



Miller homes



Construction by Miller Homes (East Midlands) of a new housing estate in the village of Great Glen, six miles south-east of Leicester, provided a rare opportunity to examine one of Leicestershire's many Romano-British farmsteads. Albion Archaeology's excavation there in 2011 revealed the remains of an agricultural settlement that was founded in the mid-1st century AD and continued to be occupied throughout the Roman period. There were periodic changes in the layout of its fields and enclosures, but its domestic core stayed in the same place, and no significant breaks in occupation were evident. Together with the livestock enclosures and a threshing floor, the plant remains and animal bones that were recovered reveal a varying emphasis on arable and pastoral farming. No great wealth was apparent, but the occupants engaged in trade, importing goods from beyond the region that were perhaps paid for by the small agricultural surplus that they are likely to have generated.

With support from the developer, the Albion Archaeology team was able to engage closely with local communities. There were site tours for school children and an open weekend, and groups of young archaeologists were able to develop their digging skills. This component of the project is described in an appendix to this report.



A ROMANO-BRITISH FARMSTEAD AT STRETTON ROAD, GREAT GLEN, LEICESTERSHIRE



BY MIKE LUKE, BEN BARKER AND JO BARKER



A Romano-British Farmstead at Stretton Road, Great Glen, Leicestershire

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Cover illustrations

Front: aerial view of the development area, looking west towards the River Sence

Back: (from left to right) Joshua Cattermole (Leicestershire Young Archaeologists' Club), John Dows, Oliver Croker and Jack Eldridge (Bedford Museum Saturday Archaeology Workshops) with the animal bone they found once the main investigations were complete

Contents

List of Figures	iv
List of Tables	v
List of Plates	vi
List of contributors	vii
Acknowledgements	viii
About this publication	ix
Structure	ix
Terminology and abbreviations	ix
Phases and chronological periods	ix
Tables	ix
Illustrations	ix
Date of text production	x
Location of the archive	x
Summary	xi
Chapter 1. Introduction and Discussion	1
I. Introduction	1
II. Discussion	2
Chapter 2. Mid-1st to mid-2nd century (Phase 2)	21
I. Overview	21
II. Domestic focus L20	21
III. Peripheral activity focus L21	22
IV. Peripheral fields L22	24
Chapter 3. Mid-2nd to mid-3rd century (Phase 3)	27
I. Overview	27
II. Domestic focus L30	27
III. 'Ladder' enclosure system L32	30
IV. Peripheral fields L31	34
Chapter 4. Mid-3rd to late 4th century (Phase 4)	39
I. Overview	39
II. Domestic focus L40	39
III. Peripheral enclosures L41 to the south and east	42
Chapter 5. Post-Roman activity (Phases 5 and 6)	49
I. Phase 5. Medieval	49
II. Phase 6. Modern	49
Chapter 6. Artefacts	51
I. Introduction	51
II. Pottery	51
III. Ceramic building material and fired clay	56
IV. Coins	56
V. Other Artefacts	57
Chapter 7. Ecofacts	65
I. Animal bone	65
II. Charred plant remains	77
III. Human remains	82
Appendices	
Appendix I. Ceramic Type Series	83
Appendix II. Samian pottery	84
Appendix III. Brick and tile fabric types	85
Appendix IV. Coin catalogue	86
Appendix V. Petrology table	87
Appendix VI. Charcoal table	88
Appendix VII. Community engagement	89
Bibliography	91

List of Figures

Chapter 1. Introduction and discussion

Figure 1.1: Location plan	2
Figure 1.2: All-features plan	4
Figure 1.3: Comparative plans showing the changes in layout of the Stretton Road farmstead over time	7
Figure 1.4: Comparative plans of the Stretton Road farmstead and others in Leicestershire	8
Figure 1.5: Comparative plans of roundhouses at Stretton Road and elsewhere in Leicestershire	11
Figure 1.6: Comparative plans of rectangular structures at Stretton Road and elsewhere in southern England	12
Figure 1.7: Comparative plans of possible structure G407 at Stretton Road and apsidal ditch F3203 at Ivy Chimneys	13
Figure 1.8: Comparative plans of the possible threshing floor at Stretton Road and others from elsewhere in southern England	14
Figure 1.9: Comparative plans of the possible stack ring at Stretton Road and others from elsewhere in southern England	15

Chapter 2. Phase 2: mid-1st to mid-2nd century

Figure 2.1: Reconstruction of how the farmstead may have looked during Phase 2	22
Figure 2.2: Overall plan of mid-1st- to mid-2nd-century (Phase 2) farmstead, with selected sections	23
Figure 2.3: Detailed plan of roundhouse G201/202, with selected sections	24
Figure 2.4: Detailed plan of roundhouse G204, with selected sections	25
Figure 2.5: Detailed plan of rectangular structure G207, with selected sections	25
Figure 2.6: Detailed plan of roundhouse G203, with selected sections	26
Figure 2.7: Detailed plan of roundhouse G209, with selected sections	26

Chapter 3. Phase 3: mid-2nd to mid-3rd century

Figure 3.1: Reconstruction of how the farmstead may have looked during Phase 3	28
Figure 3.2: Plan of mid-2nd- to mid-3rd-century (Phase 3) farmstead with Phase 2 layout	29
Figure 3.3: Overall plan of mid-2nd- to mid-3rd-century (Phase 3) farmstead	30
Figure 3.4: Overall plan of domestic focus L30	31
Figure 3.5: Selected sections of features within domestic focus L30	32
Figure 3.6: Detailed plan of roundhouse G316, with selected sections	32
Figure 3.7: Detailed plan of possible rectangular structure G318, with selected sections	33
Figure 3.8: Detailed plan of possible rectangular structure G320, with selected sections	33
Figure 3.9: Detailed plan of possible rectangular structure G321, with selected sections	34
Figure 3.10: Overall plan of 'ladder' enclosure system L32	35
Figure 3.11: Selected sections of features within 'ladder' system L32	36
Figure 3.12: Detailed plan of possible threshing floor G319, with selected section	36
Figure 3.13: Overall plan of peripheral fields L31	37

Chapter 4. Phase 4: mid-3rd to late 4th century

Figure 4.1: Reconstruction of how the farmstead may have looked during Phase 4	40
Figure 4.2: Plan of mid-3rd- to late 4th-century (Phase 4) farmstead with Phase 3 layout	41
Figure 4.3: Overall plan of mid-3rd- to late 4th-century (Phase 4) farmstead	42
Figure 4.4: Overall plan of domestic focus L40, with selected sections	43
Figure 4.5: Detailed plan of enclosure G405 (L40), with selected sections	44
Figure 4.6: Detailed plan of possible stack ring G410, with selected sections	45
Figure 4.7: Overall plan of peripheral enclosures L41	46
Figure 4.8: Selected sections of features within peripheral enclosures L41	47
Figure 4.9: Detailed plan of possible structure G407, with selected sections	47
Figure 4.10: Detailed plan of possible rectangular structure G409, with selected sections	48

Chapter 5. Phase 5: medieval

Figure 5.1: Furrows with all Roman features as an underlay	49
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Chapter 6. Artefacts

Figure 6.1: Selected Iron Age pottery (P1–3)	51
Figure 6.2: Selected Roman pottery (P4–15)	52
Figure 6.3: Selected Roman pottery (P16–24)	53
Figure 6.4: Selected Other Artefacts (OAs 4, 10, 12 and 14)	59
Figure 6.5: Selected Other Artefacts (OAs 15, 16, 17 and 19)	61
Figure 6.6: Selected Other Artefacts (OAs 21 and 23)	63

Chapter 7. Ecofacts	
Figure 7.1: Animal bone surface preservation (after Harland <i>et al.</i> 2003)	66
Figure 7.2: Animal bone fragmentation: the proportion of bones with each number of zones present	66
Figure 7.3: Age distribution from epiphyseal fusion (after O'Connor 2003)	68
Figure 7.4: Age distribution from mandibles for Phase 3 and 4 cattle	69
Figure 7.5: Distribution of cattle carcass components in each phase	69
Figure 7.6: Age distribution from mandibles for sheep in Phases 2, 3 and 4	70
Figure 7.7: Distribution of sheep/goat carcass components in each phase	70
Figure 7.8: Distribution of horse carcass components in Phase 4	70
Figure 7.9: Photograph of three antlers from G402.02	71
Figure 7.10: Comparison of cattle tooth measurements from Stretton Road and Vine Street, Leicester (author's own data)	72
Figure 7.11: Comparison of sheep tooth measurements from Stretton Road and Vine Street (author's own data)	72
Figure 7.12: Comparison of cattle, sheep/goat and pig proportions in Phases 2 to 4	76
Figure 7.13: Cattle, sheep and pig proportions from the early to the late Roman period at Vine Street (Browning in ULAS 2009b)	76
Figure 7.14: Distribution of the animal bone assemblage by feature type	77

List of Tables

Chapter 1. Introduction and discussion	
Table 1.1: All finds by phase	9
Table 1.2: Summary of roundhouses	10
Table 1.3: Summary of possible rectangular structures	11
Chapter 2. Phase 2: mid-1st to mid-2nd century	
Table 2.1: Summary of Phase 2 Land-use areas	21
Table 2.2: Summary of Phase 2 individual enclosures	21
Chapter 3. Phase 3: mid-2nd to mid-3rd century	
Table 3.1: Summary of Phase 3 Land-use areas	27
Table 3.2: Summary of Phase 3 individual enclosures	28
Chapter 4. Phase 4: mid-3rd to late 4th century	
Table 4.1: Summary of Phase 4 Land-use areas	39
Table 4.2: Summary of Phase 4 individual enclosures	40
Chapter 6. Artefacts	
Table 6.1: Phase 2 Pottery quantification	51
Table 6.2: Phase 3 Pottery quantification	53
Table 6.3: Phase 3 Roman pottery quantification by fabric group	54
Table 6.4: Phase 4 Pottery quantification	54
Table 6.5: Phase 4 Roman pottery quantification by fabric group	55
Table 6.6: Roman coins	56
Table 6.7: Phase 3 Other Artefacts assemblage	58
Table 6.8: Phase 4 Other Artefacts assemblage	60
Table 6.9: Phase 5 Other Artefacts assemblage	62
Table 6.10: Phase 6 Other Artefacts assemblage	63
Chapter 7. Ecofacts	
Table 7.1: Age categories for mandibles from sheep/goat and pig (after O'Connor 1988; O'Connor 2003)	65
Table 7.2: Relative proportion of hand-recovered animal bones assigned to each phase	66
Table 7.3: Concentrations of gnawed zoned animal bones over 10%	66
Table 7.4: Summary of burnt animal bone	67
Table 7.5: Hand-recovered animal bone (NISP) and percentages	67
Table 7.6: Hand-recovered animal bone (MNE and MNI)	67
Table 7.7: Animal bone specimens from sieved samples arranged in phase order	68
Table 7.8: Brief description of abnormal animal bones	73
Table 7.9: Total of samples containing cereal grains, chaff and weed seeds and maximum density for the group	78
Table 7.10: Charred plant remains, excluding samples with few remains	79
Table 7.11: Roman rural and extra-mural sites with charred cereal remains: comparison of maximum density of charred plant remains (items per litre of soil)	80
Table 7.12: Numbers and proportions of types of charred plant remains in samples analysed	80
Table 7.13: Ratios of wheat chaff to grains, and weed seeds to cereal grains for the most productive sample of each phase	81

Appendices

Table A1: Pottery Type Series	83
Table A2: Quantity of samian ware listed by phase	84
Table A3: Proportions of samian ware from each of the three main sources areas	84
Table A4: Quantification of samian ware by vessel type	84
Table A5: Catalogue of coins by Registered Artefact number	86
Table A6: Petrological identifications	87
Table A7: Analysis of charcoal	88

List of Plates

Chapter 1. Introduction and discussion

Plate 1: Aerial view of the wider setting of the development area	3
Plate 2: Geophysical survey (ArchaeoPhysica Ltd).....	3
Plate 3: Aerial view of excavation area.....	4
Plate 4: General view of western part of excavation area.....	5
Plate 5: Commencement of hand excavation.....	5
Plate 6: Archaeological recording	6
Plate 7: Threshing floor G319 ('ladder' enclosure system L32) from south	15
Plate 8: Hand excavation of central post-hole of possible stack ring G410 (domestic focus L40) from west, with 1m scale	16

Chapter 3. Phase 3: mid-2nd to mid-3rd century

Plate 9: Cleaning one of the post-holes within rectangular post-built structure G318 (L30) from north-west	29
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Inevitably, on a project of this scale, the hard work, advice and co-operation of a large number of people require acknowledgement.

Overall

Albion Archaeology is grateful to Simon Mortimer of CgMs Consulting Ltd for commissioning the project on behalf of Miller Homes East Midlands. His input and support proved invaluable throughout this project. Richard Clark and Teresa Hawtin monitored the fieldwork on behalf of the Local Planning Authority.

Site archaeologists

The fieldwork was managed by Mike Luke. The excavation was supervised by Ben Barker (Project Officer), with hand excavation and recording carried out by the following staff: Richard Gregson (Archaeological Supervisor); Iain Leslie, Slawomir Utrata, Adam Williams and Adrian Woolmer (Assistant Archaeological Supervisors); and Jo Ahmet, Ben Carroll, Catherine Godsiffe, Claire Lockwood, Gary Manning, Jessica Stevens and Juha-Matti Vuorinen (Archaeological Technicians). Metal detecting was undertaken by Archie Gillespie, and surveying by Mercedes Planas.

All finds were processed under the supervision of Jackie Wells (Finds Officer) who also, along with Holly Duncan, undertook the initial finds identification during fieldwork. Processing of the ecofact samples was undertaken by Slawomir Utrata and Anna Rebisz-Niziolek under the supervision of Gary Edmondson. We are also grateful to Jen Browning and Angela Monkton for undertaking site visits and for the advice they gave. Digitisation of the site plans was undertaken by Joan Lightning.

Residents of Great Glen

We are grateful to the residents of Great Glen — especially those in Garfield Park, who were our neighbours during the fieldwork — for the interest they showed in the investigations. This was reflected in the attendance of well over 500 local people during the open days on site, who were shown around the site primarily by Simon Mortimer, Mike Luke, Ben Barker, Iain Leslie and Helen Parslow.

Post-fieldwork

The post-fieldwork stages of the project were managed by Mike Luke. Initial contextual assessment and analysis was undertaken by Ben Barker. The same specialists were used for both the assessment and analysis/publication stages; they are duly acknowledged as contributors within this publication. Jo Barker took on the role as co-author.

A number of Albion Archaeology staff were involved in this project who do not, due to the nature of their work, have easily identifiable contributions to this publication. They include Gary Edmondson (who oversaw the ecofact processing) and Drew Shotliff (who provided support and advice). The latter also had the unenviable task of reading, commenting on and editing the entire publication.

Photographs

All the photographs published here are copyright to Albion Archaeology, except for Plate 2 (ArchaeoPhysica Ltd). Photographer credits: Ben Barker (Pls 4, 7 and 8), Commission Air (Pls 1 and 3) and Mike Luke (Pls 5, 6 and 9).

About this publication

Structure

Following this preamble, both the introduction and the discussion of results are presented in a single chapter (Chapter 1), with a phased chronological description in Chapters 2–5. This is followed by sections on artefacts (Chapter 6) and ecofacts (Chapter 7). A series of appendices — pottery type series, coin catalogue *etc.* — provide supplementary detail.

Chapters 2 to 5 each begin with an overview and a location plan. The text is then usually arranged by Land-use area (L number), *e.g.* domestic foci, activity foci and fields, with subdivisions for the more significant Groups (G number), *e.g.* buildings and structures. The text is accompanied by plans, section drawings and plates. Significant information on artefacts and/or ecofacts is incorporated where appropriate.

Terminology and abbreviations

An understanding of the structural hierarchy is fundamental to an understanding of the layout and terminology used in this publication. This is described in more detail below (see Ch. 1, pp. 1–2). The main elements comprise Phases (written in full), Land-use area numbers (L prefix) and Group numbers (G prefix). For ease of reference, Land-use areas and Group numbers share their initial digit with their Phase number, *e.g.* roundhouse G316 is within L30 of Phase 3. If a Group or Land-use area has a decimal point, this indicates that it is a fill, *i.e.* primary fills (.1) secondary fills (.2) or tertiary fills (.3). Where there is only a single fill in a feature it has been assigned to .5, *e.g.* G510.5. This decimal points system is mainly used in the sections on artefacts and ecofacts.

A generic fill description is given in the introduction (Ch. 1). Although slight variations in colour, matrix and inclusions were distinguished on site between different fills, these are not usually relevant to understanding this publication and are therefore not included. In general, where primary or lower fills were identified they tended to be lighter in colour and contain slightly more stones. Any significant or unusual variations are described in the Group-level text.

Finally, the following terms and abbreviations are used throughout the publication:

Animal Bone Group (ABG): articulated or associated bone groups.

BAR: British Archaeological Reports.

Building: only used where firm evidence exists.

CBA: Council for British Archaeology.

Farmstead: a coherent body of evidence for a domestic settlement based on farming.

Structure: used where the presence of post-holes or slots suggests that there may have been part of a building, but where a full ground plan could not be determined.

ULAS: University of Leicester Archaeological Services.

Phases and chronological periods

The chronological descriptions and indicative date ranges for each phase are presented below. All the firm evidence for activity postdates the mid-1st century AD and, therefore, the AD suffix has only been used elsewhere in this publication where it is considered necessary to avoid confusion.

Phase 1: Pre-Roman (residual finds)

Phase 2: Mid-1st to mid-2nd century (*c.* 50–150)

Phase 3: Mid-2nd to mid-3rd century (*c.* 150–250)

Phase 4: Mid-3rd to late 4th century (*c.* 250–400)

Phase 5: Medieval (*c.* 1150–1500)

Phase 6: Modern (*c.* 1750–1945)

Tables

Tables are numbered in a unique sequence per chapter, *i.e.* tables in Chapter 3 are numbered 3.1, 3.2, 3.3, *etc.* They have been used to provide detailed information in an easy-to-view manner. Where possible, tables showing similar information in different chapters have been standardised to allow quick and easy comparison. Finally, some tables contain information that transcends individual chapters; these are positioned where a constituent element is first mentioned in the text.

Illustrations

Illustrations are numbered in a unique sequence per chapter, *i.e.* Chapter 3 illustrations are numbered Fig. 3.1, 3.2, 3.3 *etc.* There are individual figures for each structure, roundhouse *etc.*

Artefact illustrations are presented within the relevant specialist reports. The illustration numbers for the different artefact types are prefixed as follows: pottery (P) and Other Artefacts (OA).

Artefact illustration catalogues

For pottery illustrations, the relevant catalogue is presented below its associated figure.

Reconstruction drawings

This publication includes three reconstruction drawings — one for each phase of the farmstead's layout (Phases 2, 3 and 4). Although based on the archaeological evidence, these inevitably require a degree of artistic licence to make them meaningful. They have been deliberately drawn from the same aerial viewpoint to allow easy comparison.

Drawing conventions

Plans

The plans in this volume are only labelled with those elements of the structural hierarchy (*e.g.* L or G numbers) that are actually referred to in the text. Most plans distinguish between excavated and unexcavated areas by the use of shade. Hachures and sections are only shown on the larger-scale plans where they can aid understanding, *e.g.* roundhouses and structures. Where relevant, earlier features are shown in a different colour.

Where possible, section drawings are included on the same figure as the plans to which they relate. They are greyed to help distinguish them from features shown on the plan.

Sections

The section drawings are shown at a scale of 1:40. Different line types are used for 'cuts' and their fills. The upper limit of a drawn section is always the level to which the site was machined, even if the section was located in the side of the excavation area. All sections are located in the horizontal plane, but no OD heights are given. They are usually either south- or west-facing; if necessary, the original drawing has been mirrored. Section drawings are only labelled where it will aid understanding of the text. Accordingly, most of the fills are not labelled because they are not specifically mentioned in the text.

Pottery

Standard drawing conventions have been used, with vessels usually shown at one-quarter size, although some large vessels are drawn at 1:8. An external view is shown on the right, with a section and internal view on the left. Wheel-thrown vessels are shown with solid sections, handmade vessels and applied parts with hatched sections. Visible coils are indicated in the section. The pie diagram at the base of each illustration indicates the proportion of the vessel recovered. Omission of the pie diagram indicates illustration of all available sherds. Illustrated vessels are sequentially numbered with a 'P' prefix and are catalogued below each figure.

Other Artefacts

All illustrations of Other Artefacts are in numerical order and prefixed with 'OA' (Other Artefact). The catalogue is an integral part of the report so is not repeated below each figure. They are drawn at a variety of scales.

Date of text production

Many of the specialist reports were completed by December 2012, and no systematic attempt has been made to update them.

Location of the archive

The project archive of finds and records will be accessioned with Leicestershire County Council's Heritage Services, under accession number X.A17.2011.

Summary

This report describes what was found during the archaeological excavation of a 1.5ha area in Great Glen, a village six miles south-east of Leicester. The site was earmarked for housing development by Miller Homes (East Midlands), who, in accordance with the terms of their planning permission, engaged CgMs Consulting Ltd to commission and oversee the archaeological work, which was carried out by Albion Archaeology in 2011.

The development site contained the remains of a Romano-British farmstead, whose presence had initially been suggested through geophysical survey and confirmed by trial trenching. Finds recovered from the farmstead suggest that it was established in the mid-1st century AD and remained in use throughout the entirety of the Roman period, possibly continuing a short way into the early Saxon period.

Evidence for the farmstead's initial layout was largely obscured by later activity, while part of it also lay beyond the northern edge of the development area, but several roundhouses and possibly a rectangular building were identified. The layout of the farmstead altered considerably in the 2nd century, becoming much more regular and replacing large fields with small enclosures, including a 'ladder' system. The domestic focus remained in the same location, however, and there is enough evidence of continuity to suggest that there was no break in occupation. Several new buildings were constructed, but no more than one of the earlier buildings was left standing. The layout of the enclosures suggests a strong emphasis on livestock management, but the presence of rich charred plant assemblages and a possible threshing floor points towards a mixed agricultural economy.

Further changes were introduced in the 3rd century, with a return to larger fields (although some of the smaller enclosures may have been retained). The domestic focus continued to occupy the same area, but the recovery of a smaller pottery assemblage and the absence of any conclusive evidence for new buildings perhaps indicate a reduction in domestic activity. In contrast, a larger assemblage of animal bone was collected — larger than from contemporary nearby settlements — but there was still little diversity in the species represented.

The farmstead is likely to have been fairly typical of a Romano-British farmstead in Leicestershire. No great wealth is evident from the finds that were recovered, although the presence of imported materials does indicate access to markets and trade, which the proximity of the Leicester to Godmanchester Road and Leicester itself may have facilitated. The practice of craft activities and mixed farming points towards a community that was largely self-sufficient, but which perhaps also produced a small agricultural surplus, particularly in the late Roman period.

Archaeological excavations on construction sites such as this one rarely afford opportunities to engage closely with local communities, but support from Miller Homes (East Midlands) and CgMs Consulting Ltd enabled tours of the site for local school children, an open weekend, and the chance for groups of young archaeologists to take part in the excavation. This outreach component of the project is described in an appendix to this report.

Chapter 1

Introduction and Discussion

I. Introduction

Planning background to the investigations

This report presents the results of an archaeological investigation carried out by Albion Archaeology in 2011 at land off Stretton Road, Great Glen, Leicestershire. Approximately 1.5ha was subject to open-area excavation in advance of a development by Miller Homes (East Midlands) comprising housing, infrastructure and public open space. This was in line with local planning policy and the guidelines in the Department of the Environment's *Planning Policy Guidance Note 16: Archaeology and Planning (PPG 16)*. The work was commissioned and overseen by CgMs Consulting Ltd.

Location, topography and geology

Great Glen lies six miles south-east of Leicester on the north-east side of the A6. The development area was located on the northern edge of the village, to the east of Stretton Road (centred on SP 6618 9857). The site occupies a west-facing slope, which drops down to the River Sence to the west and to a smaller tributary to the north. The land rises to the east to c. 145m OD and slopes down to c. 102 m OD at Stretton Road to the west. Immediately to the south of the site, to the rear of Garfield Park, the ground had been heavily reduced by previous construction activity.

The site's underlying solid geology is Lower Lias Clay and Limestone, overlain by boulder clay and morainic drift.

Archaeological background

Geophysical survey (Bartlett-Clark Consultancy 2005) and trial trenching (Hereford Archaeology 2005) on the part of the development area fronting Stretton Road revealed no buried archaeological features or deposits. In contrast, a geophysical survey on the eastern part of the development area (ArchaeoPhysica 2009), undertaken as part of a separate development proposal, revealed geophysical anomalies whose layout was typical of a late Iron Age / Romano-British settlement (Pl. 2). This was confirmed by trial trenching (Northamptonshire Archaeology 2009) with the archaeological features concentrated in four of the sixteen trenches. The results suggested that a small, rural, agricultural settlement was established in the middle to late Iron Age and remained in use throughout the Roman period.

The archaeological investigations

Open-area excavation

On the basis of the evaluation, CgMs Consulting Ltd defined an archaeologically sensitive area which was to be subject to open-area excavation and agreed it with the County Archaeological Officer. The investigation took place between March and May 2011, leaving a stand-off area from a hedged field boundary that subdivided

the excavation area, and also from further hedged field boundaries to the north.

Ploughsoil and subsoil were mechanically removed under archaeological supervision, exposing the underlying clay (Pl. 3). A pre-excavation plan was immediately created and used to formulate the excavation strategy. All hand excavation and recording was carried out in accordance with Albion Archaeology's *Procedures Manual* (Albion Archaeology 2001) and the *Specification* (CgMs Consulting 2010). All discrete archaeological features were half-sectioned. Initial segments through ditches were spread evenly along their lengths, except where they targeted significant finds that were visible on the surface, e.g. artefact or ecofact concentrations. The processing of finds and ecofacts was undertaken concurrently with fieldwork, to maximise feedback into, and adjustment of, the excavation strategy.

The features contained deposits that generally comprised firm, mid-grey/orange brown silty clay, with occasional stones of varying sizes, and flecks of charcoal. Any fills that differed significantly from this are described in more detail in Chapters 2 to 5.

Assessment

On completion of the fieldwork, a preliminary report (Albion Archaeology 2011a) and subsequently an assessment report and updated project design (Albion Archaeology 2011b) were produced. The latter summarised the results and identified how the recovered data could address local, regional and national research priorities. In addition, it set out the methodological basis for the post-excavation analysis.

Post-excavation analysis

The overall approach was to manipulate all data within a fully integrated, computer-based system of analysis. All structural, artefactual and ecofactual data were entered into an Access database, creating an interface with the digital drawings and images. This allowed rapid and flexible analysis of the data and facilitated the creation of the text and plans which form the basis of this publication.

The methodology for the contextual analysis is summarised below — an understanding of the contextual hierarchy is essential, as it underpins the structure of this publication. Analytical methodologies for the artefacts and ecofacts are summarised in the relevant sections. The updated project design (Albion Archaeology 2011b) should be consulted for full details of the methodologies applied to each dataset.

A total of 1,362 contexts were recorded on site, which were organised into a hierarchy during post-excavation analysis, comprising:

SG (Sub-group): indivisible unit of interpretation, e.g. the primary fills of the same ditch.

G (Group): more interpretive entities, e.g. buildings, ditch lengths, concentrations of pits.



Figure 1.1: Location plan

L (Land-use area): collections of broadly contemporary and spatially coherent groups, *e.g.* an enclosure or an unenclosed concentration of pits and post-holes.

Phases: broad, chronological divisions, *e.g.* mid-1st to mid-2nd century.

Phases, Land-use areas and Groups provide the main framework for the presentation of the results within this publication. It should be borne in mind that it is the level within the structural hierarchy that is important, *not* necessarily the actual name of the hierarchical element.

The terminology used in this publication is described above (see p. ix).

II. Discussion

By Mike Luke and Jo Barker, incorporating the conclusions and ideas of Jen Browning, Hilary Cool, Holly Duncan, Peter Guest, Angela Monkton and Jackie Wells

Archaeological investigations at Stretton Road, Great Glen, Leicestershire, located and investigated a



Plate 1: Aerial view of the wider setting of the development area



Plate 2: Geophysical survey (ArchaeoPhysica Ltd)



Figure 1.2: All-features plan



Plate 3: Aerial view of excavation area



Plate 4: General view of western part of excavation area



Plate 5: Commencement of hand excavation

previously unknown Romano-British farmstead, occupying a south-facing slope on boulder clay. The River Sence lay only *c.* 0.4km to the west, with one of its small tributaries *c.* 0.2km to the north.

The following discussion is organised around a number of themes: the Romano-British background; settlement origins, continuity and morphology; the settlement's economy and its environmental background; burial and ritual; and the inhabitants' way of life.

The Romano-British background

Within the Romano-British landscape, the Stretton Road farmstead is located 1.4km south-west of the Gartree Road, which linked Leicester and Godmanchester. The nearest known contemporary site, often interpreted as a 'villa', is within Great Glen village (Scott 1993, 112). Approximately 9km along the Gartree Road to the north lay Roman Leicester (*Ratae Corieltauvorum*); the next nearest



Plate 6: Archaeological recording

large settlement along the Gartree Road was c. 20km to the south-east at Medbourne.

Although hundreds of Romano-British farmsteads are known in Leicestershire (Liddle 2000, 3–4), and a larger number in the East Midlands in general, surprisingly few have been subject to excavation (Taylor 2006, 139–40). Therefore, the results of the excavations at Stretton Road make an important contribution to our understanding of this settlement type, both in the county and in the wider region. Leicestershire farmsteads referenced more than once in this discussion include: Rearsby Bypass Sites 1 and 6 (ULAS 2005, 2007a); The Gynsills, Glenfield (Birmingham University Field Archaeology Unit 1999); and Seagrave Road, Sileby (Luke and Barker forthcoming). Two in Northamptonshire are also referenced more than once: Glapthorn Road, Oundle (Maull and Masters 2005); and Higham Road, Burton Latimer (Albion Archaeology 2012).

Settlement origins and continuity

The earliest sub-surface features relate to a mid-1st- to early 2nd-century farmstead (Ch. 2), with the assemblage of Other Artefacts suggesting that the settlement was probably established in the later 1st century. However, there is some evidence for earlier activity (assigned to Phase 1) in the form of small quantities of both worked flint and pottery. These date to the late Bronze Age to early Iron Age, and middle to late Iron Age, and all derived from features containing Romanised pottery.

The farmstead occupied the same location throughout the Roman period but underwent two major changes in layout (Phases 2–4). Understanding the phasing of these developments relied heavily on stratigraphic relationships because, although large quantities of pottery were recovered, its dating was not sufficiently refined to date individual features with precision. Moreover, long-lived use of the same piece of land has resulted in some degree of residuality. As is often the case, the precise date of abandonment is impossible to determine, but a

coin struck in 388–402 suggests that some activity was still taking place at the very end of the 4th century or in the early 5th century. No Anglo-Saxon artefacts were recovered.

The earliest phase of the farmstead (Phase 2) dates to the mid-1st to mid-2nd century — a period when existing settlements across lowland Britain were being amended and new ones created (Williams *et al.* 1996, 83). A noticeable change in layout occurred in the mid-2nd century (Phase 3), when the alignment of the main enclosure boundaries switched from NW–SE to NE–SW (an alignment which was retained into Phase 4). This change was accompanied by the creation of a larger number of enclosures on a more regular layout. However, it does not appear to represent a break in occupation, as the domestic focus remained in the same location, and some of the earlier boundaries were incorporated into the new layout. Mid- to late 2nd-century changes in settlement layout have been observed elsewhere, *e.g.* Burton Latimer, Northamptonshire (Albion Archaeology 2012, 14) and Marsh Leys, Bedfordshire (Luke and Preece 2011, 140–1). Similar developments took place in the early 3rd century at Glapthorn Road, Oundle, Northamptonshire (Maull and Masters 2005, 55). Some rural settlements in Leicestershire have produced no obvious evidence for significant changes in layout, *e.g.* Seagrave Road, Sileby, although this site has only been subject to geophysical survey and trial trenching (Fig. 1.4) (Albion Archaeology 2011c, 24; Luke and Barker forthcoming). The exact reasons behind the creation of extensive enclosure systems and their occurrence at different dates on some sites are uncertain. It is possible that their creation was linked to the finalisation of land proprietorship following the Roman conquest — a process which did not necessarily occur immediately (Mattingly 2006, 354). In reality, too few Romano-British farmsteads have been excavated around Leicester for any pattern to be identified and explained.

Liddle has suggested that the 2nd and 3rd centuries were a time in Leicestershire when villas generally appeared and many rural farmsteads disappeared (Liddle 2000, 4). It is therefore of interest that the Stretton Road farmstead seems to have remained in use until at least the end of the 4th century, while being less than 1km from the postulated Great Glen villa. However, the latter has only been identified on the basis of the discovery of tesserae and box-flue tile (Scott 1993, 112). As is so often the case, Roman building material was also found within the Stretton Road farmstead, but whether this material originally derived from the postulated villa or some other substantial building in the vicinity is impossible to prove. Whilst the extents of villa estates are usually unclear, the proximity of some villas to non-villa settlement sites may indicate a close link between the two, as suggested at Lockington, Leicestershire (Hingley 1989, 102).

Settlement morphology

It is likely that the majority of the Stretton Road farmstead lay within the development area, although it did clearly continue to the north. This is evident from its layout within the excavation area and from the results of the evaluation, which covered the remainder of the development area.

The earliest farmstead (Phase 2) comprised at least three large enclosures, one of which contained

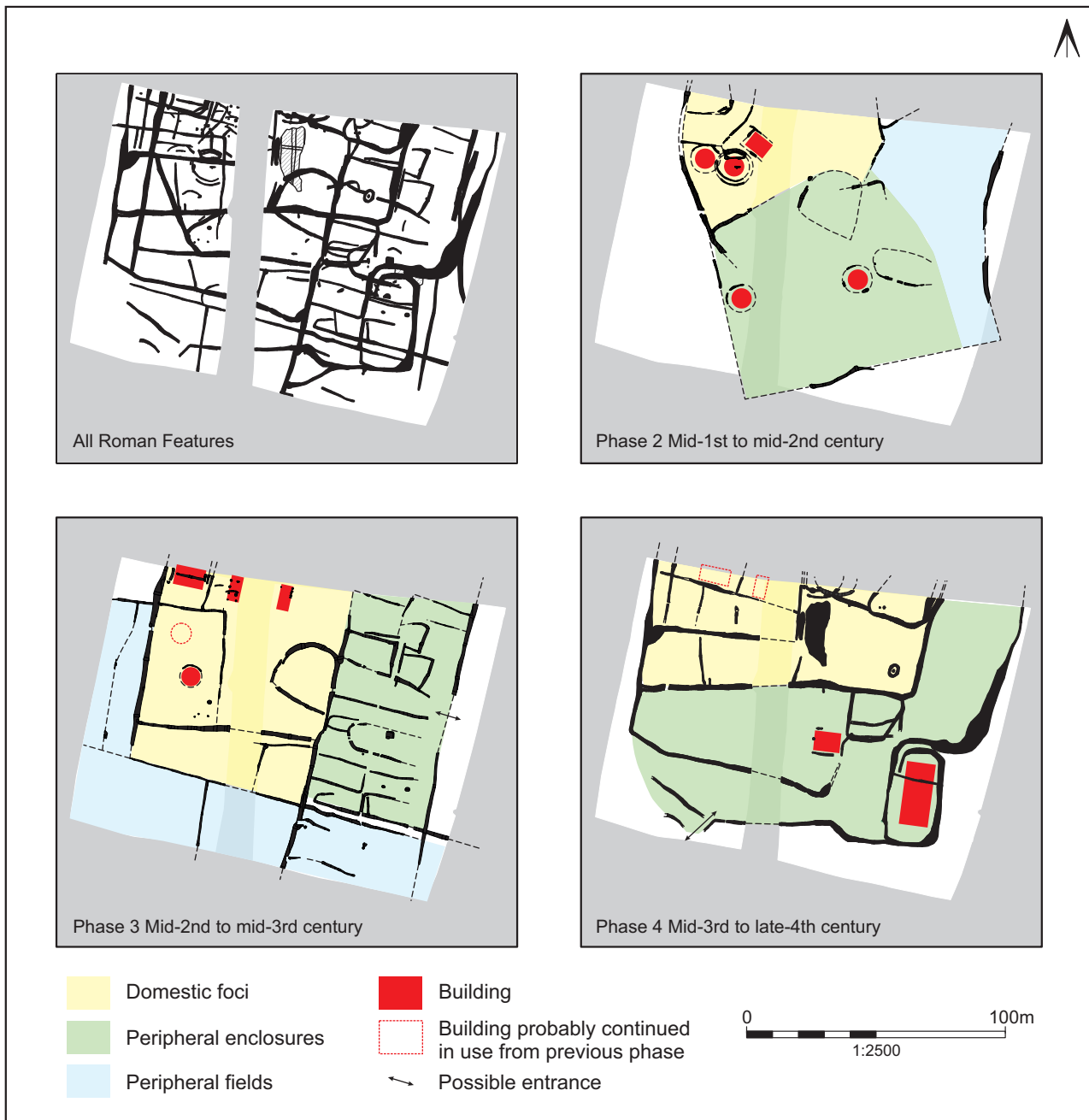


Figure 1.3: Comparative plans showing the changes in layout of the Stretton Road farmstead over time

domestic activity including a cluster of buildings/structures (Fig. 1.3). The layout of the settlement has some similarities with two other Leicestershire sites — the pre-Roman settlement in Phases 1 and 2 at Manor Farm, Humberstone (Thomas 2011, fig. 21) and enclosure 1 at Hallam Fields, Birstall (ULAS 2009a, fig. 9). Although neither is contemporary with Stretton Road, these sites could suggest that the Phase 2 layout was based on a 'typical' pre-Roman layout.

By the middle of the 2nd century (Phase 3), a new system of enclosures and fields had been established at Stretton Road (Fig. 1.3), with only a few of the earlier elements retained. The farmstead was clearly organised into zones, with domestic activity to the west and agricultural activity, such as cereal processing and animal holdings, within the 'ladder' enclosure system to the east. By the middle of the 3rd century (Phase 4), the layout of the enclosures and fields had been altered again through

the establishment of new boundaries and remodelling of the Phase 3 boundaries (Fig. 1.3).

Settlement components

The elements of each phase of the farmstead are summarised in Table 1.1 and described in Chapters 2–4. Here, the different settlement components, irrespective of which phase they occurred in, are discussed and compared. Each phase of activity comprised a domestic focus, enclosures and sometimes fields. No burials were identified; the presence of four single human bones is discussed separately (see Ch. 7, p. 84).

Layout and enclosure/fields

The layout of the earliest form of the farmstead (Phase 2) contrasted with the later layouts (Fig. 1.3). The Phase 2 enclosure ditches were generally sinuous rather than straight: the Phase 3 and 4 layouts were much more

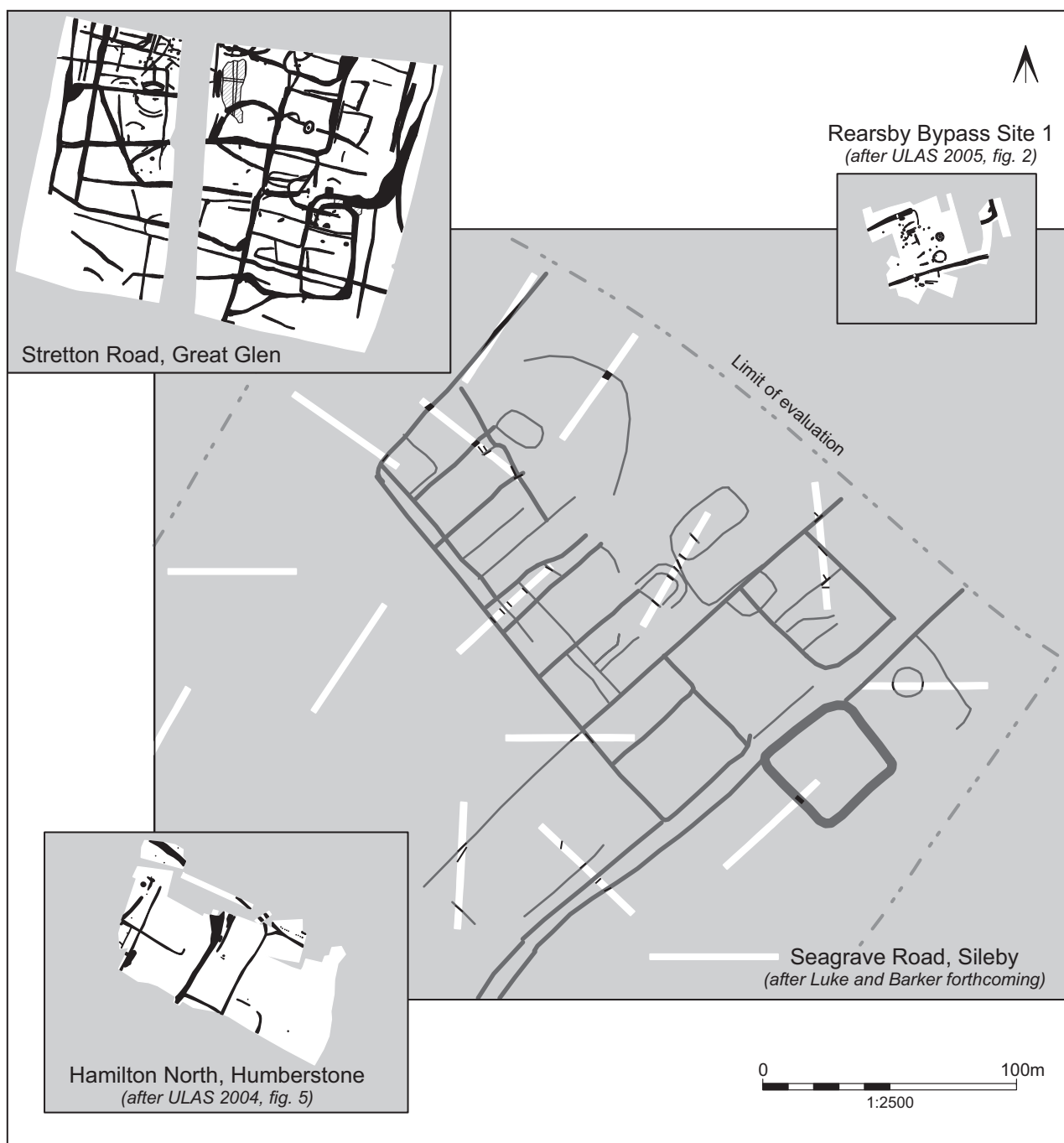


Figure 1.4: Comparative plans of the Stretton Road farmstead and others in Leicestershire

regimented and rectangular, even though they occupied the same area. Only the D-shaped sub-enclosure survived into Phase 3, suggesting that it must have been of some importance to the occupants of the farmstead.

One of the most striking elements of the Phase 3 layout was what can be described as a 'ladder' enclosure system to the east (Figs 1.3 and 3.10). This was c. 45m wide and comprised a large number of narrow sub-enclosures, most of which only extended across half the width of the enclosure system. Comparable 'ladder' systems attached to settlements that have been excavated are known at Burton Latimer, Northamptonshire (Albion Archaeology 2012, fig. 6) and Childerley Gate, Cambridgeshire (Abrams and Ingham 2008, fig. 3.13), although in both cases the enclosures, unlike at Stretton Road, extended across the full width of the system. Another difference is that at Stretton Road the sub-enclosures appeared to

form two discrete blocks, separated by the only ditch that did extend across the full width of the system (Fig. 3.10). The latter was adjacent to the D-shaped enclosure that originated in Phase 2, possibly suggesting that it was an integral part of the system.

Although this area was heavily truncated by later features, it is likely that the main entrance to the 'ladder' enclosure system was from the east. It may have provided access to a possible internal routeway that ran along the east side of the enclosure system. A funnel-like entrance to the south and a number of entrances into individual sub-enclosures were identified. The funnel-like entrance and the curving nature of some of the sub-enclosures suggest that many were used as livestock paddocks. This raises the possibility that the entire system was originally designed for the sorting and temporary corralling of animals. The narrow width of the funnel and small size of

Phase	Land-use areas	Contemporary pottery sherds:weight (kg)	Animal bone (kg)	Other finds
2	20, 21, 22	92:1.5	5.6	0.3kg brick and tile 2.78kg fuel ash Cu waste ×2 Whetstone ×1
3	30, 31, 32	643:8.76	13.54	0.75kg brick and tile 0.4kg fired clay 0.07kg fuel ash Coins ×6 Bone needle / pin tip ×1 Iron fragment ×1 Nails ×5 Oyster shell ×2
4	40, 41	132:3.62	44.25	17.1kg brick and tile 0.08kg fired clay 0.3kg fuel ash Coins ×15 Shale spindle whorl ×1 Top of iron stylus ×1 Iron knife fragments ×15 Nails ×17 Iron fragments/objects ×4 Millstone ×1 Quern fragments ×3 Oyster shell ×45
5	51	–	0.33	0.13kg brick and tile Nails ×2 Coins ×2

All weights have been rounded up to the nearest 0.01kg.

Table 1.1: All finds by phase

the sub-enclosures would suggest that it was designed for sheep or pigs rather than cattle. However, the presence of a possible threshing floor, and charred plant remains suggestive of cereal processing, indicates some sub-enclosures served other purposes, perhaps even including cultivation — although their function might have varied over the course of the year.

The ‘ladder’ enclosure system was not retained in the Phase 4 layout. However, it is possible that the new system, also with interlinked enclosures and constructed in roughly the same location, performed a similar function, even though the enclosures themselves were very different in form.

In general, the larger enclosures were on the periphery of the farmstead — *e.g.* to the east in Phase 2 and to the south in Phase 3 — and lacked evidence for internal activity. They are described as fields in this publication. No evidence was found within the development area for a more extensive field system away from the farmstead. Had such fields existed, the geophysical survey undertaken as part of the evaluation would have identified them, unless they were defined only by hedgerows and not by ditched boundaries.

Tracks/routeways

Neither the evaluation nor the excavation produced evidence for trackways linking the farmstead to the wider landscape. Such features typically comprise two parallel ditches without metalling, *e.g.* Seagrave Road, Sileby, Leicestershire (Luke and Barker forthcoming). No obvious major entrance into the domestic foci of the farmstead was identified. Had one existed, it is likely to have been located to the north of the development area where it would have provided direct access to the domestic focus. Entrances into peripheral enclosures were identified to the east in Phase 3 and to the south in Phase 4 (Fig. 1.3).

Domestic foci

This publication attempts to identify the location of the domestic focus within each farmstead’s layout, contrasting it with evidence for different activities in other parts of the farmstead. At its simplest, the domestic focus was where the occupants of the farmstead lived. It was primarily characterised by the presence of buildings and structures, which could have served a domestic function, within a coherent system of enclosures (Fig. 1.3). Some aspects of the artefact and ecofact assemblages have also assisted in their identification, *e.g.* a greater abundance of finds indicative of household, personal or craft activities (Tables 2.1, 3.1 and 4.1).

The Phase 2 domestic focus L20 comprised three adjacent buildings — two roundhouses and a rectangular structure — all within one enclosure (the two roundhouses may not have been contemporary, given their partially overlapping circuits). Although the layout of the farmstead had changed by the mid-2nd century (Phase 3), its domestic focus L30 remained in a similar location. Its constituent roundhouse and three rectangular structures were more dispersed and were not all within the same enclosure. Again, despite the changes in layout that occurred in the mid-3rd century (Phase 4), domestic focus L40 remained in the same general location. No new Phase 4 buildings were clearly identified, although stone surface G414 may have been the base of one (or it could equally have been a yard surface: see below). It lay within enclosure G405 (Fig. 4.4), which produced a larger artefact assemblage than other enclosures, including coins, an iron stylus (OA18) and fragments of quern stone (OA16).

Buildings

Both roundhouses and rectangular structures were present from the earliest phase of the Stretton Road farmstead.

Roundhouses

Five roundhouses were identified within the farmstead. The latest occurred in Phase 3 (mid-2nd to mid-3rd century), although its assignment to this phase is largely based on its spatial location rather than on datable artefacts. All were defined by small drainage gullies, enclosing an area *c.* 11m in diameter. Roundhouse G201 may have been rebuilt on a slightly larger scale, as a new gully was dug on the exterior of the original. Although the gullies were all heavily truncated, a number of genuine terminals (probably indicating the location of doorways) were identified. They were situated to the north-east (two examples), north-west (two examples) and south-west (one example), including some instances of possible multiple entrances in the same roundhouse. Only roundhouse G201 contained evidence for internal activity — a possible storage pit, and structural features that suggest the division of the interior into two halves.

Whilst roundhouses typify Iron Age settlements, they remained in use in the early Roman period, especially within farmsteads, and at some sites lasted into the 3rd and 4th centuries (Hingley 1989, 31). Other examples of possible Roman-period circular buildings on rural settlements within the county have been identified at Rearsby Bypass Site 6 (ULAS 2005, 14–15, fig. 7) and Normanton le Heath (Thorpe and Sharman 1994, 25–26, fig. 19). The latter consisted of an arc of post-holes rather than a drainage gully; its projected diameter is similar to those of the buildings at Stretton Road (Fig. 1.5). Possible roundhouse G20 at Rearsby Bypass Site 6 was, as at Stretton Road, evidenced by an incomplete circular gully. It had a projected diameter of *c.* 8m and was therefore slightly smaller than those at Stretton Road (Fig. 1.5). Several of the Stretton Road roundhouses appear to have had entrances that do not fit the pre-Roman trend of facing the rising sun, *i.e.* east to south-east (Knight 1984, 144–5; Hill 1995b, 54). Non-standard alignments have also been observed in roundhouses within other farmsteads, *e.g.* Rearsby Bypass Site 1 (ULAS 2005, 7) and Marsh Leys, Bedfordshire (Luke and Preece 2011, 152). This may have been because they served a non-domestic function, as would be suggested for those in peripheral enclosures at Stretton Road. However, the degree of truncation on the site means that there is insufficient

evidence to progress the issue of whether or not the ‘standard’ Iron Age doorway location changed in the Roman period.

Rectangular structures

Five rectangular structures were identified, and two other possible candidates are discussed separately below. Of the five, one occurred in Phase 2, three in Phase 3, and one in Phase 4. Although it was not always possible to determine their full extent, it is likely that they were all no larger than 11m × 6m. All were parallel or perpendicular to the enclosure ditches. Two types of evidence were present: post-holes, and gullies. The nature of most of the latter suggests that they were drains rather than slots for wall timbers. The fills of the features associated with these structures produced only a small quantity of pottery, animal bone and other finds. With the exception of G409 (Phase 4), all were located within the domestic focus of the farmstead and are therefore considered to have been dwellings, although other functions are clearly possible.

The apparent absence of rectangular buildings, in contrast to roundhouses, has been noted on many sites, *e.g.* Wavendon Gate (Williams *et al.* 1996, 86). This is probably explained in part by the fact that most roundhouses, as at Stretton Road, were enclosed by a drainage gully which tends to survive all but the most severe truncation and is, therefore, easily identifiable. It seems likely that some rectangular buildings were constructed in a way that left little sub-surface evidence. It has been observed elsewhere that arrangements of gullies or slots, sometimes quite ephemeral, may represent the last surviving evidence for buildings, *e.g.* building 22 at Gorhambury, Hertfordshire (Neal *et al.* 1990, 39, fig. 49) and several at Marsh Leys, Bedfordshire (Luke and Preece 2011, 155 and fig. 9.14). Therefore, an attempt has been made to identify the location of less obvious rectangular buildings at Stretton Road, even though the results are sometimes speculative. The gullies at Stretton Road, like those at Marsh Leys, were not associated with numerous post-holes, did not have the characteristics of beam slots, and did not always form a pattern that can be easily interpreted as a building; nonetheless, they may be the only surviving evidence that such structures once existed (Fig. 1.6).

Phase	2	2	2	2	2	3
Land-use area	20	20	20	21	21	30
Group	201	202	204	203	209	316
Description	Truncated circular gully	Redefinition of gully G201	Truncated circular gully NW?	Truncated circular gully NE?	Truncated circular gully SW?	Truncated circular gully NW? NE?
Entrance						
Internal diameter (m)	12	14	>10	>10	>10	>7
Gully dimensions	0.8:0.2	0.6:0.3	0.4:0.1	0.6:0.1	1.0:0.2	0.5:0.2
Max. width:depth (m)						
Gully profile	Moderate sloping sides, concave base	Moderate to steep sloping sides and a flat base	Gradual sloping sides, flat base	Gradual to moderate sloping sides, flat base	Gradual to steep sloping sides, concave base	Moderate sloping concave sides and concave base
Internal features	Pit, structural slot and post-hole	–	–	–	–	–
Pottery	2:23	2:10	–	1:1	2:0.1	–
sherds:weight (kg)						
Other finds (kg)	0.03 animal bone 0.32 fuel ash Cu fragment (RA1012)	0.07 animal bone	0.04 animal bone	–	0.18 animal bone 0.25 tile	–

RA = Registered Artefact number, Cu = Copper alloy. All weights have been rounded up to the nearest 0.01g.

Table 1.2: Summary of the roundhouses

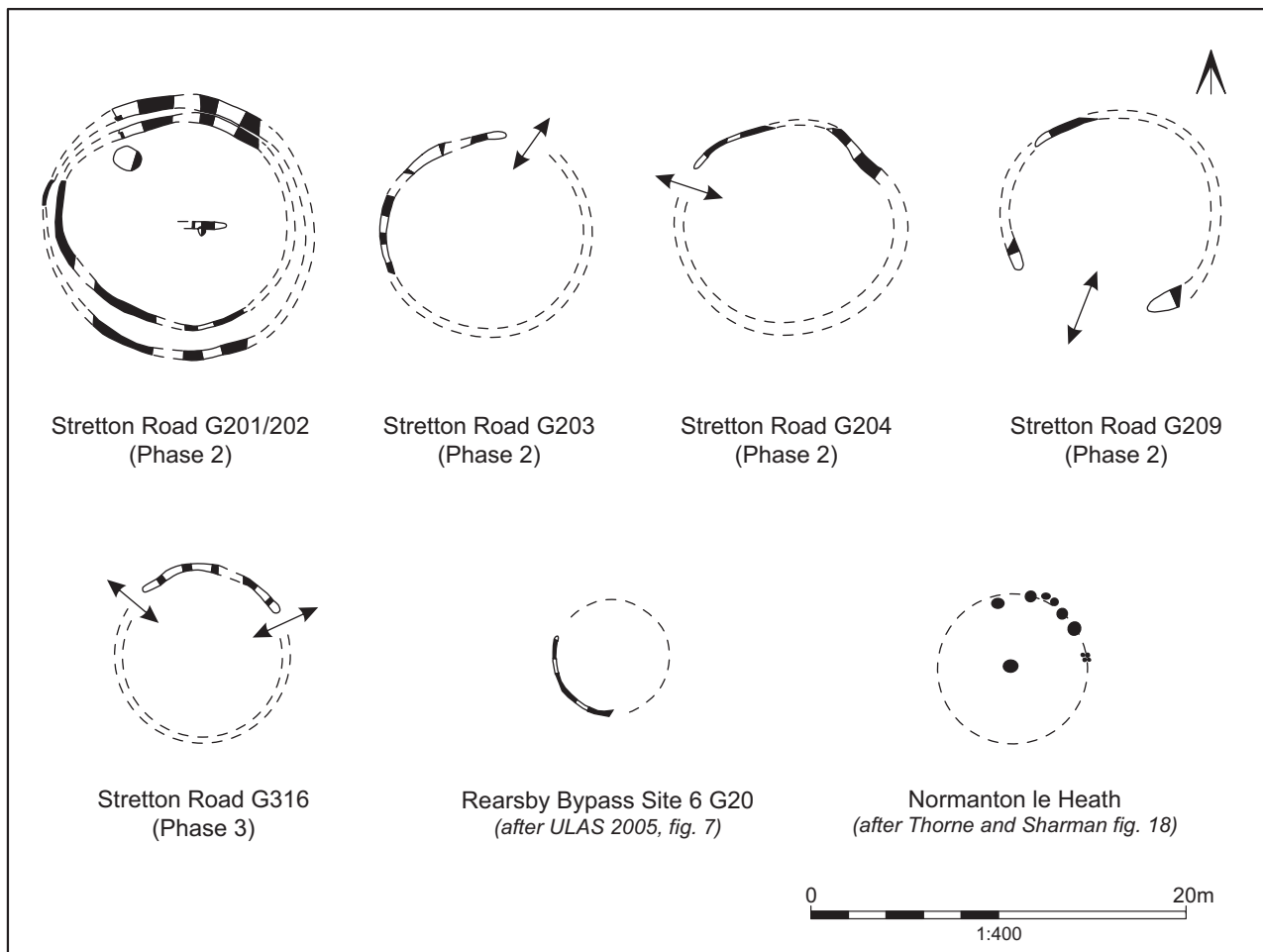


Figure 1.5: Comparative plans of roundhouses at Stretton Road and elsewhere in Leicestershire

Possible contemporary rectangular structures in the county, as evidenced by post-holes or slots, have been identified at Rearsby Bypass Sites 1 and 6 (ULAS 2005, 7–8 and 15–17; ULAS 2007a, 14–15 and 24). In contrast to those at Stretton Road, the slots at Site 6 have been provisionally interpreted as wall foundations (ULAS 2007a, 24), although like other examples they did not form a coherent pattern (Fig. 1.6). Ironically, one of the better candidates in the county — structure 3 at Hamilton North, Humberstone — has been interpreted as

a fenceline (ULAS 2004, 4), but as it was situated on the edge of the excavation area it may represent one side of a rectangular building.

Oval or rectangular structure

The possible existence of another structure is indicated by the oval arrangement of ditches G407 in the south-east corner of the Phase 4 farmstead. The ditches were much wider and deeper than those associated with the other structures at Stretton Road, but they too probably

Phase	2	3	3	3	4	4
Land-use area	20	30	30	30	21	41
Group	207	318	320	321	407	409
Evidence	Drainage gullies	Post-holes	Drainage gullies	Post-holes	Drainage gullies	Drainage gullies enclosing oval area
Profile of main element	Concave		Steep sloping with flat base	Concave	Steep U-shaped	Concave
Post-hole spacing (centre to centre) (m)	n/a	2.5	n/a	0.8–1	n/a	n/a
Width/diameter (m)	0.4–0.7	0.2–0.9	0.6–0.8	0.5–1.2	0.6–2.5	0.4–0.8
Depth (m)	0.1–0.3	0.1–0.4	0.3–0.4	0.1–0.3	0.2–0.9	0.1–0.5
Area (m)	>7×5	>3×8	>13×6	>4.5×3.5	30×12	9×>11
Alignment	NW–SE	NE–SW	NW–SE	NE–SW	N–S	E–W
Pottery sherds:weight (kg)	–	7:0.06	–	1:0.01	4:0.03	3:0.02
Other finds (kg)	0.17 animal bone 0.01 burnt stone	<0.01 animal bone 0.4 fired clay	0.7 animal bone	–	4.83 animal bone 2.14 tegula/brick/tile Copper alloy coin (RA2055)	1.57 animal bone

Table 1.3: Summary of all possible structures

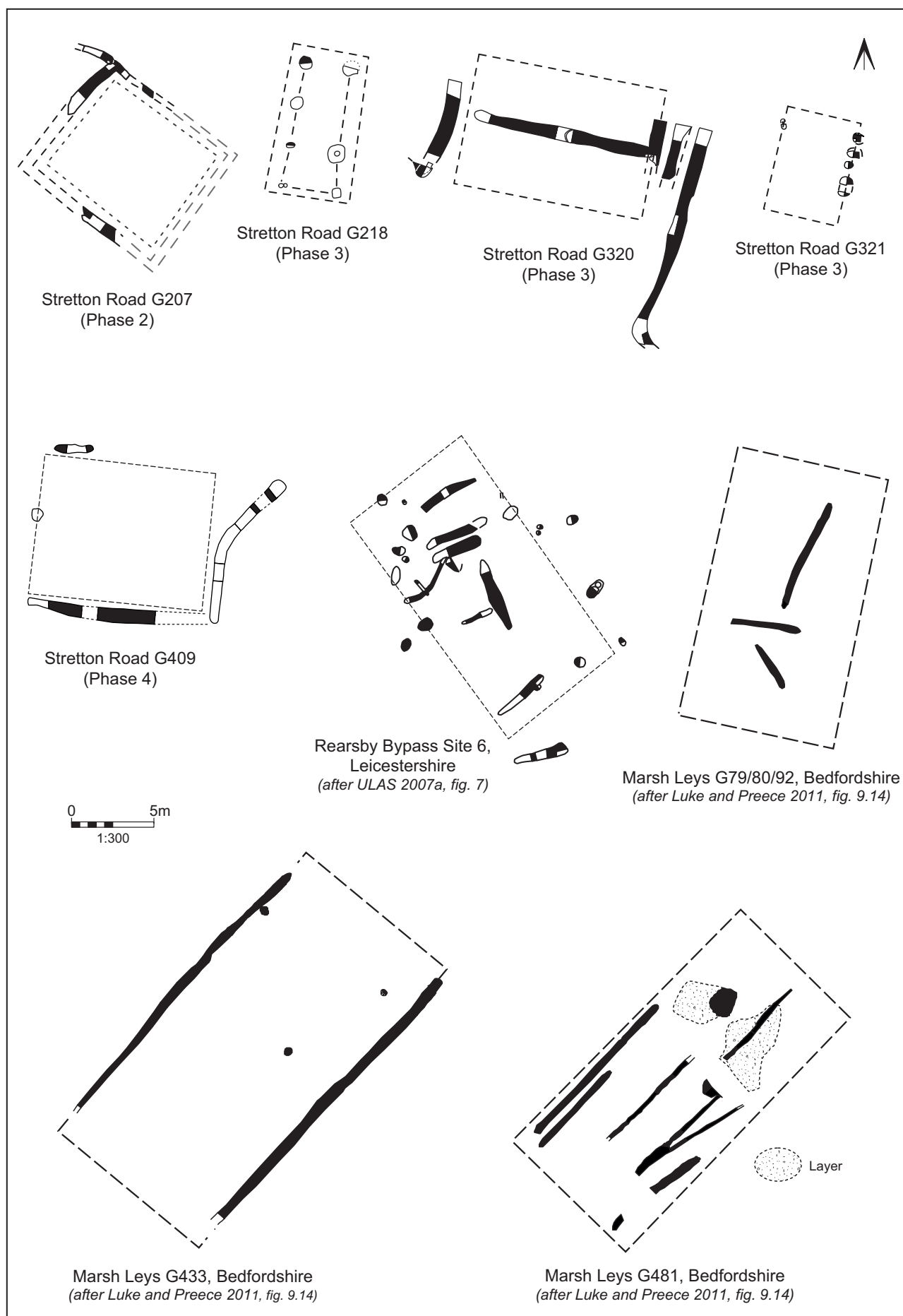


Figure 1.6: Comparative plans of rectangular structures at Stretton Road and elsewhere in southern England

served as drains. No structural elements survived in the interior but, if the ditches did define a single building, it could have been as large as 34m × 14m.

There is insufficient evidence to be certain that G407 did surround a building — it may have been no more than a livestock enclosure, with animals funnelled in from the open fields through the narrow passage to the north — but there is a possible parallel at Ivy Chimneys, Witham, Essex (Turner 1999, 41, fig. 37). There, ditches enclosing an area c. 24m × 12m were interpreted as drainage ditches around an early 4th-century building (Fig. 1.7). The similarities end there, as the Ivy Chimneys building was interpreted as a possible temple, partly because of the recovery of a large number of coins and other metal objects. There is no supporting evidence for such an interpretation at Stretton Road, although the size of the putative building and its location on the edge of the enclosure system may mean that it was a significant element of the farmstead.

Other structures

Yard/stone-based building G414

An amorphous spread of cobbles mixed with smaller stones and fragments of brick and tile, c. 25 × 10m, was present within the main enclosure of domestic focus L40 of the Phase 4 farmstead (Fig. 4.4). Stone surfaces rarely survive within Romano-British rural settlements, due largely to truncation by modern ploughing. However, several examples are known within Leicestershire. Two areas of pebbles, one 4.97 × 1m (structure 1) and the other 7.19 × 2.53m (structure 4), were found at

Hamilton North, Humberstone (ULAS 2004, 3–4). In addition, two areas of cobbles were also found during trial trenching at Seagrave Road, Sileby (Albion Archaeology 2011c, 11–12). Such features are typically interpreted as remnants of yards or hard-standing, laid down in areas where the underlying clay could easily turn into a quagmire. However, structure 4 at Hamilton North, Humberstone, contained traces of nails ‘forming a rectangular pattern within its central area’ (ULAS 2004, 4). This raises the possibility that on some sites, like Stretton Road, the pebbled areas may have served as the base for timber buildings. Clearer examples of buildings with rectangular stone surfaces were found at Skeleton Green, Hertfordshire (Partridge 1981, 49–50 and fig. 17).

?Threshing floor G319

The Phase 3 sub-square stone ‘platform’ G319 comprised flint pebbles placed on a bed of clay (Pl. 7). It was similar in shape and size to several found in the Great Ouse valley in Bedfordshire, where they have been interpreted as threshing floors (Fig. 1.8). The key difference reflects the availability of local stone in that the Bedfordshire examples were constructed out of limestone rather than flint pebbles (Luke and Preece 2012, 35–6 and fig. 17). Morris summarises what Roman authors tell us about threshing floors in the Mediterranean and describes some possible British examples: threshing floors featured a hard surface ‘to deter weeds and small animals, to avoid mud or dust, and to help crush the straw or thresh the grain more quickly’ (Morris 1979, 23). He describes smaller, circular and rectangular sunken floors as being designed

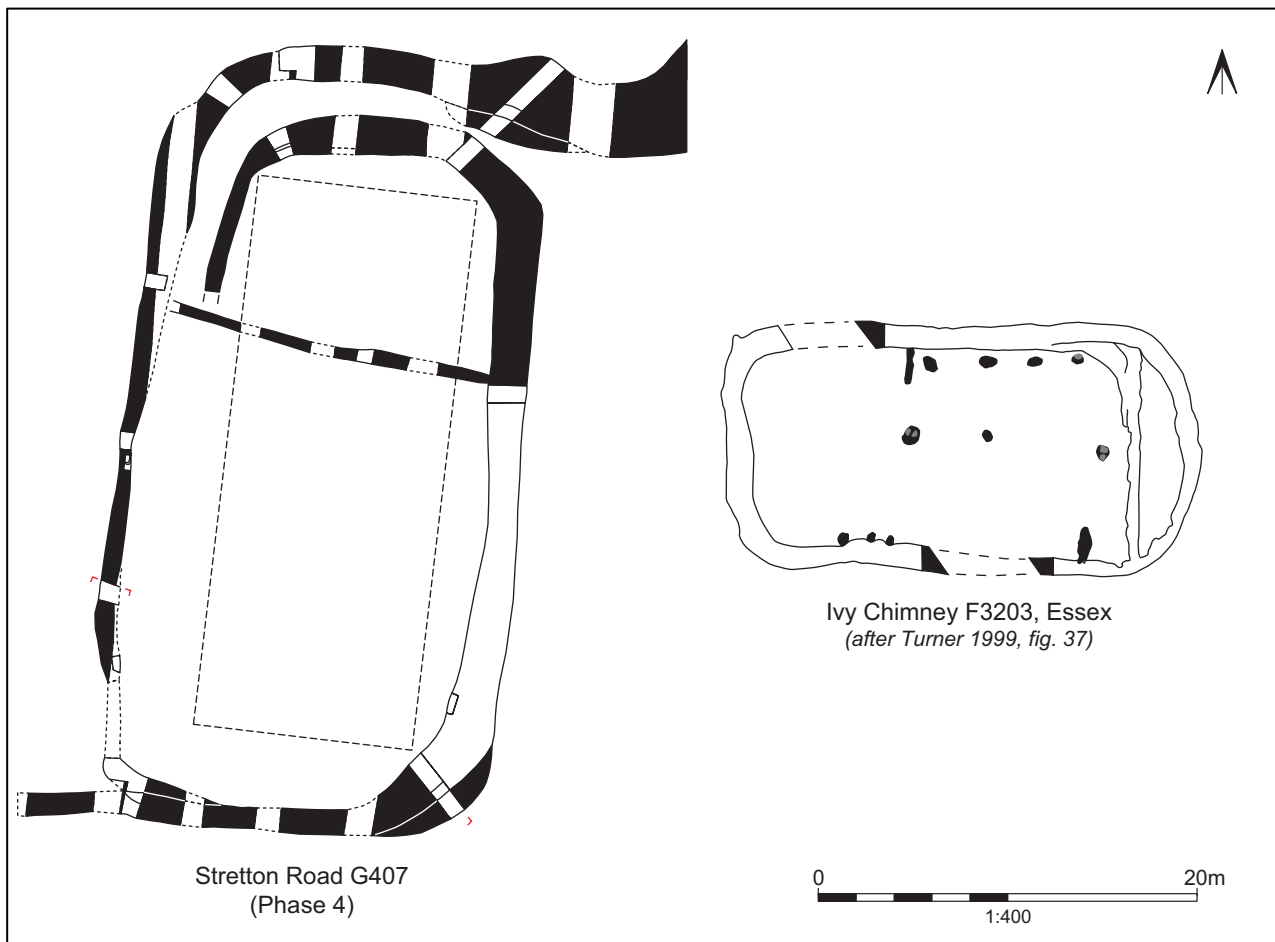


Figure 1.7: Comparative plans of possible structure G407 at Stretton Road and apsidal ditch F3203 at Ivy Chimneys

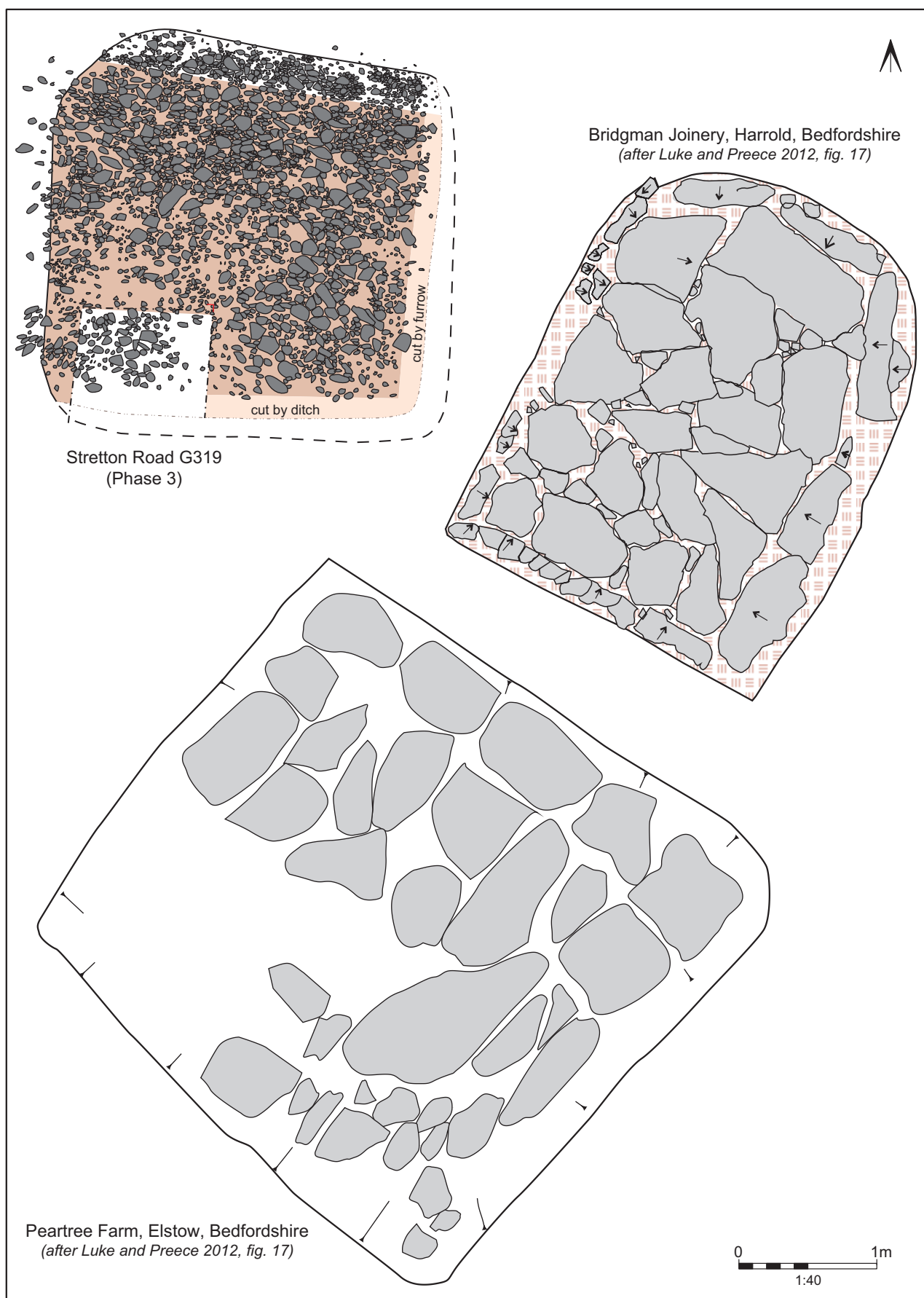


Figure 1.8: Comparative plans of the possible threshing floor at Stretton Road and others from elsewhere in southern England

for hand-threshing (Morris 1979, 27); these are more comparable to G319. Two comparable examples, set in slightly sunken areas, were excavated at Rectory Lane, Appleby Magna, Leicestershire (ULAS 2000b, 19).



Plate 7: Threshing floor G319 ('ladder' enclosure system L32) from south

Stack ring G410

A gully defining an oval area *c.* 3.5m × 2.5m with a central post-hole was identified in the south-east corner of domestic focus L40 of the Phase 4 farmstead. Its shape and small size indicate that it was not a roundhouse, although the large packing stones in the post-hole indicate the presence of a substantial post (Pl. 8).

A similar structure within the county was found at Rearsby Bypass Site 1, albeit dated to the 1st century (ULAS 2005, 7 and fig. 2). At Rearsby, the structure has been provisionally interpreted as a funerary monument (ULAS 2007a, 23). However, structures of similar shape and size, although not always with a central post-hole, have been found elsewhere in southern Britain, *e.g.* Cotswold Community, Gloucestershire (Powell *et al.* 2010, 131, fig. 3.23); and Thornhill Farm, Fairford, Gloucestershire (Jennings *et al.* 2004, 150). All have been described as 'stack rings' and interpreted as structures associated with a hayrick (Powell *et al.* 2010, 131) or fodder stand (Jennings *et al.* 2004, 150). Although it was slightly larger and more oval in shape than some examples, a similar interpretation is considered likely for G410 at Stretton Road, given, with the exception of one 3rd-century coin (RA2018), the absence of any obvious evidence for 'ritual' activity.

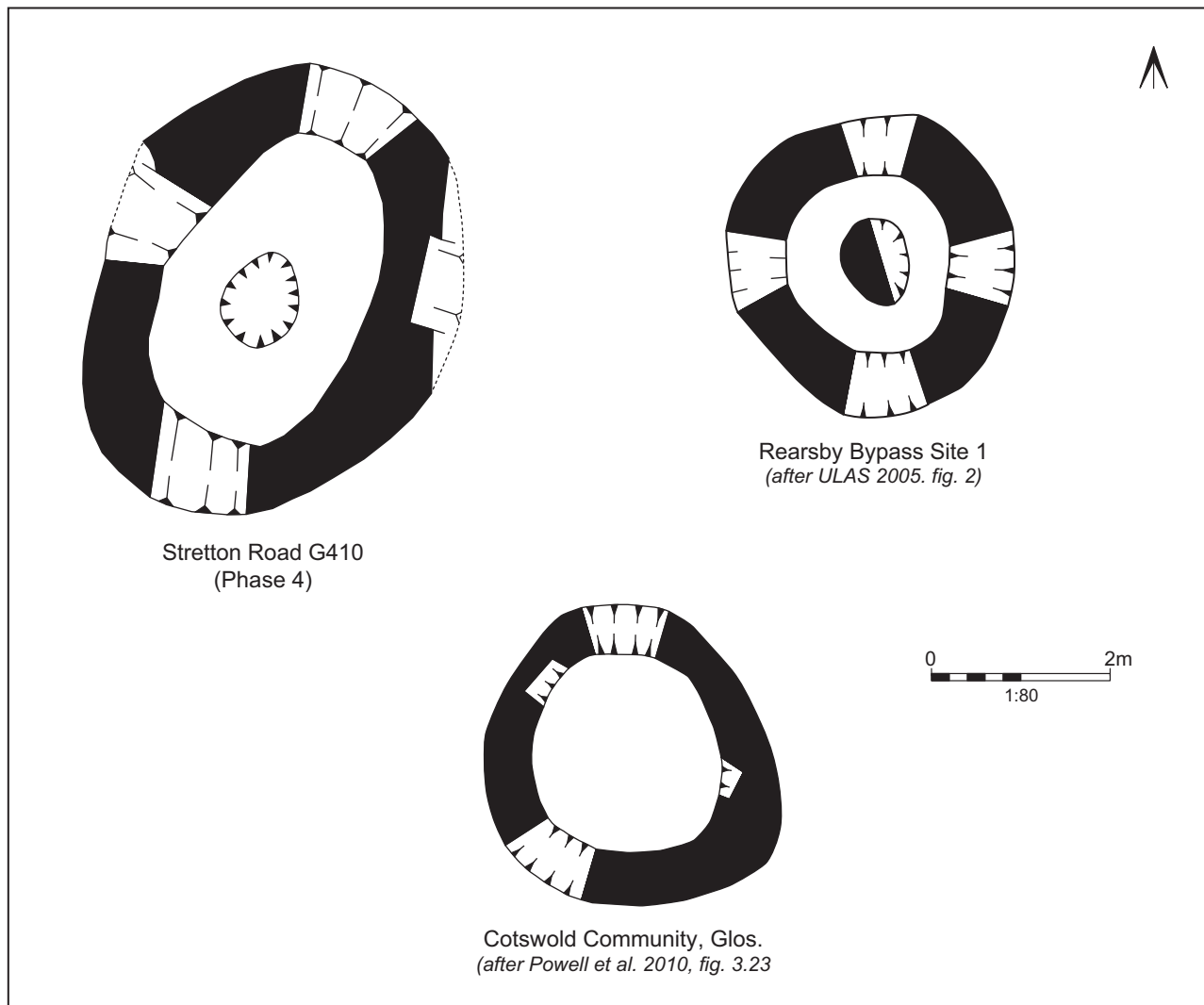


Figure 1.9: Comparative plans of the possible stack ring at Stretton Road and others from elsewhere in southern England



Plate 8: Hand excavation of central post-hole of possible stack ring G410 (domestic focus L40) from west, with 1m scale

Economic basis of the settlement

The charred plant remains, animal bone and artefact evidence indicates that the occupants of the Stretton Road settlement were engaged in mixed farming, comprising the cultivation of mainly cereals, and animal husbandry.

Cultivation

The charred plant remains indicate that spelt wheat was the dominant cultivar in all phases, as was the case at other farmsteads in the county, *e.g.* Hamilton North, Humberstone (ULAS 2004, 24). Barley was also present at Stretton Road, but in much smaller quantities. The only evidence for other crops are legume fragments, possibly of beans. The presence of stinking mayweed seeds indicates the cultivation of poorly drained land, which is consistent with the clayey soils found at Stretton Road.

The charred plant remains from the earliest phase of the farmstead indicate small-scale cereal cleaning and consumption on a domestic scale. This is comparable to other contemporary sites, such as Market Overton, Rutland (ULAS 2007b, 33–37). The improvement of agricultural techniques is suggested by the presence of weed seeds associated with the introduction of the more efficient mould-board plough. The more abundant remains from the later phases of the farmstead may indicate an increase in production, as may the appearance of a possible threshing floor G319 in Phase 3 (mid-1st to mid-3rd century). Agriculture-related artefacts comprise a small millstone (OA15), quern stones (OA16), part of a possible reaping hook (OA13) and a spud (OA14) — the latter used for either weeding or cleaning the mould board on a plough.

None of the environmental samples contained very abundant spelt chaff, and no drying ovens were present, so there is no strong evidence to suggest that a surplus in production was achieved. However, an extensive deposit of charred processing waste (samples 10 and 21) was found in the ditch defining Phase 4 enclosure G413, which might suggest higher levels of production in the later Roman period at least.

Animal husbandry

There is indirect evidence for animal husbandry within the farmstead — the presence of enclosures (which could have been used as paddocks or holding pens) within each phase and a small number of metal artefacts, *e.g.* horse harness junction OA21. However, the majority of the evidence derives from the animal bone assemblage, which is considerably larger than those from nearby contemporary rural settlements such as Hamilton North, Humberstone (ULAS 2004, 18) and Crown Hills, Evington (ULAS 2000a).

The species identified at Stretton Road are typical of those present on other rural Romano-British sites in Leicestershire. However, the variety of different species and age profiles of animals differ from those seen at Roman Leicester, *e.g.* Vine Street (ULAS 2009b, 401–479). The largest quantity of animal bone was recovered from Phase 4 deposits (mid-3rd to late 4th century); this may suggest intensification, but Phase 4 was also the last phase of activity recorded in relation to the Roman farmstead, so may include residual material.

A dominance of cattle (58–61%), followed by sheep/goat (24–15%), and a low occurrence of pig, horse and dog were consistent through all phases at Stretton Road. A similar species range was noted at Hamilton North, Humberstone (ULAS 2004, 18–21) and at Rearsby Bypass Sites 1 and 6 (ULAS 2005, 43 and 44). A slight rise in cattle and reduction in sheep/goat was noted at Stretton Road in Phase 4 (mid-3rd to late 4th centuries), which is consistent with a rise in cattle at Vine Street, Leicester (ULAS 2009b, 401–479) and 72 Nicholas Circle, Leicester (ULAS 2006, appendix 4). This could suggest that the inhabitants of the Stretton Road farmstead were inextricably linked to changing trends in the urban centres and were able to adapt to them.

The age at death of the animals suggests that cattle were primarily kept for their meat, whilst sheep/goats were kept for dairy and wool. At Vine Street and 72 Nicholas Circle, Leicester (ULAS 2009b, 401–479; ULAS 2006, appendix 4) evidence also suggests an emphasis on beef. The remains of a piglet and calf recovered from ditches in the Phase 4 farmstead indicate that livestock was also bred at Stretton Road. As discussed above, the layout of the peripheral enclosures in Phases 3 and 4 suggests that they may have been designed for stock sorting and the temporary corralling of animals.

Horse and pig were present in all phases, but only formed a small percentage of the animal bone assemblage. Horses may have been kept for transport, traction, and perhaps status — the latter possibly is supported by the presence of an elaborate harness junction OA21. As such, none of these animals were eaten so they do not appear in the ‘normal’ bone assemblage in such high quantities as other species. The consistently low occurrence of pig is in contrast to Vine Street, Leicester (ULAS 2009b, 401–479), where an increase was noted in the later part of the Roman period. It is therefore possible that, at least in the case of pig, the whole animal was taken to market rather than joints of meat, which would explain this difference.

A small number of dog bones were recovered from Phase 3 and Phase 4 deposits. They were generally disarticulated and from older animals. The presence of domestic fowl and a possible goose was also noted in the same phases.

Butchery marks on bones were quite rare at Stretton Road. In the earlier phases the cuts were carried out with a knife, resembling the Iron Age butchery style. However, during the mid-3rd to late 4th century (Phase 4) chop marks made by cleavers were more common, although knives were still in use. The use of cleavers was introduced in the Romano-British period and is commonly associated with specialised butchers on urban and military sites (Maltby 1989, 75–106). This suggests that some of the inhabitants of Stretton Road had access to, or experience in, new Roman techniques, as has been observed recently on other contemporary farmsteads, *e.g.* Marsh Leys, Bedfordshire (Maltby 2011, 128).

Wild resources

The only evidence for the exploitation of wild foods is the presence in one sample (49) of a hazel nutshell, which probably came from hedgerows or wood margins in the vicinity. The most numerous of the arable weeds are the large grasses, as found on many Iron Age and Roman sites. Grass root fragments and tubers, including a tuber of onion couch grass, were also present; these probably derived from nearby vegetation used as kindling.

In terms of wild animals, the exploitation of deer was indicated by a small quantity of antler, the majority of which showed evidence for working. The base of one antler had been sawn through the pedicle; it is therefore likely that it had been taken from a hunted animal and not one which had shed its antlers naturally. All fragments were probably red rather than roe deer, as was the case at Hamilton North, Humberstone (ULAS 2004, 20). As is often found on Romano-British rural settlements, there was no evidence of fishing at Stretton Road despite the proximity of the River Sence. Some possible reasons for this are discussed below.

Craft activities

The evidence for non-agricultural activities is limited to antler- and textile-working. The sawn antlers from the Phase 3 and Phase 4 domestic foci are suggestive of artefact manufacture. A shale spindle whorl (OA17) indicates that the spinning of wool or fibres was being carried out. No pottery production was identified on the site, which is perhaps surprising given the shallow depth at which clay occurs — it would have been readily available in the sides of the enclosure ditches when they were dug and re-dug. Pottery wasters have been found at the putative villa site in Great Glen village (Scott 1993, 112), however, suggesting that some pottery was manufactured in the vicinity.

Environment

Some evidence for the farmstead's wider environment is provided by the charcoal, charred plant remains and animal bone assemblages. Weeds such as docks and stinking mayweed, along with food-preparation waste, indicate, unsurprisingly, that some of the land was under arable cultivation from at least the mid-1st century (Phase 2), while the presence of cattle and sheep/goat suggests that some of the land was also in use as pasture. It is not altogether clear how the space within the farmsteads was organised, in terms of whether certain enclosures were used solely for crop-related activities and others for animal husbandry. The smaller sub-enclosures, such as those within 'ladder' system L32 (Phase 3), may have been holding pens for animals. However, the presence

of several cereal-rich deposits and a possible threshing floor within this area suggests that crop processing was also undertaken within some enclosures. It seems quite possible that their function was not fixed but changed, perhaps on a seasonal basis.

No evidence was found within the development area for contemporary activity away from the farmstead. It is possible that open fields existed, with further pasture and probably hay meadows closer to the River Sence. It is also likely that areas of scrub or woodland would have existed nearby, and this is perhaps supported by the presence of hazel nutshells.

Burial and ritual

No formal human burials were identified, and the only possible evidence for ritual behaviour derives from the presence of individual human bones and also animal skeletons, both complete and partial.

Human bone

The absence of formal human burials within the extensive excavation area is perhaps unusual, given the 'norm' for the East Midlands where 'rural burials are sparse in number on any one site, but are commonly present' (Taylor 2006, 154). However, no burials were found at The Gynsills, Glenfield (Birmingham University Field Archaeology Unit 1999); Hamilton North, Humberstone (ULAS 2004); or on the Rearsby Bypass (ULAS 2005), although at the latter, three empty grave-shaped pits were present (ULAS 2005, 14).

Four individual human bones were found within ditch fills at Stretton Road — one finger bone, two femurs, and one infant humerus. They occurred within the domestic foci of Phases 2, 3 and 4. The presence of an infant bone is not particularly unusual on Roman rural sites: Philpott has demonstrated that they occur in a wide variety of locations, from rubbish pits to temples (Philpott 1991, 98). It has been suggested that this was probably due to the Roman perception that, until an individual could walk and talk, they were not considered to have their own personality or identity (Philpott 1991, 101) and so did not require formal burial.

The presence of adult human bone is more difficult to explain. Had they derived from inhumations disturbed by later activity, then a greater number would have been expected and in the same general area. The possibility that they were 'structured' deposits, *i.e.* deliberately placed, cannot be ruled out, especially as this phenomenon, which is well known in the Iron Age, is increasingly being identified on Romano-British sites (Fulford 2001, 199). Two of the bones were found in what could be seen as significant locations, *i.e.* the terminal of a sub-enclosure ditch and a kink in an enclosure ditch. However, none of the bones occurred in deposits which contained other 'significant' finds. The available evidence is inconclusive, but it most probably represents the continuation of the pre-Roman traditions whereby the bones of ancestors were retained but ultimately ended up in ditch fills.

Articulated or associated bone groups

It has long been recognised in Iron Age studies that certain deposits may have been associated with ritual activity rather than representing random dumps of rubbish (Hill 1995a, Cunliffe 1992). More recently, Fulford has noted that 'in the case of Roman Britain there has also been a growing awareness of diversity in expressions of ritual

behaviour as evidenced in the archaeological record' (Fulford 2001, 199). He presents a number of case studies of such deposits in secular contexts — though all are from cities and small towns, not rural settlements.

Twelve groups of articulated bones were identified at Stretton Road during fieldwork and post-fieldwork analysis. The term ABG, meaning Articulated or Associated Bone Groups, was originally coined by Hill (1995a, 27) and has been used by subsequent researchers as a neutral phrase to describe such groups of material, as it is acknowledged that they may have resulted from different types of activity (Morris 2010, 259). The interpretation of these deposits can be contentious and has centred on whether they are the result of 'ritual' or 'functional' behaviour, although it is accepted that in many past societies this may have been an artificial divide (Morris 2010, 266).

The ABGs at Stretton Road occurred in all Roman phases, in both domestic foci and more peripheral locations, and were all from domestic stock. Three represent partial skeletons — a calf (ABG 2), a piglet (ABG 5) and a lamb (ABG 8). The young age and lack of butchery marks could suggest that they were natural mortalities. The majority of the ABGs comprise articulating limb bones, often ankle and foot, suggesting that these may have been left over after the rest of the carcass had been butchered.

Slightly more difficult to explain are an articulated right hind-leg from a cow in G401 (ABG 13) and a left leg from a horse in G406 (ABG 11). Both were recovered from the middle fills of ditches and therefore cannot be seen as closure deposits. Whilst ritual significance cannot be proved, it may be significant that the horse leg (ABG 11) was deposited in a ditch which was re-dug on a slightly different alignment close to an entranceway between different enclosures.

Enclosure G401

Enclosure G401, just south of the Phase 4 domestic focus (Fig. 4.7), was unusual for a number of reasons and is therefore worth briefly discussing here. Three ABGs were recovered from the ditch defining the south side of the enclosure, and a human infant humerus from the ditch to the north. The ABGs comprise a partial skeleton of a lamb (ABG 8), an articulated cattle radius and ulna (ABG 9) and the articulated legs of a cow (ABGs 10 and 13). While unusual, they could be explained in terms of natural mortality for the lamb and as butchery waste for the cattle bones, especially as there is nothing 'unusual' in the assemblage of artefacts from these ditches. Another unusual occurrence was the calcined remains of a sheep/goat bone in a pit (SG2257) adjacent to possible rectangular structure G409. Overall, there is probably sufficient evidence to suggest that ritual acts did take place within this enclosure, but whether that was its main function and whether the structure should be described as a shrine are largely speculation.

'Wealth', 'status' and 'Romanisation'

The 'wealth' and 'status' of the inhabitants of the Stretton Road farmstead can be inferred to a degree from the artefacts, ecofacts and structural remains that were uncovered. However, such evidence is never particularly clear-cut and cannot be directly equated with particular types of rural settlement (Taylor 2001, 50; Hingley 1989, 159–61). To some extent the evidence discussed below

for 'wealth' and 'status' is inextricably linked to the occupants' adoption of Roman culture, which may not necessarily be directly linked to their 'status' or indeed their 'wealth'.

Some aspects of the earliest farmstead at Stretton Road, although Roman in date, appear to be similar to late Iron Age settlements in Leicestershire such as Manor Farm, Humberstone (Thomas 2008). This is probably because the focus of late Iron Age activity, whose existence is suggested by the Stretton Road pottery assemblage, lay to the north, beyond the development area. It is therefore possible, but cannot be proven, that the occupants of the Roman settlement were part of the same family group that had lived there in the late Iron Age, rather than being 'incomers'. Although the layout of the farmstead changed significantly on two occasions (Phases 3 and 4), there is no real evidence for a significant change in 'wealth' or 'status' — the same family group may have occupied the farmstead throughout its existence.

The change from round to rectangular buildings has sometimes been used as an indicator of 'wealth' and 'status'. Hingley has suggested that this shift could represent 'the desire of individuals or families to acquire symbols of wealth and civilisation' (Hingley 1989, 34). It could be argued that this shift is visible at Stretton Road because of the presence of four roundhouses in Phase 2 (mid-1st to mid-2nd century), but none in Phase 4 (mid-3rd to late 4th century). However, in both Phases 2 and 3, roundhouses appear to have existed side by side with rectangular structures. This suggests that whatever gains, perceived or actual, accrued from the adoption of rectangular structures, the roundhouse remained the preferred building type for some of the occupants until the mid-3rd century. Furthermore, their presence or absence cannot simply be seen in terms of rich or poor.

There are contrasts between the Stretton Road ecofact assemblage and those from contemporary sites within Roman Leicester. The limited range of animal bone species present is in marked contrast to the greater diversity in the city. There is also no evidence for local or imported fruits at Stretton Road, another contrast with Leicester (ULAS 2010, 83–4 and table 1; Score *et al.* 2010, 89). Bird bones, nearly all from domestic species, were rare at Stretton Road, but much more common in the city. The low numbers of wild animals, specifically deer, and the absence of fish were noted at Stretton Road and also at Hamilton North, Humberstone (ULAS 2004, 18–21) and Glapthorn Road, Oundle, Northamptonshire (Deighton 2005, 64). Wild species, including fish, not only occurred in Roman Leicester but were represented by a wide variety of species, *e.g.* at 72 St. Nicholas Circle, Leicester (ULAS 2006). While some of the absences may be in part due to the differences in survival between urban and rural contexts, others may have a cultural explanation. At its simplest this may mean that the inhabitants of the Stretton Road farmstead chose not to eat the new foods which became available after the Roman conquest, or that they did not have access to markets even if they could afford such products. It would appear that hunting and fishing were rarely undertaken by the inhabitants of rural settlements. What is less clear is whether this was for cultural reasons, *e.g.* wild species were sacred, or because only the 'elite' had the rights and time to undertake such activities.

A small number of artefacts provide some evidence of 'status' or 'wealth' or 'Romanisation'. The majority

come from Phase 4 (mid-3rd to late 4th century) deposits. This does not necessarily indicate an increase in 'wealth' — Phase 4 ended with the abandonment of the farmstead after a long period of occupation, during which the re-digging of earlier deposits would have resulted in a degree of artefact residuality. The items of personal adornment found are limited to brooches (OA4 and OA5), a probable armlet or bracelet (OA10) and a glass bead (OA11). The presence of hobnails in Phase 4 suggests that at least some of the inhabitants had adopted Roman footwear. There were no toiletry implements or glass vessels. This pattern is similar to other rural sites in Leicestershire, such as The Gynsills, Glenfield (Birmingham University Field Archaeology Unit 1999, 8–9); Hamilton North, Humberstone (ULAS 2004, 14–16); Normanton Le Heath (Thorpe and Sharman 1994); and Rearsby Bypass (ULAS 2005, table 8). It is clear that the Stretton Road inhabitants could access markets for items such as brooches, querns and millstones, but it seems likely that their priorities did not extend to luxury items or status symbols.

Two intriguing types of metal artefacts were found: styli, and part of a horse harness. The two possible iron styli (OA18 and OA19) are unusual finds, as it is unlikely that the occupants of Romano-British farmsteads were generally able to write. They may therefore suggest the presence of someone who visited the farmstead and needed to keep records. The other intriguing artefact was part of a horse harness (OA21), which clearly came from a set of ornate horse trappings. It is similar to one found at the legionary fortress at Caerleon, Wales (Chapman 2005, 139 no. Tg29) and is thought to have been a feature of military cavalry equipment. It stands as a witness to some kind of military connection to the farmstead or its occupants, probably in the 2nd century. Whether this was the result of the presence of someone on tax-collection or policing duty, or someone who had served in the military, cannot be decided on a single artefact alone.

Pottery is sometimes used to give an indication of 'wealth' and 'status'. The assemblage at Stretton Road is dominated by domestic and utilitarian types and forms, with persistence in the use of local pottery sources such as the Mancetter-Hartshill kilns. A high proportion of regional wares (29%) suggests a predominantly later Roman assemblage (*cf.* Cooper in ULAS 2004, 12). Continental imports, comprising samian (predominantly of central Gaulish origin) and a sherd of Baetican amphora, total less than 3% of the assemblage, which may be regarded as typical of a small rural site (*cf.* Cooper 2000, 80). In contrast, excavations in the West Bridge area of Leicester recovered a far higher percentage of regional and continental imports (Clay and Pollard 1994, 77–114). The quantities are broadly comparable to other contemporary rural sites in the county, *e.g.* Normanton Le Heath (Pollard 1994b, 45); Hamilton North, Humberstone (ULAS 2004, 10–15); and Rearsby Bypass Site 6 (ULAS 2005, 22–23). However, the occurrence of 1st-century samian at Stretton Road is unusual on rural sites in Leicestershire (Pollard 1994b, 45–46) and might indicate a degree of surplus wealth and access to markets at this time.

In summary, the Stretton Road farmstead may be fairly typical of a Romano-British farmstead in Leicestershire, although too few have been investigated to be sure. Its inhabitants practised mixed farming; crafts such as textile manufacture and bone working were sufficient to provide for their needs. The presence of regional and continental imported pottery, non-local querns and a millstone, and Roman coins does indicate access to markets and trade, which the proximity of Gartree Road and Leicester may have facilitated. However, the number of personal items recovered is very small. While this may be partly due to effective repair and recycling by the occupants, it may also be related to their 'wealth', 'status' and resistance to the adoption of aspects of Roman culture.

Chapter 2

Mid-1st to mid-2nd century (Phase 2)

I. Overview

The pottery assemblage suggests that the farmstead was probably established in the mid-1st century AD. It was defined by ditches and extended over at least 1.1ha, continuing to the north beyond the excavation area. It comprised a domestic focus L20, peripheral activity focus L21 to the south, and peripheral field L22 to the east. The domestic focus contained the overlapping remains of two roundhouses, alongside a possible rectangular structure, while there were two further roundhouses within the peripheral activity focus.

The majority of the Phase 2 pottery assemblage is Roman in style (ninety-two sherds, 1.5kg), but the presence of small quantities of middle to late Iron Age pottery (twenty-eight sherds, 0.28kg) in some of the ditches which produced Roman material raises the possibility that the farmstead may have had earlier origins. However, no Iron Age features were identified, and any such remains were presumably situated beyond the excavation area.

II. Domestic focus L20

The domestic focus was located in the north-west part of the farmstead and was at least 0.25ha in extent. It comprised a large enclosure, containing buildings and two smaller sub-enclosures. All the enclosure ditches were assigned to G205 and their re-cuts to G206.

Enclosures

The main enclosure G205 was defined to the south and west by a large ditch up to 2.1m wide and 0.8m deep (Fig. 2.2: f and i), in contrast to the smaller ditch to the east (Fig. 2.2: d). The western ditch was re-dug at least once as a much smaller feature (Fig. 2.2: f). The north side of the enclosure lay beyond the excavation area. The two sub-enclosures were defined by smaller ditches, c. 0.7m wide and up to 0.4m deep (Fig. 2.2: a–c and e). Environmental sample 18 from one of the ditch fills contained husking waste from the processing of spelt wheat.

The presence of roundhouses G201/202 and G204 was indicated by traces of circular gullies. They varied in width and depth, suggesting that they served as drains around the buildings. A similar interpretation is likely for the gullies around possible rectangular structure G207, which was located immediately to the east of the roundhouses.

Only a small assemblage of contemporary pottery (thirteen sherds, 0.14kg) was recovered from the domestic focus, the majority from enclosure ditches G205. In contrast, the animal bone assemblage was comparatively large (3.85kg); most of it was recovered from the ditches defining the sub-enclosure to the north. A fragment of human bone was also recovered from the western boundary ditch of the main enclosure.

Land-use area	Description	Extent (ha)	Buildings / structures	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
20	Domestic focus	>0.26	2 roundhouses 1 rectangular structure	13:138	4.17	Whetstone Cu alloy fragment
21	Peripheral activity focus	0.5	2 roundhouses	77:1.35	1.44	Cu alloy fragment
22	Peripheral fields to the east	>0.4	–	2:0.01	–	–

All weights have been rounded up to the nearest 0.01kg.

Table 2.1: Summary of Phase 2 Land-use areas

Group	Description	Area (m ²)	Buildings / structures	Significant bone	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
<i>Domestic focus L20</i>							
205	Main enclosures	2,175	G201/202, G204, G207	Human (×1) ABG 1	9:0.1	3.85	Whetstone (RA1014) CPR waste from food preparation (Sample 2) CPR husking waste (Sample 18)
<i>Peripheral focus L20</i>							
206	Main enclosure	4,780	G203, G209	–	22:0.18	0.4	Copper alloy waste (RA1004)
208	Sub-enclosure	c. 354	–	–	23:0.63	0.7	–
211	Sub-enclosure	c. 221	–	–	29:0.43	0.14	–
210/212	Field	–	–	–	2:5	–	–

All weights have been rounded up to the nearest 0.01kg.

Table 2.2: Summary of Phase 2 individual enclosures and fields



Figure 2.1: Reconstruction of how the farmstead may have looked during Phase 2

Roundhouse G201/202

This roundhouse was defined by two broadly circular gullies. The c. 12m-diameter inner gully G201 is presumed to have been earlier than the c. 14m-diameter outer gully G202, although there was no stratigraphical relationship between the two. Both had similar concave profiles but varied in size over their length (Fig. 2.3: c). Gaps in the gullies to the east and north-west may indicate the location of the entrance to the roundhouse, but both could reflect truncation by a trial trench which failed to identify the gullies (see Fig. 1.2).

Although it had an asymmetrical profile, the depth of a pit within the north-west quadrant of the roundhouse suggests that it may have been used for storage (Fig. 2.3: c). Environmental sample 2 from the pit contained charred plant remains that may have been waste from food preparation, specifically sorting cereals before cooking (Ch. 7, pp. 78–79). A short gully and post-hole (Fig. 2.3: g–i) in the centre of the roundhouse may represent evidence for the partitioning of the building into two halves.

Only a small quantity of the pottery and animal bone from domestic focus L20 was recovered from this roundhouse, the majority from the pit.

Roundhouse G204

A second roundhouse is tentatively suggested by the presence of a heavily truncated, c. 10m-diameter gully, representing the north side of the building. A terminus in the gully suggests that the entrance to the roundhouse faced north-west. The projected line of this gully intersects that of roundhouse G201/202, so unless the two buildings were somehow joined together,

they could not have been contemporary. Roundhouse G204 is tentatively supposed to have been the later of the two, but there is little evidence either way. Only a small quantity of animal bone was recovered from this roundhouse.

Possible rectangular structure G207

A possible rectangular structure, defined on three sides by gullies, was tentatively identified immediately to the north-east of roundhouse G201/202. The gullies did not have the characteristics of structural slots (Fig. 2.5: a, c and d), so are interpreted as drains around a rectangular structure, 5m wide and at least 7m long. Part of a cattle foot (ABG 1) was found in one of the gullies. The only pottery from the gully is middle to late Iron Age (sixteen sherds). However, the juxtaposition of the structure with the roundhouses and the enclosure ditch to the north-west suggests that they were all contemporary.

III. Peripheral activity focus L21

To the south of domestic focus L20 lay a heavily truncated main enclosure G206 (containing two possible roundhouses G203 and G209) and two sub-enclosures G208 and G211.

Enclosures

Although the boundary of the main enclosure G206 was heavily truncated by later activity, it appeared to define a square area c. 0.5ha in extent. The western and southern boundary ditches were up to 1.5m wide and 1m deep (Fig. 2.2: j and l). More contemporary pottery was recovered

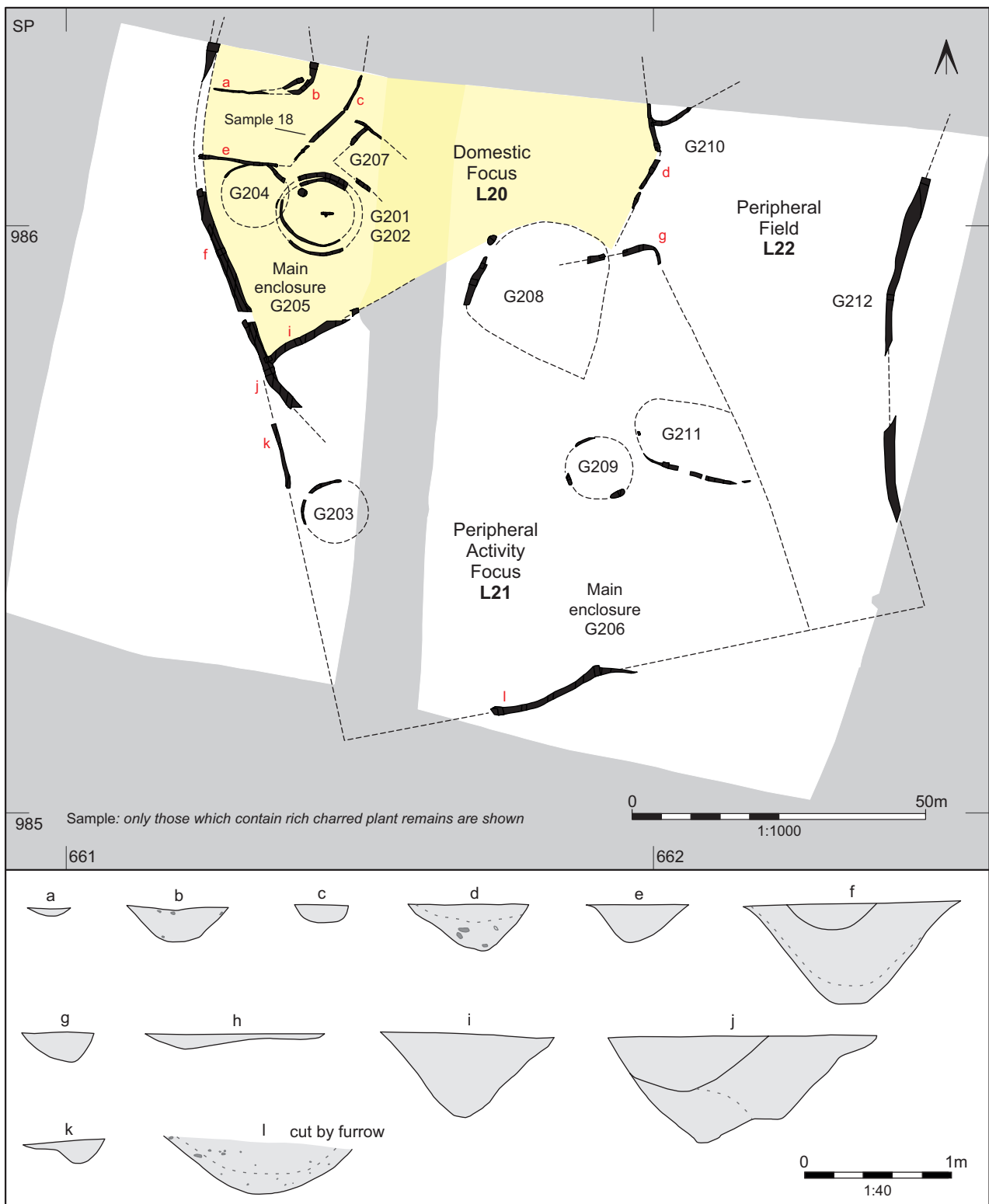


Figure 2.2: Overall plan of mid-1st- to mid-2nd-century (Phase 2) farmstead, with selected sections

from this enclosure and its two sub-enclosures G208 and G211, situated on the north and east sides of the main enclosure respectively, than from domestic focus L20, although the animal bone assemblage was considerably smaller.

Sub-enclosure G208

Sub-enclosure G208 was heavily truncated by a Phase 3 re-cut and, on this basis, is presumed to have been

D-shaped in plan. Only a short length of the original ditch survived, measuring up to 1.1m wide and 0.5m deep. A c. 2m-wide gap on the north-west side indicates an access from domestic focus L20. In comparison to the round-house gullies it produced a relatively large assemblage of contemporary pottery (twenty-three sherds, 0.63kg) — this may simply be a reflection of the different depths of the features. Only 0.7kg of animal bone was recovered.

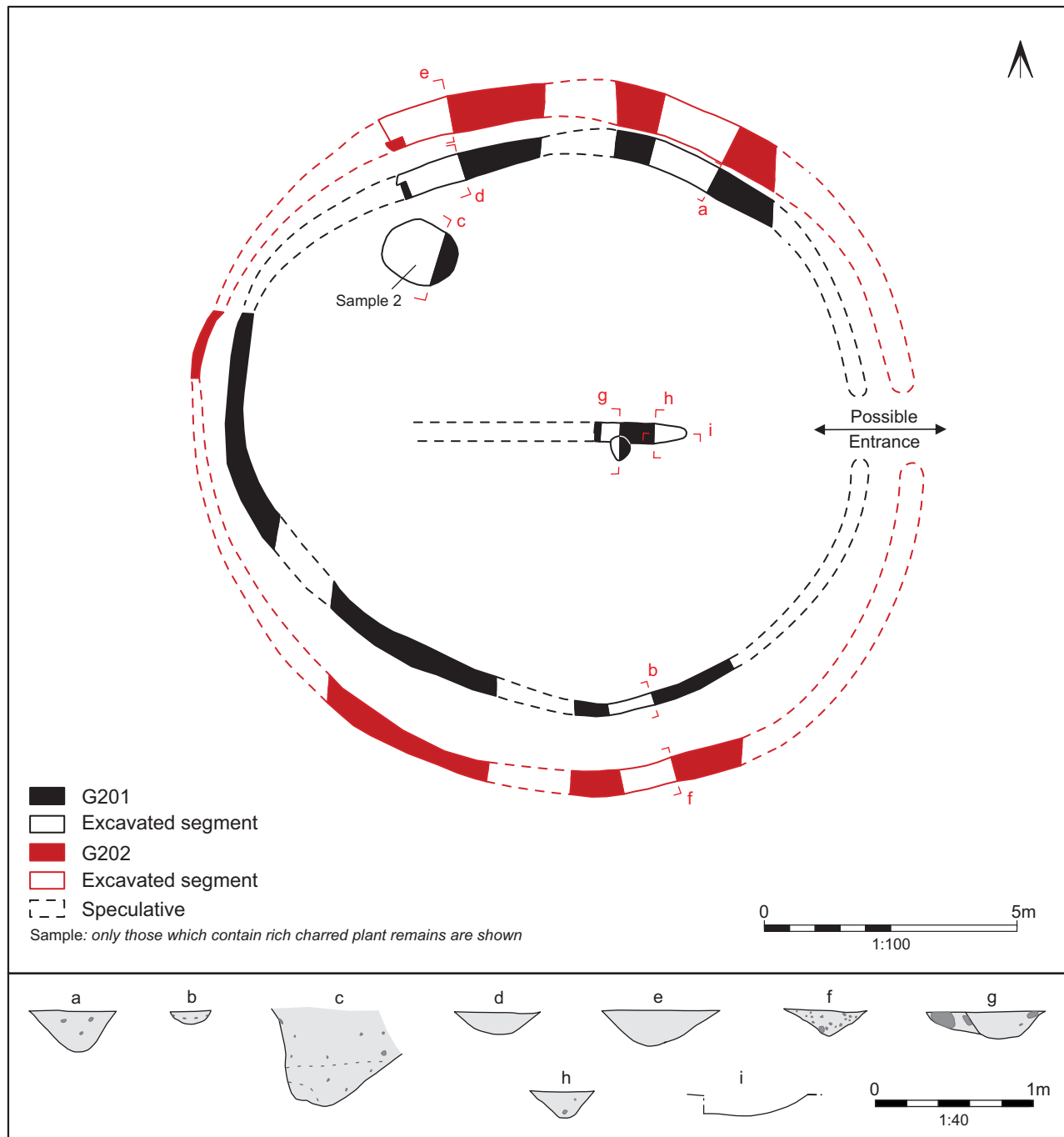


Figure 2.3: Detailed plan of roundhouse G201/202, with selected sections

Sub-enclosure G211

Sub-enclosure G211 was located adjacent to the possible eastern boundary of enclosure G206. Only short lengths to the south survived the extensive Phase 3 re-cutting. Its ditch was up to 0.9m wide and 0.5m deep, and produced slightly less contemporary pottery and animal bone than that of sub-enclosure G208.

Possible roundhouse G203

This possible roundhouse was defined by a heavily truncated gully that only survived to the north-west. It may have had an entrance to the north-east; however, the shallow depth and gentle profile of the gully's terminal suggest that this may have been the result of truncation (Fig. 2.6: a and b). A single sherd of contemporary pottery was recovered.

IV. Peripheral fields L22

L22 is described as a field because there was no evidence for internal activity (Fig. 2.2). To the east it was defined by a large ditch G212, up to 1.2m wide but only 0.3m deep, which presumably represented the boundary of the farmstead. A short length of ditch G210 indicates the presence of another enclosed space to the north, on the very edge of the excavation area. Only two sherds of contemporary pottery were recovered from these ditches, and their assignment to this phase is based largely on their stratigraphic relationships with Phase 3 features.

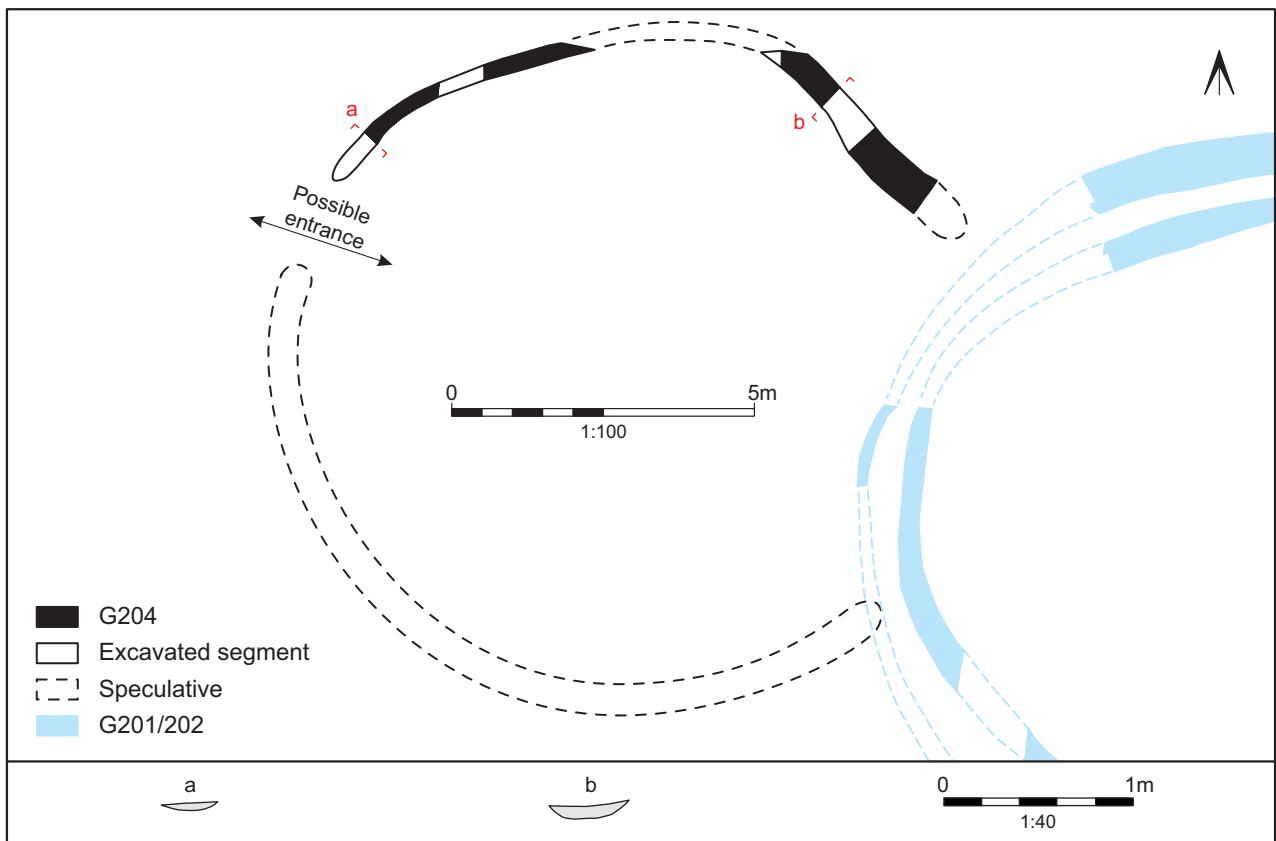


Figure 2.4: Detailed plan of roundhouse G204, with selected sections

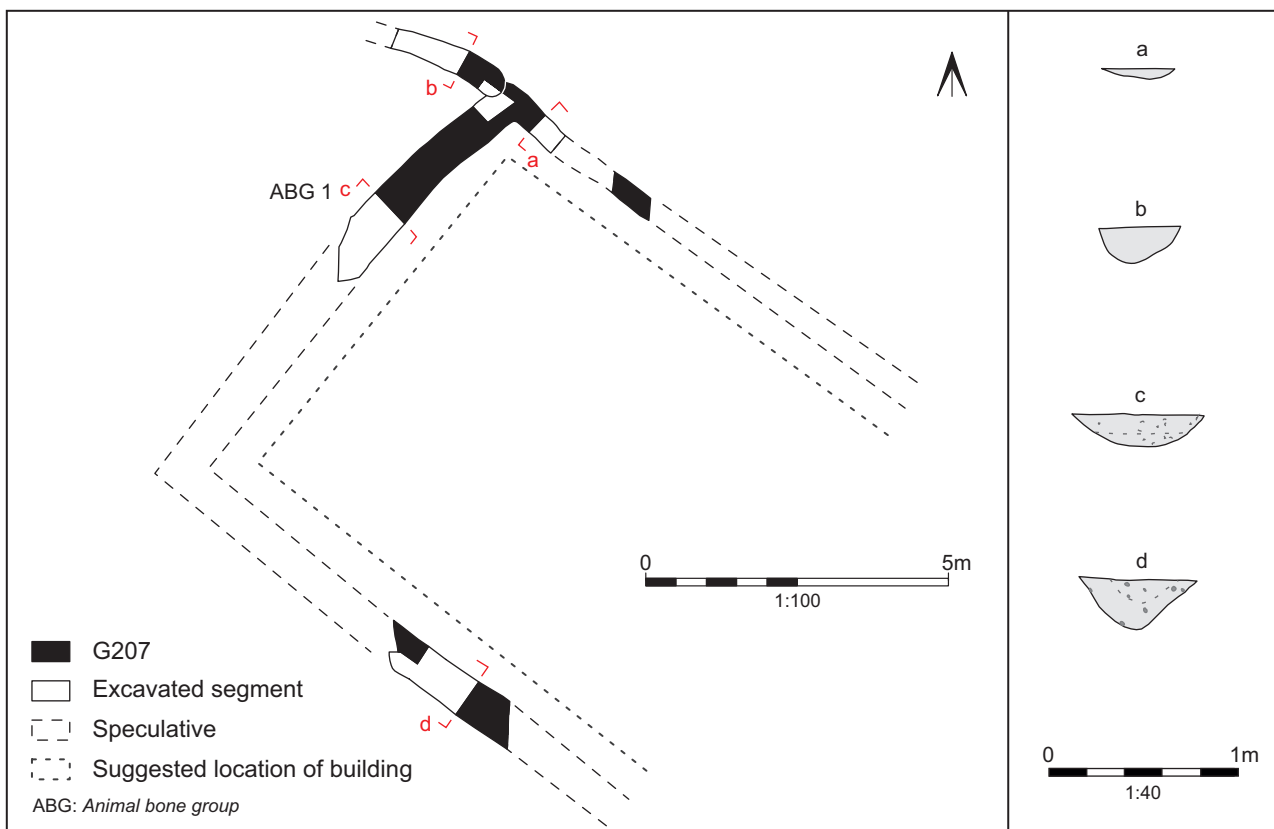


Figure 2.5: Detailed plan of rectangular structure G207, with selected sections

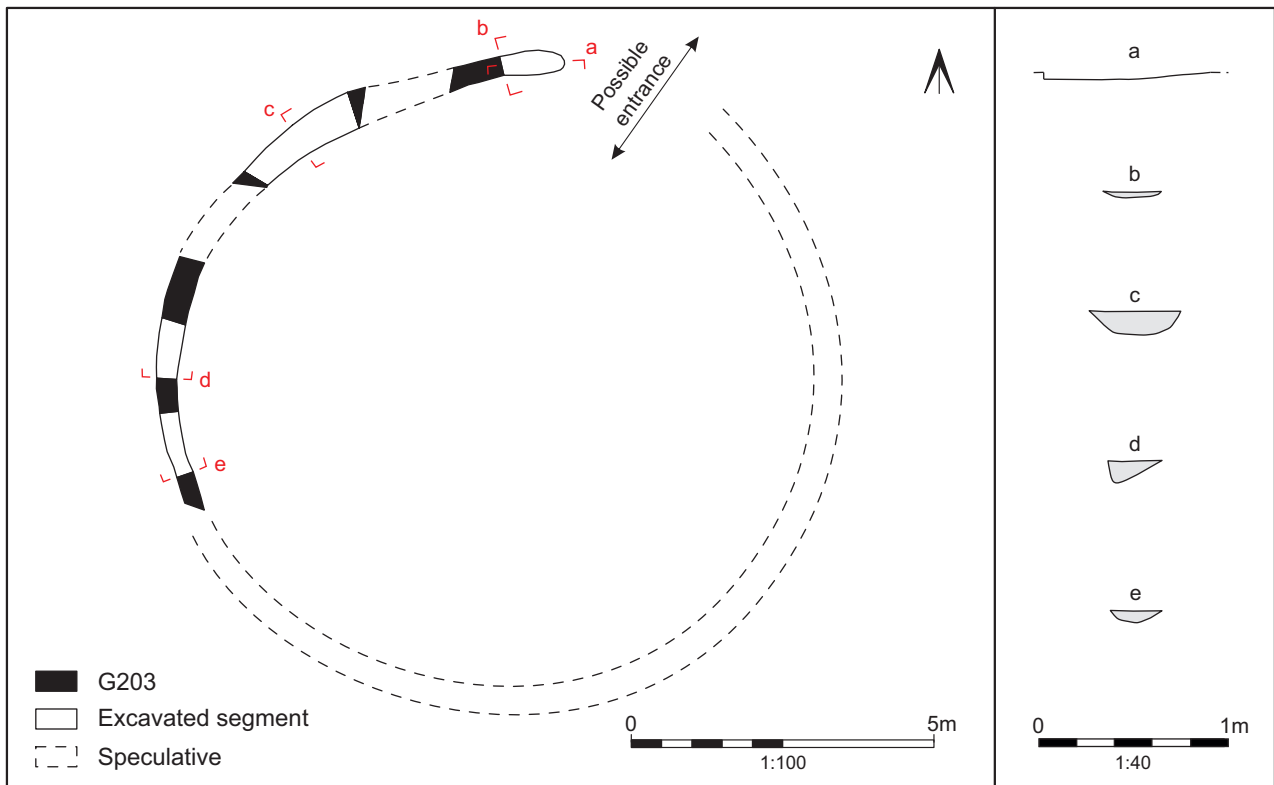


Figure 2.6: Detailed plan of roundhouse G203, with selected sections

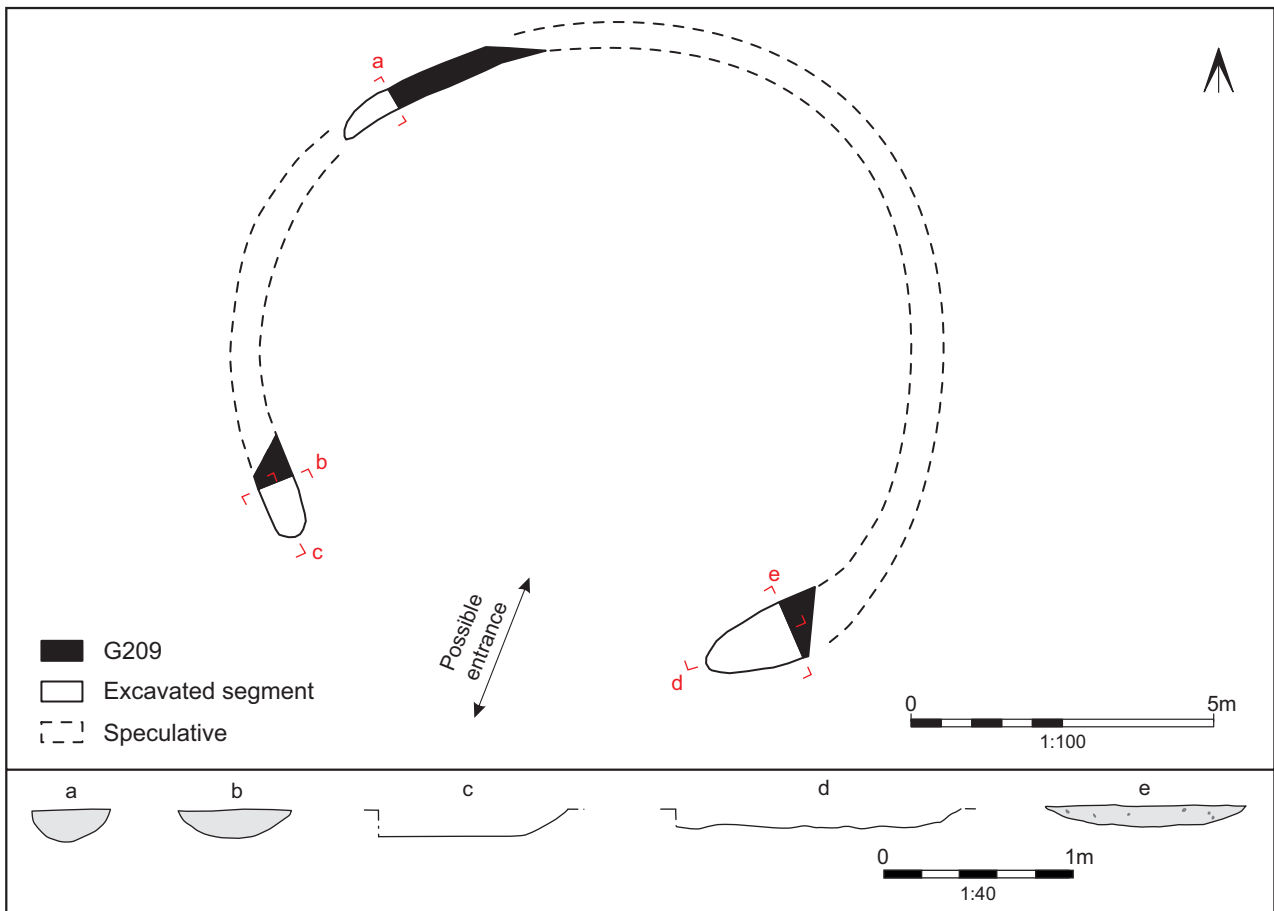


Figure 2.7: Detailed plan of roundhouse G209, with selected sections

Chapter 3

Mid-2nd to mid-3rd century (Phase 3)

I. Overview

By the middle of the 2nd century the layout of the farmstead had altered considerably. The new layout was much more regular and consisted almost entirely of rectangular enclosures (Fig. 3.3), the main elements of which were identified on the basis of their stratigraphic relationships with Phase 2 and Phase 4 features. The domestic focus L30 was in broadly the same location as in Phase 2. A 'ladder' system of enclosures (L32) was created to the east in the area previously occupied by peripheral fields, while rectangular fields (L31) were established on the south side of the farmstead.

Although the new layout was significantly different to that of Phase 2, a few of the earlier boundaries were retained (Fig. 3.2), and there is no evidence for a break in occupation. New buildings and structures (both rectangular and circular) were constructed within the domestic focus, while it is also possible that Phase 2 roundhouse G204 remained in use alongside newly built roundhouse G316. The pottery and animal bone assemblages were much larger than those recovered from Phase 2.

II. Domestic focus L30

Domestic focus L30 covered a larger area and contained a greater number of rectangular structures than its Phase 2 predecessor (Fig. 3.4). It comprised a rectilinear enclosure G301, containing roundhouses G316 and G204 (Phase 2) and pit cluster G317. Rectangular structures G318, G320 and G321 were all located to the north within enclosure G314 on the edge of the excavation area.

Enclosures

Rectangular enclosure G301 was mostly defined by ditches that were 0.6–1m wide and <0.4m deep (Fig. 3.5: d, i and m). However, the western ditch was larger — 1.9m wide and 0.6m deep (Fig. 3.5: g and l). The partial skeleton of a calf (ABG 2) and articulated cattle leg bones (ABG 3) were recovered from two separate lengths of ditch. Pit cluster G317 comprised three small pits, <0.6m in diameter and 0.3m deep, and one medium-sized pit, 1.5m in diameter and 0.4m deep (Fig. 3.5: k, n and o). All produced contemporary pottery and animal bone, with the largest quantity (sixteen sherds (0.33kg)

of pottery and 0.23kg of animal bone) recovered from the medium-sized pit.

To the east of enclosure G301, the D-shaped Phase 2 enclosure G208 was extensively re-dug (designated G305), retaining its distinctive shape compared to the other Phase 3 enclosures. It contained no evidence for internal activity. An entrance facing the buildings/structures was indicated by a 2m-wide gap in the ditch on its west side, which was partially blocked at a later date by a short ditch that reduced the width of the entrance to only 0.5m. The enclosure ditches were at least 1m wide and 0.6m deep, whilst the blocking ditch was less than 0.2m deep (Fig. 3.5: f, h and j). Environmental sample 49 from the ditch fill contained charred plant remains indicative of food waste burnt in a hearth, suggesting domestic activity nearby in the form of food preparation and consumption (Ch. 7, pp. 78–79).

Trapezoidal enclosure G306 to the south of enclosure G301 was narrower to the west than to the east. It was devoid of evidence for internal activity, other than a sub-enclosure that was created at the east end.

Most of the finds were recovered from the enclosure ditches, with only a small quantity from buildings, structures and pits. Although six 4th-century coins (RAs 1000, 2022, 2023, 2025, 2026 and 2064) were found in ditches defining enclosures G306 and G314, they were all found in the upper fills. A small quantity of Roman brick and tile was also present.

Roundhouse G316

The only surviving evidence for possible roundhouse G316 was a curving gully on its north side. Despite the level of truncation, two terminals were present (Fig. 3.6: a and b), suggesting that entrances were located to the north-west and north-east. No finds were recovered from the gully.

Post-built rectangular structure G318

A post-built structure G318 was defined by a rectangular arrangement of at least eight post-holes, *c.* 3m × 8m in extent but possibly continuing beyond the excavation limit to the north. Six of the post-holes suggest the presence of three opposing pairs of posts. Two adjacent post-holes at the south-west corner are suggestive of a repair.

Land-use area	Description	Extent	Buildings / structures	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
30	Domestic focus	>0.55	1 roundhouse 3 rectangular structures	246:4.27	9.38	Bone needle / pin tip Iron fragment Nails ×3
31	Southern peripheral fields	>0.37	–	13:0.4	0.64	Nail
32	Ladder enclosure system	>0.41	1 ?threshing floor	391:4.8	3.5	Nail Oyster shell ×2

RA = Registered Artefact number, OA = Other Artefact number (see Ch. 6, pp. 57–60). All weights have been rounded up to the nearest 0.01kg.

Table 3.1: Summary of Phase 3 Land-use areas

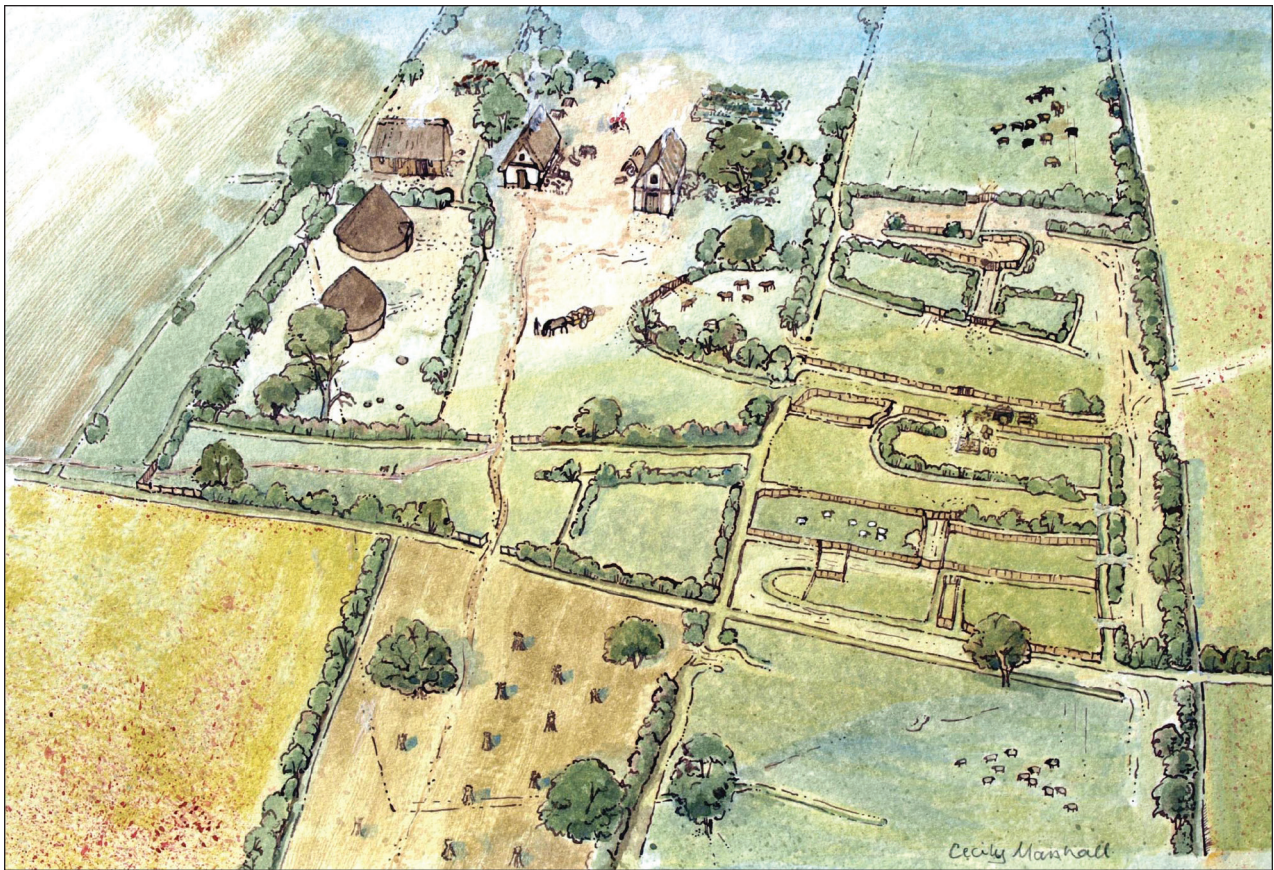


Figure 3.1: Reconstruction of how the farmstead may have looked during Phase 3

Group	Description	Area (m ²)	Internal activity	Significant bone	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
Domestic focus L30							
301	Main enclosure	1,215	Roundhouse G316 3 small pits 1 medium pit	ABG 2 & 3	16:0.1	4.36	Bone needle / pin tip (OA2) Nail
305	D-shaped enclosure	368	—	—	4:0.03	1.64	CPR food waste (Sample 49)
306	Trapezoidal enclosure	1,288	Sub-enclosure	—	10:0.14	2.35	Coins × 5 Nails × 2 Iron strap fragment (OA6) Coin
314	Enclosures to north	>233	3 structures G318, G320, G321	—	1:0.01	0.76	—
315	Enclosure to west	>994	Subdivision	—	—	0.02	—
Peripheral fields to the south L31							
302	Field	>1,359	—	—	—	0.01	Nail
303	Field	>2,137	Sub-enclosure 3 small pits	—	2:0.01	0.64	—
304	Field	>844	—	—	—	—	—
'Ladder' enclosure system L32							
308	Enclosure block	1,813	4 sub-enclosures 1 oval sub-enclosure	—	1:0.01	0.2	CPR cereal processing (Sample 43)
310	Sub-enclosures	c. 173	?threshing floor G319 2 medium pits Post-hole	Human × 1	7:0.04	2.33	Nail CPR cereal processing (Sample 43)
309	Enclosure block	1,525	5 sub-enclosures	—	—	0.01	—
307	Sub-enclosure	200	—	ABG 4	—	0.43	Oyster shell × 2
311	Sub-enclosure	96	—	—	—	0.01	—
312	Sub-enclosure	75	Small pit	—	—	0.1	—
313	Sub-enclosure	c. 252	—	—	—	0.38	CPR cereal processing (Samples 42 and 55)

All weights have been rounded up to the nearest 0.01kg.

Table 3.2: Summary of Phase 3 individual enclosures



Figure 3.2: Plan of mid-2nd- to mid-3rd-century (Phase 3) farmstead with Phase 2 layout

Only one of the eight post-holes contained a clear post-pipe to indicate where the post had been, which measured 0.3m in diameter and was surrounded by large packing stones within a c. 0.8m-diameter post-hole (Fig. 3.7: f; Pl. 9). Several of the other post-holes were of a similar size and contained stones which may have derived from post-packing (Fig. 3.7: a, b and e). Contemporary pottery and animal bone were present, but only in the packing of the post-hole containing the post-pipe.

Possible rectangular structure G320

Rectangular structure G320 was located c. 7m west of post-built structure G318 in an adjacent enclosure. The evidence comprised four gullies arranged parallel or perpendicular to each other. Some had steep sides and flat bases, suggesting that they may have contained timbers, while others were more concave, suggesting a drainage function (Fig. 3.18: a–d). Whilst their precise function is unclear, their arrangement and proximity to each other does suggest an association with a timber rectangular structure, which could have been c. 13m × 6m in extent.



Plate 9: Cleaning one of the post-holes within rectangular post-built structure G318 (L30) from north-west



Figure 3.3: Overall plan of mid-2nd- to mid-3rd-century (Phase 3) farmstead

Contemporary pottery and animal bone were recovered from the gullies.

Possible post-built rectangular structure G321

A possible post-built structure was positioned *c.* 20m east of G318 within the same enclosure. It was heavily truncated by later features but survived as an alignment of four post-holes plus a single post-hole *c.* 4.5m to the west. All the post-holes were broad but shallow (Fig. 3.9: a–c). Their arrangement suggests that they were part of a rectangular structure measuring *c.* 4.5m wide but of unknown length, as it extended beyond the area of investigation. Two sherds of contemporary pottery were present and the post-holes were stratigraphically earlier than the Phase 4 ditches, hence their assignment to this phase.

III. ‘Ladder’ enclosure system L32

‘Ladder’ enclosure system L32 was located to the east of domestic focus L30. It was *c.* 45m wide and over 90m long, comprising a series of narrow rectilinear sub-enclosures (Fig. 3.10) that were defined by ditches typically measuring *c.* 0.9m wide and 0.4m deep (Fig. 3.11). There were no obvious entrances through the western boundary ditch and it is speculated that the main entrance may have been to the east in an area disturbed by later features (Fig. 3.10). Two blocks of sub-enclosures were tentatively identified. The pottery assemblage was comparable to that from domestic focus L30, but a much smaller quantity of animal bone was recovered (see Table 3.1), in particular from the northern enclosure block (see Table 3.2). A small quantity of Roman brick and tile was also recovered.

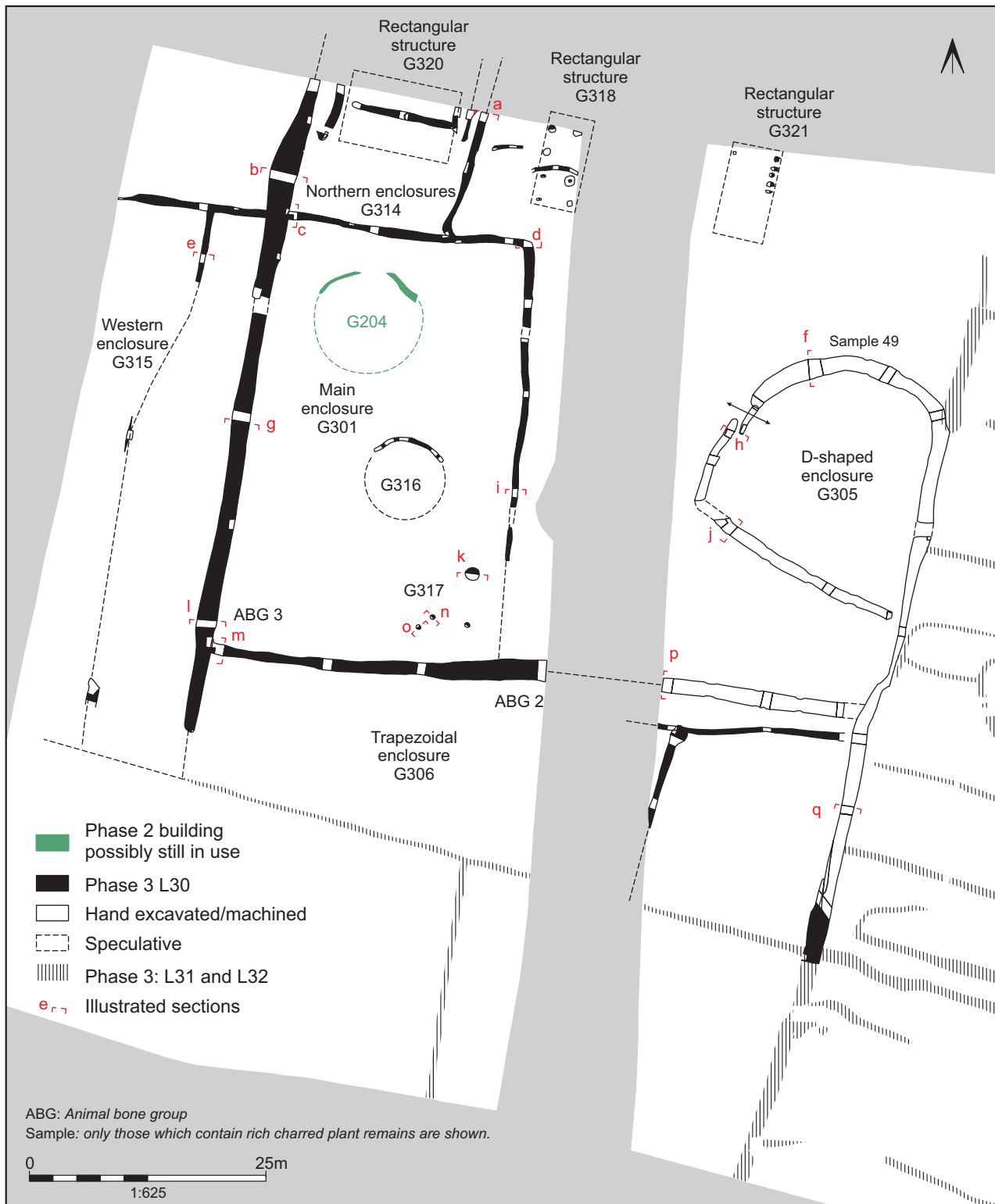


Figure 3.4: Overall plan of domestic focus L30

Northern enclosure block G309

Enclosure block G309 comprised at least four sub-enclosures, G307, G311, G312 and G313. The smallest was 10m × 11m, the largest 11m × 18m. They were defined by ditches that were <1m wide and 0.3m deep (Fig. 3.11: a–f). No direct evidence for internal activity was identified with the exception of a small pit at the east side of sub-enclosure G312. Articulated cattle ankle bones (ABG 4) were found in the ditch fills of sub-enclosure G307. Environmental samples 42 and

55 from the ditches of sub-enclosure G313 were rich in charred plant remains, suggesting nearby cereal processing (Ch. 7, p. 79).

Only one of the sub-enclosures had clear evidence for how it was entered. Access was from the south, linking with the possible main entrance through the east side of the 'ladder' enclosure system. None of the sub-enclosures extended the full width of the enclosure system, leaving an access corridor to the east.

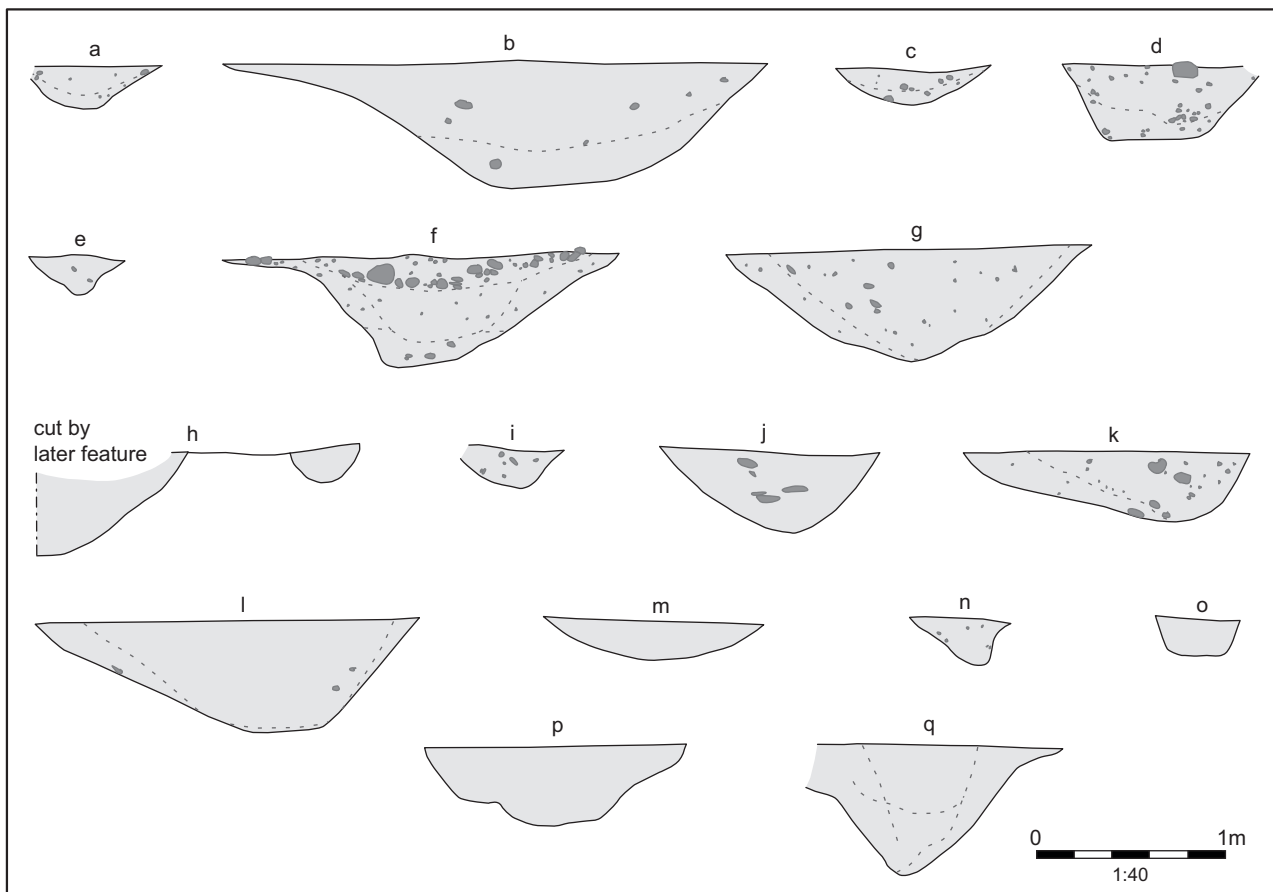


Figure 3.5: Selected sections of features within domestic focus L30

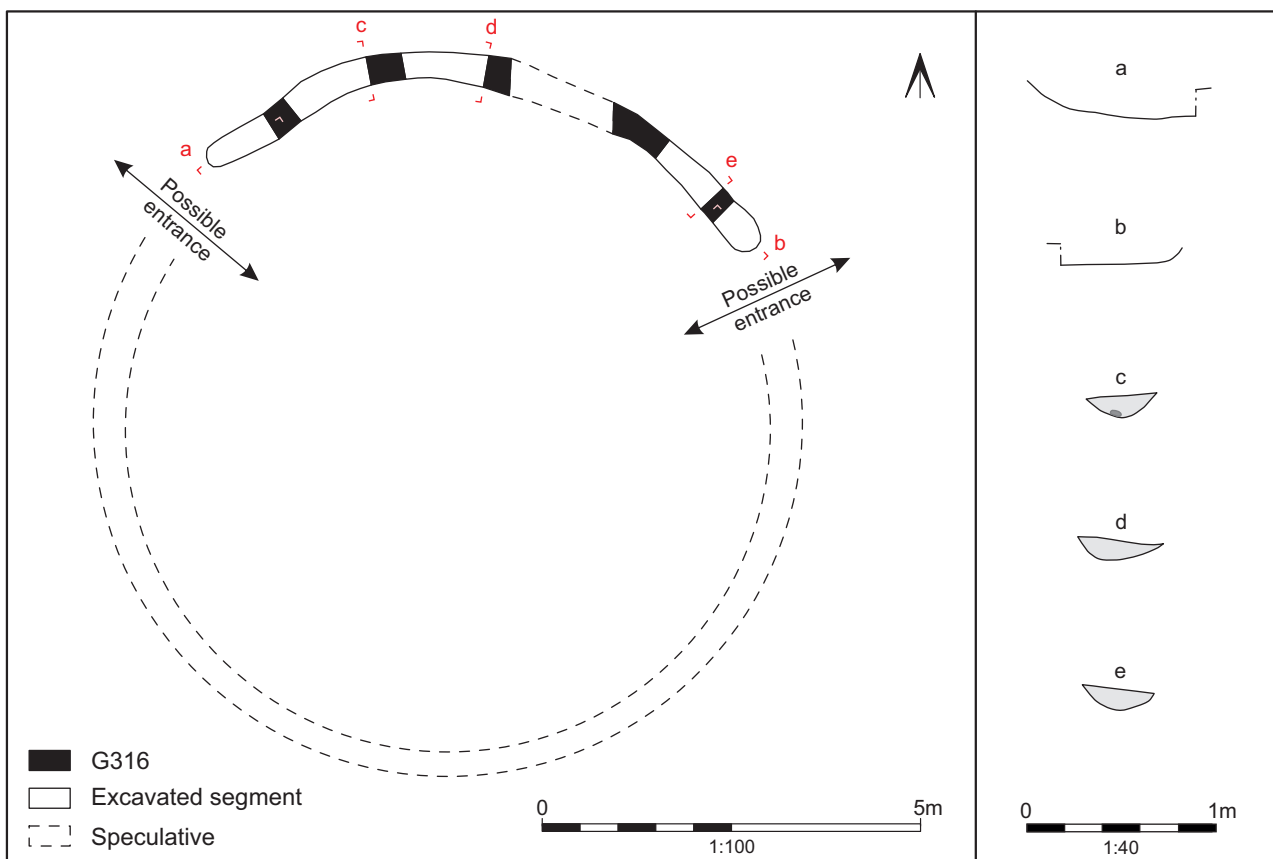


Figure 3.6: Detailed plan of roundhouse G316, with selected sections

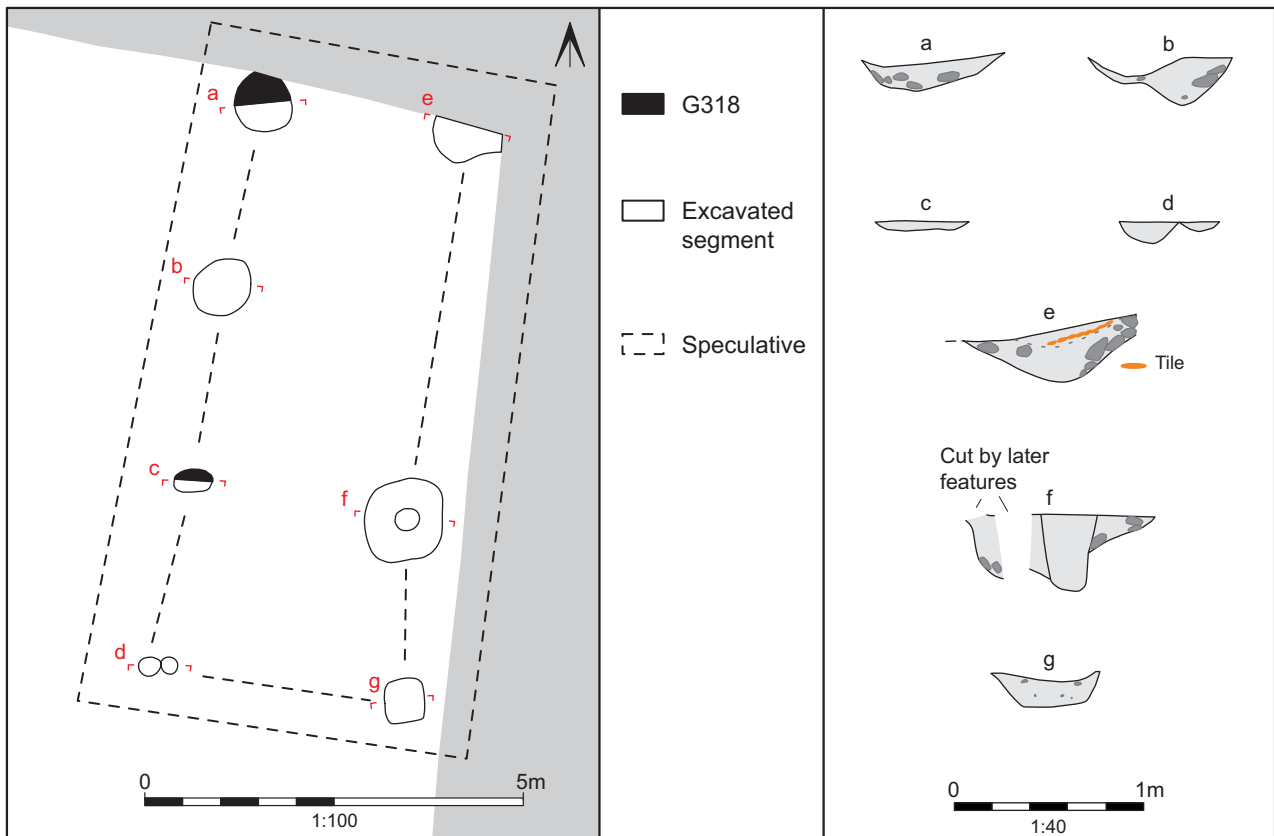


Figure 3.7: Detailed plan of possible rectangular structure G318, with selected sections

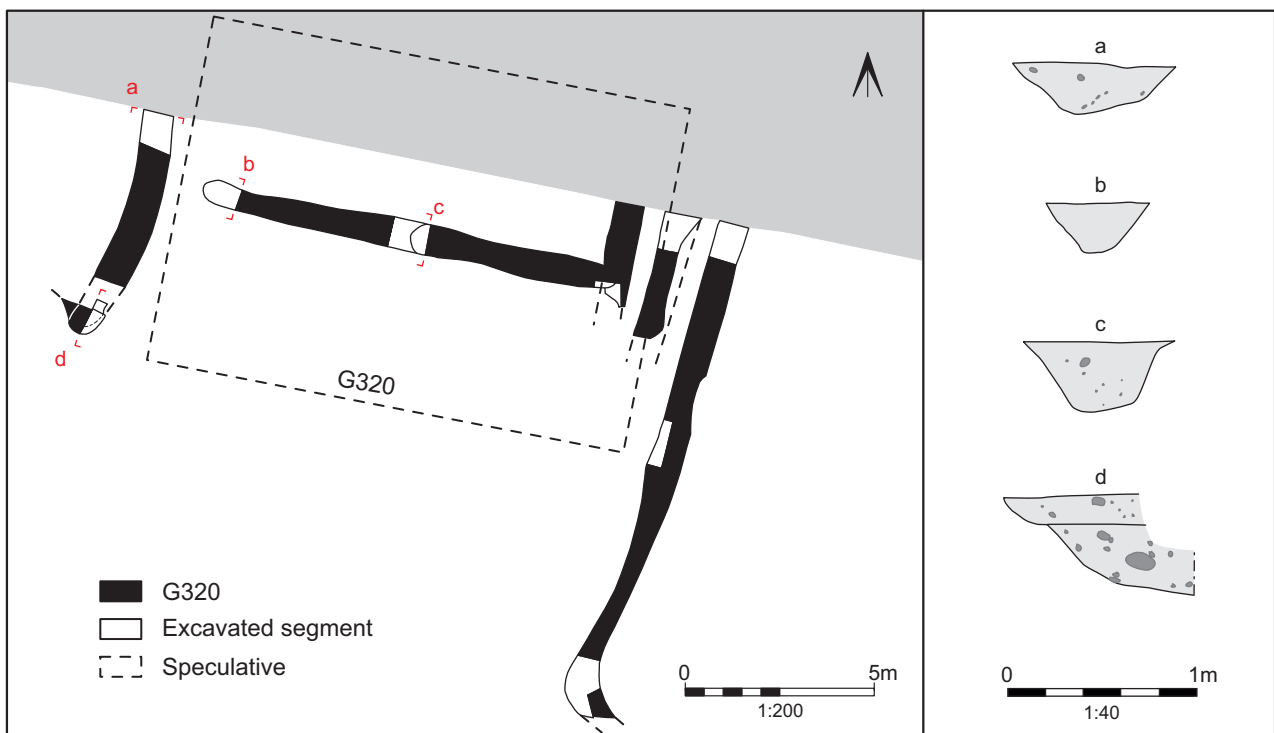


Figure 3.8: Detailed plan of possible rectangular structure G320, with selected sections

Southern enclosure block G308

In this part of the 'ladder' enclosure system, the sub-enclosures typically ranged between c. 25m × 10m and c. 22m × 12m in extent. They were defined by ditches that were <0.8m wide and 0.5m deep (Fig. 3.11: g–k and n–q).

Evidence for internal activity comprised two pits, an isolated post-hole and a possible threshing floor (G319: see below). The pits were in the centre of one of the rectangular sub-enclosures and were <1.5m in diameter and <0.5m deep (Fig. 3.11: l and m). The larger pit produced 0.7kg of animal bone. The post-hole produced

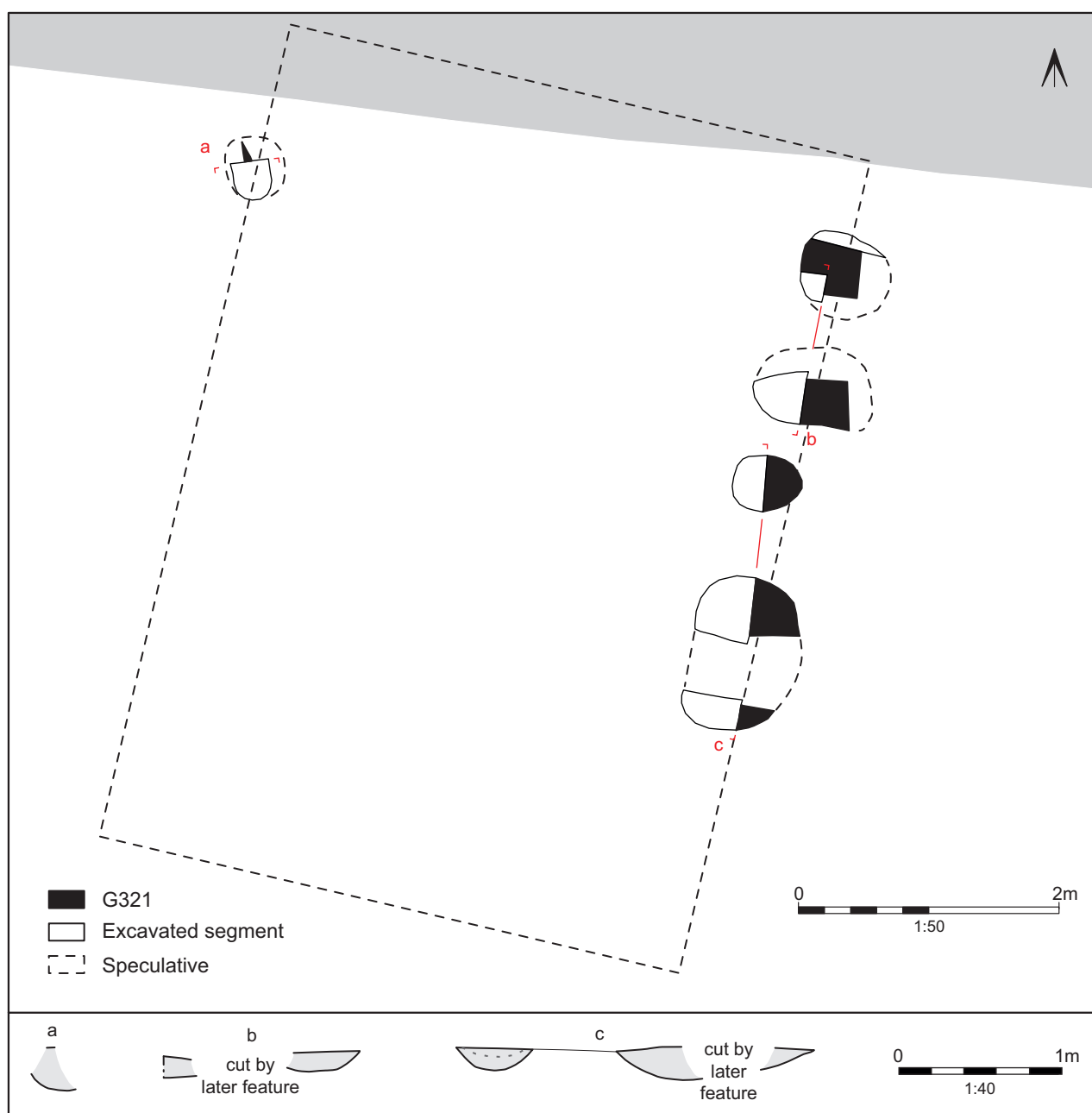


Figure 3.9: Detailed plan of possible rectangular structure G321, with selected sections

rich charred plant remains (environmental sample 43), indicating nearby cereal processing (Ch. 7, p.79), perhaps relating to the possible threshing floor *c.* 10m away.

Again, the ditches of this enclosure block did not extend the full width of the 'ladder' enclosure system, leaving an access corridor to the east. A funnel-like arrangement created by the digging of two ditches *c.* 2m apart led into another entrance in the south-west corner of the block. Here a ditch curved back on itself, presumably to aid stock control and movement. A fragment of human femur was recovered from its terminus (Fig. 3.10). Geophysical survey suggests that the southern boundary of the block continued eastwards, beyond the excavation area, and was probably part of a major landscape boundary.

Possible threshing floor G319

Stone 'platform' G319 consisted of a 0.1m-thick layer of cobbles, placed on a bed of clay (Fig. 3.12: a; Pl. 7). It was sub-square in plan, *c.* 3m × 3m, but may have been truncated on all sides but the north. A small quantity of contemporary pottery, animal bone and Roman tegula was mixed in with the cobbles.

IV. Peripheral fields L31

Three fields were identified to the south of the farmstead. Fields G302 and G304 were adjacent to domestic focus L30, while field G303 was really a continuation of the 'ladder' enclosure system L32. All were probably rectangular in shape and extended beyond the area of investigation. Their constituent east-west ditches ranged in width from 0.5m to 1.3m and were <0.4m deep (Fig. 3.13: a-d).

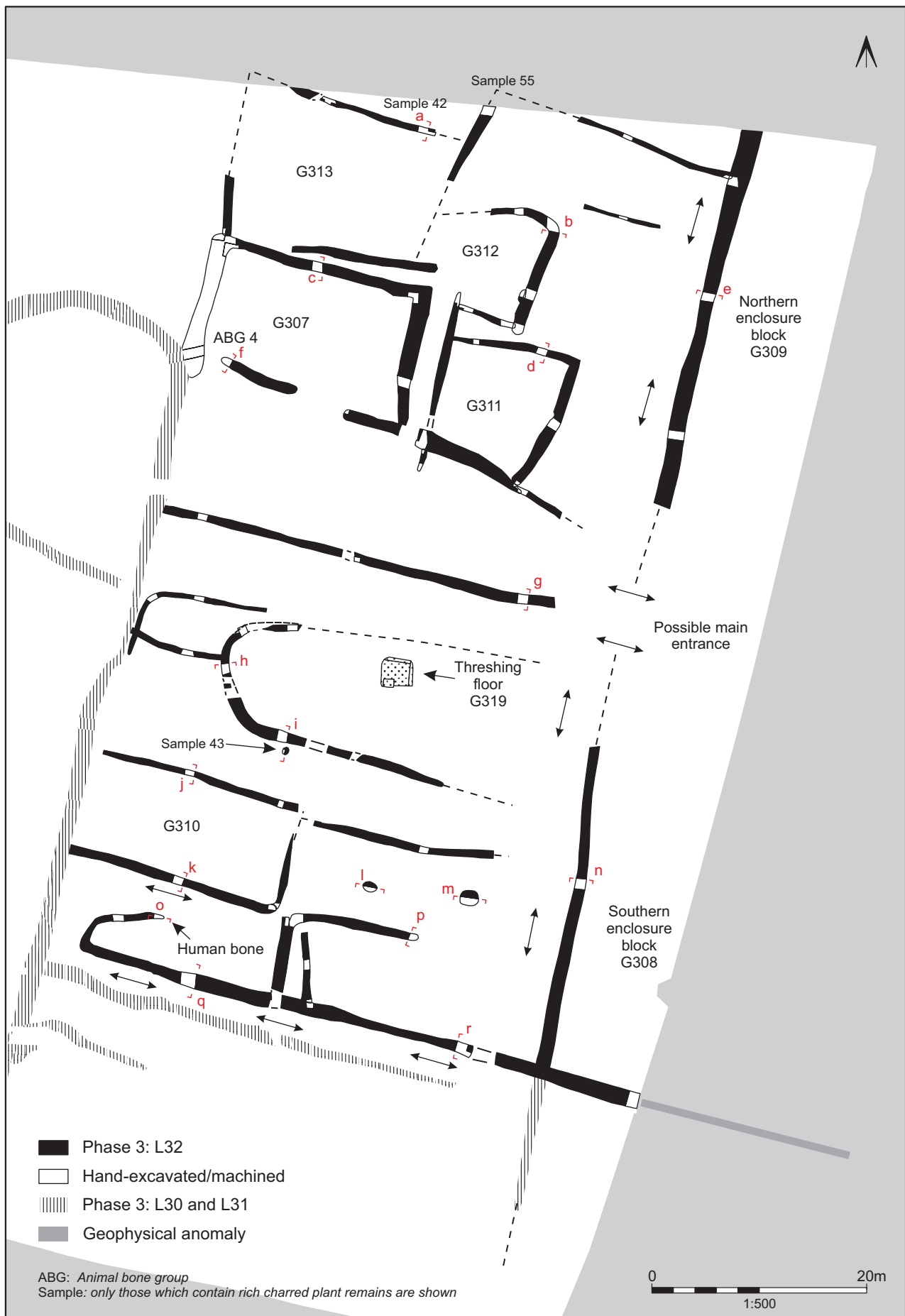


Figure 3.10: Overall plan of 'ladder' enclosure system L32

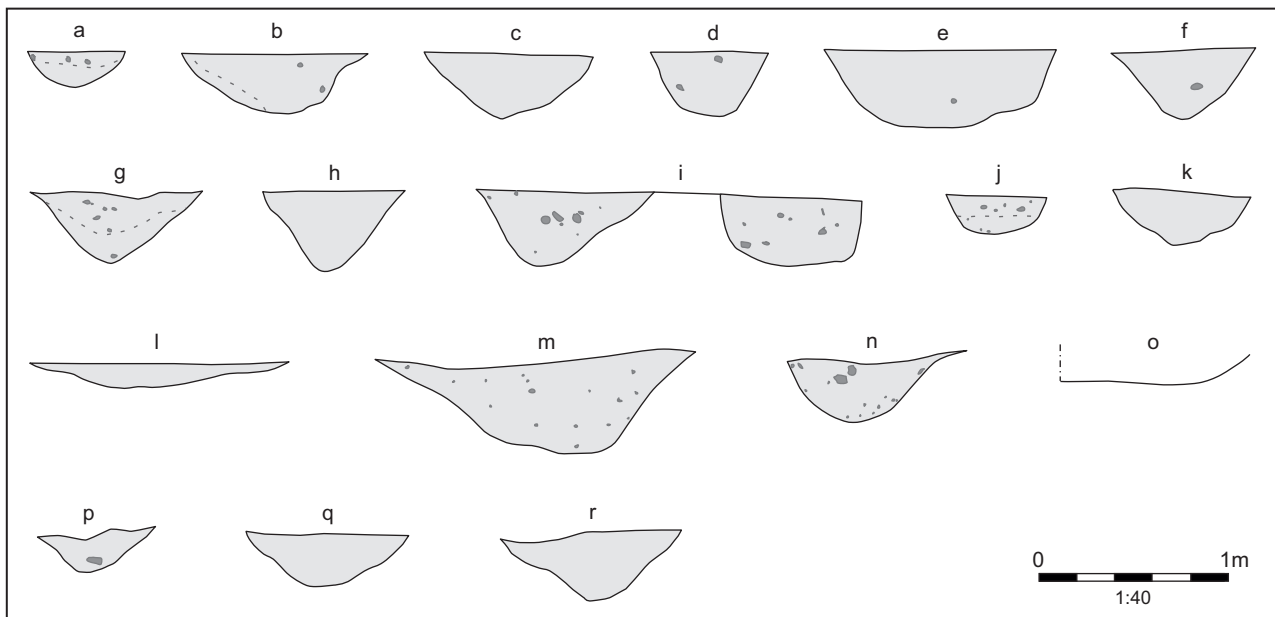


Figure 3.11: Selected sections of features within 'ladder' system L32

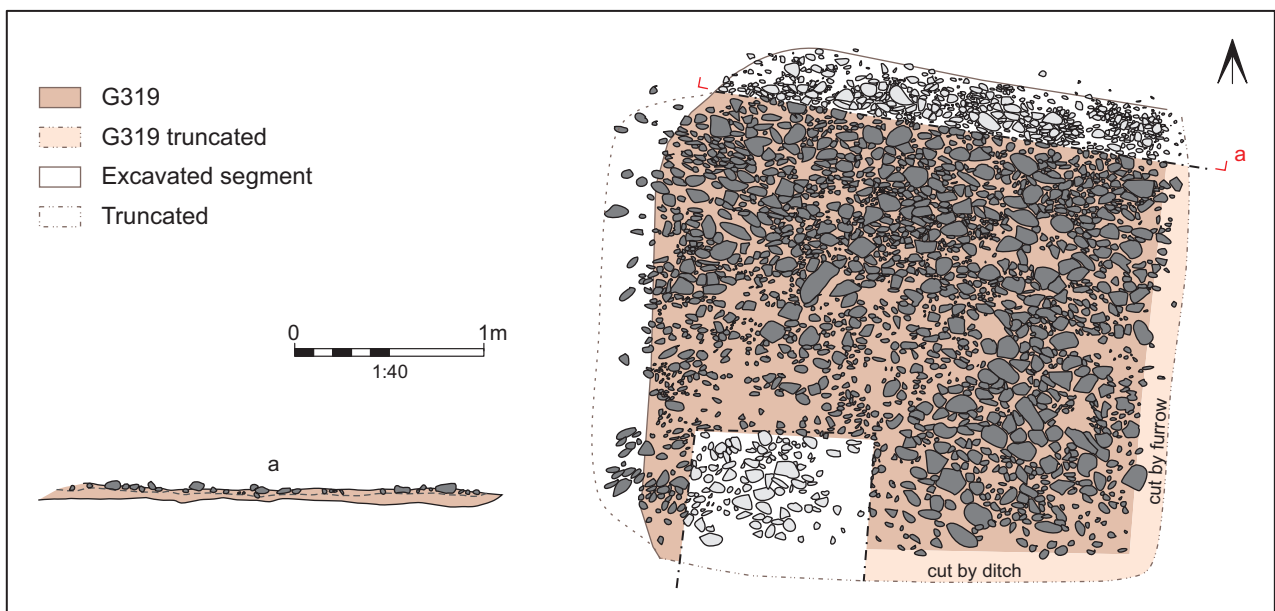


Figure 3.12: Detailed plan of possible threshing floor G319, with selected section

Only field G303 contained evidence for internal activity — several short ditch lengths that may have been the remains of sub-enclosures, and four small scattered pits. The ditches were <0.7m wide and 0.4m deep (Fig. 3.13: e), whilst the pits were 0.8m wide and <0.2m

deep (Fig. 3.13: f). Field G303 was also the only one to produce contemporary pottery (see Table 3.2).

Further fields may have existed to the west of domestic focus L30, as indicated by ditch lengths G315 in this area (Fig. 3.3).

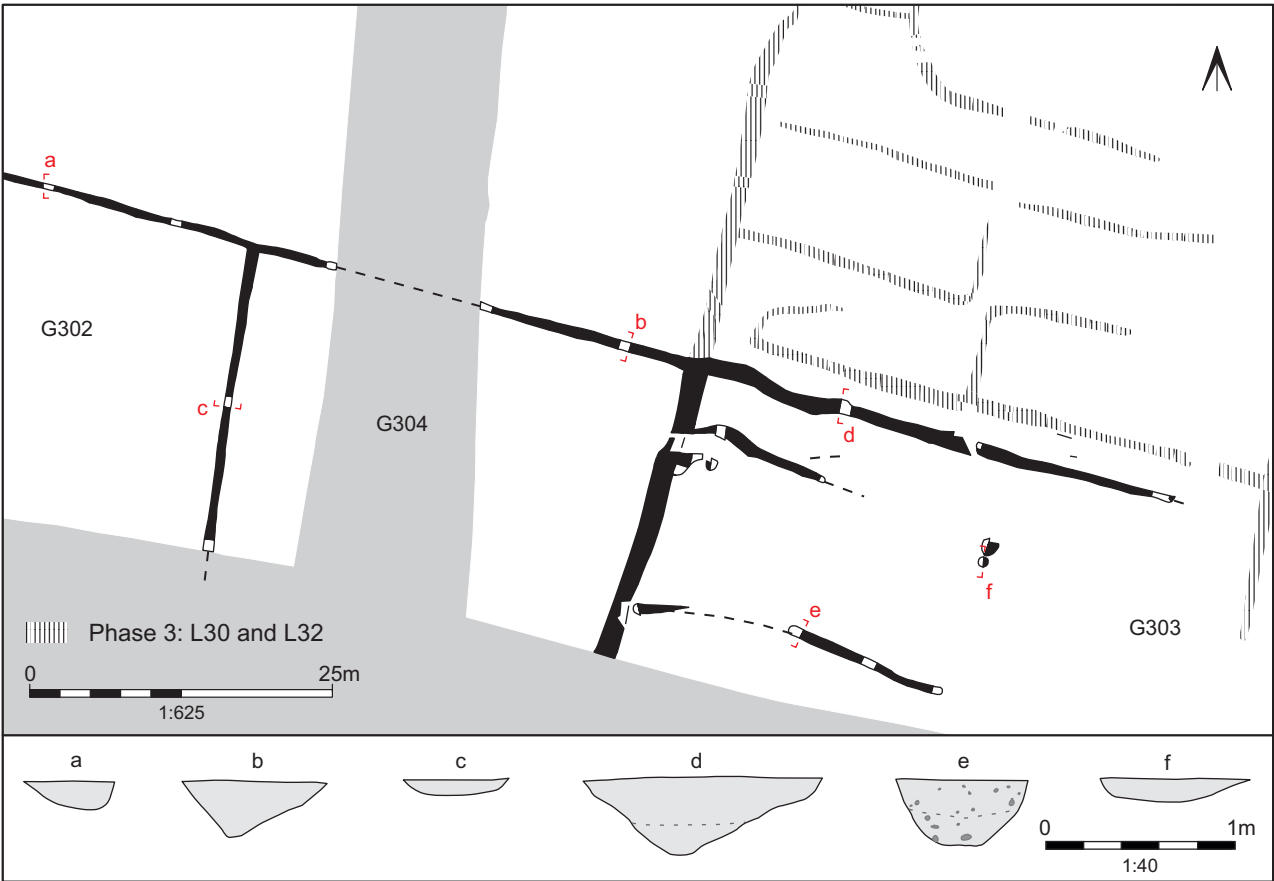


Figure 3.13: Overall plan of peripheral fields L31

Chapter 4

Mid-3rd to late 4th century (Phase 4)

I. Overview

By the end of the 3rd century the layout of the farmstead had been altered once again, although it still occupied roughly the same area. New ditches were dug, some up to 2m wide, but some of the existing boundaries and sub-enclosures were retained. Whilst no new buildings were identified, it is likely that some of the Phase 3 structures remained in use (though not roundhouse G316).

The domestic focus L40 was still in roughly the same area as its Phase 2 and 3 predecessors. Within it, an enclosure to the east contained a yard and stack ring. Peripheral fields and enclosures L41 were located to the south and east, the latter replacing the Phase 3 'ladder' enclosure system, although its spatial layout meant that some of the earlier sub-enclosures may have continued in use (Fig. 4.2). A much larger quantity of animal bone was recovered than from the earlier phases, although the pottery assemblage is considerably smaller (see Table 4.1). This phase also produced ninety-nine fragments of Roman brick and tile, although there was no direct evidence for substantial buildings within the development area.

The latest coin recovered (RA2031) is a Theodosian issue, struck between 388 and 402, indicating some kind of activity within the farmstead at the end of the 4th century and possibly beyond. However, it is unlikely that the farmstead remained in use long into the 5th century, as no Anglo-Saxon artefacts were recovered.

II. Domestic focus L40

The domestic focus extended over at least 0.5ha and continued beyond the excavation area to the north. It comprised a number of small enclosures (G402 or G403) in the area of the Phase 3 domestic focus and a larger, probably main enclosure G405 to the east. The contemporary pottery assemblage was smaller than that recovered from the Phase 3 domestic focus, although at 19.83kg the quantity of animal bone was much larger (see Table 4.1).

Enclosures

The main enclosure G405 was defined by ditches up to 2m wide and 0.7m deep (Fig. 4.5: f–h). An entrance into adjacent enclosure G402 was indicated by a c. 7m-wide gap next to yard surface G414 (Fig. 4.4). A second entrance probably existed to the north of the yard; it was later partially blocked by narrow curving gullies. The enclosure ditches produced forty-two sherds of pottery (0.9kg) along with 7kg of animal bone, including articulated cattle leg bones (ABG 7), and 4.3kg of Roman brick and tile. In addition, three quern stone fragments (OA16) were recovered. The boundary ditch on the south side contained a deposit of medium- and large-sized stones, some of which were burnt, along with large quantities of pottery and animal bone. This material may have derived from a nearby midden for which there was no other surviving evidence. Enclosure G405 contained a stack ring G410 and yard G414, which are discussed in more detail below.

Little can be said about the scatter of mainly small pits adjacent to the northern boundary of enclosure G405. The largest measured 2.3m × 1.8m, although it was quite shallow (Fig. 4.5: a). It produced a single sherd of contemporary pottery, 0.25kg of animal bone, a fragment of quern stone (OA16) and a nail (RA2007).

A number of smaller enclosures were located to the north of enclosure G405. The ditch defining enclosure G411 was c. 1.2m wide and 0.6m deep (Fig. 4.5: l). To the east, it had been re-dug at least once, on broadly the same course. Two small pits in the south-west corner are assumed to have been contemporary with this enclosure, but they did not produce any finds. Later redefinitions of the enclosures in this area were indicated by ditches defining possible oval enclosure G412, which were dug into the northern boundary ditches of main enclosure G405. Contemporary pottery was recovered from them, along with a glass bead (OA11).

Land-use area	Description	Extent	Buildings / structures	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
40	Domestic focus	>0.43	Yard Stack ring	73:2.24	19.83	Coins ×2 Cu armlet fragment Top of iron stylus Knife fragments Reaping hook/ leaf cutting hook Iron objects ×3 Nails ×10 Glass bead Shale spindle whorl Millstone Quern stone fragments ×3 Oyster shell ×45
41	Peripheral enclosures	0.8	2 rectangular structures	59:1.38	24.42	Iron spud Possible stylus Nails ×5

RA = Registered Artefact number, OA = Other Artefact number (see Ch. 6, pp. 60–62). All weights have been rounded up to the nearest 0.01kg.

Table 4.1: Summary of Phase 4 Land-use areas



Figure 4.1: Reconstruction of how the farmstead may have looked during Phase 4

Group	Description	Area (m ²)	Internal activity	Significant bone	Contemporary pottery (sherds:kg)	Animal bone (kg)	Other significant finds
Domestic focus L40							
402	Narrow enclosure	1,063		ABG 5 and 14	9:0.56	7.65	Iron knife fragments (OA12) Iron object
403	Narrow enclosure	>1,306		ABG 6	5:0.13	1.94	Millstone fragments (OA15) Copper alloy armlet fragments (OA10)
405	Main enclosure	1,422	Yard G414 Stack ring G410 3 post-holes Pit	ABG 7	42:0.9	7.0	Coins ×5 (RA2002, 2030–31, 2037, 2044) Top of iron stylus (OA18) Iron sheet fragment Quern stone fragments ×3 (OA16)
411	Sub-enclosure	>178	2 pits	–	2:0.01	0.52	Coin (RA2047)
412	Later sub-enclosure	?	–	–	9:0.26	0.25	Glass bead (OA11) Stone shingle (OA20) Nails ×2
Peripheral fields L41							
401	Trapezoidal enclosure	2,333	Structure G409	Human × 1 ABG 8, 9, 10 and 13	37:1.18	13.6	Coins ×2 (RA 2024, 2040) Iron spud (OA14) Nail
404	Small enclosure	271		–	5:0.28	1.73	Shale spindle whorl (OA17) Iron strip fragment
406	Enclosure	754	Structure G407	ABG 11	3:0.02	3.86	Nail
407	Possible structure	512		ABG 12	4:0.03	4.8	Coin (RA 2055) CPR cereal processing (Sample 51)
408	Enclosure	>1,580		–	–	0.3	–
413	Linear enclosure to south	1,104		Human × 1	11:0.06	1.85	Nail CPR cereal processing (Samples 10 and 21)

RA = Registered Artefact number, OA = Other Artefact number (see Ch. 6, pp. 60–62). All weights have been rounded up to the nearest 0.01kg.

Table 4.2: Summary of Phase 4 individual enclosures



Figure 4.2: Plan of mid-3rd- to late 4th-century (Phase 4) farmstead with Phase 3 layout

Enclosures G402 and G403 occupied the western part of domestic focus L40. They were similar in shape — narrowing slightly towards the east — and both had been subdivided. It is probable that both were accessible from the main enclosure G405. The enclosure ditches were <1.7m wide and 0.5m deep (Fig. 4.4: a, c, e, f and g). At least one of the ditches had been re-dug.

Enclosure G402 was subdivided by a single north-south ditch. The largest assemblage of animal bone (7.65kg) from domestic focus L40 was recovered from this enclosure, which included the fragmentary remains of a piglet (ABG 5) from the dividing ditch between enclosures G402 from G403.

The main area of enclosure G403 was divided by north-south ditches into three sub-enclosures, with two further sub-enclosures to the north. No internal activity was identified, but it is possible that Phase 3 rectangular structures G318 and G320 remained in use. Roman brick and tile (2.1kg), part of a millstone (OA15) and fragments of a copper-alloy armlet (OA10) were recovered from the ditches. Articulated cattle leg bones (ABG 6) were also found in the enclosure ditch.

Possible stack ring G410

A gully defining an oval area, c. 3.5m × 2.5m with a large central post-hole, was located in the south-east corner of main enclosure G405. It was <1m wide and 0.3m deep, with an uneven base (Fig. 4.6: a and b). The post-hole was c. 1.1m in diameter and 0.4m deep (Pl. 9). No trace of a post-pipe was visible to indicate where the post had been, but the feature did contain large stones that are likely to have been packing (Fig. 4.6: c). Only a small quantity of finds was recovered, including animal bone and a mid- to late 3rd-century coin (RA2018) from the post-hole. The most likely interpretation is a stack ring — these structures are usually associated with a hayrick, but some similar enclosures have been interpreted as funerary monuments (see Ch. 1, p. 15).

Yard surface G414

An amorphous layer of cobbles G414 was situated on the west side of main enclosure G405, adjacent to enclosures G402 and G403. It covered an irregularly shaped area, c. 25m × 10m, and was generally less than 0.2m thick. The cobbles were mixed with smaller stones and fragments

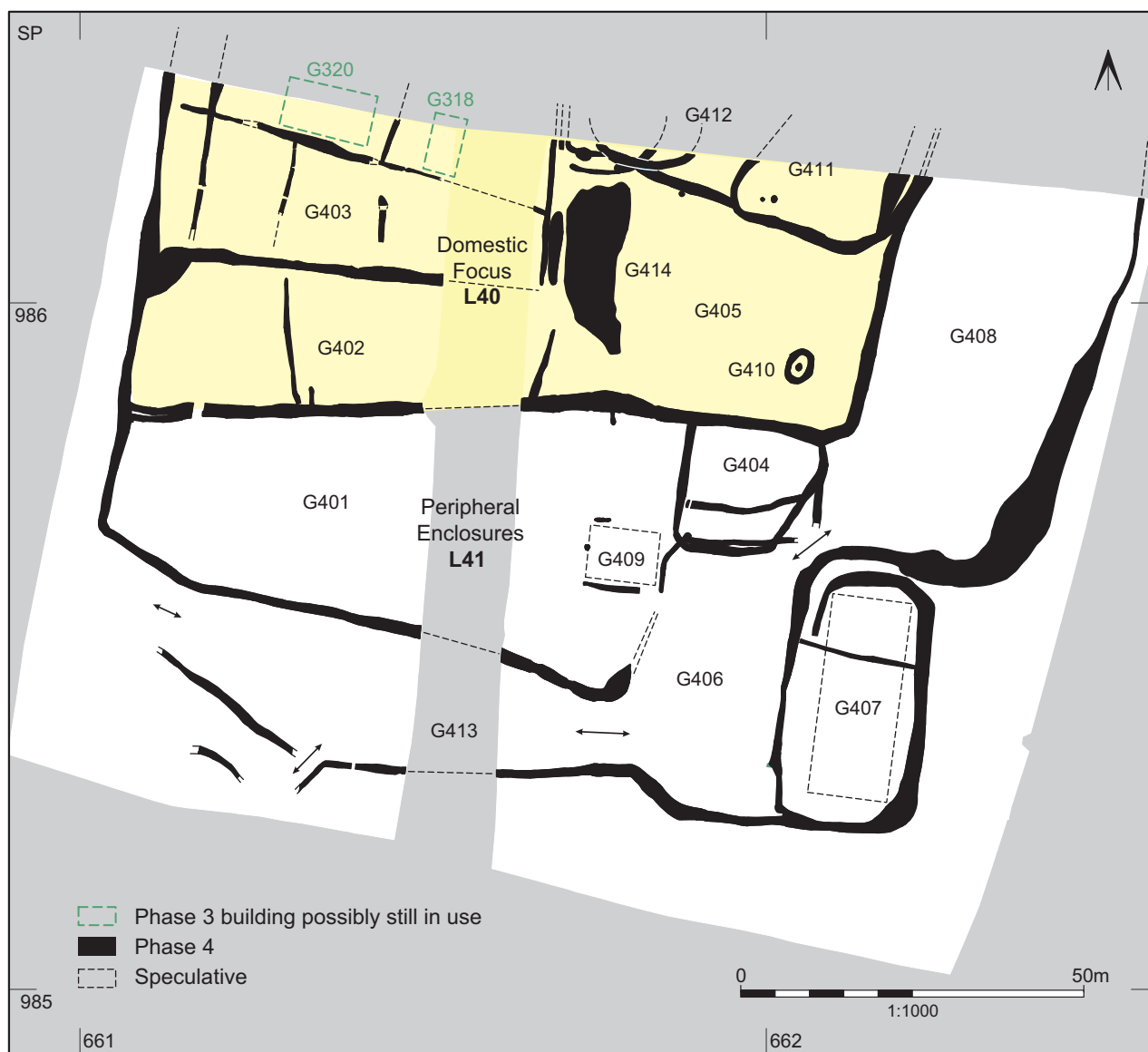


Figure 4.3: Overall plan of mid-3rd- to late 4th-century (Phase 4) farmstead

of brick and tile (0.45kg). Two sherds of contemporary pottery, 0.67kg of animal bone, three late 3rd- to early 4th-century coins (RAs 2029, 2035 and 2042) and two mid- to late 4th-century coins (RAs 2036 and 2043) were also recovered. This feature probably represents the truncated remains of a yard surface, although given the small number of buildings identified in this phase, it could perhaps have been the base of a timber building for which no other evidence survived (see Ch. 1, p. 13).

III. Peripheral enclosures L41 to the south and east

A series of enclosures L41, linked by a routeway, were located to the south and east of the domestic focus. A slightly larger assemblage of animal bone was recovered from this area than from domestic focus L40, although the contemporary pottery assemblage is smaller.

Enclosures

Enclosure G401 was located immediately south of domestic focus L40 and was trapezoidal in plan (Fig. 4.7). It was defined on all sides by ditches that were at least

1m wide and <0.7m deep (Fig. 4.8: a–e). Most showed some evidence in plan that they had been re-dug at least once on the same course, but this was not always visible in section. No entrance was definitely identified, but it is likely to have been to the east, adjacent to possible structure G409 and providing access to the routeway. Of all the enclosures in this area, G401 produced the largest quantities of pottery (thirty-seven sherds, 1.3kg) and animal bone (13.6kg). In addition, 5.4kg of Roman brick and tile and 1.5kg of burnt stone were also recovered. The ditch defining the south side of the enclosure contained a partial lamb skeleton (ABG 8) and articulated cattle leg bones (ABGs 9, 10 and 13), while the ditch to the north produced a human infant humerus. The possibility that this enclosure may have served a ritual function is discussed above (see Ch. 1, p. 18).

To the north-east of enclosure G401 was a small, sub-square enclosure G404, whose interior was devoid of evidence for activity. Its constituent ditches were similar in width to other contemporary ditches but they were only 0.4m deep (Fig. 4.8: f and g). A 4m-wide entrance in the south-east corner provided access to the routeway. Five sherds of contemporary pottery, animal bone (1.73kg)

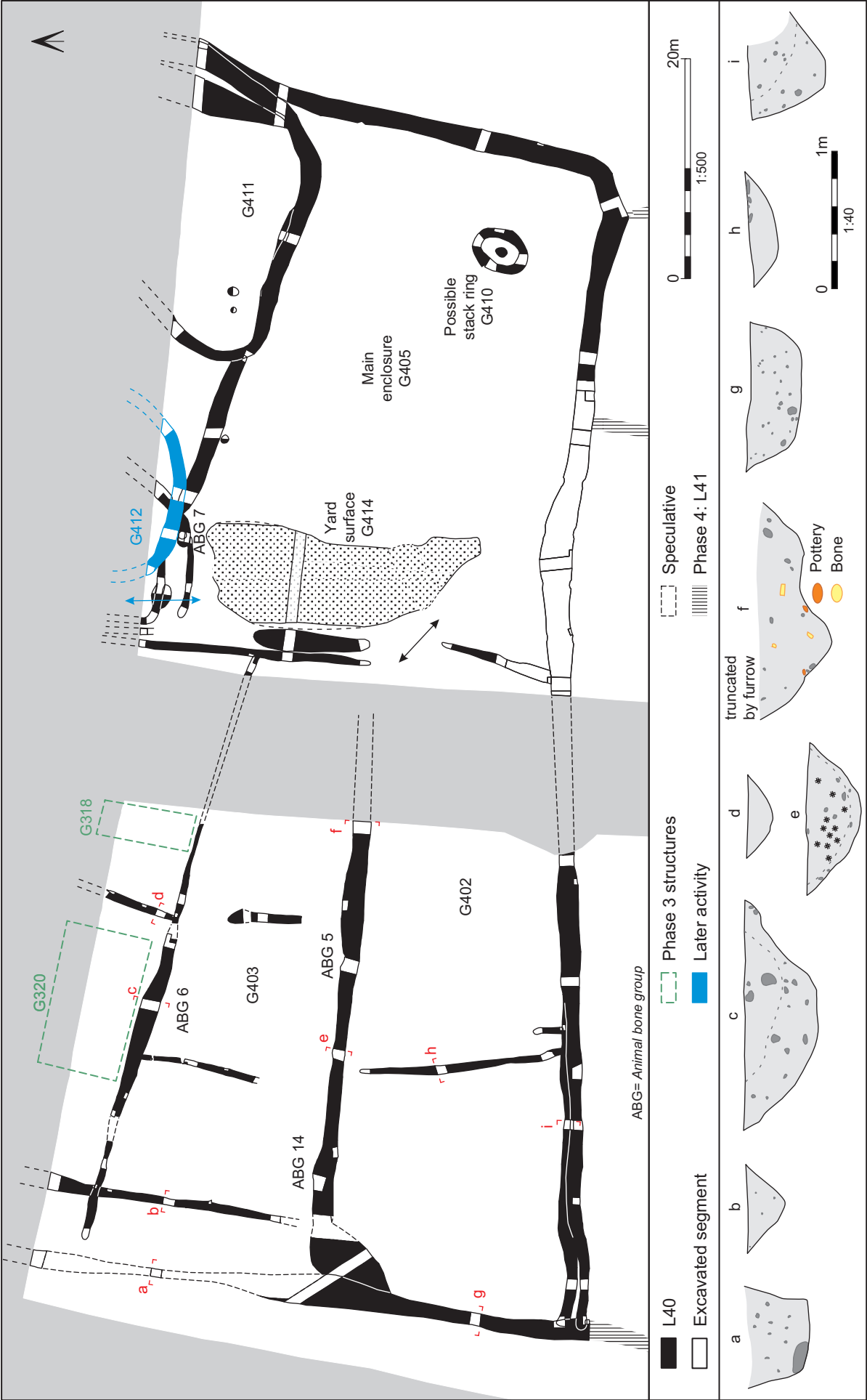


Figure 4.4: Overall plan of domestic focus L40, with selected sections

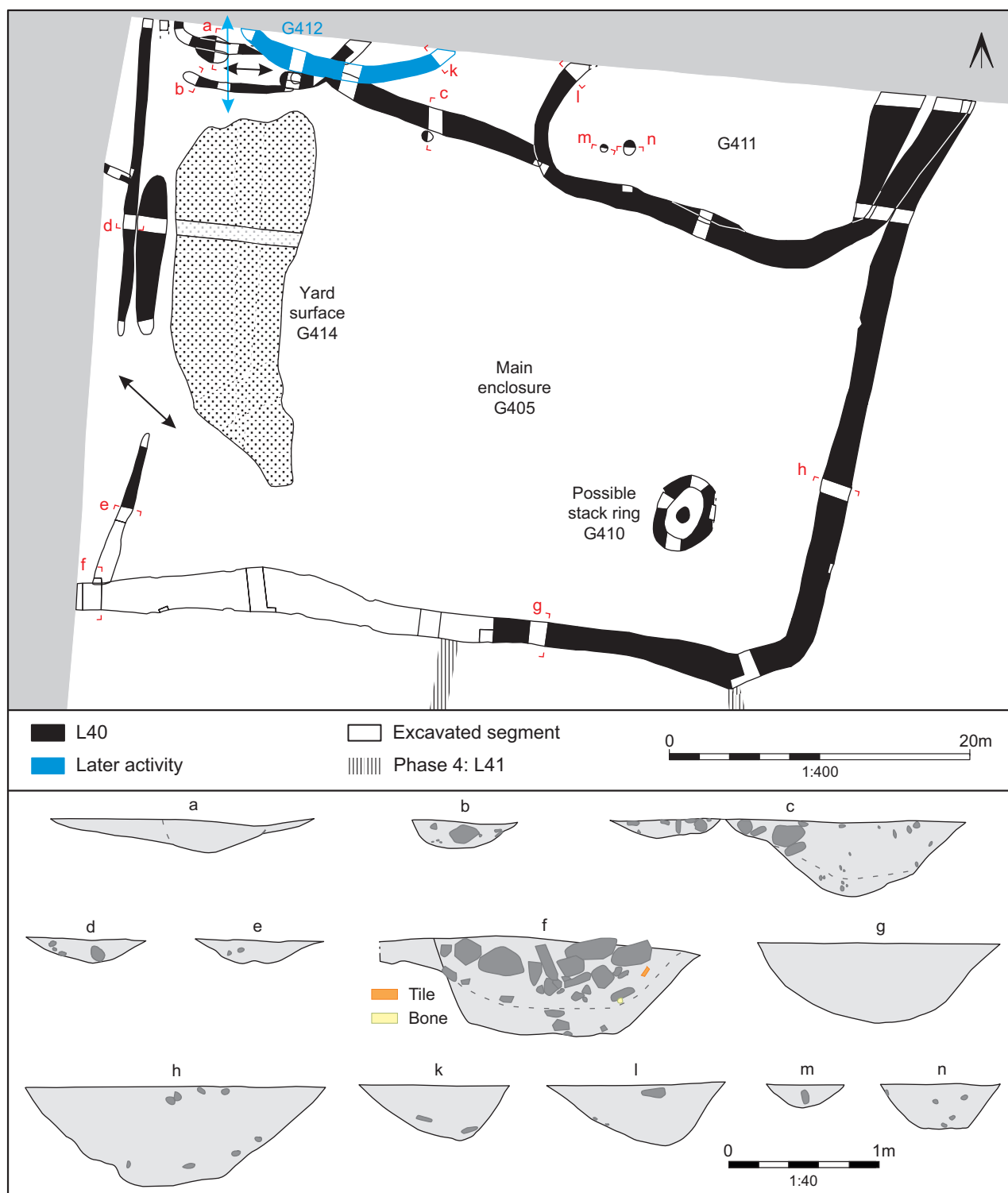


Figure 4.5: Detailed plan of enclosure G405 (L40), with selected sections

and Roman brick and tile (1.1kg) were recovered from the enclosure ditches, along with a shale spindle whorl (OA17). The articulated left leg of a horse (ABG 11) was found in the ditch forming the boundary between enclosures G404 and G406.

The routeway comprised a series of inter-linked enclosures (G406, G408 and G413), which narrowed where they met adjacent enclosures. A fragment of human femur was recovered from the southern boundary ditch (Fig. 4.7). Only the westernmost enclosure (G413) provided access to land outside the farmstead. Environmental samples 10

and 21 were taken from adjacent ditch segments at the southern entrance, which produced rich charred plant remains that are thought to represent cereal-processing waste from parching spelt for husking somewhere nearby (see Ch. 7, p. 80).

Possible structure(s) G407

An oval enclosure, measuring 35m × 15m, occupied the south-east corner of L41. It was defined by deep ditches on all sides, which were 0.6–2.5m wide and 0.2–0.9m deep — generally at the larger end of that range (Fig.

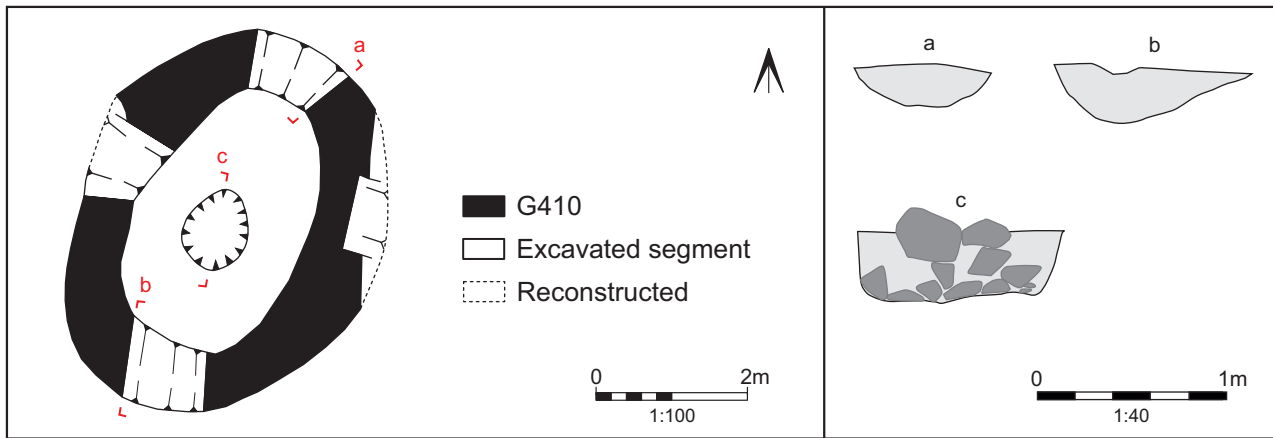


Figure 4.6: Detailed plan of possible stack ring G410, with selected sections

4.9: a and c–f). Although it may have been no more than a livestock enclosure, it is possible that the ditches were dug for drainage around one or two structures which may have had either curved or straight walls. Complicating this interpretation is an east–west gully (Fig. 4.9: b), which appears to have been dug at some point to subdivide the interior into two unequal parts.

Environmental sample 51 from a ditch fill on the north side of the enclosure contained charred plant remains suggestive of cereal-processing waste from parching spelt for husking. Only a small quantity of contemporary pottery was recovered, but other finds include 4.8kg of animal bone, 2.1kg of Roman brick and tile, and a mid-4th-century coin (RA2055) (see Table 4.2). The animal bone assemblage includes vertebrae from a horse (ABG 12).

Possible rectangular structure G409

Two parallel east–west gullies and the east side of enclosure G401 formed a rectangular area, *c.* 9m × >11m in extent, which, it is tentatively suggested, defined a possible structure. The gullies were 0.4–0.8m wide and mostly 0.1m deep (Fig. 4.10: a and c), but the one at the east end turned away from the possible structure and increased to 0.5m deep (Fig. 4.10: d and e). They probably provided drainage around the structure rather than being foundation trenches. No boundary was identified to the west, but a small pit SG2257, *c.* 0.8m diameter and 0.15m deep, was situated towards the centre of this side. It contained 426 fragments of calcined bone, many of which were identified as sheep/goat. The bones could conceivably belong to the same animal, as no evidence was seen for more than one individual (see Ch. 7, p. 74). Contemporary pottery and animal bone were recovered from one of the gullies.

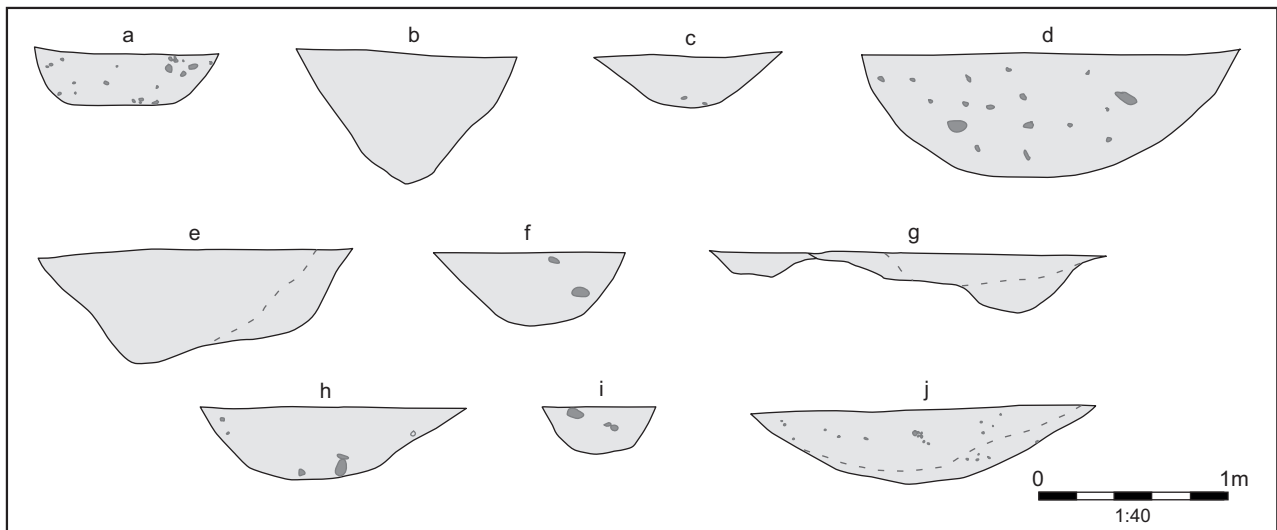


Figure 4.8: Selected sections of features within peripheral enclosures L41

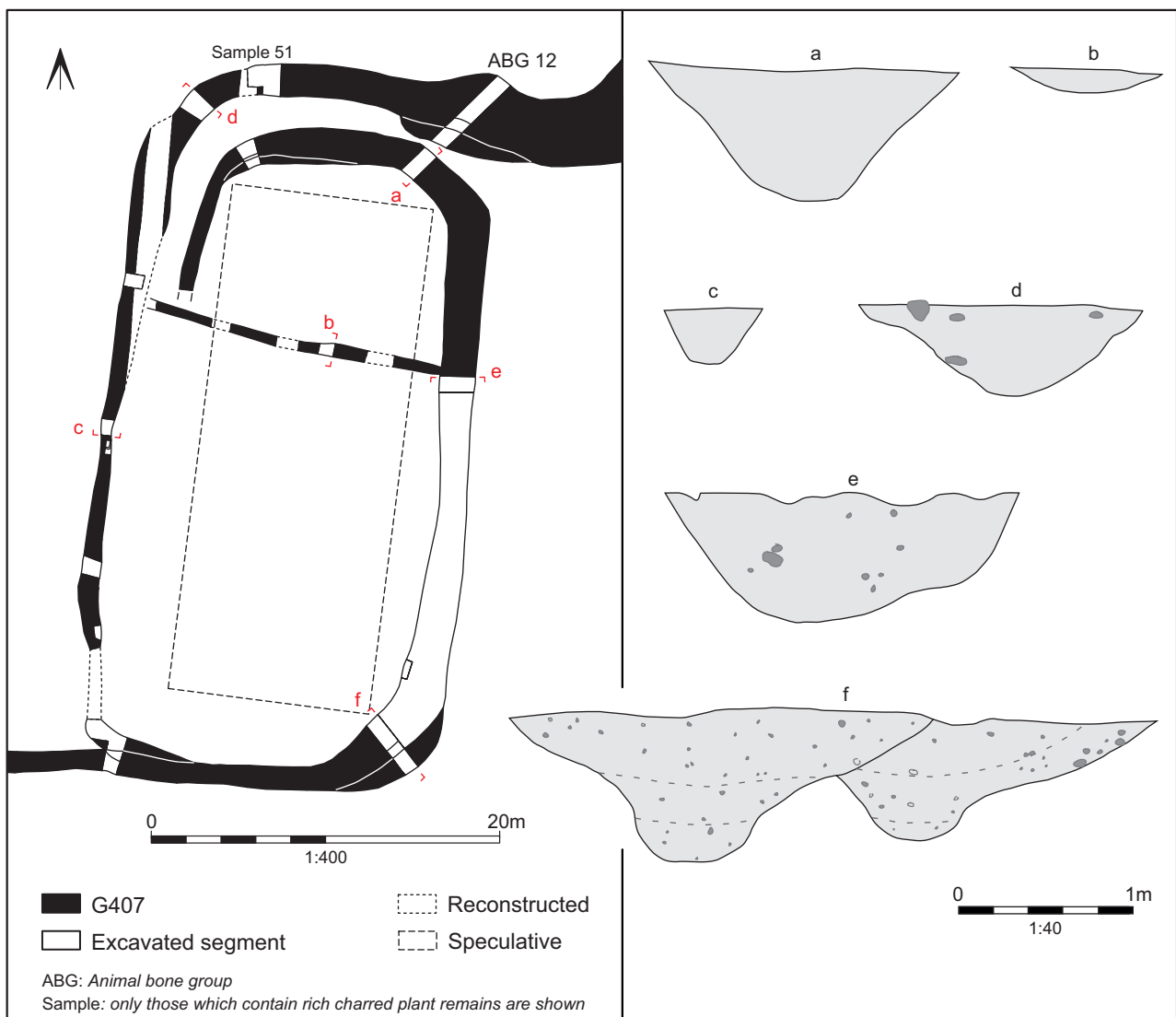


Figure 4.9: Detailed plan of possible structure G407, with selected sections

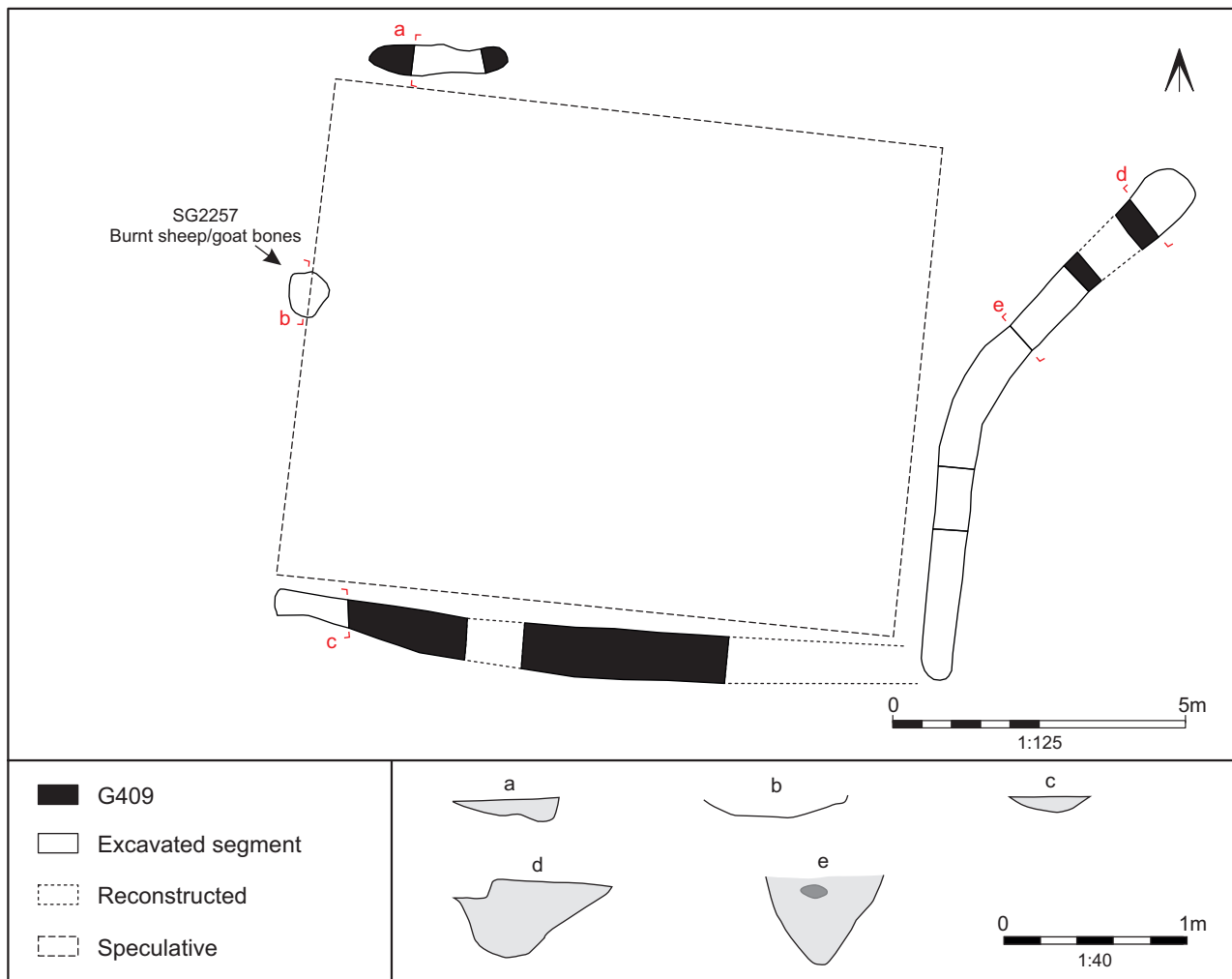


Figure 4.10: Detailed plan of possible rectangular structure G409, with selected sections

Chapter 5

Post-Roman activity (Phases 5 and 6)

I. Phase 5. Medieval

The remains of ridge-and-furrow cultivation survived as earthworks over much of the development area prior to machine stripping, and the bases of the furrows, *c.* 5m apart, were still visible afterwards. This land was clearly part of the open field system associated with the medieval settlement of Great Glen. Although the furrows were on a similar alignment to some of the Romano-British ditches, they rarely coincided, and they are therefore believed to have followed the slope of the land rather than any pre-existing boundaries.

II. Phase 6. Modern

Modern disturbance was largely confined to the south-west corner of the excavation area and appeared to be the product of mechanical excavation, associated with construction of the adjacent Garfield Park housing development. Finds recovered from the subsoil and topsoil have been assigned to this phase for convenience.

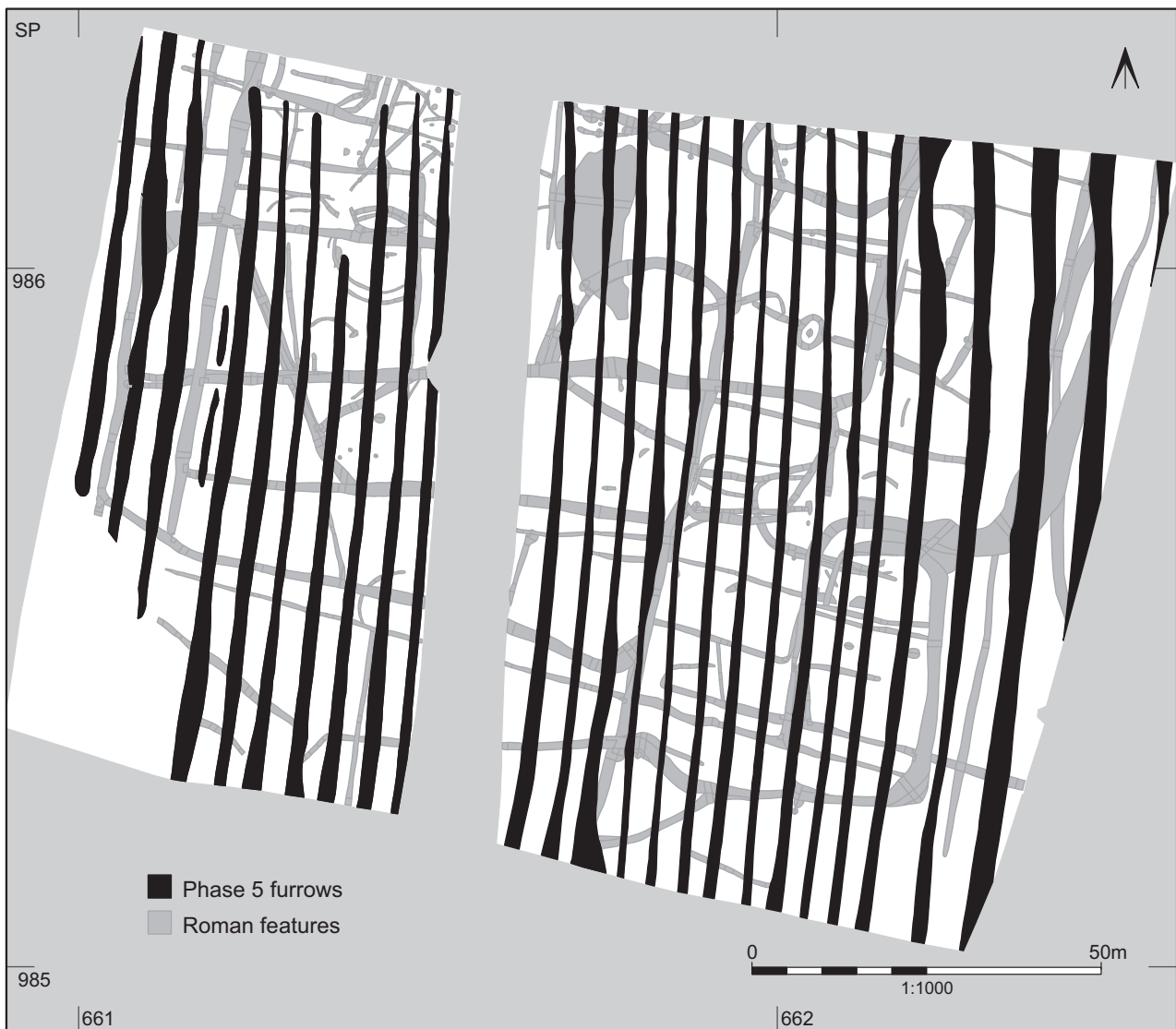


Figure 5.1: Furrows with all Roman features as an underlay

Chapter 6

Artefacts

I. Introduction

The investigations yielded an artefact assemblage comprising pottery, ceramic building material, metal personalia and objects associated with domestic and agricultural activity. These are discussed below by functional category. Where appropriate, methodologies are outlined in each section. More detailed information is provided in the appendices: pottery type series (Appendix I); samian (Appendix III); brick and tile fabric types (Appendix II); coin catalogue (Appendix IV); and petrology (Appendix V).

II. Pottery

Jackie Wells

Introduction

The pottery assemblage totals 1,969 sherds (31.2kg), with the largest quantities deriving from features assigned to middle and late Roman Phases 3 and 4. The material displays a wide date range spanning the early Iron Age to the late Roman periods, plus a single post-medieval sherd. Approximately 93% (by weight) is datable to the Roman period, and 6% is of Iron Age origin.

Pottery was collected from 268 features. It survives in fair condition, as demonstrated by an average sherd weight of 16g. A high proportion of vessels from Roman deposits are represented by more than a single sherd. This suggests that much of the assemblage occurs in primary contexts, close to areas where the pottery was used, a conclusion that is further attested by the relatively low incidence of residual or intrusive material.

Methodology

The pottery assemblage was examined by context, and fabric types were identified in accordance with the

Leicestershire Ceramic Type Series (Appendix I). The pottery was quantified by minimum vessel and sherd count, and weight. The condition of the pottery from each context was noted, and attributes such as decoration, manufacture, levels of abrasion, and evidence of function (residues, sooting and wear marks *etc.*) were recorded. Selected pottery is illustrated in Figures 6.1–6.3; vessels are shown at one quarter size, external view on the right and internal view on the left. Handmade vessels are illustrated with hatched sections, and wheel-thrown vessels with solid sections.

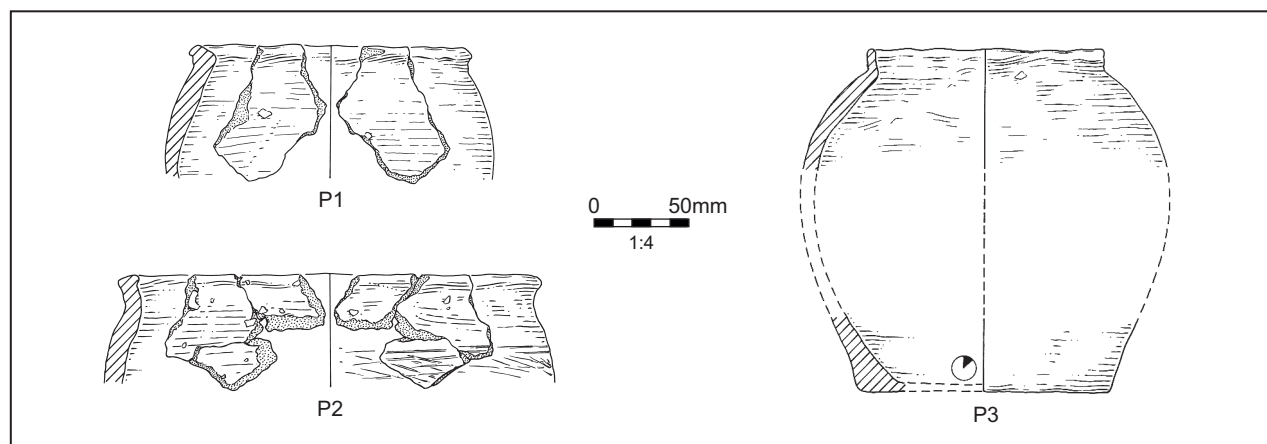
Phase 2 (mid-1st to mid-2nd century)

A total of thirty Phase 2 features produced 129 sherds (1.8kg), representing seventy-four vessels (Table 6.1). The pottery is generally abraded, and moderately fragmented, with an average sherd weight of 14g.

The earliest material comprises a middle to late Iron Age assemblage of twenty-five sherds (238g), which occur residually in Roman features. The handmade sherds are in a range of fabrics tempered with quartz-sand (Q1), igneous rock (RQ1), fossil shell (S1, S2)

Land-use area	Group	Description	Sherd No.	Wt (g)
L20	G201	Roundhouse	4	67
	G202	Roundhouse	2	10
	G205	Main enclosure	18	235
	G207	Rectangular structure	19	113
L21	G203	Roundhouse	1	1
	G206	Main enclosure	25	209
	G208	D-shaped enclosure	23	626
	G209	Roundhouse	2	111
	G211	Sub-enclosure	31	446
L22	G210	Field	3	10
	G212	Boundary ditch	1	3
			129	1,831

Table 6.1: Phase 2 pottery quantification



Illust. No.	Ware	Description	Landscape	Phase
P1	Shell (S1)	Globular jar	L20.02	2
P2	Sand and calcareous (Q)	Round shouldered vessel	L30.01	3
P3	Coarse mixed inclusions (RQ1)	Ovoid jar	L30.01	3

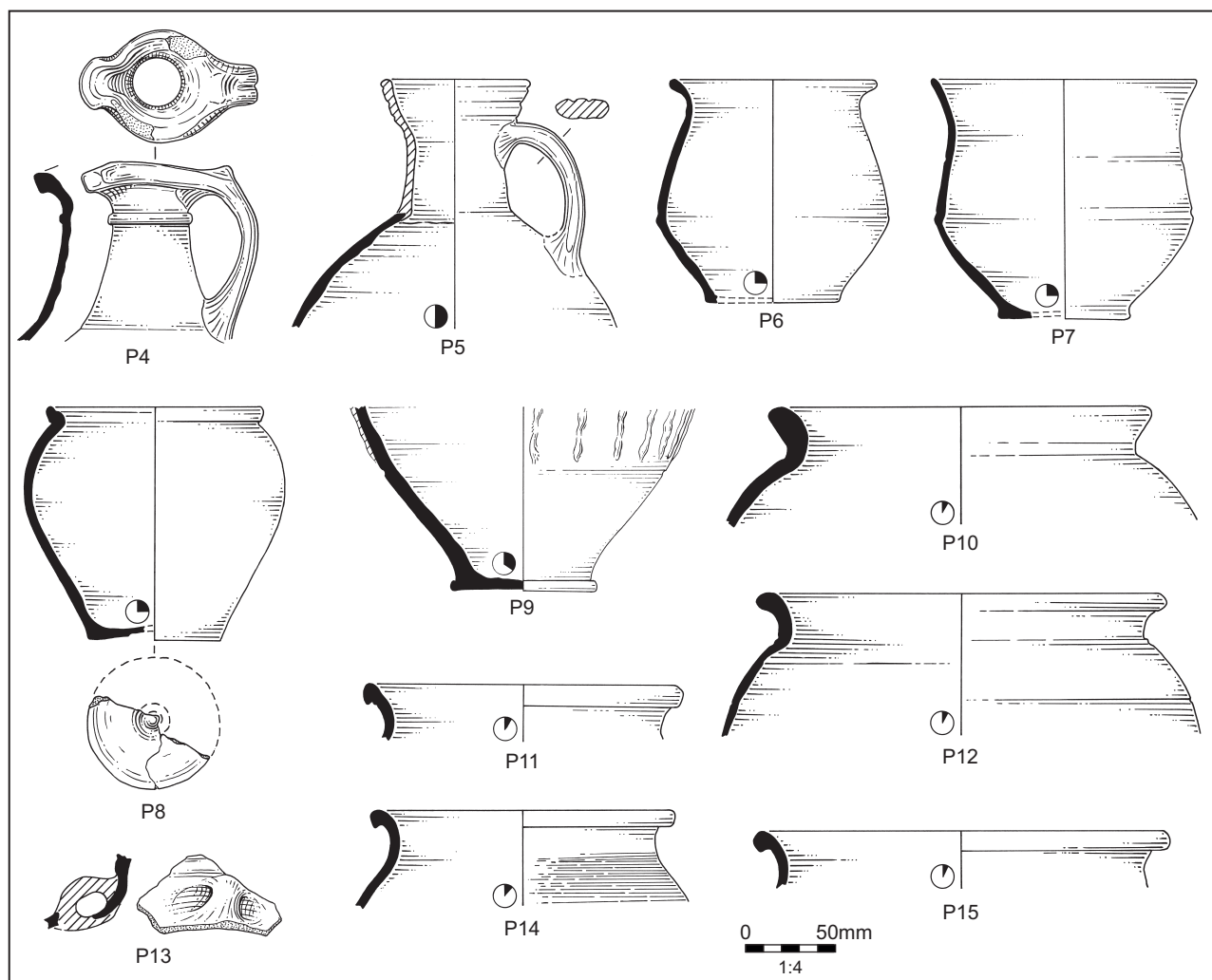
Figure 6.1: Selected Iron Age pottery (P1–3)

and grog (G1). Diagnostic forms are scarce and mainly comprise thin-walled, round-shouldered vessels with flat rims. A possible globular jar was also found (Fig. 6.1: 1). Although most sherds are undecorated, a few have light twig brushing to roughen the surface. The fill of possible rectangular structure G207 (L20) yielded sixteen sherds (98g) from a scored, shell-tempered vessel, typical of the East Midlands Scored Ware tradition of the middle to late Iron Age (*cf.* Marsden 2011, 66).

Wheel-made late Iron Age pottery of the transitional late 1st century BC / early 1st century AD totals seven grog-tempered sherds (73g: fabrics GT1, GT2), again deriving from features which also contain Romanised wares. A cordoned jar is the only diagnostic vessel form. All sherds are highly abraded, suggesting that they may be residual.

Ninety-two Romano-British sherds (1.5kg) were collected, the majority (1.3kg) deriving from the secondary fills of peripheral activity area L21. The largest single pottery deposit derived from the fill of D-shaped enclosure G208 (L21), which yielded twenty-three sherds (626g), including eleven (406g) from a rusticated fine grey-ware jar (Fig. 6.2: 9; *cf.* Gillam 1970, fig. 11, 95). Domestic focus L20 and peripheral fields L22 yielded the remainder of the assemblage.

Most of the pottery comprises reduced, sand-tempered coarse wares (sixty-seven sherds: 1.3kg), supplemented by oxidised sandy wares and shell-tempered vessels, mainly of probable local manufacture (see Appendix I). Material from more distant sources is represented by nine sherds (101g) of Black Burnished ware (BB1) from Dorset; and single sherds of Lower Nene Valley



Illust. No.	Ware	Description	Landscape	Phase
P4	Nene Valley Colour Coat (C2)	Spouted flagon or jug	L41.02	4
P5	White slipped oxidised ware (WS2)	Ring-necked flagon	L32.02	3
P6	Fine grey ware (GW3)	Carinated jar	L41.03	4
P7	Fine grey ware (GW3)	Carinated jar	L32.01	3
P8	Grog and sand (GT)	Lid-seated jar with a stamped (?) base	L40.02	4
P9	Fine grey ware (GW3)	Rusticated jar base and lower body	L21.02	2
P10	Coarse grey ware (GW6)	Large jar	L40.02	4
P11	Calcite gritted (CG1)	Triangular rim jar	L41.02	4
P12	Micaceous reduced ware (GW8)	Narrow-necked jar	L30.02	3
P13	Fine grey ware (GW3)	Handled vessel	L41.02	4
P14	Calcite-gritted (CG1)	Rilled triangular rim jar	L41.03	4
P15	Black-slipped grey ware (GW)	Triangular rim vessel	L41.03	4

Figure 6.2: Selected Roman pottery (P4–P15)

grey ware and coarse white ware, the latter possibly from Northamptonshire. Vessel forms are cordoned grey-ware jars, indicating continuity from the late ‘Belgic’ Iron Age; 1st- to early 2nd-century lid-seated shelly vessels; and BB1 flat-rimmed bowls with burnished lattice decoration (Fig. 6.3: 21), the latter datable to the early 2nd century.

Continental imports are represented by twenty-seven east Gaulish samian sherds, datable to AD40–100, and a single central Gaulish samian bowl sherd (AD120–200; see Appendix II).

Phase 3 (mid-2nd to mid-3rd century)

A total of 745 sherds (10.7kg), representing 364 vessels, was collected from 106 Phase 3 features (Table 6.2). In terms of wear and fragmentation, the pottery is comparable with that from the preceding phase, with an average sherd weight of 14g. Residual material comprises thirty-four middle to late Iron Age sherds (717g), and thirty-two sherds (510g) of wheel-thrown late Iron Age grog-tempered pottery.

Roman

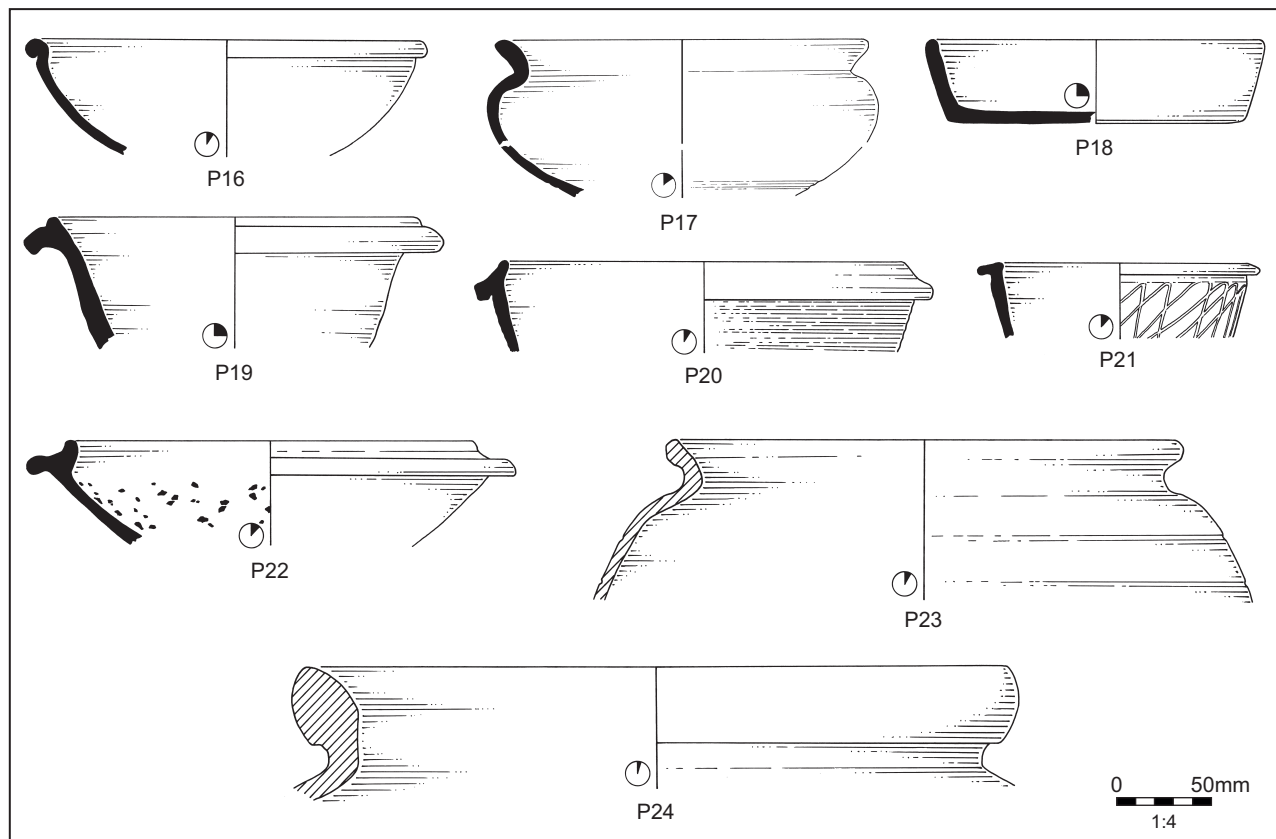
Domestic focus L30 and ‘ladder’ enclosure system L32 yielded pottery assemblages weighing 5.4kg and 5.2kg respectively, the majority deriving from the secondary fills of cut features. Over 90% of the pottery (by sherd count) occurred in ditch fills and their re-cuts. Approximately

5% derived from structural features, and the remainder from pits (4%). The fragmentation and condition of the pottery recovered from various feature types is closely comparable, suggesting similar patterns of deposition.

The Roman assemblage, comprising 653 sherds (9.4kg), is dominated by wheel-thrown grey wares and

Land-use area	Group	Description	Sherd No.	Wt (g)
L30	G301	Main enclosure	110	1,873
	G305	D-shaped enclosure	62	1,425
	G306	Trapezoidal enclosure	105	1,466
	G314	Enclosure to north	7	155
	G315	Enclosure to west	1	50
	G317	Pit cluster	20	355
	G318	Rectangular building	7	60
	G302	Field	3	4
L31	G303	Field	10	136
L32	G307	Rectangular enclosure within ladder system	68	855
	G308	‘Ladder’ system block to south	38	358
	G309	‘Ladder’ system block to north	7	41
	G310	Sub-enclosure within ladder system	176	2,171
	G311	Sub-enclosure within ladder system	8	123
	G312	Sub-enclosure within ladder system	77	865
	G313	Sub-enclosure within ladder system	26	389
	G319	Possible threshing floor	20	375
			745	10,701

Table 6.2: Phase 3 pottery quantification



Illust. No.	Ware	Description	Landscape	Phase
P16	Oxford Colour Coat (C13)	Hemispherical bowl	L41.02	4
P17	Fine grey ware (GW3)	Bowl with incurved side & perforation	L41.02	4
P18	Fine grey ware GW3)	Plain rim dish	L40.02	4
P19	Coarse grey ware (GW6)	Flanged bowl	L41.03	4
P20	Calcite-gritted (CG1)	Flanged bowl	L41.03	4
P21	Black-burnished ware (BB1)	Flat-rim bowl with burnish lattice	L21.02	2
P22	White ware (WW3)	Flanged mortarium	L40.02	4
P23	Calcite-gritted (CG1)	Large jar	L30.02	3
P24	Calcite-gritted	Storage vessel	L40.03	4

Figure 6.3: Selected Roman pottery (P16–24)

Wares and fabric groups	Sherd No.	% Sherd	Wt (g)	% Wt
<i>Imports</i>				
Amphora	1	0.2	14	0.1
Samian	18	2.7	172	1.8
<i>Local</i>				
Grey wares: fine, medium and coarse sandy	398	61.0	5,673	60.4
Oxidised wares: fine and coarse sandy	79	12.0	1,163	12.4
<i>Regional</i>				
Black Burnished ware	1	0.2	13	0.1
Calcite-gritted wares	109	16.9	1,755	18.7
Grey ware: Nene Valley	9	1.3	62	0.7
Grog-tempered ware	7	1.0	293	3.1
Nene Valley Colour Coat	15	2.2	133	1.5
Oxford Colour Coat	2	0.4	12	0.1
White wares: fine, medium and coarse sandy	14	2.1	99	1.1
	653	100	9,389	100

Table 6.3: Phase 3 Roman pottery quantification by fabric group

oxidised wares in a range of fine to coarse sandy fabrics, which total 73% of the pottery by sherd count and 72% by weight (Table 6.3; Appendix I). These are of uncertain, but probably local origin. The vessel repertoire comprises a ring-necked flagon (Fig. 6.2: 5), carinated jar (Fig. 6.2: 7), narrow-necked (Fig. 6.2: 12) and neckless jars with simple everted or bead rims, bowls with flanged rims, straight-sided bowls and dishes, and a possible strainer. Decoration comprises burnishing (overall and lattice), slipping (black and white), and a single pinched/rusticated vessel (*cf.* Gillam 1970, fig. 11, 96). Five greyware sherds from a single vessel (149g) recovered from sub-enclosure G310 (L32) have traces of pitch residue on their broken edges, indicating attempted repair.

Local wares are supplemented by regionally traded wares, which total approximately 24% by sherd count and 25% by weight. Calcite-gritted wares demonstrate links with the shelly-ware groups of Northamptonshire, Bedfordshire and south Lincolnshire; they total nearly 17% of the assemblage by sherd count (18% by weight). These mainly comprise lid-seated vessels, large ?storage jars, and everted-rim jars (Fig. 6.3: 23), many with rilled exteriors and external sooting, the latter indicating their use as cooking pots. The calcite-gritted wares range in date from the 2nd to late 3rd centuries.

Traded wares include 2nd-century white-ware flagons and jars from the Verulamium region, grey wares and 3rd-century colour-coated wares from the Nene Valley, grog-tempered ware of uncertain source (probably Northamptonshire), and a single sherd of 2nd–3rd-century Dorset Black Burnished ware. Two sherds of late Roman Oxford red colour-coated ware may be intrusive. No diagnostic vessel forms are present.

Totalling approximately 3% by sherd count and weight, the proportion of continental imports may be regarded as typical of a small rural site (*cf.* Cooper 2000, 80). They comprise sixteen sherds of central Gaulish samian (AD120–200), one with a rivet hole (see Appendix II); two south Gaulish sherds (AD50–100); and a piece of Baetican amphora of Dressel 20 form. The latter type is known to occur widely on post-conquest sites and up to the mid-3rd century.

Pre-Roman

Residual middle to late Iron Age pottery occurs predominantly in quartz-sand (Q1) and igneous rock fabrics (RQ1), with a single example tempered with fossil shell (S1). Fabric types are comparable with those from the nearby Iron Age site at Manor Farm, Humberstone (Marsden 2011, 64), although the small size and residual nature of the Stretton Road assemblage limits its potential for useful analysis.

Diagnostic forms are a round-shouldered vessel and ovoid jar (Fig 6.1: 2 and 3 respectively). Other feature sherds are three scored body sherds and three flat rims. The majority of the pottery derived from the primary fill of D-shaped enclosure G305 (L30): this yielded 525g, including nineteen sherds (470g) from a sizeable cooking pot with sooted exterior surfaces. The secondary fills of western enclosure G301 (L30) and sub-enclosures G308 within 'ladder' system L32 contained the majority of the late Iron Age wheel-thrown assemblage. Grog-tempered fabrics are dominant, as in the Phase 2 assemblage; a lid-seated vessel is the sole diagnostic form.

Phase 4 (mid-3rd to late 4th century)

A total of 118 Phase 4 features yielded pottery. The assemblage comprises 999 sherds (18.0kg), representing 593 vessels, the majority deriving from the secondary and tertiary fills of cut features within domestic focus L40 (Table 6.4). Some 89% of the pottery (by sherd count) occurred in the fills of ditches, with 7% deriving from pits and the remainder from surfaces (3%) and structural features (1%). Although abraded, the pottery is marginally less fragmented than the Phase 3 material, with a higher overall average sherd weight of 18g. However, there is greater variation in the weight of sherds deriving from different feature types: the average ranges from 10g (structural features) to 24g (external surfaces).

Roman pottery totals 942 sherds, weighing 17.3kg. There exists a degree of overlap and continuity between the Phase 3 and 4 assemblages, evidenced by their broadly similar composition. One variation, however, is an increase in Phase 4 of regional wares, and a reduction of local wares, indicating a predominantly late Roman assemblage.

Like the preceding phase, a range of wheel-thrown grey wares dominate, totalling 57% of the assemblage by sherd count and by weight (Table 6.5; Fig. 6.2: 6, 10, 13 and 15; Fig. 6.3: 17–19). Unprovenanced oxidised wares occur in smaller quantities, totalling 7% by sherd

Land-use area	Group	Description	Sherd No.	Wt (g)
L40	G402	Narrow enclosure	84	1,770
	G403	Narrow enclosure	44	1,233
	G405	Main enclosure	248	5,165
	G410	Stack ring	39	465
	G411	Sub-enclosure	30	536
	G412	Later sub-enclosure	47	1,106
	G414	Yard	25	591
	G401	Trapezoidal enclosure	139	2,496
	G404	Enclosure	134	1,875
	G406	Enclosure	35	507
L41	G407	Possible structure	100	1,121
	G408	Enclosure	8	50
	G413	Linear enclosure	66	1,052
			999	17,967

Table 6.4: Phase 4 pottery quantification

Wares and fabric groups	Sherd No.	% Sherd	Wt (g)	% Wt
<i>Imports</i>				
Samian	28	3.0	191	1.1
<i>Local</i>				
Grey wares: fine, medium and coarse sandy	535	56.9	9,734	56.3
Oxidised wares: fine and coarse sandy	61	6.5	542	3.1
<i>Regional</i>				
Black Burnished ware	4	0.4	30	0.2
Calcite-gritted wares	162	17.1	2,498	14.5
Colour coat	1	0.1	90	0.6
Grey ware: Nene Valley	14	1.5	290	1.7
Grog-tempered ware	3	0.3	99	0.6
Nene Valley Colour Coat	95	10.1	2,778	16.1
Hadham oxidised ware	8	0.8	199	1.1
Mortaria: Nene Valley, Mancetter-Hartshill, Oxford	15	1.6	515	3.0
Oxford Colour Coat	6	0.6	118	0.6
White wares: fine, medium and coarse sandy	10	1.1	186	1.1
	942	100	17,270	100

Table 6.5: Phase 4 Roman pottery quantification by fabric group

count and only 3% by weight. The vessel repertoire is broadly the same as in Phase 3, although more decorative elements are apparent, such as linear and random combed motifs and rouletting.

Jars of varying sizes are the dominant Phase 4 vessel form, totalling 57% of the diagnostic assemblage (by sherd count). This accords with the established trend for rural sites, which shows a consistently higher proportion of jars (generally 50% and above) than for urban sites, where dishes and bowls predominate (Timby 2009, 181). Bowls constitute 26%, with flanged examples being most common. Dishes total 7%, and are mainly represented by partial bases and / or base angles. The prevalent form is a simple straight-sided type. Beakers (6%), mortaria (3%) and flagons (1%) comprise the remaining vessel types.

Traded wares of more specific form and usage, from more distant regional production centres, total 34% by sherd count and 39% by weight. Calcite-gritted wares total 17% of the assemblage by sherd count, and 15% by weight, and occur in a wider range of vessel forms than in the preceding phase. Some are products of the Harrold kilns in Bedfordshire, and include rilled jars with everted, triangular and undercut rims; large combed storage jars; and rilled bowls with flanged or rectangular rims (Fig. 6.2: 11 and 14; Fig. 6.3: 20 and 24), characteristic of the later Roman period (Brown 1994). Four sherds from two BB1 dishes also occur.

Later products of the Lower Nene Valley colour-coated-ware industry total 10% by sherd count (16% by weight). Forms are flanged bowls with rouletted and barbotine decoration, straight-sided dishes, and a single sherd from a spouted flagon or jug (Fig. 6.2: 4). Oxidised wares from Hertfordshire and Oxfordshire are present in small quantities, and include flanged bowls, and a copy of a samian form 37 hemispherical bowl (Fig. 6.3: 16). Mortaria (3% by weight) mainly comprise the later products of the Mancetter-Hartshill kilns, with smaller quantities from the Oxfordshire and Nene Valley industries (Fig. 6.3: 22).

Totalling approximately 3% by sherd count and 1% by weight, continental imports comprise twenty-eight sherds of samian. The majority are of central Gaulish

origin (AD120–200), with three sherds from south Gaul (AD40–100) and a single eastern Gaulish example (AD140–160). All are highly abraded and in some cases have no slip remaining. Forms are plates, bowls, and a single cup (see Appendix II).

Residual pottery comprises thirty-four late Iron Age sherds (530g), including thirty sherds (451g) from a thickly sooted lid-seated jar (Fig. 6.2: 8) recovered from enclosure G402 (L40).

Phase 5 (medieval)

The fills of furrows L51 yielded a residual assemblage of two late Iron Age and sixty-seven Roman sherds (total weight 500g), and a black-glazed earthenware jug handle (15g) of post-medieval date. The pottery is highly fragmented (average sherd weight 7g) and abraded, consistent with its recovery from agricultural deposits. The assemblage mainly comprises Roman coarse wares, represented by a range of locally manufactured, reduced sand-tempered vessels. Fine wares comprise two undiagnostic Nene Valley colour-coated sherds (14g) and three abraded central Gaulish samian sherds (4g). The latter include two decorated examples with partial figures in the style of Cinnamus, datable to AD150–180 (see Appendix II). The material is likely to derive from the underlying Roman farmstead.

Summary

Roman pottery totals 1,854 sherds (29.3kg), with smaller quantities of middle to late Iron Age material. An average sherd weight of 16g suggests that, for a rural settlement, the assemblage survives in reasonable condition, given the possibility that pottery was left exposed in middens for some time, prior to incorporation into 'cut' features (cf. Cooper in ULAS 2004, 10).

Sixty-eight per cent of the pottery (by sherd count) comprises vessels that are probably of local manufacture, deriving from production centres whose location is unknown. A high proportion of regional wares (29%) suggests a predominantly later Roman assemblage (ULAS 2004, 12). Calcite-gritted wares demonstrate links with the shelly ware groups of Northamptonshire, Bedfordshire and south Lincolnshire, while the assemblage also contains 2nd-century wares from the Verulamium region, and later products from the Nene Valley and Oxford industries. Material from more distant sources is represented by Dorset Black Burnished ware, a common find on sites in Leicester, although less prevalent on rural sites (ULAS 2004, 12). Continental imports, comprising samian (predominantly of central Gaulish origin) and a sherd of Baetican amphora, total less than 3% of the assemblage, which may be regarded as typical of a small rural site (cf. Cooper 2000, 80).

Approximately 35% of the total assemblage could be identified to vessel form — a common range of utilitarian types. In accordance with the established trends for rural sites, jars are dominant (73%), with bowls and dishes next in prevalence (22%). The latter are associated more with serving and eating, as opposed to cooking and storage, for which jars were more commonly used. Beakers, mortaria and flagons constitute approximately 5% of the assemblage.

The Stretton Road assemblage is broadly comparable with other contemporary rural sites in the county, e.g. Normanton Le Heath (Pollard 1994b, 45); Hamilton

North, Humberstone (ULAS 2004, 10–14); and Rearsby Bypass Site 6 (ULAS 2005, 22–23).

III. Ceramic building material and fired clay

Jackie Wells

Introduction and methodology

The assemblage of ceramic building material comprises 114 fragments (18.8kg) of Roman roof tile, flue tile and brick. A single piece of post-medieval peg tile was also recovered. Fabric types are presented in Appendix III. The material was quantified by fragment count and weight, with a record kept of all fragments deriving from the same object. Extant elements (edges, corners, surfaces *etc.*) and condition were recorded to determine the level of survival; burning/sooting to assist in determining function; and manufacturing details to determine technology.

Phase 2 (mid-1st to mid-2nd century)

The fills of D-shaped enclosure G208 and possible roundhouse G209 (L21) yielded two sand-tempered tegula fragments (305g).

Phase 3 (mid-2nd to mid-3rd century)

Roman building material comprises fragments of two imbrices, three tegulae, and four indeterminate bricks or tegulae (total weight 754g). With the exception of a combed shelly tegula, all are sand-tempered. Six pieces derived from enclosure ditches within domestic focus L30 (G301, G305 and G306), and the remainder from 'ladder' enclosure system L32 (sub-enclosures G307 and G310, and threshing floor G319).

Phase 4 (mid-3rd to late 4th century)

Ninety-nine fragments of Roman building material (17.1kg) derived from features assigned to Phase 4. The largest deposits were recovered from enclosure G401 (L41) and enclosure G405 (L40), which respectively yielded 5.4kg and 4.3kg. Pieces have an average weight of 172g. They occur in oxidised sand- and shell-tempered fabrics types, which respectively total 99% and 1% (by fragment count) of the assemblage. All are moderately abraded.

Additionally, fourteen pieces of Roman flue and flat tile (1.2kg) were recovered during the trial trenching (Northamptonshire Archaeology 2009, 15).

Tegula fragments constitute 53% of the assemblage (by fragment count) and are of standard type, with rectangular or rounded flanges. Tile thickness ranges from 15mm to 30mm. Two examples have knife-trimmed edges. Signatures, in the form of single or concentric rings, occur on a number of tiles, and several are combed. One piece (46g) recovered from enclosure G401 (L41) has a wear mark and appears to have been reused as a mixing palette.

Bricks total 28% of the assemblage and range in thickness from 30mm to 45mm. Miscellaneous fragments deriving from either bricks or tegulae total 13% of the assemblage.

Imbrices range from 16–17mm in thickness and combed flue tiles from 15–20mm. The presence of the latter indicates the existence of a building with a hypocaust heating system.

Phase 5 (medieval)

Two residual fragments of Roman roof tile (66g) and a piece of post-medieval sand-tempered flat roof tile (60g) were recovered from the fill of medieval furrows L51.

Summary

Although no remains of a substantial Roman building were found within the development area, the quantity of brick and tile would suggest the existence of such a structure in the vicinity.

IV. Coins

Peter Guest

Introduction

Twenty-five Roman copper-alloy coins were recovered during the excavations (twenty-four from phased deposits). The coins are in good condition and only one required cleaning to aid identification. The coins are catalogued in Appendix IV.

Results

All of the coins date to the late Roman period and include three late 3rd-century radiates, four coins from the middle of the 4th century, twelve struck during the years 364–78, and a single small Theodosian bronze from the very end of the Roman period (Table 6.6). The excavated assemblage includes coins that are common from rural sites in southern Roman Britain, although the concentration of coinage from the second half of the 4th century is noteworthy, particularly the quantity of Valentinianic coins from the 360s and 370s. This suggests that the inhabitants of the farmstead at Stretton Road either did not use coins before the later 3rd century, or if they did, that they did not end up in archaeological deposits.

Twenty-one coins were recovered from contexts associated with occupation of the Roman farmstead: six from Phase 3 (mid-2nd to mid-3rd century) and fifteen from Phase 4 (mid-3rd to late 4th century). Of the coins from Phase 3, five originate from the eastern boundary ditch

Date	Issue Period	No. of coins	% of coins
to AD 41	I	-	0.0
41–54	II	-	0.0
54–68	III	-	0.0
69–96	IV	-	0.0
96–117	V	-	0.0
117–138	VI	-	0.0
138–161	VII	-	0.0
161–180	VIII	-	0.0
180–192	IX	-	0.0
193–222	X	-	0.0
222–238	XI	-	0.0
238–260	XII	-	0.0
260–275	XIII	1	47.6
275–296	XIV	2	95.2
296–317	XV	-	0.0
317–330	XVI	-	0.0
330–348	XVII	4	190.5
348–364	XVIII	1	47.6
364–378	XIX	12	571.4
378–388	XX	-	0.0
388–402	XXI	1	47.6
	Sub-total	21	100
Æ: late 3rd–4th century		4	
	Total	25	

Table 6.6: Roman coins

of enclosure G306, within domestic focus L30, including one Constantinian and four Valentinianic issues (RAs 2022, 2023, 2025, 2026 and 2064). This indicates that even though the Phase 3 enclosure ditches went out of use, they were still partially open and being infilled throughout the late Roman period.

The Phase 4 coins include two groups found in deposits within domestic focus L40: five from yard surface G414 (RAs 2029, 2035, 2036, 2042 and 2043) and a further five from the ditch defining enclosure G405 (RAs 2002, 2030, 2031, 2044 and 2037). This last group includes the latest coin from Stretton Road, a Theodosian issue struck in 388–402 (RA 2031), which indicates continued occupation at the end of the 4th century and possibly beyond. Another coin was recovered from the central post-hole of possible stack ring G410.

It is significant that the Roman coins from the site are concentrated around the domestic focus of the farmstead, while only a handful were recovered from peripheral areas of the site. This suggests that the coins were lost near where they most intensively used and, furthermore, that their use was part of the domestic life of the settlement.

V. Other Artefacts

Holly Duncan and Hilary Cool

Introduction and methodology

Ninety-seven Other Artefacts (including twenty-five coins described above) and *c.* 3.1kg of fuel ash slag were recovered during the investigations. Each object was assigned an identification and functional category and was quantified by number and/or weight. A date range was assigned, where applicable, with reference to standard typological works. All ironwork and selected non-ferrous objects were x-rayed by Lincolnshire County Council Heritage Service's Conservation Department. An assessment of the condition of the metalwork was carried out at the same time, and any required stabilisation and repackaging were undertaken; the jet/shale item was consolidated. The x-rays form part of the project archive.

Petrological identification of worked stone was carried out by Dr J. Eyers (Appendix V). Dr H.E.M. Cool analysed the brooches, the harness fitting and the copper alloy waste; her report is included in this discussion. With the exception of flint, the objects are discussed by Phase.

Catalogue descriptions appear at the end of each phase discussion and include both illustrated and non-illustrated artefacts, with the figure numbers provided as appropriate. The phased flint assemblage is discussed as a group, due to its residual nature. Each catalogue entry takes the following format:

* (illustrated) OA 1 (Other Artefact catalogue no.); object type, material, and description; project phasing information Phase L (Land-use area); G (Group); RA (Registered Artefact no.). OA Fig. (figure no.)

Phase 1 (pre-Roman)

No features were assigned to this phase, but a small quantity of flint, comprising two flakes and a combination tool, came from later phases. The combination tool, formed on a thin, elongated primary flake, has one serrated lateral edge with a single notch on the opposing lateral edge; this could date to the earlier Neolithic. Both flakes are

hard-hammer-struck, one with an obtuse striking platform which could suggest a date of late Neolithic into the later Bronze Age.

Phase 2 (mid-1st to mid-2nd century)

Other Artefacts from Phase 2 deposits are restricted to domestic focus L20 and peripheral activity focus L21; they are limited in quantity and not closely dated. Quantities of fuel ash slag were found in secondary and tertiary fills of enclosure ditches G205 (2295.1g), and the fills of roundhouse gully G201 (321g) (both L20). Fuel ash slag is formed when non-combustible materials such as earth, clay or ceramics are exposed to temperatures around 1000 degrees C and flux with ash creating an alkali silicate slag (Bayley 1985, 41). These slags are not indicative of a specific industrial process but simply indicate a fire at high temperatures — in the instance of the fuel ash slag in L20, this could suggest a hearth or hearths within roundhouses G201, G202 or G204 which were periodically cleared. The recovery of a whetstone (OA1) from the fills of G205 does suggest the presence of bladed tools. This silty, micaceous limestone whetstone was probably sourced locally (Appendix V).

Other Artefacts from L21 were equally sparse. A small amount (165g) of fuel ash slag and copper-alloy waste were recovered from enclosure ditches G206. The fragment of casting waste (8.7g) can be seen on the X-radiograph to be full of air bubbles. The vesicular nature would suggest that this was a spill rather than a formal failed casting, as it seems unlikely the smith would have chosen to use metal that probably would have appeared faulty in the crucible. Its presence would appear to hint that some copper-alloy working took place in the vicinity, but the meagre quantity does not suggest industry-level activity.

Phase 2 Catalogue

OA1 Whetstone. Heavily eroded silty limestone (Leicestershire Lias Lower Jurassic). Sub-rectangular in plan, tapering in width and thickness to one end; rectangular in section. Original surface appears to have eroded away (in watery environment?), bedding planes visible. Length 113.5mm; width 28mm; thickness 25mm. Phase 2; L20; G205; RA1014.

Phase 3 (mid-2nd to mid-3rd century)

The non-coinage assemblage from domestic focus L30 is in the main fairly meagre, and no items were found associated with any of the buildings. The fills of enclosure ditches G301 yielded little in the way of evidence for any activities carried out; the fuel ash slag and vitrified clay might suggest a hearth or fire, but the quantities are minor (see Table 6.7). Little can be said about the bone pin or needle tip (OA2). The nail is a flat-headed variety belonging to Manning's Type 1b general purpose nails (Manning 1985, 134); a second nail of the same type was the only Other Artefact found in pit cluster G317. The ditches of enclosure G305 produced a single piece of lead off-cut (OA3). None of these items are diagnostic of particular activities, nor are they closely datable.

Enclosure ditches G306, at the southern end of L30, did however provide dating evidence in the form of a brooch. There are three diagnostic elements to brooch OA4: an upper bow, consisting of a dished cup that would have had a separate element riveted into it; a lower bow, consisting of a fantail; and an unusual pin-fixing arrangement (Fig. 6.4). If the spring mechanism is disregarded, then in overall shape the closest similar brooch

Land-use area	Group	Description	No.	Wt. (g)
30	301	Ceramic fuel ash slag & vitrified clay		67.6
		Iron flat headed nail	1	
		Bone needle or pin tip	1	
	317	Iron flat headed nail	1	
	305	Lead waste/off-cut	1	
	306	Iron flat headed nail	2	
		Copper alloy brooch	2	
		Iron strap fragment (hinge?)	1	
31	302	Iron flat headed nail	1	
	303	Iron padlock casing?	1	
32	309	Lead alloy vessel repair patch	1	
	310	Iron nail shank	2	
		Lead alloy sheet fragment	1	

Table 6.7: Phase 3 Other Artefacts

is an unprovenanced one from East Anglia. Both Hattatt (1989, 43 no. 1481A, fig. 20) and Mackreth (2011, 46 Type AES 2.b2, fig. 28) relate this to the Aesica family of brooches. Both that brooch and OA4, however, lack the hollow-backed, arched upper bow typical of the Aesica, and the outline has more in common with the disc and fantail type (Bayley and Butcher 2004, 170 type 163, fig. 143; Mackreth 2011, 126 Type T 4.1a). The use of enamel on the foot, as seen on OA4, is also much more common on this than on the Aesica, where *repoussé* and moulded curvilinear decoration are more common.

The pin has a vestigial spring of one and a half loops. This is held in place by an axis bar inside the wings, with the ends lodged in carefully formed triangular apertures in the closed ends of the hinge cylinder. An axis bar held in the perforated ends of a spring cover is typical of the Polden Hill type of Colchester Derivative brooches, which were the preferred form of the type in western Britain. Those, however, have a spring that occupies all of the wings, and nowhere have I encountered a Polden Hill brooch with apertures as carefully formed as on OA4. This type of vestigial spring and axis bar arrangement is typical of what Mackreth terms the Nene Group (Mackreth 2011, 88 type CD 6, pl. 58–9; 2009, 140 and 144). The form of brooches of the Nene Group has nothing in common with OA4, however, as they have the typical tapering bow of most Colchester Derivatives. The pin-fixing arrangement is very distinctive, and has not otherwise been much noted. Mackreth sees it as a stage in the development in the east of England from the rearhook type of spring fastening and the true hinged pin.

Aesica brooches are commonest in the early to late 1st century. Disc and fantail brooches were in use early in the final quarter of the 1st century and continued into the 2nd century. The Nene Group also appears to have had a late 1st- into 2nd-century *floruit*. The brooch from East Anglia that shares many similar features with OA4 must have been made in the mid-1st century, as the spring was fastened with a rearhook. This was a relatively short-lived system used only in the middle part of the century, probably because it was so inefficient. The earlier part of the second half of the 1st century was a period of experimentation concerning the best way to hold the pin in place on a two-piece brooch. The various features that come together on OA4 suggest it may well have been made during the earlier part of the final third of the 1st century, when that experimentation was at its peak and various new types were developing.

The cup on the upper bow lacks its central decoration. Disc and fantail brooches sometimes have rivets with decorative heads in the centre of the disc, but the shape and size of the cup suggest that here a larger separate setting would have been riveted on. Opaque red glass beads were used in similar cups on a disc and fantail brooch from Old Penrith (Butcher 1991, 181 no. 622, fig. 89) and on an unusual fantailed brooch from Wattle Syke, West Yorkshire (Martin *et al.* 2013). Other than on some headstud brooches (see Bayley and Butcher 2004, 165), it is noticeable that brooches with such riveted cups are not common. Where riveted cups do occur it is on brooches with fantails, and frequently, as in the case of the Wattle Syke brooch, the individual examples are not closely paralleled. Even where Mackreth has marshalled a few into a group (Mackreth 2011, 127 Type T 4.2, pl. 87 no. 5594) there are only four examples. This too would fit the hypothesis that the features that came together to make up OA4 reflected a possibly short-lived period of experimentation where some elements were retained for future developments (the fantail), and others were discarded (the cups and the pin fixing arrangement). This experimentation was taking place in the northern East Anglian / East Midlands area, judging from the core distributions of the types that have been cited as *comparanda*, which fits in with the recovery of OA4 from a Leicestershire site.

One further point about this brooch may be noted. On either side of the main enamelled motif in the fantail there are two small settings, almost too shallow and slight to be called cells. They retain no evidence of decayed enamel, and there is the possibility that they are just surface corrosion pitting, although the symmetrical position and the fact that such pitting is not seen elsewhere on the brooch argue against this. The possibility exists that these are not cells for enamel but attachment points of some other decoration. One of the Mackreth Type T 4.2 brooches with the cupped setting was decorated in addition with seed pearls (Snape 1993, 44 no. 42, fig. 8), and these small depressions on OA4 would have been the right size, if they were attachment points for similar additional decoration.

Enclosure ditches G306 also produced part of what may be a cylindrical hinge cover from another brooch (OA5), two examples of Manning type 1b general purpose nails (Manning 1985, 134), and a robust strap fragment which may have formed part of a hinge (OA6).

Peripheral fields L31 to the south of domestic focus L30 produced a nail and part of an iron cylindrical case thought to be from a padlock (OA7), which may suggest some occupation of the area, or at least a locked gate.

Considering the extent of the 'ladder' enclosure system L32, the recovered assemblage of Other Artefacts is meagre. Ditches G309 of the northern enclosure block produced a lead plug from a vessel repair (OA8), and one of the sub-enclosures G310 to the south yielded two nail shanks and a fragment of thick, folded and perforated lead sheet (OA9).

Phase 3 Catalogue

OA2 Pin/needle? Bone. Lower shank of pin/needle, tip damaged. Oval in section. Length 29mm; width 5.7mm; thickness 3.7mm. Phase 3; L30; G301; RA1013.

OA3 Waste/off-cut. Lead. Lead sheet: three-quarters of one face has a very irregular (raised bumpy) surface, with a smooth surface from c. 6mm from the edge; the opposing surface is relatively smooth/flat.

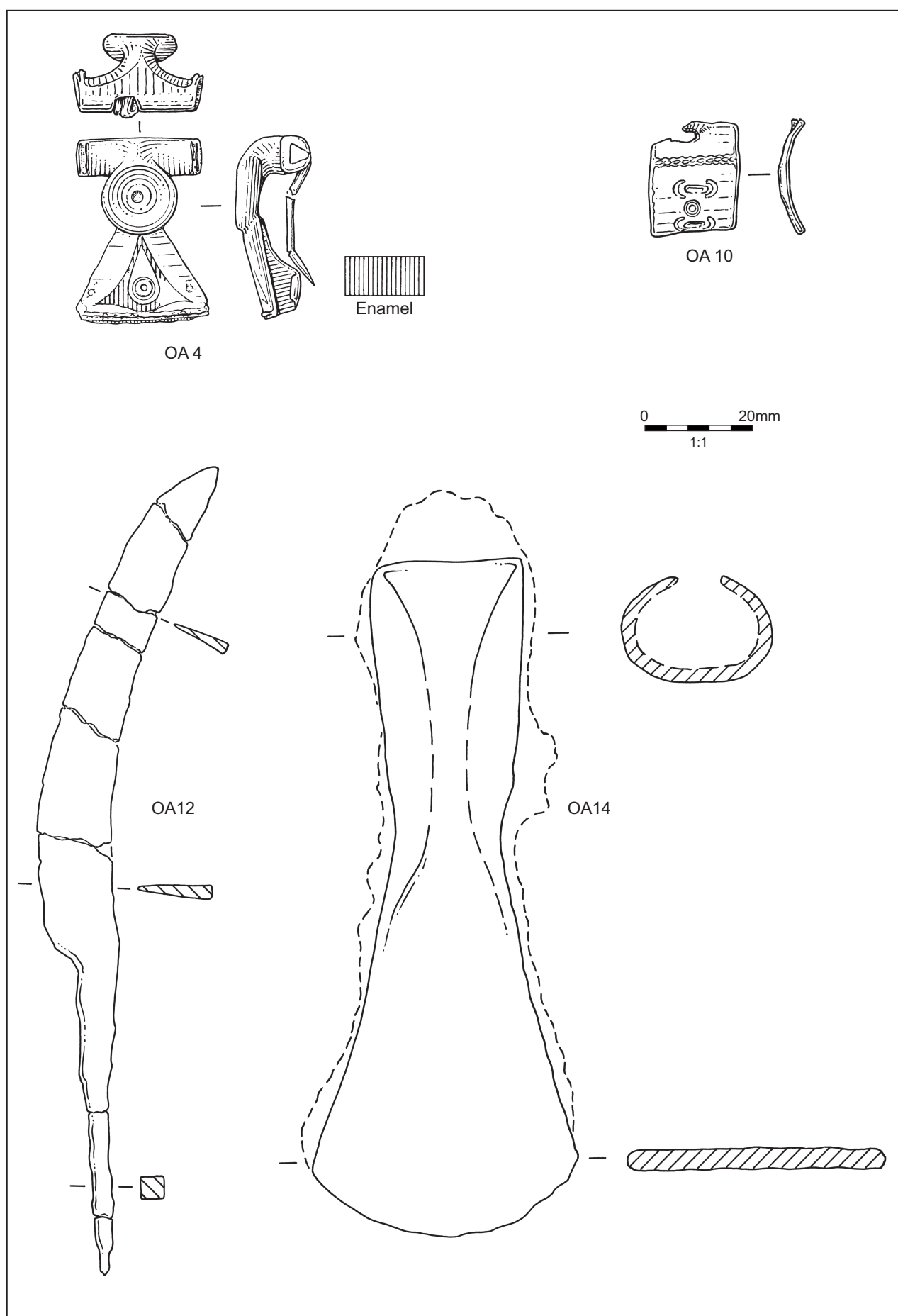


Figure 6.4: Selected Other Artefacts (OAs 4, 10, 12 and 14)

Sheet is bent; one edge looks cut, the other edges broken off. Length c. 60mm straightened; width 33mm; thickness 4.6mm. Phase 3; L30; G305; RA2028.

***OA4** Brooch. Copper alloy. Fantail brooch. Short wings with enclosed hinge case, vertical rib at either end of wings with transverse nicks: hinge case enclosed hinge bar occupying entire length (visible on x-ray) and lodged in triangular perforations in end of wings. Separate wire pin wrapped around in loop one and a half times and hinge bar threaded through centre. Upper bow a circular disc with rounded edges, flat back and concave dished front, circular perforation at centre: fan-shaped lower bow with enamelled pattern on front — triangular outline with reserved central drop with ring and dot cell in base, traces of decayed enamel now appearing green. Two tiny circular shallow cells above lower corners: narrow rib along lower edge of bow with transverse nicks; trapezoidal catch-plate at back. Length 35mm; width wings 24mm. Phase 3; L30; G306; RA2039; Fig. 6.4.

OA5 Uncertain. Copper alloy. Incomplete semi-cylindrical casing, possibly from a brooch? C-shaped in cross-section. Length of cylinder 12mm; breadth 8mm. Phase 3; L30; G306; RA2027.

OA6 Fragment. Iron. Robust strap fragment with slight curvature, one end broken, opposing end squared. Rectangular in cross-section. Possibly part of a strap hinge? Length 53mm; width 37mm; thickness 10.3mm. Phase 3; L30; G306; RA2005.

OA7 Uncertain. Iron. Part cylindrical casing which has a narrowed and collared round opening at one end (incomplete), opposing end broken off. About one-third of the circumference of the casing/ferrule survives. Padlock case? Length 49.8mm; circumference c. 24mm; opening diameter c. 9mm. Phase 3; L31; G303; RA2051.

OA8 Vessel patch. Lead. Small, waisted vessel patch/bung. Length 18mm; width 17mm. Phase 3; L32; G309; RA2046.

OA9 Folded sheet. Lead. Relatively thick piece of lead sheet, ends and one side folded in. A small rectangular perforation is visible on one face. Possibly folded for recycling? Length 64mm; width 38mm; sheet thickness c. 3.4mm. Phase 3; L32; G310; RA2052.

Phase 4 (mid-3rd to late 4th century)

Although the now familiar suite of small quantities of nails, lead sheet/scrap and fuel ash slag are present within the Phase 4 assemblage, a wider range of objects was also recovered. This affords some insight into the activities undertaken on the farmstead and, perhaps, its economy. The majority of the assemblage came from domestic focus L40.

Phase 4 sees the first instances of hobnails, albeit in limited quantities — one in L40 (enclosure ditches G412) and two in L41 (possible structure G407 and enclosure ditches G413) — suggesting that the inhabitants had adopted Roman footwear. Further evidence of at least outward 'Romanisation' comes in the form of a fragment of a probable armlet or bracelet (OA10) found in enclosure ditch G403 (L40). OA10, although incomplete and very worn, appears to be one of the broader and flatter forms of bracelet; it is decorated with a line of vertical cable pattern and ring-and-dot (Fig. 6.4). This form of bracelet was in use in the later 1st and 2nd centuries, as can be seen by examples from Colchester, Essex (Crummy 1983, fig. 40); Verulamium, Hertfordshire (Waugh and Goodburn 1972, fig. 32 nos 30–31); and Baldock, Hertfordshire (Stead and Rigby 1986, fig. 52 nos 163–6). The only other item of dress and adornment is a short cylindrical or drum-shaped bead of opaque green glass with blue tinge (OA11) from enclosure ditches G412 (L40). This is unfortunately a long-lived form (Guido 1978, 95).

Only one knife (OA12; Fig. 6.4) was recovered, from enclosure ditch G402 (L40). Although in several pieces, it appears to conform to Manning's type 23 (1985, 118).

Land-use area	Group	Description	No.	Wt. (g)
40	402	Iron knife	1	
		Iron blade fragment (?reaping hook)	1	
		Lead alloy waste/scrap	1	
		Fuel ash slag & vitrified clay		245.5
	403	Copper alloy bracelet fragment	1	
		Stone millstone	1	
		Fuel ash slag		55
	404	Shale spindle whorl	1	
		Iron strip (perforated)	1	
	405	Iron flat-headed nail	3	
		Iron nail shanks	3	
		Iron stylus	1	
		Stone quern	3	
		Iron sheet (perforated)	1	
	410	Iron flat-headed nail	1	
		Iron blade(?) fragment	1	
	412	Iron nail (domed head)	1	
		Stone shingle	1	
		Glass bead	1	
		Iron hobnail	1	
	414	Iron flat-headed nail	2	
		Lead alloy vessel repair	1	
41	401	Iron flat-headed nail	1	
		Iron nail shank	2	
		Iron spud	1	
		Iron stylus(?)	1	
	406	Iron flat-headed nail	1	
	407	Iron nail shank	1	
		Lead alloy waste		81
		Iron hobnail	1	
	413	Iron hobnail	1	
		Lead alloy waste		26

Table 6.8: Phase 4 Other Artefacts

This is an Iron Age type which continued into the Roman period, passing out of use in the late 1st or 2nd century (Manning 1985, 118). An example from Dragonby, Lincolnshire was found in deposits containing Flavian-Trajanic samian ware (Manning and McDonald 1996, 303 and fig. 11.39 no. 85).

Remnants of bladed implements were also recovered from G402 (OA13) and G410, both in L40. The fragment from G402 has two straight sides which abruptly curve before the break; this could have formed part of a reaping hook (*e.g.* Manning 1985, pl. 23 F40). Too little of the blade fragment from G410 survives to suggest whether it was part of a knife, shears or reaping hook. Definitely associated with agriculture is the spud (OA14) from enclosure ditches G401 (L41). These tools could be used for weeding or for cleaning the share and mould board of a plough; Manning suggested that the broader-bladed forms, such as OA14, may have been plough spuds and the more pointed ones weeding spuds (Manning 1985, 49). Rees (1979, 330) notes that find-spots are scattered widely around Britain, especially in areas of high Romanisation, and have an almost exclusively civil distribution. As a type, however, they are poorly dated.

The earliest evidence for querns came from Phase 4 deposits. They were restricted to domestic focus L40: a small millstone or large quern OA15 in G403 (Fig. 6.5); and three fragments of quern in G405 (*e.g.* OA16, Fig. 6.5). All are of Millstone Grit, originating from the Pennines (Appendix V). At Dragonby it was suggested that the instances of gritstone querns could be dated to the later Roman period, when the market for this stone type widened and they first began to be introduced into south-eastern England in quantity (Wright 1996, 371).

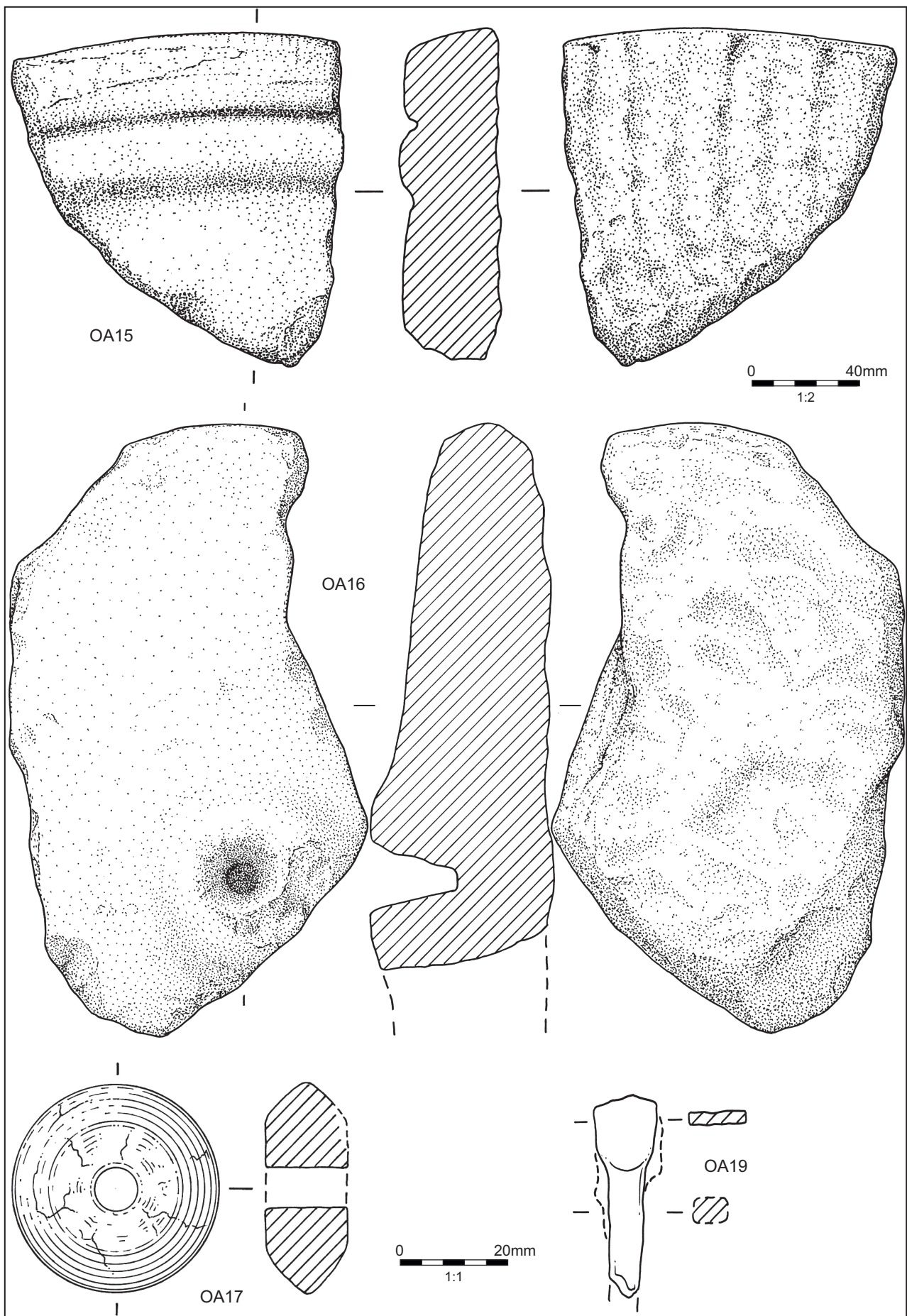


Figure 6.5: Selected Other Artefacts (OAs 15, 16, 17 and 19)

The only certain evidence of craft activity is represented by a lathe-turned shale spindle whorl OA17 that was found in enclosure G404 (L41) (Fig. 6.5). This whorl is unlikely to predate the late 2nd century (Allason-Jones 2011, 2) and could well date to the 3rd or 4th centuries (Lawson 1976, 272 and fig. 14 no. 107).

Two possible styli were tentatively identified: OA18 from G405 and OA19 from G401 (L40 and L41 respectively) (Fig. 6.5). Both are iron and only retain the 'eraser' end and part of the upper shaft, so certain identification as to form is not possible, but it is more than likely that they are of Manning's type 1, the most common form (Manning 1985, 85). A number of such styli were identified from Dragonby, only one of which came from a stratified context associated with pottery of up to the later 3rd century AD (Manning and McDonald 1996, 297–301, fig. 11.36 no. 51 and fig. 11.37 nos 52–56).

Enclosure G412 (L40), on the edge of the excavation, produced part of a flat, relatively thin (18.9mm) slab of dark grey, slate-like stone, retaining one cut and slightly bevelled edge. This has been tentatively identified as a possible roofing slate. The stone is a silty limestone of the Tarporley Siltstone Formation in Leicestershire (Appendix V). Whether this did form a roofing slate is debatable, but it is perhaps noteworthy that roofing slates from the Roman villa near Drayton and the Romano-British settlement at Hamilton, North Humberstone, both within c. 16km of Stretton Road, produced roofing material of Swithland Slate (Cooper *et al.* 1989, 14–15; ULAS 2004, 14).

Phase 4 Catalogue

***OA10** Armlet fragment? Copper alloy. Rectangular strip with remains of broken though circular perforation at one end. Strip bent into a 'C' shape and decorated with a vertical cable pattern c. 3mm distant from the perforation, and at least two ring-and-dots to the right of the border. Length 20mm; width 15mm; thickness 1.6mm. Phase 4; L40; G403; RA2045; Fig. 6.4.

OA11 Bead. Glass (opaque green glass with slight blue tinge). Short cylindrical or drum-shaped bead. External diameter 5.5mm; height 3.2mm; central perforation diameter c. 1.75mm. Phase 4; L40; G412; RA2021.

***OA12** Knife. Iron. Blade portion in six joining pieces; handle in three pieces. Rectangular-sectioned tang. The back of the blade curves up from the tang to the point, which is at a higher level than the tang. The blade edge, stepped down from the tang, rises in convex curve to the tip. Estimated length 140mm; blade width c. 14.8mm. Phase 4; L40; G402; RA1015; Fig. 6.4.

OA13 Reaping hook / leaf-cutting hook? Iron. Two joining pieces, straight sides with what appears to be abrupt/sharp curve before break, opposing end also broken. Length 70mm; width 23mm. Phase 4; L40; G402; RA1010.

***OA14** Spud. Iron. Socketed spud with flared blade with convex edge. The socket appears on the x-ray to have a portion of one side broken away. Maximum blade width 51.3; total length 142mm. Phase 4; L41; G401; RA1011; Fig. 6.4.

***OA15** Millstone. Millstone grit (Carboniferous Pennines). Fragment of the edge of an upper stone, smoothed upright skirt, radiating grooves formed by interlinking pitting on grinding surface. Upper surface: two grooves forming lipped edge, one groove set c. 30mm from outer edge, second groove c. 27mm distant from first. Area between two grooves slightly raised and rounded in profile. Estimated diameter 730mm; thickness 39mm. Phase 4; L40; G403; RA2012; Fig. 6.5.

***OA16** Quern. Millstone Grit (Carboniferous Pennines). About a quarter of the lower stone of a flat rotary quern retaining spindle hole, which does not perforate the thickness of the quern. Worn, convex grinding surface with 'collar' around spindle hole, straight skirt, roughly pecked

reverse surface of lower stone. Estimated diameter 320mm; maximum thickness 68mm. Phase 4; L40; G405; RA2008; Fig. 6.5.

***OA17** Spindle whorl. Shale. Lathe-turned bi-conical spindle whorl. Nearly complete. Two flat plain surfaces, sides of whorl sharply angled to create bi-conical shape. Cylindrical central hole. External diameter 39.3mm; height 15.1mm; perforation diameter 7.2mm. Phase 4; L40; G404; RA2003; Fig. 6.5.

OA18 Stylus? Iron. Head and upper shank of stylus, head very slightly splayed and flattened to form eraser. Incomplete stem, rounded rectangle in cross-section, broken at or before mid-point. Length 40.5mm; stem 8.5mm × 8mm. Phase 4; L40; G405; RA2019.

***OA19** Stylus? Iron. Head and upper shank of stylus. Head flattened and splayed, with shoulder at junction of head and rounded square-sectioned shank/shaft. Length 39.2mm. Phase 4; L41; G401; RA2062; Fig. 6.5.

OA20 Stone shingle? Silty limestone (Tarporley Siltstone Formation, Leicestershire, Triassic). Flat laminated 'slab', relatively thin, retaining one cut edge, very slightly bevelled. Length 132mm; width 120mm; thickness (maximum) 18.9mm. Phase 4; L40; G412; RA2017.

Phase 5 (Medieval)

On the whole, the small assemblage of Other Artefacts from the medieval furrows is not closely datable. The finds could all have originated from disturbed Roman deposits — the nails are either incomplete or of the flat-headed general purpose type, and the annular ring is commonly found in both Roman and medieval contexts. The one exception to this is strap mount OA21, which clearly comes from a set of ornate horse trappings (Fig. 6.6).

OA21 would have articulated with a pendant at the lower edge and have been permanently fastened to a horizontal strap above. The reconstructions of the set of trappings from Xanten show how such junctions would have worked and where they were positioned (Jenkins 1985, figs 15–17). Such 1st-century junction loops tend to have looped attachments at their backs, whereas from the 2nd century they tended to be riveted directly to the straps, as with OA21. A very similar piece to OA21 has been recovered from Broadway House, Caerleon, from within the legionary fortress (Chapman 2005, 139 no. Tg29). No contextual information is available but the later history of occupation at Caerleon would make a 2nd- to early 3rd-century date likely. The notching around the edge of the plate might favour a mid-2nd-century date, as similar decoration occurs on studs found in contexts of that date at, for example, Barburgh Mill, Dumfriesshire (Breeze 1974, 162 no. 41) and Castleford, West Yorkshire (Cool and Philo 1998, 104–5 and fig. 38 nos 523 and 556).

Civilian horses needed a harness as much as military ones, but this piece comes from the sort of elaborate trappings for saddle horses that were a feature of cavalry equipment. It stands as a witness to a military association with the site at some point in the 2nd century, though whether that was transient or the result of someone on policing duty cannot be decided on this piece alone.

Land-use area	Group	Description	No.
51	501	Iron nail	3
		Copper alloy annular ring	1
		Copper alloy strip fragment	1
		Lead alloy fragment rolled into a ball	1
		Copper alloy harness mount	1

Table 6.9: Phase 5 Other Artefacts

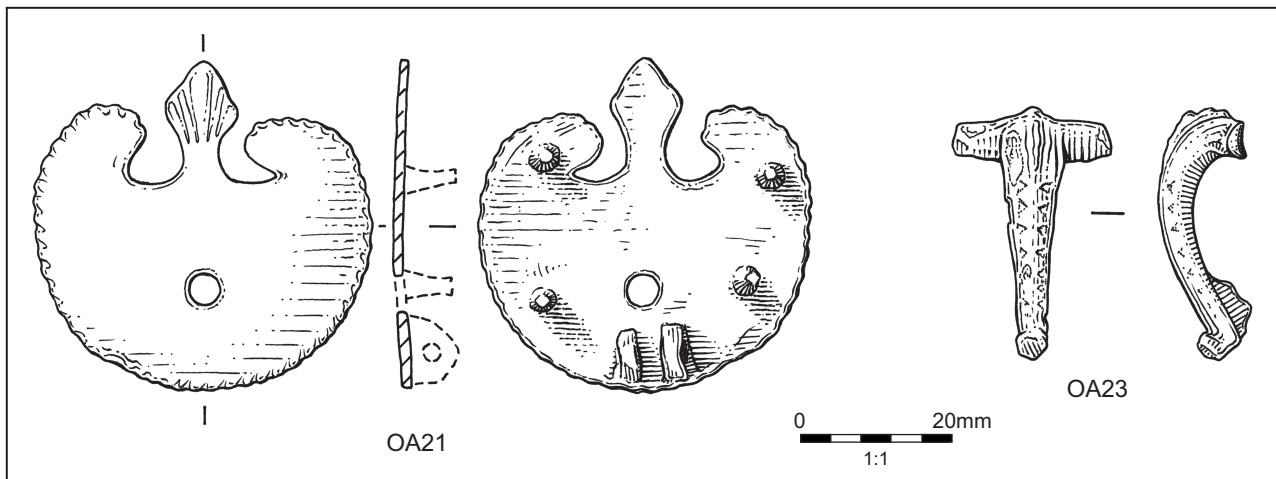


Figure 6.6: Selected Other Artefacts (OAs 21 and 23)

Phase 5 Catalogue

***OA21** Harness junction. Copper alloy. Crescentic plate with diamond-shaped central projection with vertical grooves, outer edge notched; small circular perforation centrally; on back, a double perforated lug is situated along the lower edge, positioned centrally to the hinge-fitting pair of rivets which are cast in one with front plate; rivets have burred ends. Length 44mm; width 46mm; thickness plate 2mm; depth including rivet 8mm. Phase 5; L51; G501; RA 2057; Fig. 6.6.

Phase 6 (Modern)

Ploughsoil deposits produced a small assemblage of mixed date. The cast disc button OA22 has a petalled motif and integral perforated tab loop, and is 17th-century or later in date. The lead-alloy waste/scrap sheet fragment and the vessel patch are not closely dated, but as similar items were recovered from Phase 3 and 4 deposits, it is likely that they derived from the underlying Roman farmstead.

Brooch OA23 is in very poor condition, having lost all of its pin-fixing arrangement, parts of the wings and the upper part of the bow. The diagnostic features are the remains of a crest on the upper part of the bow, traces of triangular cells for enamel down the front with apparently reserved solid diamond cells in between, and a forward-facing foot-knob (Fig. 6.6). The features would be consistent with its being similar to one found at Jewry Wall (Kenyon 1948, 251 no. 14). This did not fit happily into the Hull Typology which Bayley and Butcher's (2004) synthesis outlined. Nor does the Mackreth system include a type like this, though the Jewry Wall example is included within a form that has the salient features together with serrated edges to the bow which this piece lacks (Mackreth 2011, 106, type Headstud 2d, pl. 72 no. 7184). The reserved diamonds seem to be a feature of East Midland headstud brooches. In Leicester they have also been noted on a brooch from Causeway Lane (Mackreth 1999, 249 no. 7, pl. 118 = Mackreth 2011, 105 Headstud Type 2b.2) as well as on two from Vine Street (ULAS 2009b). An example is also said to have been

found in Northamptonshire (Hattatt 1985, 102 no. 421). The example from Jewry Wall came from a context dated to the earlier 2nd century (c. 125–30), whilst that from Causeway Lane came from one assigned to the mid-2nd to early 3rd century. Mackreth argued that the features on the Causeway Lane brooch supported a date of manufacture prior to c. AD75, and this earlier date was supported by the fact that one of the Vine Street brooches came from a mid-1st- to early 2nd-century context. So again, on balance, a later 1st-century date is probably appropriate for the manufacture of this piece.

Phase 6 Catalogue

OA22 Button. Copper alloy. Cast disc button, disc convex in section with slightly thickened 'lip' and integral flat rectangular-sectioned shank with circular perforation at its end. The slightly domed obverse face of the disc has a multi-petal motif (7 to 8 petals) radiating from central point. Face damaged. Diameter 27mm; height 9.8mm. Phase 6; L60; G602; RA2001.

***OA23** Headstud-related brooch. Copper alloy. Heavily corroded, and some details obscured and missing. Front of short wings with hollow back; broken crest at top; bow tapering to projecting foot-knob, front has traces of two rows of triangular cells. Length 34mm; width wings 21mm. Phase 6; L60; G602; RA2060; Fig. 6.6.

Summary

There is little indication of prehistoric activity within the excavated area. The flint assemblage comprises a single combination tool of suggested early Neolithic date and two possibly later Neolithic hard-hammer-struck flakes, all of which were residual finds.

A feature of the assemblages of Other Artefacts from Phases 2 and 3 is their small size and generally uninformative nature. It is not until Phase 4 that some sense of the farmstead's economic basis can be gleaned from the assemblage. It is also apparent that typologically dated finds were found residually in later phases, presumably as a result of the length of occupation, with discarded items re-emerging where deposits were worked over. The increased numbers of finds in Phase 4 may also reflect the fact that this is when the settlement was abandoned.

Although the assemblage from late 1st- and early 2nd-century (Phase 2) deposits cannot confirm the date of this activity, it is evident from residual finds from Phases 3, 4 and 6 that the farmstead was probably established in the later 1st century. The various features that come together on fantail brooch OA4 suggest that it may well

Land-use area	Group	Description	No.
60	602	Copper alloy brooch	1
		Copper alloy button	1
		Lead alloy vessel patch/repair	1
		Lead alloy waste/scrap	1

Table 6.10: Phase 6 Other Artefacts

have been made during the earlier part of the final third of the 1st century, a short-lived period of experimentation in the northern East Anglian / East Midlands area when some brooch elements were retained for future developments (the fantail), and others were discarded (the cups and the pin-fixing arrangement). Headstud-related brooch OA23 from ploughsoil deposits dates to a similar period. Although battered, it retains traces of triangular cells for enamel down the front with apparently reserved solid diamond cells in between, a feature of headstud brooches from the East Midlands. Other items that probably originated from activity during the later 1st and earlier 2nd century include a fragment of a broad, flat bracelet (OA10; Phase 4) and a knife of Manning type 23 (OA12; Phase 4).

While the number of items of personal adornment dating to the later 1st and early 2nd century is limited, there is a total lack of such items (excluding hobnails) typologically dated to the later 2nd to 4th centuries. Although the 3rd century witnessed a decline in the use of the brooch in Britain generally, bracelets gained popularity, and it is surprising that none of the bangle-type bracelets are present within the assemblage. Hair pins and toiletry items are also conspicuous by their absence. This might suggest a change in fortunes of the occupants, and/or greater concentration on subsistence-related activities. The only item that can be typologically dated to the later 2nd century is harness junction OA21, found in a medieval furrow. This piece comes from the sort of elaborate trappings for saddle horses that were a feature of cavalry equipment and indicates a military presence on the site, be it transient or the result of someone on policing duty.

The majority of the Other Artefact assemblage is utilitarian and subsistence-related. Although these items were

concentrated in Phase 4 deposits, this is likely to be the result of the careful curation of tools from earlier phases; what is visible in the Phase 4 deposits is more reflective of the point of the farmstead's abandonment. The charred plant remains and faunal assemblage (see Ch. 7) indicate that the economy of the farmstead included mixed farming, with both cereal production and animal husbandry. This suggestion is supported by the finds of a spud (OA14) and at least one blade of a small reaping or leaf-cutting hook (OA13), along with millstone and quern fragments attesting to grain processing. The lathe-turned bi-conical shale whorl OA17 (Phase 4) provides proof that wool/fibre-spinning was carried out.

If, as suggested by Browning (Ch. 7, p. 75), some of the animal stock was taken to market, then the two possible styli from Phase 4 deposits (OA18 and OA19) may have been used to record transactions. Although coinage was recovered (see Appendix IV), there is limited evidence for the purchase of other goods. The late 1st-century brooches suggest access to regional markets, and the millstones and querns indicate that there must have been trading links with the Pennine area in the later Roman period. It is noteworthy, however, that no glass vessels were recovered — even the humblest of rural settlements usually produces a few sherds from prismatic bottles. As noted above, there is also a lack of toiletry implements and jewellery items of the later 2nd to 4th centuries. This absence could suggest that the fortunes of the settlement were in decline in from the 2nd century, but it could also relate to the primary *raison d'être* of the farmstead, and the priorities of its residents, as opposed to wealth or lack of it.

Chapter 7

Ecofacts

I. Animal bone

Jen Browning

Introduction and methodology

Specimens were identified with reference to comparative modern and ancient skeletal material held at the School of Archaeology and Ancient History, University of Leicester. Information was compiled on a database with facility for recording data on taxa, bone element, state of epiphyseal fusion and completeness, in order to elicit information on species proportions, skeletal representation, age and preservation. Where possible, the anatomical parts present for each skeletal element were recorded using the 'zones' defined by Serjeantson (1996), with additional zones ascribed to mandibles based on Dobney and Reilly (1988) and a simple system applied to skulls by the author (four commonly found recordable points were defined on each side of the skull to make the assessment of zones present rapid and comparable: pre-maxilla; upper and lower orbit; and occipital condyle). Preservation was assessed with reference to Harland *et al.* (2003). Joining fragments were re-assembled and the resulting specimen counted as a single fragment. The location and nature of modifications such as burning, gnawing and pathologies were also recorded. Butchery marks were located by zone, where feasible, categorised using simple codes, and described. Measurements were taken as appropriate, following von den Driesch (1976), Payne (1969) for sheep/goat metacarpals, and Payne and Bull (1988) for pigs. Sheep and goat bones are notoriously similar, and fragments were therefore recorded as sheep/goat unless they could be positively separated. Species proportions were calculated using Number of Identified Specimens (NISP), Minimum Number of Elements (MNE), and Minimum Number of Individuals (MNI). For MNE and MNI, the raw counts for skeletal elements were first standardised using the zones recorded, to ensure that only non-repeatable parts were included. For analysis of carcass parts present, the results were made comparable across species by dividing by the number of times the element naturally occurred in the body.

Age at death was assessed for the three main species using a combination of epiphyseal fusion and dental eruption and attrition. For the purposes of analysis, 'fusing' specimens (defined as where the fusion line was clearly visible) were considered to be fused. Although there is no definitive sequence and age at which epiphyseal fusion of each element occurs, it is possible to use the ranges provided by various authors as a guide. This report follows the figures from Silver (1969), grouping epiphyses into 'early', 'middle', 'late' and 'final' after O'Connor (2003, table 34). Recording of tooth-wear followed Grant (1982) and the resulting wear stages were then grouped into age categories following O'Connor (2003, table 31; 1988, 85) (Table 7.1).

Cattle and Sheep Mandibles

N	Neonatal	DP4 unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, LM1 not in wear
I	Immature	LM1 in wear, LM2 not in wear
SA	Sub-adult	LM2 in wear, LM3 not in wear
A	Adult	LM3 in wear
E	Elderly	Dentine exposure to or beyond stage j

Pig Mandibles

N	Neonatal	DP4 unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, LM1 not in wear
I	Immature	LM1 in wear, LM2 not in wear
SA	Sub-adult	LM2 in wear, LM3 not in wear
A	Adult	LM3 in wear
E	Elderly	Three main zones of dentine exposure across LM3 merging (stage j)

Table 7.1: Age categories for mandibles from sheep/goat and pig (after O'Connor 1988; O'Connor 2003)

Suitable deposits were routinely sampled for charred plant remains and small bones, a strategy supplemented by the taking of spot samples of particularly rich deposits. Selected, well dated samples were wet-sieved in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The purpose of examining the bone from the sieved samples was twofold: to identify bones from small mammal, birds and fish species that would not otherwise be recovered; and to check the recovery rates of the larger species. Unfortunately, the samples produced mainly tiny undiagnostic fragments of mammal bones. Consequently, the material could add little to the information from the hand-recovered material. A separate record of the material from coarse fraction and flots was retained.

Quantity and preservation

Quantity

Faunal material, totalling 2,835 hand-recovered fragments, derived from features assigned to all phases (Table 7.2). Phase 4 features produced the largest proportion of bones (63%), suggesting that the deposits were not extensively re-worked after the end of occupation.

Surface condition and fragmentation

The surface condition of most bones was generally considered good, therefore allowing the recognition of butchery marks, pathologies and other modifications that might be present (Fig. 7.1). However, the issue of fragmentation was highlighted by the fact that refitting of conjoining fragments reduced the total number of hand-recovered fragments from 3,799 to 2,835. Fragmentation patterns in the assemblage were examined following Holmes and Browning (2011). This method is still undergoing testing, but aims to measure the degree of fragmentation using the number of zones recorded per bone (Serjeantson 1996), to supply a numeric value which can be compared

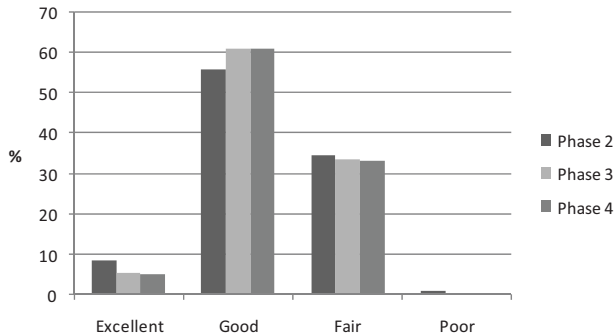
Phase	Nature of archaeological remains	No. fragments	Relative proportion of assemblage %
2	Farmstead with domestic focus and peripheral fields	219	7
3	Farmstead with domestic focus (possible roundhouse), ladder enclosure system and peripheral fields	795	28
4	Farmstead comprising domestic focus (rectangular building, yard <i>etc.</i>) and peripheral fields,	1,793	63
5	Furrows	28	1
Total		2,835	

Table 7.2: Relative proportion of hand-recovered animal bones assigned to each phase

with other samples. Unzoned fragments here are called '0' and are classed together with bones that only have one zone present. Complete bones have eight zones, therefore the number of zones can potentially range between one and eight. Figure 7.2 shows the proportion of specimens at each stage of completeness and the results suggest that there were very similar patterns of fragmentation in the three main phases. Most bones in the assemblage had a maximum of one zone present, and only a small proportion of bones (*c.* 2%) were complete. These tended to be the more compact bones such as phalanges, astragali and vertebrae. The results were used to calculate a Fragmentation Index (F.I.), which is concerned with completeness rather than fragment size. The F.I. for Phase 1 was 0.20 and was 0.19 in both Phase 2 and Phase 4, which indicates high fragmentation in all phases.

Gnawing

The prevalence of gnawing may also suggest residual or redeposited material. Gnawing occurred rarely in the assemblage, affecting 3% (*n*=88) of the total number of specimens, which could indicate that bones in all phases



Excellent: majority of surface fresh or even slightly glossy; very localised flaky or powdery patches. Good: lacks fresh appearance but solid; very localised flaky or powdery patches. Fair: surface solid in places, but flaky or powdery on up to 49% of specimen. Poor: surface flaky or powdery on over 50% of specimen

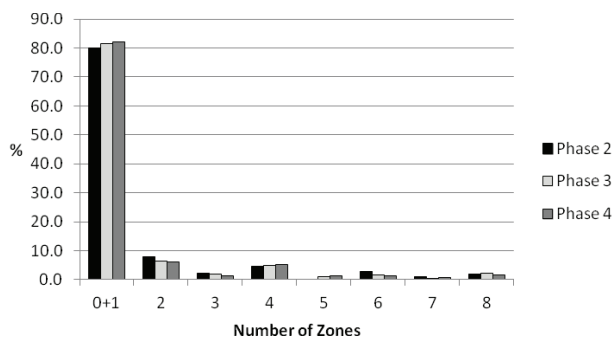
Figure 7.1: Animal bone surface preservation (after Harland *et al.* 2003)

Figure 7.2: Animal bone fragmentation: the proportion of bones with each number of zones present

were rapidly buried and therefore rarely available to scavengers. However, since the number of specimens has been significantly inflated by large numbers of undiagnostic shaft fragments, a second calculation included only the zoned bones, as this may give a more meaningful result. This showed that 12% of zoned bones were gnawed overall. A scan of the proportions of gnawed bones in each Land-use area (L) revealed concentrations of over 10% in several ditches, as well as an external surface, associated with the domestic foci of the Phase 4 farmstead and furrows in Phase 5 (Table 7.3). Although the fragment number was lower, there does appear to be a higher proportion (22%) of gnawed bones in Phase 2 deposits, compared with 11% and 12% in Phases 3 and 4.

Phase	Land-use area	Feature type	Gnawed (N)	Total zoned bones (N)	% gnawed
2	20.02	Ditches	8	29	28
3	30.02	Ditches	11	74	15
		Pits	1	7	14
4	40	External surface	2	7	29
	40.02	Ditches	13	89	15
	40.03		5	45	11
	41.02		21	169	12
5	51.02	Furrows	2	6	33

Table 7.3: Concentrations of gnawed zoned bones over 10% (groups contain a minimum of five specimens)

Burnt Bone

Burnt bone was only rarely encountered in the assemblage (*n*=10) and did not occur in any significant spatial concentrations (Table 7.4). The burnt fragments were a mixture of charred and scorched bones with a smaller number of calcined fragments. Most of the charring and scorching probably occurred during routine cooking activities, and in a couple of cases, scorching on the interior surface showed that the breakage had occurred before exposure to fire (perhaps broken to access the marrow). Burning on an antler fragment was likely to have resulted from non-culinary activities such as bone working.

The Taxa

Species Representation

Table 7.5 shows the raw counts of identified bones (Number of Identified Specimens: NISP) from the hand-recovered assemblage. The dominance of cattle in Phases 2 to 4 is evident, with the second most common taxon, sheep/goat, contributing considerably fewer bones. Less common mammals include horse, pig, and to a lesser extent dog. Wild animals were represented only by red deer. Bird bones were scarce — only a small number of domestic fowl bones and a fragment tentatively identified as goose were present; the only wild bird identified was crow. There were no bones belonging to small mammals, fish or amphibians.

Phase	Land-use area	Taxon	Bone	Type
2	20.02	Large mammal	Shaft fragment	Partial (scorch mark)
	21.02	Sheep/goat	Radius	charred (black)
3	30.02	Medium mammal	Shaft fragment	calcined (grey/white)
		Cattle	Radius	Light brown/pink/grey
	30.03	Medium mammal	Shaft fragment	charred (black)
		Red deer	Antler	Light brown/pink/grey burning on burr
		Large mammal	Shaft fragment	calcined (grey/white)
4	31.02	Large mammal	Humerus	Partial (scorch mark)
	40	Sheep/goat	Partial skeleton	Calcined (G401)
	41.02	Cattle	Humerus	Partial (scorch mark) on lateral side of trochlea
			Radius	Light brown/pink/grey on proximal shaft

Table 7.4: Summary of burnt animal bone

Taxa	Phase 2		Phase 3		Phase 4		Phase 5		Total
	No.	%	No.	%	No.	%	No.	%	
Cattle <i>Bos taurus</i>	46	58	141	59	343	61	4	29	534
Sheep/Goat <i>Ovis/Capra</i>	19	24	63	26	84	15	9	64	175
Sheep <i>Ovis aries</i>					4	1			4
Pig <i>Sus scrofa</i>	4	5	12	5	24	4			40
Horse <i>Equus sp.</i>	9	11	17	7	91	16	1	7	118
Dog <i>Canis domesticus</i>			2	1	6	1			8
Red deer <i>Cervus elaphus</i>			1	<1	4	1			5
Deer <i>Cervus sp.</i>					1	<1			1
Human <i>Homo sapiens</i>	1	1	1	<1	2	<1			4
Domestic <i>Gallus sp.</i> Fowl			3	<1	2	<1			5
Crow <i>Corvus corax</i>					1	<1			1
cf Goose <i>Anser sp.</i>	1	<1							1
Total identified	80		240		562		14		896
Large mammal	120		413		1019		11		
Medium mammal	10		88		115		1		
Catsize or smaller			1						
Indeterminate	9		53		97		2		
Grand Total	219		795		1,792		28		2,835

Partial skeletons counted as '1'

Table 7.5: Hand-recovered animal bone (NISP) and percentages

The bones from Phase 5 constituted the smallest assemblage and consisted of twenty-eight specimens, among which cattle metapodia, sheep/goat limb and mandible fragments, and a horse phalanx were identified. No further analysis on these remains was carried out since they were mostly recovered from furrows and have little archaeological significance.

Since the larger mammal bones have the potential to fragment into more pieces than smaller bones, the NISP count could have overestimated the number of large mammals. Further methods of quantification were therefore used to help address the bias, such as Minimum

Number of Elements (MNE), which only includes fragments that could not have come from the same element. The Minimum Number of Individuals (MNI) was the third quantification method: this indicates the lowest number of animals that could have been present in order to generate the assemblage, and is not intended as an estimation of the actual numbers of animals present at the site. MNE and MNI confirmed that cattle were the dominant species in the Roman phases (Table 7.6). Both NISP and MNE suggest that the proportion of sheep/goat declined between the early and the late phases, but this is not reflected using MNI. Pigs were poorly represented in all phases, with horse bones more common in every phase.

Sieved Samples

Very few identifiable fragments were recovered from the sieved samples, which could therefore contribute only a small amount of additional information on the taxa already encountered (summarised in Table 7.7). The bones were predominantly sheep/goat and were usually phalanges and teeth, small elements that might easily have been missed during hand-excavation of the heavy clay substrate. Occasional cattle and horse bones, including a cattle mandible, were also recovered. No small mammal, bird or fish remains were retrieved, which probably reflects the high fragmentation and variable preservation already noted.

Cattle

Cattle bones dominated in Phases 2 to 4 and occurred in all feature types. The lack of polled skulls and the presence of horn-core fragments in all phases indicated that the cattle were of a horned type typical of the period. Where it was possible to tell, the horns appear to have been short with a slight curve but no torsion (twist). The

Taxa	Phase 2				Phase 3				Phase 4			
	MNE	%MNE	MNI	% MNI	MNE	%MNE	MNI	% MNI	MNE	%MNE	MNI	% MNI
Cattle	32	49	2	25	108	58	4	25	186	53	12	43
Sheep/Goat	18	28	2	25	45	24	5	31	72	20	6	21
Pig	4	6	1	12.5	10	5	2	13	21	6	2	7
Horse	9	14	1	12.5	17	9	1	6	56	16	3	11
Dog			0	0	2	1	2	13	6	2	1	4
Red deer			0	0			0	0	1	<1	1	4
Human	1	2	1	12.5			1	6	1	<1	1	4
Domestic Fowl			0	0	3	2	1	6	2	<1	1	4
Corvid			0	0			0	0	1	<1	1	4
Goose	1		1	12.5			0	0			0	0
Total identified	65	100	8	100	185	100	16	100	346	100	28	100

Table 7.6: Hand-recovered animal bone (MNE and MNI)

Phase	Land-use area	Group	Cattle	Sheep/goat	Horse	Total (all frags)	Elements	Feature type
2	20	201				5		Ditch
				3		8	Teeth	Ditch
	20	202		1		7	phalanx	Ditch
	20	205				1		Ditch
	20.02	205.02				5		Ditch
	21.02	206.05	1	1		12	phalanx,	Ditch
Total			1	5	0	38		
3	30	301				7		Ditch
	30	304				3		Ditch
	30	318				2		Post-hole
	30.02	301.02				2		Ditch
	30.02	305.02				5		Ditch
	30.02	317.02				13		Pit
	32	311				1		Ditch
	32.02	310.05		1		4	Patella	Post-hole
	32.02	313.02		1		4	Tooth	Ditch
	32.02	313.05	1			1	Mandible (44 frags)	Ditch
Total			1	2	0	42		
4	40.02	402.02				6		Ditch
	40.02	404.05		1		21	tooth	Ditch
	40.02	405.05		2		42	Mandible fragments	Ditch
	40.03	402.03				61		Ditch
	40.03	411.03				2		Ditch
	41	407				2		Ditch
	41	412	1			56	Femur fragment	Ditch
	41	413				1		Ditch
	41.02	401.05				12		Ditch
				2		9	phalanges	Pit
						2		Pit
				1		3	phalanx	Pit
						1		Ditch
	41.02	407.02		1		14	Long bone	Ditch
	41.03	413.05				16		Ditch
				1		26	tooth	Ditch
						1		Ditch
				2	1	11	Equid metapodial, sheep metapodial and pelvis fragments	Ditch
Total			1	10	1	286		

Table 7.7: Animal bone specimens from sieved samples arranged in phase order

only length measurement obtained was 103mm, which fits into the 'small horn' category, as defined by Sykes and Symmons (2007, table 1). Withers heights obtained from a small number of bones indicated variable stature, although it is difficult to know how representative these are. A Phase 3 metacarpal produced a height of 1.15m, while a metacarpal, two radii and a tibia from Phase 4 produced heights of 1.09m, 1.39m, 0.83m and 1.28m, using multiplication factors from Matolcsi (1970). The range for Roman cattle at a contemporary urban site at Vine Street, Leicester was between 1.09m and 1.27m (ULAS 2009b).

Age Structure

The patterns suggested by the epiphyseal fusion evidence indicate that there was low mortality among very young animals in all three phases (Fig. 7.3). The ageing evidence for Phase 2 cattle was fairly scant: there were few epiphyses (n=11), and no unfused bones were noted except among vertebrae, which fuse after 84 months (Reitz and Wing 1999, table 3.5, 76). Only two ageable teeth were available for Phase 2 cattle; both were deciduous, indicating the presence of juvenile and sub-adult animals.

Although the number of Phase 3 mandibles was low (n=6), a peak in slaughter was observed amongst sub-adult animals (probably aged between 18 months and 2.5

years), with fewer adult and elderly cattle (Fig. 7.4). No juveniles were observed, with the exception of the partial skeleton of a calf in G301.02 (ABG 2), described separately below. Epiphyseal fusion (from the post-cranial bones) shows a slightly different pattern, suggesting that a small proportion (15%) were slaughtered below the age of 18 months and that mortality steadily increased through the middle and late age categories, sharply increasing between the late and final categories. This therefore

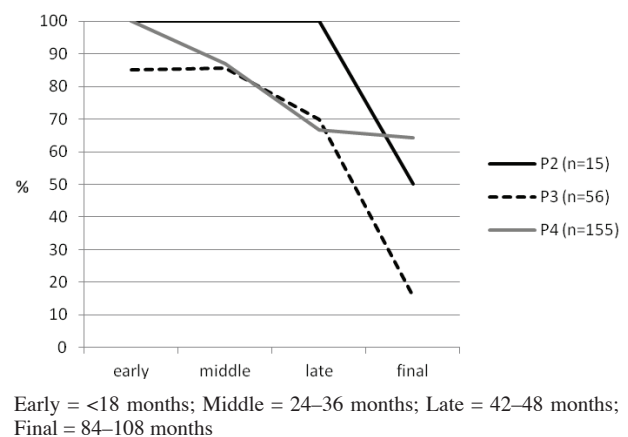


Figure 7.3: Age distribution from epiphyseal fusion (after O'Connor 2003)

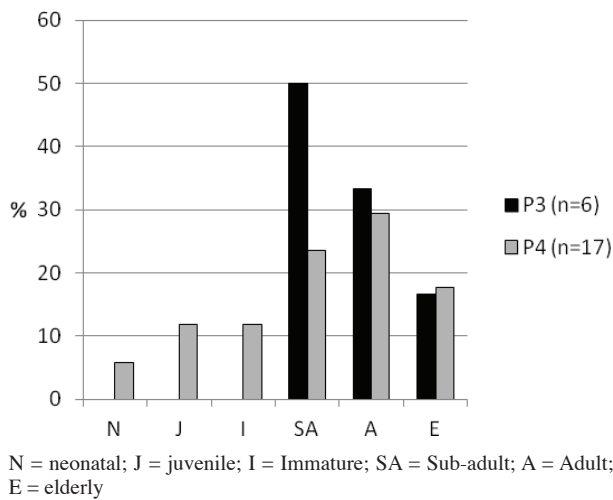


Figure 7.4: Age distribution from mandibles for Phase 3 and 4 cattle

suggests that most animals (70%) were slaughtered as adults over the age of 48 months. Phase 4, for which there is considerably more dental data, shows mortalities in every age category, peaking among adult animals, but also with evidence for elderly cattle. Mandibles indicate that 50% of cattle were slaughtered as sub-adults or adults, therefore as prime beef. The Phase 4 post-cranial bones suggest that 35% were aged between 18 months and 4 years at death, but that the majority of cattle survived into maturity, which would place an emphasis on secondary products such as traction.

Carcass representation

Analysis of the bone elements present in an assemblage can provide information on activities taking place on site as well as the disposal of waste. Slaughter and primary butchery, skinning, food preparation and consumption, or use of bones for craft purposes, may result in abundances of particular skeletal parts. The element counts are standardised to make the results comparable across categories. The disadvantage of this method is that it does not take into account the relative robustness of individual elements; the small dataset from Phase 2 has therefore resulted in an uneven distribution (Fig. 7.5). Phases 3 and 4, however, show relatively similar patterns. Horn cores occurred sporadically, and vertebrae, phalanges and ribs are underrepresented. There is a relative abundance of elements from the scapulae, pelvis and forelimbs compared with other parts of the

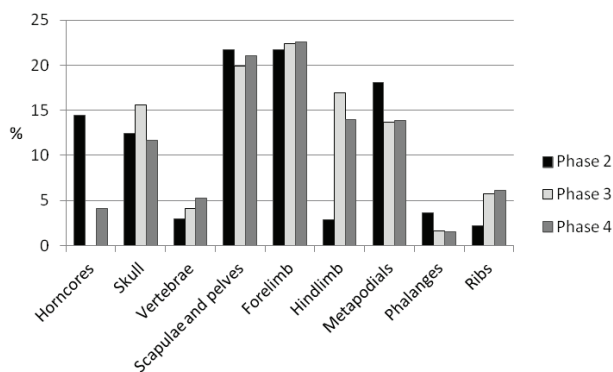


Figure 7.5: Distribution of cattle carcass components in each phase

body. These categories may suggest an emphasis on the meatier parts of the body; however, since many of these bones may have been boned-out prior to consumption, they could suggest an accumulation from secondary butchery. Taphonomic factors should also be considered, as the two categories also contain the more robust parts of the skeleton, such as the glenoid cavity of the scapula, acetabulum of the pelvis and the distal humerus and proximal radius. The proportion of vertebrae was relatively low, which, since these are more likely to be retained to the point of consumption, suggests that the bones do not predominantly represent table waste. However, vertebrae are also easily destroyed by scavengers because of the high proportion of cancellous bone. Similar factors could affect phalanges, which could also be utilised for glue or stock-making, potentially reducing their chances of survival.

Sheep/goat

Sheep and goat bones, particularly post-cranial fragments, are difficult to distinguish and therefore were recorded as sheep/goat unless positive sheep or goat attributes were observed. Attempts were made to separate the two species using morphological criteria defined by Boessneck (1969) and Prummel and Frisch (1986), paying particular attention to horn cores, skulls and teeth, scapulae, humeri, metacarpals and metatarsals. Metacarpals were measured after Payne (1969), but unfortunately there were too few to plot. However, no elements were positively identified as goat, while skull fragments of sheep were identified in a small number of cases. In light of this and findings from other sites in the locality, it is probable that most of the sheep/goat bones actually belong to sheep.

Horn-core fragments were only recovered from Phase 4. No examples of polled skulls were seen. Where it was possible to establish morphology, horn cores were D-shaped in cross section, with a strong ridge, curve and slight twist.

Age Structure

Little evidence from epiphyseal fusion was available for Phase 2 sheep: only a distal tibia was present, which would have fused between 18 and 24 months (Silver 1969), meaning that this individual was at least in its second year. Tooth eruption and wear, although scant, suggested a peak among adult animals, probably aged over 3 years. The larger Phase 3 assemblage produced seventeen bones with epiphyses, of which 76% were fused. There were no un-fused bones among the under-16-month age group, contrasting with the mandibular evidence from Phase 3, which confirmed the presence of younger animals (Fig. 7.6).

In Phase 4, there were twenty-three bones with epiphyses, of which 65% were fused. Un-fused bones were present in both the early and middle fusing categories, suggesting that there were some mortalities prior to maturity. The mandibular evidence showed a strong peak among adult animals (from approximately 3 years of age) within a spread encompassing juvenile to elderly animals (Fig. 7.6).

Carcass representation

Although the dataset was small, analysis of carcass components showed an under-representation of vertebrae, ribs and phalanges. Phalanges were the most frequently found element among the sieved remains, which suggests

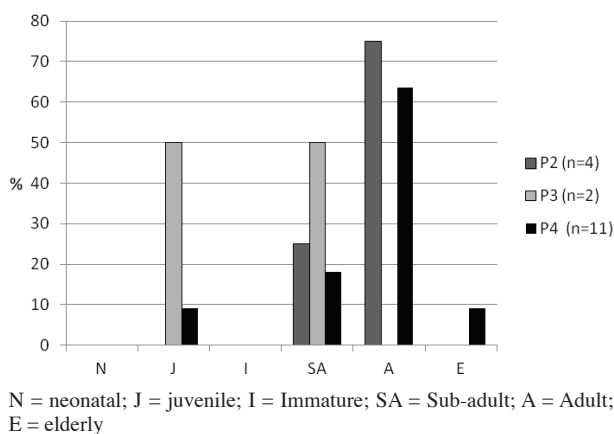


Figure 7.6: Age distribution from mandibles for sheep in Phases 2, 3 and 4

that their low occurrence in the hand-recovered assemblage may be partly due to loss during redeposition and recovery. Vertebrae, with their spongy interiors can be particularly vulnerable to carnivore gnawing and taphonomic loss, which goes some way to explaining the low numbers. There were a greater proportion of elements from the skull and hind-limb among the Phase 2 material and in Phase 3, hind-limbs and metapodials are better represented. The Phase 4 assemblage indicated relatively even distribution, suggesting that all parts of the carcass were present and with no particular abundances.

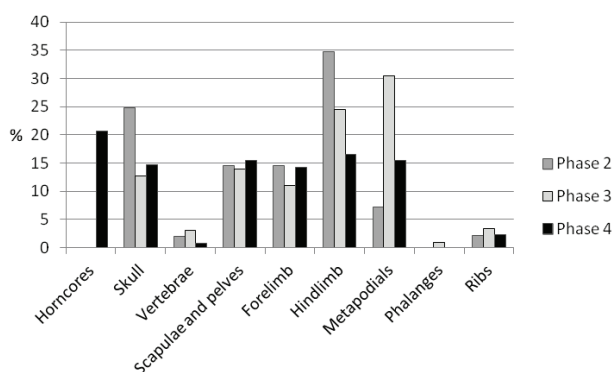


Figure 7.7: Distribution of sheep/goat carcass components in each phase

Pig

Pig bones were recovered from ditches, pits and post-holes, but did not exceed more than 5% of identified specimens in any phase and therefore provided only limited evidence on swine husbandry.

There were no ageable teeth and mandibles in Phase 2. In Phase 3, mandibles from a sub-adult and an adult animal were present; both were in an age bracket associated with meat production (probably just under and just over two years of age). Both canines recovered in this phase were male. One of the Phase 4 mandibles was also from an animal aged just over two. The other was from a partial pig skeleton (ABG 5) from G402, likely to represent an animal just a few weeks old and indicative that breeding took place at the site. The post-cranial bones provided little supporting evidence; for example, Phase 4 produced only seven epiphyses, of which five (early and middle-fusing) were fused.

Similarly, there were too few pig bones in any phase to permit useful analysis of carcass distribution. However,

it was noted that the elements present are predominantly from the skull and mandible, as well as the more robust parts of the post-cranial skeleton, such as the distal humerus.

Horse

Equid bones were present in all the main phases and were most frequent in Phase 4, where they constituted 16% of identified bones. As with sheep/goat, distinguishing between different equid species can be difficult. However, measurements taken on a first phalange, adjusted and plotted following Davis (1982), were consistent with those from horse (*Equus caballus*). Horse is certainly the most probable species for the equid bones from the site, as donkeys are generally rare in the British archaeological record, with few examples confirmed.

Three withers heights were obtained from a metacarpal (Phase 2), metatarsal (Phase 3) and tibia (Phase 4), providing heights of 1.27m, 1.22m and 1.49m respectively, using Kiesewalter's multiplication factors (Kiesewalter 1888). The former two would be classed as ponies, but the latter would be at the smaller end of the range for horses.

Most of the horse bones were recovered from enclosures ditches. With the exception of a fragmented skull from L20.02, these were limb bones from adult animals and did not include any articulated material. The Phase 3 assemblage was similar but included a fusing distal scapula, from an animal aged around one year (Silver 1969, 285, table A) and some mandible fragments, but no ageable teeth. The larger Phase 4 assemblage included a small number of unfused and fusing epiphyses. These were a tibia with proximal unfused and distal fusing, aged around 2 years, and a second tibia with the proximal epiphysis fusing, aged about 3.5 years (Silver 1969, 285, table A). A minimum of three individuals were present and were represented by most parts of the body, but with an emphasis on metapodials (Fig. 7.8). This could be due to the greater robustness and survivability of these elements.

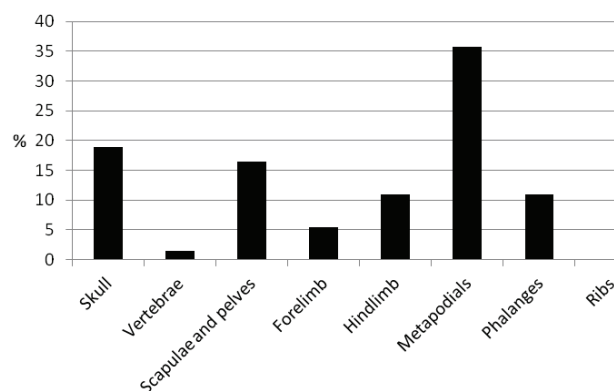


Figure 7.8: Distribution of horse carcass components in Phase 4

Dog

The assemblage produced eight dog bones from six different deposits. Ditch fill G301.05 (Phase 3) contained fragments from two left ulnae. Phase 4 ditches (G406.02, G407.02, G413.02 and G413.05) and a pit (G405.05) produced the rest of the bones. Fragmented left and right maxillae and a left mandible were all recovered from the same deposit in G406 and probably represent

the remains of a single individual. A tibia, an ulna and another mandible fragment were isolated finds in the other groups. There were no juvenile bones. The tibia from G405.05 exhibited a hole in the centre of its distal articulation which appeared to have been drilled, but the purpose of this is unknown.

Deer

Deer was primarily represented by antler fragments in Phases 3 and 4 and appears to have contributed little to the diet. The only post-cranial bone was a first phalanx from Phase 4 (L40.02), likely to have been brought in with a hide. All of the fragments were of a size and morphology suggesting red rather than roe deer.

A fragment from a shed antler was recovered from the tertiary fill of enclosure G306 (L30). This had probably been used for artefact manufacture. The brow tine had been sawn off and the cracked and shattered surface suggested that it had also been burnt.

In Phase 4, antlers were recovered from secondary and tertiary fills of enclosure ditches G402 and G405 (L40). Those in G402.02 comprised four fragments, which included parts of the base, beam and tines (three shown in Fig. 7.9). The size of the fragments suggested that they could all have come from the same set of antlers, although it is impossible to be sure. All of the fragments had been sawn. The base of one had been sawn through the pedicle, which indicated that it had been taken from a hunted animal rather than simply collected after it was cast in late winter. There were also scrapes down the beam and tine, removing the surface.

Birds

Bird bones were very rare ($n=7$) and all came from ditch deposits. Five were domestic fowl (split between

Phases 3 and 4), but a distal tibio-tarsus of crow (*Corvus corax*) was recovered from Phase 4 (L40.03, G402.03). A fragment tentatively identified as goose humerus was retrieved from deposits associated with Phase 2 enclosure G205 (L20).

Butchery

Butchery marks were comparatively rare in the assemblage, affecting only 2% ($n=57$) of bones. However, the extensive fragmentation noted within the assemblage is likely to have obscured some evidence.

Butchery marks occurred only on bones from Phases 2–4, and affected cattle, sheep/goat, pig, deer, and large and medium mammal. No butchery was observed on horse or bird bones. Unfortunately, there was insufficient evidence to reconstruct butchery patterns in detail for the site, and the following are general observations.

In Phases 2 and 3, most marks had been produced with a knife rather than an axe or cleaver, although the number of cut and chop marks was equal for cattle in Phase 3. In Phase 4, cut and chop marks were more even overall and more cattle bones exhibited cleaver marks than knife cuts, which could reflect a slight change in butchery practice. Deliberate breakage in order to extract the marrow is commonly seen on Roman bones, but appeared to be rare at Stretton Road: it was observed only on two bones, a sheep/goat humerus and an undiagnostic fragment of medium mammal shaft. Saw marks were predominantly noted on antler, but a rib fragment and cattle humerus, both from Phase 4, also appeared to have been sawn. As the saw is usually associated with bone-working rather than meat processing for this period, it may be that some manner of artefact manufacture was intended (Grant 1987, 55).



Figure 7.9: Photograph of three antlers from G402.02

An examination of prevalence (excluding those cases where only one element was present and it was butchered) suggested that the most common sites for butchery for both cattle and sheep in Phase 3 were the pelvis and the astragalus, with the addition of the femur for cattle. In Phase 4, the pelvis, scapula and radius were most common for cattle. For sheep there were too few butchery marks to analyse. Despite their lower numbers, pig bones in all phases were butchered.

Biometry

Measurements were taken on a total of 298 bones and teeth. Since there were few whole bones in the assemblage, most of these were taken on articular ends and teeth. The small number of greatest length measurements has allowed the calculation of withers heights for cattle and horse (tabulated in archive report).

Measurements on sheep and cattle lower molars were pooled to produce a larger dataset (after Albarella 2002), with width and length measurements grouped separately. Although the technique can also be applied to bones, teeth were chosen in this case as they tend to be less affected by age, sex and environmental factors (Albarella 2002, 54). Log ratios were calculated using standard measurements for sheep taken from Davis (1996) and for cattle taken on a Chillingham cattle skeleton held within the reference collection at the University of Leicester (School of

Archaeology and Ancient History). This method meant that Stretton Road cattle and sheep/goat measurements could be compared with those at Vine Street, Leicester. The datasets were not sufficiently large to make a phase by phase comparison, so the data from all three phases was combined.

The cattle data from Stretton Road has a fairly unimodal distribution, indicating that they represent one population. The results are not as clear for Vine Street, but the cattle from both sites plot in the same range, with no clear separation between them (Fig. 7.10). The possibility that the Leicester animals were from the same stock therefore cannot be discounted.

By contrast, the Stretton Road sheep/goat dataset shows a difference to that from Vine Street, indicating that the animals may have been slightly larger at Stretton Road (Fig. 7.11). This could indicate that the Leicester animals were procured from a different source. It has only been possible to examine a small number of measurement types for this brief consideration, but the results suggest that further analysis may be worthwhile.

Pathologies

There were thirty-seven recorded pathologies, which were observed on bones of cattle, horse, sheep/goat and pig. Seventy-five percent were observed on Phase 4 bones, accounting for 2% of specimens. The diagnosis

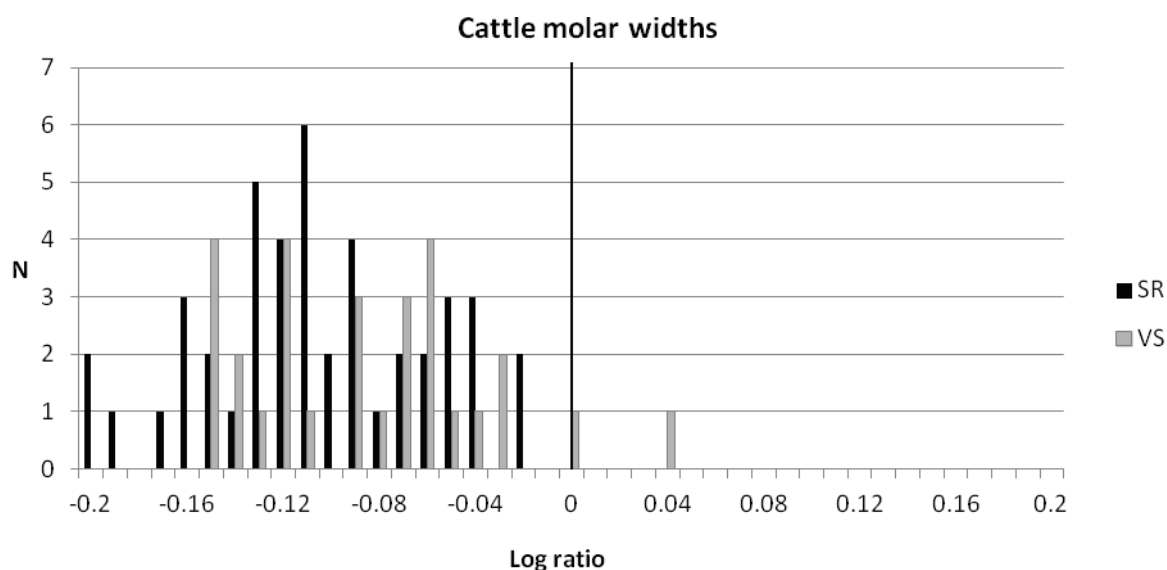


Figure 7.10: Comparison of cattle tooth measurements from Stretton Road and Vine Street, Leicester (author's own data)

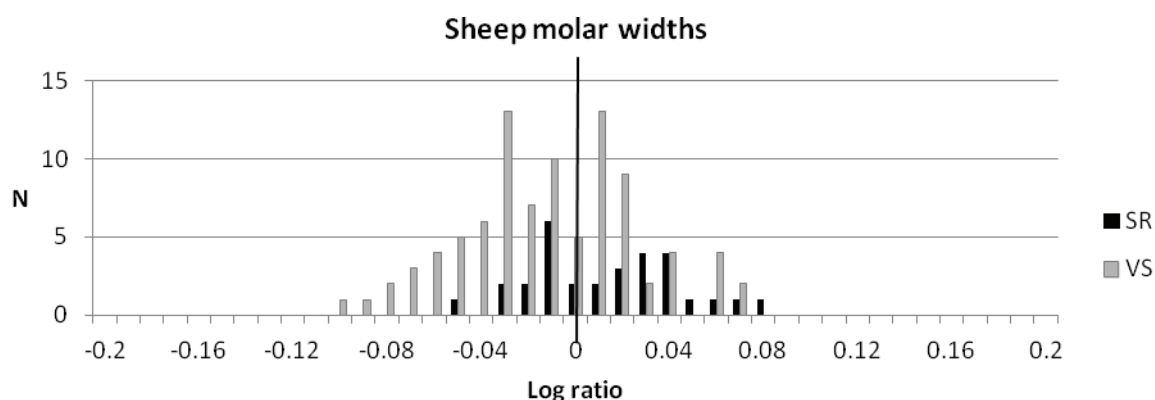


Figure 7.11: Comparison of sheep tooth measurements from Stretton Road and Vine Street (author's own data)

of pathological lesions present in disarticulated and fragmented bones can be problematic, because it is not possible to assess the patterning of lesions throughout the skeleton. Bone tissue can only make a limited set of responses to infection or trauma; therefore, widely different conditions could cause a similar reaction (Vann and Thomas 2006).

Pathologies fell into several categories, of which abnormal bone formation occurred most commonly (n=16), although it varied considerably in severity. It was most frequently observed on cattle and, occasionally, horse metapodials, as well as on a phalanx. Although occurring rarely, these abnormalities, consisting of osteophytes or slight eburnation on the distal condyles, could be associated with load-bearing, possibly associated

with use as draught animals (Bartosiewicz *et al.* 1997). Eburnation, probably caused by bone-on-bone contact, was noted within the acetabulum of a cattle pelvis from Phase 4. Evidence of trauma was very rare, but there were two responses to possible bone contusions: a horse metapodial had what appeared to be an ossified haemotoma; and a smooth bone swelling was noted on the spinous process of a thoracic vertebra from a large mammal.

Congenital abnormalities on cattle teeth included two examples of a much reduced third cusp on two cattle third molars in Phase 4, with another in Phase 3. Thinning, porosity and abnormal formation around the alveolar bone, probably indicative of periodontal disease, was noted on several cattle mandibles. Seven examples of perforations through the body of large mammal

Phase	Land-use area	Taxa	Location	Type	Brief description	Prevalance
2	21.02	Cattle	Phalanx 1 (medial side)	ABF	exostosis on medial side- not extensive and fairly localised on a long strip	1/12
3	20.03	Pig	Maxilla (p3)	M	slight rotation of p3	
	30.03	Cattle	Skull lower orbit	BL	porosity on border of orbit	1/12
			Lm3	CA	3rd cusp absent	3/12
	30.02	Horse	Metapodial (midshaft, cranial face)	ABF	appears to be an ossified haemotoma — woven bone	1/15
4		Large mammal	Metacarpal (proximal)	CA	mcII or IV fused to mcIII, some woven bone but mostly smooth	1/5
			V Thoracic (body)		perforation in body	1/20
		Sheep/ goat	Metatarsal (proximal articular surface)	ABF	small patch of exostosis on articular surface	1/17
		Cattle	Mandible (alveolar bone)	ABF	expansion of mandibular cavity below m1, new bone formation lining cavity — possible infection/abscess	1/79
			Maxilla (alveolar bone)		mix of porosity and extra bone formation indicating periodontal disease	2/6
	40.03	Cattle	Metapodial (distal condyle)	ABF	exostosis around distal shaft, grooving and eburnation on condyle, splaying — traction-related	1/48
			Tibia (cranial face)	BL	clean circular hole or sinus just above articulation, in an area where there are lot of (much smaller) sinuses	1/20
			Metacarpal (proximal articular surface)	BL	deep scar/pit observed.	2/26
	41.02	Cattle	Mandible (dp4)	M	unusual wear pattern on middle cusp	1/4
			Mandible (medial side)	ABF	thin layer of bone has formed close to basal part of mandible- infection?	1/79
			Maxilla (alveolar bone)	ABF	'honeycomb' bone on the alveolar bone — periodontal disease. Age related?	2/6
			Tibia (proximal – lateral side)		bone formation around an irregular hollow- callous. Meas.24.7mm x19.6mm. Located just below fusion line	1/20
	41.03	Cattle	Metacarpal (proximal articular surface)	BL	very pronounced 'scar' on medial articular face	2/26
			Pelvis (acetabulum)	BL	eburnation particularly on pubic part. — excessive wear	1/26
			Mandible (lm3)	CA	distal pillar absent	3/12
			Mandible (lm1)	AM	straw-like roots	1/24
	41.03	Cattle	Atlas (cranial articulation)	BL	porosity noted on the cranial articulation	1/7
			Molar (root)		distal pillar	3/12
	40.02	Horse	Metatarsal (proximal)		thin layer of woven bone on surface of shaft and concentrated at prox end	1/6
	41.01	Horse	Metapodial (distal)	ABF	exostosis on distal end possible damage to epiphysis	1/15
	40.02	Large mammal	Scapula (caudal border)	ABF	bony nodules on the border of the bone	-
			Metapodial (shaft)		some nodules of abnormal bone along border	-
	40.02	Large mammal	V Lumbar (body)	BL	perforation through body	3/20
			V Lumbar (body)		perforation through body	3/20
			Vertebral fragment (body)		perforation in body	-
	40.03	Large mammal	V thoracic (spinous process)	ABF	smooth callous (9mm diameter) on the thoracic spine	1/20
	41.02	Large mammal	Rib (lateral face)	ABF	roughened and pitted close to proximal head	1/152
			V Lumbar (body)	BL	perforation through body	3/20
	41.02	Sheep/ goat	Vertebral fragment (body)	BL	perforation through body	-
			Metacarpal articular surface)	BL	very pronounced scar	1/14

ABF = abnormal bone formation, M = Malocclusion, CA = congenital abnormality, BL = bone loss, AM = abnormal morphology

Table 7.8: Brief description of abnormal animal bones

vertebrae were noted in the assemblage and the cause of these abnormalities may be congenital, as they have been observed in a number of assemblages. Similarly, a lesion on the proximal articular surface of some metacarpals may be *osteochondrosis dissecans*, which is caused by a failure of a portion of the growth cartilage to ossify and covert to bone (Yttrhus *et al.* 2007, 432). This has been seen in a large number of bone assemblages and may be caused by compression, although multiple factors may contribute (Bartosiewicz and Gál 2013, 110).

Partial skeletons and articulated material

Articulated or Associated Bone Groups (ABGs) were identified in all three of the Roman phases and are briefly described below.

Phase 2 (mid-1st to mid-2nd century)

Part of a cattle foot comprising the metacarpal and proximal phalanx (ABG 1) was recovered from the primary fill of a gully assigned to structure G207, L20.

Phase 3 (mid-2nd to mid-3rd century)

The partial skeleton of a calf (ABG 2) was deposited in the secondary fill of one of the ditches defining rectangular enclosure G301 (within domestic focus L30). The skeleton was highly fragmented, and the only whole bones were the left humerus and right femur. Several fragments from the head were present, including the left occipital condyle and the left and right mandible. A couple of unfused thoracic vertebrae and rib fragments were also recovered. The forelimbs were represented by fragments of the right and left scapulae, humeri, radii and the right ulna. Both pelves were represented, along with the right femur, left and right distal tibia and an astragalus. All of the bones were of a small size, and none were fused. A metacarpal, unfused down the sagittal line, suggested that the animal was neonatal. The mandibles contained an unworn deciduous 4th premolar and a half-erupted first molar, suggesting that the animal was likely to be no more than a few weeks old. No butchery marks were observed. In the absence of any associated artefacts, this could represent a natural mortality. An articulated cattle radius and ulna (ABG 3) were recovered from the secondary fill of another ditch defining enclosure G301.

An articulated cattle calcaneum and astragalus (ABG 4) were present in the secondary ditch fill of sub-enclosure G307 (within the northern part of 'ladder' enclosure system L32).

Phase 4 (mid-3rd to late 4th century)

The fragmentary remains of a piglet (ABG 5) were recovered from the tertiary fills of a ditch defining enclosure G402 (within domestic focus L40). The right mandible, left and right scapulae (unfused) and several ribs could all have belonged to the same individual. The state of tooth eruption (dp4=a, m1=C; after Grant 1982) suggested that the animal was only a few weeks old and was likely to be unweaned. There were no butchery marks, and the animal could have been a natural mortality. An articulating first and second horse phalanx (ABG 14) were recovered from another segment through the same ditch.

Articulated cattle left femora and tibiae (both fused) were recovered from ditches defining enclosures G403 (ABG 6) and G405 (ABG 7), also within domestic focus L40.

Part of the hindquarters of a lamb (ABG 8), comprising left and right femur, right tibia and part of the metatarsal,

were recovered from the ditch on the south side of enclosure G401 (peripheral enclosures L41). An articulated cattle radius and ulna (ABG 9) were recovered from another segment of the same ditch, while a third segment contained a second articulated cattle radius and ulna (ABG 10). The length of the radius suggested a withers height of 1.39m. In the same segment, an articulated right hind-limb of cattle (ABG 13) was recovered, comprising parts of the femur, tibia, tarsals (including the astragalus and calcaneum) and metatarsal. Unfortunately, there was little conclusive evidence as to whether the hind and fore legs belonged to the same individual, but they have been recorded with the same AGB number. A lack of butchery marks meant that it was not possible to say whether the bones represent butchery waste. However, although the femur is a bone with a high meat yield, the rest of the bones are of a lower utility and therefore could have been removed and discarded early in the butchery process.

Within the ditch that defined the north side of adjacent enclosure G406 (L41), the entire left leg of a horse was recovered, comprising femur, tibia, calcaneum, astragalus, metatarsal III, metatarsal II or IV, and first phalanx (ABG 11). Unfortunately, no bones were complete enough to allow an estimation of withers height.

Finally, cervical vertebrae along with an atlas and axis identified as horse (ABG 12) were recovered from the ditch that defined possible structure G407 (L41). Two of the vertebrae were observed during excavation to be articulated.

Burnt Bone SG2257

A small oval pit SG2257, originally interpreted as a cremation burial, was located on the west side of possible structure G409 within field G401 (L41). It was excavated in three 5cm spits and the majority of the 426 bone fragments recovered were from the upper spit. These were all in various stages of calcination characterised by a 'porcelain' appearance and white colouration, indicating that they had been exposed to temperatures of around 800°C (Nicholson 1993, 425). Temperatures within a fire are variable, but even a campfire could create this heat (Nicholson 1993, 427). Although the bones exhibited the high degree of fragmentation, shrinkage and distortion associated with such high temperatures, it was possible to identify over fifty of the fragments — all were sheep/goat. Elements from the skull and mandible, including tooth enamel, were present; vertebrae and ribs were also represented, as well as elements from both the fore and hind limbs and extremities. The presence of phalanges, carpals and tarsals, as well as a patella, suggested that the carcass had been articulated at the time that it was burnt. The bones could conceivably belong to the same animal, as no evidence for more than one individual was seen. The state of epiphyseal fusion of the identified bones suggests that the animal was aged around 2.5–3 years at the time of death, a prime age for slaughter for meat.

Discussion

Only a small number of rural Roman settlements in the area have been excavated under modern conditions, and, by contrast with their urban counterparts, few have produced sizeable faunal assemblages. For example, a Roman settlement at Crown Hills (ULAS 2000a), located 5.5km from the centre of Leicester and 9.5km north of the Stretton Road site, was affected by poor preservation and produced only 218 identifiable bones.

Late Roman deposits from Hamilton North, in close proximity to Leicester, also produced a small assemblage numbering 193 identified bones (ULAS 2004, table 8). The potential of the Stretton Road assemblage to help investigate the provisioning of Roman Leicester (*Ratae Corieltavorum*), which has been highlighted in regional frameworks (Knight *et al.* 2010; Monckton 2006, 277), was recognised from the outset. The mechanisms by which the town was supplied with meat and its economic relationship with the countryside are currently poorly understood. Although farming estates, such as the Norfolk Street villa (Lucas 1980–81, 103), are known from its immediate hinterland, the extent to which the town was supplied locally is unknown.

It is likely that Leicester procured food for its markets from diverse sources, and may well have brought stock on the hoof from some distance away. It is therefore pertinent to ask whether there is evidence that Stretton Road could have produced meat destined for the town markets, 9.6km away, or whether the economy there was based on subsistence. In order to do this, it is necessary to consider whether the assemblage shares similar characteristics to the faunal evidence from Leicester, including the Leicester Highcross sites (ULAS 2009b–d), Causeway Lane (Gidney 1999) and Bonner's Lane (Baxter 2004) (summarised in Buckley and Cooper forthcoming), or else suggests different patterns. If the settlement at Stretton Road was strongly engaged in production, we might reasonably expect a dominance of different age groups, on the assumption that, excluding the surplus sent to market, the remaining animals represent breeding stock and those retained for consumption. As trade links work both ways, a second set of questions are concerned with whether food preferences at the site have been influenced by Roman culture. This might manifest itself through changing proportions of domestic stock, unusual or 'exotic' species, differences in size or shape, and changing butchery practices. The inevitable problems with answering these questions include a lack of clarity in the assemblage, due to the small phase groups. There are also inherent difficulties in attempting to compare the results from a single site, which has its own particular suite of biases, with generalised trends compiled from a number of assemblages.

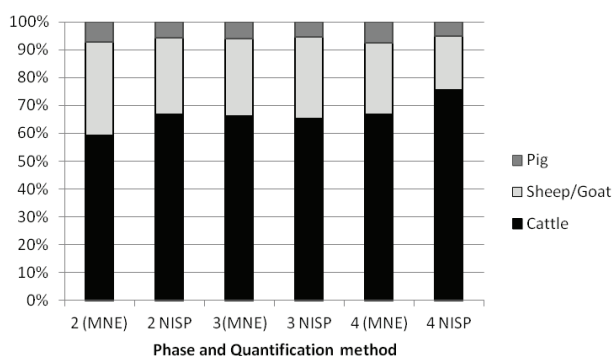
The assemblage was dominated in all phases by large and medium-sized domestic mammals, especially cattle, horse, sheep/goat and pig. Bones from wild animals and birds were few, and no amphibian or fish bones were recovered. Undoubtedly some taphonomic loss has occurred, due in part to the heavy clay subsoils, and the resulting assemblage is certainly highly fragmented. This will have particularly affected the survival of small and fragile bones, including those from juveniles, which tend to be more porous. Therefore, the number of cattle and horse bones is likely to be inflated in comparison with sheep and, particularly, pig, which are generally slaughtered before maturity. The small range of identified species contrasts with sites in Leicester, which had greater diversity of birds and wild animals, such as deer, hare, waterfowl and fish (Buckley and Cooper, forthcoming). Very few bird bones were present at Stretton Road, with domestic fowl contributing less than 1% of the identified assemblage in Phases 3 and 4. In contrast, the proportion of domestic fowl in the Leicester Vine Street assemblage rose from 5% to 10% between the early and late Roman phases. No fish bones were recovered

from Stretton Road, compared with Leicester sites which produced a range of freshwater and marine fish (Buckley and Cooper forthcoming). The range of animals represented at Stretton Road therefore has more in common with other non-urban sites, such as Crown Hills (ULAS 2000a), dominated by cattle (56%), horse (23%), sheep/goat (20%) and a very small proportion of pig bones (1%). Late Roman deposits from Hamilton North, also produced a high proportion of cattle (62%) (ULAS 2004, table 8) and at Rearsby, a rural site north of Leicester, cattle accounted for 80% of identifiable bones, although this assemblage was undoubtedly affected by poor preservation (ULAS 2005, 2007).

This lack of species diversity may be partially attributed to the relatively modest assemblage size and poorer preservation compared to contemporary assemblages in the town, but may also reflect a less varied diet, with limited access to imported, 'exotic' or characteristically 'Roman' foods obtained via the markets. For example, smoked or cured shoulders of beef frequently occur in Roman deposits, particularly at military or other heavily 'Romanised' sites (Cool 2006, 91; Score *et al.* 2010, 88). These scapulae normally have a hook hole in the wide part of the blade, from which the shoulder would have been suspended during the curing process, and often have marks relating to filleting and trimming around the neck of the bone. There was one possible example in Phase 4 at Stretton Road, representing 2% of all scapulae; this contrasts sharply with one of the Highcross sites, Vine Street, Leicester, where 26% of scapulae had been processed in this way (ULAS 2009b). Methods of carcass processing from Roman assemblages typically include distinctive butchery practices involving the greater use of the cleaver to chop through bones, rather than disarticulation at the joints using knives (Grant 1987, 55). A high proportion of bones were butchered in Roman Leicester — for example, in all Roman phases at Vine Street over 50% of cattle bones were affected and were mostly chopped. By contrast, butchery marks were rare at Stretton Road, with chop marks only exceeding cut marks in the later phase. The butchery style therefore appeared to more closely resemble local mid-late Iron Age sites, such as Manor Farm, Humberstone, where butchery marks were also fairly rare and more than half were caused by knives (Browning 2011, 114).

The three main domesticates — cattle, sheep and pig — usually form the bulk of faunal assemblages, and comparing their relative proportions is a common method of inter-site comparison, sometimes characterising sites of particular periods. High proportions of cattle and pig have been especially noted on late Roman sites (King 1999, 180). Figure 7.12 shows the Stretton Road results plotted using both NISP and MNE: both methods indicate the predominance of cattle through the Roman phases, but also show a slight increase in cattle compared to sheep in Phase 4. As is the norm for most domestic sites, pig was the least well-represented in all three phases. The data from Vine Street has been plotted as a comparison and shows rising proportions of cattle and pig relative to sheep (Fig. 7.13).

Analysis of the animal bones from the Highcross sites in Leicester (ULAS 2009a–d) suggests that the relative proportions of cattle, sheep and pigs varied over time. While there is some evidence to suggest that sheep were the most common animal at the beginning of the Roman period, cattle were the most widely exploited species in



NISP = Number of Identified Specimens; MNE = Minimum Number of Elements

Figure 7.12: Comparison of cattle, sheep/goat and pig proportions in Phases 2 to 4

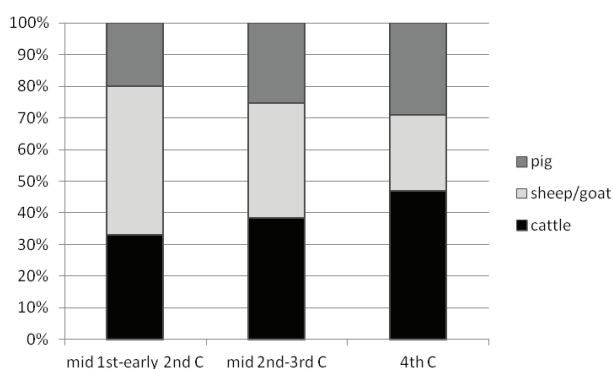


Figure 7.13: Cattle, sheep and pig proportions from the early to the late Roman period at Vine Street (Browning in ULAS 2009b)

the period as a whole, increasing in importance as time progressed. At Vine Street, for example, sheep declined significantly throughout the Roman period, from 47% in the mid-1st to early 2nd century, to 24% in the 4th century. The later phases were dominated by cattle, whose proportion rose over the same period from 33% to 47%. A similar trend was seen at Causeway Lane (Gidney 1999, 310), Little Lane (Ancient Monuments Laboratory 1991) and Vaughan Way (ULAS 2009d), while other town sites such as Great Holme Street (Gouldwell 1991) and Bonner's Lane (Baxter 2004) also emphasise the importance of cattle. The higher proportions of cattle seen particularly at urban and military sites presumably reflect the demand for beef and an emphasis on food production on a larger scale. They may also suggest both culinary preference and the intensification of husbandry practices. However, the evidence from other parts of the Midlands is variable. Although the available evidence from sites in Leicester's immediate hinterland shows an emphasis on cattle, a focus on sheep has been observed on rural sites in the wider region. Several sites, such as Mawsley (ULAS 2012), Wakerley (Jones 1978) and Wavendon Gate, Milton Keynes (Dobney and Jacques 1995) appear to show an increase in sheep and a decline in cattle. In some cases, this is interpreted as a continuation of native husbandry practices, although the high proportion of young sheep at the Roman settlement at Higham Ferrers, Northamptonshire, was thought to represent dairying (Strid 2009, 299).

Pork, known from contemporary texts to have been a favoured Roman foodstuff, appears to have become more important in the Roman period. This is especially

the case with deposits linked to higher-status sites, such as the remains found in a Roman cellar at Little Lane (Ancient Monuments Laboratory 1991). Pig comprised less than 10% of the combined total of the three main domesticates at Stretton Road, contrasting with sites such as Vine Street, where its proportion increased to 30% in the late Roman phase. Although highly speculative and impossible to prove with negative evidence, the very low levels of pig bones at Stretton Road could be explained not only by taphonomic processes, but also by the export of pigs to the urban market, where their bones were subsequently deposited.

In the town, cattle were predominantly mature, with most beef cattle slaughtered at 3–4 years of age. The Stretton Road evidence presents a mixed picture, with deaths, particularly in Phase 4, occurring in all age groups. However, lower mortality among the younger age categories was followed by increased slaughter upwards of approximately 2.5 years, peaking in adults over the age of three. There is some evidence that a significant proportion of cattle survived into old age. No clear differences are therefore apparent between the urban remains and those from Stretton Road, suggesting that, in general, cattle were as important for reproduction, milk and pulling ploughs as they were for their meat. By contrast with the cattle, the sheep from the urban sites were often young, suggesting that the population was bred for meat; at Vine Street there was a high proportion of juveniles and sub-adults. There is some evidence for younger animals at Stretton Road, but the majority appear to have been fully adult at time of death, indicating an emphasis on secondary products such as dairy and wool. It could be argued that if wool production was predominantly a rural activity, older animals are unlikely to have been brought to the town market.

There were no specific groups of craft-working material, although sawn antlers from the domestic foci in Phases 3 (G306, L30) and 4 (G402, L40) are suggestive of low-level artefact manufacture. Fragments of red deer antler in Phase 4, which were still attached to part of the skull, provided evidence for hunting during the autumn or winter months.

A number of articulated bones were identified, whose presence indicates that the parent deposit was not heavily re-worked after burial. The term Associated/Articulated Bone Groups (ABGs) is commonly used as a neutral phrase to describe such groups of material (Hill 1995a, 27), as it is acknowledged that they can result from different types of activity (Morris 2010, 259). Iron Age ABGs have been widely studied, but they are more common on Romano-British sites, and, in this period, sheep are the second most common species after dog (Morris 2010, 262). Interpretation of these deposits can be contentious and has centred on whether they are the result of 'ritual' or 'functional' behaviour, but individuals in many past societies may not have made a distinction (Morris 2010, 266; Chadwick 2012, 296). The deposition of metalwork was associated with ABGs (mostly sheep) at the rural Roman site at Mawsley, Northamptonshire, possibly indicating some form of commemoration (Harvey *et al.* forthcoming).

The ABGs at Stretton Road were all from domestic stock, and a small number represent partial skeletons: a calf (ABG 2) in Phase 3; and a piglet (ABG 5) and a lamb (ABG 8) in Phase 4. The young age and lack of butchery marks could suggest that they were natural mortalities,

and, if so, they provide good evidence for the breeding of livestock at the site. More common, however, are examples of articulating limb bones; in many cases these are from the ankle and foot, which may have remained together as units following primary butchery, since they would have provided little meat. The radius and ulna, adjacent bones in the forelimb, were also relatively frequently found together. Slightly more difficult to explain are an articulated right hind-leg from a cow in G401 (ABG 13) and an entire left horse leg in G406 (ABG 11). Neither exhibited butchery marks, yet some manner of disarticulation had clearly taken place. However, while studies indicate that the deposition of material culture, including animal parts, may well have been imbued with deep significance (e.g. Chadwick 2012, 303), actually interpreting the meaning behind these deposits is more problematic and is best carried out with regard to all the available artefactual and spatial evidence.

Figure 7.14 clearly shows that the vast majority of the faunal assemblage derives from ditches. This therefore suggests that the mechanisms by which the bones were deposited were more complex than direct disposal into a purpose-dug pit. Unfortunately, the pit assemblages at Stretton Road were too small to compare with the ditch assemblages, although this in itself may tell us that pits were not primarily for rubbish. Waste, including bones, could have been collected together before being dumped into open ditches, or perhaps pits were periodically cleaned out and their contents redeposited into other features. Patterns noted at other local sites such as Manor Farm, Humberstone (Browning 2011) have shown that the bones of larger animals such as cattle and horse are more common in ditches, while sheep bones are more frequent in pits and post-holes. Work on spatial patterning at other sites has suggested that larger bones tend to be located around the edges of the settlement and smaller fragments towards the centre, due to movement caused by the re-working of deposits (Wilson 1996, 14). One theory behind this is that large bones, probably removed before cooking, could have been relocated towards the edges of a settlement by both the inhabitants and by dogs or other scavengers. It may also suggest that work on larger carcasses tended to take place away from the centre of the settlement.

The structural evidence also has a bearing on animal resources at Stretton Road — a major change in layout occurred at the end of Phase 2. The form of the settlement from Phase 3, with a funnel-like entrance and curvilinear sub-enclosures, is reminiscent of systems for grouping and sorting animals, although it is suggested that the size of the enclosures points towards sheep and pigs rather

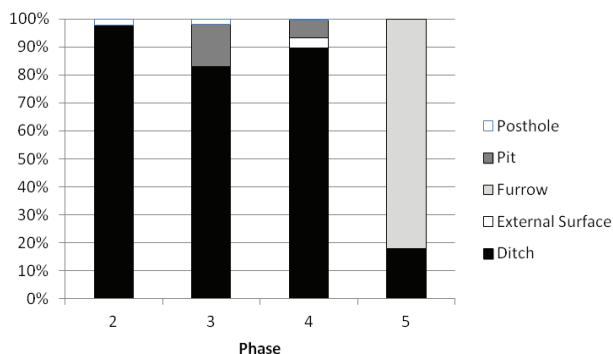


Figure 7.14: Distribution of the animal bone assemblage by feature type

than cattle (see Ch. 1, p. 9). If so, it may be that the faunal evidence does not fully reflect this usage.

It is very likely that a satellite farmstead such as Stretton Road did have a role to play in supplying the dietary demands of the urban market, and this excavation has provided a welcome opportunity to examine an assemblage from a rural Roman settlement. However, further evidence is required to help address questions of provisioning and the cultural and economic relationship between urban and rural sites in this period.

II. Charred plant remains

Angela Monckton

Introduction and methodology

Samples were taken from datable features with the potential to contain charred plant remains, in order to recover cereal remains and seeds as evidence of occupation, agriculture or other activities on the site.

Samples from forty contexts were wet-sieved in a York tank using a 1mm mesh, with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were transferred into trays and air-dried, and were then packed carefully in self-seal polythene bags and scanned for remains. The residues were also air-dried, and the coarse fraction over 5.6mm sorted for all finds. The fractions of the residues below 5.6mm were retained, and those from the samples selected for analysis were sorted down to 2mm for charred plant remains.

The flots were sorted for plant and animal remains using a x10–30 stereo microscope, and the remains were removed to glass specimen tubes. The plant remains were identified by comparison with modern reference material at ULAS, counted, and were recorded by type in the archive and summarised in Table 7.9. The samples with the most remains were selected for detailed analysis and tabulated in full (Tables 7.10 and 7.11), together with remains from the sorted residues — mainly cereal grain fragments — and selected 1–2mm residues which contained chaff and a few seeds. The plant names follow Stace (1991). For samples with over fifty items, the proportions (Table 7.11) and ratios (Table 7.12) of the different types of remains, i.e. cereal grains, chaff and weed seeds, were considered to help interpret the samples (van der Veen 1992). The results are described and discussed below.

Results by plant type

Most of the samples contained some charred plant remains, with only five being negative. Ten of the samples were moderately rich in plant remains, including some from each phase of Roman occupation, which is unusual for a farmstead or rural site of this period in Leicestershire. The samples contained much root material, including some large roots, but although some earthworm egg cases were noted, modern seeds were generally few in number, modern snails were scarce, and the charred material was all consistent with Roman material.

Cereals

Cereal grains were recovered from most samples, although many of the grains were broken and abraded. The identifiable cereal grains were mainly of glume wheat (*Triticum dicoccum* or *spelta*), but barley grains

Phase	Land-use area	Total samples	Samples with grains	Samples with chaff	Samples with weeds	Samples with food	Max. Density
2	20	5 (2*)	5	1	5	1	15.3
	21	2	1	0	1	0	0.42
3	30	7 (1*)	5	3	5	1	5.2
	31	1	1	0	0	0	0.1
	32	5 (3*)	5	3	5	1	60.7
4	40	6 (3*)	5	3	3	0	5.9
	41	9 (3*)	8	5	6	0	15.5

Max. density = items per litre of soil sieved for the best sample from the group.

* = number of samples analysed from the total for the group

Table 7.9: Total of samples containing cereal grains, chaff and weed seeds and maximum density for the group

(*Hordeum vulgare*) were also found — of a hulled form including some twisted grains, which shows that six-row barley was present. Wheat chaff fragments (glume bases) were quite numerous in some samples, and most were identifiable as glumes of spelt (*T. spelta*), having prominent minor veins, one prominent wide-angled keel, and wide bases. Glumes which were broken too short to distinguish these features or were of intermediate type were identified only as the glume wheats, either emmer or spelt (*T. dicoccum/spelta*). Although most were robust and probably of spelt, a few smaller glume bases were possibly of emmer as a contaminant of the crop, because crops were less uniform in the past. Evidence of germination of the grains was scarce: only a few grains had evidence of sprouting from the impression of the sprout, although many grains were broken, so the evidence may have been lost. However, very few detached cereal sprouts were found, so evidence of malting was absent, and no ovens or kilns were found on the site.

Other crops and food plants

Other food plants were sparse; occasional legume fragments may have been of beans or peas. Hazel nutshell was present in only one sample and represented food collected from the wild, probably from hedgerows or wood margins.

Wild plants

Weed seeds were mainly of plants of arable or disturbed ground. Weeds of spring-sown crops or disturbed ground included docks (*Rumex* sp.), while cleavers (*Galium aparine*) is associated with autumn-sown crops such as spelt. Other arable weeds are represented by stinking mayweed (*Anthemis cotula*), which is typical of poorly drained soils and often associated with the ploughing of clay soils. It is more common in the medieval period, when it is thought to have been associated with more efficient ploughing (Greig 1991). A seed of scentless mayweed (*Tripleurospermum* sp.) is more typical of better drained soils. Both mayweeds have been recovered from samples from Roman Leicester (Monckton 1999; Moffett 1993). Of the other weeds at Stretton Road, corn-cockle (*Agrostemma githago*) is represented by a fragment of capsule, as found in Leicester (Moffett 1993), while a few seeds of sedges (*Carex* sp.) suggest the presence of wetter areas of the fields or ditches. The most numerous of the arable weeds are the large grasses (Poaceae), including brome grass (*Bromus hordeaceus* or *secalinus*), as found on many Iron Age and Roman sites. Grass root fragments and tubers, including a tuber

of onion couch grass (*Arrhenatherum elatius*), were also present, perhaps from nearby vegetation used as kindling. A few other weeds were present, as mentioned below.

Results by provenance

Phase 2 (mid-1st to mid-2nd century)

Domestic focus L20

Three samples (2, 17 and 22) from roundhouse G201 and two samples (13 and 18) from the ditches of enclosure G205 were processed. Sample 2 was taken from the pit within roundhouse G201 and contained the most remains. These consisted of cereal grains of barley and wheat with weed seeds (Table 7.10), suggesting that this was waste from food preparation such as sorting cereals before cooking. No chaff was present in the roundhouse samples, but grass tubers were present, possibly from grass used as kindling, so this could represent domestic waste from food preparation that was burnt in a hearth and was dumped or accumulated in the features nearby, including enclosure ditch G205 (sample 13). Sample 18 from the enclosure ditch differed in being rich in chaff from spelt wheat, which outnumbered the grains, indicating that this was husking waste which included weed seeds of the crops in about equal numbers to the grains. This sample was the only one from the site with both types of mayweed amongst the weeds. The waste was not very abundant, and may suggest that this was a small-scale activity that involved husking spelt for consumption on the site.

Peripheral activity focus L21

Sample 8 from roundhouse G203 and sample 11 from enclosure ditch G206 contained few remains — only charcoal fragments within sample 8, and a few plant remains within sample 11, possibly as part of a scatter of domestic waste.

Phase 3 (mid-2nd to mid-3rd century)

Domestic focus L30

The samples from one of the pits in cluster G317 (sample 3), enclosure ditches G301 (samples 6 and 16) and roundhouse gully G316 (sample 19) contained only single numbers of plant remains, as did sample 20 from rectangular structure G318, probably all as a scatter of domestic waste. Sample 19 from roundhouse G316 and sample 46 from the ditch defining D-shaped enclosure G305 were negative. However, sample 49, also from G305, differed in containing material dominated by wheat grains, with fragments of hazel nutshell but few seeds. This is probably food waste burnt in the hearth and dumped in the

Phase Landscape number Group number Feature type Sample number	2		3				4						
	L20		L30	L32		313	L40	413	413	L41	407	412	
	201	205	305	310	313		405			404			
	Pit	Ditch	Ditch	Post-hole	Ditch					Ditch			
	2	18	49	43	42	55	50	10	21	44	51	54	
CEREAL GRAINS													
<i>Triticum dicoccum/spelta</i>	–	6	29	22	85	28	9	20	34	6	24	2	Glume wheat
<i>Triticum</i> sp.	3	–	2	–	4	–	–	–	–	–	–	–	Wheat
<i>Hordeum</i> sp. Hulled	5	1	1	22	7	3	17	5	5	–	2	1	Barley
<i>Secale cereale</i> L.	–	–	–	1cf	–	–	–	–	–	–	–	–	?Rye
Cereal indet.	10	16	46	48	141	46	21	30	81	12	51	–	Cereal
Cereal/Poaceae	1	2	–	3	4	4	–	–	4	1	3	–	Cereal/Grass
Cereal embryo sprouted	–	1	1	–	2	–	2	3	2	3	–	–	Cereal sprouts
CHAFF													
<i>Triticum spelta</i> L. gb	–	12	1	–	69	2	6	14	19	9	19	3	Spelt
<i>T. dicoccum/spelta</i> gb	–	57	–	2	173	17	15	53	69	53	62	4	Glume wheat
<i>T. dicoccum/spelta</i> gb*	3	27	–	–	102	–	–	–	59	–	–	–	Glume wheat
<i>T. dicoccum/spelta</i> spikelet	–	4	–	–	5	–	–	–	3	–	3	–	Glume wheat
<i>Triticum dicoccum</i> gb	–	–	–	–	5cf	–	–	–	–	–	2	–	?Emmer
<i>Triticum</i> cf <i>spelta</i> rachis	–	1	–	–	1	–	–	–	–	–	–	–	Glume wheat
Awns	–	–	–	–	1	–	–	–	–	–	–	–	Cereal barbs
Culm nodes, large	–	–	–	–	–	1	–	–	–	–	–	1	Straw fragment
COLLECTED, CULTIVATED													
<i>Corylus avellana</i> L.	–	–	11	–	–	–	–	–	–	–	–	–	Hazel nutshell
<i>Vicia/Pisum</i>	–	1	–	–	–	1	–	–	–	–	–	–	Beans/Peas
WILD PLANTS													
<i>Ranunculus</i> subgen <i>Ranunculus</i>	1	–	–	–	–	1	–	–	–	–	–	–	Buttercups
<i>Chenopodium</i> sp.	–	–	–	–	1	–	–	–	1	–	–	–	Goosefoot
<i>Stellaria</i> sp.	–	–	–	–	–	–	1	–	–	–	–	–	Chickweed type
<i>Rumex</i> sp.	4	–	1	38	17	1	5	2	2	–	8	–	Docks
<i>Polygonum</i> sp.	–	–	–	–	1	–	–	–	–	–	–	–	Knotweed
<i>Vicia</i> type	–	8	–	8	–	–	–	–	–	1	–	–	Vetches
<i>Vicia/Lathyrus</i>	1	–	–	–	1	–	–	–	–	–	–	–	Vetches/Tares
<i>Medicago/Trifolium</i> type	1	2	1	–	2	1	3	3	1	1	1	–	Clover type
<i>Prunella vulgaris</i> L...	–	–	–	–	–	–	–	–	–	1	–	–	Self-heal
<i>Plantago lanceolata</i> L.	–	–	1	–	–	–	–	–	–	–	–	–	Ribwort plantain
<i>Valerianella</i> sp.	2	–	–	1	–	–	–	–	–	–	–	–	Cornsalad
<i>Anthemis cotula</i> L.	–	1	–	–	15	1	7	2	3	1	7	–	Stinking mayweed
Asteraceae	–	–	–	–	–	–	–	–	–	1	–	–	Daisy family
<i>Tripleurospermum</i> sp.	–	1	–	–	–	–	–	–	–	–	–	–	Scentless mayweed
<i>Eleocharis</i> sp.	–	–	–	5	–	–	–	–	–	–	–	–	Spike-rush
<i>Carex</i> sp.	1	–	–	7	2	1	1	–	2	–	1	–	Sedges
<i>Bromus hordeaceus/secalinus</i>	–	1	1	1	6	–	2	8	5	–	2	–	Brome grass
Poaceae large	1	9	–	4	17	19	4	15	17	4	37	2	Grasses
Poaceae small	1	–	–	–	–	–	1	2	1	1	1	–	Grasses
<i>Cynosurus cristatus</i> L.	–	–	–	1	2	–	–	–	–	–	–	–	Crested dog's tail grass
Poaceae medium	–	–	1	2	61	3	–	–	–	–	–	–	Grasses
Indeterminate seeds	6	3	3	5	4	1	–	3	2	1	3	–	Seeds
OTHER													
<i>Agrostemma githago</i> L. frag.	–	–	–	–	+	–	–	–	–	–	–	–	Corn cockle capsule
Poaceae stem	–	–	+	+	–	+	–	–	–	–	1	–	Grass stem
Culm bases	3	–	–	–	–	–	–	–	–	–	–	–	Cereal/Grass roots
Charred roots	++	–	++	–	–	–	–	–	–	1	–	–	Roots
Tubers	5	–	5	–	–	–	–	–	–	1	–	–	Tubers ?grass
Total	48	153	104	170	728	130	94	160	310	97	227	13	Items
Vol. sample	20	10	20	18	12	16	16	12	20	19	20	20	Litres
Vol. flot	30	15	15	20	30	20	15	15	25	10	10	10	Mls
Items/litre	2.4	15.3	5.2	9.4	60.7	8.1	5.9	13.3	15.5	5.1	11.4	0.6	Items/litre

gb = glume base, + = present, ++ = abundant, * = remains from fine residues 1–2mm. Remains are seeds in the broad sense unless described otherwise

Table 7.10: Charred plant remains, excluding samples with few remains (see Table 7.9)

ditch, suggesting the domestic activity of food preparation and consumption nearby.

Southern peripheral fields L31

Sample 14 from field G302 contained only a fragmentary cereal grain.

'Ladder' enclosure system L32

Of the five samples recovered from L32, three were rich in remains. Sample 43 from a post-hole within enclosure block G308 contained little chaff but quite numerous

grains and weed seeds. Sample 55 from a ditch defining sub-enclosure G313 was dominated by cereal grains, with a little more chaff than the previous sample, but fewer weeds than grains. Both appear to contain partly cleaned cereal grains. Sample 42 (also from a ditch defining sub-enclosure G313) was the richest sample from the excavations, containing about equal numbers of grains and glume bases, with fewer weed seeds than grains (Table 7.10). The sample contained husking waste but included some spikelet bases, suggesting that spikelets were parched for husking or storage. The crop appears

to have been partly cleaned, as fewer weed seeds were present, meaning that the abundant chaff and weed seeds provide evidence for the husking of spelt on the site. These samples all suggest cereal-processing activities in this enclosure system as part of the site's agricultural activity.

Phase 4 (mid-3rd to late 4th century)

Domestic focus L40

Samples 5, 15 and 41 from the ditches defining enclosures G402 and G411 contained few charred plant remains, which probably represent part of the scatter of remains on the site. Sample 50 from the ditch defining enclosure G405 contained a moderate number of remains dominated by grains, mainly of barley (Table 7.10).

Peripheral enclosures L41

The two richest samples (10 and 21) from this area came from the southern boundary ditch of enclosure G413 on the southern edge of the farmstead. Both were dominated by chaff and contained arable weed seeds (Tables 7.11 and 7.12); they are thought to represent cereal-processing waste from parching spelt for husking somewhere nearby. No ovens or kilns were found, but this waste suggests that husking spelt was an activity on this part of

the site, as the deposit in the ditch was quite extensive. Sample 51 from a ditch defining possible structure G407 was similar. All these samples appear to represent partly cleaned cereals with husking waste, and suggest agricultural activity. Other ditch samples from this enclosure system produced fewer remains, probably as a scatter of domestic waste.

Sample 44 from the ditch defining enclosure G404 contained a moderate number of remains that were dominated by spelt chaff, probably as evidence of the small-scale husking of spelt.

Discussion

Spelt was the most numerous cereal encountered, the same type of wheat that has been found in other Roman and Iron Age sites both locally and nationally. At Stretton Road, it was found with barley in all Roman phases. Charred cereal grains, chaff and weed seeds were found to be quite numerous in some of the samples, and the relative proportions of these remains can indicate activities carried out on the site by consideration of what is known about the cereals themselves. The ears of glume wheat (spelt) break into segments called spikelets when they are threshed. The straw fragments would be raked away and the spikelets could be stored in this form

Phase	Low density: up to 5 items/Litre	Medium density 6–49 items/Litre	High density: >50 items/Litre
2	Normanton I (2.5) Kirby Muxloe (2.5) Stamford Rd (1.4) Gimbro Farm (3.5) Rearsby Site 2 (0.3) Rearsby JR (+) Loughborough, Dishley Grange (1.2) Ratby (0.6)	Great Glen (15.3) Market Overton (7.0)	Ridlington Oven 5 (222) CD
3	Drayton Villa (3.4)	Lockington (44) A Ashby Bypass (12.6) Oats	Ridlington Oven 1 (342) CD Empingham (c.200) CD Norfolk St (c.100) CD Hamilton (368) CDx2 Great Glen (60.7) C Scalford Brook (c.250) C Appleby Magna (73) CD Crown Hills (139) CD Grange Lane (385) CD
4	Desford (1.3) Rearsby Site 6 (0.6)	Great Glen (15.5) C Gaddesby JR (+++) Chaff	

Key: Figure in brackets = maximum density (items per litre of soil) of the best samples of the phase; CD = Roman corn drier with abundant spelt chaff showing large-scale cereal-processing; A = agricultural waste; C = cereal crop waste.

Source of information: sites summarised in Monckton 2004a and 2011 except Ashby Bypass (Ciaraldi 2001), Desford (ULAS 1999), Market Overton (ULAS 2007b), Ridlington (ULAS 2002), Hamilton Corn Driers (ULAS 2004a), Appleby Magna and Crown Hills (ULAS 2000a; 2000b), Grange Lane (ULAS 2010), Rearsby sites 2 and 6 (Monckton 2007a), Gaddesby and Rearsby (Rackham 2009) and Lockington (ULAS 2011)

Table 7.11: Roman rural and extra-mural sites with charred cereal remains: comparison of maximum density of charred plant remains (items per litre of soil)

Phase	Land-use area	Group	Sample	Grains	Chaff	Seeds	Other	Total
2	20	201	2	24.7% (19)	3.9% (3)	53.2% (41)	18.2% (14)	77
		205	18	15.9% (25)	64.3% (101)	19.2% (30)	0.6% (1)	157
3	30	305	49	75.8% (78)	0.9% (1)	7.8% (8)	15.5% (16)	103
	32	310	43	55.4% (96)	1.2% (2)	42.2% (73)	1.2% (2)	173
		313	55	62.3% (81)	14.6% (19)	22.3% (29)	0.8% (1)	130
		313	42	32.7% (241)	48.2% (354)	18.6% (137)	0.5% (4)	736
4	40	405	50	49.0% (47)	21.9% (21)	25.0% (24)	4.1% (4)	96
	41	404	44	19.6% (19)	64.0% (62)	11.3% (11)	5.1% (5)	97
		407	51	35.2% (80)	38.3% (87)	26.1% (59)	0.4% (1)	227
		413	10	34.4% (55)	41.8% (67)	21.9% (35)	1.9% (3)	160
		413	21	39.1% (124)	47.3% (91)	12.9% (41)	0.7% (2)	317

Key: the percentage of each type of remains (with the number of remains in brackets) of the total remains found in each sample analysed

Table 7.12: Numbers and proportions of types of charred plant remains in samples analysed

because the chaff protects the grain from insect and fungal attack (Hillman 1981). In the spikelet, the grain is still held in the chaff and requires parching and pounding to free the grain; then the chaff and small weed seeds can be removed by sieving to retain the grains. The spikelet of spelt consists of two glumes and two grains; samples with more chaff than grains indicate the presence of cereal-cleaning waste (van der Veen 1992), as in samples 18 and 44 (Tables 7.10 and 7.13). Samples with abundant weed seeds may also represent some of this cereal-cleaning waste, which was present in most of the samples analysed here (Table 7.10). Samples rich in grain are likely to represent cleaned grain if they have little chaff and few weeds, perhaps originating from accidental burning of the cereal product from storage or during food preparation. However, there was no evidence for abundant clean grain at Stretton Road. The deposits mainly represent partly cleaned cereals, perhaps burnt accidentally during processing to husk the spelt, with waste chaff and seeds. This also includes some spilled grain raked from hearths for disposal and found on areas of the site near to where cereal processing was carried out. This agricultural activity was most evident in the middle and late Roman phases and particularly in peripheral enclosure L41, with some in domestic focus L40, where quern stones and a small millstone or large quern were also found.

	Phase 2, Sample 18	Phase 3, Sample 42	Phase 4, Sample 21
Glumes: wheat grains	5.47	1.33	1.47
Seeds: all grains	1.2	0.58	0.33

Table 7.13: Ratios of wheat chaff to grains, and weed seeds to cereal grains for the most productive sample of each phase

Domestic occupation can be typified by samples with low densities of grain and seeds which may represent waste from hand-sorting of cereals before consumption (Moffett 1986). Such remains, which can include grains spilled during food preparation and cooking, may represent domestic waste burnt in the hearth. This waste may be raked from hearths and dumped in pits or other features, and it can accumulate as a scatter on occupation sites, as represented in some of the poorer samples such as sample 54 (G412, L40) at Stretton Road. Plant materials for other purposes such as fodder, thatch and kindling may be represented by the remains of grassy vegetation found in some of the samples. The distribution of the scatter of remains points towards areas where domestic rather than agricultural activities were carried out.

As with other sites outside the town of Leicester, there is a lack of evidence for other foods such as the fruit and fish represented in the town. This may be because these finds from the town are mainly from cess-pits, which are not so necessary in the countryside, but is perhaps more likely to reflect the difference in status or wealth of the inhabitants. Other crops are represented by only two legume fragments, possibly of beans, while gathered foods are represented only by hazel nutshell fragments in one sample, meaning that the evidence for foods other than cereals is very sparse. These remains do, however, provide some evidence for food consumption or preparation on the site, particularly Phase 2

sample 18 (L20) and Phase 3 samples 49 (L30) and 55 (L32) (Table 7.10).

Comparison with other Roman sites

Around twenty Roman rural sites have been sampled in Leicestershire and Rutland. Some have only a low density scatter of charred cereal remains from domestic activity, while others have abundant cereal-processing evidence dominated by spelt chaff, including the sites with corn driers (summarised in Monckton 2004a, 60). Some of the sites with few cereal remains may have been more concerned with animal husbandry (Monckton 2004b, 16), or at least certain parts of the sites, as is suggested at Rearsby site 6 — few cereal remains were recovered, but grassy remains were present together with a water-pit to provide animals with water. At the other extreme, very abundant cereal remains have been recovered from corn driers where cereals were processed in various ways. Corn driers have been found at a number of local sites, mainly from the middle and late Roman periods, with evidence for parching spikelets of spelt and for husking spelt, as well as other functions (Monckton 2004a). The use of specialised features for this shows the increased organisation and development in farming technology for cereal processing. They have been found at some villas in the area such as Empingham, Rutland and Norfolk Street, Leicester, and at sites on the outskirts of Leicester at Hamilton North and Crown Hills (Table 7.12) as well as elsewhere in the two counties. Although ovens or kilns were not found at Stretton Road, there is evidence for cereal processing in Phases 3 and 4. Between these two extremes there are a few other sites with evidence for agricultural activities which compare with Stretton Road (Table 7.12).

In the early Roman Phase 2, some of the samples compare with sites which have a low density of remains (Table 7.12), probably as domestic waste and small-scale cereal cleaning. However, one sample from Stretton Road (sample 18) has more husking waste than these 'low density' sites, and although it may still represent domestic activity, it may suggest that this activity was more important here than at sites where few remains were found. The evidence at present is for small-scale cereal processing in the early Roman period, suggesting that spelt was stored as spikelets and processed in small batches, as in the Iron Age.

In Phase 3, the richest sample from Stretton Road contained abundant spelt chaff as evidence of husking spelt, while other samples from the phase contained fewer remains. This suggests agricultural as well as domestic activity. The cereals, mainly spelt, are likely to have been grown in the nearby fields, and the weeds — scentless and stinking mayweed and cornsalad — have all been found in samples in Roman Leicester (Monckton 1999). It is possible that the town was supplied with cereals from this area of the county, although there is insufficient evidence here to suggest commercial activity. At Ashby Bypass, samples with abundant stinking mayweed were thought to indicate an improved method of ploughing, as this plant was rare on Iron Age sites in the region but appeared in Roman times with more abundant cereals (Ciaraldi 2001). Some of the samples at Lockington suggested domestic activity, including small-scale cereal processing, with the addition of a sample representing agricultural waste from weeding or harvest (Monckton 2011). The evidence from Stretton Road therefore adds

to the local evidence for the development of agriculture in the Roman period.

Late Roman Phase 4 samples again showed a mixture of low and high densities of remains, with the low-density scatter of domestic waste from food preparation in the areas of occupation. However, low-density plant remains may have been from parts of a site further away from the areas where cereal processing was carried out — the processing of cereals in the Roman period does seem to have been concentrated in particular areas, often at the margins of the settlement. This seems to have been the case here, where cereal-processing waste was present in a ditch in peripheral enclosures L41, possibly showing an increase in its importance. By the late Roman period, the processing of cereals is known from the evidence from corn driers elsewhere. Where these features are found, waste from cereal processing can indicate where this activity was being carried out, and may suggest sources for the supply of cereals to towns in the area.

Conclusions

All three Roman phases produced some samples with sufficient remains for analysis. Although the same cereals were found over time, there was some difference in the quantity and types of remains and the composition of the samples, ranging from those of a more domestic nature in Phase 2, to more agricultural-type activity in Phases 3 and 4. Cereals were grown nearby, and weeds characteristic of the locality were present. The development of agricultural methods is suggested by the presence of weed seeds associated with more efficient ploughing, and an increase in production is suggested by more abundant remains in Phases 3 and 4. There was continuity in the cultivation and consumption of spelt throughout the phases, with barley also present in smaller numbers. There were no samples with very abundant spelt chaff, nor were ovens and kilns present, so there was no strong evidence for surplus production, although an extensive deposit in Phase 4 suggests that this was a possibility.

It should be noted that spelt can be traded as spikelets, with the grain still in the chaff, for storage or processing elsewhere, while chaff itself is a useful commodity and may have been traded (D. de Moulins pers comm.). It was a favoured fuel for cereal processing and is often found in corn driers. Cereal waste can also be used as animal food, which may have been the case at Stretton Road, where animal husbandry is believed to have been significant (see Ch. 7, p. 75).

The economy of the site included mixed farming, with cereal production and animal husbandry. There is no evidence from the plant remains of the characteristic Roman foods of local and imported fruits and fish, as are found in Leicester (*e.g.* Score *et al.* 2010). In fact, such remains have not yet been found on any rural sites of Iron Age or Roman date, and seem to be an urban phenomenon in the county. The Stretton Road farmstead therefore seems to fit the pattern of low-status agricultural sites, although it is unusual in showing production throughout the Roman period.

III. Human remains

Jen Browning, with identification carried out by Harriet Jacklin

Four human bones were found in isolation within enclosure ditches, rather than as articulated groups of bone or partial skeletons. Three were adult; the fourth was a humerus from an infant. One adult phalanx was recovered from the main enclosure G205 within domestic focus L20 (Phase 2), and one from another adult was found in the ditch terminus of a small sub-enclosure within block G308 of the 'ladder' enclosure system L32 (Phase 3). In Phase 4, an adult femur was recovered from a ditch that defined the south side of routeway G413 (L41), whilst an infant humerus was recovered from enclosure G401 (also L41).

The bones from G205, G401 and G413 were found along with animal bones, which suggests that they were not disposed of in any special way. The femur from G308 was found along with some undiagnostic bone fragments which were poorly preserved but which all could have been human.

Disarticulated human remains are frequently found on Iron Age sites; an example from the region is Beaumont Leys (Jacklin and Thomas 2011), and the bones from Stretton Road may be in the same tradition. These may sometimes represent structured deposits (Hill 1995a, 105) but are equally likely to have resulted from the reworking of old deposits. With the exception of the infant bone, the remains were fragmented and in quite poor condition, possibly suggesting that they were of some antiquity before final deposition.

Appendix I

Ceramic Type Series

Jackie Wells

Fabrics are listed below (Table A1) in chronological order, using fabric codes and common names in accordance with

the Leicestershire Ceramic Type Series. For the Roman pottery concordance has been made, where possible, with the National Roman Fabric Reference Collection (Tomber and Dore 1998).

Leicestershire CTS Code		NRFRC code or common name	Sherds	Wt (g)
<i>Iron Age (Marsden 2000)</i>				
Grog	G	Grog	1	4
	G1	Grog and sand	31	477
Igneous	RQ1	Coarse mixed inclusions	22	489
Shell	S1	Shell	19	157
	S2	Shell and fine sand	2	30
Quartz	Q	Sand and calcareous	3	74
	Q1	Fine/coarse sand	16	239
<i>Late Iron Age</i>				
Grog	GT	Grog and shell	18	344
	GT1, GT2	Fine/medium/coarse grog	24	263
Calcite-gritted ware	CG1A	Shell	1	37
<i>Roman (Pollard 1994a)</i>				
Samian	Samian	Samian ware (see Appendix 2)	54	416
Amphorae	AM9A	BAT AM 1	1	14
MO: Mortaria	MO1	OXF WH	3	59
	MO4	MAH WH	3	75
	MO6	LVN WH	2	219
	MO	Unprovenanced mortaria	4	143
WW: White wares	WW	OXF WH	4	51
	WW1	Northamptonshire ware	5	70
	WW2	MAH WH	1	1
	WW3	LVN WH / VER WH	11	114
	WW5	VER WH	5	71
OW: Oxidised wares	OW2	Fine sandy	55	378
	OW3	Coarse sandy	89	1052
	OW7	Micaceous sandy	8	112
	OW9	HAD OX	1	7
WS: White-slipped wares	WS2	White-slipped oxidised ware	5	351
	WS3	White-slipped reduced ware	6	260
GW: Grey wares	GW1	Sandy reduced ware	46	482
	GW4	LVN RE	24	360
	GW3, GW5	Fine grey ware	663	10,740
	GW6, GW9	Coarse grey ware	261	4,420
	GW8	Micaceous reduced ware	54	672
	GW, C5	Black-slipped grey ware	2	63
BB: Black-Burnished ware	BB1	DOR BB 1	8	79
GT: Grog tempered wares	GT	Grogged ware	2	123
	GT3	Roman grog	9	279
	GT5	Grog and sand grey ware	15	421
C- Colour-coated wares	C2, C3	LVN CC	131	3,044
	C13	OXF RS	10	139
	C17	Unprovenanced colour coat	1	90
CG: Calcite-gritted wares	CG1A, CG1B	Shelly wares, including HAR SH	283	4,387
	–	Non-specific Roman ware	6	57
<i>Post-Roman (Davies and Sawday 1999)</i>				
Post-medieval	EA6	Black-glazed earthenware	1	15
UNID	–	Unidentified / undatable	5	25

Table A1: Pottery Type Series

Appendix II

Samian pottery

Jill Eyers

Methodology

The pottery was assessed by fabric and form using a x20 hand lens and x40 binocular microscope. Where decoration was available a fuller assessment was attempted using a variety of published, printed and online databases. However, in-depth analyses were prevented due to the fragmentary nature of the decorated vessels. The quantity and weight of the total assemblage is expressed numerically and as a percentage. The assemblage is too small to present as meaningful EVEs, although these were measured and appear in the archive.

The assemblage

The assemblage consists of fifty-four sherds, weighing 416g. Forms include plates, cups and bowls, with many abraded sherds which could not be assigned to a form. Table A2 shows the proportions of samian in Phases 2–5.

Phase	Sherds	%	Wt (g)	%
2	5	9.3	49	11.8
3	18	33.3	172	41.2
4	28	51.8	191	46.0
5	3	5.6	4	1.0
Total	54	100	416	100

Table A2: Quantity of samian ware listed by Phase

Discussion

The samian is predominantly 2nd-century and from Lezoux (Table A3), which allows for production from AD120 to 200, followed by distribution and site usage during the late 2nd to 3rd century. The Lezoux pottery accounts for 87% of the assemblage, with only 11% from the 1st century, which is a La Graufesenque source.

Source area	Sherds	%	Wt (g)	%
La Graufesenque	6	11	49	12
Lezoux	47	87	332	80
East Gaul	1	2	35	8
Total	54	100	416	100

Table A3: Proportions of samian ware from each of the three main source areas

There are no samian sherds from Montans (South Gaul), Les Martres de Veyre (Central Gaul) and very little East Gaulish material. Key distribution for samian was during the 2nd to 3rd centuries and from the big centres in Central Gaul.

The vessels used on Stretton Road were predominantly plates and bowls, which together make up 40% of the sherd content (58% by weight). Dishes and cups together comprise a further 15% of the assemblage (25% by weight). This is a typical domestic assemblage, showing some communal eating style during this time period (Table A4; Willis 2005).

The assemblage is too fragmentary and abraded to give a meaningful EVE value but the assemblage undoubtedly represents a minimum of forty-six vessels.

Vessel Category	Sherds	%	Wt (g)	%
Plates (Dragendorff 18, 18/31*)	11	20	118	28
Bowls (Dr 30, 31, 37, 38)	11	20	124	30
Dishes (Dr 36, Curle 15)	3	6	76	18
Cups (Dr 27)	5	9	29	7
Indeterminate	24	45	69	17
Total	54	100	416	100

* transitional plate/bowl

Table A4: Quantification of samian ware by vessel type

Conclusion

The samian is predominantly distributed within 2nd- and 3rd-century deposits, mostly representing mid- to late 2nd-century manufacture and distribution. Occurrence in secondary and tertiary fills explains the abraded and fragmented nature of many items. The assemblage is primarily domestic, with common and popular forms being represented from the height of Lezoux mass production centres.

Catalogue notes

1. **Phase 3** 'Ladder' enclosure system L32: DR37 bowl Lezoux. Sherd with rivet hole. These are reasonably common in samian pottery. They can be present as large and ungainly repairs to the pottery or occasionally simply pierce the pottery (*i.e.* not for repair of broken vessels) and the purpose is unknown. This rivet hole is on the edge of the broken sherd and hence it is not known what category it fits into. AD 120–200.

2. **Phase 5** Furrows L51: DR37 bowl Lezoux. The two decorated sherds (a and b) are very likely to be from the same vessel (based on fabric, thickness and design). The smaller of the two sherds is a fragment of a female figure; the larger sherd shows a standing male figure. A muscular right arm is visible, with part of the chest. It is not possible to locate the precise figure in databases as the head and lower body are missing, but both are in the style of Cinnamus (*e.g.* Stanfield and Simpson 1958, pls 159 and 161). AD 150–180.

Appendix III

Brick and tile fabric types

Jackie Wells

Sand: Oxidised hard-fired fabric, sometimes with a reduced core, containing abundant sub-rounded and sub-angular quartz sand inclusions. Variable degree of coarseness, although not in sufficient quantity to merit definition as coarse or finer variants.

Shell: Hard-fired, fairly smooth fabric, with variable orange-buff-brown surfaces and sometimes a paler core. Containing abundant, ill-sorted, sub-angular shell, visible throughout the fabric and on the surfaces.

Appendix IV
Coin catalogue

Peter Guest

RA	Phase	Land-use area	Group	Denomination	Date	Obverse	Reverse	Mint-mark	Mint	Reference
1000	3	30	314	AE3	364–78	Valens	SECVRTAS REIPVBLICAE	OF/[...]/[.....]		
2002	4	40	405	AE3	364–78	House of Valentinian	GLORIA ROMANORVM	//[.....]		
2018			410	Radiate	253–68	GALLIENUS	DIANAE CONS AVG — stag / antelope?	//XI		
2022	3	30	306	AE3	347–8	House of Constantine	VICTORIAE DD AVGGQNN — 2 victories	palm//[.....]		
2023				AE3	364–78	Valens	SECVRTAS REIPVBLICAE	//[.....]		
2024	4	41	401	AE3	364–78	Valens	GLORIA ROMANORVM	//[.....]		
2025	3	30	306	AE3	364–78	House of Valentinian	SECVRTAS REIPVBLICAE	OF/[...]/[.....]		
2026				AE3	364–78	House of Valentinian	SECVRTAS REIPVBLICAE	//SCON	Arles	
2029	4	40	414	AE4 copy	late 3rd–4th century	illegible	illegible			
2030			405	Barb radiate	270–300	as Tetricus I	illegible			
2031				AE4	388–402	House of Theodosius	Victory advancing left	//[.....]		
2035			414	Barb radiate	260–300	illegible	illegible			
2036				AE3	364–78	House of Valentinian	GLORIA ROMANORVM		Lyon	
2037			405	AE4 copy	330–48	as House of Constantine	as Gloria Exercitus — 2 standards	OF/II/LV/GDP		
2038	5	51	501	AE4 copy	330–48	as House of Constantine	as Gloria Exercitus — 2 standards			
2040	4	41	401	AE3	364–78	House of Valentinian	SECVRTAS REIPVBLICAE	//[.....]		
2041	5	51	501	AE3	364–7	Valens	SECVRTAS REIPVBLICAE	O/IV/G•P	Lyon	CK: 283
2042	4	40	414	AE3/4	late 3rd–4th century	illegible	illegible			
2043				AE3 copy	351–64	as Magnentius / Decentius	as Victoria DD NN Aug et Caes, 2 victories holding shield — VOTV/MVLT/X			
2044			405	AE3	367–75	Gratian	GLORIA NOVI SAECVLI	OF/II/CON*	Arles	CK: 523a
2047			411	AE4 minim	late 3rd–4th century	illegible	illegible			
2055		41	407	AE3	330–5	House of Constantine	GLORIA EXERCITVS — 2 standards	wreath//[PI] CONST	Arles	
2061	6	60	602	AE4 minim	late 3rd–4th century	illegible	illegible			
2064	3	30	306	AE3	375–8	Gratian	SECVRTAS REIPVBLICAE	//PCON	Arles	CK: 533
2065	6	60	602	AE3	375–8	Valentinian II	GLORIA ROMANORVM	OF/III//[.....]		

Table A5: Catalogue of coins by Registered Artefact number (RA)

Appendix V

Petrology table

Phase	Land-use area	Group	OA	RA	Find type	Lithology	Source
2	20	205	1	1014	Whetstone	Silty limestone Lias	Leicestershire (Lower Jurassic)
4	40	403	15	2012	Millstone	Millstone Grit	Carboniferous, Pennines
		405	16	2008	Rotary quernstone	Millstone Grit	Carboniferous, Pennines
				2015	Rotary quernstone	Millstone Grit	Carboniferous, Pennines
				2016	Rotary quernstone	Millstone Grit	Carboniferous, Pennines
		412	20	2017	Stone tile	Micaceous sandstone	Leicestershire Tarporley Siltstone Fm (Triassic)

RA = Registered Artefact number, OA = Other Artefact number (see Ch. 7).

Table A6: Petrological identifications

Appendix VI

Charcoal table

Phase	Land-use area	Group	Sample	Diameter	Rings	Age	Species	Species
2	20	202.5	22	frag	5	5	oak	<i>Quercus</i> spp.
		205.5	18*	—			coal	—
		203.5	8	frag			oak	<i>Quercus</i> spp.
3	30	206.5	11	15mm.	5	5	maple	<i>Acer campestre</i>
		316.5	19	—			coal	—
		317.2	3	frag			oak	<i>Quercus</i> spp.
	32	305.2	49*	frag			maple	maple
		310.5	43	frag			hazel nutshell	<i>Corylus avellana</i>
		313.5	55	frag			oak	<i>Quercus</i> spp.
4	40	405.5	50*	frag			ash (mature)	<i>Fraxinus excelsior</i>
		405.5	50*	frag			ash	<i>Fraxinus excelsior</i>
		411.3	41	frag			oak	<i>Quercus</i> spp.
		411.3	41	frag			oak	<i>Quercus</i> spp.
	41	317.2	47	frag			ash	<i>Fraxinus excelsior</i>
		401.5	48	frag			oak	<i>Quercus</i> spp.
		401.5	48	frag			oak	<i>Quercus</i> spp.
		58	—	—			coal	—
6	61	601.1	7	—			coal	—

* = CPR sample

Table A7: Analysis of charcoal

Appendix VII

Community engagement

When construction work is underway, opportunities for communities to engage with archaeological investigations are often difficult to arrange. Although not a requirement of the Stretton Road Project Design, we were fortunate that our client (Miller Homes East Midlands Ltd) and their archaeological consultant (Simon Mortimer of CgMs Consulting Ltd) were supportive of enabling some engagement with the local community. It was also opportune that, once the priority area in terms of construction had been investigated and handed back to the developer, archaeological work continued in a discrete part of the development area, shielded from construction activities by a mature hedge — thus making the site relatively safe for the general public.

As community engagement is still not the ‘norm’ for developer-funded archaeological investigations, it seems appropriate to briefly record what happened at Great Glen. There were four main strands, all of which took place in what effectively became the final ‘open’ week of fieldwork: production and circulation of a preliminary report; visits to the site by local school children; visits to the site by ‘young archaeologists’; and site tours for the residents of Great Glen. Risk assessments and considerable liaison with the participants were necessary in advance of the site visits and tours.

The success of the community engagement strategy is evidenced by the constructive feedback from visitors and school teachers, along with the positive comments in the visitor book.

Preliminary report

This report was produced to coincide with the open week. It was circulated by e-mail for wider distribution to all known interested parties, including the Parish

Archaeological Warden, the Community Archaeologist of Leicestershire County Council, and local schools. It was also delivered by hand to the residents of Garfield Park, who were our neighbours during the investigations.



School visits

Several groups of pupils from St Cuthbert's Church of England Primary School in Great Glen and from Leicester Grammar School visited the site. Not only did they have a tour of the site, handle some of the finds and

talk to archaeologists doing their work, they also got to wear yellow hi-vis vests and hard hats supplied by Miller Homes East Midlands Ltd. Over fifty school children visited the site in total.





Young Archaeologists

Members of the Leicestershire Young Archaeologists' Club and the Bedford Museum Saturday Archaeology Workshops attended the site for a day with their parents. They were given an opportunity to excavate archaeological deposits and clean archaeological finds.

Over twenty-five 'young archaeologists' were given practical experience on a real archaeological site.



Site tours for the residents of Great Glen

For several days (within working hours) the site was open for visits by members of the public. They were given a tour of the site by a professional archaeologist, who explained how the work was being done and what had been found on site. There was also a display of finds and photographs.

There were over 200 visitors — a considerable number, given that the visits had only been advertised within Great

Glen and were only on weekdays. As expected, most of the visitors were from Great Glen itself, but some came from Leicester and even as far away as Peterborough. At times, due to the visitor numbers, multiple tours were undertaken.



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