped terminal ends, which hold in place a separate solid circular-sectioned roller. The solid roller would have

decreased friction, resulting in less wear on harness straps .The x-ray reveals that the outer surface of the frame retains the vestiges of a non-ferrous coating. For a similar example see Clark 1995 (fig 42, 29). The other buckle is made from copper alloy (SF40), it has a rectangular double frame with off-centre bar (L: 23mm W: 27mm) the edges and sides of frame are bevelled and the remains of an iron pin survive as a corroded mass coiled around the bar (cf. Egan and Pritchard, 1991fig 62, 442).

A complete rumbler bell (SF20) was recovered from spread 2093. It is spherical (Dia: 30mm) with a suspension loop at the top (H: 35mm). The bell has been made in four individual parts, which comprise, the top, bottom, loop and pea; the latter surviving as a mass of corrosion products inside the bell. The exterior surface (top and bottom) is decorated with a foliate motif and the base adjacent to the sounding hole is marked with a crude hammer, a foundry mark. Bells of this type date to the 16th and 17th century.

A 16th-century coin by Paul Clements

One 16th-century coin was recovered from the topsoil in Area B (2000) via metal detector. SF60 is a silver half-groat of Elizabeth I struck at the tower mint, London. Despite both faces being heavily worn the partial tun or hand mint mark is visible on the reverse. These marks were used between 1590 and 1595 (Sutherland 1982, North 1991).

Table 26: Catalogue of other finds

SF No.	Fill / cut / type	Material	Object	Date	Description
10	2000 / topsoil	Lead	Off cut		Folded sheet offcut.
11	2002 / stone spread	Lead alloy	frag	Modern	Crushed fragment of white metal cap or top of jar
12	2014 / stone spread	Stone	Whet-stone	Medieval	Micaceous schist whetstone, incomplete L: 111mm W: 33-30mm D: 27-20mm.
13	2028 / rubble spread	Iron	Ring	Medieval	Ring, iron. Complete but broken in two pieces. Ext dia: 27mm Int Dia: 19mm.
14	2003 / subsoil	Lead	Fragment	Undated	Sub-oval fragment with five incisions, four forming two V-shaped cuts.
15	2005 / rubble spread	Stone	Whet-stone	Medieval	Micaceous schist whetstone, incomplete, L: 125mm W: 20mm D: 18mm
20	2093 / spread	Copper alloy	Bell	16th/ 17th century	Rumbler bell, complete. Made in four parts, decorated with a leaf motif and with a foundry mark. Dia: 30mm height: 35mm Date: 16th/17th C
21	2093 / spread	Copper alloy	Staple	Medieval	Rectangular staple. Tapered arms. W: 41mm H: 22mm Th: 8mm
22	2040 / rubble spread	Copper alloy	Buckle plate	Medieval	Buckle-plate. Incomplete, one side missing. Patches of gilding evident on exterior surface. L: 14mm W: 15mm
23	2093 / spread	Copper alloy	Buckle	L 12th – L14th century	Buckle frame/pin, copper alloy. Oval frame with ornate outside edge, in the form of four knops. L: 18mm W: 25mm Pin – L: 22mm
24	2164 / spread	Copper alloy	Strap-end	Medieval	Strap-end, complete, tongue-shaped, three-piece composite type with forked spacer plate, undecorated. L: 48mm W: 18mm
25	2159 / Surface in Plot A	Copper alloy	Buckle	Medieval	Buckle. Complete but pin broken. Plain circular frame with no constriction for the pin. Ext. dia: 26mm Int. dia: 19mm
26	2000 / topsoil	Copper alloy	Buckle	14th century	Buckle frame. Cast oval, lipped frame (protruding recess for the pin). L: 18mm W: 19mm
27	2000 / topsoil	Copper alloy	Buckle	14th century	Buckle frame. Oval-shaped frame with offset bar; D-shaped cross-section and shallow recess for the pin. L: 19mm W: 24mm
28	2000 / topsoil	Copper alloy	Buckle plate	Medieval	Buckle-plate, rectangular sheet of metal folded in half and secured by four dome headed rivets. A slot for the pin and a recess for the frame are evident. Tiny fragment of gilding is visible. L: c. 35mm W: 18mm
29	2000 / topsoil	Copper alloy	Mount	Medieval	Strap loop. Five-sided arched frame with single internal rivet on attachment edge. W: 15mm, L: 17mm
30	2014 / spread	Iron	Barrel padlock	Medieval	Padlock case. Cylindrical case with tube for free arm located away from the case; connected to the case by an integral rectangular fin. The case is formed from rolled ferrous metal sheet. L: 70mm H:60mm
31	2000 / topsoil	Copper alloy	Stud	Medieval	Stud. Now badly damaged, outside edge of head folded inwards. Spots of

SF No.	Fill / cut / type	Material	Object	Date	Description
					gilding visible on the surface. W of head: c. 25mm, L: c.21mm
32	2000 / topsoil	Copper alloy	Brooch*	Medieval	Ring. Plain annular ring with sub-oval cross-section, possibly a circular buckle frame. Ext. dia: 34mm Int. dia: 27mm
33	2000 / topsoil	Copper alloy	Ring	Medieval	Ring. Plain annular ring with flattened sub-oval cross-section. Ext. dia: 20mm Int. dia: 15mm
34	2040 / rubble spread	Copper alloy	Buckle plate	Medieval	Buckle-plate. Badly corroded. One piece type, made from rectangular shaped piece of sheet metal folded in half and secured by rivets (two extant, others missing). Spots of gilding visible and a linear motif. L: <i>c</i> .29mm Width: 19mm
35	2040 / rubble spread	Copper alloy	Buckle plate	Medieval	Buckle-plate. One piece type, made from a rectangular shaped piece of sheet metal folded in half widthways. Furnished with slot for the pin, is recessed for the frame. L: 29mm W: 15mm
36	2160 / demolition layer	Copper alloy	Buckle plate	Medieval	Buckle-plate. Incomplete abraded fragment only. Rectangular piece of sheet metal with two extant perforations. L: 22mm, W:13mm
37	2094 / 2097 / ditch	Copper alloy	Buckle plate	Medieval	Buckle-plate. One piece type made from a metal sheet folded in half widthways. Furnished with slot for the pin. Spots of gilding evident in corrosion products. L: 29mm W: 15mm L: 17mm W: 13mm
38	2000 / topsoil	Copper alloy	Strap-end	c.1400	Strap-end. Back-plate from composite strap-end, originally type with forked spacer plate. Slightly tapered with vestige of knop. L: 48mm W: 18mm
39	2028 / spread	Iron	Staple/ nails	Undated	Staple. Incomplete. U-shaped staple with rectangular cross-section and tapered terminal. L: c. 80mm. 13 nails one with flat circular head and square-sectioned shank (c.58mm). And 12 with discerable head measuring up to 44mm in length.
40	2028 / spread	Copper alloy	Buckle	14th/ 15th century	Buckle frame. Rectangular double frame with off-centre bar. Edges and sides of frame bevelled. Remains of iron pin survives. L: 23mm W: 27mm
41	2028 / spread	Iron	Buckle	Medieval	Buckle. Complete with pin attached. Rectangular, made in two pieces. C-shaped frame with looped terminal ends, which hold in place a separate solid circular-sectioned roller. Vestige of non-ferrous coating visible.
43	2000 / topsoil	Copper alloy	Buckle	13th/ 14th century	Buckle frame. Oval frame with D-shaped cross-section and narrowed bar. Pin survives as a corroded lump attached to bar. L: 20mm W: 33mm
44	2018 / 2019 / ditch	Copper alloy	Brooch	Medieval	Cast annular brooch with sub oval cross section. Decorated with three equidistant panels of oblique grooves. Pin missing. Ext. Dia: 38mm Int: 32mm
45	2000 / topsoil	Copper alloy	Buckle	Medieval	Cast buckle frame. Damaged and incomplete, with ornate outside edge, centrally placed moulding with circumferential groove. W: 37mm
46	2000 / topsoil	Copper alloy	Buckle	c.1250-1400	Trapezoidal buckle frame with off-set narrow bar (now missing, vestige

SF No.	Fill / cut / type	Material	Object	Date	Description
					survives). Outside edge of frame bi convex with three small equidistant bosses/rivets. W: 32mm L: 25mm
47	2040 / rubble spread	Copper alloy	Buckle plate	Medieval	Buckle-plate. Complete but badly corroded and surface patina flaking off. Tapered one piece type, made from sheet of copper alloy with terminal folded over, secured by three rivets. Vestige of a non ferrous coating. L: 37mm W: 13mm
48	2000 / topsoil	Copper alloy	Rod fragment	Medieval	Incomplete, one terminal missing. Tapered sub-square sectioned shank with rounded terminal. Possibly part of buckle/brooch pin. L:35mm
50	2093 / spread	Iron	Rod fragment		Circular-sectioned rod fragment, curved profile. Possibly part of ?suspension ring.
51	2093 / spread	Iron	Padlock bolt	Medieval	Padlock bolt. U-shaped free arm (rectangular cross-section) with vestige of circular closing plate and one spine (no leaf springs). L: 74mm
52	5097 / 5098 / ditch	Iron	Nail	Undated	Nail. Complete. Sub-circular flat head with straight shank tapered to a point. L: 48mm
58	2040 / rubble spread	Iron	Binding strip	Undated	Binding strip, iron. Incomplete, three fragments joining to a strip. L: 103mm W: c26mm
59	2052 / 2055 / pit	Iron	Nails	Undated	Nails (x 4) one complete with sub-circular flat head with straight square- sectioned shank tapered to a point.
60	2000 / topsoil	Silver	Coin	1590-1595	Coin, silver half groat (twopence) of Elizabeth I. Minted London. Wear vw/vw. Obv: Crowned bust facing left, 2 pellets to the right behind the head. Rev: Long cross fourchee over Royal shield. Tun or hand mint mark. CIVITAS [LON]DON [E]:D:G:R[OSA SIN] SPINA. Diameter: 17mm Weight: 0.8g. SF60, Context 2000, topsoil.
61	2000 / topsoil	Copper alloy	Strap-end	Medieval	Composite strap-end. Incomplete, damaged. Two-piece strapend with angled terminal and vestige of two V-shaped notches in attachment edge, a single copper-alloy rivet sited close to attachment edge. L: 29mm W: 14mm
62	2000 / topsoil	Copper alloy	Buckle	c.1350-1400	Buckle. Cast, oval, lipped frame with integral forked spacer. Frame with triangular cross-section and rectangular-sectioned forked spacers. Frame: L: 14mm W: 14mm, Plate - L: 23mm, W:8mm

7.5 The animal bone by Stephanie Vann

An assemblage of 328 fragments of animal bone was recovered from pits, ditches and gullies on the medieval site, of which 139 fragments (42%) were identifiable. The identifiable pieces comprised bones of cattle, sheep, ovicaprid, pig, horse, red deer, vole, frog, domestic fowl, bird, small mammal, medium mammal and large mammal. The methodology for the interrogation of this assemblage can be found in section 5.5 above.

Results

Preservation of the animal bone at this site was poor to good. Fragmentation was moderate and surface abrasion was moderate with bone exhibiting signs of erosion, weathering and other taphonomic damage in some instances. Fragmentation was the result of both old and fresh breaks. Five medieval period bones exhibited butchery marks and one showed potential pathology. From both the Roman and medieval bone, ten bone fragments showed evidence of burning and 27 showed evidence of canid gnawing.

Table 27: Total number of bone fragments per species from the medieval contexts

Species	Number of excavated fragments	Number of fragments from environmental samples
Cattle (Bos taurus)	15	1
Sheep (Ovis aries)	7	1
Sheep/Goat (Ovicaprid)	6	3
Vole (cf. Arvicola sp.)	-	34
Pig (Sus scrofa)	4	-
Horse (Equus caballus)	10	-
Red Deer (Cervus elaphus)	1	-
Large Mammal	8	-
Medium Mammal	17	1
Small Mammal	-	12
Domestic Fowl (Gallus gallus)	-	1
Bird	-	1
Frog (Rana sp.)	-	17
Total identified	68	71
Unidentified	41	148
Total	109	219

Tooth wear was recorded for one complete sheep mandible, following Grant (1982), enabling an age to be assigned to the individual animal. The results are shown in Table 28.

Table 28: Ageing of animal species by tooth wear (Grant 1982)

Context	Species	DP4	M1	M2	М3
2123	Sheep	h	d	-	-

Discussion

As with the Roman animal skeletal material, the small size of the assemblage prevents any significant conclusions to be drawn. The frequency of cattle remains, along with other domestic species such as ovicaprids (sheep/goat) and pigs (Maltby 1981) demonstrates their common exploitation throughout the medieval periods and is not unusual. The preferential preservation of these larger bones again should be taken into account.

Following the York System (Table 29), the sheep mandible would also be classified as juvenile/subadult. Following the fusion stages described by Reitz and Wing (1999) the total number of fused and unfused skeletal elements for the main domesticates (Tables 28 and 29) shows that most were above the early fusing stage at the time of death, apart from a cattle proximal radius from context (2101), indicating a cattle of less than 12 - 18 months of age (Reitz and Wing 1999). The only late-fusing element recorded amongst the data of this period was unfused, indicating a cattle of less than 42 - 48 months (3.5 - 4 years) of age (Reitz and Wing).

Table 29: Total number of fused and unfused skeletal elements for main domesticates (after Reitz and Wing 1999) during the medieval period

	Early Fusing		Middle Fusing		Late Fusing	
	Number Unfused	Number Fused	Number Unfused	Number Fused	Number Unfused	Number Fused
Cattle	1	5	0	1	1	0
Ovicaprid	0	4	1	0	0	0
Total	1	9	1	1	1	0

As with the Roman material, the medieval skeletal elements represent a variety of bones, including the axial skeleton (cranium, pelvis, scapula and vertebrae), the feet (metapodials, tarsals and phalanges) and the limbs (humerus, radius, ulna, femur, and tibia). Again, evidence of cut and chop marks combined with this distribution pattern may indicate that this is normal butchery waste. Four skeletal elements of ox, ovicaprid, horse, medium mammal and large mammal show chopping in the medieval phase. In addition, one medieval cattle humerus exhibited cut marks on the distal condyle, which may be indicative of dismemberment and filleting (Binford 1981).

Canids were present on the site throughout medieval periods. This is indicated by the evidence for canid gnawing on a number of bones from medieval contexts.

One example of possible pathology is given by a medieval ovicaprid metacarpal from context (2053). The bone exhibits shallow depressions on the proximal lateral articulation measuring 6.5mm by 5.5mm in size. The bone is shallow with a porous, woven-bone appearance. Similar depressions in the proximal articulation have been seen at other sites such as medieval and post-medieval Dudley Castle (Thomas 2005) and post-medieval Tumbling Fields in Devon (Vann and Grimm 2010). They may represent either osteochrondritic lesions or inherited (or epigenetic) traits.

7.6 Plant macrofossils by Val Fryer

Two samples for the retrieval of plant macrofossil assemblages were taken from medieval contexts and were submitted for assessment. The methodology for the analysis is detailed in Section 5.6. The plant macrofossils and other remains noted are listed in Table 30. Nomenclature within the tables follows Stace (1997) and Kerney and Cameron (1979) for the mollusc shells. All plant remains were charred. Modern roots, seeds, chaff and arthropod remains were abundant within all the assemblages.

Results

Cereal grains/chaff and seeds of common weeds were present at a low density within one of the two medieval assemblages, and were entirely absent in the other. No weed seeds were recovered from either context. Charcoal/charred wood fragments were present throughout, although not at a high density. The fragments of black porous and tarry material were probable residues of the combustion of organic remains (including cereal grains) at very high temperatures. Other remains occurred infrequently, but did include small pieces of bone and pellets of burnt or fired clay. It is though that later disturbance of the soil column may also have been responsible for the introduction of the mollusc shells, which were recorded within the assemblages. Although some were fragmented and abraded, most were extremely well preserved, retaining both delicate surface structures and excellent coloration. Open country species, particularly those associated with short-turfed grassland habitats, were recovered from both contexts.

Pit fills (Table 30)

Table 30: Plant macrofossils from medieval contexts

Sample No.	2	3
Context fill / cut / type	2020 / 2021 / pit	2057/ 2058 / pit
Plant macrofossils		
Cereal indet. (grain frag.)	x	-
Charcoal <2mm	xx	XXXX
Charcoal >2mm	xx	XXX
Charcoal >5mm	x	XX
Charcoal >10mm	-	X
Indet.seeds	-	X
Other remains		
Black porous 'cokey' material	x	-
Black tarry material	-	X
Bone	x	-
Burnt/fired clay	X	X
Molluscs		
Woodland/shade loving species		
Clausilia sp.	-	Х
Open country species		
Helicidae indet.	x	-
Vallonia sp.	-	X
Vertigo pygmaea	X	-
Volume of flot (litres)	<0.1	0.1
% flot sorted	100%	100%

x = 1 - 10 specimens xx = 11 - 50 specimens xxx = 51 - 100 specimens xxx = 100+ specimens

With the exception of charcoal/charred wood fragments, plant macrofossils are particularly scarce. As some of the charcoal fragments are moderately large (i.e. >5mm in size or larger), it is tentatively suggested that both assemblages may contain hearth waste, but further interpretation of these assemblages is not possible.

7.7 Charcoal wood samples by Imogen van Bergen Poole

The methodology for charcoal analysis is given in section 5.8. As with the Roman material, the majority of the wood is considered to be round wood, probably originating from a relatively small diameter axis such as branch material based on growth ring curvature. Some fragments revealed evidence of being heart wood. The fragments all showed evidence of rounding which indicates that they may have been subject to some weathering or abrasion post charcoalification. Preservation was relatively good with some fragments exhibiting well-preserved anatomy and good reflectivity whilst others showed evidence of distorted anatomy and homogenised cell walls usually coupled with high reflectivity.

Table 31: Summary of the taxonomic identity and charcoalified wood fragments from the medieval contexts

Fill / cut / type	Sample	Bag No.	Family / Genus / Species	Common name	No. of fragments	Notes
2057 / 2058 / pit	3	1	Betulaceae / Quercus sp.	oak	100	heart wood with tyloses

Familial classification follows that of the Angiosperm Phylogeny Group (2009)

Pit [2058] fill (2057)

This sample from pit [2058] comprised fragments of charcoalified oak heartwood material >3mm diameter. All fragments were black-grey in colour with orange staining in places. There was evidence of some anatomical distortion. There was a range in the maturity of the fragments preserved although no twig wood was evident. The reflectivity was relatively high in these fragments but neither the cell walls were homogenised nor the anatomy distorted. This suggests that the temperatures to which they were exposed were probably in the region of 400-600°C (cf. Braadbaart and Poole, 2008).

The assemblage of fragments derived from the medieval context comprised entirely oak. Most woodland during the medieval times comprised coppice-with-standards, i.e. standard trees for timber that was taken infrequently and an underwood where coppiced wood, including oak, was taken on a short rotation (i.e. annually), which was then used for fuel and fencing. Moreover as hedgerows increased so too did the occurrence of oak and it became perhaps the most common hedgerow tree at this time (Rackham 1990). The reflectivity and anatomy suggest that the exposure temperatures of the charred wood found from this context were likely to have been at the high end for a normal domestic fire (but see note about preservation in alkaline soils above). Oak wood is characterised by its high density and high calorific value relative to other European woods (Gale and Cutler, 2000) which makes it difficult to burn but once established provides a long-lasting, steady and (with adequate ventilation) even heat. Therefore often a 'companion' wood is used in the initial stages of starting an oak wood fire. However since no companion wood was found in this context this suggests that perhaps this fire was the end remains of a more long-term, established fire for a purpose that required a slow steady heat (hence the use of oak) where the internal

heat had built up sufficiently for subsequent fuel wood to be simply oak and any companion wood left to undergo complete charring resulting in ash, which would have been lost from the archaeological record. This would contrast to a domestic fire utilised for relatively short duration which would increase the chances of a companion wood being preserved.

The orange staining noted on the fragments from this context indicates that the fragments may have been exposed (post deposition) to iron oxide in an anoxic (eg waterlogged) environment. For the iron to precipitate out there would have had to have been a change from anoxic conditions to more oxic conditions (eg drop in the water level) resulting in Fe³⁺ precipitating out as the orange Fe²⁺ visible on most of the specimens including the internal anatomy. The reflectivity and anatomy indicates an exposure temperature in the region of 400-600 °C (cf Braadbaart and Poole 2008). However, if oxygen levels did fluctuate then it is likely that the degree of reflectivity is similarly influenced (Ascough *et al* 2010), which may in turn have influenced the inferred maximum exposure temperatures given above.

8 DISCUSSION

The development area contained remains across two spatially and chronological distinct sites; a rural, multiphase Roman field system to the east in Area A, and small medieval settlement and boundary plots to the west in Area B.

8.1 Late Iron Age and Roman

The Roman site comprised a series of substantial rectilinear enclosures forming a multiphase system, with a small number of features associated with agricultural processing and possible industrial activity. A number of postholes were found across the site, suggesting a post-built superstructure in the vicinity of the industrial pits, and two possible post structures may have been located to the west of Enclosure E2. Other buildings may have left no surviving traces.

The earliest phase of activity on the site dated from the late Iron Age or 1st century AD to 2nd century AD. The most significant feature of this period was Enclosure E1, but this phase also included a number of curvilinear ditches, a trackway, limestone surface and pits. The earlier oval or sub-square enclosure, which originated in the Iron Age was later replaced by enclosures with a more rectangular shape. This is a pattern observed at similar Roman sites within the region (Parry 2006).

Enclosure E1

Enclosure E1 was a large sub-square ditched boundary which enclosed an area of approximately 0.17ha. The only re-cutting seems to have taken place at the west entrance. The pottery recovered from Enclosure E1 is almost entirely dark brown and red-brown shell-gritted ware, together with a very small amount of grogged ware, indicating an origin perhaps in the late Iron Age, and certainly by the 1st century AD. The enclosure contained twelve pits. The pit functions were not clear, but they may have resulted from localised quarrying.

Other 1st to 2nd-century Roman features

A cluster of linear ditches, pits and curvilinear gullies were situated in the north-east of the enclosures. The features are broadly contemporary with the Phase 1 Roman activity, but could not be associated with Enclosure E1 with any certainty. A limestone trackway leading down the slope to the north-east was excavated during the trial trench evaluation (Walker 2011), and a small area of limestone surface was also identified.

Enclosure E2

Situated to the west of and cutting through Enclosure E1 was Enclosure E2, a large straight-sided, rectangular enclosure covering around 0.27ha. As with Enclosure E1, the main body of the enclosure seemed to have been cut as a single phase, although there were no observable entranceways. A linear ditch extending from the south of the enclosure may be a partial re-cut or re-alignment. The greater range of pottery fabrics from Enclosure E2 features, including some closely datable examples, gives this enclosure a probable 2nd-century date.

Corn Dryers and pits

A T-shaped structure of unbonded limestone was identified within Enclosure E2, with associated pits and cut features. The corn-drying oven contained a small amount of charcoal, pottery, and moderate densities of cereal grains and chaff. The low densities of charcoal recovered may indicate that the structure was cleaned regularly. Although this sort of oven is known to be low temperature, some of the recovered charcoal had

been subjected to high temperatures, possibly in excess of 600°C, indicating other industrial activity in the vicinity.

In general, where corn-drying ovens have been examined, the majority have contained the remains of spelt wheat, although mixed spelt and emmer wheat or barley have also been occasionally noted (Pelling 2013). The corn drying oven at Benefield produced a mixture of cereal types, primarily macrofossils of emmer wheat but also with quantities of spelt, bread wheat and a small amount of barley.

Over a hundred Roman corn dryers have been recorded in England, probably due to their easily identifiable structure. They are generally located in a broad scatter across southern England on land under 100m aOD, and are particularly common in the area between Northampton and Peterborough (Taylor 2007, fig 7.3). Ovens with a T-shaped flue are the most commonly found, comprising a stoking area, the flue, and a drying floor. A comparable contemporary example was excavated at Earls Barton, Northamptonshire, around 25km to the south-west (Chapman and Atkins 2004). Corndrying ovens were used throughout the Roman period, but they are primarily associated with the increased scale of cereal production and processing during the 3rd and 4th centuries AD; later than the proposed 2nd-century date for this example (Van der Veen 1989). Although these T-shaped structures, such as the one identified in Area A, are commonly known as corn dryers, a number of archaeobotanical and experimental papers have determined they may have been ineffective for drying grain, and instead had a multifunctional use, including roasting germinated grain for the production of malt, as well as the preparation of grain prior to consumption or storage (Pelling 2013; Reynolds and Langley 1979; Van der Veen 1989).

Associated with the corn dryer was a series of pits and cut features lying to the south, at least one of which contained burnt material of similar type to that recovered from the recognised corn dryer, and can be closely dated to the second quarter of the 2nd century AD. Further to the north of the corn dryer lay another group of adjoining pits which included another possible oven or hearth [5206]. The pits did not appear to intercut and may have been in use contemporaneously. Several contained the remnants of a probable stone lining, although this did not show any signs of having been burned.

Other features in Enclosure E2

Also in Enclosure E2 was a roughly circular pit which, as indicated by a highly burnt fill and associated metal working slag, may have been used for secondary iron smithing. A series of associated postholes may indicate a form of super-structure was associated with this industrial activity.

In the south of Enclosure E2 was a large pit or possible well, which may have had a base or floor of flat limestone slabs, containing 2nd-century AD pottery. During the trial trenching in 2011, another pit was identified in the south of Enclosure E2 near to the possible well (Walker 2011). Pit [209] was at least 2.50m long, 1.33m wide and 1.37m deep, with a bell-shaped profile. The upper fill (211) was compact dark brown sandy clay with frequent small pieces of limestone, not only containing seven sherds of shell-gritted and grog-tempered pottery and animal bone, but also the fragmentary skeleton of a human infant, probably neonatal. It was noted that such apparently casual burials are not uncommon on Roman sites. The infant burial proved to be isolated however, as no further human remains were identified during the current phase of works.

Enclosure E3

The third ditched enclosure produced a similar range of pottery forms and fabrics to that recovered from Enclosure E2, suggesting it was probably in contemporaneous use. Enclosure E3 was rectangular, with an area of 0.039ha. The enclosure had two

entrances at the western end, and there was no indication that the ditch had been cleared or re-cut at any point. Two pits were associated with the enclosure, one inside and one outside. Both contained what appeared to be waste dumped from hearths, including charcoal, burnt stones and cobbles.

Later 3rd to 4th-century Roman features

Crossing the centre of Enclosure E2 was a ditch which aligned with the southern edge of the enclosure. Pottery from fills suggests the ditch was in use during the 3rd or 4th century AD. This ditch was cut by a later undated pit, which contained a dump of burnt material from industrial activity. A probable 4th-century coin was found in the topsoil of Area B, along with a fragment of possible AD 1st-century armlet and a roof tile, although there was no evidence for concentrated Roman activity in that part of the site.

Conclusion

The Roman site excavated Area A corresponds with site recorded in the Historic Environment Record under HER 9433 as a possible Roman farmstead, although no structural occupation remains were identified.

It is likely that most of the pottery recovered from the Roman site was locally produced. The range of pottery wares and vessel forms, together with the small amount of regionally traded and imported continental wares, suggests that most of the activity within the enclosures and the associated features had a utilitarian agricultural function, with a small amount of domestic activity. This interpretation would appear to fit with the nature of the agricultural and low-level industrial features which were identified.

8.2 Medieval

The medieval settlement excavated in Area B comprised four house plots, edged with ditched boundaries, and containing stone-built rectangular house structures dating from the 13th century. At least one process of reorganisation of the plot boundaries took place, and at a later period some of the ditched boundaries were moved or replaced with stone walls before the site was abandoned at the end of the 14th century.

Late 12th-century boundary ditches

The first phase of activity within the medieval site comprised the digging of large boundary ditches to form at least two roughly rectangular plots extending back from the line of the road. Pottery evidence indicates that this activity took place between 1150 and 1250.

Plot 1

Plot 1 was defined by three different phases of boundary ditches. Two buildings were constructed within Plot 1; Buildings B1 and B2. These comprised two long rectangular limestone structures, aligned perpendicular to each other. Both buildings contained small internal walls subdividing the space. Building B1 contained a possible hearth. Pottery from the structures dated from the 13th to mid-14th centuries.

Other features within the boundaries of the plot included two small pits containing dumps of domestic hearth waste, and a large stone-lined pit which was later cut by a boundary ditch.

Plot 2

Plot 2 contained two different phases of stone building on differing alignments. Only small sections of the earlier structure, dating was dated from the 13th century, were surviving, preventing its reconstruction. A series of intercutting quarry pits were also present from this date. Later, a second limestone building B3 was constructed in the plot on a parallel alignment with the northern boundary. The demolition layers around the second building have been dated to the second half of the 14th century. At some point, stone walls were constructed edging the plot to the north-east, and stone drains were extended to the Building B3.

Plot 3

No structures were identified in Plot 3. However, as only the north-eastern corner of the plot lay within the excavation area, it is possible that building remains were located further to the south or west. An alternative interpretation may be that this plot remained unoccupied, as observed in several plots at West Cotton, instead being utilised for animal enclosure or horticulture (Parry 2006). A series of intercutting pits was probably dug for the purposes of quarrying or clay extraction, another activity observed at West Cotton (*ibid*). The pits were dated between the 13th and end of the 14th centuries.

Plot 4

Plot 4 was a later construction which was created between Plots 1 and 3 by the moving of existing boundaries. The southern boundary of Plot 1 followed the same alignment as previously but was recut further to the north. The new boundary ditch was dated between 1350 and 1400. It may have been partially stone lined and re-cut as many as five times, although the waterlogged conditions made this difficult to determine. In seems likely that similar wet ground conditions in the medieval period may have led to the recutting in the first place. The northern boundary of Plot 2 was replaced by a wall.

Building B4 was constructed over the defunct boundary of Plot 1, within the new plot. The building could not be fully excavated, but seemed to be formed of three rooms. A pitched stone surface lay adjacent to the structure to the north, and one room contained an area of stone flooring, perhaps a hearth or oven base.

Conclusions

The plots and stone buildings excavated in Area B form part of the deserted medieval hamlet of Churchfield. The range of pottery types indicates that the medieval structures had a short period of use. The buildings were probably constructed at the beginning of the 13th century, and the site was abandoned by the end of the 14th century.

The plots identified during the current excavations were constructed adjacent to, or leading off from, the route of the road (now Harley Way), and are situated around 350m to the north-east of the main area of earthworks representing the remains of Churchfield village. The remains of the hamlet have largely been destroyed by ploughing, but the surviving earthworks at Churchfield Farm were subject to excavation in the 1960s. These excavations produced evidence for stone buildings and finds dating from the 12th to 14th centuries. Churchfield is recorded in historic documents from the mid-10th century until the 14th century, although no finds from this earlier period have been identified (RCHME 1975; Foard 1991).

During the current excavations, the earliest remains found in Area B at Harley Road date from 1150, although the main period of activity falls between 1200-1350 and tailing off towards the abandonment of the settlement at the end of the 14th century. From this, it can be inferred that the Harley Way settlement represents a short-lived

expansion or relocation of the original Churchfield settlement before its eventual abandonment. This is a pattern observed in other studies of medieval landscape. An examination of four villages near Raunds (Parry 2006) and seven villages further afield (Page and Jones 2007) have identified a period of expansion during 1000-1350 AD, followed by a period of population decline and settlement contraction between 1350 and 1550.

The new area of settlement beside Harley Way is noticeably separate from the main earthworks of Churchfield hamlet, positioned further up the slope and overlooking the Lyvden Brook. The reason for this division probably lies in the position of medieval township boundaries. The boundary of Churchfield township passed between the two settlement areas to the south of the Harley Way settlement following a change in geology, while the Biggin township boundary passed around Silley Coppice and along the road to the north (Foard 1991, fig 2). The current County Parish boundaries follow these routes (Fig 3). The Harley Way settlement therefore occupied a narrow spit of land in the Oundle township between, and was probably therefore the settlement for Oundle tenants recorded in the 1301 Churchfield fee (Foard 1991).

Ridge and furrow identified during the trial trench analysis indicates that the area between the two settlements was ploughed. The furrows to the south of the Harley Way settlement, identified by trial trenching and geophysical survey, had a north-east by south-west alignment, although two remnant furrows to the north of Area A were aligned north-west by south-east (Fig 4). It is not clear that this change in orientation suggests division of the land between the two settlements rather than just the natural topography of the land. Geophysical survey did not identify any clear structural remains on the lower slope to the west of Site A, suggesting that the Harley Way settlement did not extent significantly further to the south (Butler and Walford 2011), although the RCHME records cropmarks further to the south by the brook (Fig 3).

The reasons for the abandonment of the Harley Way settlement and of Churchfield hamlet are not clear. Following a recognised trend of 14th-century depopulation caused by famines and the Black Death in the mid 14th century, it has been estimated that as many as 20,000 medieval villages and hamlets in England shrank to a single farm or disappeared entirely (Jones and Page 2006), of which 82 disappeared from Northamptonshire (Brown and Taylor 1975). It is worth noting that this abandonment was not necessarily due to the immediate effect of the plagues, but may instead be the result of the re-organisation of land in its aftermath (Parry 2006). The Lyveden valley in particular underwent significant desertion at this time, due to its dispersed nature (Foard, Hall and Partida 2009), as well as probably the small size of its settlements, and their subordinate nature (Parry 2006). An additional factor at the Harley Way settlement may be very wet ground conditions, which were observed in the present day. The frequent recutting of some medieval ditches on the site may indicate similar conditions were present during the 14th century, which might have also made occupation of the site difficult.

8.3 Research objectives

As stated in Section 3, it was hoped that the site might fulfil a number of research objectives given by the regional research agendas for the East Midlands (Knight *et al* 2012; Cooper 2006).

Some of the Roman period research objectives could not be met. The Roman site did not produce any evidence for settlement structures, and it is unknown where the occupation areas of the farmstead may have been situated in the landscape or in relation to the agricultural enclosures. While Roman settlements and agricultural sites are often seen to develop from earlier Iron Age occupation, as seen elsewhere in the

Lyveden Valley, this was not observed in this instance. While some pottery forms may have been in use during the Iron Age, these types are known to continue in use into the Roman period, and no features or finds which could be said to significantly predate the conquest were identified.

Specialist studies have been made of plant macrofossils and charcoal evidence from a number of the agricultural and proposed industrial features within the Roman site, including the proposed corn-drying ovens. The large proportion of cereal grains identified within the environmental samples highlight the agricultural processing which was taking place. The variety of plant macrofossils and other remains recovered from the ovens and associated pits, such as small bones, supports the idea that such ovens were multi-functional structures which were also used for other forms of food preparation and processing.

In Area B, the site offers several interesting insights to the research objectives concerned with the morphology and change of rural settlements, and of building fabrics.

The buildings themselves were constructed of roughly-faced limestone blocks, and lacked bonding material. The near absence of medieval roof tile materials found on site indicates that the buildings were likely to have been roofed with degradable materials such as thatch or shingles. No clear evidence was recovered for the function of the structures in Area B, although the change in orientation and shape of the buildings in Plot 2 is of note, and perhaps suggests a change in function. In broad terms, they are closely comparable to the buildings within the non-manorial phase of peasant tenements excavated at West Cotton, Raunds (Chapman 2010). A number of pits around the edges of the house plots suggest that small quarries of stone or clay were being excavated on the site.

The dating evidence suggests the buildings along the edge of Harley Way were constructed at a later date than the main village of Churchfield further to the southwest, as part of the expansion of the village along the roadway. A second period of expansion can be observed, even during the relatively short period of the site's use, with the re-organisation of the building plots observed for the insertion of a new building (Building B4). This suggests that a further evolution of the settlement, requiring the infilling of available open space with new structures, took place, even as little as fifty years before this area of the hamlet was abandoned.

Both Areas A and B of the site can add to the corpus of data for their respective periods, and may provide a useful tool for further research of the regional Roman or medieval landscape of the region, and of the dispersed settlement of the Lyveden Valley.

BIBLIOGRAPHY

Allison, K J, Beresford, M W, and Hurst, J G, 1966 *The Deserted Medieval Villages of Northamptonshire*, Leicester Department of English Local History, Occas. Papers, **18**

Angiosperm Phylogeny Group III, 2009 An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants APG III, *Botanical Journal of the Linnean Society*, **161**, 105-121

Ascough, P L, Bird, M I, Scott, A C, Collinson, M E, Cohen-Ofri, I, Snape, C E, and Le Manquais, K, 2010 Charcoal reflectance measurements: implications for structural characterization and assessment of diagenetic alteration, *Journal of Archaeological Science*, **37**, 1590-1599

Biddle, M, (ed), 1990 Object and Economy in Medieval Winchester; Artefacts from Medieval Winchester, *Winchester Studies*, **7.2**, Oxford

Binford, L R, 1981 Bones: Ancient Men and Modern Myths, Academic Press

Birch, W G, 1885 Cartularium Saxonicum: a collection of charters relating to Anglo-Saxon history, Whiting & Company, available online at http://ota.ox.ac.uk/desc/0511

Blinkhorn, P, 2001 Pottery from Southwick, 1996, in AG Johnston et al 1996, 150-55

Blinkhorn, P, 2002 Saxon and medieval pottery, in I Meadows 1998, 46-57

Blinkhorn, P, 2003 The Pottery, in A Thorne 2003, 116-9

Blinkhorn, P, 2007 Late medieval pottery kilns, in A Hardy et al 2007, 100-111

Blinkhorn, P, 2008 The Pottery in P Chapman et al 2008, 236-255

Blinkhorn, P, 2010 The Saxon and medieval pottery, in A Chapman 2010, 259-333

Braadbaart, F, and Poole, I, 2008 Morphological, chemical and physical changes during charcoalification of wood and its relevance to archaeological contexts, *Journal of Archaeological Science*, **35**, 2434–2445

Braadbaart, F, Poole, I and van Brussel, A A, 2009 Preservation potential of charcoal in alkaline environments: an experimental approach and implications for the archaeological record, *Journal of Archaeological Science*, **36**, 1672–1679

Brown, A E and Taylor, C C, 1975 Four Deserted Settlements in Northamptonshire, *Northamptonshire Past and Present*, **V**

Bryant, G F, and Steane, J M, 1969 Excavations at the Deserted Medieval Settlement at Lyveden, a Second Interim Statement, Journal of Northampton Museum, 5

Bryant, G F, and Steane, J M, 1971 Excavations at the Deserted Medieval Settlement at Lyveden, a Third Interim Report, Journal of Northampton Museum, 9

Butler, A, and Walford, J, 2011 *Archaeological geophysical survey, land east of Harley Way, Benefield, Northamptonshire*, Northamptonshire Archaeology report, **11/178**

Chapman, A, 2010 West Cotton: A Study of medieval settlement dynamics: AD450-1450. Excavation of a deserted medieval hamlet in Northamptonshire, 1985-89, Oxbow

Chapman, A, and Atkins, R, 2004, Iron Age and Roman settlement at Mallard close, Earls Barton, Northamptonshire, *Northamptonshire Archaeology*, **32**

Chapman, P, Blinkhorn, P and Chapman, A 2008 A medieval potters' tenement at Corby Road, Stanion, Northamptonshire, *Northamptonshire Archaeology* **35**, 215 - 70

Chapman, P, 2008 Ceramic roof tile, in P Chapman et al 2008, 255-257

CIfA 2014a Code of Conduct, Chartered Institute for Archaeologists

ClfA 2014b Standard and Guidance for Archaeological Excavation, Chartered Institute for Archaeologists

Clarke, J, 1995, The Medieval Horse and its Equipment c.1150-c.1450, *Medieval Finds from excavations in London*, **5**

Clark, K M, 1995 The later prehistoric and protohistoric dog: the emergence of canine diversity, *Archaeozoologia*, **VII/2**, 9 – 32

Connor, A and Buckley, R, 1999 Roman and Medieval Occupation in Causeway Lane, Leicester: Excavations 1980 and 1991, Leicester Archaeology Monographs 5, University of Leicester Archaeological Services

Cooper, N J, (ed) 2006 The Archaeology of the East Midlands, an archaeological resource assessment and research agenda, Leicester Archaeology Monograph, **13**

Crummy, N, 1983 The Roman small finds from excavations in Colchester, *Colchester Archaeological Reports*, **2**

Dawson, M, 2011 Heritage Assessment: Land at Harley Way, Benefield, Northamptonshire, CgMs Consulting report

Egan, G, and Pritchard, F, 1991 Dress Accessories c.1150-c.1450, *Medieval Finds from Excavations in London*. **3**

Evans, J, 2003 The Later Iron Age and Roman Pottery, in H Hinman 2003, 68-107

Fingerlin, I, 1971 Gürtel des Hohen und späten Mittelalters, Deutscher Kunstverlag, 46

Foard, G, 1991 The Saxon Bounds of Oundle, in *Northamptonshire Past and Present*, **VIII:3**

Foard, G, 2001 Medieval Woodland, Agriculture and Industry in Rockingham Forest, Northamptonshire, in *Medieval Archaeology*, **45**, Society for Medieval Archaeology

Foard, G, Hall, D and Partida, T, 2009 Rockingham Forest: An Atlas of the medieval and early-modern landscape, The Northamptonshire Record Society

French, C A I, 1994 *The Archaeology along the A605 Elton-Haddon bypass, Cambridgeshire*, Fenland Archaeological Trust, Cambridgeshire County Council

Frere, S, 1972 Verulamium Excavations Volume I, Society of Antiquaries

Gale, R, and Cutler, D, 2000 *Plants in Archaeology,* Westbury and Royal Botanic Gardens Kew

Gardiner, M, and Rippon, S (eds), 2007 *Medieval Landscapes: Landscape History After Hoskins*, Windgather Press, **2**

Gidney, L, 1999 The animal bones, in A Connor and R Buckley 1999, 310-328

Goodall, I H, 1990 Locks and Keys, in M Biddle 1990, 1001-1036

Gover, J E B, Mawer, A, and Stenton, F M, 1975 *The Place-names of Northamptonshire,* English Place-Name Society, **X**

Grant, A, 1982 The use of toothwear as a guide to the age of domestic ungulates, in B Wilson, C Grigson and S Payne (eds) 1982, 91 - 108

Hall, D, 1995 *The Open Fields of Northamptonshire,* Northamptonshire Record Society, **38**

Hardy, A, Charles, B M and Williams, R J, 2007 *Death and Taxes: The archaeology of a Middle Saxon estate centre at Higham Ferrers Northamptonshire*, 100-111, Oxford Archaeology Monograph

HE 2015 Management of Research Projects in the Historic Environment (MoRPHE), Historic England

Hinman, M, 2003 A Late Iron Age Farmstead and Romano-British Site at Haddon, Peterborough, BAR British Series, **358**

Hylton, T, 2010 Other Finds in A Chapman 2010, 335-426

Jackson, D and Williams, A ,1991 The Fina Pipeline Project and a Roman Pottery Kiln at Fineshade, *Northamptonshire Archaeology*, **23**

Johnston, A. G., Bellamy, B., and Forster, P. J., 1996 Excavations at Southwick, Northamptonshire, *Northamptonshire Archaeology*, **29**, 150-55

Jones, M and Dimbleby, G (eds) 1981, The Environment of Man: the Iron Age to the Anglo-Saxon Period, BAR British Series, **87**

Jones, R, and Page, M, 2006 *Medieval Villages in an English Landscape: Beginnings and Ends,* Windgather

Kerney, M P, and Cameron, R A D, 1979 A Field Guide to the Land Snails of Britain and North-west Europe, Collins

Knight, D, Vyner, B, and Allen, C, 2012 East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands, Nottingham Archaeology Monographs, **6**

Kouldeka, F, 1885 Das Verhältnis der Ossa longa zur Skeletthöhe hei Säugertieren, Verhandlungen der Naturforschenden Vereines in Brünn, **24**

Mackreth, D F, 2011 Brooches in Late Iron Age and Roman Britain, Vols 1 and 2, Oxbow Books

Maltby, M, 1981 Iron Age, Romano-British and Anglo-Saxon animal husbandry – a review of the faunal evidence, in M Jones and G Dimbleby (eds) 1981, 155-203

MOLA Report 16/154 Page 120 of 146

Mather, L-A 2011 Brief for a programme of archaeological excavation, recording, analysis and publication of land at Harley Way Quarry, Harley Way, Churchfield, Northamptonshire, Northamptonshire County Council

Manning, W H, 1985 Catalogue of the Romano-British Iron tools, fittings and weapons in the British Museum. British Museum

Margeson, S, 1993 Norwich Households: Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-78, EAA **58**

Matolcsi, J, 1970 Historische Erforschung der Körpergröße des Rindes auf Grund von ungarischen Knochenmaterial, *Zeitschrift für Tierzüchtung und Züchtungsbiologie*, **87**, 89 - 137

McCarthy, M, 1979 The Pottery, in J H Williams 1979, 151-242

McParland, L C, Hazell, Z, Campbell, G, Collinson, M E, and Scott, A C, 2009, How the Romans got themselves into hot water: Temperatures and fuel types used in firing a hypocaust, *Environmental Archaeology*, **14**, 176-183

Meadows, I 1998 Excavations at Peterborough Road, Warmington, Northamptonshire 1998, Northamptonshire Archaeology report

MPRG 1998 Guide to the Classification of Medieval Ceramic Forms, Medieval Pottery Research Group, Occasional Paper, 1

MPRG 2001 Minimum Standards for the Processing, Recording, Analysis and Publication of post-roman Ceramics, Medieval Pottery Research Group, Occasional Paper, 2

MOLA 2014 Archaeological Fieldwork Manual, MOLA Northampton

Murray, I, and Clegg, I, 1961 Oundle School history society notebook, Sept 1961

NA 2011 Archaeological Fieldwork Manual, Northamptonshire Archaeology

NA 2012 Written Scheme of Investigation for archaeological investigation on land at Harley Way Quarry, Harley Way, Benefield, Northamptonshire, Northamptonshire Archaeology

North, J, J, 1991 Hammered Coinage Vol 2: Edward I to Charles II 1272 - 1662, Spink

O'Connor, T, P, 2003 The Analysis of Urban Animal Bone Assemblages: A Handbook for Archaeologists, The Archaeology of York, **19**, Principles and Methods, York Archaeological Trust and Council for British Archaeology

Orton, C, 1998-99 Minimum Standards in Statistics and Sampling, *Medieval Ceramics*, **22-23**, 135-8

Ottaway, P and Rogers, N, 2002 Craft, Industry and Everday Life: Finds from Medieval York, The Archaeology of York, The Small Finds **17/15**

Page, M, and Jones, R, 2007 Stability and Instability in Medieval Village Plans: Case Studies in Whittlewood, in M. Gardiner and S Rippon (eds), 2007, 139-152

Parry, S, 2006 Raunds Area Survey: An archaeological study of the landscape of Raunds, Northamptonshire 1985-94, Oxbow Books

Pearce, J, and Vince, A, 1988 A Dated Type-Series of London Medieval Pottery. Part 4: Surrey Whitewares London and Middlesex Archaeol Soc Special Paper, 10

Pelling, R, 2013 The Charred Plant Remains from a corn-drier at Lower Woods Stanley Meadow, South Gloucestershire, English Heritage Research Department Reports, 30/2013

Perrin, R, 1980 Pottery of 'London ware' type from the Nene Valley, *Durobrivae: A Review of Nene Valley Archaeology, 8*, Nene Valley Research Committee, 8-10

Perrin, R, and Webster, G, 1990 Roman Pottery from Excavations in Normangate Field, Castor, Peterborough 1962-3, *Journal of Roman Pottery Studies*, **3**, 35-62

Rackham, O, 1990 Trees and Woodlands in the British Landscape, Phoenix Press

RCHME 1975 An Inventory of the Historical Monuments in the County of Northampton, Volume 1: Archaeological Sites in North-East Northamptonshire, The Royal Commission on the Historical Monuments of England, Her Majesty's Stationary Office

Reitz, E J and Wing, E S, 1999 *Zooarchaeology,* Cambridge Manuals in Archaeology, Cambridge University Press

Reynolds, P J, and Langley, J K, 1979 Romano-British Corn Drying Oven: an Experiment, *Archaeology Journal*, **136**, 27-42

Rollo, L, 1994 The Roman Pottery, in C A I French, 1994, 89-129

Schweingruber, F H, 1990 *Mikroskopische Holzanatomie. Anatomie microscopique du bois. Microscopic wood anatomy*, Swiss Federal Institute of Forestry Research

Stace, C, 1997 New Flora of the British Isles, 2nd edition, Cambridge University Press

Steane, J M, and Bryant, G F, 1975 Excavations at the Deserted Medieval Settlement at Lyveden, Northants, Forth Report, Journal of Northampton Museum, 12

Sutherland, C, H, V, 1982, English Coinage 600-1900, B.T.Batsford

Swan, V G, 1984 *The Pottery Kilns of Roman Britain*, Royal Commission on Historical Monuments Supplementary Series **5**, Her Majesty's Stationary Office

Taylor, J, 2007, *An atlas of Roman rural settlement in England*, Council for British Archaeology, research report **151**

Thomas, R, 2005 Animals, Economy and Status: The Integration of Zooarchaeological and Historical Evidence in the Study of Dudley Castle, West Midlands (c.1100–1750), BAR British Series, **392**, Archaeopress

Thorne, A 2003, A medieval tenement at Deene End, Weldon, Northamptonshire, *Northamptonshire Archaeology,* **31**

Turland, R, 1991 The pottery from the Kiln, in D Jackson and A Williams, 1991, 85-92

Van der Veen, M, 1989 Charred Grain Assemblages from Roman-Period Corn Driers in Britain, *The Archaeological Journal*, **146**, 302-319

Vann, S, 2008 Recording the Facts: a Generic Recording System for Animal Palaeopathology, University of Leicester, Unpublished Ph.D thesis

Vann, S and Grimm, J, 2010 Post-medieval sheep (*Ovis aries*) metapodia from southern Britain, *Journal of Archaeological Science*, **37**, 1532 - 1542

Von den Driesch, A, 1976 A Guide to the Measurement of Animal Bones from Archaeological Sites, Peabody Museum

Walker, C, 2011 Archaeological evaluation of land at Harley Way, Benefield, Northamptonshire, Northamptonshire Archaeology report, **11/203**

Waugh, H, and Goodburn, R, 1972 The Non-Ferrous Objects, in S Frere 1972, 114-145

Webster, PA, 1975 Pottery Report, in JM Steane and GF Bryant, 1975, 60-95

Whitehead, R, 1996 Buckles 1250-1800, Greenlight Publishing

Williams, J H 1971 St Peter's St, Northampton; Excavations 1973-76, Northampton Development Corporation Monographs, **2**

Wilson, B, Grigson, C, and Payne, S (eds), *Ageing and Sexing Animal Bones from Archaeological Sites*, BAR British Series, **109**

Young, J, and Vince, A, with Nailor, V, 2005 *A Corpus of Anglo-Saxon and Medieval Pottery from Lincoln*, Lincoln Archaeological Studies, **7**

Websites and maps:

BGS 2016 British Geological Survey, available at: http://www.bgs.ac.uk/geoindex/home.html

RFT 2016 The Rockingham Forest Trust Heritage Resource Centre, available at: http://resource.rockingham-forest-trust.org.uk/SiteResources/Data/Templates/1simpletextpagedownloads.asp?DocID=77 4&v1ID=&docidfile=

MOLA Northampton

29 November 2016

APPENDIX A: SITE A CONTEXT INVENTORY

Context	Context type	Description	Dimensions	Artefacts/ Samples
5000	Topsoil	Friable mid-grey-brown silty clay	0.24-0.37m thick	-
5001	Void			
5002	Natural	Competent fossiliferrous marine pale yellow to off- white limestones of Blisworth Limestone Formations Longthorpe Member	-	-
5003	Fill of ditch 5004	Firm, mid-grey-brown, silty clay, occasional limestone fragments	Depth: 0.25m, Width: 0.95m	Pottery, animal bone
5004	Ditch E2	Linear/corner of enclosure, N-S to E-W, moderate sloping sides, flat base	Depth: 0.25m, Width: 0.95m	-
5005	Fill of ditch 5006	Firm, mid-grey-brown, silty clay, occasional charcoal + limestone flecks	Depth: 0.10m, Width: 1.20m	Pottery, animal bone
5006	Ditch E2	Linear/corner of enclosure, N-S to E-W, gentle sloping sides, slightly concave base	Depth: 0.10m, Width: 1.20m	-
5007	Fill of ditch 5008	Firm, mid-red-brown, silty clay, small limestone fragments	Depth: 0.20m, Width: 1.46m	Pottery, animal bone, SF42
5008	Ditch E2	Linear, N-S, concave sides approx. 30° slope, flat base	Depth: 0.20m, Width: 1.46m	-
5009	Fill of ditch 5010	Firm, mid-red-brown, silty clay, occasional limestone fragments	Depth: 0.48m, Width: 1.22m	Pottery, animal bone
5010	Ditch	Linear, E-W, moderate sloping sides, flat base	Depth: 0.48m, Width: 1.22m	-
5011	Fill of posthole 5012	Firm, mid-red-brown, silty clay, occasional limestone fragments	Depth: 0.38m, Width: 0.60m	-
5012	Posthole	Circular, steep sloping sides, U-shaped, concave base	Depth: 0.38m, Width: 0.60m	-
5013	Fill of ditch 5014	Firm, mid-brown, silty clay, moderate limestone inclusions	Depth: 0.39m, Width: 3.65m	Pottery, animal bone
5014	Ditch E2	Linear, N-S, gentle sloping sides, flat base	Depth: 0.39m, Width: 3.65m	-
5015	Ditch E2	Linear, U-shaped, steep sided, flat base	Depth: 0.68m, Width: 1.43m	-
5016	Fill of ditch 5015	Firm, mid-brown, silty clay, occasional small limestone pieces	Depth: 0.14m, Width: 0.96m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5017	Fill of ditch 5015	Firm, mid-brown, silty clay, occasional limestone fragments	Depth: 0.54m, Width: 1.43m	Pottery, animal bone
5018	Ditch E2	Linear, U-shaped, flat base	Depth: 0.36m, Width: 0.48m	-
5019	Fill of ditch 5018	Firm, mid-brown, silty clay, limestone fragments	Depth: 0.10m, Width: 0.32m	-
5020	Fill of ditch 5018	Firm, mid-brown, silty clay, limestone flecks	Depth: 0.25m, Width: 0.48m	Pottery + Flint
5021	Ditch	Linear, N-S, concave sides, irregular base	Depth: 0.23m, Width: 0.68m	-
5022	Fill of ditch 5021	Firm, mid-brown, clay/silt, occasional limestone fragments	Depth: 0.23m, Width: 0.68m	-
5023	Fill of ditch 5026	Firm, mid-dark red-brown, frequent small-mid-size limestone pieces	Depth: 0.13m, Width: 1.24m	-
5024	Fill of ditch 5026	Friable, mid-dark brown, silty clay, occasional charcoal and limestone pieces	Depth: 0.33m, Width: 1.38m	Pottery, <19>
5025	Fill of ditch 5026	Firm, mid-dark red-brown, frequent limestone pieces	Depth: 0.19m, Width: 0.76m	Pottery, animal bone
5026	Ditch	Linear, E-W, steep sloping sides, flat base, ditch terminal	Depth: 0.62m, Width: 1.42m	-
5027	Pit	Circular, steep sided, irregular base	Depth: 0.26m, Width: 0.77m	-
5028	Fill of pit 5027	Firm, mixed mid-red- brown + mid-brown-grey, clay/silt, occasional charcoal flecks and large stones	Depth: 0.26m, Width: 0.77m	Bone
5029	Posthole	Sub-circular, U-shaped, concave base	Depth: 0.14m, Width: 0.17m	-
5030	Fill of posthole 5029	Firm, mid-brown, clay/silt, occasional charcoal fragments	Depth: 0.14m, Width: 0.17m	Pottery
5031	Posthole	Circular, U-shaped, concave base	Depth: 0.20m, Width: 0.24m	-
5032	Fill of posthole 5031	Firm, mid-brown, clay/silt	Depth: 0.20m, Width: 0.24m	-
5033	Posthole	Circular, steep sides, uneven base	Depth: 0.10m, Width: 0.31m	-
5034	Fill of posthole 5033	Firm, mid-brown, clay/silt, occasional pebbles	Depth: 0.10m, Width: 0.31m	Flint
5035	Fill of ditch 5037	Firm, mid-grey-brown, silty clay, occasional limestone pieces	Depth: 0.29m, Width: 1.32m	Pottery, Flint, Bone + Tile
5036	Fill of ditch 5037	Firm, mid-brown, silty clay, frequent limestone fragments	Depth: 0.20m, Width: 1.20m	Pottery
5037	Ditch	Linear, E-W, steep sloping sides, flat base	Depth: 0.49m, Width: 1.32m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5038	Fill of pit 5039	Friable-firm, mid-brown, silty clay, frequent limestone pieces	Depth: 0.31m, Width: 1.09m	Bone
5039	Pit	Sub-circular, moderate sloping sides, flat base	Depth: 0.31m, Width: 1.09m	-
5040	Fill of ditch 5041	Firm, mid-grey-brown, sandy clay, limestone inclusions	Depth: 0.09m, Width: 1.2m	-
5041	Ditch E2	Linear, E-W, very gentle sloping sides, uneven base	Depth: 0.09m, Width: 1.2m	-
5042	Fill of pit 5044	Friable-firm, red-orange, clay, burnt stone and clay	Width: 0.66m	-
5043	Fill of pit 5044	Friable, dark grey-black, silty clay, moderate- frequent charcoal	Width: 0.66m	Flint, <4>
5044	Pit	Circular, moderate sloping sides, concave base	Width: 0.66m, Depth: 0.18m	-
5045	Fill of ditch 5048	Friable, mid-brown, silty clay, limestone inclusions	-	Pottery
5046	Fill of ditch 5048	Friable-firm, mid-brown, silty clay, limestone inclusions	-	Bone
5047	Fill of ditch 5048	Friable, mid-brown, silty clay, limestone inclusions	-	-
5048	Ditch	Linear, E-W, moderate sloping sides, flat base	Width: 1.30m, Depth: 0.47m	-
5049	Ditch E2	Linear, E-W, U-shaped, flat base	Depth: 0.88m, Width: 1.52m	-
5050	Fill of ditch 5049	Firm/compact, mid-brown, clay/silt, limestone inclusions + large stones	Depth: 0.38m, Width: 1.10m	-
5051	Fill of ditch 5049	Firm/compact, mid-brown- red, clay/silt, limestone inclusions	Depth: 0.50m, Width: 1.52m	Pottery, flint, bone, <18>
5052	Ditch E2	Linear, W-E, shallow sloping sides, flat base	Depth: 0.30m, Width: 1.12m	-
5053	Fill of ditch 5052	Firm/compacted, mid- brown-grey, clay/silt, limestone inclusions	Depth: 0.30m, Width: 1.12m	Pottery, flint, bone
5054	Ditch E2	Linear/corner of enclosure, N-S to E-W, shallow sloping sides, concave base	Depth: 0.21m, Width: 0.79m	-
5055	Fill of ditch 5054	Firm, dark brown-grey, clay/silt, flecks of charcoal	Depth: 0.21m, Width: 0.79m	Pottery, flint, bone
5056	Fill of ditch 5059	Friable, mid-grey-brown, silty clay, limestone inclusions	Depth: 0.26m, Width: 0.72m	-
5057	Fill of ditch 5059	Friable, mid-brown, silty clay, limestone inclusions	Depth: 0.13m, Width: 0.74m	-
5058	Fill of ditch 5059	Friable, mid-brown, silty clay, limestone fragments	Depth: 0.23m, Width: 0.50m	-
5059	Ditch E1	Linear, NE-SW, steep sloping sides, flat base	Depth: 0.6m, Width: 0.74m	-
5060	Fill of ditch 5063	Friable, mid-grey-brown, silty clay, with limestone	Depth: 0.24m, Width: 0.38m	Pottery, flint, bone

Context	Context type	Description	Dimensions	Artefacts/ Samples
5061	Fill of ditch 5063	Friable, mid-brown, silty clay, limestone + charcoal inclusions	Depth: 0.6m, Width: 0.7m	Pottery, bone, <20>
5062	Fill of ditch 5063	Friable, mid-brown, silty clay, limestone inclusions	Depth: 0.68m, Width: 0.26m	-
5063	Ditch E1	Linear, N-S, steep sides, flat base	Depth: 0.87m, Width: 1.18m	
5064	Fill of ditch 5065	Firm, mid-grey-brown, silty clay, limestone inclusions	Depth: 0.58m, Width: 1.25m	Bone
5065	Ditch E1	Curvilinear, N-S, gradual sloping sides, uneven base	Depth: 0.58m, Width: 1.25m	-
5066	Fill of ditch 5067	Firm, mid-dark grey- brown, silty clay, limestone inclusions	Depth: 0.90m, Width: 1.10m	Pottery, bone
5067	Ditch E1	Linear, terminal of enclosure, N-S, V-shaped sides, flat base	Depth: 0.90m, Width: 1.10m	-
5068	Fill of ditch 5069	Firm, mid-grey-brown, silty clay, limestone inclusions	Depth: 0.20m, Width: 1.10m	Pottery, bone
5069	Ditch E2	Linear, E-W, U-shaped cut, flat base	Depth: 0.20m, Width: 1.10m	-
5070	Fill of possible oven 5071	Firm, mid-black-brown, silty clay, limestone + small stone inclusions	Depth: 0.22m, Width: 1.20m	Pottery, bone. <5>
5071	possible oven	Oval, gentle-moderate sloping sides, flat base	Depth: 0.22m, Width: 1.20m, Length: 2.90m	-
5072	Fill of ditch 5073	Loose, mid-grey/red- brown, silty clay, limestone inclusions	Depth: 0.30m, Width: 0.50m	Pottery, bone
5073	Ditch	Linear, NW-SE, V-shaped sides, concave base	Depth: 0.30m, Width: 0.50m	-
5074	Fill of ditch 5075	Compact, mid-brown, silty clay, limestone inclusions	Depth: 0.35m, Width: 0.66m	Bone
5075	Ditch E2	Linear, E-W, steep sloping sides, flat base	Depth: 0.35m, Width: 0.66m	-
5076	Fill of ditch 5077	Compact, mid-brown, silty clay, limestone inclusions	Depth: 0.57m, Width: 0.96m	Pottery, bone
5077	Ditch E2	Linear, E-W, moderate sloping sides, flat base	Depth: 0.57m, Width: 0.96m	-
5078	Fill of depression	Compact, mid-brown, silty clay, limestone inclusions	Depth: 0.29m, Width: 1.36m	Bone
5079	Fill of pit 5082	Friable, mid-brown-grey, silty clay, limestone inclusions	-	-
5080	Fill of pit 5082	Friable-loose, mid-grey- brown, silty clay, limestone + charcoal inclusions	-	Pottery, flint, bone
5081	Fill of pit 5082	Friable, light yellow, sand, limestone inclusions	-	Pottery
5082	Pit	Circular, near vertical slope sides, stepped base	-	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5083	Fill of pit 5085	Friable-firm, mid-dark grey-brown, silty clay, limestone + charcoal inclusions	-	-
5084	Fill of pit 5085	Friable, mid-grey-brown, silty clay, limestone inclusions	-	Bone
5085	Pit E1	Circular, near vertical sloping sides, flat base	-	-
5086	Fill of gully 5087	Friable,, mid-brown, silty clay, limestone inclusions	-	-
5087	Gully E1	Curvilinear, NW-SE, moderate sloping sides, base unclear	-	
5088	Ditch	Linear, N-S, U-shaped, concave base	Depth: 0.20m, Width: 2.62m	-
5089	Fill of ditch 5088	Firm/hard, mid-brown, clay/silt, stone and charcoal inclusions	Depth: 0.20m, Width: 1.02m	Pottery
5090	Ditch E1	Linear, E-W, U-shaped, concave base	Depth: 0.58m, Width: 0.80m	-
5091	Fill of ditch 5090	Firm, mid-brown-grey, silty clay, stone and charcoal inclusions	Depth: 0.28m, Width: 0.38m	-
5092	Fill of ditch 5090	Hard, mid-brown, clay/silt, charcoal inclusions	Depth: 0.30m, Width: 0.80m	Pottery, bone
5093	Fill of pit 5094	Firm, mid-red-brown, silty clay, limestone and charcoal inclusions	Depth: 0.22m, Width: 1.18m	Pottery, bone
5094	Pit	Circular, gently sloping sides, flat base	Depth: 0.22m, Width: 1.18m	-
5095	Fill of pit 5096	Firm, mid-red-orange, sandy silt, limestone inclusions	Depth: 0.26m, Width: 0.89m	-
5096	Pit	Circular, U-shaped sides, flat base	Depth: 0.26m, Width: 0.89m	-
5097	Fill of linear feature 5098	Firm, dark grey-brown, silty clay, limestone inclusions	Depth: 0.30m, Width: 1.8m	SF52
5098	linear feature	Linear, E-W, gentle sloping sides, uneven base	Depth: 0.30m, Width: 1.80m, Length: 3.95m	-
5099	Fill of corn drying oven 5101	Firm mid-orange-brown silty clay + limestone fragments, charcoal	Depth:0.14m, Width: 2.28m, Length: 1.74m	<10>
5100	Fill of corn drying oven 5101	Firm mid-grey-brown silty clay + limestone fragments, charcoal	Depth: 0.12m Length: 1.37m	<11>
5101	Structure of corn drying oven	T-shaped, E-W aligned, of roughly faced unbonded limestone	Depth: 0.14m, Width: 2.28m, Length: 3.09m	-
5102	Fill of plough scar 5103	Firm mid-grey-brown silty clay + limestone fragments	Depth: 0.05m, Width: 1.0m	-
5103	Plough scar	Linear, NW-SE, shallow with a broad base	Depth: 0.05m Width: 1.0m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5104	Fill of ditch 5105	Firm, mid-grey-brown silty clay + limestone fragments	Depth: 0.20m, Width: 0.48m	Pottery
5105	Ditch E3	Terminus of northern E-W section of rectangular enclosure, linear, flat base	Depth: 0.20m, Width: 0.48m	-
5106	Fill of 5107	Firm mid-grey-brown silty clay + limestone fragments	Depth: 0.20m, Width: 0.40m	Pottery, <21>
5107	Ditch E3	Western edge of rectangular enclosure, linear, N-S, U-shaped profile, flat base	Depth: 0.20m, Width: 0.40m	-
5108	Fill of pit 5112	Friable mid-brown silty clay + flint, occasional limestone fragments, charcoal	-	SF53
5109	Fill of pit 5112	Friable mid-brown sandy clay + limestone and charcoal	-	Pottery, animal bone
5110	Fill of pit 5112	Friable mid-brown-grey sandy silt + rare charcoal	-	-
5111	Fill of pit 5112	Friable mid-brown sandy silt + limestone pieces, some large slabs	-	Pottery, animal bone
5112	Pit/well	Angular/square in ellipse, vertical sides and flat base	Depth: 1.20m, Length:2.70m	-
5113	Fill of pit 5114	Firm mid-grey-brown silty clay + limestone fragments	-	Pottery
5114	Pit	Circular cut with flat base	Depth: 0.18m, Width: 0.75m	-
5115	Fill of pit 5116	Firm mid-grey-brown silty clay + limestone fragments	Depth: 0.26m, Width: 0.71m	Pottery, animal bone
5116	Pit	Circular, U-shaped profile with steep, straight sides and a flat base	Depth: 0.26, Width: 0.71m	-
5117	Fill of ditch 5118	Compact mid-brown silty clay + large limestone pieces	Depth: 0.48m, Width: 0.19m	Animal bone
5118	Ditch	Possible enclosure ditch, linear, N-S aligned, flat base	Depth: 0.48m, Width: 1.90m, Length: 0.26m	
5119	Fill of ditch 5120	Firm mid-brown sandy clay + large limestone pieces	Depth: 0.78m Width: 0.70m Length: 2.58m	Pottery, animal bone
5120	Ditch E2	Possible enclosure ditch, linear, N-S aligned, sloping flat base	Depth: 0.78m, Width: 0.70m, Length: 2.58m	
5121	Fill of 5122	Firm mid-grey-brown silty clay + limestone fragments	Depth: 0.32m, Width: 0.48m	Pottery
5122	Ditch E3	Enclosure ditch, linear, N-S aligned	Depth: 0.32m, Width: 0.48m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5123	Fill of ditch 5124	Firm mid-grey-brown silty clay + 30% limestone pieces	Depth: 0.30, Width: 0.64m	Pottery
5124	Ditch E3	Terminus of enclosure ditch, linear, N-S aligned, U-shaped profile with flat base	Depth: 0.30m, Width: 0.64	-
5125	Fill of ditch 5126	Firm mid-grey-brown silty clay + 30% limestone pieces	Depth: 0.25m, Width: 0.58m	-
5126	Ditch E3	SW corner of enclosure, turning alignment, U- shaped profile with flat base	Depth: 0.25m Width: 0.58m	-
5127	Fill of 5128	Firm mid-grey-brown silty clay loam + frequent limestone fragments	Depth: 0.30m	-
5128	Pit	Sub-circular, broad and flat base, truncated by 5131	Depth: 0.30m	-
5129	Fill of pit 3131	Loose, dark grey-brown silty clay loam + frequent large limestone pieces	Depth: 0.50m	Pottery, animal bone
5130	Fill of pit 3131	Loose, mid-orange-brown, silty loam + frequent limestone fragments	Depth: 0.60m	-
5131	Pit	Circular pit with steep vertical sides, and a broad, flat base	Depth: 1.10m	_
5132	Fill of pit 5133	Compact, mid-dark brown silty clay + large quantity of big limestone slabs	Depth: 0.43m, Width: 1.10m, Length: 0.87m	Pottery, animal bone
5133	Pit	Circular, aligned NW-SE, very steep sides, somewhat U-shaped, flat stone base	Depth: 0.43m, Width: 1.10m, Length: 0.87m	-
5134	Fill of posthole 5135	Friable mid-dark grey silty clay + occasional limestone, rare charcoal	-	Pottery
5135	Posthole	Circular, steep-sided and uneven base	Depth: 0.14m, Width: 0.40m	-
5136	Fill of posthole 5137	Friable mid-brown-grey silty clay +occasional limestone, rare charcoal	-	-
5137	Posthole	Circular, steep-sided, concave base	Depth: 0.15m, Width: 0.28m	-
5138	Fill of posthole 5139	Friable, mid-dark grey silty clay + occasional limestone, rare charcoal	-	-
5139	Posthole	Circular, steep-sided, concave base	Depth: 0.32m, Width: 0.45m	-
5140	Fill of posthole 5141	Friable, mid-dark grey- brown silty clay + rare small stones, frequent charcoal	-	<6>
5141	Posthole	Circular, sloping sides and concave base	Depth: 0.08m, Width: 0.38m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5142	Fill of posthole 5143	Friable mid-grey silty clay + occasional limestone, rare charcoal	-	Pottery, animal bone, slag
5143	Posthole	Circular, steep-sided, flat base	Depth: 0.18m, Width: 0.45m	-
5144	Fill of posthole 5145	Friable mid-grey-brown silty clay + rare limestone, occasional charcoal	-	-
5145	Posthole	Circular, sloping sides to concave base	Depth: 0.07m, Width: 0.26m	
5146	Fill of posthole 5147	Friable mid-dark grey silty clay + occasional limestone, frequent charcoal	-	<7>
5147	Posthole	Circular/elliptical, sloping sides to flat base	Depth: 0.1m, Width: 0.50m	-
5148	Fill of pit 5150	Friable-firm pink-red burnt silty clay sand + occasional-moderate burnt limestone pieces, rare charcoal	-	<8>
5149	Fill of pit 5150	Firm mid-yellow-brown clay + occasional limestone pieces, rare charcoal	Depth: 0.25m, Width: 1.68m Length: 2.05m	-
5150	Pit	Roughly circular/square pit with sloping sides and uneven base	-	-
5151	Fill of ditch 5153	Enclosure ditch fill, firm dark-orange-brown silty clay + occasional limestone	Depth: 0.55m, Width: 1.42m	Pottery, flint, animal bone
5152	Fill of ditch 5153	Enclosure ditch fill, firm mid-yellow-brown silty clay + frequent limestone	Depth: 0.31m, Width: 0.79m	-
5153	Ditch terminal E1	Curvilinear, N-S aligned, V-shaped profile with convex sides and flat base	Depth: 0.84m, Width: 1.42m	-
5154	Fill of pit 5157	Firm, mid-dark brown silty clay + small limestone inclusions	Depth: 0.08m, Width: 0.54m, Length: 0.57m	-
5155	Fill of pit 5157	Compact, dark red clay + frequent small burnt stones	Depth: 0.10m, Width: 0.90m, Length: 0.57m	Pottery
5156	Fill of pit 5157	Firm, mid-yellow-brown sandy clay + frequent large limestone inclusions	Depth: 0.46m, Width: 1.0m, Length: 0.57m	-
5157	Pit	Circular, NW-SE aligned, steep-sided with U- shaped profile, generally flat base	Depth: 0.46m, Width: 1.0m, Length: 0.57m	-
5158	Fill of gully 5159	Firm mid-grey-brown silty clay + rare limestone and charcoal	Depth: 0.06m, Width: 0.45m	-
5159	Gully	Linear, NE-SW aligned, steep sides, round base	Depth: 0.06m, Width: 0.45m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5160	Fill of gully 5161	Firm mid-grey-brown silty clay	Depth: 0.08m, Width: 0.38m	Pottery
5161	Gully	Curvilinear, NE-SW aligned, uneven base and broken slope of sides	Depth: 0.08m, Width: 0.38m	-
5162	Fill of pit 5163	Firm dark grey-brown silty clay + occasional charcoal and limestone, burnt fill	Depth: 0.15m, Width: 2.20m	Pottery, animal bone
5163	Pit	Circular pit with sloping sides ad wide flat base	Depth: 0.15m, Width: 2.20m	-
5164	Fill of pit 5169	Firm mid-dark blue grey clay + rare small stones and charcoal flecks	-	-
5165	Fill of pit 5169	Friable mid-brown silty clay + occasional small to mid-sized limestone pieces	-	-
5166	Fill of pit 5169	Firm mid-dark grey silty clay + occasional small-mid limestone pieces, charcoal and burnt stone	-	<15>
5167	Fill of pit 5169	Friable mid-dark brown- grey silty clay + moderate small-large limestone incl. two big slabs, charcoal	-	-
5168	Fill of pit 5169	Friable mid-brown silty clay + moderate small-mid size limestone pieces	-	<17>
5169	Pit	Circular, steep, near vertical sides to base, probably flat base laid with large slab	-	-
5170	Fill of pit 5171	Friable mid-dark grey- brown silty clay + frequent limestone, rare charcoal	-	-
5171	Pit	Circular steep, near vertical sides and flat base	-	-
5172	Fill of 5175	Friable mid-brown-grey silty clay + moderate limestone, rare charcoal	-	Pottery
5173	Fill of 5175	Friable mid-grey-brown silty clay + occasional small stones, rare charcoal	-	-
5174	Fill of 5175	Friable mid-dark-brown- grey silty clay + occasional limestone, rare charcoal	-	-
5175	Pit	Circular, near vertical sides to flat base	-	-
5176	Spread over 5177	Spread over limestone surface 5177	_	Pottery
5177	Surface	Limestone surface	-	SF54

Context	Context type	Description	Dimensions	Artefacts/ Samples
5178	Fill of gully 5179	Firm mid-grey-brown silty clay + mod/rare limestone and charcoal	Depth: 0.21m, Width: 0.85m	Pottery
5179	Gully	Curvilinear, NE-SW, U- shape profile, rounded base	Depth: 0.14- 0.21m, Width: 0.50- 0.85m	
5180	Fill of gully 5181	Firm mid-grey-brown silty clay rare charcoal, rare limestone	Depth: 0.18m, Width: 0.45m	Pottery
5181	Gully	Curvilinear, NE-SW aligned, rounded base and broken slope of sides	Depth: 0.18m, Width: 0.45m	-
5182	Fill of pit 5183	Firm dark grey-brown silty clay + 30% charcoal, large pieces of charcoal and burnt stone	Depth: 0.18m, Width: 0.70m	Pottery, <9>
5183	Pit	Oval, NE-SW aligned, broken slope into flat base	Depth: 0.18m, Width: 0.70m	-
5184	Fill of ditch 5187	Firm mid-grey-brown silty clay + abundant limestone pieces	Depth: 0.29m, Width: 1.60m	Pottery, animal bone
5185	Fill of ditch 5187	Firm light yellow brown silty clay + abundant limestone pieces	Depth: 0.31m, Width: 1.63m	-
5186	Fill of ditch 5187	Firm mid-orange-brown silty clay, + abundant limestone pieces	Depth: 0.34m, Width: 0.70m	-
5187	Ditch E1	Curvilinear enclosure ditch, NS aligned, V- shaped profile with eroded edges and flat base	Depth: 0.89m Width: 1.67m	-
5188	Fill of pit 5191	Friable mid-brown silty clay + moderate limestone, occasional charcoal	Depth: 0.29m, Width: 1.60m	Pottery, flint, animal bone
5189	Fill of pit 5191	Friable mid-brown clayey silt + occ. limestone, occasional charcoal	Depth: 0.36m, Width: 1.56m	Pottery
5190	Fill of pit 5191	Friable mid-dark-grey clay silt + rare stone, moderate charcoal	Depth: 0.16m, Width: 1.30m	Pottery, animal bone
5191	Pit	Circular, steep near vertical sides, flat base	Depth: 0.54m, Width: 1. 64m	-
5192	Fill of ditch 5193	Firm mid-orange-brown silty clay + frequent limestone, rare charcoal	Depth: 0.52m, Width: 1.04m	Pottery, bone
5193	Ditch E1	Linear enclosure ditch, NS aligned, U-shaped cut with vertical sides eroded at the top, flat base	Depth: 0.52m, Width: 1.04m	-
5194	Fill of gully 5195	Loose, dark-grey-brown clay loam + frequent limestone fragments	Depth: 0.30m, Width: 0.60m Length: >4m	Pottery

Context	Context type	Description	Dimensions	Artefacts/ Samples
5195	Gully	Linear gully, SW-NE aligned, sloping concave sides and narrow base	Depth: 0.30m, Width:0.60m Length: >4m	-
5196	Fill of ditch 5197	Loose, dark grey-brown silty clay loam + frequent limestone pieces	Depth: 0.50m, Width: 1.50m	Pottery, animal bone
5197	Ditch	Linear, EW aligned, steep sloping slightly concave slides, broad uneven base.	Depth: 0.50m, Width: 1.50m	-
5198	Fill of ditch 5200	Friable mid-grey-brown silty clay + occasional limestone, rare charcoal	Depth: 0.27m, Width: 0.66m	Pottery, animal bone
5199	Fill of ditch 5200	Friable mid-dark brown- grey silty clay + occasional limestone, rare charcoal	Depth: 0.27m, Width: 0.58m	-
5200	Ditch E1	Linear enclosure ditch, NW-SE, curving to west, steep near vertical sides, flat base	Depth: 0.54m, Width: 0.66m	-
5201	Fill of pit 5202	Firm dark orange-brown silty clay + frequent limestone fragments	Depth: 0.42m, Width: Length: 1.90m	-
5202	Pit	Oval cut pit, NS aligned, U-shaped cut with eroded edges, flat base	Depth: 0.42m, Width: Length: 1.90m	-
5203	Fill of pit 5204	Friable mid-grey-brown silty clay + small-large burnt stones, frequent limestone, occasional charcoal	Depth: 0.32m, Width: 1.32m	Pottery
5204	Pit	Circular, uneven sides and uneven base	Depth: 0.32m, Width: 1.32m	-
5205	Fill of pit 5206	Firm mid grey-brown silty clay + limestone pieces	Depth: 0.38m, Width: 0.77m, Length: 0.90m	Pottery, animal bone <13>
5206	Pit	Oval, EW aligned, straight vertical sides , flat base	Depth: 0.38m, Width: 0.77m, Length: 0.90m	-
5207	Fill of pit 5208	Firm mid-grey-brown silty clay + frequent limestone fragments, rare charcoal	Depth: 0.30m, Width: 1.0m, Length: 1.30m	Pottery, animal bone <14>
5208	Pit	Oval, EW aligned, straight vertical sides, flat base	Depth: 0.30m, Width:1.0m, Length: 1.30m	-
5209	Fill of pit 5210	Firm mid grey-brown silty clay + frequent limestone fragments	Depth: 0.20m, Width: 0.56m	Pottery, animal bone
5210	Pit	Circular pit, U-shaped cut with convex sides, flat base	Depth: 0.20m, Width: 0.56m	-
5211	Fill of posthole 5212	Firm mid-grey-brown silty clay + occasional small stones	Depth: 0.18m, Width: 0.16m	Pottery

Context	Context type	Description	Dimensions	Artefacts/ Samples
5212	Posthole	Circular pit, U-shaped cut, almost vertical sides, flat base	Depth: 0.32m, Width: 0.28m	-
5213	Fill of posthole 5212	Firm mid blue-grey clay	Depth: 0.16m, Width: 0.28m	-
5214	Fill of pit 5215	Firm mid-grey-brown silty clay + frequent limestone fragments	Depth: 0.37m, Width: 0.76m, Length: 1.17m	Pottery
5215	Pit	Sub-circular, E-W aligned	Depth: 0.37m, Width: 0.76m, Length: 1.17m	-
5216	Fill of pit 5217	Firm mid grey-brown silty clay + abundant limestone	Depth: 0.32m, Width: 0.90m, Length: 1.20m	Pottery, animal bone <12>
5217	Pit	Sub-circular E-W aligned, U-shaped cut with convex sides	Depth: 0.32m, Width: 0.90m, Length: 1.20m	-
5218	Fill of gully 5219	Friable, mid-red-brown silty clay + rare stones, rare charcoal	Depth: 0.18m, Width: 0.69m	Pottery, Fe nail, SF85, SF55
5219	Gully E3	Curvilinear enclosure corner, EW turning NS alignment, sloping sides to flat base	Depth: 0.18m, Width: 0.69m	-
5220	Fill of gully 5221	Friable mid-dark grey- brown silty clay + rare small stones and charcoal	Depth: 0.19m, Width: 0.63m	Pottery
5221	Gully E3	Linear enclosure gully, E- W aligned, sloping sides to flat base	Depth: 0.19, Width: 0.63m	-
5222	Pit group	Group of pits in an EW alignment. Contains 5206, 5208, 5210, 5212, 5215, and 5217	-	-
5223	Fill of gully 5224	Friable mid-brown silty clay + occasional limestone, rare charcoal	Depth: 0.25m, Width: 0.73m	-
5224	Gully E3	Linear enclosure gully, E- W aligned, sloping sides to flat base	Depth: 0.25m, Width: 0.73	-
5225	Fill of gully 5226	Friable mid-brown silty clay + occasional limestone, rare charcoal	Depth: 0.15m, Width: 0.62m	Pottery
5226	Gully E3	Curvilinear enclosure corner, NS turning EW alignment, sloping sides to flat base	Depth: 0.15m, Width: 0.62m	-
5227	Fill of drainage gully 5228	Firm mid-orange-brown silty clay + occasional limestone pieces	Depth: 0.20m, Width: 0.54m	-
5228	drainage gully	Linear drainage gully, N-S aligned, U-shaped cut with sloping sides, flat base	Depth: 0.20m, Width: 0.54m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
5229	Fill of pit 5230	Friable, mid-brown silty clay + moderate burnt stones, rare charcoal	Depth: 0.14m, Width: 0.90m	-
5230	Pit	Circular, sloping sides to flat base	Depth: 0.14m, Width: 0.90m	-
5231	Fill of pit 5232	Firm, dark grey brown, silty clay, limestone fragments	Depth: 0.16m, Width: 1.01m	Pottery
5232	Pit	Circular with gentle sloping sides and a flat base	Depth: 0.16m, Width: 1.01m	-
5233	Fill of pit 5234	Firm, dark grey-brown, silty clay with limestone fragments	Depth: 0.09m, Width: 0.67m	-
5234	Pit	Circular with gentle sloping sides and a flat base	Depth: 0.09m, Width: 0.67m	-
5235	Fill of pit 5236	Loose, dark grey-brown, silty clay with occasional limestone fragments	Depth:0.20m, Width: 0.90m	-
5236	Pit	Circular, edges at 45° angle, flat base	Depth: 0.20m, Width: 0.90m	-
5237	Fill of pit 5238	Firm, dark grey/brown, silty clay, occasional limestone fragments	Depth: 0.22m, Width: 0.80m	-
5238	Pit	Circular, SW edge concave at 35° angle, and NE edge straight at 50°, flat base	Depth: 0.22m, Width: 0.80m	-
5239	Fill of pit 5242	Friable mid-brown silty clay + rare limestone and charcoal	Depth: 0.14m, Width: 0.84m	-
5240	Fill of pit 5242	Large burnt stones placed in pit, probably pot boilers or an unused fire pit	Depth: Width:	SF50, SF56
4241	Fill of pit 5242	Firm compact mid-brown and blue-grey clay + rare small stones. Possibly clay lining to hold water	Depth: 0.08m, Width: 0.80m	-
5242	Pit	Circular, steep sloping sides to flat base	Depth: 0.21m, Width: 0.84m	-
5243	Fill of ditch 5244	Firm, dark grey/brown, silty clay, occasional limestone fragments	Depth: 0.26m, Width: 0.80m	Pottery
5244	Ditch	Curvilinear, N-S, U- shaped cut with sharp sides, flat base	Depth: 0.26m, Width: 0.80m	-
5245	Fill of gully	-	-	Pottery
5246	Gully	-	-	-

APPENDIX B: SITE B CONTEXT INVENTORY

Context	Context type	Description	Dimensions	Artefacts/ Samples
2000	Topsoil	-	-	SF10, 26, 27, 28, 28, 31, 32, 33, 38, 43, 45, 46, 48, 49, 57, 60, 61, 62
2001	Dirty topsoil/natu ral interface	-	-	SF10, Brick/Tile, Pottery
2002	Stone Spread	-	-	SF11
2003		-	-	SF14
2004	Fill of pit 2055	-	-	
2005	Rubble spread	-	-	SF15
2006	Fill of 2007 pit	Firm, dark grey/brown, silty clay + frequent limestone fragments	Length:1.40m Width: 0.70m Depth: 0.20m- 0.30m	Pottery
2007	Pit	Sub-rectangular, orientated NE-SW, steep almost vertical sides and a broad, flat base with sub-circular depression	Length: 1.40m Width: 0.70m Depth: 0.20m- 0.30m	-
2008	Fill of ditch 2010	Firm, dark grey brown, silty clay + rare limestone and charcoal flecks	Width:1.20m Depth: 0.24m	Pottery
2009	Fill of ditch 2010	Firm, light grey brown, silty clay + rare angular gravel	Width: 0.55m Depth: 0.10m	-
2010	Ditch Plot 3	Boundary ditch, sharp rounded corner NW-SE turning 90° to NE-SW. Sharp break of slope 45° and rounded base.	Width: 1.10m Depth: 0.34m	-
2011	Fill of drain	Firm, dark grey brown, silty clay + occasional medium sized angular limestone pieces	Width: 0.27m Depth: 0.10m	-
2012	Stone lining of drain	Medium to large sized + roughly shaped limestone pieces, unbonded	Width: 0.29m Length: 0.25m Depth: 0.07m	-
2013	Drain	Linear, orientated E-W with a sharp cut near vertical sides and a flat base.	Width: 0.50m Depth: 0.15m	-
2014	Spread	Firm, dark grey-brown silty clay + frequent large limestone inclusions	Length: 2.40m Width: 1.30m Depth: 0.14m	Potter, animal bone, slag, SF12, 30
2015	Fill of ditch 2017	Firm, mid grey-brown silt + occasional small stones (angular)	Width: 1.20m Depth: 0.34m	Pottery

Context	Context type	Description	Dimensions	Artefacts/ Samples
2016	Fill of ditch 2017	Firm, mid orange-brown, silty clay + small angular limestone pieces (5-10%) with clear boundaries.	Width: 0.69m Depth: 0.30m	-
2017	Ditch Plot 3	Linear, orientated E-W, V-shaped with asymmetrical sides and a flat/rounded base.	Width: 1.30m Depth: 0.60m	-
2018	Fill of ditch 2019	Firm, dark brown-grey silty clay + frequent limestone fragments	Length: >6m Width: 0.90m Ditch: 0.35m	Pottery, SF44
2019	Ditch Plot 3	Linear, orientated NE-SW, both edges are steep and slightly convex with a narrow and concave base.	Length: >6m Width: 0.90m Ditch: 0.35m	-
2020	Fill of pit 2021	Firm, light grey-red mottled silty clay, with mid-grey-black + rare charcoal flecks and smears, rare small limestone inclusions	Length: 0.70m Width: 0.75m Depth: 0.02m	-
2021	Pit Plot 2	Circular, gently sloping sides and a flat base.	Length: 0.75m Width: 0.74m	-
2022	Fill of pit 2023	Firm, mid-orange-brown, silty clay	Width: 0.76m Depth: 0.14m	-
2023	Pit Plot 2	Circular, with gently sloping sides and a flat base.		-
2024	Fill of pit 2025	Firm, mid grey brown silty clay + occasional small limestone pieces and limestone gravel	Width: 0.84m Depth: 0.08m	Pottery, animal bone
2025	Pit Plot 2	Linear/ovoid, orientated E-W, gently sloping sides and a flat base.	Width: 0.90m Depth: 0.08m	-
2026	Fill of 2027	Firm, mid grey brown, silty clay + rare small-medium angular limestone	Width: 0.90m Depth: 0.15m	-
2027	Drain	Linear, orientated NE-SW, moderate break of slope 40° cut and a rounded base.	Width: 0.90m Depth: 0.15m	-
2028	Spread Plot 3	Firm dark grey-brown, silty clay + rare small angular limestone pieces	Width: 2.60m Depth: 0.16m	Pottery, animal bone SF13, 39, 40, 41.
2029	Fill of pit 2030	Firm dark red-brown, silty clay + rare small angular limestone pieces, charcoal flecks	Width: 1.30m Depth: 0.40m	Pottery
2030	Pit Plot 3	Possible quarry pit, sharp break of slope 50° cut and a wide flat base.	Width: 1.30m Depth: 0.40m	-
2031	Fill of pit 2032	Firm mid-grey-brown, silty clay + frequent small-medium sized angular limestone, rare charcoal flecks	Width: 1.45m Depth: 0.38m	Pottery

Context	Context type	Description	Dimensions	Artefacts/ Samples
2032	Pit Plot 3	Sharp break of slope with flat base.	Width: 1.45m Depth: 0.38m	-
2033	Fill of pit 2034	Firm mid grey brown, silty clay + rare charcoal flecks	Width: 0.76m Depth: 0.22m	Pottery
2034	Pit Plot 3	Truncated pit with flat base	Width: 0.76m Depth: 0.22m	-
2035	Fill of 2036 pit	Firm dark grey-brown, silty clay + rare charcoal flecks, rare small angular limestone pieces	Width: 0.58m Depth: 0.26m	Pottery
2036	Pit Plot 3	Sharp break of slope 60° cut and rounded base.	Width: 0.58m Depth: 0.16m	-
2037	Fill of pit 2038	Firm mid red-brown silty clay + rare charcoal flecks	Width: 0.50m Depth: 0.37m	Pottery
2038	Pit Plot 3	Steep sided near vertical edges and a flat base	Width: 0.50m Depth: 0.37m	-
2039	Stone drain	Limestone drain	-	-
2040	Layer	Demolition spread	-	Pottery, SF22, 34, 35, 47, 58
2041	Layer	Loose dark grey-purple, silty clay	Length: >10m Width: 2.10m Depth: 0.10m- 0.12m	-
2042	Fill of gully 2043	Firm mid-grey-brown mottled with orange, limestone fragments up to 0.10m x 0.05m + occasional charcoal flecks	Width: 0.50m Depth: 0.25m	-
2043	Gully Plot 4	Linear orientated NE-SW, both sides slightly convex 45° with concave and narrow base.	Length: >10m Width: 0.50m Depth: 0.25m	-
2044	Fill of ditch 2045	Firm mid-grey-brown mottled with dark orange, silty clay + occasional limestone fragments and charcoal flecking	Length: >10m Width: 1.50m Depth: 0.30m	-
2045	Ditch Plot 4	Linear, orientated NE-SW, NW edge is irregular, 45° - SE edge straight and slightly less steep with a broad flat base.	Length: 10m Width: 1.50m Depth: 0.30m	-
2046	Fill of ditch 2048	Loose dark grey-brown silty clay + occasional limestone and rare charcoal	Width: 1.35m, Depth: 0.10m	Pottery
2047	Fill of ditch 2048	Firm mid-brown silty clay + occasional limestone and charcoal	Width: 1.40m, Depth: 0.30m	-
2048	Ditch Plot 1	Linear NE-SW, straight sloping sides and flat base		-
2049	Spread	Firm linear light black- brown silty clay + occasional limestone pieces and rare charcoal	Width: 4.10m, Depth: 0.10m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
2050	Fill of ditch 2051	Firm light orange-brown silty clay + occasional limestone fragments and blue clay, rare charcoal	Width: 1.53m, Depth: 0.44m	-
2051	Ditch Plot 1	Linear NE-SW with steeply sloping convex sides, flat base	Width: 1.53m, Depth: 0.46m	-
2052	Fill of pit 2055	Firm mid orange-brown sandy clay + limestone fragments, degraded sandstone	Width: 4.0m, Depth: 0.40m	SF59
2053	Fill of pit 2055	Firm dark orange-brown silty clay + degraded sandstone and limestone	Width: 4.08, Depth: 0.36m	-
2054	Fill of pit 2055	Stone lining of pit, light grey-white limestone slabs	Width: Depth:	-
2055	Pit Plot 1	Circular cut pit, angled convex edges, NW face is stepped, flat base	Width: 4.10m, Depth: 0.83m	-
2056	Fill of pit 2058	Firm mid-red-brown silty clay + occasional limestone, small stones	Width: 0.80m, Depth: 0.10m	-
2057	Fill of pit 2058	Firm, very dark grey- brown silty clay + frequent charcoal, rare burnt stone	Width: 1.00m, Depth: 0.09m	Pottery, <3>
2058 Plot 1	Pit	Circular cut pit, steep NW side, sloping SE side, concave base	Width: 1.0m, Depth: 0.17m	-
2059	Fill of ditch 2060	Firm mid-orange-brown silty clay + rare charcoal, stone	Width: 0.75m, Depth: 0.40m	Pottery, animal bone
2060	Ditch Plot 1	Linear NW-SE aligned, V-shaped profile with a concave base	Width: 0.75m Depth: 0.40m	-
2061	Fill of ditch 2063	Firm mid-orange-grey- brown silty clay + rare charcoal flecks, rare limestone	Width: 0.90m, Depth: 0.40m	Pottery
2062	Fill of ditch 2063	Firm mid-grey-brown silty clay + moderate limestone pieces	Width: 0.50m, Depth: 0.22m	Pottery
2063	Ditch Plot 1	Linear SW-NE, U-shaped profile with rounded base	Width: 0.90m, Depth: 0.60m	-
2064	Fill of ditch 2065	Firm mid-brown-grey silty clay + rare charcoal flecking, frequent large limestone fragments	Width: 1.30m, Depth: 0.57m	Pottery, animal bone
2065	Ditch Plot 4	Linear NW-SE, asymmetric sides with eroded edges	Width: 1.30m, Depth: 0.57m	-
2066	Fill of ditch 2067	Firm mid grey-brown silty clay + moderate limestone, clay	Width: 0.80m, Depth: 0.27m	Pottery, animal bone

Samples
Pottery, animal
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Pottery
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Pottery

Context	Context type	Description	Dimensions	Artefacts/ Samples
2085	Fill of ditch 2086	Firm mid-brown grey silty clay + frequent small limestone fragments	Width: 1.0m, Depth: 0.60m	Pottery
2086	Ditch Plot 1	Linear ditch, NW-SE aligned, steep sided with narrow, concave base	-	-
2087	Spread	Firm mid-red-brown silty clay + limestone pieces, rare charcoal	Width: 1.50m, Length: 8.50m	Pottery, animal bone
2088	Fill of drain 2089	Firm dark red-black silty clay + limestone fragments	Width: 0.80m, Depth: 0.45m	-
2089	Drain Plot 2	Linear drain or gully, E-W aligned, V-shaped profile, flat base	Width: 0.80m, Depth: 0.45m	-
2090	Fill of ditch 2091	Firm light red-brown silty clay + frequent charcoal, limestone	Width: 2.40m, Depth: 0.40m	Pottery, animal bone
2091	Ditch Plot 1	Linear ditch, EW aligned, concave sides, U-shaped cut, flat base	Width: 2.40m, Depth: 0.40m	-
2092	Wall Plot 2	White-grey limestone blocks built on top of ditch fill, roughly faced, not bonded.	Width: 0.70m, Depth: 0.15m	-
2093	Spread	Firm dark grey-brown silty clay + rare limestone, rare charcoal	Depth: 0.12m	Pottery, animal bone, SF20, 21, 23, 50, 51
2094	Fill of ditch 2097	Firm dark orange-grey- brown silty clay + rare charcoal	Width: 1.20m, Depth: 0.40m	Pottery, SF37
2095	Fill of ditch 2097	Firm dark grey-brown silty clay + rare charcoal, 2 large limestone pieces	Width: 0.86m, Depth:0.14m	Pottery
2096	Fill of ditch 2097	Firm dark orange-grey- brown silty clay + rare charcoal, rare limestone	Width: 0.58m, Depth: 0.12m	Pottery
2097	Ditch Plot 1	Linear ditch terminal aligned SW-NE, moderate break of slope, rounded base	Width: 1.20m, Depth:0.40m	-
2098	Layer	Layer of limestone rubble, large/medium sized stones	-	Pottery, animal bone
2099	Surface	Hard white-grey angular limestone pieces laid as a surface,	Width: c3.10m Depth:	Pottery, animal bone
2100	Fill of ditch 2103	Firm dark brown-red silty clay + rare small stones, occasional charcoal	Width: 1.90m, Depth:0.14m	
2101	Fill of ditch 2103	Firm light orange-brown silty clay	Width: 0.90m, Depth: 0.30m	Pottery, animal bone
2102	Stone lining Plot 4	Hard mid-grey-white limestone laid in multiple courses, no visible bonding material	Width: 1.40m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
2103	Ditch	Probably linear N-S aligned with convex sides with eroded tops	-	-
2104	Layer	Friable mid grey-brown silty clay	-	Pottery, animal bone
2105	Layer/ surface	Compact small cobble surface laid up against walls	-	-
2106	Layer	Limestone rubble used as internal wall foundation		
2107	Layer	Possible levelling layer friable mid dark-grey-brown silty clay	-	-
2108	Spread	Friable-firm mid-brown silty clay + occasional small stones	-	-
2109		-	-	-
2110	Fill of pit 2111	Loose mid-brown-orange silty clay + occasional limestone	Width: 0.70m, Depth:0.30m	-
2111	Pit	Oval/rectangular pit, NW- SE with vertical sides and broad concave base	Width: 0.70m, Depth: 0.30m	-
2112	Layer/fill of 2114	Firm dark orange-brown silty clay + limestone frags	Width: 1.40m, Depth:0.10m	-
2113	Fill of ditch	Firm mid-grey-brown silty clay, + 60% limestone fragments and blocks between 5-70cm in size, regular charcoal		-
2114	Ditch terminal Plot 4	Possible ditch terminal or turn, concave sides with eroded tops	-	-
2115	Building B4	Medieval building on NW edge of Area B, aligned NW-SE	-	-
2116	Make-up layer	Firm dark-orange-grey silty clay + frequent gravel	Depth: 0.20m	-
2117	Wall of 2115 B4	Wall aligned NE-SW, limestone pieces roughly faced outer edges, unbonded. 5/6 courses deep.	Width: 0.50m, Depth: 0.25m	-
2118	Wall of 2115 B4	Wall aligned NW-SE, roughly faced on outer edge, unbonded, 3 courses	Width: 0.50m, Depth: 0.10m	-
2119	Fill of ditch 2120	Firm mid-grey-brown silty clay + rare charcoal, occasional gravel	Width: 1.30m, Depth: 0.35m	Pottery
2120	Ditch	Linear NW-SE ditch, moderate break of slope with rounded base	Width: 1.30m, Depth: 0.35m	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
2121	Layer or buried soil	Firm mid-dark grey-brown silty clay + rare small rounded gravel, occasional charcoal	Depth: 0.17m	Pottery
2122	Wall of 2115 B4	Wall aligned NW-SE, roughly faced on outer edge, unbonded, 1 course	Width: 0.60m, Depth: 0.10- 0.20m	-
2123	Fill or spread	Firm dark grey-brown silty clay + rare limestone, occasional charcoal	-	Pottery, slag
2124	Wall of 2115 B4	Wall foundation aligned SW, roughly faced on outer edge, unbonded, 1 course	Width: 0.60m, Depth: 0.10- 0.20m	-
2125	Building B2	Rectangular building, NW-SE orientation, limestone blocks	Width: 4.20m, Length: 6.0m	-
2126	Wall of 2125 B2	Linear NE wall, composed of limestone blocks, roughly faced, no bonding material, one course remaining	Width: 0.70m, Length: 6.00m	-
2127	Wall of 2125 B2	Linear SE wall, composed of limestone blocks, roughly faced, no bonding material, one course remaining	Width: 0.70m, Length: 3.05m	-
2128	Fill of 2125 B2	Firm mid-grey-brown silty clay + small stones, charcoal, limestone demolition material	Width: 3.50m, Length: 5.30m	-
2129	Wall of 2125 , B4	-	-	-
2130	Wall of 2125 , B4	-	-	-
2131	Building B1	Building aligned SW-NE, 3 walls remaining		-
2132	Wall of 2131 B1	Linear NW wall, composed of limestone blocks, roughly faced, no bonding material, two courses	Width: 0.20m, Depth: 0.15m	-
2133	Wall of 2131 B1	Linear SW wall, composed of limestone blocks, roughly faced, no bonding material, two courses	Width: 0.70m, Depth: 0.10m	-
2134	Wall of 2131 B1	Linear SE wall, composed of limestone blocks, roughly faced, no bonding material, one course	Width: 0.66m,	-
2135	Scorched natural B1	Firm dark red-brown sandy clay + rare gravel	Width: 0.40m, Depth: 0.03m	-
2136	Wall of 2131 B1	Internal wall of building 2131. Formed of 2105- 2108	-	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
2137	Floor B4	Laid limestone floor internal to B4, possible hearth base	-	-
2138	Building	Building, rectangular, aligned NE-SW	Width: 3.0m, Length: 2.90m	-
2139	Wall of 2138 B2	Linear NW-SE wall, composed of limestone blocks, roughly faced, no bonding material, one course	Width: 0.60m, Length: 2.80m	-
2140	Wall of 2138 B2	Linear NE-SW wall, composed of limestone blocks, roughly faced, no bonding material, one course	Width: 0.60m, Length: 2.20m	-
2141	Layer B2	Firm mid-orange-brown silty clay + occasional small stones, charcoal flecks, limestone fragments	Width: 1.70m, Length: 2.40m Depth: 0.25m	Pottery, animal bone
2142	Fill of posthole 2145	Loose dark grey-brown silty clay + occasional small limestone fragments	Width: 0.70m, Depth: 0.10m	Pottery
2143	Fill of posthole 2145	Firm dark grey silty clay + frequent burnt stone inclusions, occasional charcoal	Width: 0.70m, Depth: 0.32m	Pottery
2144	Fill of posthole 2145	Firm dark grey-brown silty clay	Width: 0.50m, Depth: 0.10m	-
2145	Posthole/ pit Plot 1	Sub-circular, both sides steep, slightly concave, narrow and concave base	Depth: 0.55m	-
2146	Surface	Surface of probable hearth comprises flat limestone pieces in oval shape		-
2147	Fill of pit 2148	Firm dark grey-black with patches of red scorched clay + occasional burnt stone and charcoal fragments	Width: 1.40m, Depth: 0.05m	-
2148	Pit	Oval/irregular pit, with very gradual straight edges, broad and flat base		-
2149	Fill of posthole 2150	Loose dark-grey silty clay + frequent burnt stone, charcoal flecks	Depth: 0.10m	-
2150	Posthole	Sub-circular posthole, steep sides slightly concave, broad and flat base	Depth: 0.10m	-
2151- 2154	Void	-	-	-

Context	Context type	Description	Dimensions	Artefacts/ Samples
2155	Fill of ditch 2157	Upper fill	-	-
2156	Fill of ditch 2157	Lower fill	-	-
2157	Ditch Plot 4	Ditch to the north-east of plot 4	-	-
2158	Wall Plot 2	Wall A	-	-
2159	Surface Plot 2	Floor south of wall A	-	SF25
2160	Demolition layer	Demolition north of wall A	-	SF36
2161	Wall demolition layer	Demolition of Wall D	-	-
2162	Wall Plot 2	Wall B	-	-
2163	Wall Plot 2	Wall C	-	-
2164	Layer	Brown spread, same as 2093	-	SF24





