EAST ANGLIAN ARCHAEOLOGY

Frontispiece:
Sunset over a flooded open-area 2, November 2001. *Photographer Catherine Grindey*

This book is dedicated to the memory of Revd. Mark Ellahi-Folland
who sadly passed away in April 2009

Farm and Forge: late Iron Age/Romano-British farmsteads at Marsh Leys, Kempston, Bedfordshire

by Mike Luke and Tracy Preece

with major contributions by
Simon Chapman, Mark Maltby, Mark Robinson, Jackie Wells and Tim Young

and contributions by
Brenda Dickinson, Peter Guest and Felicity Wild

illustrations by
Cecily Marshall

East Anglian Archaeology
Report No. 138, 2011

Albion Archaeology

EAST ANGLIAN ARCHAEOLOGY
REPORT NO.138

Published by:
Albion Archaeology
St Mary's Church
St Mary's Street
Bedford MK42 0AS

in conjunction with
ALGAO East
http://www.algao.org.uk/cttees/Regions

Editor: Martin Oake
Managing Editor: Jenny Glazebrook

Set in Times Roman by Jenny Glazebrook using Corel Ventura™
Printed by Henry Ling Limited, The Dorset Press

ISBN 978 0 9556546 3 3

Funding for archaeological investigation and publication was provided by Old Road Securities (evaluation and Area 1) and Gazeley Properties (Area 2)

East Anglian Archaeology was established in 1975 by the Scole Committee for Archaeology in East Anglia. The scope of the series expanded to include all six eastern counties and responsibility for publication was transferred in 2002 to the Association of Local Government Archaeological Officers, East of England (ALGAO East).

For details of *East Anglian Archaeology*, see last page

Cover illustration:
Aerial photograph with open-area 2 in foreground and construction of large warehouse in area 1 almost complete (*CgMs Consulting copyright reserved*)

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Acknowledgements

Inevitably, on a project of this scale, the hard work, advice and co-operation of a large number of people require acknowledgment.

Overall
Albion Archaeology would like to acknowledge the assistance of Kate Sylvester-Kilroy and Chris Kilroy (Old Road Securities) during the evaluation and Area 1. For Area 2 we would like to acknowledge Don Morgan and Terry Chung (Gazeley Properties).

In addition, thanks are due to Martin Oake (Bedfordshire County Archaeological Officer during this project) who monitored all stages of the work and provided much useful advice.

The co-operation shown by Mr and Mrs Western of Marsh Leys Farm, (landowners at the time of the evaluation) and their land agent Peter Mavro (Warmingtons) greatly assisted in the smooth running of the on-site work when part of the land was still being actively farmed.

The evaluation, mitigation investigation and post-fieldwork were undertaken by Albion Archaeology (formerly known as Bedfordshire County Archaeology Service) under the management of Mike Luke working to Drew Shotliff.

Evaluation
The initial evaluation was undertaken in three main stages: field artefact collection, geophysical survey and trial excavation. Field artefact collection was undertaken by Ian Beswick, Sally Dicks, Rob Edwards, Craig Halsey, Joan Lightning and Christiane Meckseper. Geophysical survey was undertaken by West Yorkshire Archaeology Service under the direction of Alistair Webb and with the assistance of Mark Whittingham and Rob McNaught. Excavation and recording during evaluation trenching was supervised by Rob Edwards assisted by Sally Dicks, Matt Edgeworth, James Pixley, Jerry Stone and Julian Watters.

Mitigation investigation
Open-area excavations were undertaken immediately in advance of development and both areas were supervised by Ian Beswick with assistance from Tracy Preece (Assistant Supervisor on Area 2). Hand excavation and recording for Area 1 was undertaken by Kate Bain, Vivien Bray, Caroline Clarke, Sally Dicks, Ed Frost, Pat Kent, Tracy Preece, Amy Rushton, Jerry Stone and Julian Watters. Those who undertook the same tasks on Area 2 were: Kate Chapman, Steve Clarke, Caroline Clarke, Catherine Grindey, Keeley Hale, Richard Jones, Mark Littlewood, Helen Parslow, Pete Sprenger, Chris Thatcher, Steve Thorpe and Adrian Woolmer.

Joan Lightning (Albion) and Martin Edwards (Mouchels) undertook site survey including the earthwork survey. Artefact recovery was assisted by metal detectorists from the St Neots Club (notably Alan Bartlett) and independently by Iain Metcalfe.

Post-fieldwork assessment and updated project design
The majority of the initial artefact processing was undertaken by, or under the supervision of, Jackie Wells. Processing of many of the finds and ecofact samples was undertaken by Jerry Stone. Site plans were digitised by Joan Lightning.

The MAP 2 style post-excavation assessment and updated project design covered all stages of fieldwork. It was prepared by Mike Luke (editor), Ian Beswick (structural), Jackie Wells (artefacts), Mark Maltby (animal bone), Jenny Robinson and Layla Renshan (ecofact samples for Area 1 and 2 respectively, both working under the direction of Mark Robinson).

Analysis and publication
Wherever possible, the specialists used for the assessment were also used for analysis and publication. They are duly acknowledged as contributors to both specialist sections and the discussion chapter. In some cases, work programme conflicts prevented involvement beyond the assessment stage *e.g.* Jenny Robinson and Layla Renshan were replaced by Mark Robinson (ecofact samples).

Mark Maltby would like to acknowledge that animal bone recording was undertaken by Kate Mason and Vicki Ford (both of the School of Conservation Sciences, Bournemouth University).

A number of BCAS/Albion staff who were involved in the investigations do not, due to the nature of their work, have easily identifiable contributions to this publication. They include: Ian Beswick (site supervisor), Joan Lightning (who undertook all the digital capture of excavation drawings and cropmarks); and Drew Shotliff (who provided endless support and advice).

Peter Guest and Martin Oake read substantial sections of the publication. Their suggestions and comments, along with those of Drew Shotliff who had the unenviable task of reading, commenting on and editing the entire publication, are gratefully acknowledged.

Photographs

Photographer credits (where known): Kate Bain (Pl. 3.2), Ian Beswick (Pls 1.1, 1.3, 3.1, 4.5, 4.8 and 5.3), Chris Cox of CgMs Consulting (cover and Plate 4.6), Sally Dicks (Pls 3.8 and 4.13), Catherine Grindey (frontispiece and Plate 4.12), Pat Kent (Pl. 4.2), Mike Luke (Pls 4.7, 4.9, 5.4 and 7.1), Helen Parslow (Pl. 3.9), Tracy Preece (Pls 3.3, 3.7, 4.1, 5.1, 5.2 and 5.5), Pete Sprenger (Pl. 4.10), Jerry Stone (Pl. 3.4) and Julian Watters (Pls 3.6 and 4.3).

Format of the report

Structure of the publication
Following this preamble and introduction (Chapter 1), the results of the investigations are presented within a chronological framework (Chapters 2–6) which corresponds to Phase, *e.g.* Phase 4 is in Chapter 4 *etc*. This is followed by artefacts (Chapter 7) and ecofacts (Chapter 8) and a discussion (Chapter 9). A series of appendices (pottery type series, registered artefact catalogue *etc.*) provide supplementary detail.

Chapters 2–6 begin with an overview and a standardised location plan. The text is then usually arranged by Farmstead and divided by land use area (L number), *e.g.* domestic enclosures, fields, activity foci *etc*. Sub-divisions by spatial (L number) or functional (G number) elements are used. The text is accompanied by plans and section drawings where appropriate. Significant artefactual and/or ecofactual information is incorporated where appropriate.

Date of writing
Many of the specialist reports were completed by 2005–6 and no systematic attempt has been made to update them.

Terminology
The area covered by the investigations reported in this publication is referred to as Marsh Leys or Marsh Leys Farm. All measurements are metric.

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 Chapter 1: The archaeological background; Post-excavation analysis). The main elements comprise Phases (written in full), Farmsteads (written in full), Land use area number (L prefix) and Group number (G prefix). If a group or land use area has a decimal point, this indicates that it comprises 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 .05, *e.g.* G510.05. This is particularly relevant to the artefactual and ecofactual sections.

A generic fill description is given at the beginning of each land use area. Although, on site, slight variations in colour, matrix and inclusions were used to distinguish 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.

Reference to Sub-group numbers (S prefix) and context numbers is only made in the case of burials, where Sub-group number may be used for grave and context numbers for pottery vessels.

In situations where a length of ditch has been issued two group numbers, perhaps where they are spatially separated or border different enclosures, they are usually described together, *e.g.* G12/G174. Where a ditch has been recut, the group number(s) of the recut(s) is referenced after the original ditch group number. Where a ditch separated two enclosures it could only be assigned to one of them for the purposes of computer-based analysis. Therefore, although the same enclosure ditch may be mentioned in the discussion of both enclosures, it will only be described in detail in the one it was assigned to.

Decimal points have also been used to associate features with individual groups, such as roundhouses. For example, a post-hole associated with roundhouse G73 might be assigned to G73.3, its primary fill to G73.31, secondary fill to G73.32 *etc*. Unless significant the fill numbers have not be referenced.

Where fabric types are relevant to the discussion of pottery assemblages, they are usually described briefly with the relevant fabric code for ease of reference to the type series (Appendix I). Those non-ceramic artefacts requiring more detailed recording and description than bulk finds are registered with a unique number, prefixed with RA for registered artefact (Appendix V).

Finally, the following terms are used throughout the publication:

- Farmstead: a coherent body of evidence for a domestic settlement based on farming. Within the structural hierarchy each farmstead has been assigned a unique number, even where two, from successive phases, physically occupied the same site. See below (Chapter 1 Introduction; IV The archaeological investigations, Post-excavation analysis, Contextual analysis) for further description of how this term has been used during post-excavation analysis.
- Water pit: a large diameter feature, sufficiently deep to have contained standing water but where no stone or wooden lining was evident.
- Well: a feature where a stone-lined shaft survived or where its former presence could be inferred from other evidence.
- 'Special' deposit: a deposit containing an unusual assemblage of artefacts or ecofacts.

Tables

Tables within each chapter are numbered in a unique sequence, *e.g.* in Chapter 4 (Phase 4) they are Tables 4.1, 4.2, 4.3 *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 facilitate comparison. For example, the provenance of pottery fabric types is presented with Farmstead/L numbering down the left hand side and fabric types along the top. However, differing specialist data has prevented the use of an entirely standardised table layout

Illustrations

Illustrations within each chapter are numbered in a unique sequence, *e.g.* Chapter 4 (Phase 4) illustrations are Fig. 4.1, 4.2, 4.3 *etc*. Wherever possible, a hierarchy of figures linked to the interpretive hierarchy is used, *e.g.* each chapter has a 'standard' overall phase plan and a 'standard' farmstead plan. As appropriate, there are individual figures for components of the farmsteads (land use areas) *e.g.* enclosures, fields and, in many cases, the next level of the interpretive hierarchy (groups), *e.g.* buildings, burials *etc*. The position of Marsh Leys Farm is shown, for referencing purposes, on the 'standard' overall phase plan.

Artefact illustrations relevant to each phase are presented within the relevant specialist section of the artefact chapter. The illustration numbers for different artefact types are prefixed as follows: pottery (P), fired clay (FC), flint and other artefacts (RA). An illustration catalogue is presented below each pottery and fired clay illustration.

Drawing conventions

Plans

The plans are only labelled with those elements of the contextual hierarchy, *e.g.* L or G number, that are referred to in the text. Most plans distinguish between excavated and unexcavated parts of features by differential shading rather than hachuring. The latter is used to aid understanding on larger scale plans. Where detailed inset plans are used on figures, they are labelled with capital letters to distinguish them from section drawings, *e.g.* Fig. 4.6A. Where relevant, shading is also used to distinguish between excavated features, geophysical anomalies and cropmarks. On a small number of plans shading is also used to distinguish between earlier and later features.

The positions of drawn sections on each plan are labelled alphabetically, usually from top to bottom, with a unique section letter. Where possible, section drawings are included on the plans for ease of reference. They and all relevant labels occur in a lighter tone to help distinguish them from features shown on the plans.

The plan conventions are standardised and are shown in the key (Fig. 0.1).

Sections

The majority of 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 for sections located along the edge of the excavation. All sections are positioned in the horizontal plane, but no OD heights are given. Sections are normally illustrated as south- or

west-facing only; if necessary, the original drawing has been mirrored. Section drawings are only labelled with G numbers where it will aid understanding of the text. Accordingly, the majority of fills are not labelled because they are not specifically mentioned in the text.

The section conventions are standardised and are shown in the key (Fig. 0.1).

Pottery
Standard drawing conventions have been used with vessels shown at one quarter size. External view is shown on the right with a section and internal view on the left. Wheel-thrown vessels are shown with solid sections. 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.

Fired clay
All fired clay illustrations are in numerical order and prefixed with FC (fired clay). They are drawn at one quarter size.

Other artefacts
All other artefact illustrations use the original RA number and are prefixed with RA (registered artefact). They are drawn at a range of scales.

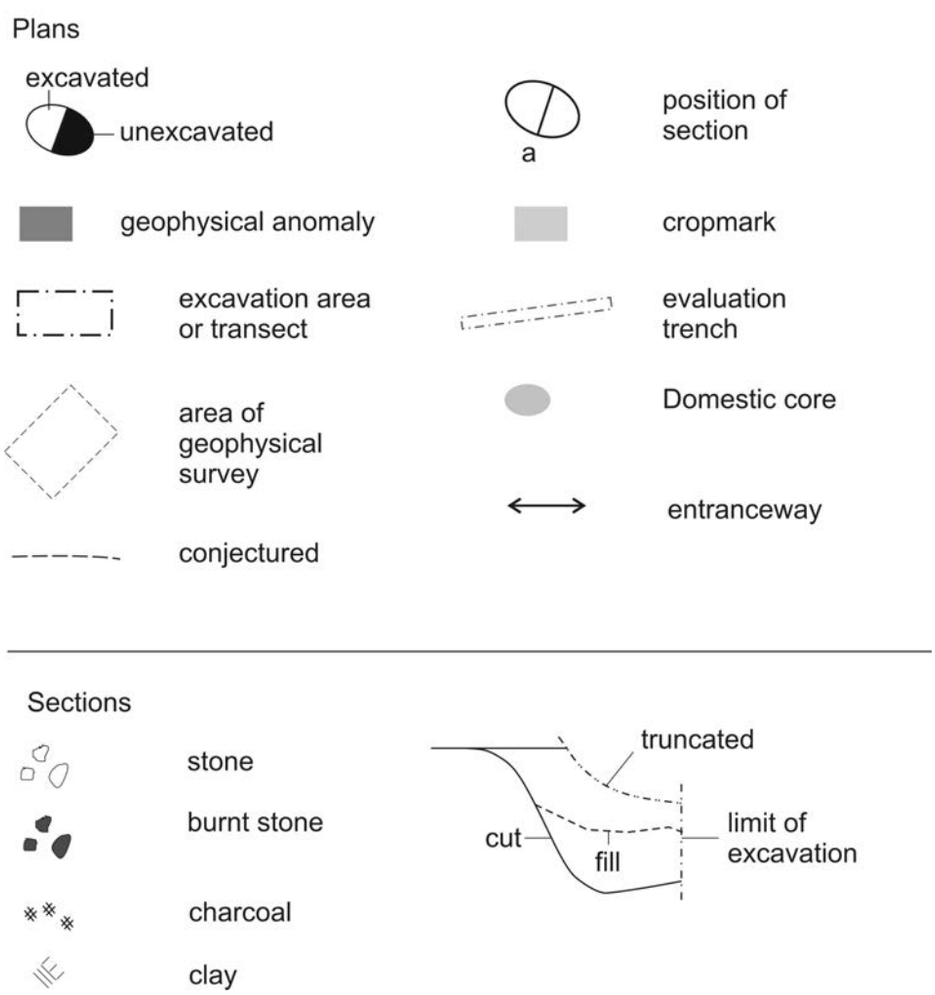


Figure 0.1 Key to plans and sections

Location of the archive

The project archive of finds and records will be accessioned with Bedford Museum, Castle Lane, Bedford MK40 3XD, under accession number BEDFM: 2000/186.

Abbreviations and key terms

ALBION	Albion Archaeology (formerly BCAS)	archaeological contractor
BBC	Bedford Borough Council	local planning authority
BCAS	Bedfordshire County Archaeology Service (renamed Albion Archaeology)	archaeological contractor
BCC	Bedfordshire County Council	local authority
-	Brief	document issued by the CAO
CBM	Ceramic building material	Artefact — brick, tile, daub, kiln furniture *etc*.
CAO	County Archaeological Officer	officer of BCC
Client	Old Road Securities Ltd Gazeley Properties Ltd	Organisations associated with the developer who funded the work
G	Group	aggregation of deposits/features which form a functional element, *e.g.* building, ditch *etc*.
HER	Historic Environment Record	catalogue of archaeological sites and finds held by Bedfordshire County Council
L	Land use area	aggregation of Groups which form a meaningful spatial element, *e.g.* enclosure *etc*.
-	Phase	aggregation of land use areas believed to be contemporary
-	Marsh Leys Farm	farmhouse, outbuildings and fields which formerly occupied the development area
PPG16	Planning Policy Guidance Note 16	Document issued by Department of the Environment in 1990
	Project design	document issued by archaeological contractor
RA	Registered artefact	artefact assigned a unique number, with both location and nature recorded in detail
WYAS	West Yorkshire Archaeology Service	geophysical survey contractor

Preface

Two adjacent, long-lived, Romano-British settlement sites were investigated at Marsh Leys. There were three sequential farmsteads on one site and two on the other. In all five cases virtually the entire farmstead was the subject of open-area excavation, shedding light on their layout, morphology, development, economic basis and environment. The results were enhanced by the integration during analysis of the evidence from adjacent unexcavated areas which had been subject to non-intrusive and intrusive evaluation — plotting of cropmarks, geophysical survey, field artefact collection and trial trenching. By combining this with the results of more recent development-led investigations, it has also been possible to describe more fully the contemporary landscape in which the farmsteads were set.

Summary

Between 1998 and 2001, Albion Archaeology (formerly Bedfordshire County Archaeology Service) carried out a series of archaeological investigations in advance of development at Marsh Leys, on the outskirts of Bedford. Although the discovery of flint artefacts suggested limited earlier prehistoric activity, the first firm evidence for sustained use of the site was a ditched enclosure which pre-dated the late Iron Age. The vast majority of the archaeological evidence was associated with five Romano-British farmsteads located *c.* 400m apart. They varied in size over time, ranging from *c.* 1ha to 3.3ha. Their layout, morphology, chronological development, mixed farming economy and environment were similar, although subtle contrasts were identified.

The earliest farmsteads originated prior to the Roman Conquest and appear to have been largely unaffected by it. In their earliest form they comprised small, individual ditched enclosures adjacent to areas of unenclosed domestic activity that included roundhouses. One of the ditched enclosures contained a square building which has been interpreted as a shrine. Cremation burials were found on the periphery of both farmsteads including a small cemetery of seven graves. Substantial changes were made to the layout of both farmsteads around the middle of the 2nd century AD when rectangular systems of enclosures/fields were created. This change is a common occurrence on farmsteads in the region but generally occurs at least half a century earlier than it did at Marsh Leys. Domestic

and non-domestic enclosures were established, usually attached to major boundaries or trackways. In places, the new system incorporated the earlier enclosures, suggesting a degree of continuity with the previous phase of occupation. The farmsteads' domestic foci were characterised by the presence of buildings, pit and post-hole groups, wells, water pits and large quantities of domestic debris. These remained in the same broad location as the farmsteads were altered and developed. The discovery of up to five rectangular buildings is significant because they are rarely found on farmsteads in the region. A small number of human burials and 'structured' deposits were identified, nearly always away from the domestic foci. The majority occurred in the vicinity of the western major boundary of Farmstead 5, but an interesting one on Farmstead 4 comprised two headless domestic fowl buried with two coins. Several large areas within one of the farmsteads were given over to gravel quarrying. The final farmstead was established in the late 3rd or early 4th century and was characterised by a new enclosure and two new fields. The absence of late 4th-century coins may indicate that the farmsteads at Marsh Leys had been abandoned by the middle of the 4th century.

The location of the farmsteads on low-lying land close to the Elstow Brook favoured a mixed farming economy, as evidenced by the animal bone and charred plant assemblages. The majority of the evidence for non-agricultural activities is associated with iron working, specifically smithing. Almost all the metallurgical residues were from the same location within all phases — the northern part of one of the farmsteads away from the domestic foci. This indicates that long-lived smithing activity, with skills presumably handed down from generation to generation within the same community, took place in the same location for several hundred years. There is also limited evidence, mainly from the artefact assemblage, for textile, wood and bone working, but there was no evidence for pottery manufacture. The absence of the latter is difficult to explain given that both farmsteads were situated on Oxford Clay and kilns are commonly found on contemporary settlements in the area. There was no apparent shortage of wood because it was used for buildings, cremations and iron smithing. It is therefore possible that the occupants of some farmsteads in a given area specialised in a specific craft, *e.g.* blacksmithing at Marsh Leys, pottery manufacture at another, with the need for particular goods met through purchase or exchange.

Although the structural, artefactual and ecofactual evidence could be used to suggest that the occupants of the farmsteads were low status, such an interpretation is far from straightforward. For example, a switch from roundhouses to rectangular buildings has sometimes been associated with an increase in status of the occupants, but the new buildings at Marsh Leys were not necessarily any more comfortable or costly to build than the earlier ones. The reason for the absence of evidence for hunting and fishing is also not clear-cut, because at its simplest it could be the result of a lack of hunting rights, a lack of time to undertake such activities or even that wild animals and fish were taboo creatures. The occupants of the last farmstead had miniature or lap-dogs, access to walnuts and oysters and appeared to cultivate ornamental box hedges, all suggesting greater wealth than that apparently indicated by the artefactual and structural evidence.

The Marsh Leys farmsteads appear to have been part of a string of settlements, *c.* 0.5km apart, lying to the north and south of the Elstow Brook. Knowledge of the immediate environs of the farmsteads has been considerably enhanced by a number of more recent adjacent developer-funded investigations. The evidence includes other possible settlements, areas of dispersed peripheral activity, field systems, trackways, possible vineyards and quarry pits. Areas around the farmsteads, shown by field artefact collection to be devoid of contemporary artefacts, may represent the sites of woodland or permanent pasture. Although it is impossible to be sure if these areas are associated with the Marsh Leys farmsteads, their existence does demonstrate that the surrounding landscape was quite extensively utilised for a diverse range of activities.

Résumé

Entre 1998 et 2001, Albion Archaeology (désigné autrefois par le nom de Bedfordshire County Archaeology Service) a entrepris un ensemble de fouilles archéologiques avant que ne commencent des travaux d'aménagement à Marsh Leys, dans la banlieue de Bedford. Bien que la découverte d'artefacts en silex suggère l'existence d'une faible activité à l'époque préhistorique, la première preuve incontestable d'une utilisation prolongée du site a pris la forme d'une enceinte à fossés antérieure à l'âge du fer tardif. La grande majorité des preuves archéologiques était associée à deux fermes romano-britanniques situées à environ 400m les unes des autres. Leur taille a varié au fil du temps, passant d'environ un hectare à 3,3 hectares. Des différences ténues les séparent même si elles se rapprochent en ce qui concerne l'agencement, la morphologie, le développement chronologique, l'environnement et l'économie fondée sur une agriculture mixte.

Les toutes premières fermes sont antérieures à la conquête romaine qui les a apparemment très peu marquées. Sous leurs formes les plus anciennes, elles comprenaient de petites enceintes à fossés distinctes qui étaient situées à côté de zones ouvertes d'activités domestiques pourvues de rotondes. L'une de ces enceintes contenait un bâtiment carré que l'on a présenté comme étant un lieu de pèlerinage. Des inhumations avec crémation ont été trouvées à la périphérie de deux fermes qui comprenaient un petit cimetière composé de sept tombes. Des modifications importantes ont été apportées à l'agencement des deux fermes vers le milieu du deuxième siècle de notre ère lorsque des systèmes rectangulaires d'enceintes et de champs ont été créés. On trouve fréquemment ce genre de modification dans les fermes de la région mais elles précèdent en général d'un demi-siècle au moins les transformations qui se sont produites à Marsh Leys. Des enceintes, domestiques et non domestiques, ont

été construites et elles étaient en général rattachées à des limites importantes ou à des chaussées. Dans certains endroits, le nouveau système intégrait les enceintes précédentes, ce qui permet de supposer une forme de continuité avec la phase d'occupation antérieure. Les centres domestiques des fermes se caractérisaient par la présence de bâtiments, de fosses et d'ensembles de trous de poteaux, de puits, de fosses de rétention d'eau et d'un grand nombre de débris domestiques. Ces centres sont restés dans l'ensemble aux mêmes endroits alors que les fermes se modifiaient et s'étendaient. On a découvert jusqu'à cinq bâtiments rectangulaires, ce qui revêt une certaine importance car on en a rarement trouvé dans les fermes de la région. Un petit nombre de tombes humaines et de dépôts « structurés » ont été identifiés, presque toujours à une certaine distance des centres domestiques. La majorité se trouvait à proximité de la principale limite ouest de l'une des fermes, mais une découverte intéressante a été effectuée à l'autre ferme qui contenait deux volailles sans têtes enterrées avec deux pièces de monnaie. Plusieurs grandes zones situées dans l'une des fermes ont été affectées à une carrière de gravier. La phase finale de la ferme a été établie à la fin du 3ème ou au début du 4ème siècle et elle se caractérisait par une nouvelle enceinte et deux nouveaux champs. L'absence de pièces datant de la fin du 4ème siècle peut indiquer que les fermes de Marsh Leys ont été abandonnées au milieu du 4ème siècle.

L'emplacement des fermes sur des terres basses proches d'Elstow Brook a favorisé une économie fondée sur l'agriculture mixte, comme le montre la découverte d'os d'animaux et d'ensembles de plantes carbonisées. Les preuves des activités non agricoles sont dans leur majorité associées au travail du fer et plus précisément de la forge. Presque tous les résidus métallurgiques proviennent du même endroit qui est situé au nord de l'une des fermes, à une certaine distance des centres domestiques, quelle que soit la phase du travail du métal envisagée. Cela signifie que l'activité de la forge, qui repose sur des compétences probablement transmises de génération en génération au sein de la même communauté, s'est déroulée au même endroit pendant plusieurs centaines d'années. L'analyse, qui a porté principalement sur l'ensemble des artefacts, a donné peu de résultats en ce qui concerne le textile, le bois et le travail des os. En outre, aucune trace de poterie n'a été retrouvée. L'absence de poterie s'explique difficilement dans la mesure où les deux fermes sont situées à Oxford Clay où l'on trouve habituellement des fours à la même époque dans les implantations de la région. Il n'y avait apparemment pas de pénurie de bois car celui-ci était utilisé pour les crémations, la construction de bâtiments et l'activité de la forge. C'est pourquoi il est possible que dans une zone donnée, les occupants des fermes se soient spécialisés dans des activités artisanales précises. Ainsi les occupants de Marsh Leys étaient devenus forgerons tandis que les habitants d'autres fermes se consacraient à la poterie, l'achat ou l'échange de biens permettant de satisfaire les besoins des uns et des autres.

On pourrait avancer l'hypothèse que les occupants des fermes étaient d'un statut social inférieur en s'appuyant sur des preuves structurelles, artefactuelles et écofactuelles. Une telle interprétation est toutefois loin d'être claire. Par exemple, le passage des rotondes aux bâtiments rectangulaires a parfois été associé à une amélioration du statut social des habitants. Toutefois, quand on compare les nouveaux bâtiments de Marsh Leys aux anciens, on s'aperçoit qu'ils n'étaient pas forcément plus confortables ou plus coûteux sur le plan de la construction. De même, l'absence de preuves concernant la chasse ou la pêche ne s'explique pas clairement. La raison en est peut-être très simple : les habitants ne disposaient pas des droits de chasse ou ils manquaient de temps pour se livrer à de telles activités, ou bien encore les poissons et les animaux sauvages étaient tabous. Les occupants la plus récente de la ferme possédaient des chiens de petite ou de très petite taille; ils connaissaient les noix et les huîtres et semblaient cultiver des haies d'ornement. Tous ces éléments donnent à penser qu'ils disposaient d'une richesse plus grande que ne l'indiquent apparemment les preuves artefactuelles et structurelles dont nous disposons.

Les fermes de Marsh Leys semblent avoir fait partie d'un chapelet d'implantations situées au nord et au sud d'Elstow Brook et distantes les unes des autres d'environ 500 mètres. La connaissance des environs immédiats des fermes a largement bénéficié de fouilles plus récentes menées à proximité avec le concours financier des entreprises chargées de l'aménagement des lieux. Les preuves réunies concernent d'autres implantations possibles, des zones dispersées d'activités périphériques, des systèmes de champs, des chaussées, d'éventuels vignobles et des fosses liées à l'exploitation de carrières. Les zones entourant les fermes ne possèdent pas d'artefacts de la même époque, comme le montre l'ensemble des artefacts découverts sur le terrain. Elles peuvent ainsi correspondre à des sites formés de bois ou de pâturages permanents. Il est impossible d'affirmer avec certitude que ces zones étaient associées aux fermes de Marsh Leys. Toutefois, leur existence montre bien que les lieux avoisinants étaient assez largement exploités pour un ensemble varié d'activités.

(Traduction: Didier Don)

Zusammenfassung

Zwischen 1998 und 2001 führte Albion Archaeology (der frühere Bedfordshire County Archaeology Service) eine Reihe archäologischer Untersuchungen im Vorfeld von Bauarbeiten in Marsh Leys am Rand von Bedford durch. Während die Entdeckung von Silexartefakten bereits auf begrenzte Aktivitäten in der Urgeschichte hinwies, lieferte ein vor der späten Eisenzeit angelegtes Grabenwerk die ersten konkreten Belege für eine dauerhafte Nutzung der Stätte. Der Großteil der archäologischen Befunde stand mit zwei etwa 400 Meter auseinanderliegenden romano-britischen Siedlungsstätten in Verbindung, die über lange Zeit Bestand hatten. An einer dieser Stätten wurden drei, an

der anderen zwei aufeinanderfolgende Gehöfte ausgemacht, deren Größe je nach Zeit zwischen rund 1 Hektar und 3,3 Hektar variierte. Trotz subtiler Gegensätze bestanden große Ähnlichkeiten bei Grundriss, Morphologie, chronologischer Entwicklung, landwirtschaftlicher Nutzung und Umgebung der Gehöfte.

Die ältesten Gehöfte entstanden vor der römischen Eroberung, von der sie offenbar kaum beeinflusst wurden. In ihrer Urform waren es einzelne kleine Grabenwerke, die an unbefestigte häusliche Bereiche, beispielsweise Rundhäuser, angrenzten. In einem der Grabenwerke fand sich ein quadratisches Gebäude, das als Schrein interpretiert wurde. Am Rand beider Gehöfte wurden Brandgräber gefunden, darunter auch ein kleines Gräberfeld mit sieben Grabstätten. Um die Mitte des 2. Jahrhunderts n. Chr. wurde der Grundriss beider Höfe durch die Anlage rechteckiger Graben- und Feldsysteme stark verändert. Obwohl eine solche Modifizierung bei Höfen in der Region recht häufig vorkam, fand sie in der Regel mindestens 50 Jahre vor der in Marsh Leys beobachteten Umgestaltung statt. Wohn- und andere Bereiche erhielten Einhegungen, die zumeist mit größeren Grenzgräben oder Wegen verbunden waren. Die älteren Einhegungen wurden stellenweise in die neue Anlage integriert, was auf eine gewisse Fortführung der vorhergehenden Siedlungsphase hindeutet. Der häusliche Schwerpunkt der Höfe war durch Gebäude, zusammenhängende Gruben und Pfostenlöcher sowie Brunnen, Wasserlöcher und große Mengen an Hausabfällen gekennzeichnet, die auch bei allen nachfolgenden Änderungen und Weiterentwicklungen der Höfe ungefähr am selben Ort erhalten blieben. Ungewöhnlich war die Entdeckung von bis zu fünf rechteckigen Gebäuden, da diese auf Höfen in der Region sehr selten sind. Es wurden einige menschliche Bestattungen und »strukturierte« Deponierungen gefunden, die fast durchweg außerhalb der Wohnbereiche lagen. Die meisten waren unweit der westlichen Hauptgrenze von Hofstelle 5 zu finden, während Hofstelle 4 ein besonders interessantes Grab aufwies, in dem zwei geköpfte Hühner zusammen mit zwei Münzen lagen. Auf einem der Hofgelände wurden mehrere große Bereiche für den Kiesabbau genutzt. Die letzte Hofstelle, die um die Wende vom 3. auf das 4. Jahrhundert angelegt wurde, wies eine neue Einhegung und zwei neue Felder auf. Das Fehlen von Münzen aus dem späten 4. Jahrhundert könnte darauf hindeuten, dass die Höfe von Marsh Leys noch vor Mitte des 4. Jahrhunderts aufgegeben wurden.

Die niedrige Lage der Gehöfte nicht weit vom Elstow Brook eignete sich für Ackerbau und Viehzucht, die durch Tierknochen und verkohlte Pflanzenreste belegt sind. Die meisten Hinweise auf nichtlandwirtschaftliche Aktivitäten deuten auf Eisenverarbeitung und insbesondere Schmiedearbeiten hin. Fast alle Metallrückstände der verschiedenen Siedlungsphasen stammten vom selben Ort: dem Norden eines der Gehöfte außerhalb von dessen Wohnbereich. Dies zeigt, dass über hunderte von Jahren am selben Ort geschmiedet wurde, wobei das nötige Wissen vermutlich von Generation zu Generation innerhalb der Gemeinschaft weitergegeben wurde. Zudem gab es vor allem in der Artefaktsammlung begrenzte Hinweise auf die Bearbeitung von Textilien, Holz und Knochen, nicht jedoch auf die Verarbeitung von Ton. Das Fehlen von Keramik gegenständen ist angesichts der Lage beider Gehöfte auf Oxford-Ton und dem häufigen Vorkommen von Brennöfen an zeitgleichen Siedlungsplätzen in der Region nur schwer erklärlich. Allem Anschein nach bestand kein Mangel an Holz, da dieses sowohl für den Hausbau als auch für Leichenbrände und das Schmieden von Eisen verwendet wurde. Möglich wäre, dass sich die Bewohner einiger Höfe in einem Gebiet auf ein Handwerk spezialisierten, beispielsweise auf das Schmieden in Marsh Leys und auf die Herstellung von Tonwaren anderswo, und man sich bei Bedarf an bestimmten Waren durch Kauf oder Tauschhandel behalf.

Obwohl die gefundenen Strukturen, Artekfakte und Ökofakte auf eine eher niederrangige Gemeinschaft schließen lassen könnten, ist eine solche Interpretation alles andere als eindeutig. So wird beispielsweise der Übergang von runden zu rechteckigen Gebäuden gelegentlich mit einer Statuszunahme der Bewohner assoziiert, obwohl die neuen Gebäude in Marsh Leys nicht unbedingt komfortabler oder im Bau teurer als die älteren Häuser waren. Der Grund für den Mangel an Hinweisen auf Jagd und Fischfang ist ebenfalls schwer zu fassen. Einfache Gründe dafür könnten sein, dass die Jagdrechte woanders lagen, für derartige Aktivitäten die Zeit fehlte oder das Fangen wilder Tiere und Fische gar ein Tabu darstellte. Die Bewohner des zeitlich letzten Hofes besaßen Miniatur- oder Schoßhündchen sowie Zugang zu Walnüssen und Austern. Ferner kultivierten sie offenbar ornamentale Buchsbaumhecken – alles Hinweise auf einen höheren Wohlstand, als die gefundenen Artefakte und Strukturen nahelegen.

Die Gehöfte von Marsh Leys gehörten vermutlich zu einer Reihe von Siedlungsplätzen im Norden und Süden des Elstow Brook, die etwa 500 m auseinanderlagen. Aufgrund einer Reihe kürzlicher, vom Bauträger finanzierter Untersuchungen der angrenzenden Bereiche wissen wir mittlerweile einiges mehr über die unmittelbare Umgebung der Gehöfte. Es wurden Hinweise auf weitere mögliche Siedlungsstätten sowie Gebiete verstreuter Randaktivitäten, Feldsysteme, Wege, mögliche Weinberge und Steinbruchgruben entdeckt. Die Bereiche rund um die Gehöfte könnten Waldstücke oder Dauerweiden gewesen sein, da die auf den Feldern gefundenen Artefakte nicht aus derselben Zeit wie die Gehöfte stammen. Obwohl nicht mit letzter Sicherheit behauptet werden kann, dass diese Bereiche mit den Hofstellen von Marsh Leys verbunden waren, ist durch ihre Existenz belegt, dass die umliegende Landschaft für ein breites Tätigkeitsspektrum genutzt wurde.

(Übersetzung: Gerlinde Krug)

Chapter 1. Introduction

I. Planning background to the investigations

In 1998, Bedford Borough Council granted Old Road Securities outline planning permission (98/00992/OUT) for a distribution warehouse facility at Marsh Leys, on the outskirts of Bedford. On the advice of the Bedfordshire County Archaeological Officer (CAO), a condition (no. 22) was placed on the planning permission, requiring a programme of archaeological work in advance of development. This was in line with local plan policy and the guidelines in the Department of the Environment's Planning Policy Guidance Note 16: Archaeology and Planning (PPG 16). An evaluation located significant archaeological remains over part of the development area. Open-area archaeological excavation was undertaken where remains would be unavoidably destroyed by the development.

Bedfordshire County Archaeology Service (BCAS), now known as Albion Archaeology, undertook the archaeological fieldwork on behalf of Old Road Securities and Gazeley Properties. This report presents the evidence for the origins and development of two adjacent late Iron Age/Romano-British farmsteads which were investigated as a result of this development.

II. Location, topography and geology

(Figs 1.1 and 1.2)

Marsh Leys Farm was located on the southern edge of Kempston on the western outskirts of Bedford, centred on TL 2600 4570. The development area was 59ha in extent and comprised four arable fields, bounded by roads to the north, west and south, and the Bedford-Bletchley railway line to the east. The buildings of Marsh Leys Farm were demolished as part of the development.

Topographically the site lies within the Marston Vale, a clay vale lying to the south-west of Bedford. It is situated within the upper reaches of the Elstow Brook, a tributary of the River Great Ouse, which flows in this area on a south-west to north-east alignment. The land is fairly flat at 30m OD with a gentle fall from north-east to south-west. The northern part of the development area lay within the 'designated' floodplain along with the adjacent land to the west and east. Flooding was a particular problem during fieldwork (Pl. 1.1).

The drift geology comprises localised pockets of river gravels into which the majority of the archaeological features were dug, with alluvial clays nearer to the Elstow Brook. The underlying solid geology is Oxford Clay which in places lies directly below the subsoil.

III. Archaeological background

(Fig. 1.3)

Prior to the investigations published here, Bedfordshire's Historic Environment Record (HER) contained one 'site' within and one adjacent to the development area. Like the majority of 'sites' in the area they comprised cropmarks of a small number of ditches, some of which appeared to form enclosures (HER 9600). Although undated, they were presumed to be later prehistoric or Romano-British in date. A larger area of more complex cropmarks, suggesting a series of rectangular enclosures, was present in the field to the east of the railway (HER 16323). The majority of the linear cropmarks were either at right-angles or parallel to the unstraightened course of the

Plate 1.1 Flooded eastern part of open-area 2 with some mounds of soil visible above water indicating location of partially excavated features

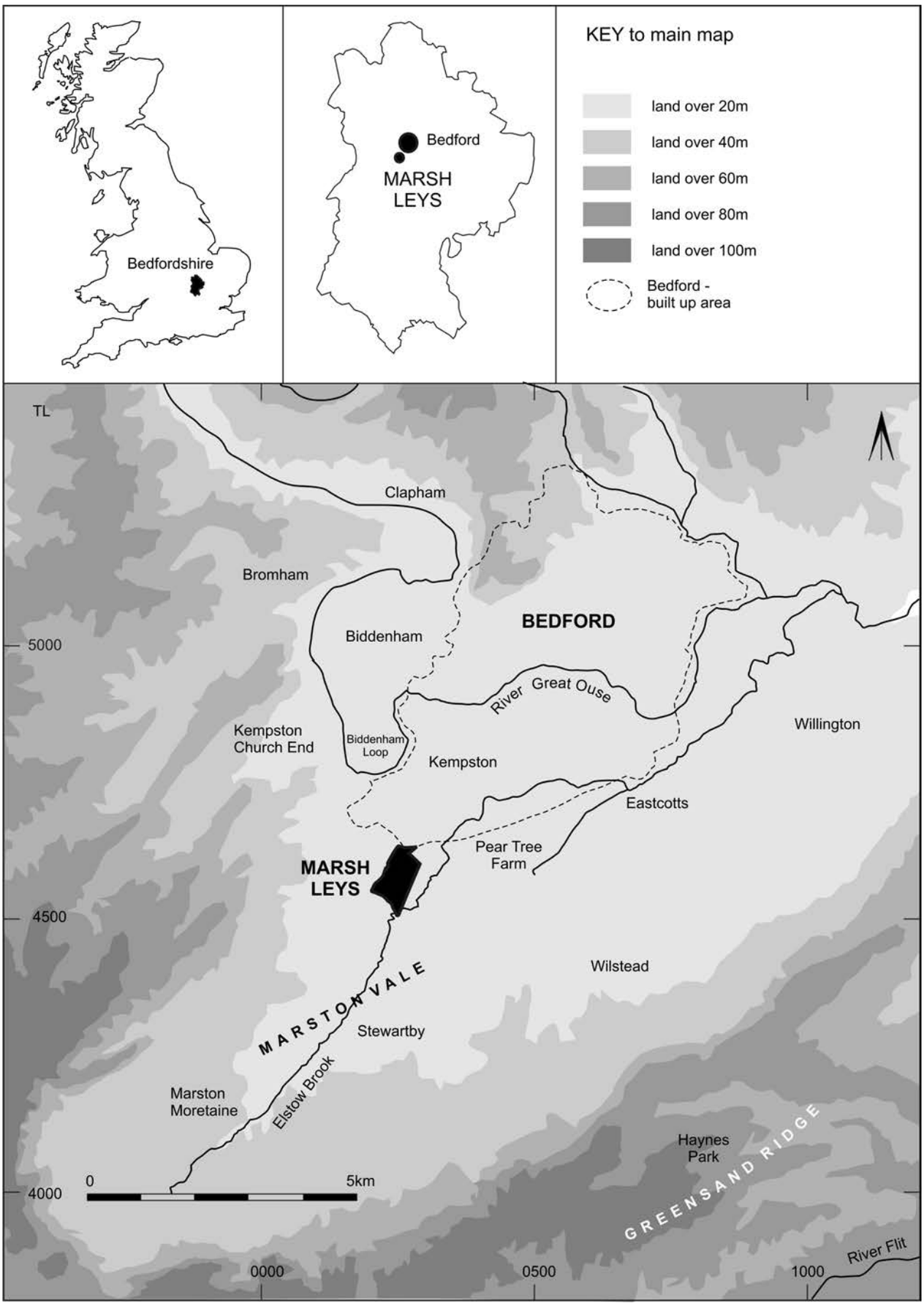


Figure 1.1 Location of Marsh Leys, topography of area and names of villages and sites frequently mentioned in text. Scale 1:100,000

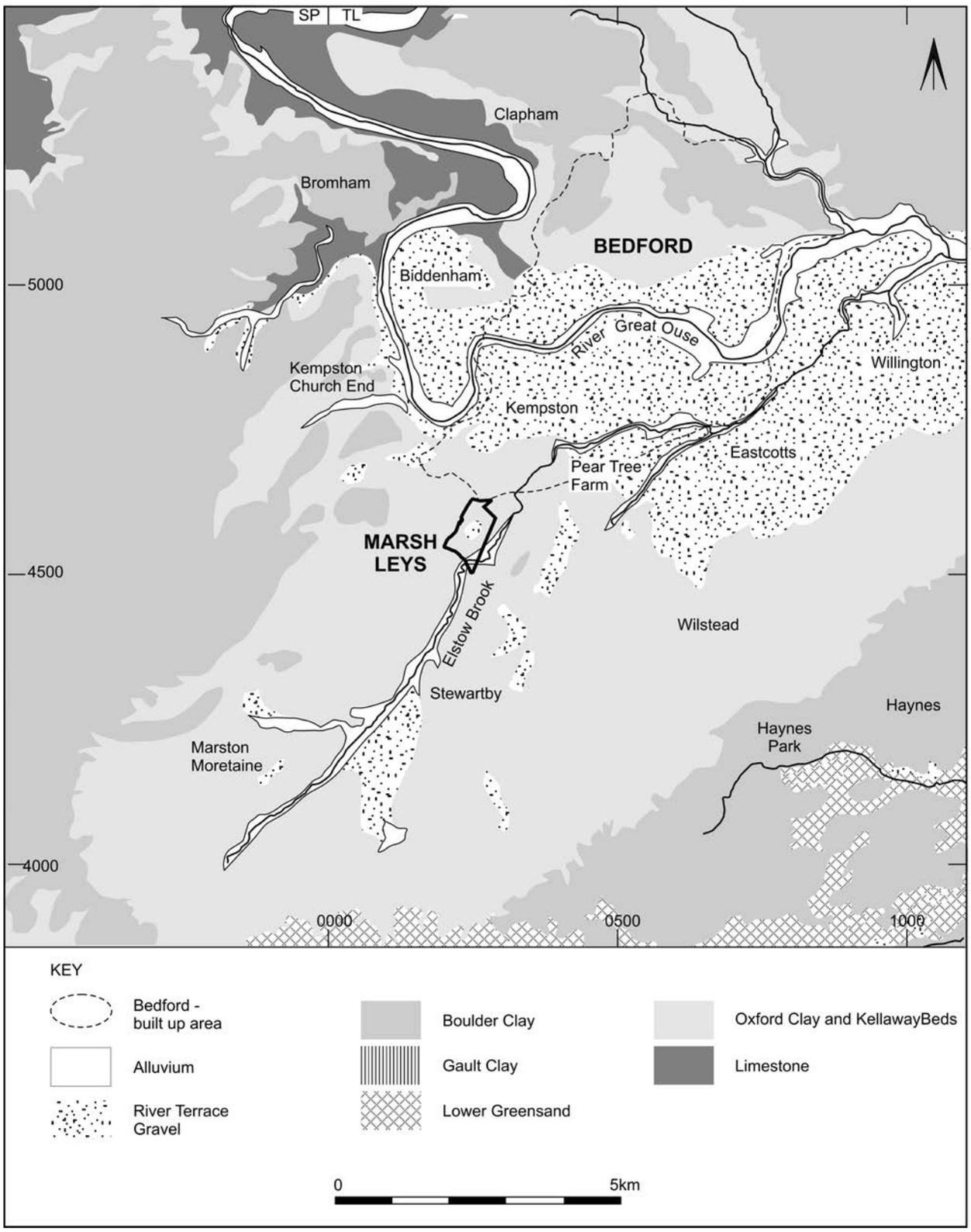


Figure 1.2 Geology of the area around Marsh Leys and names of villages and sites frequently mentioned in text. Scale 1:100,000

Elstow Brook. Roman pottery had been found in the vicinity but away from the cropmarks (HER 265).

A large number of similar cropmark sites comprising rectangular arrangements of enclosures and fields are known to the north and south of the Elstow Brook (see Fig. 9.17). Several of those within the Bedford Southern Bypass road corridor were subject to open-area investigation (BCAS 1995). The nearest to Marsh Leys, *c.* 2km to the north-east, was in the vicinity of Pear Tree Farm and included evidence for a Romano-British farmstead (BCAS 1995, 12). Evidence for a separate contemporary farmstead, *c.* 570m away, had been found during earlier

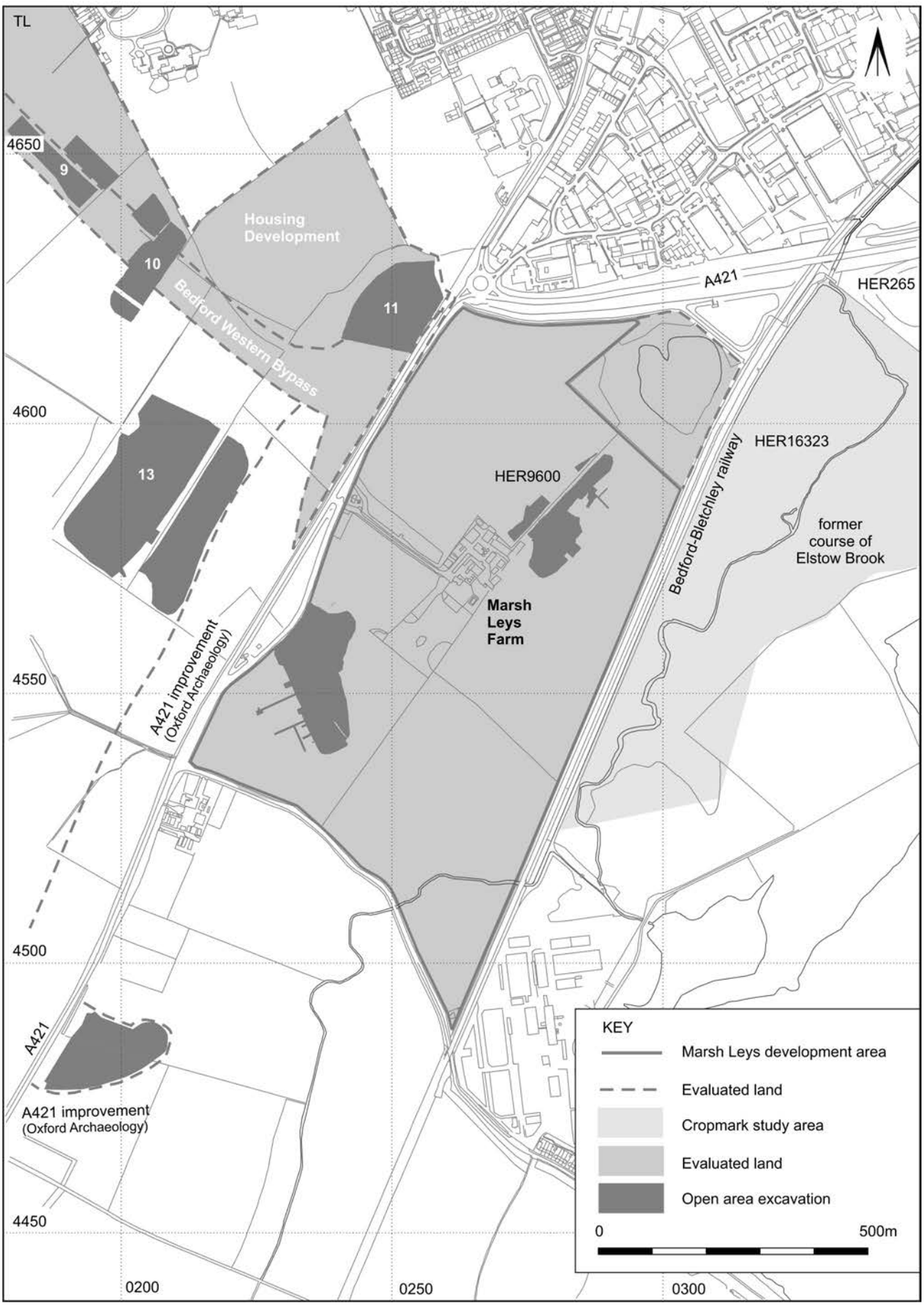


Figure 1.3 Adjacent archaeological investigations to Marsh Leys. Scale 1:10,000

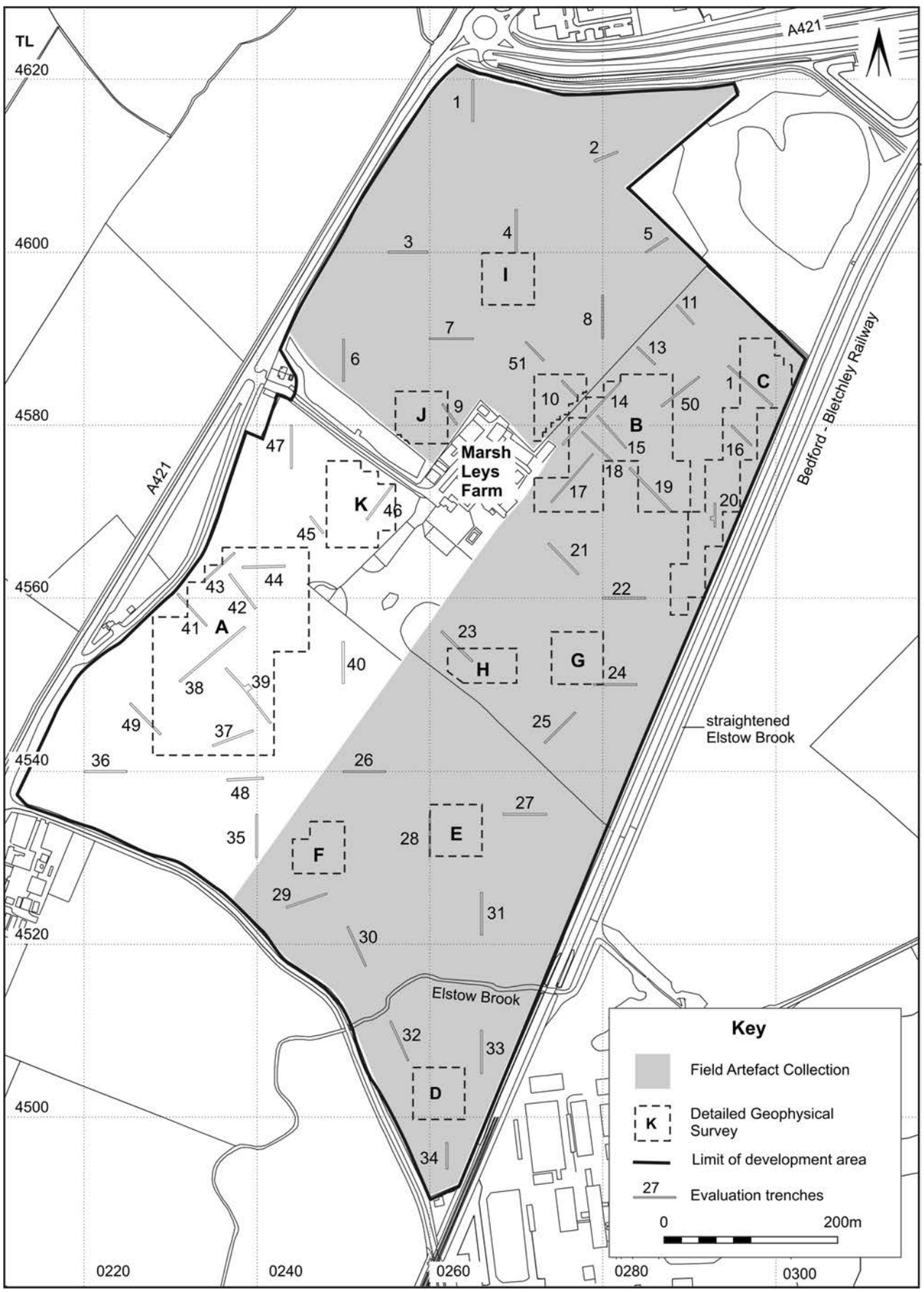


Figure 1.4 Areas of archaeological evaluation within the Marsh Leys development area. Not to standard scale

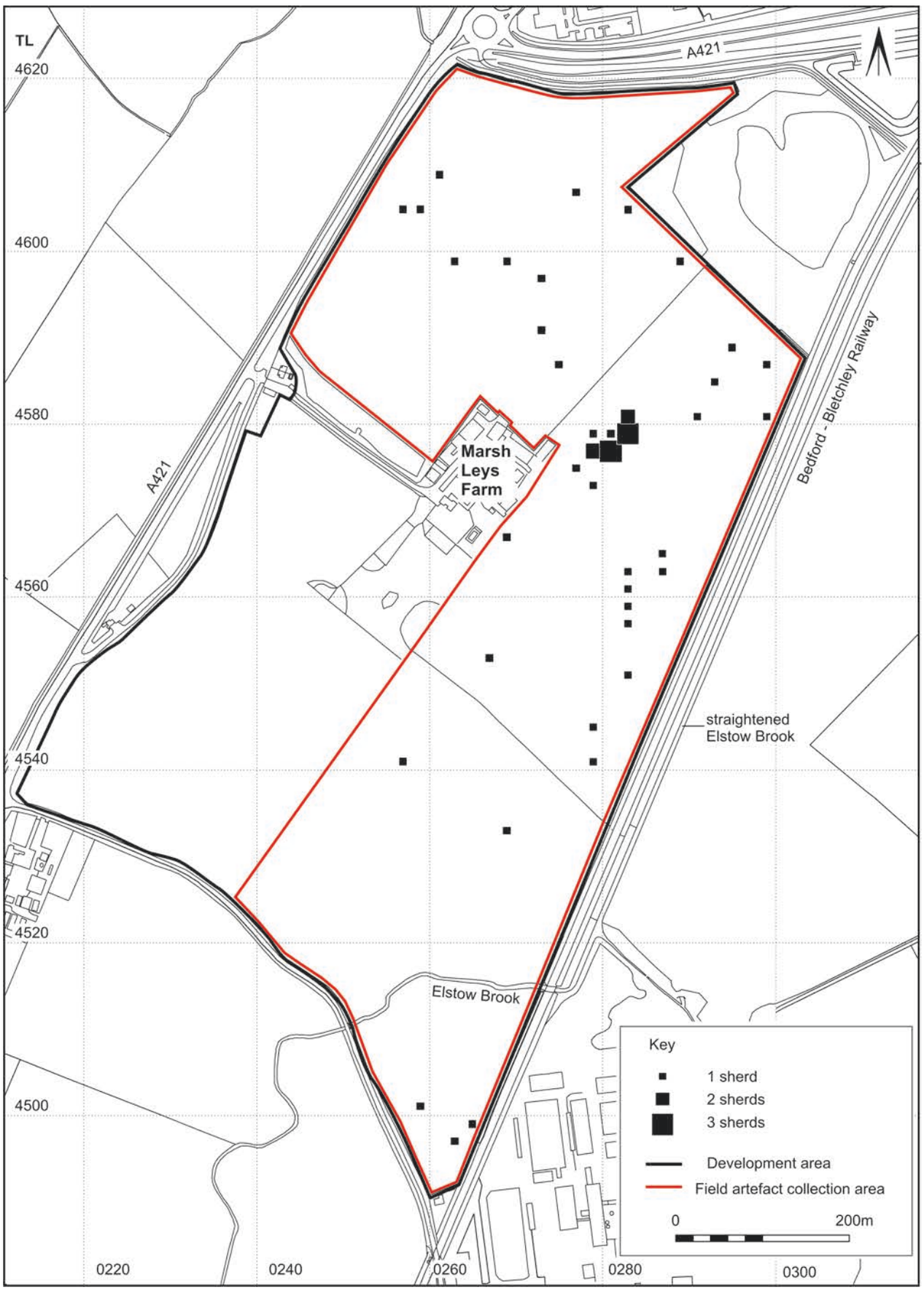


Figure 1.5 Distribution of late Iron Age/Romano-British pottery recovered during field artefact collection.
Not to standard scale

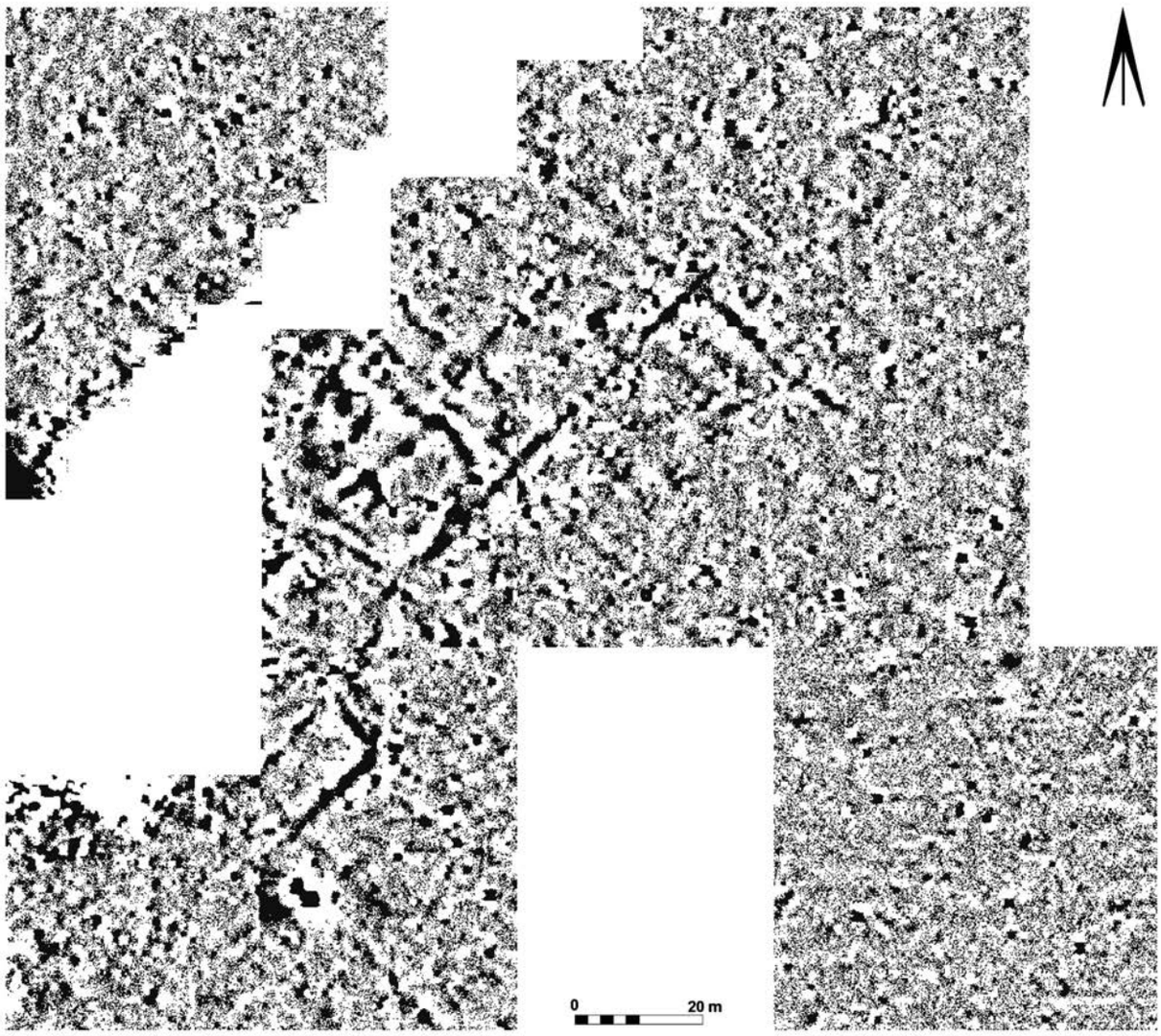


Plate 1.2 Geophysical anomalies within Area B with major boundaries of Farmstead 4 visible
(West Yorkshire Archaeology Service copyright reserved)

investigations (Woodward 1977). Cropmarks suggested that there may have been another farmstead between these two.

There are a number of cropmark sites to the south in the vicinity of Marston Moretaine and Stewartby. One of these, just east of Marston Moretaine village, has been evaluated (Albion 2004). This demonstrated that despite having curvi-linear enclosures/field systems it was of late Iron Age/Romano-British date. There is now considerable evidence for contemporary settlement in this area (Shotliff and Crick 1999; Connor 2000; Edwards and Wells in prep.).

The only evidence for medieval remains within the Marsh Leys development area were cropmarks of furrows, indicating extensive open fields. Ridge and furrow earthworks survived in the paddock adjacent to the farm in the centre of the development area. The Kempston Enclosure Act was passed in 1802 and was rapidly followed by the construction of farms such as Marsh Leys Farm within the new allotments (Wood 1984, 57–8, 97).

Following completion of the Marsh Leys investigations further archaeological work has been undertaken during 2005–8 in advance of the Bedford Western Bypass (Albion 2008a and c), in advance of housing development in 2008 (Albion 2008d) and during 2008–9 in advance of the A421 improvement scheme (Oxford Archaeology in prep.). Where relevant, the results are referred to in the discussion.

IV. The archaeological investigations

A staged programme of archaeological work was undertaken, with each stage building on the results of the earlier stages. The integrated results form the main section of this publication.

The first stage of archaeological work comprised an evaluation designed to identify, locate, date and determine the nature of any archaeological remains within the proposed development area. Four evaluation techniques were utilized, in two main episodes (non-intrusive and intrusive).

Briefs were issued by the CAO for each element of the work, stipulating methodology and extent. These, along with the BCAS/Albion Project Design and reports on each stage, are in the project archive.

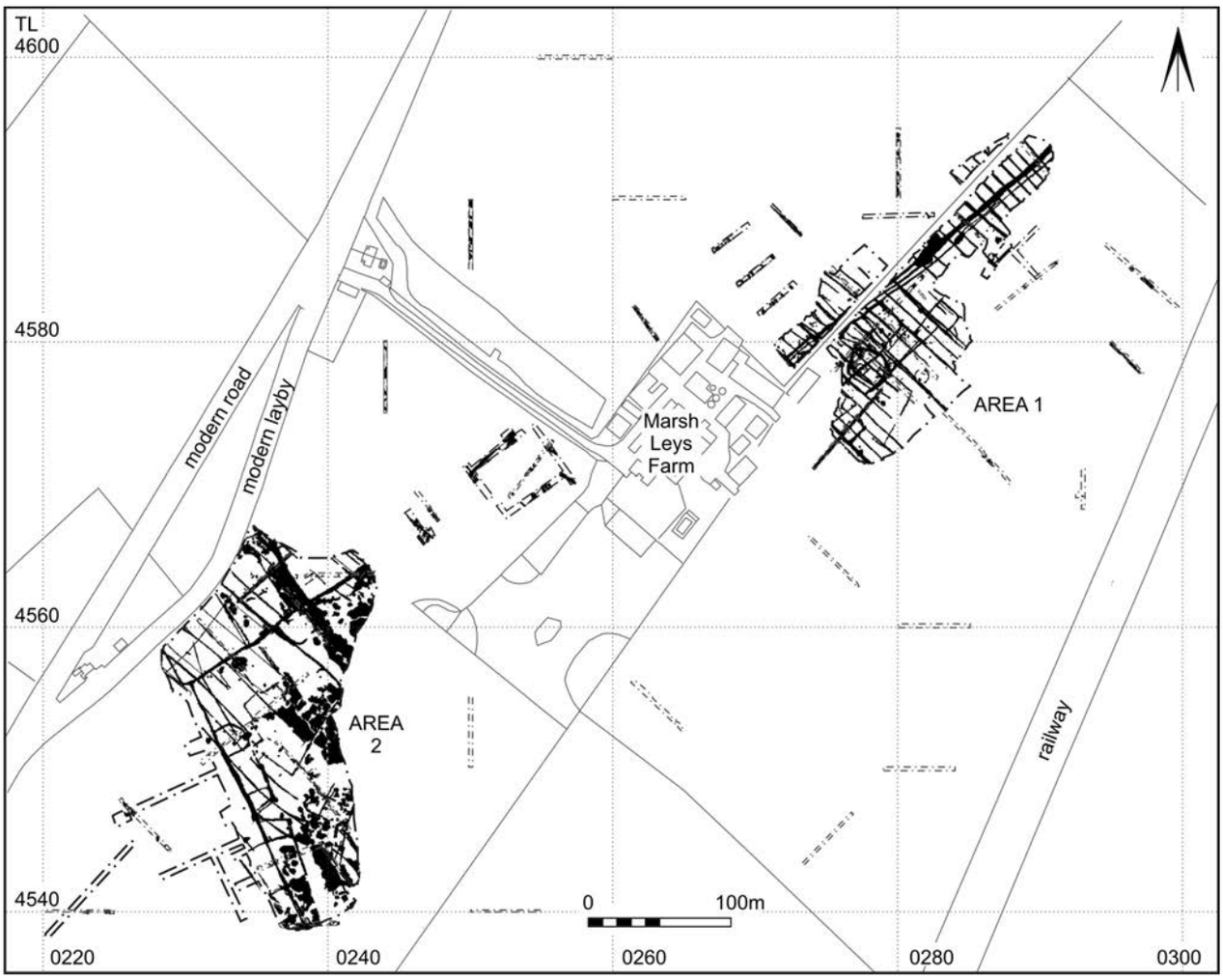


Figure 1.6 All features plan for both open-area excavations. Scale 1:5000

Non-intrusive evaluation

Aerial photographs

Aerial photograph analysis identified a variety of mainly linear cropmarks within the development area (BCAS 1999a). Many of these were parallel and clearly furrows associated with the medieval strip field system. Others corresponded to features on historical maps. However, some did not; nor did they respect the layout of either the post-enclosure or medieval fields, indicating that they were likely to be of some antiquity.

Beyond the development area, to the north-east of the railway line a series of rectangular enclosures were located on either side of the former course of the Elstow Brook. The presence of pit-type cropmarks both within and outside a number of the enclosures suggested settlement activity.

Field artefact collection

(Figs 1.4 and 1.5)

Approximately 41ha were subject to field artefact collection in November 1998 (BCAS 1999a), which recovered pottery of late Iron Age, Romano-British, medieval and post-medieval date; ceramic building material of Romano-British and late medieval/post-medieval date; worked flint; an annular glass bead; and ferrous slag. No significant concentrations were identified amongst the pre- or post-Romano-British material. However, Romano-British pottery was concentrated to the north-east of Marsh Leys Farm (Fig. 1.5), in the same area as rectilinear cropmarks. This supported the suggestion that there was a settlement in this location.

Geophysical survey

(Fig. 1.4)

During December 1998 West Yorkshire Archaeology Services undertook a two-stage magnetometry survey (WYAS 1998). Firstly, the entire development area was scanned along traverses approximately 12–15m apart. This identified a number of areas containing potential archaeological-type responses. The second stage comprised *c.* 10ha of detailed survey (Fig. 1.4). Rectangular ditched enclosures associated with a discrete area of pit-type anomalies and interpreted as settlements were found in survey areas A and B (Pl. 1.2). The latter coincided with the concentration of Romano-British pottery found during field artefact collection (Fig. 1.5).

Intrusive evaluation

(Fig. 1.4)

Forty-seven trenches, usually either 30m or 50m long and all 2.2m wide, were excavated in March and April 1999

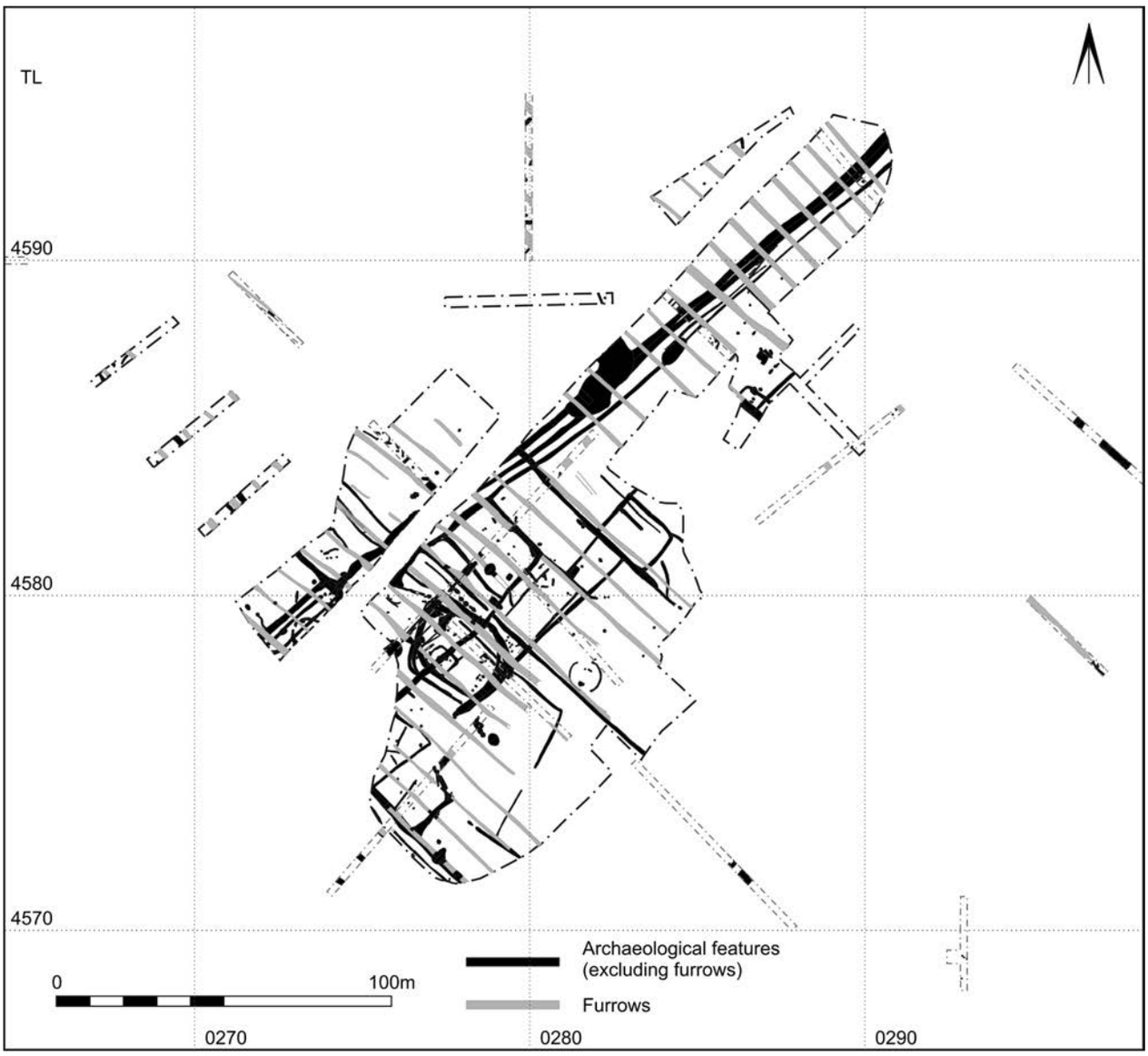


Figure 1.7 All features plan for Area 1. Scale 1:2000

(BCAS 1999b). Most were targeted on geophysical anomalies, many of which proved to be of human origin and contained late Iron Age/Romano-British pottery. Additional work, including four new trenches and a number of trench extensions, was undertaken in an attempt to determine the nature and extent of the archaeological remains. The results suggested that two late Iron Age/Romano-British farmsteads (BCAS 1999b, 64) existed within the development area: one to the north-east (Area 1) and one to the south-west (Area 2) of Marsh Leys Farm.

Open-area excavation

(Figs 1.6, 1.7 and 1.8, Pls 1.1 and 1.3)

Although the evaluation identified significant archaeological remains, they did not, *per se*, warrant preservation *in situ*. It was therefore agreed by the CAO and Old Road Securities that these remains could be dealt with by detailed archaeological investigation in advance of construction. A total of *c.* 5.8ha was subject to investigation, split between two main areas (Fig. 1.6). Area 1 was investigated between July and December 2000 (Fig. 1.7) and Area 2 between May and December 2001 (Fig. 1.8). In addition, fifteen *c.* 4m wide transects were opened on the periphery of the farmsteads.

Ploughsoil and subsoil were mechanically removed, under archaeological supervision, exposing the underlying gravel or clay. A site grid (based on the Ordnance Survey) was set out. A hand-drawn, pre-excavation plan was used to formulate the excavation strategy. To aid review of the strategy, the plan was scanned and geo-referenced so it could be manipulated within Gsys, a GIS-type software. This also allowed a variety of other digital data, *e.g.* cropmarks, geophysical survey, trial excavation, development design plans, *etc*., to be overlaid on the pre-excavation plan.

All hand excavation and recording was carried out in accordance with the BCAS *Procedures Manual* (BCAS 1998) and the *Written Schemes for archaeological resource management* (BCAS 2000; 2001). The site recording sequences started during the evaluation were continued for the open-area excavation. All isolated

Figure 1.8 All features plan for Area 2. Scale 1:2000

archaeological features were half-sectioned. Segments of ditches were excavated; those clearly associated with domestic activity were more intensively investigated. Areas of intercutting quarry pits were only subject to limited hand excavation (Pl. 1.3). Due to health and safety concerns a machine was used where excavation below 1m from the stripped surface was required.

Assessment

On completion of the fieldwork, a combined Assessment Report and Updated Project Design (Albion 2002) was produced. This 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. It was submitted in May 2002 and approved in December 2002, after which post-excavation analysis commenced.

Post-excavation analysis

The updated project design should be consulted for full details of the methodologies applied to each data set. Short descriptions are presented in the relevant artefactual and ecofactual sections. The methodology for the contextual analysis is summarised below. Overall, the approach aimed to manipulate all data within a fully integrated, computer-based system of analysis. All structural, artefactual and ecofactual data were entered onto 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. Archaeological evidence from the *unexcavated* parts of the development area was also included to provide a wider chronological and spatial context.

Contextual analysis

All context data was entered onto an Access database. Post-excavation feature and deposit plans were digitised using AutoCAD. All section drawings were scanned using an HP Scanjet, and all the site photographs were converted where necessary to digital format, allowing them to be viewed on screen alongside database records and digital drawings.

A total of 4309 contexts were recorded during fieldwork, including 1017 from the evaluation. The contextual evidence recorded on site was organised into a hierarchy, comprising:

- SG (Subgroup) – 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 *etc*.
- L (Land use area) – collections of broadly contemporary and spatially coherent groups, *e.g.* an enclosure, unenclosed concentration of pits and post-holes.
- Farmstead – coherent arrangement of contemporary land use areas within a phase with sufficient artefactual and ecofactual evidence to suggest domestic activity centred around farming. On Area 1, Farmstead 2 was replaced by Farmstead 4. On Area 2, Farmsteads 3, 5 and 7 succeeded one another. This level of the structural hierarchy was also used to designate an undated enclosure (F1) and the latest activity on Farmstead 4 (F6), although these do not in themselves constitute separate farmsteads.
- Phases – broad, chronological divisions, *e.g.* late Iron Age/early Romano-British, Romano-British, later Romano-British).

An understanding of these terms is essential to the understanding of this publication. Phase, Farmstead and Land use areas provide the main framework within which the results are presented. However, 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 report is described above (see Format of the report: Terminology).

Plate 1.3 Hand excavation of intercutting quarry pits G370 L35 Farmstead 5

Chapter 2. Activity prior to the late Iron Age (Phases 1 and 2)

I. Phase 1: earlier prehistoric

Fifty-one pieces of struck flint of possible Neolithic and early Bronze Age date were recovered. This comprised 43 pieces from field artefact collection and the remainder entirely residual within excavated features. There was no obvious concentration to this material. This prehistoric evidence is, therefore, only briefly described in the artefacts section.

II. Phase 2: undated enclosure

(Fig. 2.1)

The earliest firm evidence for human activity comprised a single large enclosure F1 located within the southern half of Area 1. No datable artefacts were recovered. It was assigned to the pre-late Iron Age on the basis of stratigraphic relationships with later activity and because its fills contained no late Iron Age or Romano-British artefacts. No internal features or pottery were identified within the enclosure. A small quantity of animal bone and fired clay was recovered from the ditch fills. These factors would suggest that this enclosure was not associated with settlement. Only a single unidentified cereal grain was recovered from ecofactual samples. Although residual in later features, it may be significant that the only pre-late Iron Age pottery from the entire excavations derived from Area 1 and was concentrated around the north-west end of this enclosure.

Enclosure F1

The enclosure was broadly sub-rectangular in plan but its ditches were only approximately at right angles to one another. It was orientated north-west to south-east and enclosed an area of 4100sqm. An entrance may have existed on its north-east side, but all other breaks are the result of later truncation. There is some evidence to suggest that an external bank existed.

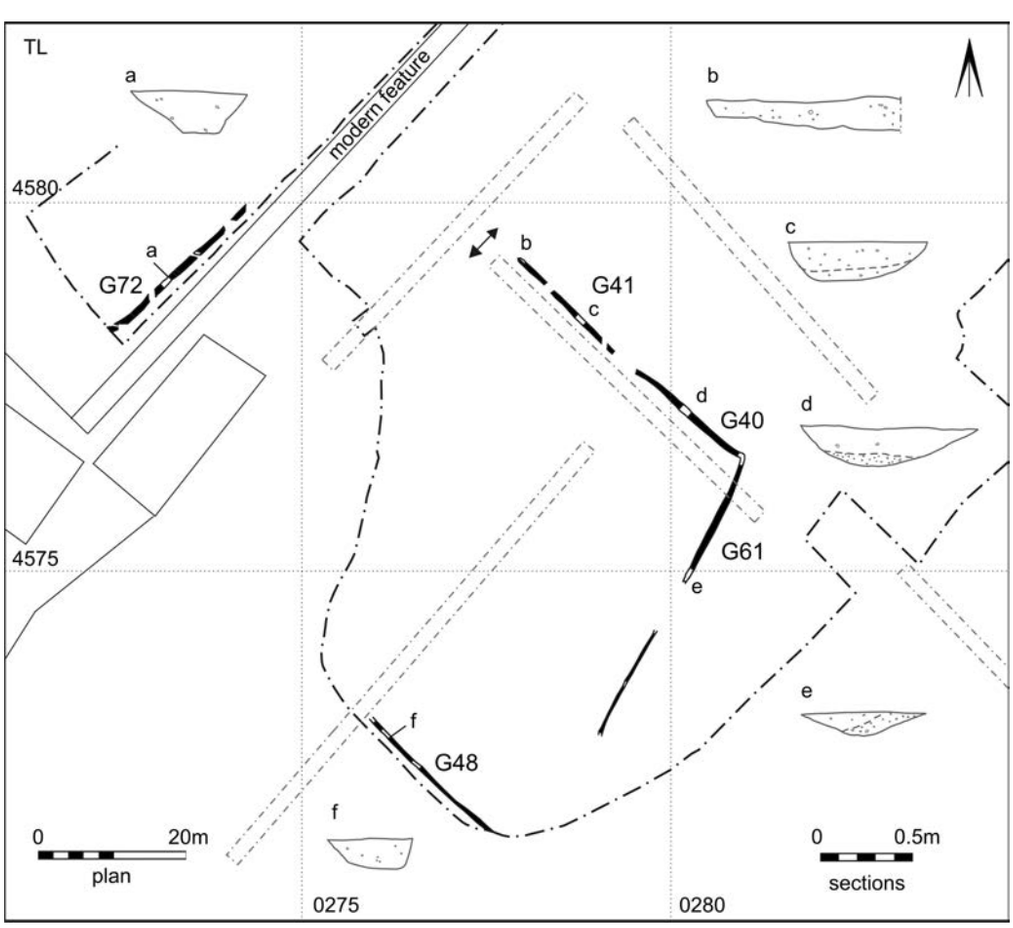


Figure 2.1 Overall plan of Phase 2 enclosure F1 (scale 1:1000), with ditch sections (scale 1:80)

Enclosure ditches G40, G41, G48, G61, G72

Five surviving ditch lengths defined the enclosure. Only G41, on the north-east side, terminated indicating the location of an entrance (Fig. 2.1b). All other possible ends were shallow and likely to be the result of truncation. The ditches had asymmetrical profiles and were between *c*. 0.5m and 0.8m wide, *c.* 0.3m deep (Fig. 2.1a, c, d, e and f).

The primary fills of the ditches was consistently light yellow-brown sandy silt with moderate quantities of small stones. These contained 12 small fragments of animal bone. The position of the primary fill within one excavated ditch segment is suggestive of material derived from an external bank (Fig. 2.1e). The sole or secondary fills comprised mid grey-brown sandy silt with occasional stones. They contained 14g of fired clay and three fragments of animal bone.

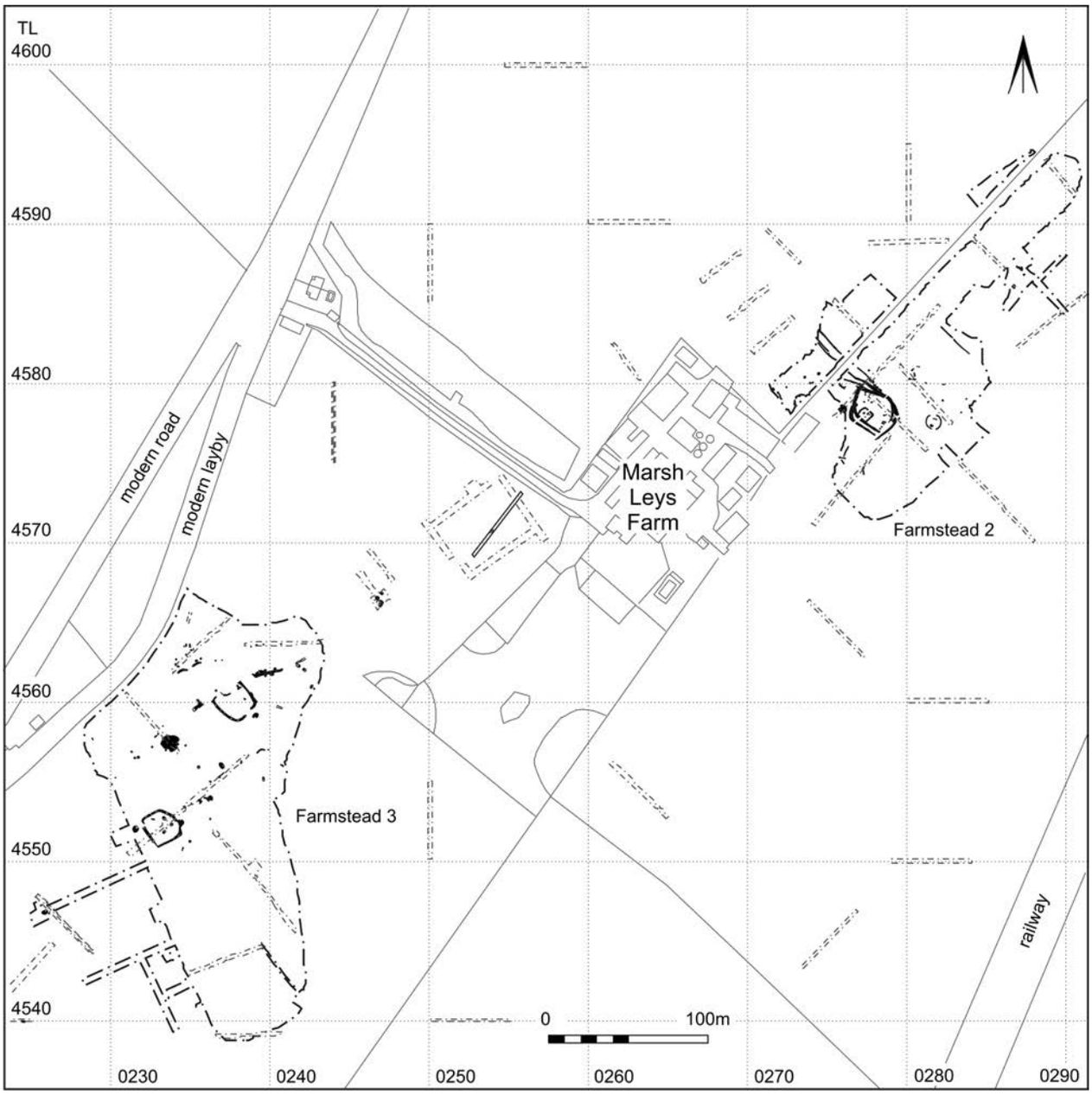


Figure 3.1 Late Iron Age to early Romano-British overall phase plan. Scale 1:4000

Chapter 3. Late Iron Age to early Romano-British farmsteads (Phase 3)

I. Overview
(Fig. 3.1)

During the late Iron Age/early Romano-British period, two farmsteads were established *c*. 400m apart. Farmstead 2 occupied the same location as the Phase 2 enclosure. A number of its boundary ditches were on the same alignment as one of the sides of the earlier enclosure, suggesting continuity between the two. However, the main farmstead enclosure destroyed part of the earlier enclosure ditch. In contrast, Farmstead 3 was established on previously unoccupied land.

The two Phase 3 farmsteads were similar in that they comprised small, possibly non-domestic, ditched enclosures next to areas of unenclosed domestic activity. The ditched enclosure on Farmstead 2 is of particular interest because it contained a building interpreted as a possible 'shrine'. In both farmsteads the adjacent evidence for domestic activity comprised roundhouses, pits and post-holes. Cremation burials were also associated with both farmsteads; the majority of which were in a discrete cemetery on the periphery of Farmstead 2.

The major elements of the farmsteads, *e.g.* the enclosure ditches, have been assigned to this phase because they are stratigraphically earlier than Phase 4 features and contained late Iron Age/early Romano-British pottery. However, for most of the isolated features the presence of contemporary pottery or their spatial positioning in relation to better dated features have been the principal determinants of phasing. The pottery assemblage (*c.* 25kg) attests to the continuity of the wheel-thrown late Iron Age traditions and the introduction of Romano-British wares and forms. A larger quantity of pottery was recovered from Farmstead 3, although this may be because it was more extensive and contained more features than Farmstead 2. There are slight variations in the pottery types between the two farmsteads. For example, a small quantity of specialist Roman forms, such as *mortaria* and samian, were present on Farmstead 2 but were absent from Farmstead 3. Conversely, Farmstead 3 contained a higher proportion of storage vessels.

One thing that does distinguish the farmsteads was the presence of metallurgical residues on Farmstead 3 but not Farmstead 2. The animal bone assemblages from both farmsteads are typical of the period — dominated by cattle with sheep/goat, pig, horse and dog in descending order of frequency. There were slight variations in percentages of species between the farmsteads but these are only mentioned where considered significant. The absence of wild animal bone, such as deer, from both farmsteads could be seen as unusual. Spelt wheat and barley were cultivated around the farmsteads.

II. Farmstead 2
(Fig. 3.2 and Table 3.1)

Farmstead 2 partially overlay the Phase 2 enclosure but did not respect it. It comprised a single, ditched enclosure with adjacent evidence for unenclosed domestic activity and a small cremation cemetery on its eastern periphery. It covered at least *c*. 1ha, with its limits defined in all directions except possibly to the west.

Ditched enclosure L1, which may have served a religious function, was located in the middle of the farmstead. It contained a square building, interpreted as a 'shrine', and a small number of pits and post-holes. The enclosure was redefined on a number of occasions L2/L3, each time retaining its original shape and with the entrances still on the south side.

Evidence for unenclosed activity was concentrated in three foci L4, L5 and L6 to the west and east of the enclosure. These included two definite (and possibly three) roundhouses, pits and post-holes. The presence of two of the roundhouses in L4 and the large quantity of pottery from this area suggest it was the main domestic focus of the farmstead. Fragments of perforated fired clay plates, derived from ovens or kilns, were also found in this area.

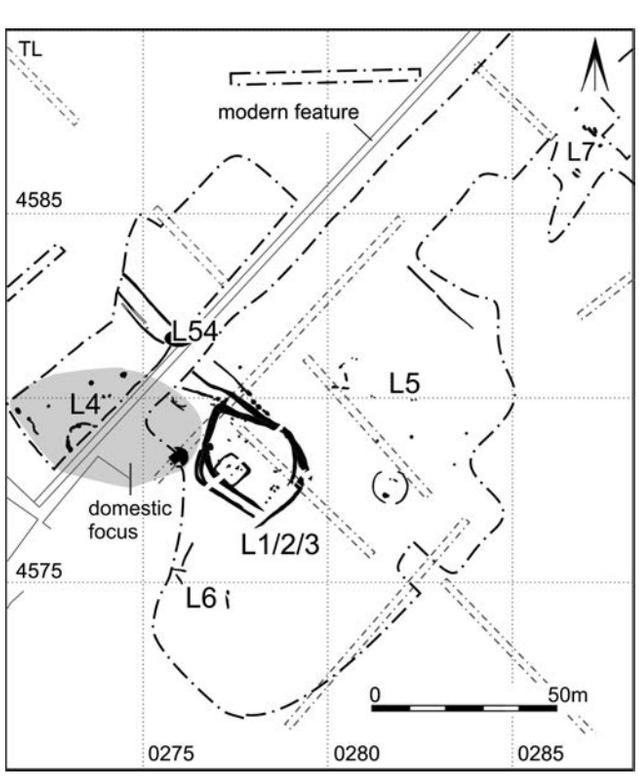


Figure 3.2 Farmstead 2 overall plan. Scale 1:2000

L no.	*Function*	*Extent (sqm)*	*Associated features*	*Pottery (kg)*	*Animal bone (kg)*
1	Enclosure	450	• Shrine • Possible structures • Large pit • Small pits	1	0.6
2	Redefinition of enclosure ditch	-	• None	0.07	0
3	Redefinition of enclosure ditch	380	• None	2.2	0.9
4	Unenclosed domestic focus	800	• Roundhouses • Water pit • Small pits • Gullies • Post-holes	3.2	0.9
5	Unenclosed activity focus	1100	• Roundhouse • Small pits • Gullies • Possible 2-post structure • Cremation cemetery	1.4	0.38
6	Unenclosed activity focus	200	• Possible structure	0.3	0.1
7	Unenclosed peripheral activity focus	250	• Small pits • Post-holes • Gullies	0.4	0.02
Total				**8.57**	**2.9**

Note: does not summarise the major linear boundaries

Table 3.1 Summary of enclosures, activity foci and boundaries in Farmstead 2

Boundary L54 clearly defined the north-east limit of domestic focus L4. This boundary mainly comprised ditches, although its junction with ditched enclosure L1 was defined by a number of small pits. A concentration of pits and post-holes L7 lay *c*. 70m to the north-east of the farmstead but they are unlikely to be associated with domestic activity.

A large quantity of domestic pottery (nearly 10kg) and moderate quantities of animal bone were recovered from the farmstead. The majority of this domestic debris derived from features within domestic focus L4 rather than ditched enclosure L1. Samian associated with Farmstead 2 is of Neronian, early Flavian and early Antonine date. Only a small assemblage of personal (hair pin and a late 1st-century AD brooch) and household (quernstone) items were recovered (Table 7.8). The only object associated with craft activities was a spindle whorl.

The animal bone assemblage was dominated by cattle with sheep/goat, pig, horse and dog. The assemblage of charred plant remains indicates that cereals were being grown and that woodland in the vicinity was being exploited for fuel.

Enclosure L1

(Pls 3.1 and 3.2, Fig. 3.3)

Ditched enclosure L1 was broadly sub-rectangular in plan and was redefined on at least two occasions. Its original ditches G60 and G102 enclosed an area of *c*. 450sqm with entrances to the south and west. A square building G69, tentatively interpreted as a shrine, was located within the interior, on the south-west side. A large part of the interior, especially to the north-east of the possible shrine, was devoid of features. The other evidence for activity within the enclosure was concentrated in two areas: a possible structure G94/G95 and pits G154 to the south-east; and more dispersed pits G138, post-holes G148, G149 and G150 and a large pit G107 to the north-west.

Without firm dating evidence it is always difficult to be sure whether features within the interior of an enclosure are actually contemporary with it and this is certainly the case here. In addition, it has been impossible to associate particular features within the interior with particular episodes of ditch digging. Only pit G107 had a stratigraphical relationship with the latest recut ditch.

With the possible exception of a possible incense burner and an owl bone, there is nothing unusual about the fills to support a ritual interpretation for this enclosure. The majority of the features contained mid brown sandy silt with occasional small stones. Where primary fills were identified, they were lighter in colour and contained more stones. A large quantity of pottery (1kg) and a small quantity of animal bone (640g) was recovered. Of uncertain significance is an owl bone.

Earliest enclosure ditch G60/102

Two lengths of the original enclosure ditch survived later recutting. Both were *c.* 1m wide but G60 to the south-west was only 0.2m deep compared to G102 which was twice as deep. Both had symmetrical, concave profiles, although G102 had considerably steeper sides (Fig. 3.3k and n). Although the eastern length of ditch G60 was truncated by a recut, it clearly terminated, forming a 4.5m wide entrance.

The majority of the artefacts and animal bone were recovered from the eastern ditch G102, furthest from the 'shrine' G69. The only artefact of note was a possible lamp or incense burner (Fig. 7.1 P2) which was found in the same ditch segment as the radius of an owl.

'Shrine' G69

(Fig. 3.4)

Square enclosure G69 has tentatively been interpreted as containing a square building or structure that may have functioned as a 'shrine'. This is because square buildings

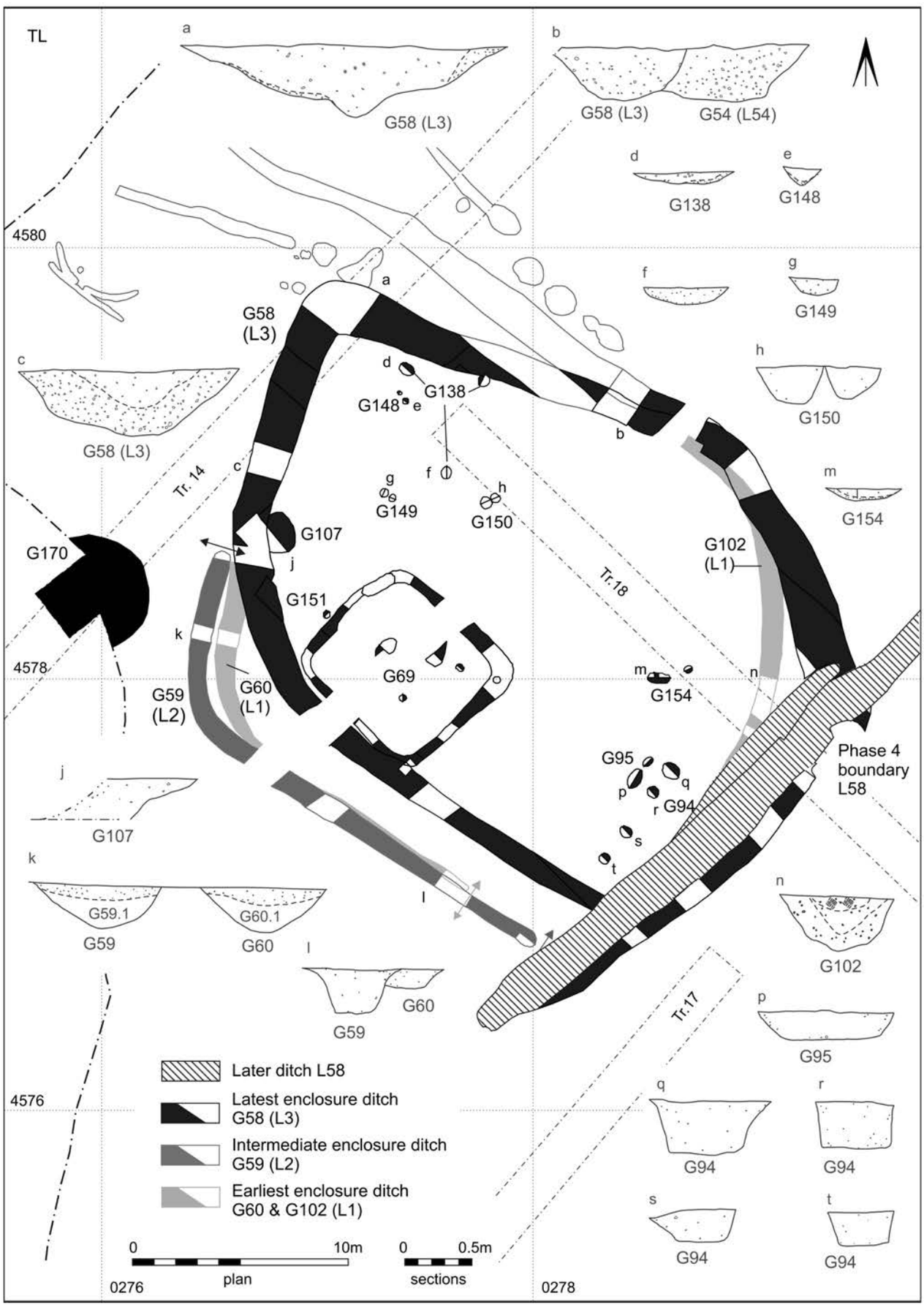


Figure 3.3 Overall plan of enclosure L1/2/3 (scale 1:250), with selected sections (scale 1:80)

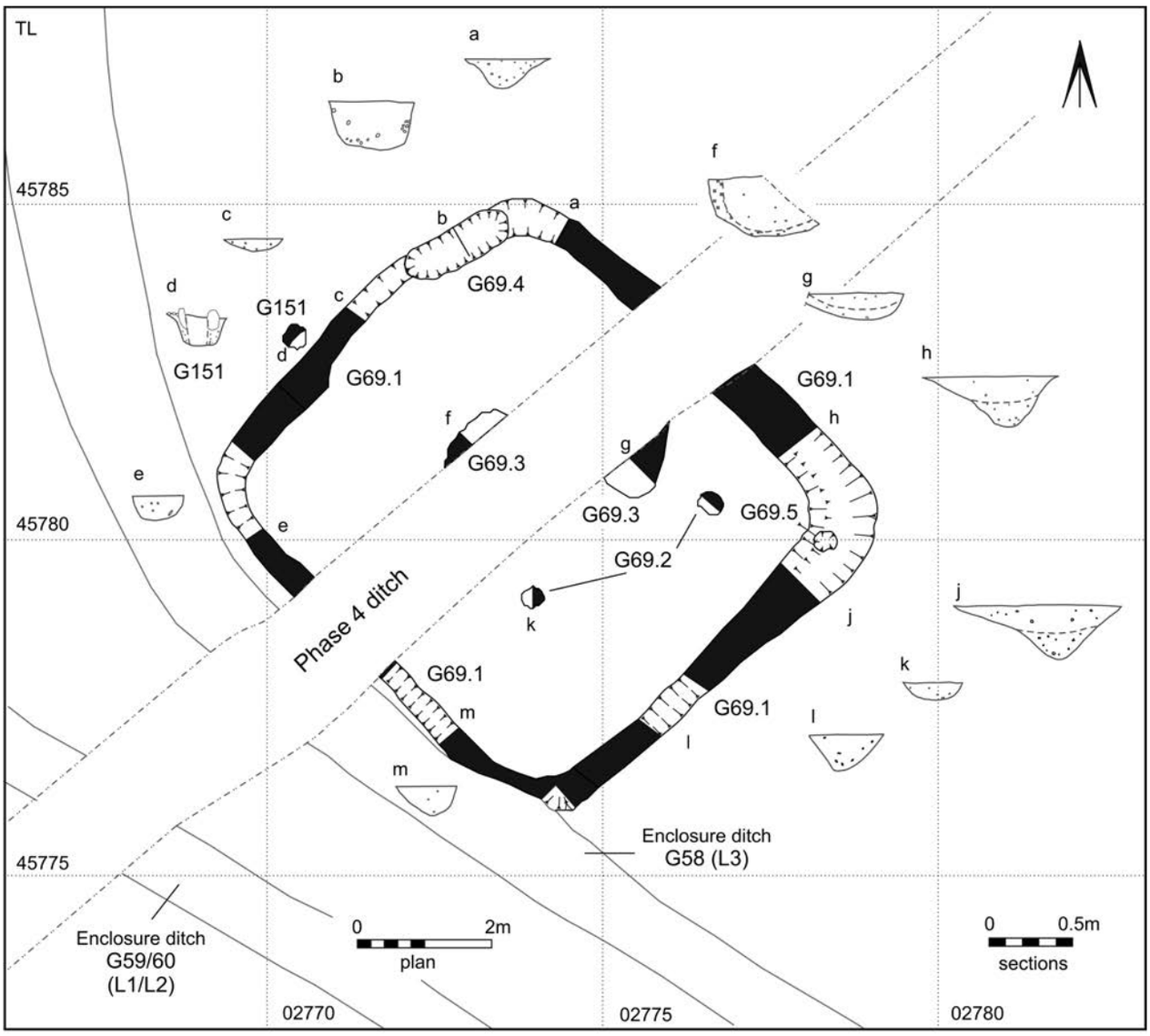


Figure 3.4 Detailed plan of possible 'shrine' G69 (scale 1:100), with selected sections (scale 1:80)

were unusual during this period and a number of similar enclosures have been interpreted in this way *e.g.* Biddenham Loop, Beds. (Luke 2008, 227–31). It was located in the south-west part of the enclosure, *c.* 3m to the north of enclosure ditch G60. It was defined by a drainage gully G69.1 which enclosed an area of *c.* 7m by 6m wide (Pl. 3.1).

The gully was typically 0.35m wide and 0.2m deep. In the north-east corner it was 0.85m wide and 0.3m deep, possibly as a result of a deliberate attempt to create a sump. The gully's profile varied — an asymmetrical V-shape to the south-east (Fig. 3.4l and j), steep-sided and concave to the north (Fig. 3.4a). A small number of features which could be contemporary with the building were located within the interior. These comprise two post-holes G69.2 and two pits G69.3. The former were located *c.* 2.5m apart and were *c.* 0.4m in diameter and 0.1m deep with near vertical sides and flat bases (Fig. 3.4k). The pits G69.3 were truncated by a later ditch but appeared to be sub-oval in plan. They had probably originally been *c.* 1m in diameter and were 0.15m–0.35m deep with near vertical sides and slightly concave bases (Fig. 3.4f and g).

Two features, G69.4 and G69.5, appeared to have been dug into the infilled gully but may still have been associated with the building. For example, they may have held external supports for the walls of the building. Slot G69.4 was 1.6m long, 0.5m wide and 0.3m deep with near vertical sides and a flat base (Fig. 3.4b). Post-hole G69.5 was located on the opposite side of the gully to the slot. It was 0.3m in diameter and 0.15m deep with near vertical sides and a flat base.

Another post-hole G151 was located 0.1m beyond the north-west edge of the gully and may have served a similar purpose. It was 0.4m in diameter and 0.2m deep with near vertical sides and a slightly concave base. It contained a post-pipe, which was 0.15m in diameter and 0.2m deep with vertical sides. The post packing consisted of a ring of vertically placed stones and light brown silty clay (Fig. 3.4d).

The main fills of the gully contained a small pottery assemblage of 1st- to 2nd-century date.

Plate 3.1 Possible shrine G69 (L1, Farmstead 2) and later ditch from southwest, with 1m scales

Possible structure G94/G95
Four circular post-holes G94 and two pits G95 were located just inside the south-east corner of the enclosure. They appear to have been deliberately positioned parallel to the enclosure ditch and the building. The row of regularly spaced post-holes was 6m long (Pl. 3.2). They increased in diameter (0.5m to 0.9m) and depth (0.3m to 0.4m) from south-west to north-east — a real phenomenon rather than the result of truncation. They all had steep sides and flat bases (Fig. 3.3q, r, s and t). Pits G95 were located immediately to the north-west of the post-holes and had similar diameters to the adjacent post- holes. However, their interpretation is less certain because they were only 0.2m deep and had more concave profiles (Fig. 3.3p).

Plate 3.2 Possible structure G94/G95 (L1, Farmstead 2) from southwest, with 1m scale

Large pit G107
Circular pit G107 was located in the western part of the enclosure and was truncated by the latest re-cut of the ditch. It was at least 1.55m in diameter and over 0.3m deep but was not bottomed (Fig. 3.3j). The latest pottery recovered was a single sherd of 2nd-century date.

Possible structure G138, G148, G149, G150
In the northern part of the enclosure was a scatter of pits and post-holes. It is unclear if they form a single structure or are individual features. The three pits G138 lay within 3m of each other. They were *c*. 0.6m in diameter and 0.2m deep with concave profiles and flat bases (Fig. 3.3d and f). In the vicinity were three individual pairs of post-holes G148, G149 and G150, each of which is likely to represent the replacement of an earlier post with a later one. They were 0.2m–0.5m in diameter and 0.15m–0.3m deep with steep-sided, concave profiles and concave bases (Fig. 3.3e, g and h).

Pits G154
Two oval pits G154 were located 0.7m apart in the eastern part of the enclosure, *c*. 0.5m to the north of possible structure G94/G95. They were 0.4m and 1m long, 0.3m and 0.6m wide and were under 0.2m deep with concave profiles and flat bases (Fig. 3.3m).

Redefinition of enclosure ditch L2 and L3
(Fig. 3.3)
Enclosure L1 was re-established on at least two occasions. The first re-cut L2 only survived to the south-west where, in the main, it followed the line of the original ditch. The second re-cut L3 was much more substantial but enclosed a slightly smaller area *c.* 380sqm. Although this ditch appeared to truncate the southern corner of the drainage gully around square building G69, it is possible that they were actually open together and therefore contemporary. As previously discussed, it has been impossible to determine whether any of the other internal features were contemporary with the re-cuts.

The majority of the ditch fills comprised grey-brown clay silt with occasional small stones. A large assemblage of domestic debris, including pottery (2.2kg), fired clay and animal bone (0.9kg) was recovered from the latest re-cut L3. This may suggest that the function of the enclosure had changed. However, it could simply be a reflection of the fact that the ditch probably survived as a hollow in the ground for a long period of time and was not redug like the earlier ditches.

Enclosure ditch G59 (L2)
This ditch mainly followed the line of the original ditch and only survived itself for 24m before being completely removed by the later recut. Two possible entrances were identified on the west and south sides of the enclosure. The ditch was 0.95m wide and 0.3m deep but it narrowed to 0.7m towards the south-east before it terminated. It had a steep-sided, convex profile with a flat base to the south (Fig. 3.3l) changing to a more concave profile to the west (Fig. 3.3k).

Enclosure ditch G58 (L3)
The final recut G58 was 0.95m–2.3m wide and 0.35m–0.6m deep with a steep-sided, irregular concave profile and base (Fig. 3.3a, b and c). The positioning of the

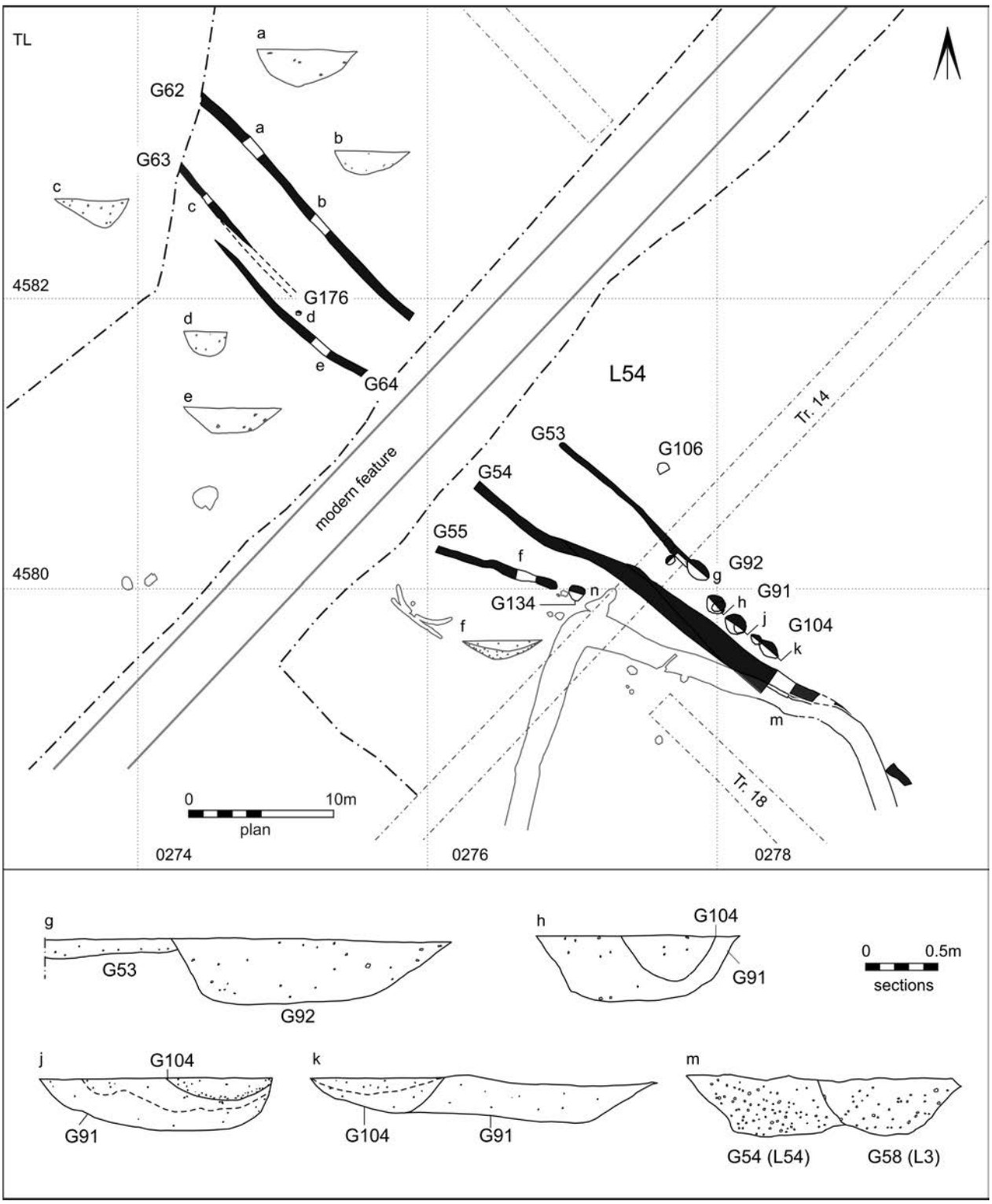


Figure 3.5 Overall plan of boundaries L54 (scale 1:400) with ditch and pit sections (scale 1:80)

fills within the ditch to the north-east suggests the presence of an external bank (Fig. 3.3a). No entrances could be positively identified. It is likely that the one to the south-east continued in use, although this could not be proved due to truncation by a Phase 4 ditch.

The ditch fills produced a large pottery (2.2kg) and fired clay (3kg) assemblage. Little can be said about the animal bone assemblage (913g), although six bones appeared to belong to the same immature dog. The majority of the finds were recovered from the northern ditch length, *i.e.* away from the 'shrine'.

Major linear boundary L54

(Pl. 3.3, Fig. 3.5)

Major linear boundary L54, aligned NW–SE, joined the northern side of ditched enclosure L1/L2/L3. It comprised

several parallel ditches G62, G63, G64, G54, G55 and G53; a short alignment of pits G91, G92 and G104; another pit G134; and a post-hole G176. It is presumed that not all these elements were contemporary. Overall it was over 50m in length. One of the boundary ditches was truncated by the final recut L3 of the enclosure and is, therefore, likely to be contemporary with one of the earlier versions of the enclosure L1/L2. This boundary represents the north-east edge of domestic focus L4 and presumably continued beyond the limit of excavation. The arrangement of some of the ditches could also suggest that they defined a routeway which was later blocked by the alignment of pits.

The main fills of these features comprised mid grey-brown silty clay with occasional stones. Given their size and proximity to domestic activity, they contained a surprisingly small assemblage of pottery (1.2kg) and animal bone (538g). Ecofact sample 22 from pit G91 contained a plant typically found in temporary wet areas of fields from which the crop represented in this sample had presumably been harvested.

Ditch G53/62

Ditch lengths G53 and G62 represent the easternmost element of the boundary, which was at least 35m long and continued beyond the north-west limit of the excavation area. Ditch G62 was 0.6m wide and 0.3m deep with a concave profile to the north-west (Fig. 3.5a, b). It narrowed and got progressively shallower to the south-east before it terminated within G53.

Alignment of pits G91, G92, G104

A short alignment of pits was located at the south-east end of ditch G53/62 on the same alignment (Pl. 3.3). Although eight pits were identified, not all were contemporary. Three of the pits G91 had been redug as smaller pits G104 (Fig. 3.5h, j, k). The earlier pits G91 were *c*. 1.5m in diameter, 0.65m wide and 0.4m deep with steep-sided, convex profiles and flat bases (Fig. 3.5h, j, k). The later pits G104 were *c.* 0.7m in diameter and under 0.3m deep with concave sides and concave bases (Fig. 3.5h, j, k). Pit G92 was slightly offset from the others but its size would suggest it was contemporary with the three larger pits G91. It was 1.9m long, 1.1m wide and 0.45m deep with a steep-sided asymmetrical concave profile and a flat base (Fig. 3.5g).

Ecofact sample 22 contained many seeds of blinks, a low-growing plant of shallow, open temporary puddles, for example in wheel ruts and compacted areas in cultivated fields.

Ditch G63

Ditch G63 was located *c*. 4m to the south-west of ditch G62. They could be contemporary and may have defined a trackway. Ditch G63 was only observed for 7.5m because it continued beyond the limit of the excavation area to the north-west and was obscured by a later feature to the south-east. It was 0.5m wide, 0.2m deep with an asymmetrical, V-shaped profile (Fig. 3.5c).

Ditch G54/G64

Ditch lengths G54 and G64 are part of the westernmost element of the boundary. They were parallel to and *c.* 5.5m south-west of G53/G62 suggesting they may have defined a routeway. Towards the south-east G54 changed

Plate 3.3 Short alignment of pits G104 (foreground), G91 and G92 (L54, Farmstead 2) from SE, with 1m scale

alignment, reducing the width of the possible trackway. To the north-west the ditch was 0.6m wide, 0.2m deep with a concave profile and flat base (Fig. 3.5e) but to the south-east it was 1.1m wide and 0.4m deep with a steep-sided, convex profile and flat base (Fig. 3.5k).

Ditch G55

Ditch G55 was on a slightly different alignment to the other ditches but its proximity and position in relation to the northern corner of enclosure L1 suggests it is associated. It was only 2m to the south-west of ditch G54, with which it is unlikely to be contemporary. It was at least 8.5m long and terminated to the south-east in the vicinity of pit G134. Its full extent to the north-west is unknown. The ditch was 0.55m wide and 0.15m deep with a shallow, concave profile and concave base (Fig. 3.5f).

Unlike the other ditches in this area its main fills contained a moderate quantity of domestic debris including pottery, the latest of which dated to the 2nd century.

Pit G134

Sub-circular pit G134 was located 0.8m from the eastern terminal of ditch G55 — a comparable position to that of pit G92 and ditch G53 (see above). The pit was *c*. 1m in diameter and 0.3m deep with a steep-sided, concave profile and flat base (Fig. 3.5n).

Post-hole G176

Circular post-hole G176 was located between ditches G63 and G64. It was 0.3m in diameter, 0.15m deep with a vertical profile and slightly concave base (Fig. 3.5d).

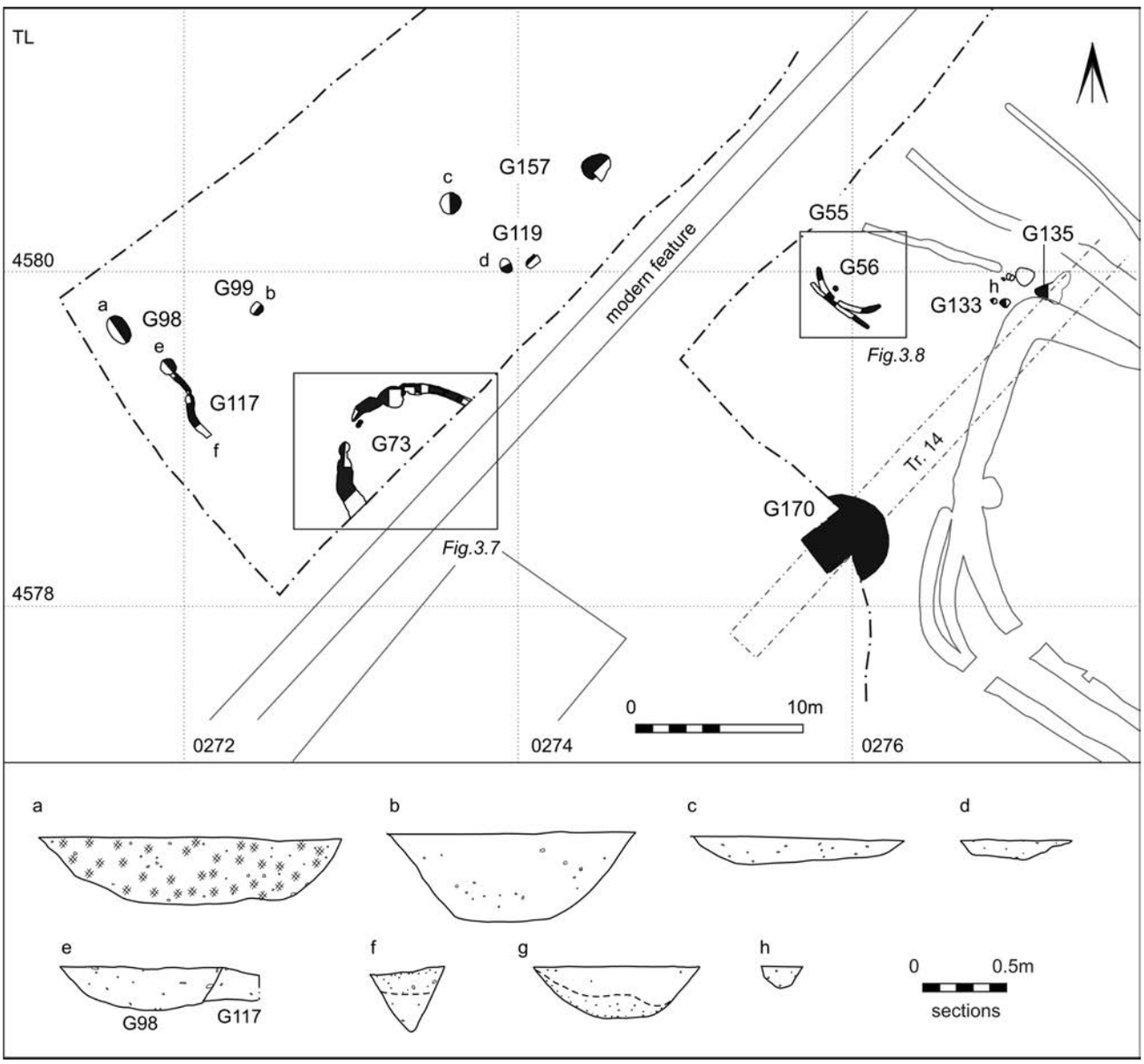


Figure 3.6 Overall plan of domestic focus L4. Scale 1:400

Unenclosed domestic focus L4
(Fig. 3.6)
A focus of domestic activity L4 was located to the west of ditched enclosure L1 and to the south-west of boundary L54; it may have continued beyond the western limit of excavation. It comprised two roundhouses G73 and G56 situated 20m apart; water pit G170; pits G98, G99, G119, G135 and G157; gullies G117; and post-holes G133.

The majority of the fills of these features comprised dark grey-brown silty clay with occasional small stones. The majority of the recovered finds derived from roundhouse G73 and nearby pits, supporting the domestic interpretation of these features. They included the largest pottery (3.2kg) and animal bone (0.9kg) assemblages from this farmstead. Personal artefacts included a late 1st-century AD copper alloy brooch and pin. In addition to the domestic finds, there was also a small amount of evidence for craft activity. This included an incomplete chalk spindle whorl and portable kiln/oven furniture; although the latter could also have served a domestic function. One ecofact sample contained remains suggestive of waste from the de-husking and final cleaning of weed seeds from spelt wheat.

Roundhouse G73
(Pl. 3.4, Fig. 3.7)
Only the north-west half of roundhouse G73 fell within the excavation area. It was defined by a drainage ditch G73.1 whose projected circumference suggests it contained a building with a diameter in the region of 8m (Pl. 3.4). A 1.3m gap in the ditch suggests the presence of a NW-facing doorway (Fig. 3.7a, b). The ditch was quite irregular in plan; in places it was 1.25m wide but towards the doorway it narrowed to 0.5m. It was 0.25m–0.45m deep with a steep-sided profile and flattish base (Fig. 3.7c). A recut G73.2 on the northern side was smaller than the original ditch — 0.45m wide and 0.25m deep with a steep-sided profile and flat base (Fig. 3.7e). Two intercutting post-holes G73.3 were probably associated with the doorway. Both post-holes were 0.25m in diameter, 0.1m deep with near vertical sides and slightly concave base (Fig. 3.7d).

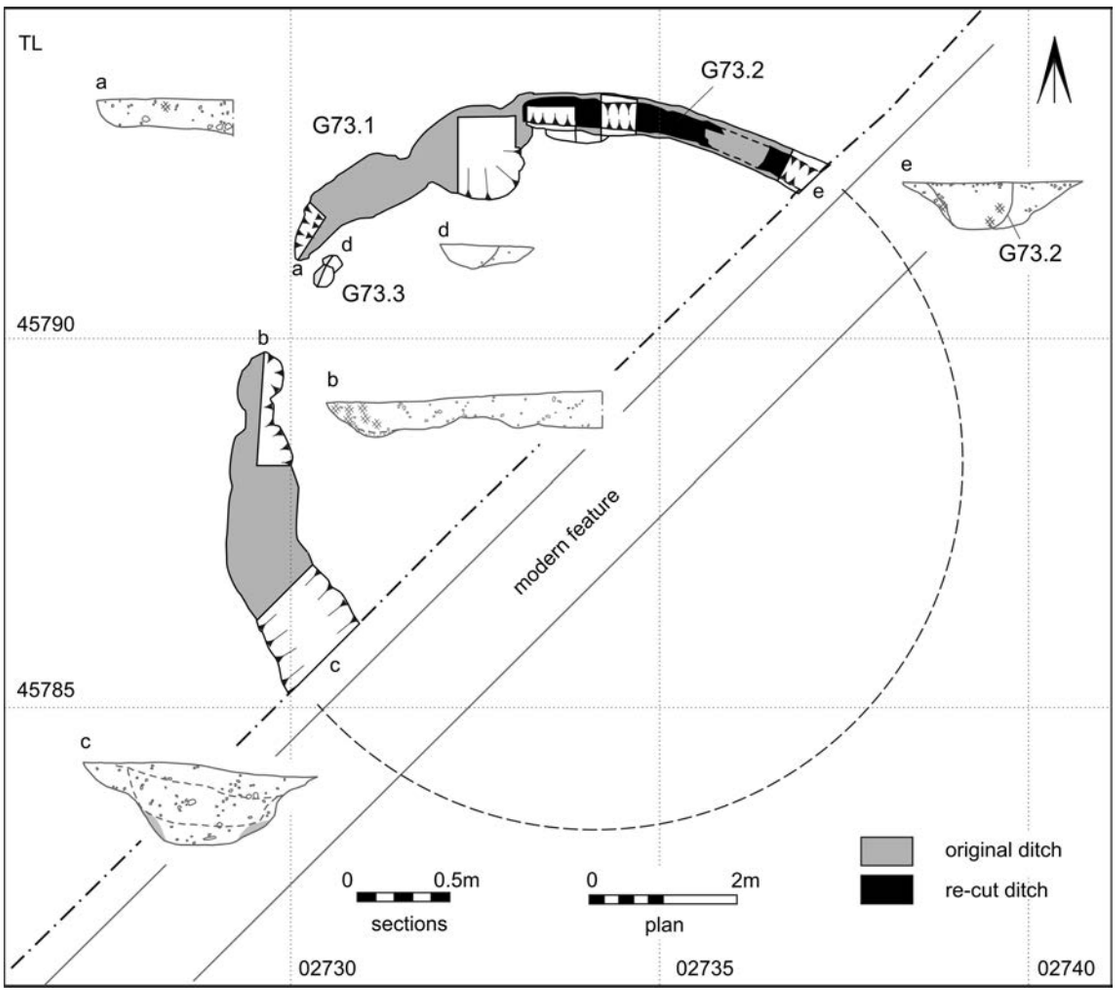


Figure 3.7 Detailed plan of roundhouse G73 (scale 1:100), with selected sections (scale 1:80

The main fills of these features G73.12 comprised green brown clay sand with moderate small stones and frequent charcoal flecks. They produced nearly 1kg of pottery, none of which was later than the early 2nd century. It also contained a small number of fired clay fragments, including slabs (Fig. 7.5 FC5), suggestive of the presence of an oven.

Pits G98, G99, G119, G157

To the north of roundhouse G73 was a scatter of seven isolated pits G98, G99, G119 and G157. They were all of a similar nature and located in close proximity. They were circular and oval in plan, 0.7m–0.95m in diameter and 0.1m–0.3m deep, with either shallow or steep-sided concave profiles or flat bases (Fig. 3.6, a, b, c and d). Some of the pits were truncated by a Phase 4 ditch.

The pit fills produced a small quantity of domestic debris, including a late 1st-century AD copper alloy brooch (RA 20). Chaff and weed seeds outnumbered grain in ecofact sample 30, the remains were therefore probably waste from the de-husking and final cleaning of weed seeds from spelt wheat.

Gully G117

Curvilinear gully G117 was located *c.* 8m to the west of roundhouse G73. It was 5m long, *c.* 0.4m wide and 0.15m–0.4m deep with a V-shaped profile (Fig. 3.6f). The north-west end of the gully was truncated by one of the pits G98 (Fig. 3.6e). The primary fill of the gully contained fragments of portable kiln/oven furniture (88g) including perforated plates (Fig. 7.5 FC2). The main fills contained a chalk spindle whorl (RA 22) and a copper alloy hairpin (RA 21) which may be associated with the adjacent roundhouse.

Plate 3.4 Roundhouse G73 (L4, Farmstead 2) from NE, with 1m scales

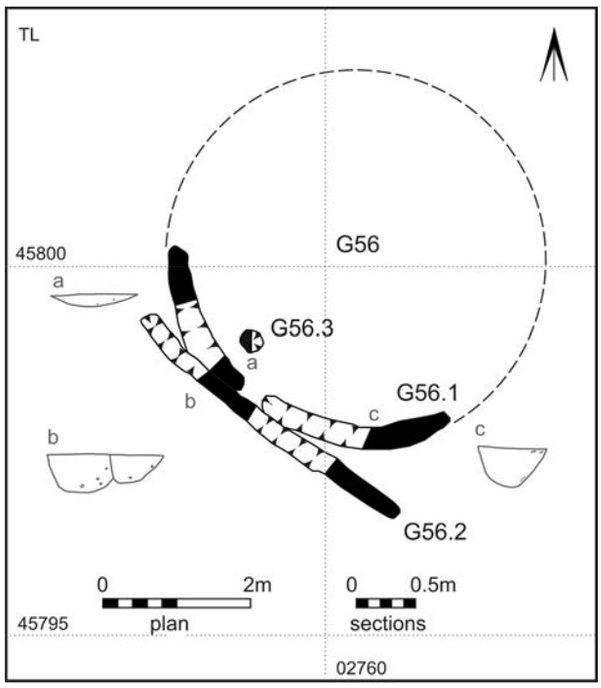


Figure 3.8 Detailed plan of possible roundhouse G56 (scale 1:100), with selected sections (scale 1:80)

Possible roundhouse G56
(Fig. 3.8)
Possible roundhouse G56 was located *c*. 20m north-east of roundhouse G73. Only the southern part survived — two curved lengths of drainage ditch whose projected circumference suggests a building with a diameter of *c.* 5m. The ditch lengths were *c*. 0.3m wide and 0.2m deep with near vertical sides and a flattish base (Fig. 3.8c). A single post-hole G56.3 was located close to the gap between the two ditch lengths. It was 0.3m in diameter and 50mm deep with shallow concave sides and a slightly concave base (Fig. 3.8a). A NW-SE aligned slot G56.2 abutted the drainage ditches. It was 4.4m long, 0.25m wide and 0.15m deep with a steep-sided concave profile and flat base (Fig. 3.8b). Its proximity to the roundhouse suggests that it is associated in some way.

The latest datable pottery from the fill of the drainage ditch comprised six sherds of 2nd-century wares.

Post-holes G133, pits G135
Located between possible roundhouse G56 and boundary L54 were five post-holes G133 and a pit G135. The post-holes were circular in plan, 0.1m–0.4m in diameter and *c*. 0.2m deep with steep-sided profiles and concave bases (Fig. 3.6h). The adjacent pit was irregular in plan, *c*. 2m long, 1m wide and 0.15m deep with a concave profile and an uneven base.

The primary fill of the pit contained five sherds of 2nd-century pottery and the main fill contained a moderate quantity of domestic debris including over 1kg of fired clay. The latter is indicative of the presence of an oven or hearth in the vicinity for which no *in situ* evidence was recovered.

Water pit G170
A large, relatively isolated water pit G170 was located to the south of the main focus of activity, *c.* 3m from enclosure L1. It was at least 4.6m in diameter and over 0.8m deep but was not bottomed due to its proximity to the limit of excavation and modern farm structures.

Unenclosed activity focus L5
(Fig. 3.9)
Activity focus L5 was located to the east of enclosure L1. Its full extent was revealed within the excavation area; its north-east limit may have been defined by ditch G8. It comprised a roundhouse G57, dispersed pits G147, an isolated pit G106, two adjacent short gullies G141 and a possible two-post structure G146. In addition, a small cremation cemetery G84/G103 was located 30m to the north of the roundhouse.

The majority of the fills of these features comprised mid grey brown silty clay with occasional small stones. The function of the majority of the pits and post-holes is uncertain, principally because, with the exception of the graves, the overall pottery (1.4kg) and animal bone (0.38kg) assemblages were small.

Ditch G8
NW-SE aligned ditch G8 terminated to the north-west, suggesting the location of an entrance. It was 0.45m wide, 0.1m deep with a concave profile and base (Fig. 3.9a).

Roundhouse G57
(Pls 3.5 and 3.6, Fig. 3.10)
Roundhouse G57 was defined by a drainage ditch whose circumference suggests it contained a building with a diameter of *c*. 9m (Pl. 3.5). A south-facing doorway is indicated by the presence of a *c.* 2.5m wide gap on this side although only one genuine terminal in the ditch was identified (Fig. 3.10d). The other gaps are the result of plough truncation. The ditch was 0.2m–0.4m wide and 50mm–0.15m deep with steep sides and a flat base (Fig. 3.10a, b and c).

Four features within the interior of the building are presumed to be contemporary with it, given the absence of other such features outside the roundhouse. They comprised two post-holes G57.3 and G57.6 and two pits G57.4 and G57.5. The post-holes were 0.25m and 0.35m in diameter, 0.15m to 0.3m deep, with near vertical sides and flat bases (Fig. 3.10e). The larger post-hole G57.6 was dug into pit G57.5 and contained an angled post-pipe 0.25m in diameter (Fig. 3.10h). The shapes of the pits differed; they were *c*. 1.25m long, 0.2m–0.5m wide and *c*.

Plate 3.5 Roundhouse G57 (L5, Farmstead 2) from SE, with 1m scale

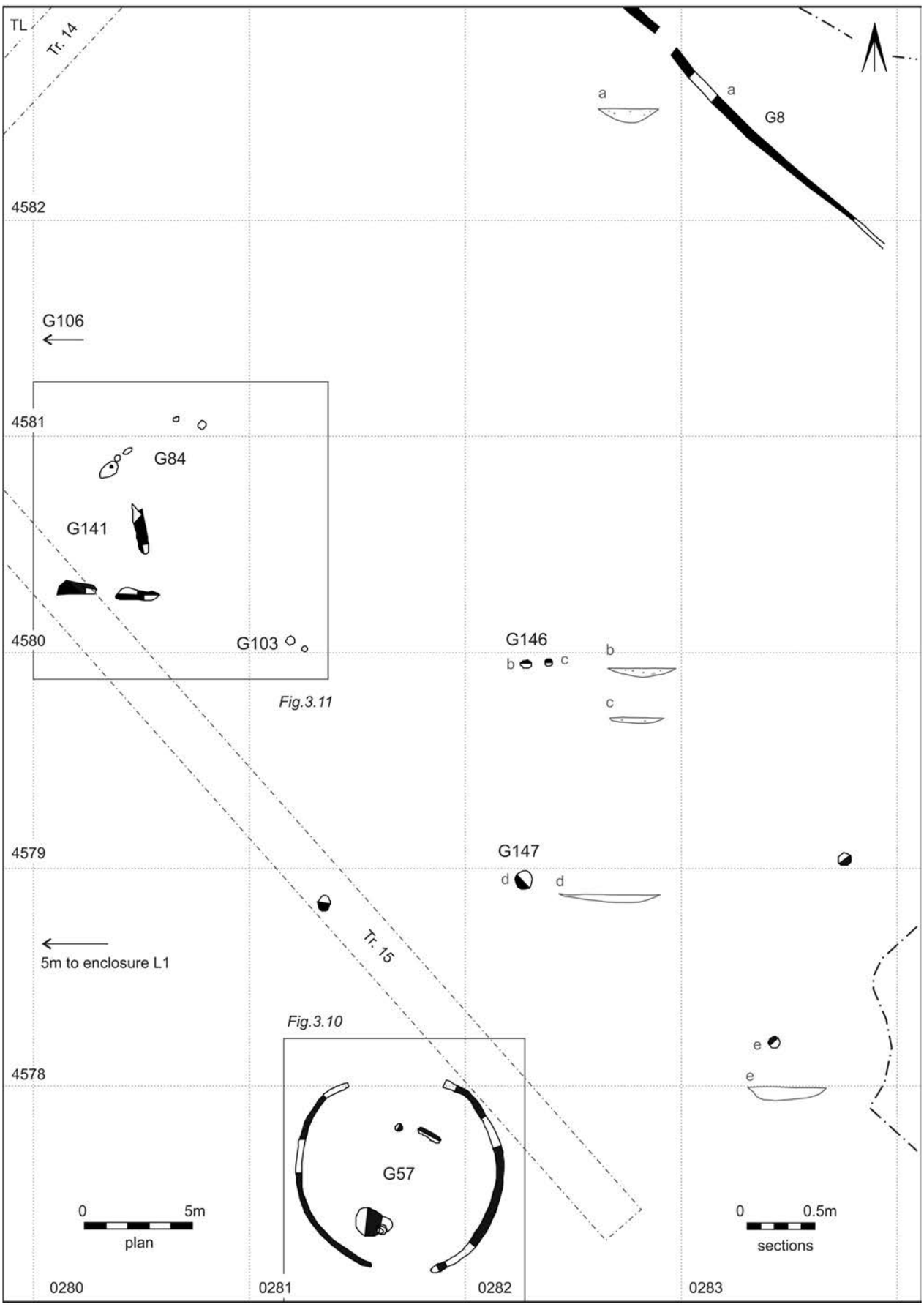


Figure 3.9 Overall plan of domestic focus L5 (scale 1:250), with selected sections (scale 1:80)

Plate 3.6 Upside down skull within drainage ditch defining roundhouse G57 (L5, Farmstead 2), with 0.2m scale

0.25m deep (Fig. 3.10f). The northern pit G57.4 was almost slot-like in plan and may have been dug to hold a timber (Fig. 3.10g).

The main fill of the ditch produced a small quantity of domestic debris, including late Iron Age/early Roman pottery. In addition, part of a human skull of a mature female (6251) had been placed upside down on the base of the roundhouse ditch, close to its southern terminal (Fig. 3.10) (Pl. 3.6). Only the lower part of the skull was missing as a result of plough truncation.

Cremation cemetery G84/G103

(Pls 3.7 and 3.8, Fig. 3.11 and Table 3.2)

Cremation cemetery G84/G103 was located *c.* 30m north of roundhouse G57 and *c.* 20m east of enclosure L1. It contained seven graves, five of which contained pottery vessels broadly datable to the 2nd century. All the graves were truncated by recent ploughing and it has, therefore, not always been possible to determine the original location of cremated bone and grave goods. Two clusters of graves *c.* 10m apart were identified. The northern one G84 contained five graves, the southern one G103 only two graves. The majority of the graves were circular in plan, 0.2m–0.45m in diameter and 50mm–0.15m deep.

Adjacent to the graves were three short gullies G141 which are likely to be associated. They were assigned to this phase because they are truncated by Phase 4 features and are also on a different alignment to the later enclosure systems.

Four of the graves contained ceramic urns S327, S331, S333 and S336 (Pl. 3.7). All had been damaged by post-depositional disturbance. Three of the burials were un-urned. Two of the graves S322 and S327 contained accessory vessels. One of these, a miniature whiteware (R03C) vessel (Fig. 7.1 P1), had been placed upright

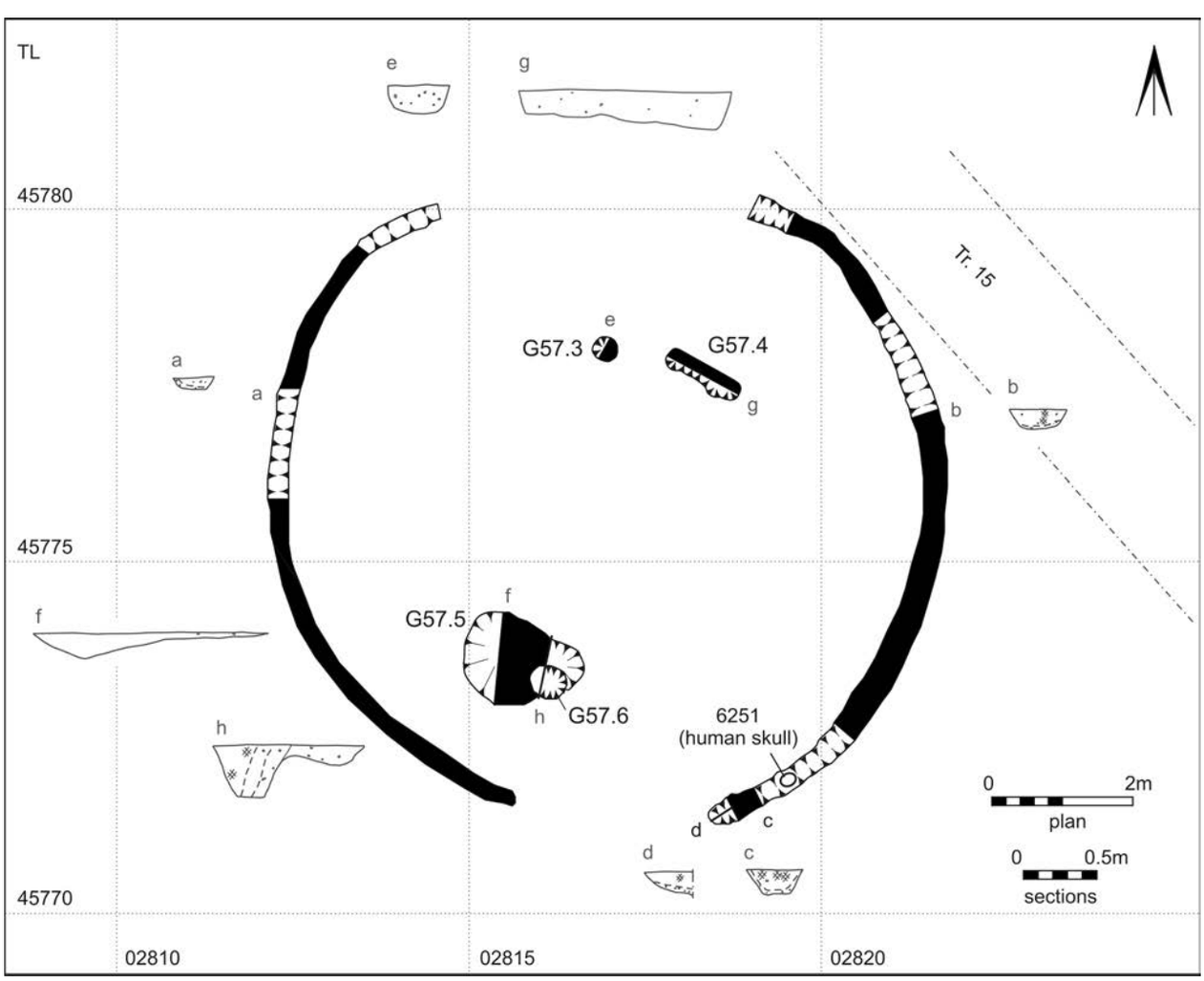


Figure 3.10 Detailed plan of roundhouse G57 (scale 1:250), with selected sections (scale 1:80

within grave S322 but clearly after some backfilling had taken place because it was not on the base (Pl. 3.8).

Only three graves contained more than 370g of cremated bone, presumably reflecting the level of disturbance. Only the cremated bone deposits within graves G103 contained charcoal flecks, presumably derived from pyre debris.

Gullies G141

Three short gullies G141 were located in the vicinity of the cremation burials. Two were aligned west-east, while the third ran at a right angle. They were 1.5m–2m long and were all *c*. 0.5m wide and 0.15m–0.25m deep with concave profiles and flat bases (Fig. 3.11h, j and k). The main fills G141.2 varied from light red brown to mid grey-brown silty clay with occasional small stones.

Although their shape and profile is comparable to pyre-related features identified on other sites, the absence of any evidence for burning, either *in situ* or within the fills, suggests that this is unlikely.

Pit G106

Pit G106 was relatively isolated from the other features in this area; it lay *c*. 2.5m north-east of boundary L54 (Fig. 3.5). It was assigned to this phase because it was stratigraphically earlier than a Phase 4 ditch. It was 0.5m in diameter and 0.3m deep with a concave profile and slightly concave base.

The majority of the pottery assemblage from its main fill G106.1 derived from a single late Iron Age/early Roman vessel.

Possible two-post structure G146

Two post-holes G146 were located *c.* 18m east of cemetery G84/G103. They were 0.7m apart and have tentatively been interpreted as a two-post structure. Both post-holes were *c*. 0.5m in diameter and 50mm deep with shallow concave profiles (Fig. 3.9b and c).

Pits G147

A loose cluster of four circular pits G147 was located to the north-east of roundhouse G57. They were 0.6m–0.75m in diameter and 0.1m–0.2m deep with shallow, concave profiles (Fig. 3.9d and e).

Plate 3.7 Cremation deposit within grave S336 with urn just visible (G84, L5, Farmstead 2), with 0.4m scale

Plate 3.8 Miniature vessel within grave S322 (G103, L5, Farmstead 2), with 0.4m scale

G no.	*Grave*	*Total Weight (g)*	*Spatial location of bone, if known*	*Measurements (m)*		*Depth (m)*	*Vessels*	*Section*	*Photos*
				Diameter	*Length*				
84	325	68	(68)	0.45		0.05	Un-urned	e	
	327	56	(56)		0.90	0.07	Black R08 urn (5946) Red R05A accessory vessel (5944)	a	
	331	370	(370)	0.35		0.05	Grey R06D urn (5940)	b	
	333	6	(6)		0.35	0.10	Grey R06D urn (5942)	c	
	336	133	(133)	0.20		0.05	Grey R06B urn (5833)	d	Pl. 3.7
103	320	415	A (78), B (216), C (121)	0.40		0.10	Un-urned	f	
	322	436	A (7), B (404), C (25)	0.25		0.15	Un-urned miniature R03C accessory vessel (6178)	g	Pl. 3.8

Note: cremation deposits excavated in spits are numbered from A (uppermost)

Table 3.2 Details of cremation cemetery G84/G104 in Farmstead 2

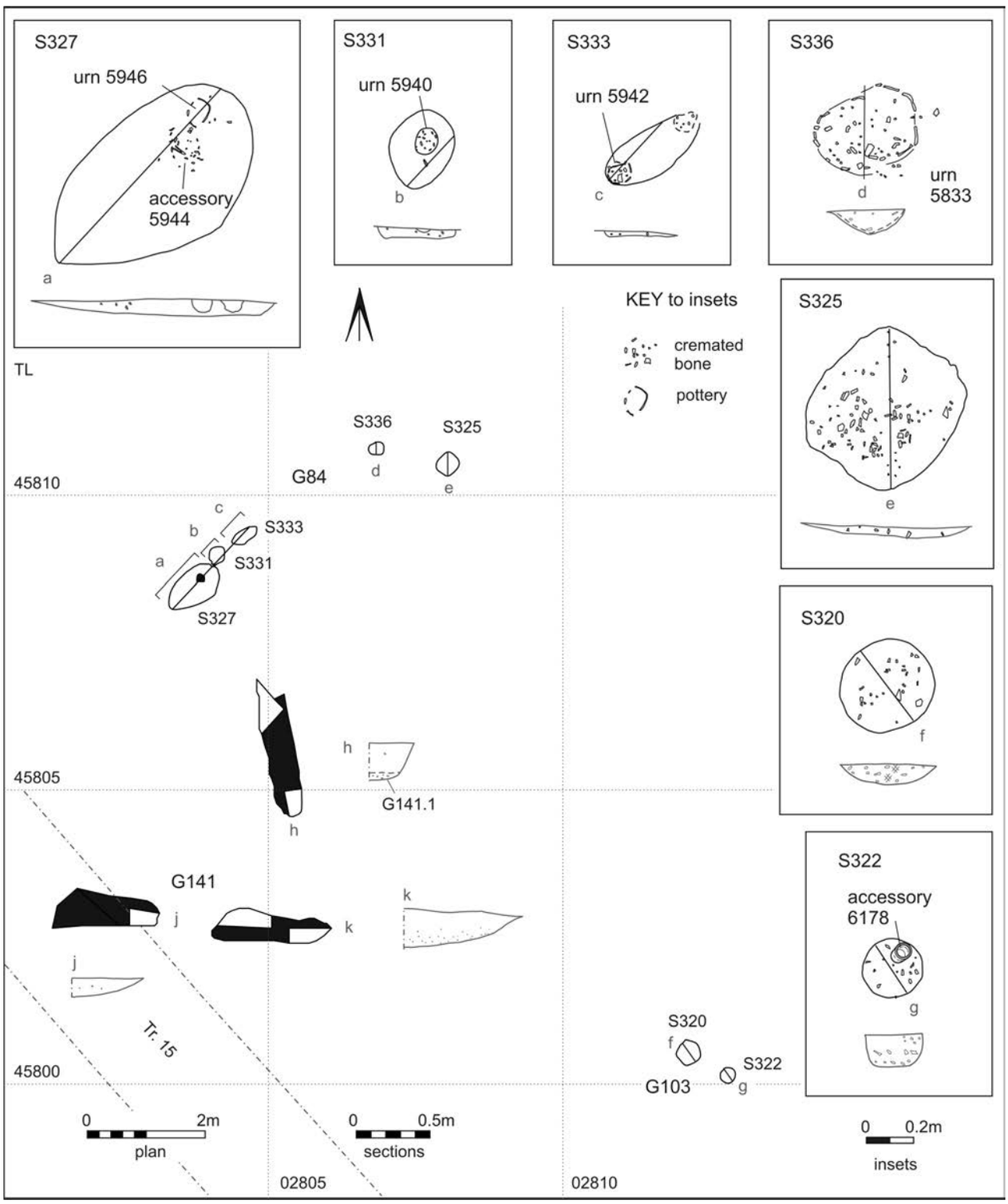


Figure 3.11 Overall plan of cremation cemetery G84 and G103 along with gullies G141 (scale 1:100), with inset plans of individual graves (1:25)

Unenclosed activity focus L6
(Fig. 3.12)

The only evidence for activity to the south-west of enclosure L1 was a cluster of four gullies G51, G79, G80 and G81. They had similar dimensions and profiles but were all on different alignments. Despite this it is tentatively suggested that they may have been associated with a rectangular building or structure. They were assigned to this phase because one of the gullies was stratigraphically earlier than a Phase 4 ditch and because their alignments were completely different to later boundaries.

They were filled by mid grey brown silty clay with occasional small stones which produced a tiny assemblage of domestic debris. They do not appear to be drainage gullies or boundaries and are, therefore, tentatively interpreted as being associated with a building or structure.

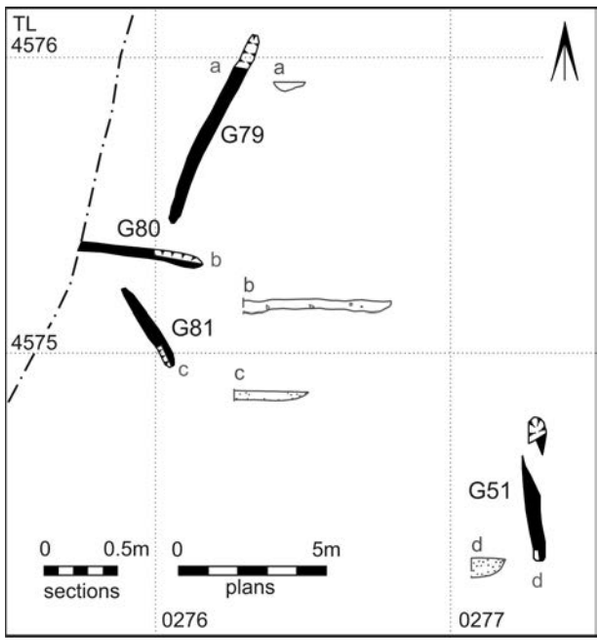


Figure 3.12 Overall plan of unenclosed activity focus L6 (scale 1:250), with selected sections (scale 1:80)

Gullies G51, G79, G80, G81

The gullies were aligned north-south (G51), west-east (G80), NW-SE (G80) and NE-SW (G79). The full extent of three could be determined. They were *c.* 3m–7m long, 0.35m–0.5m wide and under 0.15m deep with concave profiles and either flat or uneven bases (Fig. 3.12a, b, c and d).

Unenclosed peripheral activity focus L7

(Fig. 3.13)

Evidence for unenclosed activity L7 was located *c*. 100m to the north-east of enclosure L1. It comprised a concentration of features including a short gully G113, and a small cluster of pits G112, with slightly larger pits G114 and G110 on the periphery. Approximately 37m to the south-east was a cluster of four post-holes G179. All these features were filled by dark grey silty clay with occasional stones. With the exception of pits G112, they produced only a tiny assemblage of domestic debris, suggesting that they were not located within the main part of the settlement.

Gully G113

Gully G113 was 3m long, 0.7m wide and 0.2m deep with a steep-sided profile and flat base (Fig. 3.13d).

Pit G110

Pit G110 was *c*. 1.8m in diameter and 0.35m deep with a steep-sided profile and concave base. It was stratigraphically earlier than a Phase 4 enclosure ditch.

Pits G112

G112 comprises three sub-oval pits that were 0.8m–1.5m long and 0.35m and 0.5m wide. They were 0.4m–0.6m deep, although one was not fully excavated (Fig. 3.13e). They had either concave or vertical sides with flat bases (Fig. 3.13b and c). Their main fill G112.2 produced a small pottery assemblage (329g), none of which was later than 2nd-century in date. This included a sherd from a Central Gaulish samian decorated bowl (Fig. 7.1 P3).

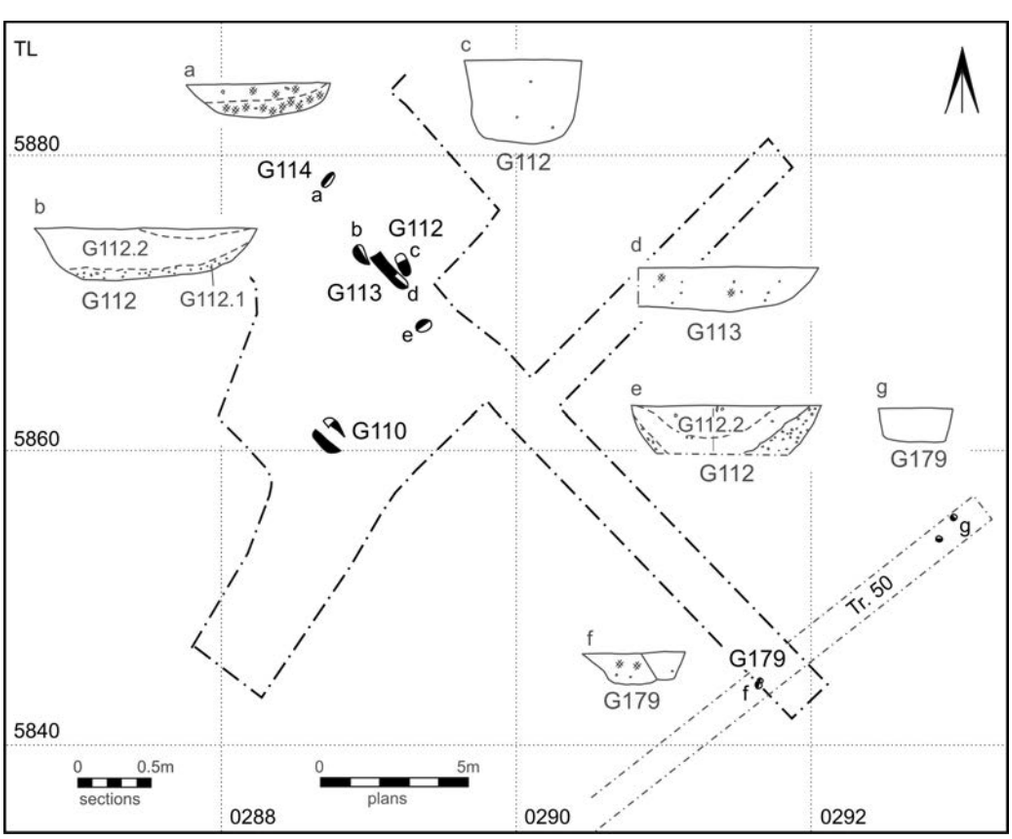


Figure 3.13 Overall plan of unenclosed activity focus L7 (scale 1:250), with selected sections (scale 1:80)

Pit G114
Sub-oval pit G114 was 1m long, 0.3m wide and 0.2m deep with a concave profile and flat base (Fig. 3.13a).

Post-holes G179
Four post-holes G179 were identified in evaluation trench 50, but no additional ones were located in a transect excavated in the vicinity. Two of the post-holes were intercutting and therefore not contemporary (Fig. 3.13f). All were *c*. 0.4m in diameter and 0.2m deep with steep sides and flat bases (Fig. 3.13f and g).

III. Farmstead 3
(Fig. 3.14 and Table 3.3)

Farmstead 3 was located *c*. 400m to the south-west of Farmstead 2 and extended over an area of *c*. 1.5 ha. It comprised two small ditched enclosures L21 and L27 situated 70m apart with adjacent evidence for unenclosed domestic activity. The ditch defining enclosure L21 had been redug (L22) on at least one occasion. Although its original shape was retained, it is likely that the position of the entrance was changed. Internally, both enclosures contained a small number of pits but no evidence for buildings. A boundary ditch L78 appeared to join the

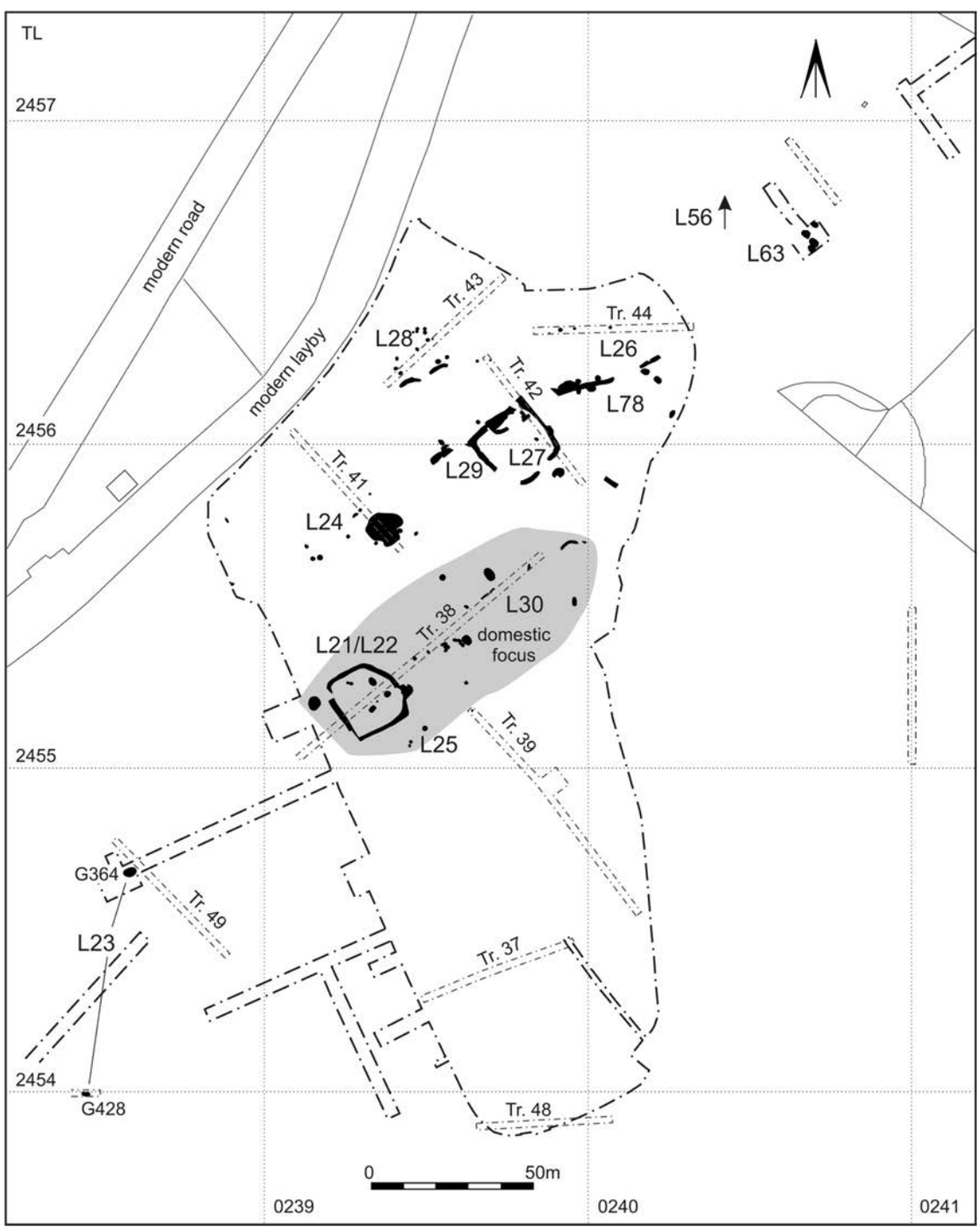


Figure 3.14 Farmstead 3 overall plan. Scale 1:2000

north-east corner of enclosure L27, reminiscent of a similar arrangement on Farmstead 2. It is tentatively suggested that this may have defined the south side of a routeway. Evidence for activity L25 adjacent to enclosure L21 comprised a water pit, other pits and post-holes. There was a similar group of pits and a well L29 next to enclosure L27.

At least two unenclosed activity foci L24 and L30 lay between the two enclosures. They comprised a number of pits and post-holes, including a large water pit in the former. Similar foci were identified to the north-west (L28) and north-east (L26) of enclosure L27. Additional evidence for dispersed activity was found *c*. 75m to the south-west of enclosure L21 in the form of two large pits L23; while *c*. 60m to the north-east of L26 were pits and a single cremation burial L63.

A large quantity of domestic pottery (*c.* 16kg) and animal bone (*c.* 12kg) was recovered from this farmstead. The pottery assemblage included a higher proportion of storage vessels than on Farmstead 2 but no samian ware. Enclosure L21/22, its surrounding activity (L25) and adjacent activity (L30) produced larger quantities of domestic debris than enclosure L27. Therefore, this area is interpreted as the domestic focus of the farmstead. A small assemblage of personal items (hobnails from shoes), coins and household objects (quern, iron artefacts some of which may have served agricultural functions) were recovered (Table 7.8). Approximately 2.2kg of metallurgical residues were recovered from the northern part of Farmstead 3 indicative of iron working in the vicinity of enclosure L27.

In comparison to Farmstead 2, the animal bone assemblage contained a higher proportion of cattle and a lower proportion of pig and dog. Evidence for cereal cultivation, in particular barley, was recovered. Land snails indicate well-drained, open conditions on the farmstead.

Enclosure L21/22

(Fig. 3.15)

Sub-square, ditched enclosure L21/L22 covered an area with a diameter of *c*. 290sqm. It was redefined on at least one occasion. The original enclosure ditch G241 (L21) was largely truncated by its recut G226 (L22). However, sufficient evidence survived to suggest that the recut blocked the original north-west entrance. The pattern of silting within the recut ditch suggests that a bank existed on the exterior of the enclosure. Two pairs of post-holes G228 and G229 and three pits G230, G231 and G233 lay within the enclosure.

The majority of the main fills of the ditches and internal features comprised grey-brown sandy silt with occasional small stones. Where primary fills were identified, they were lighter and more orange in colour. Large quantities of domestic debris were recovered from the enclosure ditches and the internal pits — 3.7kg of pottery, including a range of late Iron Age and early Roman wares, and 2kg of animal bone.

Earlier ditched enclosure G241

The original enclosure ditch G241 survived later recutting in only two short lengths, including an entrance terminal to the north-west. They differed in both dimensions and

L no.	*Function*	*Extent (sqm)*	*Associated features*	*Pottery (kg)*	*Animal bone (kg)*	*Metallurgical residues (kg)*
21/22	Enclosure	290	• Large pits • Post-holes	3.7	2	
23	Unenclosed peripheral activity focus	-	• Pits	0.06	0.26	
24	Unenclosed activity focus	500	• Large water pit • Small pits • Post-holes	0.39	1.2	
25	Unenclosed domestic focus	120	• Water pit • Large pit • Small pits	4.7	2.67	
26/78	Activity focus	230	• Small pits • Post-holes	1.6	1.35	0.28
27	Enclosure	340	• Gullies • Small pits	0.8	0.9	1.38
28	Unenclosed activity focus	300	• Curvilinear gullies • Small pits • Post-holes	0.3	0.2	0.008
29	Unenclosed activity focus	160	• Possible well • Possible water pit • Small pit • Quarry pits	0.8	1.2	0.5
30	Unenclosed domestic focus	1,200	• Possible roundhouse • Possible structure • Possible water pits • Small pits • Quarry pit • Post-holes	3.9	2.1	
Total				**16.22**	**11.88**	

Note: does not summarise the major linear boundaries

Table 3.3 Summary of enclosures and activity foci in Farmstead 3

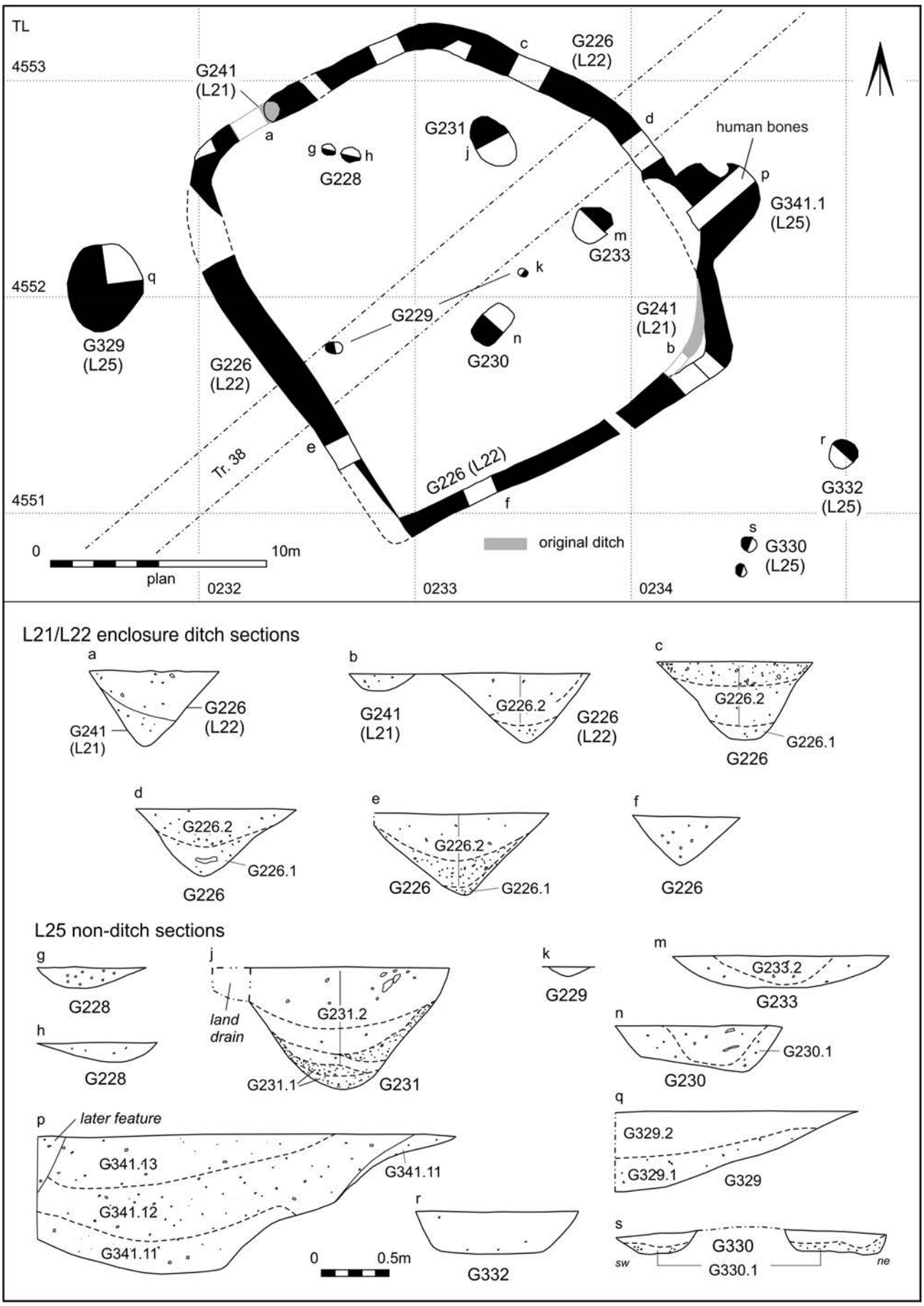


Figure 3.15 Overall plan of enclosure L21/22 and external activity L25 (scale 1:250), with selected sections (1:80)

profile. They were 0.5m–0.95m wide and 0.15m–0.55m deep, widening and deepening in the vicinity of the terminal. Their profiles were shallow concave with a flat base (Fig. 3.15b) and V-shaped (Fig. 3.15a). Where a primary fill G241.1 was identified, it comprised mid blue-grey clay with occasional small stones.

Later ditched enclosure G226
Recut G226 largely followed the course of the original ditch, although it blocked off the north-west entrance. The ditch was 0.8m–1.2m wide and *c*. 0.5m deep with a V-shaped profile (Fig. 3.15b–f).

The main fills of the ditch were similar but became progressively darker towards the top of the profile. They produced a moderate assemblage of domestic debris. The pottery assemblage (913g) was dominated by late Iron Age/early Roman forms, but included seven sherds of 2nd-century date.

Post-holes G228
Two adjacent post-holes G228 were located within the northern part of the enclosure. They were *c*. 0.6m in diameter and 0.15m deep with concave profiles and slightly concave bases (Fig. 3.15g and h).

Post-holes G229
Two other post-holes G229 were located within the enclosure *c.* 9m apart. They were *c*. 0.5m in diameter and 0.15m deep with concave profiles and bases (Fig. 3.15k).

Pits G230/G231/G233
Three large pits G230, G231 and G233 were situated within the enclosure. They were oval or rectangular in shape, under *c.* 2.5m in diameter/length with steep sides (Fig. 3.15j, m and n). Pits G230 and G233 were *c.* 0.25m deep, but pit G231 was *c.* 0.9m deep suggesting it may have served a different function.

The main fills of these pits contained a large assemblage of domestic debris, including 2.1kg of pottery dominated by late Iron Age/early Roman wares.

Unenclosed domestic focus L25 adjacent to enclosure L21/22
(Fig. 3.15)
Evidence for activity L25 adjacent to ditched enclosure L21/22 was restricted to five pits. Of the two larger pits G329 and G341.1, only the latter was deep enough to be interpreted as a water pit. The other pits G332 and G330 were all much smaller and situated slightly further away from the enclosure.

The fills of the majority of these features comprised grey-brown sandy silt with occasional small stones. They produced large assemblages of pottery (4.7kg) and animal bone (2.6kg). The upper fills of water pit G341.1 alone contained *c*. 1kg of pottery. Sufficient fragments of kiln/oven furniture were recovered to suggest the presence of such a structure in the vicinity. The animal bone assemblage, which included cattle mandibles, is suggestive of primary butchery waste. Similarly, the charred plant remains are indicative of cereal processing.

Water pit G341.1
Water pit G341.1 was located on the eastern edge of enclosure ditch G226. Although it is likely to have been contemporary with the ditch, their actual stratigraphical relationship had been removed by a Phase 4 recut. The water pit was 4m in diameter and 1.05m deep with irregularly sloping sides and a slightly concave base (Fig. 3.15p).

Both the primary and secondary fills produced large quantities of domestic debris including pottery (2.8kg) animal bone (2.5kg). The latest pottery was 2nd-century in date (Fig. 7.1 P4 and P5). Several fragments of oven/kiln furniture, slabs and fired clay were recovered. In addition, three fragments of human bone were present.

Pit G329
Circular pit G329 was located 2.5m to the west of the enclosure. It was 4m in diameter and 0.6m deep with sloping sides and a flat base (Fig. 3.15q). The main fill contained a moderate quantity of domestic debris including charcoal flecks.

Pits G330, G332
Three circular pits were located *c*. 6m to the south-east of enclosure L21/22. Pits G330 were grouped together because they were only 0.6m apart and had similar dimensions and profiles. Each was *c*. 0.65m in diameter and 0.15m deep. Pit G332 was located 5m to the north-east; it was 1.3m in diameter and 0.3m deep. All of the pits had steep-sided profiles and flat bases (Fig. 3.15r and s).

The main fills of these features produced a large quantity of pottery (1.6kg), none of which post-dates the 1st century AD.

Enclosure L27
(Pl. 3.9, Fig. 3.16)
Sub-square ditched enclosure L27 was located *c*. 70m to the north-east of enclosure L21/22 and covered an area of *c*. 340sqm. A *c*. 5m wide entrance was clearly identified to the south-east. Two short lengths of gully G212 and G430 appear to have partitioned off the north corner of the enclosure. Pits G292 and G293 represent the only other evidence for internal activity.

The majority of the fills of these features comprised grey- brown sandy silt with occasional small stones. They produced a moderate quantity of domestic debris, including pottery (820g) and animal bone (910g). However, the discovery of *c.* 1.4kg of metallurgical residues, including slag and smithing hearth cake, is

Plate 3.9 Ditch G216 which defined enclosure L27 (Farmstead 3), with 1m scale

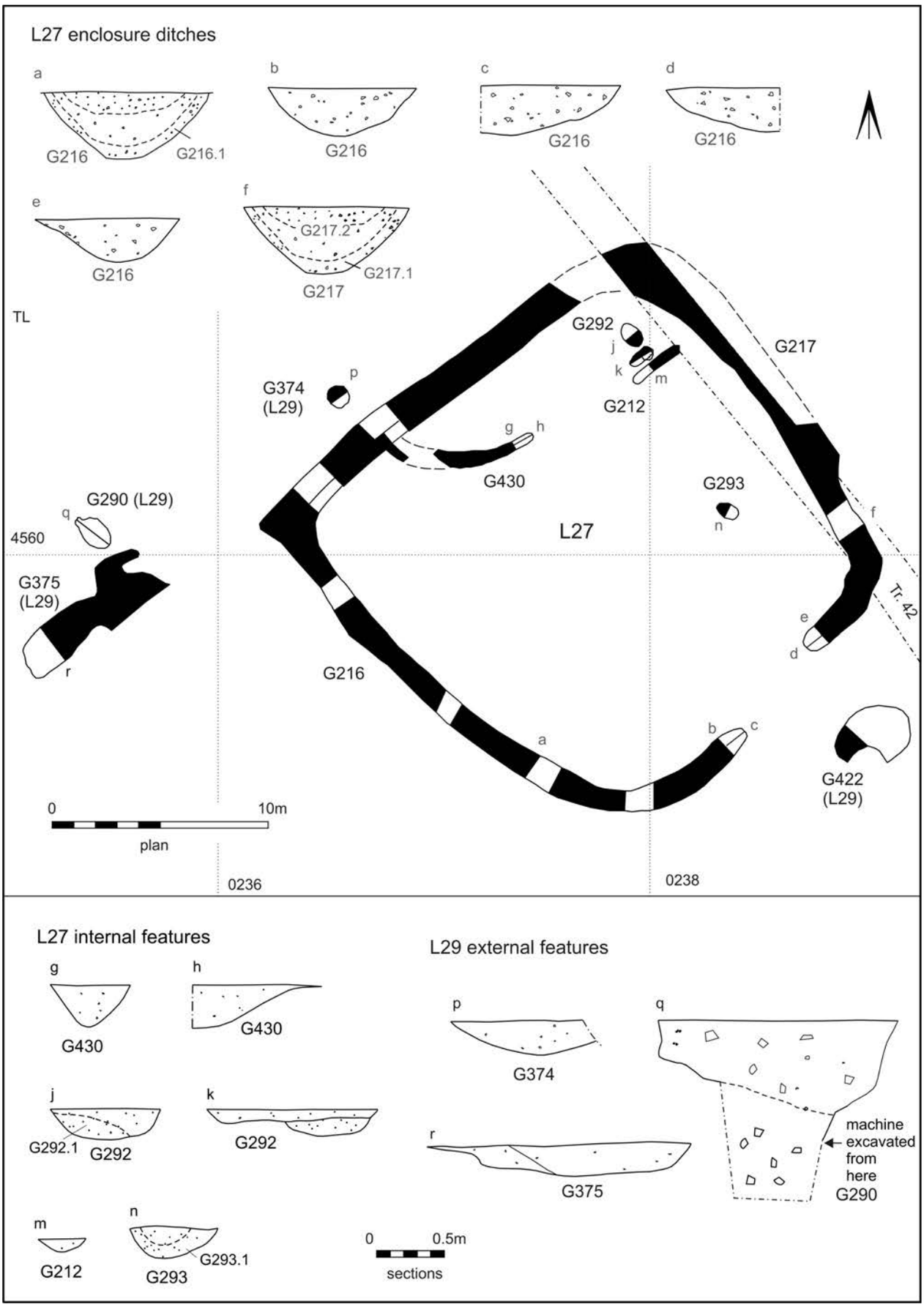


Figure 3.16 Overall plan of enclosure L27 and external activity L29 (scale 1:250), with selected sections (scale 1:80)

significant because it suggests that iron working was taking place either within this enclosure or in the immediate vicinity.

Enclosure ditches G216/G217
The enclosure was defined by ditch G216/G217 which was *c.* 1.3m wide and 0.5m deep with a U-shaped profile and concave base (Fig. 3.16a, b, e and f) (Pl. 3.9). The ditch terminals at the entranceway were gently sloping (Fig. 3.16c and d).

The primary fill of one of the north-west segments of ditch G217 contained 810g of metallurgical debris (including a smithing hearth cake, vitrified hearth lining and slag), five iron nails and other iron objects (RA 7 Fig. 7.7). The main infilling deposits were considerably darker in colour than the primary fills with occasional charcoal flecks. They produced a moderate assemblage of domestic debris; the latest datable pottery was 2nd-century. Only a single tiny fragment of slag was recovered from the main fill.

Internal gullies G212, G430
Two gullies G212 and G430 were located in the north corner of the enclosure. A 5.3m wide gap between them formed a south-east facing entranceway, mirroring the position of the entrance into the enclosure. The gullies were *c*. 0.4m wide and 0.3m deep with concave profiles and slightly concave, flat bases (Fig. 3.16g, h and m). Although later recutting has left the precise position of the enclosure ditch in this area uncertain, the gullies appear to have defined an area 4m wide and 12.5m long. Their fills produced a small quantity of domestic debris.

Pits G292
Three pits were located within the partitioned, north corner of the enclosure. Two were intercutting — *c*. 0.65m in diameter and no more than 0.2m deep (Fig. 3.16k). The other pit was 1.1m long, 0.8m wide and 0.25m deep with a U-shaped profile (Fig. 3.16j). Their main fills produced 0.5kg of slag, including a smithing hearth cake.

Pit G293
An isolated oval pit G293 was the only other feature within the enclosure. It was situated *c.* 6m from the entrance and was *c.* 1.1m long, 0.65m wide and 0.25m deep with a steep-sided, concave profile and concave base (Fig. 3.16n).

Unenclosed activity focus L29 adjacent to enclosure L27
(Fig. 3.16)
Evidence for activity L29 adjacent to ditched enclosure L27 comprised possible well G290, water pit G422 and two other pits G374 and G375. Possible well G290 and adjacent large pit G375, which may have been a quarry, were located on the west side of the enclosure. Water pit G422 was located 4m outside the enclosure entrance while the smallest pit G374 was situated to the north-west. Three of these pits were stratigraphically earlier than Phase 4 features.

The majority of these features were filled by dark brown-grey silty clay with occasional small stones. Only a small assemblage of pottery (804g) and animal bone (1.2kg) was recovered. However, pit G375 is significant because, like the enclosure ditch on this side, it contained fragments of hearth lining.

Possible well G290, water pit G422
The lower part of pit G290 was excavated by machine; it was at least 1.2m deep but was not bottomed. It was sub-oval in plan with a squarish point to the north-west which may be associated with access. The stepped profile leading to what must have been a steep-sided lower part of the feature suggests the existence of a central shaft (Fig. 3.16q). This is supported by the presence of large limestone blocks within the main fill which was otherwise unexceptional. It is therefore possible that this pit represents a robbed out stone-lined well.

Sub-oval water pit G422 was located 4m from the enclosure entrance. It had a steep-sided profile, diameter of *c.* 3.6m and was over 0.8m deep but was not bottomed. Its fill contained only a small assemblage of domestic debris; the latest identifiable pottery was 2nd-century in date.

Quarry pit G375
Irregular, elongated pit G375 was located 0.6m to the south of water pit G290. It was 7m long, 2m wide and 0.25m deep with a steep-sided profile and a flat, uneven base (Fig. 3.16r). On the basis of its dimensions and profile it has been interpreted as a quarry pit. The main fill produced 178g of slag, 360g of hearth lining fragments and two iron nails.

Pit G374
Circular pit G374 was located at least 1m north of the enclosure ditch. It was at least 1.1m long, 0.9m wide and 0.25m deep with sloping sides and a concave base (Fig. 3.16p).

Activity focus L24
(Fig. 3.17)
Activity focus L24 was located roughly equidistant between enclosure L21/L22 and enclosure L27. It extended over an area of *c*. 500sqm. It contained a large water pit G320, several small clusters of pits G309, G312, G313 and G315 and a scatter of post-holes G311 and G318. Several of the pits were stratigraphically earlier than Phase 4 features.

The majority of these features were filled by mid grey-brown silty clay with moderate quantities of small stones. They produced a small quantity of domestic debris including pottery (398g) and animal bone (1.2kg) but many features were sterile, suggesting an absence of domestic activity. It is possible that this area was principally associated with animal watering.

Large water pit G320
Water pit G320 was *c*. 10m in diameter and quite irregular in plan suggesting it could be interpreted as a pond. It had gradually sloping sides and was at least 1.2m deep, although the feature was not bottomed (Fig. 3.17h). Although some domestic debris was recovered, it was quite sparse given the volume of fill excavated. The latest identifiable pottery dated to the 1st/2nd centuries.

Pits G309, G312
Five pits, three oval G309 and two circular G312, were located to the west of the water pit. They were *c.* 1.4m

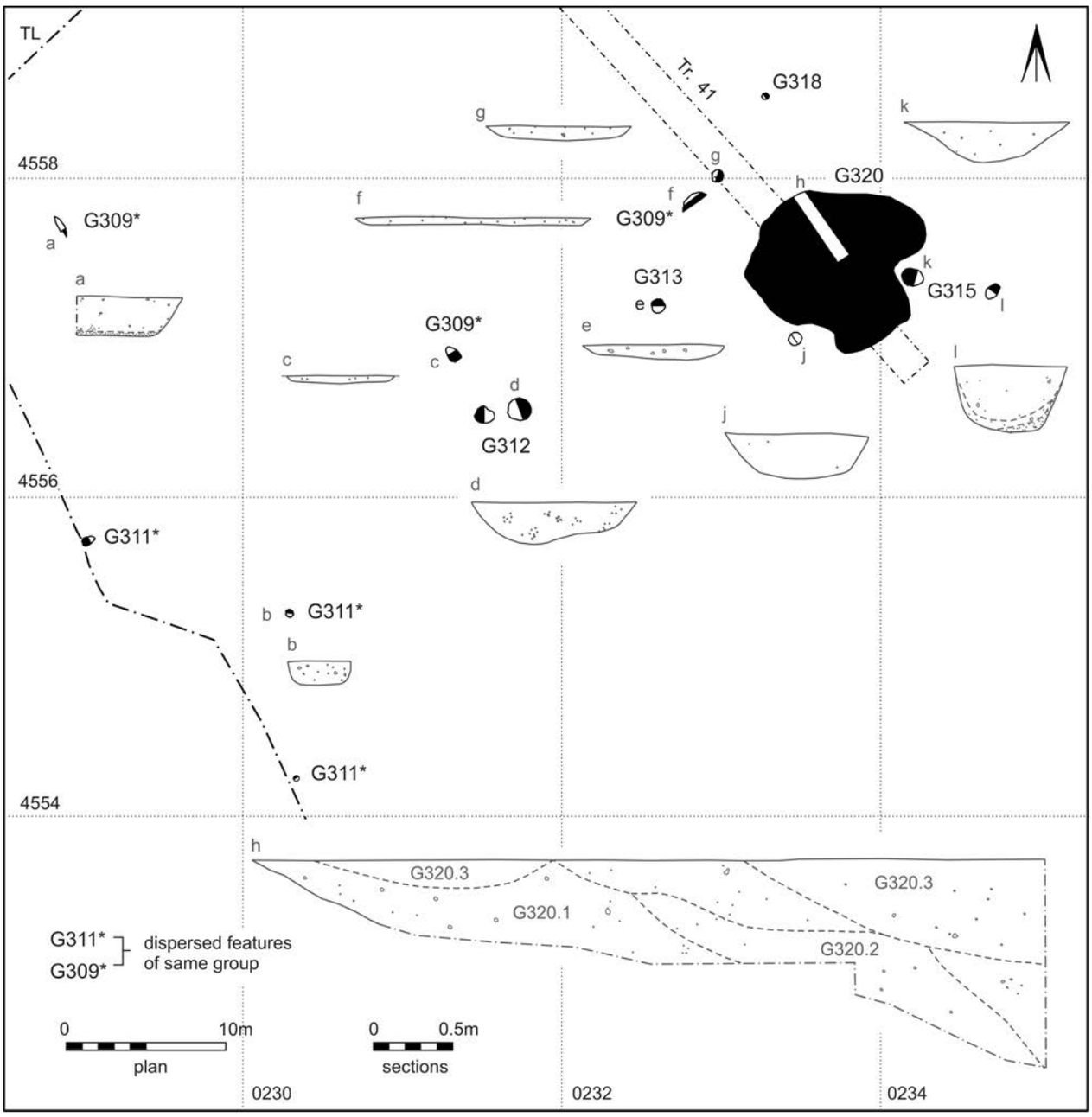


Figure 3.17 Overall plan of activity focus L24 (scale 1:400), with selected sections (scale 1:80)

long, 0.6m–1.05m wide and 50mm–0.25m deep. All of the pits had steep-sided, concave profiles with either concave or flat bases (Fig. 3.17a, c and f).

Post-holes G311

Three post-holes within 12m of each other were located to the south-west of pits G309/312. They were 0.35m–0.7m in diameter and less than 0.15m deep with vertical sides and flat bases (Fig. 3.17b).

Pits and post-hole G313, G315, G318

Five pits and one post-hole were located adjacent to water pit G320. The pits lay to the west (G313) and east (G315) of the water pit but were otherwise quite similar. They were circular, 0.9m–1.2m in diameter and less than 0.3m deep. In the main, pits G313 had shallow concave profiles and flat bases (Fig. 3.17g, e and j) while pits G315 had U-shaped profiles and slightly concave bases (Fig. 3.17k and l). Post-hole G318 was 0.4m in diameter and 0.1m deep.

Unenclosed domestic focus L30

(Fig. 3.18)

Domestic focus L30 was located to the north-east of enclosure L21/22. It extended over an area 40m x 60m. It contained a possible roundhouse G358, possible structure G388/G408/G409, water pit G357, possible water pits G321 and G323, quarry pit G363, numerous other dispersed pits G326, G383, G412, G413 and a couple of post-holes G335.

The majority of these features were filled by grey-brown silty clay with occasional small stones. A large quantity of domestic debris including pottery (3.9kg) and animal bone (2.1kg) was recovered from these features,

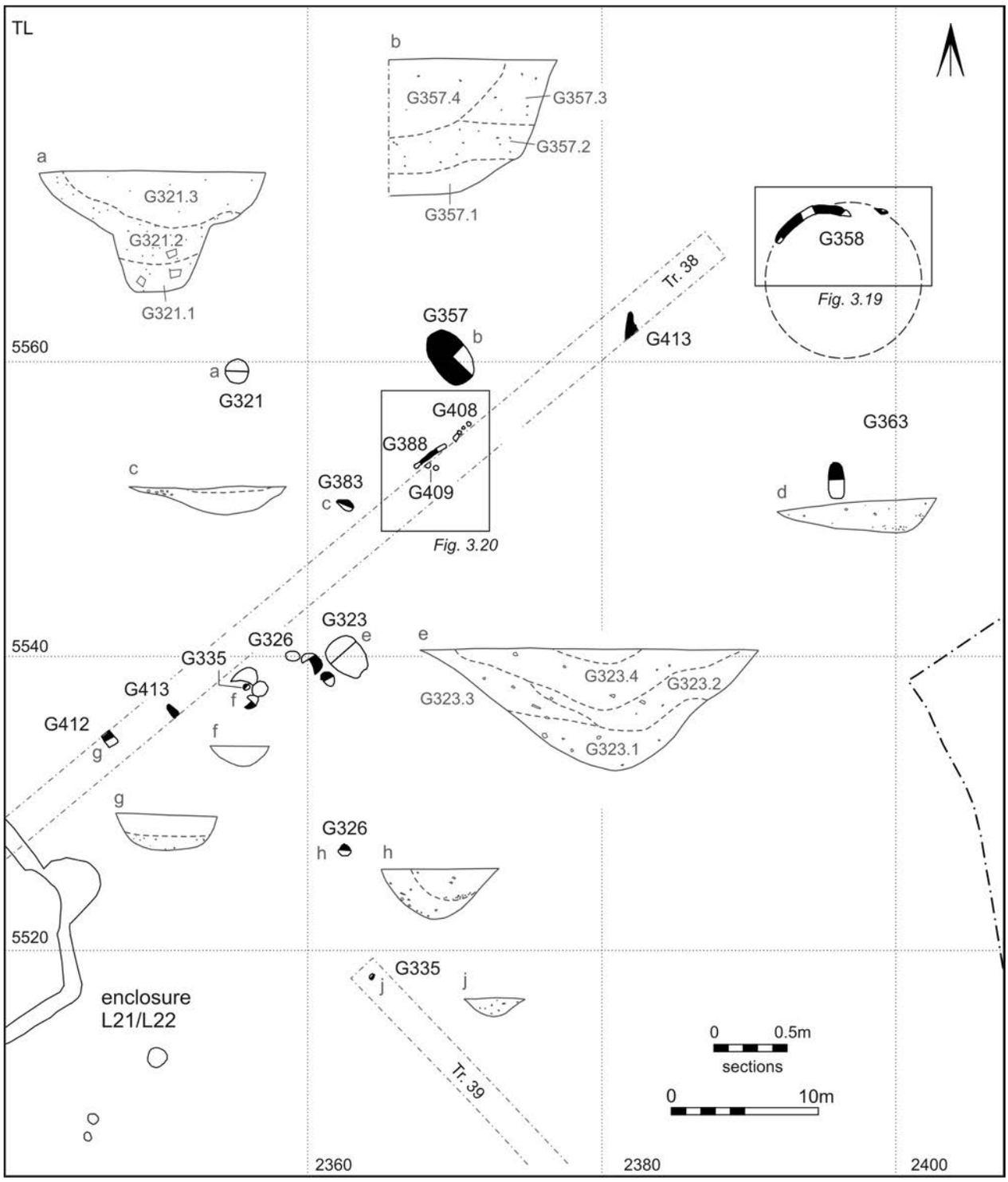


Figure 3.18 Overall plan of activity focus L30 (scale 1:400), with selected sections (scale 1:80)

suggesting that this area was the domestic focus of the farmstead. However, nearly a quarter of this derived from a single feature, pit G323. The majority of the domestic fowl bones from this farmstead derived from slot G388 within this activity focus. The assignment of these features to this phase was partly based on pottery dating but also because a small number of the features were stratigraphically earlier than Phase 4 ditches and pits.

Possible roundhouse G358

(Fig. 3.19)

Only the north-west part of possible roundhouse G358 survived. It was defined by a *c*. 8m long drainage ditch, the projected circumference of which suggests it contained a building with a diameter in the region of 12m. The gully was 0.55m wide and 0.35m deep with a U-shaped profile and slightly concave base (Fig. 3.19b). It was uncertain whether the recorded ends of the gully were genuine terminals or the result of truncation (Fig. 3.19a and c).

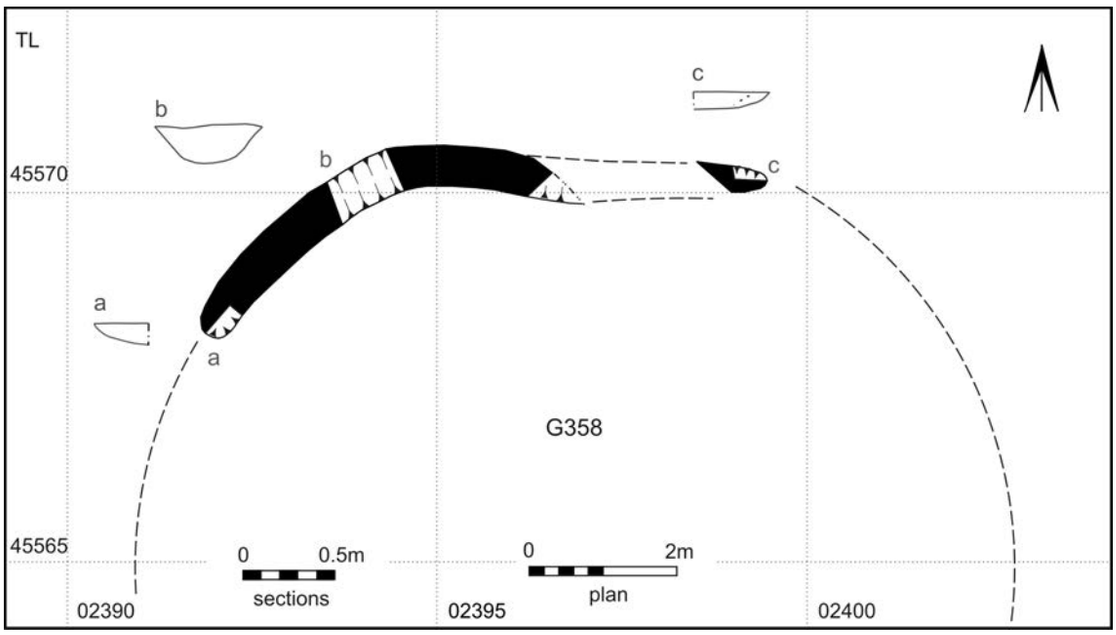


Figure 3.19 Detailed plan of possible roundhouse G358 (scale 1:100), with ditch sections (scale 1:80)

Possible structure G388/G408/G409
(Fig. 3.20)

A second possible structure was located *c*. 24m south-west of possible roundhouse G358. It comprised a NE-SW aligned slot G388 and five adjacent post-holes G408/G409. Although these features did not form an obvious, rectangular building, their concentration in this one area does suggest this interpretation is possible. The slot was *c*. 3.8m long, 0.3m wide and 0.15m deep with a steep-sided profile and flat base — suitable for holding a timber (Fig. 3.20b). Both of the terminals appeared to be genuine rather then the result of truncation (Fig. 3.20a and d). Three of the post-holes G408 continued the alignment of the slot to the north-east (Fig. 3.20c and d). They were *c*. 0.2m apart, 0.3m in diameter and less than 0.35m deep with U-shaped profiles and concave bases. One of these contained a very large quantity of oak charcoal indicating that the timbers were burnt *in situ*. The other two post-holes G409 were located adjacent to the south of the slot but were only investigated within trial trench 38. They were slightly larger in diameter and their fills also produced considerable quantities of oak charcoal.

Possible water pits G321, G323, G357

On the basis of their diameters and depths, three features in this area may have been water pits, although their profiles were quite varied.

Circular water pit G321 was located *c.* 14m west of possible structure G388/G408/G409. It was 1.55m in diameter and 0.8m deep with a funnel-shaped profile and a flat base (Fig. 3.18a). The lower fills contained several large stones, possibly derived from the original lining of the pit. This and the funnel-shaped profile suggest that it may have been a well. Although this relatively large feature was fully excavated, its fills only produced a tiny quantity of domestic debris.

Large, sub-oval pit G323 was located *c.* 13m south of water pit G321. It was *c*. 3m long, 2.3m wide and 0.85m deep with a steep-sided profile and concave base (Fig. 3.18e). It was filled by grey silty clay which darkened with depth and was partially waterlogged. Domestic debris was present throughout the pit, particularly in the upper fills. The 2.4kg pottery assemblage did not contain any types clearly later than the 2nd century.

Large oval pit G357 was located *c.* 12m east of water pit G321. It was 4m long, 2.5m wide and 0.95m deep with a steep-sided profile and flattish base (Fig. 3.18b).

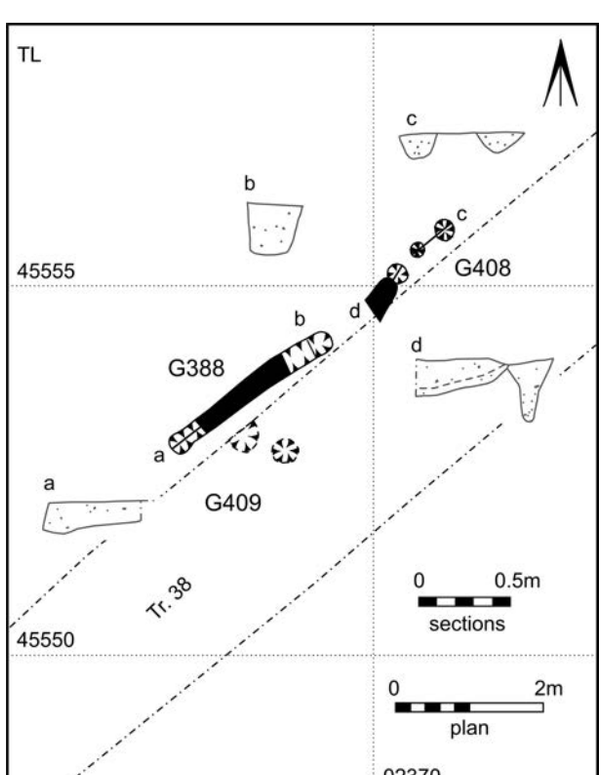


Figure 3.20 Detailed plan of possible structure G388/G408/G409 (scale 1:100), with selected sections (scale 1:80)

Pits G326, G383, G412
Nine smaller pits were located in the vicinity of water pit G323. Several were intercutting, indicating that they represent more than a single episode of activity. The majority of the pits were circular (G326) or oval (G383) in plan, *c*. 1m in diameter and 0.20m–0.55m deep with steep-sided profiles (Fig. 3.18c and h). G412 was the only rectangular example. It was 0.7m wide, at least 1m long and 0.2m deep with near vertical sides and a flat base (Fig. 3.18g).

Post-holes G335
Two post-holes were identified in this area: one in the vicinity of the pits G326/G383/G412 and the other *c.* 20m to the south-east. They were *c*. 0.4m in diameter and *c*. 0.15m deep with concave profiles (Fig. 3.18f and j).

Isolated quarry pit G363
Sub-rectangular pit G363 was located *c*. 15m south of possible roundhouse G358. It was 2.5m long, 1.1m wide and 0.25m deep with an asymmetrical profile suggestive of quarrying (Fig. 3.18d).

Pits G413
Two irregularly shaped pits G413 were located 40m apart in trial trench 38. They were *c.* 1.5m long 1m wide. They were not located in the open-area excavation but their unexcavated fills did contain pottery contemporary with this phase.

Activity focus L26/L78
(Fig. 3.21)
This activity focus comprised a concentration of pits and post-holes L26 in the vicinity of ditch L78. The pits appear to be deliberately positioned in relation to an entranceway through the ditch. They are, therefore, considered together, even though the ditch appears to be stratigraphically later than some of the pits. The projected alignment of the boundary would suggest that it joined the north-east corner of enclosure L27. Pits G296, G303 and G306 were located to the south of the boundary; pits G336, G297 and G299 and post-holes G298 were located to the north. All the pits were relatively shallow and may have been dug to extract gravel.

These features were filled by mid/dark grey-brown silty clay with occasional small stones. The ditch fills contained a large quantity of domestic debris including pottery (1.6kg) and animal bone (1.3kg). In contrast, the pits only produced a tiny quantity of material. There was also evidence for crop processing (a millstone) and smithing (metallurgical residues).

Ditch G214/215
Ditch G214/215 was aligned SW-NE and was visible for 34m before becoming obscured by a layer to the north-east. A 9m-wide entrance, devoid of pits, was identified (Fig. 3.21d and e). The ditch was 1.2m wide and 0.45m deep, becoming slighter to the east. It had a U-shaped profile and concave base (Fig. 3.21k). Its quite dark upper fills produced occasional charcoal flecks and large quantities of domestic debris, including a millstone fragment (RA 225) and 98 iron hobnails (RA 199).

Pits G296, G303, G306
Five pits were located to the south of ditch G214/215. Two of them (G296) were truncated by it: they were 1.2m and 2m long, 0.9m and 1.3m wide and both were less than 0.4m deep with steep-sided profiles and slightly concave bases (Fig. 3.21k). Single pit G306 and a pair of pits G303 were located just to the south-east of the entrance through the ditch. They were oval in plan, *c*. 2.4m long, 1.5m wide and 0.3m deep with steep-sided profiles and flat bases (Fig. 3.21f, g and m). The main fills of these pits were dark in colour with occasional charcoal flecks. Pit G296 produced nearly 300g of metallurgical debris, including a smithing hearth cake.

Pits G297, G336
Four pits were located immediately north of ditch G214/215. Three (G297) were sub-oval in plan, 1.4m–2m long and 1.2m–1.45m wide and could be contemporary with the ditch. They were similar to those to the south in that they were *c*. 0.2m deep with U-shaped profiles and slightly concave bases (Fig. 3.21j). One of these pits truncated larger pit G336 which was also truncated by ditch G214. Pit G336 was irregular in plan, 4.5m long, at least 1.2m wide and 0.2m deep with a shallow, U-shaped profile and a flat base (Fig. 3.21h).

Post-holes G298, pit G299
Three post-holes G298 and one circular pit G299 were all located 15m to the north of ditch G214/215. The post-holes were 0.3m–0.5m in diameter and *c*. 0.15m deep with rounded, V-shaped profiles and bases (Fig. 3.21a and c). The pit was 1m in diameter and 0.25m deep with a concave profile and slightly concave base (Fig. 3.21b).

Activity focus L28
(Fig. 3.22)
Activity focus L28 was located *c*. 20m north-west of ditched enclosure L27. It comprised two short curvilinear gullies G284 and G285, post-holes G279, G282, G283 and G373, stakeholes G281 and pits G280. Although the arrangement of these features did not obviously form the plan of a building or structure, their concentration in such a small area is indicative a specific type of activity.

The features were filled by mid brown silty sand with occasional small stones. They produced tiny quantities of domestic debris most of which came from the gullies.

Gullies G284, G285
SW-NE aligned, curvilinear gullies G284 and G285 were located *c*. 3.6m apart. They were both *c*. 6m long, 0.9m wide and 0.3m–0.45m deep with steep-sided profiles and flat but slightly concave bases (Fig. 3.22k, m, n and p). Their exact function is unknown but their similarities do suggest that they served a single purpose.

Post-hole group G279
Post-holes G279 were located 11m north of gully G285. They comprised two pairs of post-holes, located *c*. 2.5m apart, and may represent a four-post structure. The post-holes had U-shaped profiles and were less than *c*. 0.8m in diameter and 0.2m deep. The western pair were smaller (Fig. 3.22a and b).

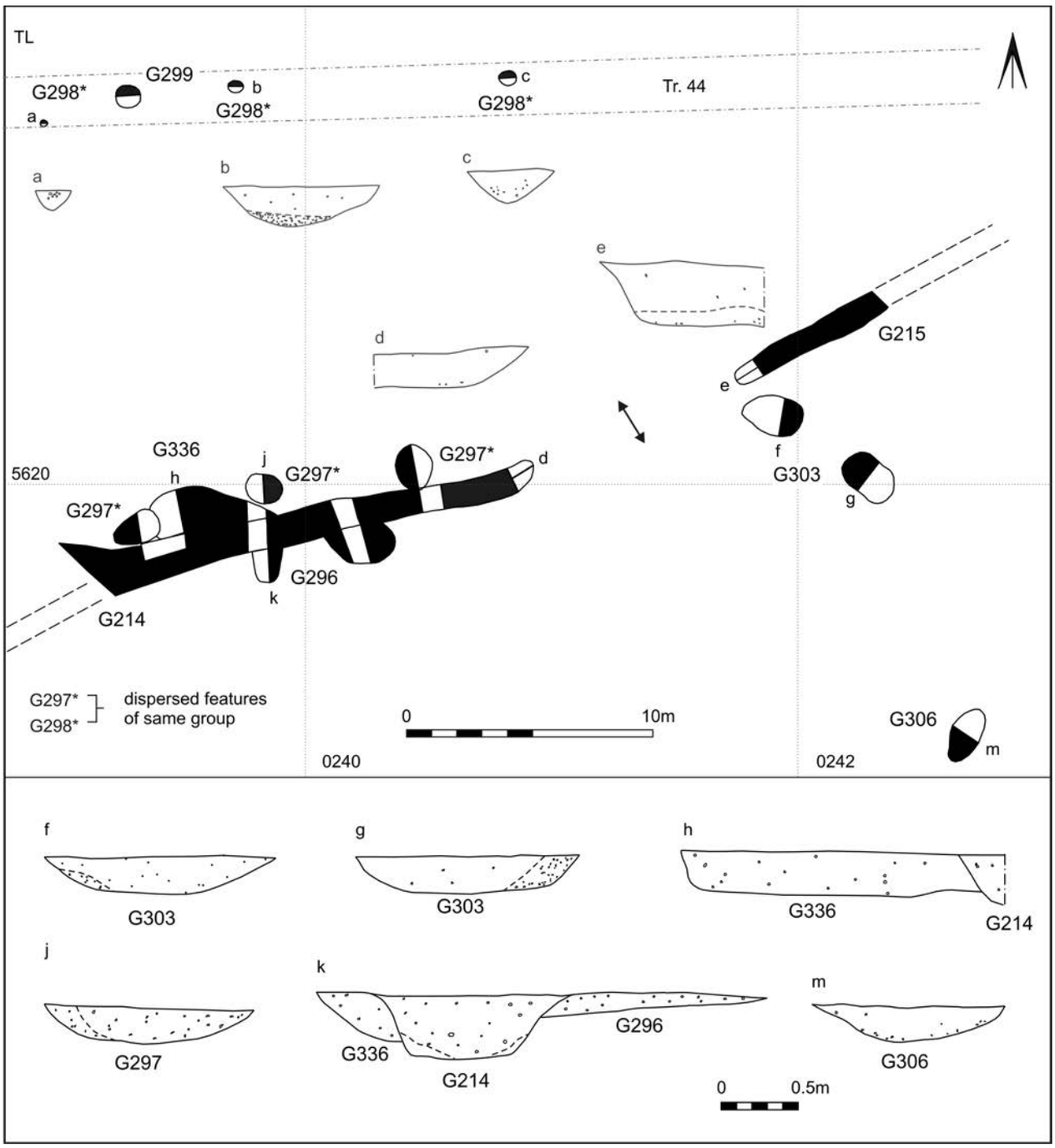


Figure 3.21 Overall plan of activity focus L26/L78 (scale 1:250), with selected sections (scale 1:80)

Post-holes G281, G282

Five post-holes G281 and G282 were located between G279 and gully G285. Three had diameters of *c.* 0.25m (G281) and two of *c.* 0.8m (G282). The majority had steep sides, rounded bases and were 50mm–0.25m deep (Fig. 3.22g). The larger post-holes G282 contained post-pipes, *c*. 0.30m in diameter (Fig. 3.22f), which suggests that the diameter of the smaller post-holes may represent the actual post size.

Where present, packing material comprised mid yellow-brown sandy clay with occasional small stones. One of the post-pipes contained a very large quantity of oak charcoal (ecofact sample 126) indicating that the timbers were burnt *in situ*.

Post-holes G283

Three large post-holes G283, *c*. 2m apart, were located to the north of gully G284. They were oval in plan, *c.* 1m by 0.6m and less than 0.5m deep with asymmetrical, U-shaped profiles (Fig. 3.22e). Two contained post-pipes that were 0.30m and 0.45m in diameter (Fig. 3.22c and d).

Where present, the packing material comprised mid yellow-brown sandy clay with occasional small stones. The post-pipes contained frequent oak charcoal (ecofact sample 127).

Pits G280

Two circular pits G280, *c*. 1.8m apart, were located next to the north side of gully G285. They were of a similar size

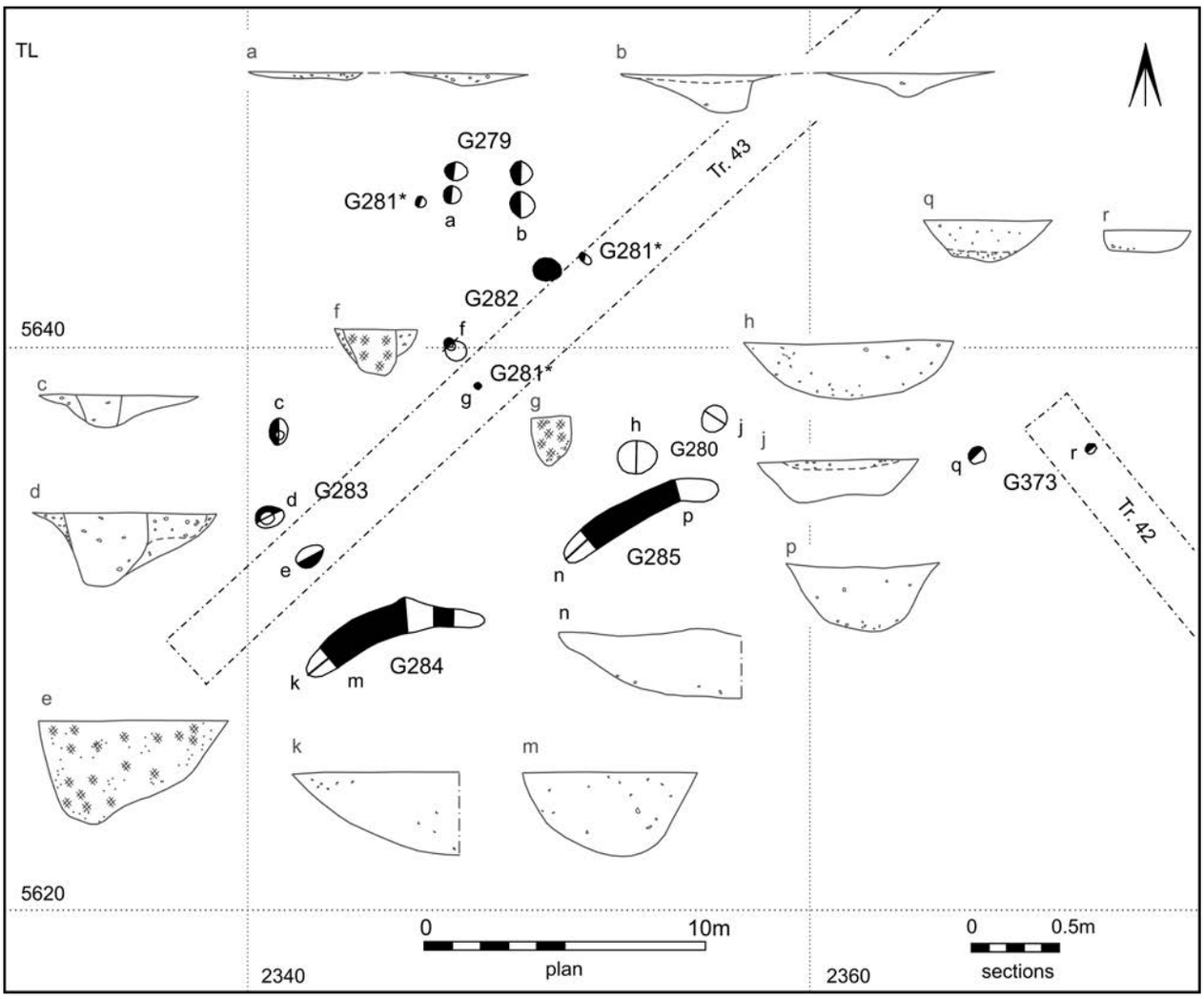


Figure 3.22 Overall plan of activity focus L28 (scale 1:250), with selected sections (scale 1:80)

(*c.* 1.1m diameter, 0.3m deep) and profile (U-shaped with uneven base), although the western one was slightly larger and more even in profile (Fig. 3.22h and j). Although they were fully excavated, they contained no domestic debris.

Post-holes G373
Two post-holes were located *c.* 8m to the east of the gullies. They were less than 0.7m in diameter and 0.25m deep with steep-sided profiles and slightly concave bases (Fig. 3.22q and r).

Peripheral activity focus L23 to the south-west
(see Fig. 3.14)
Trial trenches and transects were opened to the west of the main open-area excavation to check for evidence of activity in this area. Two isolated pits G364 and G428 were located, *c.* 80m to the west of enclosure L21/L22. They were filled by light yellow-brown silty clay with occasional small stones and produced tiny quantities of domestic debris. Their presence may indicate that other isolated pits existed in this area.

Pit G364
Sub-circular pit G364 was 3.8m long, 2.5m wide and 0.55m deep with a largely steep-sided profile and a flat base.

Pit G428
Sub-oval pit G428 was 1.9m long, 1.1m wide and 0.3m deep with sloping sides and an uneven base.

Peripheral activity focus L63 to the north-east
(Fig. 3.23)
Trial trenches and transects were opened to the north-east of the main open-area excavation to check for evidence of activity in this area. A number of pits G365, G366 and G367 and a cremation burial G411 were located, *c.* 97m from enclosure L27. The pits were shallow and were probably originally dug as gravel quarries.

They were filled by dark grey-brown sandy silt with occasional small stones, although the primary fills were lighter in colour. None produced any domestic debris. The presence of a cremation burial within one of the quarry pits is a further indication that this area was some distance from the main settlement focus.

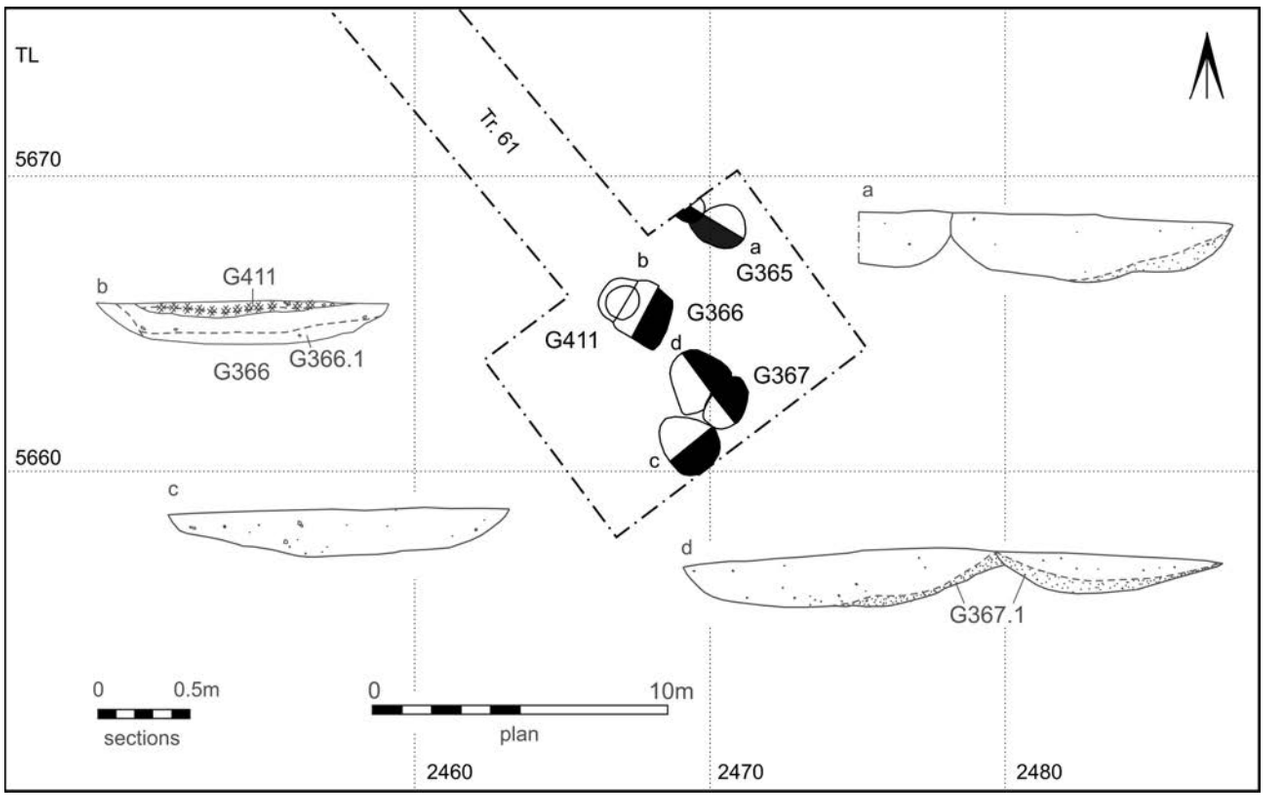


Figure 3.23 Overall plan of activity focus L63 (scale 1:250), with selected sections (scale 1:80)

Quarry pits G365, G366, G367
Seven pits were identified within transect 61; some were intercutting and, therefore, not contemporary. They were 0.5m–2m in diameter and were no more than 0.35m deep with asymmetrical concave profiles and flat bases (Fig. 3.23a–d).

Cremation burial G411
An isolated un-urned cremation burial G411 was deposited in a shallow hollow within one of the partially infilled quarry pits G366 (Fig. 3.23b). The hollow was sub-circular in plan, 1.2m in diameter and 70mm deep with an asymmetrical, concave profile and slightly concave base.

A total of 193g of burnt human bone was recovered from the hollow, with a further 13g from the upper fill of the quarry pit. The cremated bone was within a grey-brown silty clay matrix. A large amount of charcoal including Pomoideae (hawthorn, apple) was recovered from ecofact samples 132, 133, 137 and 138. Although excavated in three spits, the shallow depth of this feature and the presence of human bone within the quarry pit suggest that the minor differences noted between them are not significant.

Peripheral activity focus L56 to the north-east
(see Fig. 3.14)
Activity focus L56 was located *c.* 275m to the north-east of enclosure L27. It was identified in trial trench 47 and was not investigated by open-area investigation. It comprised a possible water pit G417 and a possible hearth G429.

The two features were filled by mid orange-grey sandy clay with occasional small stones. With the exception of one sherd of late Iron Age/early Roman pottery, they produced no domestic debris suggesting that they were located some distance from the main area of settlement.

Possible water pit G417
Pit G417 was a large, irregularly shaped feature that was 6m wide and 0.85m deep with sloping sides and a flat base.

Possible hearth G429
Possible hearth G429 was situated *c.* 14m to the south of the water pit. It was 2.8m long with rounded ends, 0.75m wide and 0.25m deep. It had steep sides and a concave base. Its primary fill contained occasional charcoal flecks. The main fill was lighter in colour and contained frequent burnt stones and fired clay flecks. In the absence of *in situ* burning, this feature cannot be conclusively identified as a hearth. However, at the very least, its fills must have derived from a hearth in the vicinity.

Chapter 4. Romano-British farmsteads (Phase 4)

I. Overview
(Fig. 4.1)

The Phase 3 farmsteads were replaced by Farmsteads 4 and 5, which were significantly different in character. They comprised rectangular systems of ditched enclosures/fields in contrast to the dispersed and largely unenclosed layout of the earlier farmsteads. However, there was a degree of continuity — some of the earlier, single enclosures were incorporated into the new farmsteads and may have continued in use.

The Phase 4 farmsteads were situated *c*. 400m apart. Although their enclosure/field systems had similar layouts and orientation, there is no evidence to suggest that any of the major boundaries physically joined — one of the reasons for interpreting them as two separate farmsteads. Substantial ditched boundaries defined the edges of the enclosure systems on some, but apparently not all, sides. Enclosures on both farmsteads served a variety of domestic and non-domestic functions. Inhumation burials were present within the farmsteads but there was no evidence for formal cemeteries.

The major elements of these farmsteads have been assigned to this phase because they are stratigraphically later than Phase 3 features but earlier than Phase 5 features. Where no stratigraphic relationships exist, which is the case with the majority of the isolated features, spatial positioning and pottery dating have been used. The latter spans the 1st to the 3rd centuries. The pottery assemblage (*c*. 102kg) from this phase suggests that some late Iron Age wares continued in use alongside more Romanised types. The Romano-British material is dominated by sand-tempered, reduced and oxidised coarsewares and shelly coarsewares. Vessel forms are representative of a utilitarian assemblage, comprising a range of tableware, storage vessels and cooking pots. Regional and continental imports were present on both farmsteads and represent 10% of the assemblage with the latter consisting of *amphorae* sherds and a small quantity of samian ware. A number of specialist Roman forms such as *mortaria* and flagons occurred in both farmsteads. There were no major differences in the range of pottery types recovered from the two farmsteads, reinforcing the idea that they are separate and probably contemporary.

Small quantities of Roman brick and tile were found in this phase and, although Farmstead 4 produced twice as much as Farmstead 5, the quantities are insufficient to be derived from a building within either farmstead.

The animal bone assemblage (cattle, sheep/goat, pig, horse and then dog) was similar between the farmsteads and comparable to the Phase 3 assemblage. It should be noted that the pig assemblage during this phase was extremely low. Both farmsteads produced evidence for the continuing cultivation of spelt wheat and barley, with evidence of bread wheat on Farmstead 4. One distinguishing characteristic of Farmstead 5 was that it produced considerably larger quantities of metallurgical residues than Farmstead 4.

II. Farmstead 4
(Fig. 4.2 and Table 4.1)

Farmstead 4 replaced the earlier Farmstead 2. Some of the latter's ditches were incorporated into the new rectangular enclosure system, which articulated around a NE-SW aligned boundary/trackway L8. There were other major boundaries to the south-west (L82), south-east (L53) and north-east (L72), indicating that the farmstead covered an area of *c*. 3.3ha.

At least fourteen enclosures or fields were identified (Table 4.1), the majority to the south-east of boundary/trackway L8. Those immediately adjacent to L8 incorporated the trackside ditch into their perimeters. During analysis, the enclosures have been designated as domestic, non-domestic or fields, on the basis of the nature/quantity of internal features and domestic debris. Enclosures L14 and L16 are believed to represent the domestic core of the farmstead. They contained evidence for rectangular buildings, a stone-lined well, pits and post-holes. The remainder can be divided into small, non-domestic enclosures (L10, L12, L13, L15, L20, L65 and L84) and larger fields (L9, L11, L19, L60 and L81). These contained minimal evidence for internal activity, *e.g.* isolated water pits and dispersed features or structures. Two inhumations were present: one within domestic enclosure L14 and the other within the adjacent non-domestic enclosure L13.

The enclosure system was clearly maintained over a period of time because several of the ditches were recut. In addition, several new ditches were dug, *e.g.* L57, L58 and L67 (Fig. 4.14), although the overall layout of the farmstead remained unchanged.

A large quantity of pottery (*c*. 41kg) and a moderate quantity of animal bone (*c*. 25kg) were recovered from this farmstead. The majority derived from the domestic core and the adjacent enclosures (Table 4.1). A variety of artefacts were recovered: personal items (hobnails, hair pin); coins; household items (vessel glass, key) and agricultural items (quern stones and mill stones) (Table 7.8). No objects directly associated with craft activities and only small quantities (*c*. 250g) of metallurgical residues were recovered.

The animal bone assemblage has been described above (see the phase introduction). The most obvious evidence for ritual activity was associated with animals; it comprised the burial of two headless domestic fowl, with coins, in enclosure L16, and a horse burial in field L60.

Major north-east boundary L72
(Fig. 4.2)

The north-east limit of the farmstead appears to have been defined by a major NW-SE aligned boundary L72. Its ditch G180 was only examined in two trial trenches, although it was visible as a *c*. 300m-long cropmark. Its dating is uncertain because it produced no datable artefacts and is in the vicinity of, and on the same alignment as, a number of post-medieval ditches. Ditch

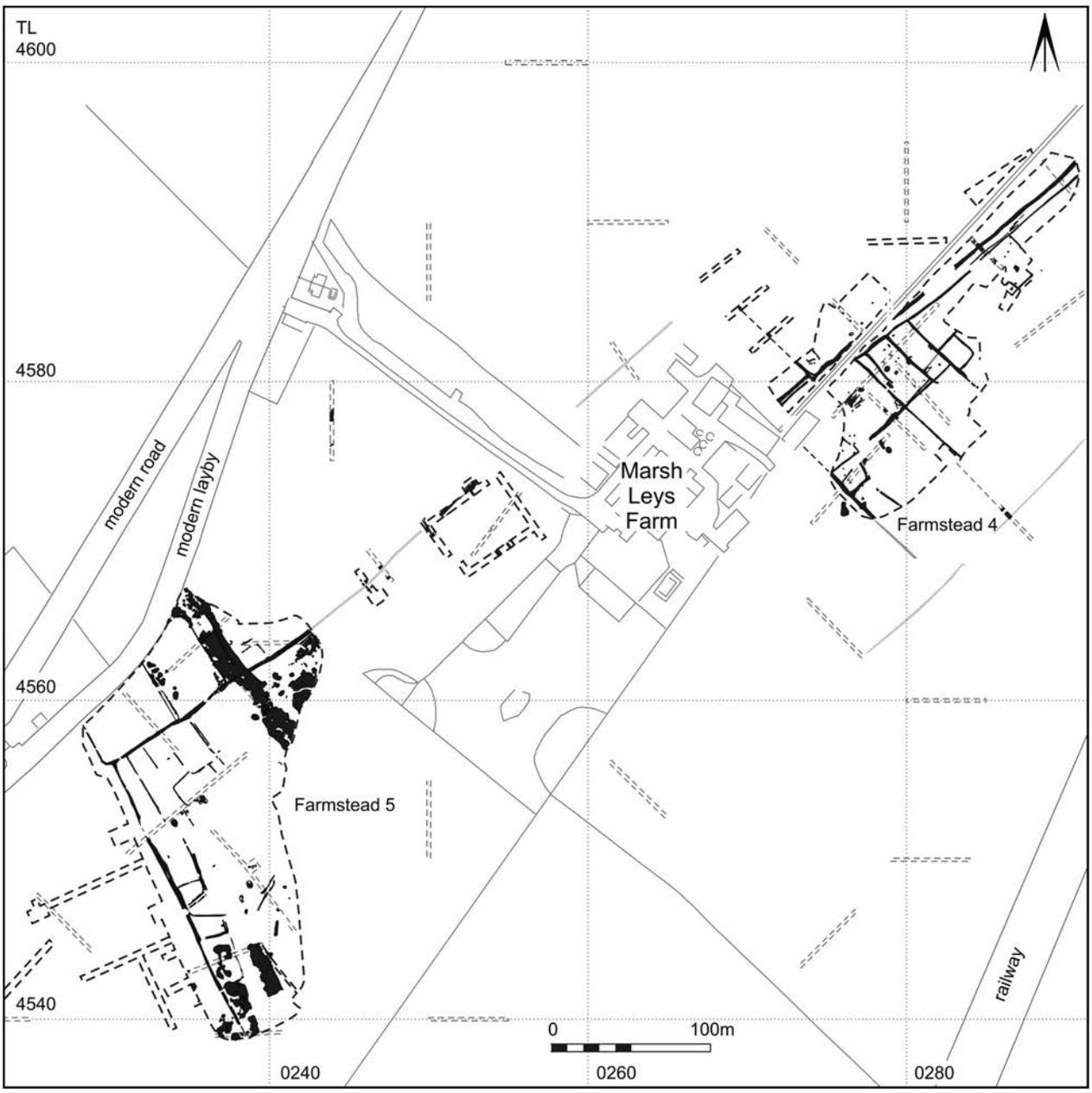


Figure 4.1 Romano-British overall phase plan. Scale 1:4000

G180 was substantial — *c*. 5m wide and 0.35m deep with a V-shaped profile and flat base. It was filled by mid brown-grey silty clay with occasional small stones but no domestic debris.

Major south-east boundary L53

(Fig. 4.2)

The south-east limit of the farmstead appears to have been defined by a major SW-NE aligned boundary L53. This comprised two ditches which were only examined in trial trenches, although the boundary was visible as a *c*. 300m-long cropmark. Like boundary L72, its dating is uncertain because it produced no datable artefacts and is in the vicinity of, and on the same alignment as, a number of post-medieval ditches. The inner ditch was *c*. 1m wide and 0.5m deep with a rounded, V-shaped profile. The outer ditch was 4m wide and 0.55m deep with near vertical sides and a flat base (Fig. 4.2a). They were filled by light orange-brown primary fill which was overlaid by mid brown-grey silty clay. They produced a small quantity of domestic debris.

Major boundary/trackway L8

(Fig. 4.3)

NE-SW aligned boundary/trackway L8 was integral to the farmstead's entire enclosure system. It comprised three parallel ditches G1/G171, G2 and G3/G67 which were at least 250m long. Their precise relationship with boundary L72 to the north-east is uncertain.

To the north-east ditches G1 and G3 were parallel, *c*. 6m apart and probably defined a trackway. This is confirmed by the presence of several possible wheel ruts G4 between the ditches, although similar features G28 were also identified to the north of the ditches. The position of ditch G2 between the two trackside ditches indicates that it is not contemporary with them, but it could

L no.	*Function*	*Extent (sqm)*	*Internal features*	*Pottery (kg)*	*Animal bone (kg)*
9	Field	>1,450	• Pit	4.6	2.5
10	Non-domestic enclosure	710	• Possible structure • Small pits	0.4	0.06
11	Field	1,450	• None	0.05	0.3
12	Non-domestic enclosure	230	• None	0.03	0.27
13	Non-domestic enclosure	610	• Water pit • Large pits • Small pits • Inhumation	1.3	3.3
14	Domestic enclosure	1,000	• Rectangular building • Two-post structure • Well • Clay-lined pit • Large pits • Post-holes • Inhumation	10.8	3.7
15	Non-domestic enclosure	>160	• Small pits	0.3	0.9
16	Domestic enclosure	>1,550	• Rectangular building • Possible structure • Ritual post setting • Large pits • Post-holes	4.3	1.9
19	Field	3,250?	• Water pit	0.5	0.26
20	Non-domestic enclosure	280	• Slot • Small pit • Post-holes	2.9	0.9
60	Field	>1,610	• Small pits • Post-holes • Horse burial	0.05	6.5
65	Non-domestic enclosure	130?	• Possible structure	0	0
80	Peripheral activity focus		• Water pit • Post-holes	0	0
81	Field	4,100	• Stone surface • Water pit • Large pits	4.0	3.0
84	Non-domestic enclosure	>360	• Possible water pit • Small pits	0.5	1.9
Total				**29.73**	**25.49**

Note: does not summarise the major linear boundaries

Table 4.1 Summary of enclosures and fields in Farmstead 4

not be determined whether it was earlier or later. To the south-west, the line of the southern trackside ditch was continued as the north side of the attached enclosures L13 and L14 (Fig. 4.2) (*i.e.* ditches G13 and G19 (recut as G27)). However, no obvious access points from the trackway into the enclosures were identified. The ditches forming these enclosures and the corresponding northern trackside ditch G67 (recut as G68) — the continuation of G3 adjacent to field L60 (Fig. 4.13) — were the only parts of the trackside ditches where re-cuts could be clearly identified.

The main fills of the ditches comprised mid/dark grey-brown silty clay with occasional small stones. They produced a moderate quantity of domestic debris, including a large assemblage of pottery (7.4kg), most of which derived from the south-west part of the boundary/trackway in the vicinity of the domestic enclosures.

Southern trackside ditch G1, G13, G19/G27, G171

For the purposes of spatial analysis, the southern trackside ditch was assigned a different group number where it bounded an enclosure or field, *e.g.* G13, G19/G27 and G171, and these are described under the relevant sections below. G1 represents the ditch away from the enclosures and fields. Generally, it was *c*. 1.2m wide and 0.5m deep but in places it narrowed to 0.6m and shallowed to 0.2m. It had a steep-sided, U-shaped profile with a slightly concave base (Fig. 4.3d). Only a tiny quantity of domestic debris was recovered from ditch length G1, confirming that this part of the farmstead was some distance from the domestic core.

Northern trackside ditch G3/G67 (recut as G68)

The northern trackside ditch G3/G67 was at least 150m long but continued beyond the limit of excavation to the north-east. To the east of the modern ditch it was designated G3 and was *c*. 1.7m wide and 0.6m. It had a concave, U-shaped profile that was partially stepped on its north-west side with a flat but slightly concave base (Fig. 4.3a and c).

To the west of the modern ditch, it was designated ditch G67, and was 0.7m wide and 0.5m deep. It had a steep-sided profile, stepped on the north-west side, and a

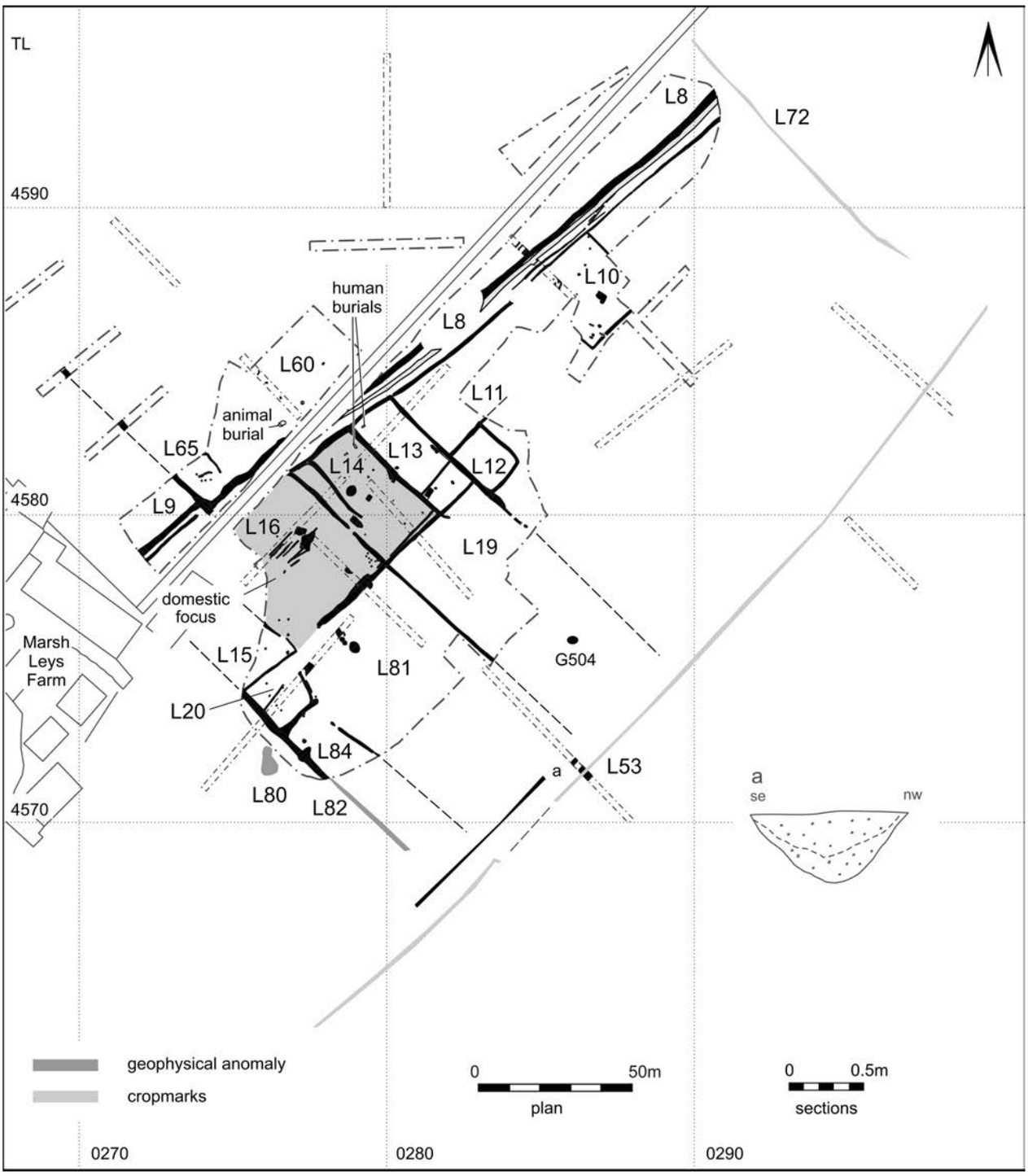


Figure 4.2 Farmstead 4 overall plan. Scale 1:2000

flat base (Fig. 4.13). It was recut as G68, which was 1.2m wide and 0.5m deep with a similar profile to the original ditch, albeit stepped to the south-west. A moderate quantity of domestic debris was recovered from the fills of G67. Pottery from the primary fills included six sherds of 2nd-/3rd-century types. The assemblage from the main fills included 17 sherds of 2nd-century material and two sherds of 3rd-/4th-century material.

Boundary ditch G2

Ditch G2 lay between trackside ditches G1 and G3. Its full extent to the south-west is unclear because it was destroyed by a modern ditch. It was *c*. 1.6m wide, 0.7m deep but narrowed to 1.2m and shallowed to 0.3m to the south-west. It had an asymmetrical, concave, U-shaped profile that was partially stepped on its north-west side (Fig. 4.3f). Its fills were quite light in colour and were probably entirely the result of weathering and erosion. It was probably located away from the farmstead's domestic core.

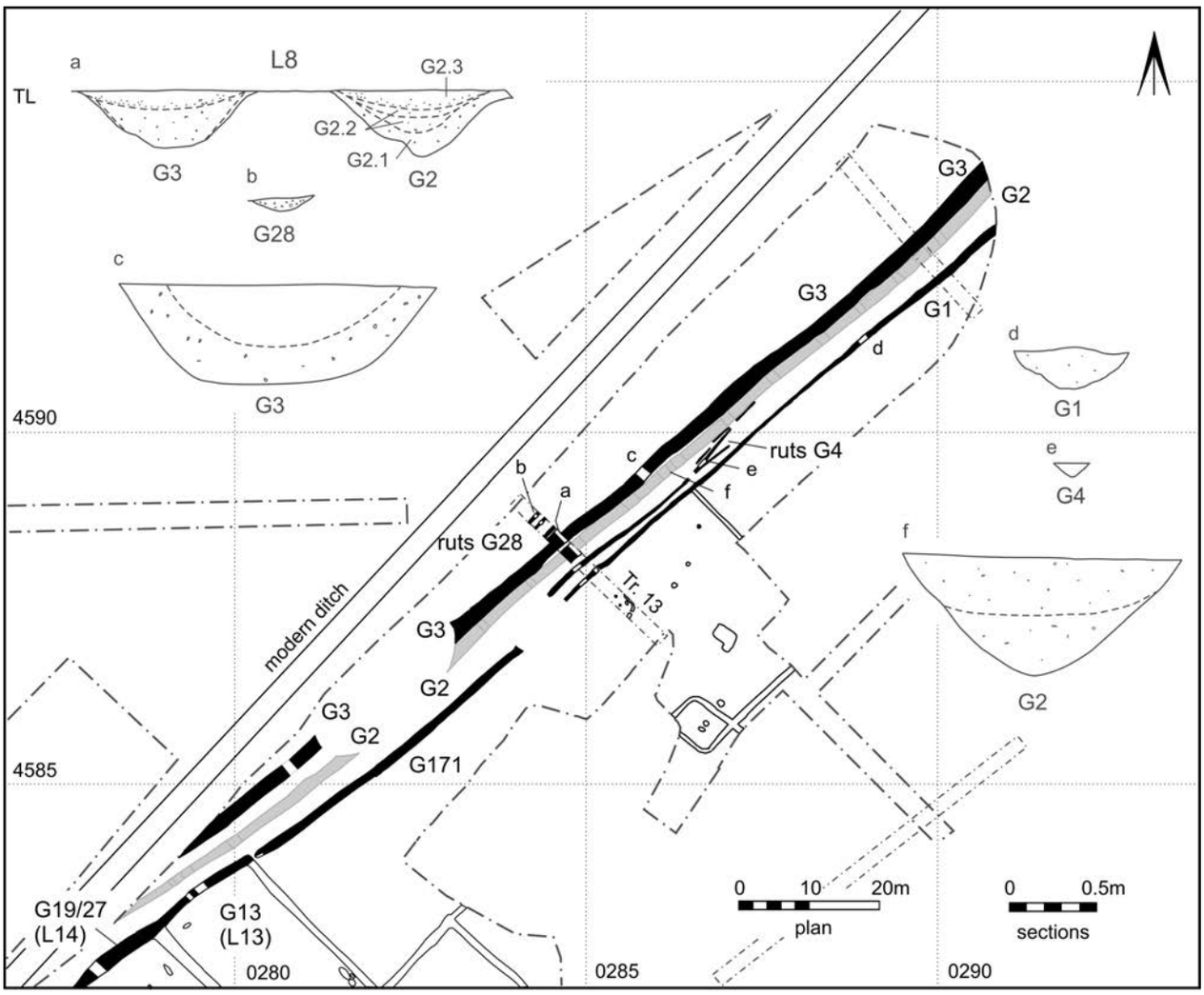


Figure 4.3 Overall plan of major boundary/trackway L8 (scale 1:1000), with ditch sections (scale 1:80)

Possible wheel ruts G4 within trackway
Several short lengths of NE-SW aligned gullies G4 were located between the trackside ditches and are interpreted as the remains of wheel ruts. They were 6m–20m long, 0.35m–0.65m wide and no more than 0.2m deep with rounded, V-shaped profiles (Fig. 4.3e).

Possible wheel ruts G28 to north of trackway
Three parallel gullies G28, beyond the northern trackside ditch, were similar to gullies G4 and are also interpreted as wheel ruts. They were spaced 1m–1.5m apart and were *c.* 0.5m wide and 0.2m deep with concave profiles and bases (Fig. 4.3b). These features were only identified within trial trench 11 but their presence may indicate the existence of a routeway prior to, or after, the establishment of the ditched trackway.

Major boundary L82
(Fig. 4.2)
Major SE-NW aligned boundary L82 comprised a single large ditch. It was at least 80m long and was detected as a geophysical anomaly beyond the limit of excavation. It ran at right-angles to major boundaries L53 to the south-east and L8 to the north-west, although the actual intersections did not fall within the excavation area. The paucity of features to the west of this boundary and the fact that no other ditches joined it from the west suggest that it delimits the main part of the enclosure system. The main fills comprised mid/dark grey-brown silty clay with occasional small stones. They produced a small quantity of domestic debris.

Boundary ditch G47
NW-SE aligned ditch G47 was generally *c.* 2m wide. To the north-west it widened to 2.25m; this is probably the result of recutting, although no definitive evidence for this was identified. Overall, the ditch had a steep-sided, irregular, convex profile with an uneven base. It was 0.5m deep (Fig. 4.12d and l).

Domestic enclosure L16
(Fig. 4.4)
Enclosure L16 is one of two interpreted as the domestic core of the farmstead. It continued beyond the limit of excavation to the south-west. To the north-west it was defined by southern trackside ditch G27, to the north-east by ditch G34 (assigned to enclosure L14), to the south-east by ditch G39/G139 and to the south-west by ditch G43 (assigned to enclosure L15). Ditch G39 terminated to the south-west, providing a wide entranceway into field L81.

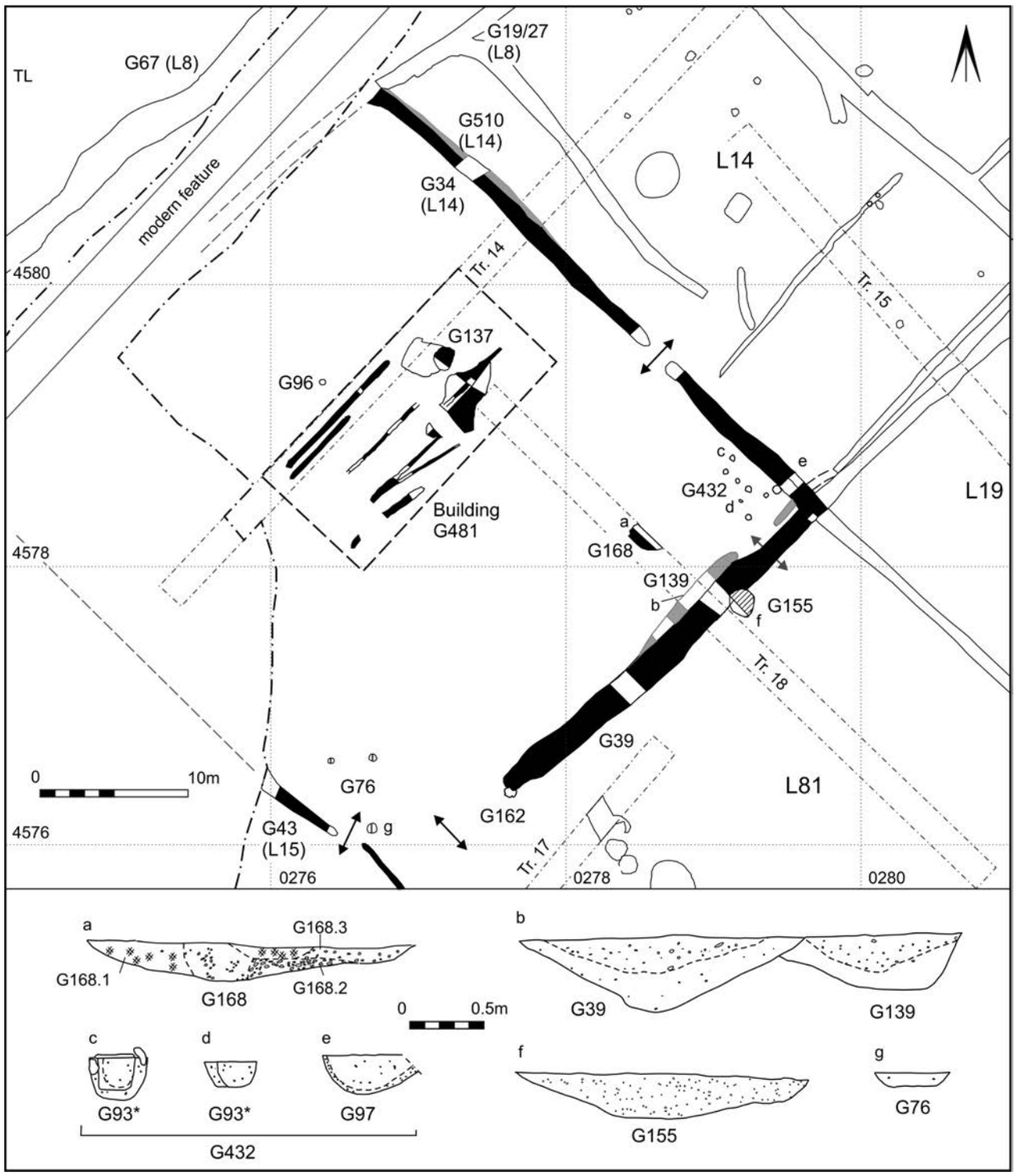


Figure 4.4 Overall plan of domestic enclosure L16 (scale 1:400), with selected sections (scale 1:80)

The terminal was associated with two intercutting post-holes G162 which may be evidence for a fence or gate structure. The earlier ditch G139 on the south-east side also featured an entrance into field L81 in the eastern corner of the enclosure. There were also entrances through ditch G34 on the north-east side and through ditch G43 on the south-west side.

A possible rectangular building G481 was positioned centrally within the enclosure adjacent to the possible ritual post setting G96. A possible post-built structure G432 was located in the north-east corner of the enclosure. Two large pits G155 and G168 were also located in this area, the former just outside the enclosure. A cluster of post-holes G76 was located in the south-west corner of the enclosure next to the entrance into enclosure L15. Not all of the internal features were contemporary. Pit G137 was stratigraphically later than layer G136, which was associated with the possible rectangular building.

The main fills of these features comprised mid grey brown silty clay with occasional small stones. They produced a large quantity of domestic debris, including

pottery (4.3kg), animal bone (1.1kg) and fired clay, the majority of which derived from layer G136.

Enclosure ditch G139 (recut asG39)
The majority of the original ditch G139 on the south-east side of the enclosure was truncated by recut G39. However, the surviving 11m length had a terminal to the north-east indicating the presence of an entranceway. The ditch was *c*. 1m wide and 0.4m deep with a steep-sided profile and slightly sloping, flat base (Fig. 4.4b). The recut varied in width from 1.3m towards the north-east to *c*. 2m towards the south-west. It was 0.6m deep with a more gentle concave profile and irregular, concave base (Fig. 4.4b). Pottery from the main fill included five sherds of 3rd–4th-century date.

Other enclosure ditches G27 (L8), G34 (L14) and G43 (L15)
The other ditches defining this enclosure are described below under their respective land use areas.

Post-holes G162
Two intercutting post-holes G162 may be associated with a fence or gate at the entrance into the enclosure's southern corner. However, they appeared to be dug into the south-west terminal of ditch G39. They were *c.* 0.5m in diameter and 0.45m deep with near vertical sides and a concave base. One contained a post-pipe that was 0.3m in diameter; large stones formed the packing.

Rectangular building G481
(Fig. 4.5)
G481 represents a possible building *c.* 19m by 9m. It comprises a series of slots G85 and a layer G136.

The six parallel NE-SW aligned slots may have contained timbers which supported a raised floor. The purpose of a seventh slot on a slightly different alignment is uncertain. The slots were 5m–12m long, although their full extent was obscured by medieval furrows. One of the slots was stratigraphically later than a Phase 3 enclosure ditch, supporting their assignment to this phase. They were 0.25m–0.55m wide and were no more than 0.2m deep, with steep-sided profiles and slightly concave bases (Fig. 4.5c, d, e and f).

Layer G136 extended over an area of *c*. 7m at the possible NE end of the building. It comprised dark grey brown silty clay with moderate small stones and occasional charcoal flecks (Fig. 4.5a). Its origin is uncertain but it was coextensive with the adjacent slots suggesting that it was associated with the building in some way. However, it did appear to be stratigraphically earlier than one of the slots, suggesting that it may have pre-dated the building. It might represent a buried soil preserved below the building or, less likely, a deliberately deposited make-up layer.

The fills of the slots produced a tiny quantity of domestic debris in contrast to the moderate quantities from layer G136. Two sherds of 3rd–4th-century date represent the oldest types in the pottery assemblage, although they were very much in the minority. A fragment of vessel glass (RA 38) and twenty oyster shells were the more unusual finds.

Possible structure G432
A possible timber structure G432 was located in the eastern corner of the enclosure, next to one of the original entrances. It comprised an arrangement of seven post-holes G93 and a pit G97 located within a 4m by 4m area. The post-holes were 0.3m–0.4m in diameter and 0.15m–0.3m deep, with vertical sides and flat bases. Two contained post-pipes G93.1 that were 0.25m in diameter (Fig. 4.4c and d). These contained high concentrations of oak charcoal suggesting timbers had been burnt *in situ* (ecofact samples 32 and 33). Pit G97 was located 0.5m to the east of the post-holes. It was 0.55m in diameter and 0.3m deep with a U-shaped profile partially truncated by ditch G34 (Fig. 4.4e). These features may have been part of a structure associated with the entrance in the eastern corner of the enclosure.

The fills of the post-holes and pit were almost devoid of finds. Where present, the packing material comprised mid orange-brown silty sand and large stones.

Plate 4.1 Possible ritual post setting G96 (L16, Farmstead 4), with 0.4m scale

Possible ritual post setting G96
(see Fig. 4.5, Pl. 4.1)
Located *c*. 2m north-west of possible building G481 was a feature G96 that had all the characteristics of a post-hole but contained an unusual finds deposit. It was circular, 0.4m in diameter and 0.25m deep with near vertical sides and a concave base (Fig. 4.5b). Two headless domestic fowl had been placed in the feature in association with two copper alloy coins (RA 24 and 25). The coins comprised a radiate and sestertius dated AD 138–161 and AD 260–296 respectively. The feature had then been filled with dark grey clay silt which contained small slabs of limestone *c*. 0.15m in diameter and either laid flat or angled vertically.

Post-holes G76
Near to one of the southern entrances of the enclosure were three post-holes G76 located *c.* 5m apart. They were 0.45m–0.6m in diameter and no more than 0.2m deep with shallow profiles and flat bases (Fig. 4.4g). One of these is adjacent to a ditch terminal and may be associated with a gate structure.

Pits G137, G155, G168
Three pits were associated with this enclosure; their function is unclear.

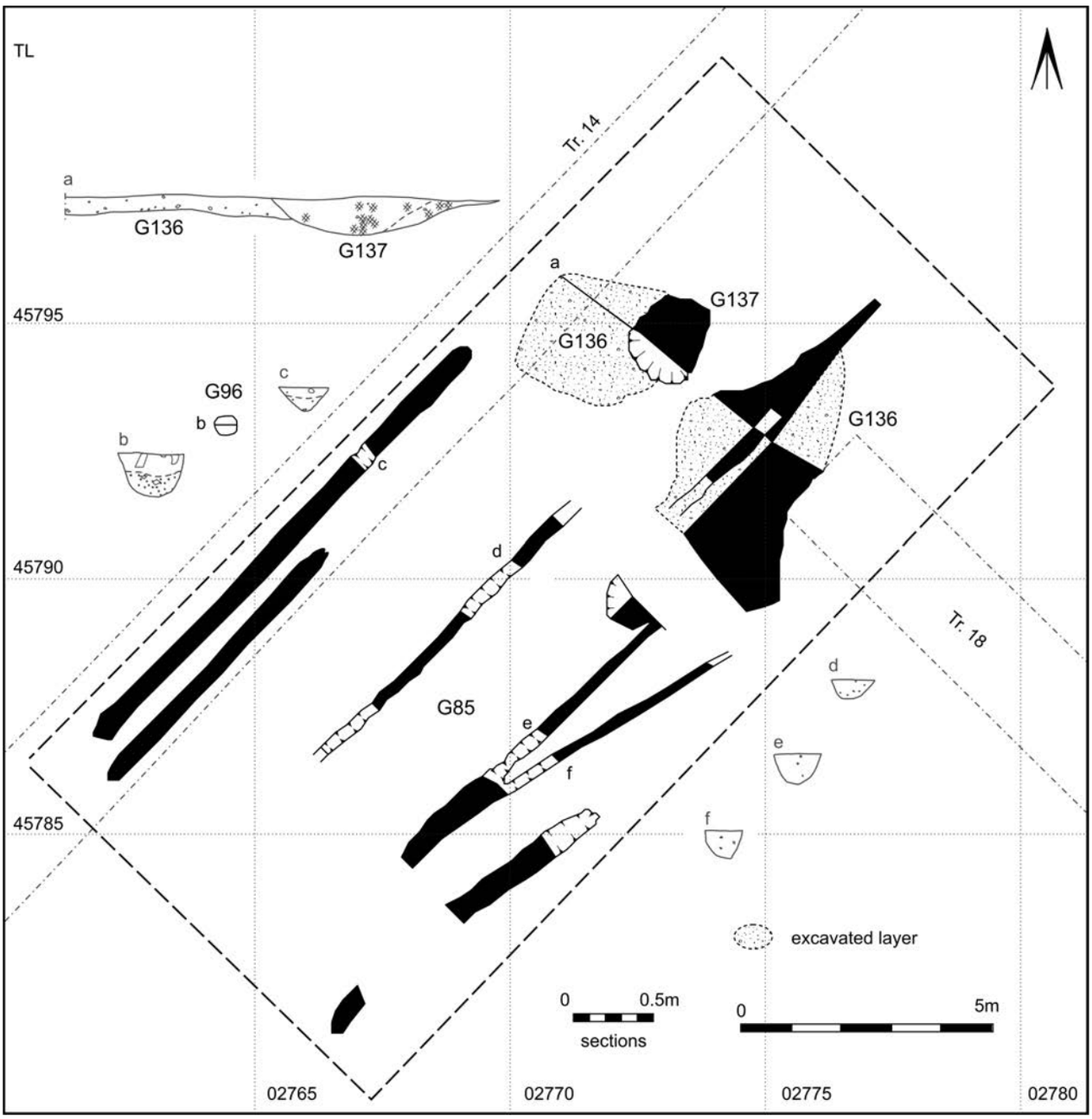


Figure 4.5 Detailed plan of building G481 (scale 1:125), with selected sections (scale 1:80)

Oval pit G137 was stratigraphically later than layer G136 from the possible rectangular building G481. It was *c.* 1.5m in diameter and 0.25m deep with a concave profile (Fig. 4.5a). Its main fill contained a moderate assemblage of domestic debris including six sherds of 3rd–4th-century pottery.

A large sub-circular pit G168 was located within trial trench 18, *c.*6m to the south-west of possible structure G432. It was *c.* 2.2m in diameter and 0.25m deep with gradual sloping sides and an uneven base (Fig. 4.4a).

Just beyond the south-east side of the enclosure was a large circular pit G155. It appeared to truncate enclosure ditch G39 and it is, therefore, uncertain if it is contemporary with the use of this enclosure. It was 2m in diameter and 0.35m deep with an irregular concave profile (Fig. 4.4f).

Domestic enclosure L14

(Figs 4.6 and 4.7)

Rectangular enclosure L14 was located between domestic enclosure L16 and non-domestic enclosure L13. It is considered to be part of the domestic core of the farmstead. To the north-west it was defined by the southern trackside ditch G19/G27, to the north-east by ditches G33/G52 (recut as G25 and G26) and to the south-west by ditches G510 (recut as G34) and G37 (recut as G35). Thus, G38 on the south-east side was the only part of the enclosure ditch that did not produce clear evidence for recutting. At some point in the enclosure's history an internal ditch G29 (recut as G30) was used to demarcate a narrow strip of land on its south-west side. Twigs of sloe or hawthorn were found in waterlogged ecofact sample 76 from well G89 and may have derived from a hedge associated with the enclosure ditches. Entrances were

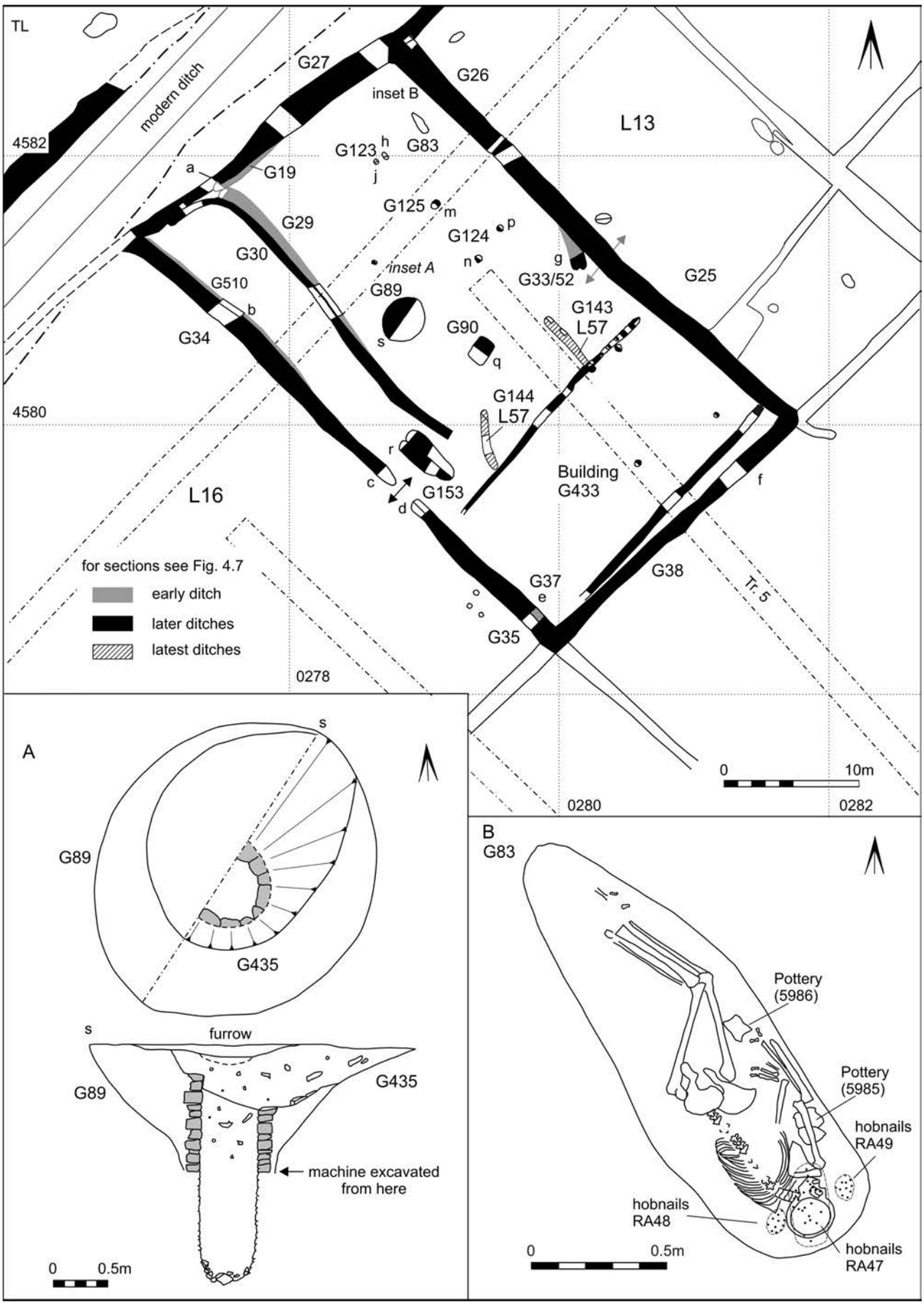


Figure 4.6 Overall plan of domestic enclosure L14 (scale 1:400), with inset plans of well G89 (scale 1:50) and inhumation burial G83 (scale 1:20)

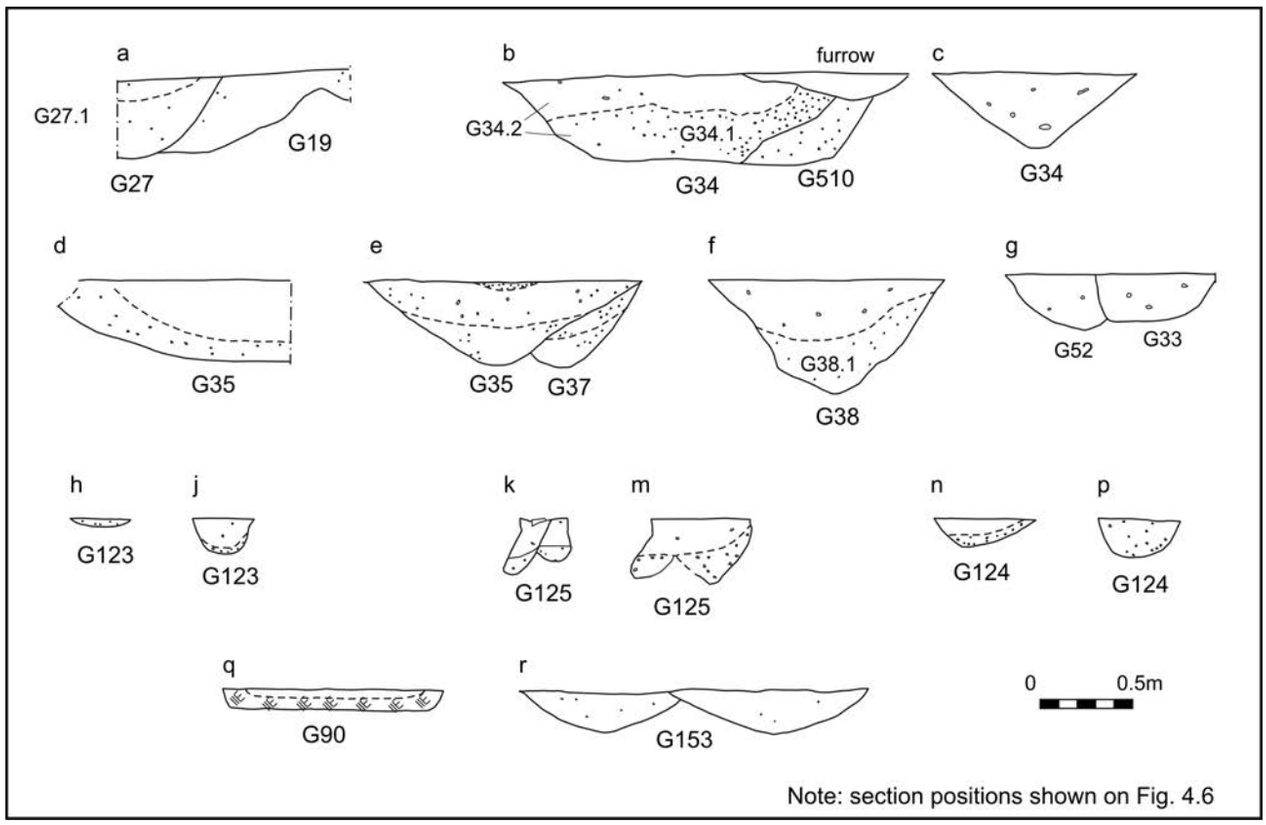


Figure 4.7 Selected sections for domestic enclosure L14 (scale 1:80)

represented by a 1.8m wide gap in the south-west side, which was retained when the ditch was recut, and a corresponding gap in the north-east side. There, however, the entrance was removed when the ditch was recut.

There was a possible rectangular building G433 in the south-east end of the enclosure, while towards the centre were a stone-lined well G89 and pits G90 and G153. Several sets of post-holes G123, G124 and G125 also lay within the interior. There was also an inhumation burial G83 in the north corner.

The main fills of these features comprised grey brown silty clay with occasional small stones. They produced a large quantity of domestic debris, including the largest pottery assemblage (10.8kg) and the second largest animal bone assemblage (3.4kg) from all the enclosures within this farmstead. The majority of this material derived from the enclosure ditches and the well. Waterlogged plant and insect remains from the well suggest that the enclosure contained timber structures, open areas, middens and areas of neglected ground (ecofactual sample 76). The presence of snails that live in stagnant water suggests that the ditches were open for some time and contained puddles of water.

Enclosure ditches G19 (recut as G27), G510 (recut as G34), G37 (recut as G35) and G33/G52 (recut as G25/G26), G38

The north-west side of the enclosure was defined by the southern boundary of trackway/major boundary L8 — in the form of ditch G19, which was later replaced by ditch G27. The original ditch was 0.7m wide and 0.4m deep, with an irregular concave profile and base (Fig. 4.7a). The recut was 2.15m wide towards the north-east but narrowed to 1.15m to the south-west. It was 0.4m deep with a concave profile and base.

On the north-east side it was impossible to determine whether ditch G33 or G52 was the earlier. They had been heavily truncated by recut G26 (assigned to L13), but sufficient survived to demonstrate that both terminated and therefore indicated the position of an entrance on this side of the enclosure. They were both 0.65m wide and 0.25m deep with concave profiles and flat bases (Fig. 4.7g).

Ditch G38 formed the south-east side of the enclosure. It was 1.3m wide and 0.6m deep with a steep-sided, irregular concave profile and irregular concave base (Fig. 4.7f).

The south-west side of the enclosure was defined by ditches G510 (recut as G34) and G37 (recut as G35). A 1.8m wide gap between them indicates the position of an entrance providing access into the adjacent enclosure L16. The dimensions and profile of the original ditches were difficult to determine although G510 appeared to be steep sided with a flat base (Fig. 4.7b) whereas G37 had a more V-shaped profile (Fig. 4.7e). Recut G34 was *c*.1.6m wide and 0.5m deep with steep-sided profiles and flat base (Fig. 4.7b), but became smaller and more V-shaped near the entrance (Fig. 4.7c). To the south-east recut G35 was similar to the latter being 0.85m wide and 0.45m deep with a V-shaped profile (Fig. 4.7e).

All the fills of the ditches, even the primary fills, contained large quantities of domestic debris. Most of it derived from the south-west ditch, adjacent to domestic enclosure L16. The primary and main fills respectively produced 2.6kg and 4.2kg of pottery; the latest datable types were 2nd century (Fig. 7.2 P8).

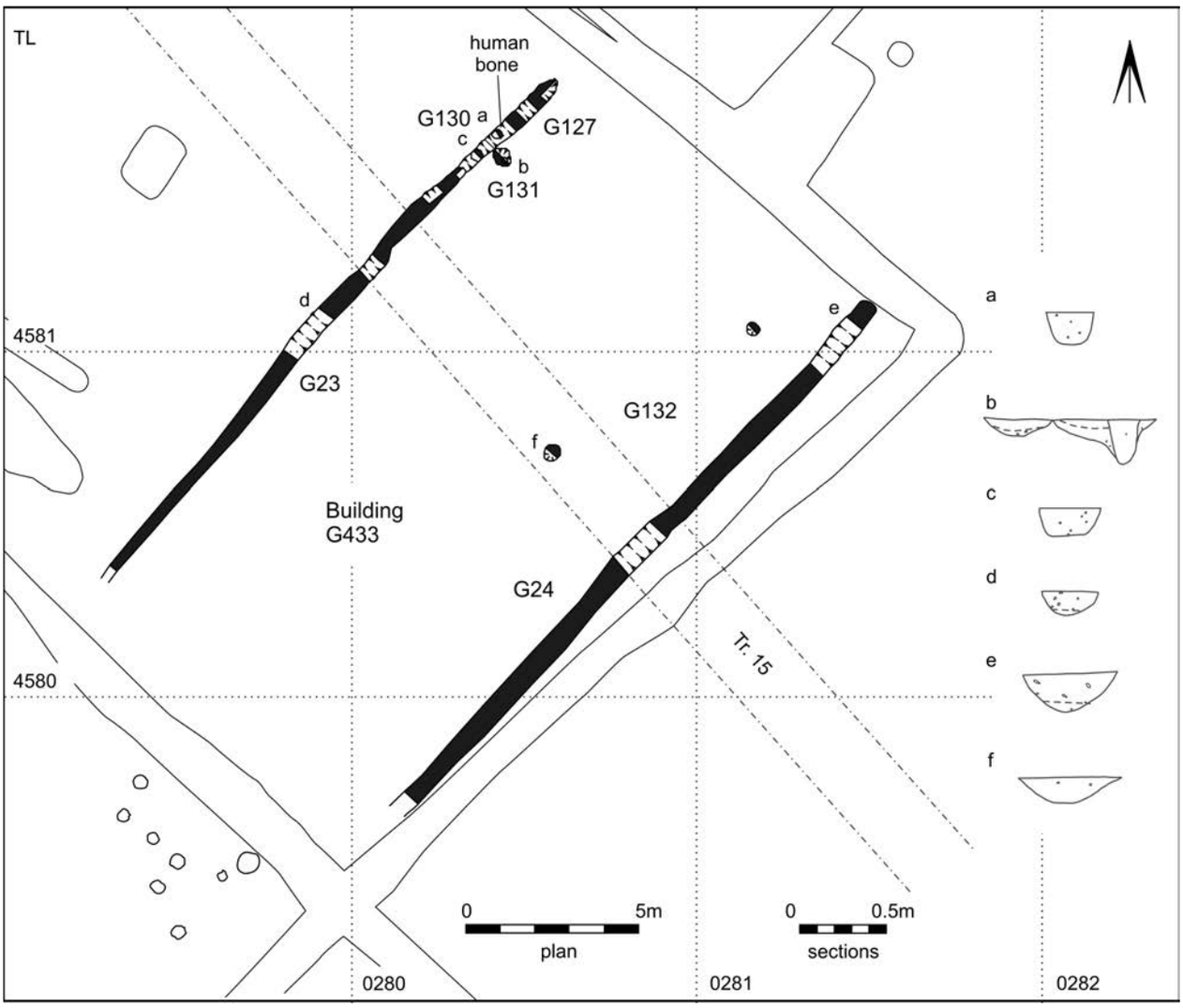


Figure 4.8 Detailed plan of possible building G433 (scale 1:200), with selected sections (scale 1:80)

Later ditches G29 (recut as G30)

Although clearly later, the purpose of internal ditch G29 and its recut G30 is unclear. They lay parallel to, and *c*. 6m north of, the south-west side of the enclosure. Both were *c*. 0.8m wide and no more than 0.3m deep with U-shaped profiles and slightly concave bases. Given the way that they respect the enclosure's internal features, it is possible that they demarcated a narrow strip of land used, for example, as a trackway or for animal sorting, rather than representing a more fundamental change in the size of the enclosure.

Rectangular building G433

(Fig. 4.8)

Two NE-SW aligned parallel slots G23/127 and G24 appear to represent the outer walls of a *c*. 20m by 10m building. A small number of post-holes were also found within this area.

The slots were *c*. 0.5m wide and no more than 0.25m deep with steep-sided, concave profiles (Fig. 4.8d and e). The north-east part of the northern slot was assigned to G127 because it was narrower and contained two post-holes unlike the south-west part which was assigned to G23. The two post-holes G130 in the base of the slot were *c.* 0.5m apart, 0.35m in diameter and 0.2m deep with near vertical sides and flat bases (Fig. 4.8a and c).

With the exception of three post-holes, the area defined by the slots was largely devoid of features. Post-hole G131 was located next to post-holes G130 and had similar dimensions, but irregular, steep sides and a concave base (Fig. 4.8b). It contained a post-pipe that was 0.15m in diameter. The packing material comprised light yellow-brown silty clay. Two further post-holes G132 were located *c.* 3m to the north of slot G24. They were 0.4m and 0.6m in diameter and *c*. 0.2m deep with concave profiles (Fig. 4.8f).

The main fills of the slots and the post-holes were unexceptional and similar in composition. They produced a small quantity of domestic debris and one of the slots also contained a fragment of a human rib bone and part of a horse's skull. The lower fills of the slots were quite different — mid orange-brown silty sand with moderate small stones. It is possible that this was bedding material for timbers placed in the slots.

Two-post structure G123

A possible two-post structure G123 was located towards the north corner of the enclosure. Its post-holes were 0.4m

Plate 4.2 Stone-lined well G89 (L14, Farmstead 4), with 1m scale

apart and were 0.4m and 0.6m in diameter and 50mm and 0.2m deep, with either near vertical or concave profiles and flat bases (Fig. 4.7h and j).

Post-holes G124, G125

Two pairs of post-holes G124 and G125 were located *c.* 5m south-east of two-post structure G123. Pair G124 were 2.2m apart and were 0.5m in diameter, 0.2m deep with near vertical sides and concave bases (Fig. 4.7n and p). Pair G125 were actually 5.6m apart but are discussed together because they both contained post-pipes. They were 0.25m and 0.5m in diameter and 0.25m and 0.35m deep, with near vertical sides and concave bases (Fig. 4.7k and m). Their post-pipes were 0.2m in diameter and angled within the post-holes. The packing comprised mid brown silty clay with fragments of limestone.

Well G89

(Fig. 4.6A. Pl. 4.2)

Well G89 was located halfway between possible building G433 and the north-west side of the enclosure. Its construction pit was oval in plan, 3.6m long and 3m wide on the surface, narrowing considerably with depth. It was hand excavated to a depth of 1m and machined excavated to its full depth of 2.5m. The well featured a stone-lined shaft, with an internal diameter of 0.65m, made of 0.1m–0.45m limestone blocks. No obvious bonding material was identified, although blue-grey clay had been packed in behind the stones. The absence of domestic debris from the well shaft suggests that it may have been allowed to fill up naturally and a small number of limestone blocks were found at the base. Ecofact sample 76 from its lowest fill produced waterlogged plant and insect remains suggestive of the presence of nutrient-rich, disturbed and/or neglected ground.

At a later date pit G435 was dug into the upper part of the shaft presumably to recover building stone. It was larger than the diameter of the shaft with sides sloping at around 45 degrees (Fig. 4.6s). The pit was filled by fairly uniform dark grey-brown silty clay with occasional limestone block fragments. It produced a moderate assemblage of domestic debris, including two sherds of 3rd/4th-century pottery.

Clay-lined pit G90

Rectangular clay-lined pit G90 was situated *c.* 4m south-east of well G89 and may be associated with it. G90 was 1.9m long, 1.3m wide and 0.1m deep with vertical sides and a flat base (Fig. 4.7q). The base and sides of the pit were lined with light blue-green clay, presumably to hold water or other liquids.

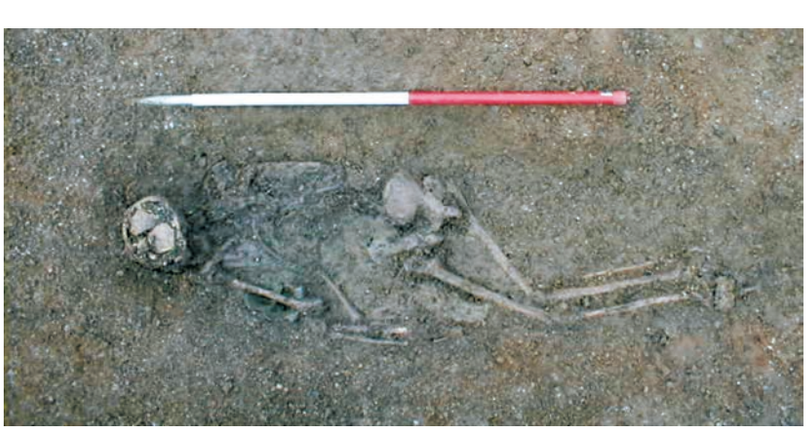


Plate 4.3 Inhumation burial G83 (L14, Farmstead 4) from NE, with 1m scale

Pits G153
Pits G153 were located 1.6m north-east of the entrance in the south-west side of the enclosure. Their location appears to have been deliberately designed to assist in controlling access into the enclosure. They appeared to be intercutting but were very similar in shape and size — 1.3m and 2.7m long, 0.75m and 1.25m wide, and 0.25m and 0.45m deep, with concave profiles (Fig. 4.7r).

Inhumation burial G83
(Fig. 4.6B, Pl. 4.3)
Grave G83 was situated in the north corner of the enclosure. It was *c.* 1.7m from the north-east ditch and was parallel to it, suggesting they were contemporary. It was oval in shape, 1.8m long, 0.6m wide and 0.25m deep. The skeleton S316 was of an adult female aged between 35–45 years. It had been partially truncated as the top of the skull and some of the hand and foot bones were missing. The skeleton was in a flexed position, on its right side with head to the south-east and facing north-east. Both legs were flexed and the lower part of the left leg from the knee downwards slightly overlay the right leg. Only part of the right arm was visible as it lay beneath the ribcage; however, the hand was bent at the wrist and pointed towards the pelvis. The left arm was extended and covered part of the right hand.

Three groups of iron hobnails were located in the vicinity of the skull. Group RA 47 comprised 24 hobnails which clearly lay under the skull, while groups RA 48 and RA 49 comprising 12 and 11 hobnails were found on either side of the skull although unfortunately were disturbed prior to recognition of their full significance. They probably belonged to a pair of shoes that had been placed under the head. Part of a wide-mouthed calcareous grey ware (R06E) jar (5985) was found beneath the left arm. Further sherds (5986) from the same jar were found 0.4m away placed in the left hand, as finger bones were found beneath it. These two pottery deposits comprised large matching sherds suggesting that the jar had been broken prior to deposition (Fig. 7.2 P6).

Non-domestic enclosure L13
(Fig. 4.9)
Rectangular enclosure L13 was located between domestic enclosure L14 and field L11. It was defined to the north-west by the southern trackside ditch G13, to the north-east by ditches G18 and G20 (recut as G12 and G173), to the south-east by ditch G22 and to the south-west by ditches G25 and G26. The terminal of the original ditch on the north-east and south-west sides provides the only convincing evidence for entranceways, albeit ones that were blocked by later ditch recuts. The positions of these entrances correspond well with the position of the entrance between enclosures L14 and L16.

The south-east end of the enclosure was demarcated by an internal ditch G21, defining an area of 120sqm. This contained a large water pit G128 and two smaller pits G129. The majority of the features within the remainder of the enclosure were all positioned around the edges, leaving the central area clear. These comprised an inhumation burial G82 and several pits G126 and G145.

The main fills of these features comprised mid brown-grey silty clay with occasional small stones. They produced a small quantity of domestic debris, including 1.2kg of pottery and 3.3kg of animal bone. The majority of this material derived from the water pit. Ecofact sample 67 from the fill of enclosure ditch G18 was dominated by chaff and was probably waste from the de-husking of spelt wheat. This suggests that crop processing was undertaken in this enclosure.

Enclosure ditches G13, G18/G20 (recut as G12/G173), G22, G33/G52 (recut as G25/G26)
The north-west side of the enclosure was defined by ditch G13 (L8) which was 1.1m wide and 0.4m deep with a concave profile and base (Fig. 4.9a).

Ditch lengths G18 and G20 are the surviving remnants of the original north-east side of the enclosure, which was recut as G12 and G173. To the south-east, G18 was 1m wide and 0.25m deep with a concave profile and base (Fig. 4.9m). However, to the north-west, G20 was only 0.3m wide and 0.1m deep with a concave profile and base (Fig. 4.9e). However, this ditch was only investigated at its terminal, which may not be representative of its entire length.

The south-east side of the enclosure was defined by ditch G22 — the continuation of ditch G38 which formed the south side of the adjacent enclosure L14. It was 0.8m wide and 0.2m deep with a concave profile.

Ditch lengths G25 and G26 formed the south-west side of the enclosure. To the north-west, ditch G26 was 1.7m wide and 0.6m deep (Fig. 4.9b). To the south-east, G25 was only 0.7m wide and 0.1m deep (Fig. 4.9c), although again this length was only investigated at its terminal.

The main fills of the ditches produced a moderate quantity of domestic debris.

Internal partition G21
Ditch G21 sub-divided the enclosure into two unequal parts. It was 0.7m wide and 0.2m deep with a concave profile and base (Fig. 4.9g).

Water pit G128
A large rectangular pit G128 was located in the south-west corner of the small sub-division of the enclosure. Its precise relationship with the enclosure ditches was not determined but its positioning suggests that it is likely to be contemporary with them. The pit had near vertical sides. It was 3.4m long, 2.2m wide and over 0.8m deep, although the base was not reached (Fig. 4.9k).

All the fills of this pit produced small quantities of domestic debris, including sherds of 3rd/4th-century pottery and tile (Fig. 7.5 FC1).

Pits G129
The only other features identified within the sub-division were two pits G129, *c.* 5m apart. Both were similarly oval in plan. They were *c.* 0.85m long, 0.6m wide, 0.2m deep with a concave profile and flattish base (Fig. 4.9h and j).

Pits G126, G145
Three pits were located within the larger part of the enclosure, adjacent to its original entrances. Two of them G145 were close to the original north-east entrance and, therefore, in a comparable position to pits G153 in enclosure L14 (see above). They were 0.1m apart and differed in shape and size. One was oval in plan, 2.2m long, 0.8m wide and 0.5m deep. The other was circular in plan, 0.8m in diameter and 0.5m deep. Both had U-shaped profiles (Fig. 4.9d and e).

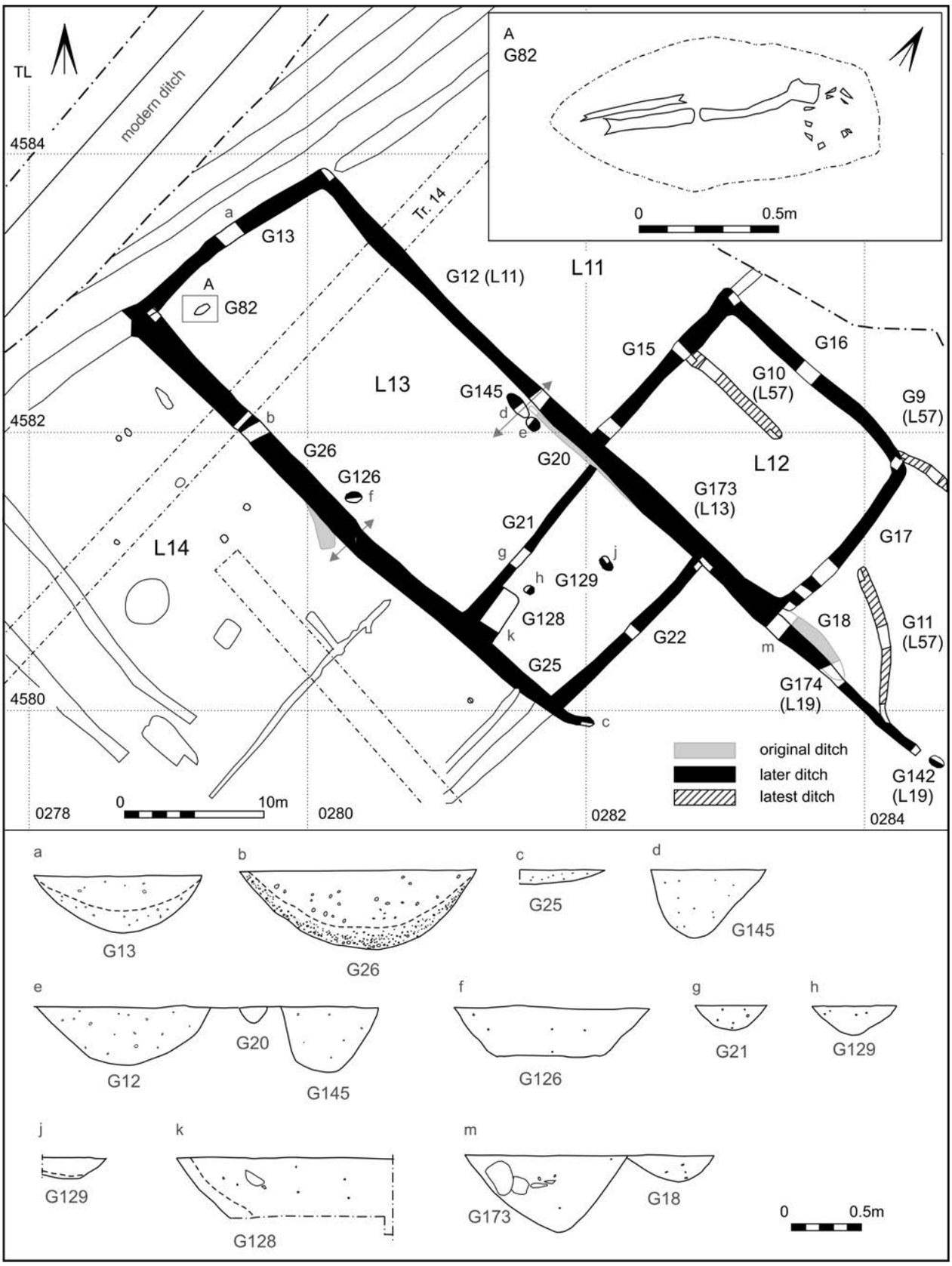


Figure 4.9 Overall plan of non-domestic enclosures L12 and L13 (scale 1:400), with inset plan for inhumation burial G82 (scale 1:20) and selected sections (scale 1:80)

The third pit G126 was located adjacent to the original south-west entrance. It was oval in plan and was 1.2m long, 0.7m wide and 0.35m deep with steep sides and a flat base (Fig. 4.9f). These features produced a tiny assemblage of domestic debris.

Inhumation burial G82
(Fig. 4.9A)
A grave was situated in the west corner of the enclosure, *c.* 2m from and parallel to the southern trackside ditch G13. The full extent of the grave could not be determined because it had been heavily truncated. It contained the right leg and fragmented pelvis of a probable adult male. No grave goods were present.

Non-domestic enclosure L12
(Fig. 4.9)
Ditched enclosure L12 was 200sqm in extent and one of the smallest within the farmstead. It was defined to the south-west by ditch G173 (assigned to L13), to the north-west by ditch G15 (assigned to L11), to the north-east by ditch G16 and to the south-east by ditch G17. No entranceways or internal features were identified.

The ditches were filled by dark brown-grey silty clay with moderate small stones. Only a small quantity of domestic debris was recovered, supporting the suggestion that this was a non-domestic enclosure.

Ditches G15, G16, G17, G173
The ditches defining this enclosure formed a continuous boundary that was *c.* 1m wide and 0.5m deep. The south-west ditch G173 was slightly wider at 1.4m, perhaps because it was a shared boundary with the adjacent enclosure L13. All the ditches had steep-sided profiles with concave bases. Ditch G16 contained a coin dated to AD 268–70 (RA 50).

Field L11
(Not illustrated)
Probable field L11 was located to the north and east of enclosures L12 and L13. It was defined to the north-west by ditch G171 (southern trackside ditch L8), to the south-west by ditch G12 (enclosure L13) and to the south-east by G15 (enclosure L12). The north-east side may have been defined by ditch G172, although no trace of this was observed adjacent to the southern trackside ditch L8 (see Fig. 4.10). The only positively identified entranceway into the field was to the south-west from enclosure L13, although this was blocked by later recutting of the ditch. No internal features were identified — hence its interpretation as a field.

The main fills of the ditches comprised grey-brown silty clay with moderate small stones. They produced a tiny quantity of domestic debris, mainly derived from the ditch on the south-west side.

Ditches G12, G14, G15, G171, G172
The ditches defining this field were all very similar with the exception of G14, which was much narrower. In the main they were 1m–1.3m wide and 0.35m–0.55m deep, with steep-sided, U-shaped profiles and slightly concave bases.

Non-domestic enclosure L10
(Fig. 4.10)
L10 was located to the north-east of field L11 and is presumed to be a separate enclosure (see Fig. 4.2). It was defined to the north-west by the southern trackside ditch G1 (L8), to the north-east by ditch G5, to the south-east by ditch G7 and to the south-west, partially, by ditch G172. No obvious entrances were located, although ditch G172 did not extend as far as the trackside ditch G1.

A possible rectangular structure G434 was identified within the enclosure, *c*. 5m from the trackway. A scatter of other internal features was present, including three pits G109 in the southern corner, four pits G105 in the northern part and a single, large, more central pit G111.

The main fills of these features comprised mid/dark grey silty clay with occasional small stones. They produced a small quantity of domestic debris, including 0.4kg of pottery. However, several fragments of rotary quern (RA 9 and 10) and millstone (RA 11) were also recovered. This may indicate that this area was utilised for crop processing. Ecofact sample 79 from pit G111 contained hazelnut shell indicating limited exploitation of woodland resources.

Enclosure ditches G1, G5, G7, G172
The ditches defining this enclosure were very similar in nature and are likely to be one continuous boundary. They were *c*. 0.7m wide and no more than 0.35m deep with concave sides and flat bases (Fig. 4.10m).

Possible rectangular structure G434
(Fig. 4.10A)
A gully G116 and four post-holes G115 were located in trial trench 13 and may be part of a timber structure. No other features were identified in this area during the open-area excavation. The gully was L-shaped in plan, 0.3m wide and 0.15m deep, with near vertical sides and a slightly concave base (Fig. 4.10c and d). The majority of the post-holes were circular, 0.25m–0.35m in diameter and 50mm–0.2m deep. All of the post-holes had near vertical sides and concave bases (Fig. 4.10a and b).

Several fragments of limestone, *c.* 0.3 by 0.15m in size, were present in the fill of the gully; they may represent packing material. Only a small quantity of domestic debris was recovered but this included fragments of rotary quern (RA 9 and 10) and a millstone (RA 11).

Pits G105, G109, G111
A total of eight pits were located in the north, central and south parts of the enclosure.

Four small, circular pits G105 were located towards the north corner. They were spaced 3m–5m apart, over a distance of *c*. 14m. They appeared to be on a curved alignment, although the significance of this is uncertain. All were 0.4m–0.8m in diameter and less than 0.2m deep, with concave profiles and bases (Fig. 4.10e and f).

The south corner of the enclosure contained three pits G109 all located within *c*. 2.5m of one another. Two were circular in plan, 0.8m in diameter and 0.2m–0.4m deep. The other was oval in plan and was 0.85m long, 0.5m wide and 0.2m deep. All of the pits had steep-sided, concave profiles with either flat or concave bases (Fig. 4.10h, j and k).

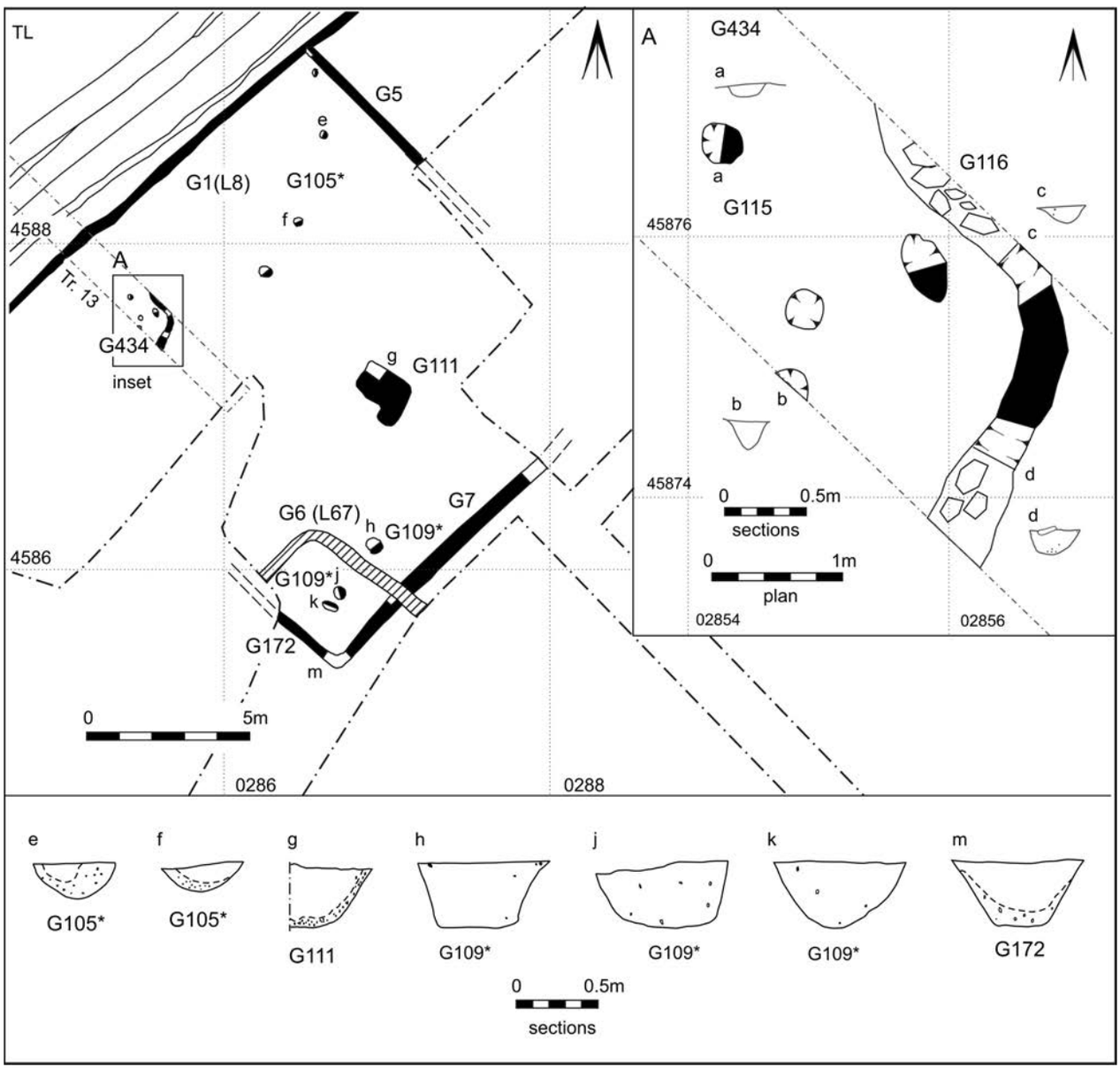


Figure 4.10 Overall plan of non-domestic enclosure L10 (scale 1:400), with inset plan of structure G115/6 (scale 1:50) and selected sections (scale 1:80)

A large rectangular pit G111 with a projection to the south was located roughly centrally within the enclosure. It was 3.2m long, 2.7m wide and 0.35m deep with a steep-sided, concave profile and flat base (Fig. 4.10g). Although the projection was unexcavated, it may have formed an access ramp, possibly suggesting that this was a quarry pit. The main fill was slightly different to the others in that it comprised light yellow-brown silty sand with occasional small stones. It produced a small quantity of domestic debris, including a single sherd of 4th-century pottery. In addition to cereal remains, ecofact sample 79 contained charred hazel nut shell fragments.

Non domestic enclosure L15

(Figs 4.11 and 4.12)

Enclosure L15 was located between major NW-SE boundary ditch G47 (L82) and domestic enclosure L16. To the north-east it was defined by ditch G43, which featured a 2m wide entrance, and to the south-east by ditch G44. Only a small part of the interior fell within the excavation area; two small pits G75 were identified.

The main fills of these features comprised mid brown-grey sandy clay with occasional small to medium stones. They produced a small quantity of domestic debris, including 300g of pottery and 900g animal bone. Ecofact sample 10 from the fill of enclosure ditch G43 contained pure grain and may have resulted from the accidental burning of fully cleaned wheat. This may suggest that grain storage took place in the vicinity.

Ditches G43, G44

The parts of ditch G43 on either side of the 2m wide entrance were slightly different and the terminals were not exactly opposite each other. To the north-west the ditch was 0.9m wide and 0.2m deep, with a concave profile (Fig. 4.12a). The south-east side of the enclosure ditch G44 was 0.55m wide and 0.2m deep, with concave sides and an uneven base (Fig. 4.12c). Amongst the pottery assemblage was a single sherd of a 4th-century vessel.

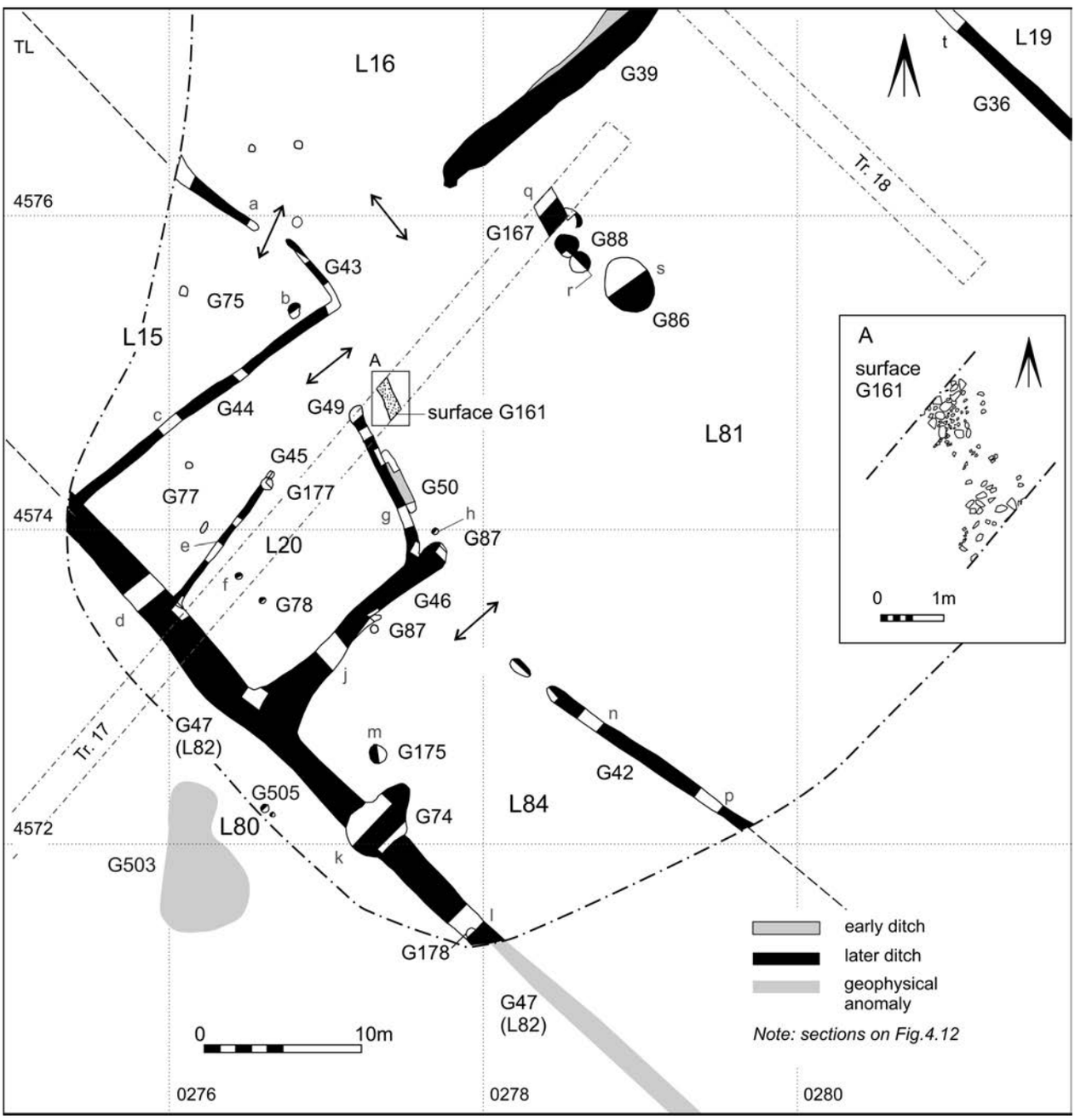


Figure 4.11 Overall plan of non-domestic enclosures L15, L20 and L84, and field L81 (scale 1:400), with inset plan for surface G161 (scale 1:100)

Pits G75

Two pits G75, situated 6.5m apart, were located *c.* 4m from the entrance. Both were under 0.95m in diameter and 0.25m deep, with concave profiles and slightly concave bases (Fig. 4.12b).

Large field L19

(see Fig. 4.2)

A large field L19 was located to the south-east of enclosures L13 and L14. It was defined to the south-west by ditch G36, to the north-west by ditch G22/G38 (assigned to L13 and L14) and to the north-east by ditch G174/G142. The field may have extended as far as the major boundary L53 to the south-east but this lay beyond the excavation area. Internally, the only identified feature was a pit-type geophysical anomaly G504, which may represent a water pit.

The main fills of the ditches comprised dark grey-brown clay silt with occasional small stones. They produced a small quantity of domestic debris, including 500g of pottery and 200g animal bone.

Ditch G36

Ditch G36 was 0.9m wide and 0.4m deep, with a steep-bsided concave profile and flattish base (Fig. 4.12t).

Ditch G18 (recut as G174/G142)

Ditch G174 was the recut of G18. It was located 38m from ditch G36 and was parallel. It was 1.2m wide and 0.55m deep, with a steep-sided, U-shaped profile and concave base. The southern part of the ditch was much shallower

and narrower indicating that it had been heavily truncated. This suggests that G142, originally interpreted as a shallow pit, is actually a surviving part of the ditch (see Fig. 4.9). The fills produced a small quantity of slag (232g) — a relatively unusual occurrence on this farmstead.

Water pit G504
A large, oval, pit-type geophysical anomaly G504 was located centrally within the field. It was 5m long and 3m wide and is presumed to be a water pit.

Non-domestic enclosure L20
(Fig. 4.11)
Square enclosure L20 lay between enclosures L15 and L84 and, like them, abutted the NW-SE aligned major boundary ditch G47 (L82). To the north-west it was defined by ditch G44 (L15), to the north-east by ditch G49/G50 and to the south-east by ditch G46. There was a 5.5m wide entrance on its north-east side. The enclosure contained a slot G45, pit G177 and post-holes G77 and G78. Although located on the exterior of the enclosure, post-holes G87 are believed to be part of an associated fence or hedge. Not all of this activity was contemporary, as slot G45 was stratigraphically earlier than pit G177.

The main fills of these features comprised mid grey-brown clay silt with occasional small stones. They produced a large quantity of domestic debris, including 2.9kg pottery and 2.8kg animal bone.

Ditches G44, G50 (recut as G49), G46
The enclosure ditches were 0.7m–1.6m wide and 0.2m–0.6m deep, with steep-sided, concave profiles and concave bases (Fig. 4.12g and j). Only ditch G50 on the north-east side showed firm evidence of recutting (by G49). However, the large size of ditch G46 suggests that it too was probably recut.

The main fill of the ditches produced a moderate quantity of domestic debris, including 2.5kg of pottery, amongst which were thirteen sherds of 3rd/4th-century vessels.

Slot G45
Slot G45 was not parallel to the sides of the enclosure. However, it was almost in line with the southern terminal of the entrance, suggesting that it was designed to sub-divide the enclosure. It was 0.5m wide and 0.15m deep, with a rounded, V-shaped profile (Fig. 4.12e).

Post-holes G77, G78
Four post-holes, designated G77 and G78, were located within the enclosure on either side of slot G45. They were less than *c*. 0.5m in diameter and less than 0.15m deep. Some had near vertical sides (Fig. 4.12f) while others were more concave.

Post-holes G87
Two post-holes G87 within *c.* 0.5m of the enclosure ditch are believed to be associated with either a fence or hedge. They were *c*. 0.5m in diameter and no more than 0.2m deep with steep-sided, concave profiles and slightly concave bases (Fig. 4.12h).

Pit G177
Circular pit G177 was stratigraphically later than slot G45. It was 0.85m in diameter and 0.25m deep with a concave profile and flat base.

Possible enclosure L84
(Fig. 4.11)
Enclosure L84 was also located next to the NW-SE aligned major boundary ditch G47 (L82). It was defined by parallel ditch G42, indicating that the enclosure was *c*. 14m wide. However, its full extent is unknown because it continued beyond the limit of excavation. A gap of at least 10m between ditch G42 and enclosure L20 probably indicates the location of an entranceway. The enclosure contained a small pit G175 and a possible water pit G74. The latter is stratigraphically later than ditch G47 and it is, therefore, uncertain if it was in use at the same time as the enclosure.

The main fills of these features comprised mid grey-brown clay silt with occasional small stones. They produced a moderate quantity of domestic debris, including 534g pottery and 1.8kg animal bone. Most of it derived from the upper fills of water pit G74.

Ditch G42
Ditch G42 was parallel to and *c.* 14m north-east of G47 (L82). It terminated to the north-west where an apparently wide entranceway may actually be the result of truncation, and what appears to be an oval pit on the line of the ditch may simply be a less severely truncated part of its base. The northern part of the ditch was 0.8m wide and 0.25m deep, with an asymmetrical, concave profile and base (Fig. 4.12n). However, to the south it deepened to 0.5m and had more of a V-shaped profile (Fig. 4.12p). The position of the primary fill in that segment suggests there may have been a bank on the south-west side of the ditch (Fig. 4.12p). Small quantities of domestic debris were recovered; unusually, they mainly derived from the primary fills.

Pit G175
Circular pit G175 was located *c.* 2m from boundary G47 in the vicinity of water pit G74. It was 1.25m in diameter with a concave profile (Fig. 4.12m).

Earlier pit G178
Pit G178 was located at the eastern extremity of the enclosure but was stratigraphically earlier than major boundary ditch G47. It was *c.* 0.9m in diameter and 0.55m deep with a steep-sided, concave profile and concave base (Fig. 4.12l).

Later possible water pit G74
A large, sub-oval water pit G74 was stratigraphically later than major boundary ditch G47. It was 5m by 3.6m wide at the surface and 1m deep, with a steep-sided, irregular profile and a generally flat base (Fig. 4.12k). The north-east part of the feature sloped more gently and may have been a deliberately created access ramp.

The latest dated pottery from the water pit was a single sherd of 3rd/4th-century material. G74 also produced a copper alloy hair pin (RA 42).

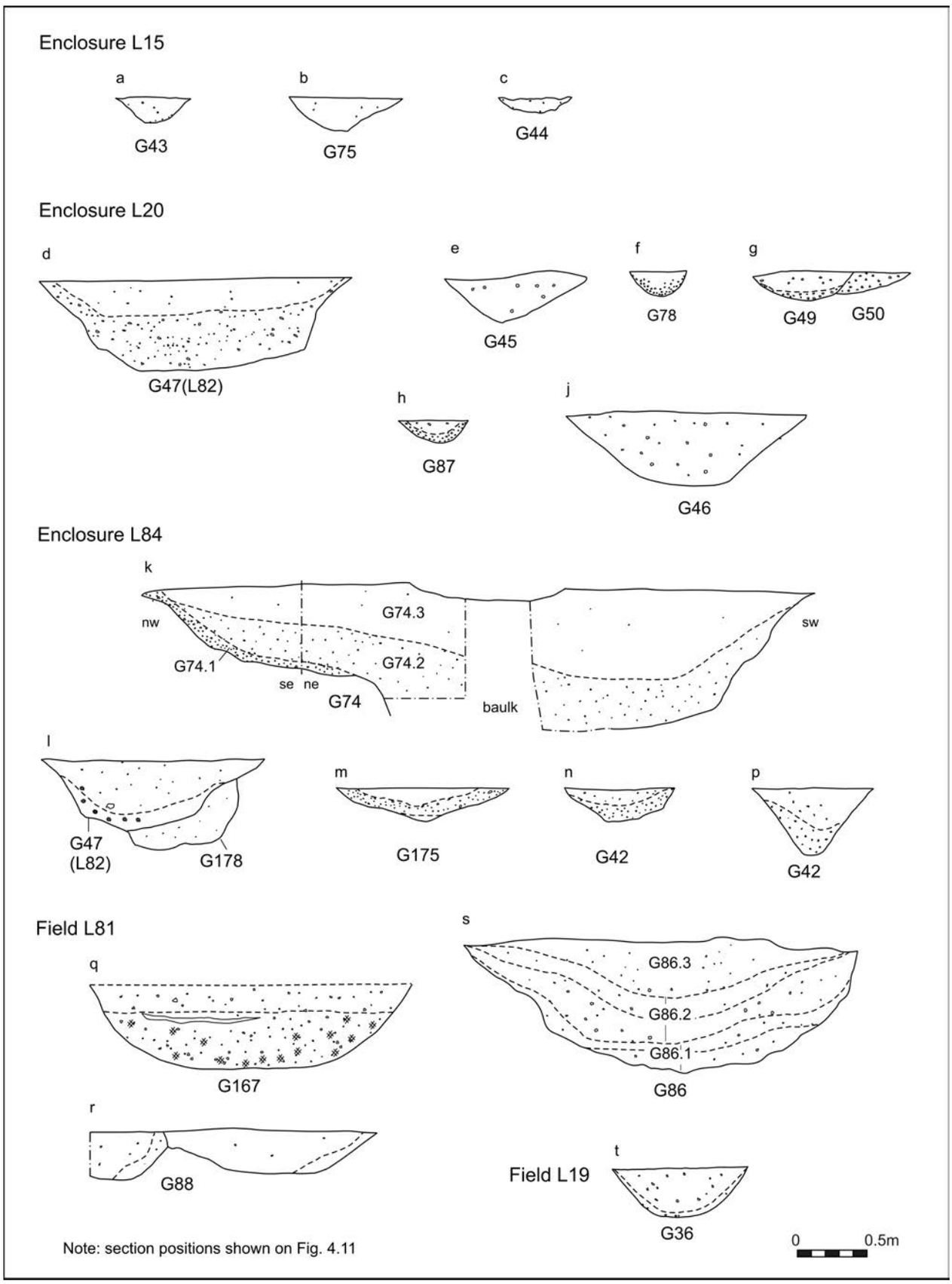


Figure 4.12 Selected sections for non-domestic enclosure L15, L20 and L84, and fields L19 and L81. Scale 1:80

Field L81
(Fig. 4.11)
Field L81 was located to the south-east of domestic enclosure L16 and to the east of the small enclosures attached to NW-SE aligned major boundary ditch G47 (L82). The field was defined to the north-west by ditch G39 (assigned to domestic enclosure L16) and to the north-east by ditch G36 (assigned to field L19). Its south-east limit may have been major boundary L53. The field contained very few features, most of which were concentrated in the same area. They included a stone surface G161, water pit G86 and pits G88 and G167.

The main fills of these features comprised mid grey-brown clay silt with occasional small stones. They produced a moderate quantity of domestic debris, including 4kg pottery, 2.7kg animal bone and a small number of iron objects. However, the vast majority of this material derived from stone surface G161.

Stone surface G161
(Fig. 4.11A)
The remains of a stone surface G161 were located close to enclosure L20 but were only observed in trial trench 17. The surface comprised limestone fragments, 50mm–0.2m in size, set within a grey-brown silty clay. They occupied a slight hollow, probably a localised natural variation which may have assisted their survival. The hollow was 0.9m wide, 2m long and 0.1m deep with a shallow profile and flat base. Further stones, possibly derived from this surface, were found in the vicinity where they had clearly been disturbed by ploughing.

The stones were associated with a large quantity of domestic debris including 3.8kg of pottery, which may have been used as part of the surface. The latest dated pottery comprised 16 sherds of 3rd/4th-century date. In addition, 12 nails, an iron key (RA 17), a hobnail (RA 15), an unidentifiable iron object (RA 16) and an amber-coloured glass fragment (RA 8) were recovered.

Water pit G86
(Pl. 4.4)
Water pit G86 was centrally located at the north-west end of the field. It was *c*. 3.5m in diameter and 1m deep, with a steep-sided profile and uneven, concave base (Fig. 4.12s).

Pits G88, G167
Three pits G88, two of which were intercutting, and an elongated pit G167 were located adjacent to water pit G86. Pits G88 were all circular in plan, *c*. 1.5m in diameter and 0.3m deep with steep-sided profiles and flat bases (Fig. 4.12r). However, pit G167 was 2m wide and 0.4m deep with steep sides and a flat base (Fig. 4.12q).

Peripheral activity focus L80 to the south-west of the farmstead
(see Fig. 4.2 and 4.11)
The only evidence for activity identified to the south-west of major boundary G47 (L82) comprised a large, pit-type geophysical anomaly, interpreted as a water pit G503, and two post-holes G505.

Large water pit G503
A large, sub-oval feature G503 was identified by geophysical survey *c*. 5m to the south-west of the major boundary ditch G47. Because of its size — 9m by 5m — it is interpreted as a water pit or pond.

Post-holes G505
Two circular post-holes G505 were located *c*. 3m to the north-east of water pit G503 within the open-area excavation. They were situated 0.2m apart and were 0.3m–0.5m in diameter and no more than 0.1m deep.

Field L9 to the north of major boundary/trackway
(see Fig. 4.2 and 4.13)
Field L9 lay to the north-west of the major boundary/trackway L8 and only a small part of it fell within the excavation area. It was defined to the south by parallel ditches G70 and G71, which are presumed not to be contemporary. They represent the continuation of the alignment of major boundary/trackway L8. One of the ditches terminates, suggesting that the south-east corner of the field could be accessed from the trackway *via* a 2.5m wide entranceway. The field was defined to the north-east by ditch G66, a continuation of one of the major boundary/trackway ditches which had changed direction. With the exception of a small pit G118, which truncated the north end of ditch G70, the field was devoid of evidence of activity.

Plate 4.4 Water pit G86 (L81, Farmstead 4) from N, with 1m scale

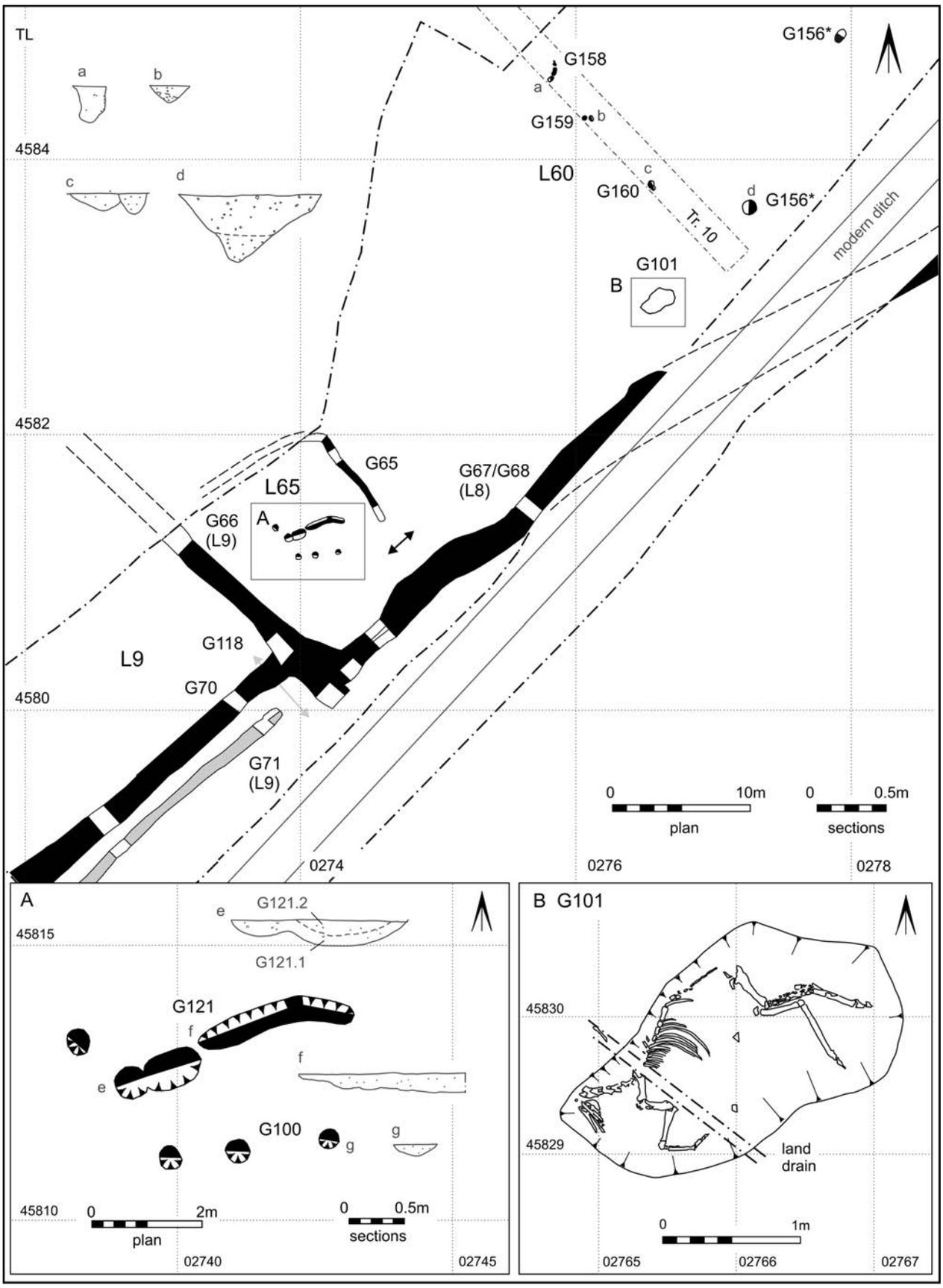


Figure 4.13 Overall plan of field L9 and L60, and non-domestic enclosure L65 (not to standard scale), with inset plan for possible structure G100/121 (scale 1:100) and horse burial G101 (scale 1:40), with selected sections (scale 1:80)

The ditch fills comprised mid grey-brown silty clay with frequent small to medium stones. They produced a large quantity of domestic debris, including 3.8kg of pottery and 2.4kg of animal bone which included a substantial portions of the skulls of cattle and horse. Some of this material may be residual and derived from the Phase 3 settlement that was located in this area. However, it is interesting that the majority of the debris was recovered from the south-east corner of the field, next to domestic enclosure L16.

Ditch G66

Ditch G66, which formed the north-east boundary of field L9, joined the northern ditch of the SW-NE aligned major boundary/trackway ditch G67, suggesting that they were dug at the same time. It was observed for 67m within the excavation area and transects 54 and 55, but not transect 56, suggesting it may have changed direction. The ditch was 1.65m wide and 0.55m deep, with a steep-sided, V-shaped profile; to the south-east it widened and deepened.

Within the excavation area, a large quantity of domestic debris was present in the ditch. This comprised 2.7kg of pottery including a flagon that had been repaired (Fig. 7.2 P7) and 1.3kg of animal bone including a substantial portion of a cattle skull from the primary fill. However, only a tiny quantity was recovered from the segments excavated in the transects confirming that these were located away from the main domestic core of the farmstead.

Ditches G70, G71

Ditches G70 and G71 were parallel and 2m apart; they formed the south-east side of the field. Although they are unlikely to have been open at the same time, it is unclear which was the earlier. Ditch G70, which joined ditch G66, was 1.85m wide and 0.65m deep, with a steep-sided, concave profile and concave base. In contrast, ditch G71, which terminated before reaching G66, was much smaller — 0.75m wide and 0.4m deep with a V-shaped profile.

The main fills of both ditches produced a large quantity of domestic debris, including 1.1kg of pottery and 400g of animal bone. The majority of this material derived from the north-east parts of the ditches.

Later pit G118

A circular pit G118 was dug into the east end of ditch G70. It was 0.65m in diameter and 0.2m deep, with a steep-sided, asymmetrical profile and flat base. Its main fill — yellow-brown silty clay with occasional small stones — was distinct from those of the ditches. It produced a moderate quantity of domestic debris, including most of a horse skull.

Field L60 and non-domestic enclosure L65 to the north of major boundary/trackway

(see Fig. 4.13)

Field L60 lay on the north side of the major boundary/trackway L8, next to field L9. Unlike the latter, field L60 did contain some evidence for activity, albeit of an uncertain nature and date. Two activity foci, *c*. 50m apart, were identified. In the southern corner of the enclosure, L65 was defined by a ditch and contained a possible post-built structure. The other focus was unenclosed and contained a possible post-built structure G158, along with two sets of post-holes G159 and G160. Slightly away from the main cluster of features was a horse burial G101 and two pits G156.

These features were filled by mid brown silty clay with occasional small stones. Only a tiny quantity of domestic debris was present.

Ditch G65 associated with enclosure L65

Ditch G65 appeared to have been dug to create a small enclosure in the southern corner of field L60. It was not fully exposed but the ditch turned within the excavation area, suggesting that the enclosure may only have been *c.* 11 by 14m in extent. The ditch was 0.5m wide and 0.2m deep with a concave profile and flat base. It terminated to the south-east, indicating the location of an entrance.

Possible structure G121/G100 associated with enclosure L65

(Fig. 4.13A)

A possible post-built structure, comprising the truncated remains of a curvilinear gully G121 and four post-holes G100, was located centrally within the small enclosure L65. The gully comprised two short lengths which were *c*. 0.5m wide and less than 0.25m deep, with concave sides and bases (Fig. 4.13e and f). The post-holes lay within *c*. 2m of the gully. The three to the south were on an approximately west-east alignment. All the post-holes were 0.3m–0.45m in diameter and less than *c*. 0.15m deep, with concave profiles and slightly concave bases (Fig. 4.13g).

Horse burial G101

(Fig. 4.13B, Pl. 4.5)

An articulated, adult horse skeleton G101, lying on its right hand side, was found in a shallow grave close to the south-east side of the field. The grave was 2.3m long, 1.8m wide and 0.3m deep with shallow, concave sides and a slightly concave base. The skeleton was well preserved except for the skull and the left side of the pelvis which had been damaged by ploughing. There was also some minor disturbance from the digging of a modern land drain. The fill contained a single residual sherd of late Iron Age/early Roman pottery.

Post-holes G158, G159, G160

Nine post-holes were located in trial trench 10, clustered within 12m of each other. All were *c.* 0.35m in diameter and less than 0.35m deep with vertical sides. Post-holes G158 appeared to be in a slightly curving row and had vertical sides (Fig. 4.13a). Two post-holes G159 were situated *c*. 3.5m to the south-east of G158 and were 0.2m apart. They had a shallow V-shaped profile (Fig. 4.13b). Two intercutting post-holes G160 were located *c*. 6m to the south of G159. The earlier post-hole was 0.45m in diameter and 0.15m deep. Both had near vertical sides and concave bases.

Pits G156

Two circular pits G156 were located 13m apart to the north-east of the horse burial G101. They were *c*. 1m in diameter, and 0.15m and 0.5m deep, with steep-sided profiles and concave bases (Fig. 4.13d).

Minor additions to the enclosure system L57, L58 and L67

(Fig. 4.14)

During the lifetime of the farmstead a number of its boundary ditches were recut. However, in addition, a limited number of completely new ditches were dug. Identification of these has been based on stratigraphical relationships and, in some cases, their unusual orientation. To distinguish these ditches from the farmstead's original enclosure system, and to avoid over complication, they have been assigned to separate land use areas rather than to a sub-phase.

The most substantial new ditch was G32 (L58) which sub-divided the original enclosures L14 and L16. The course of the new ditch passed through the original entranceways of the enclosures and created a narrow strip of land at the back, *i.e.* south-east of both enclosures. It respected buildings G433 (in L14) and G481 (in L16) suggesting that they remained in use. The only part of the new ditch to be recut G108 corresponded to the position of building G481, again suggesting that this building was still in use. The position of ditch G6 (L67) truncating the southern corner of enclosure L10 suggests that the enclosure may have gone out of use.

In summary, the land use areas comprising new ditches are:

L57 — ditches G9 and G11 to the south-east of enclosure L12, ditch G10 which sub-divided enclosure L12 and ditches G143 and G144 in the middle of enclosure L14;

L58 — ditch G32 (and its recut G108) sub-dividing enclosures L14 and L16;

L67 — ditch G6 may suggest that enclosure L10 no longer existed at this time.

The ditch fills varied from dark grey-brown silty clay with occasional small stones to light yellow-brown silty clay with occasional small stones. They produced a large quantity of domestic debris, including 7kg of pottery and 500g of animal bone. However, the majority of this material was derived from ditches subdividing the two domestic enclosures, *i.e.* G143 and G144 within L14, G32 (and its recut G108) within L14 and L16. This suggests that the domestic enclosures continued to function after they were sub-divided. The primary fill of ditch G32 contained a single sherd of 3rd/4th-century pottery which might indicate when this sub-division occurred.

Ditches G9 and G11, L57

(see Fig. 4.9)

Ditches G9 and G11 were located to the south-east of enclosure L12. Ditch G11 was on more of a north-south alignment than the original enclosure ditches but terminated *c.* 1.3m from ditch G17, suggesting they were broadly contemporary. It was 0.8m wide and 0.2m deep, with a steep-sided, asymmetrical profile. Towards the south it narrowed and appeared to merge with enclosure ditch G12. The short length of ditch G9 visible within the excavation area was on a similar alignment to the original enclosure ditches. To the north-west it joined the ditch defining the eastern corner of enclosure L12, which must have still been open at this time. It was 0.7m wide and 0.2m deep, with a concave profile and base.

Internal ditch G10, L57

(see Fig. 4.9)

Ditch G10 was 9m long and located within enclosure L12. It terminated to the south-east and joined enclosure ditch G15 to the north-west. It was 0.8m wide and 0.2m deep, with a concave profile and flat base.

Ditches G143 and G144, L57

(see Fig. 4.6)

Ditches G143 and G144 were located within enclosure L14 to the north of possible building G433 and may have served a drainage function. They were on slightly different alignments and were *c.* 5m long, *c.* 0.5m wide and no more than 0.3m deep, with steep-sided, concave profiles.

Their main fills produced a moderate quantity of domestic debris, including 397g of pottery amongst which were five sherds of 3rd/4th-century material.

Ditch G32 (recut as G108), L58

Ditch G32 subdivided the two domestic enclosures L14 and L16. It was 0.85m–1.6m wide and 0.25m–0.5m deep,

Plate 4.5 Horse burial G101 (L60, Farmstead 4) from SE, with 0.4m scale

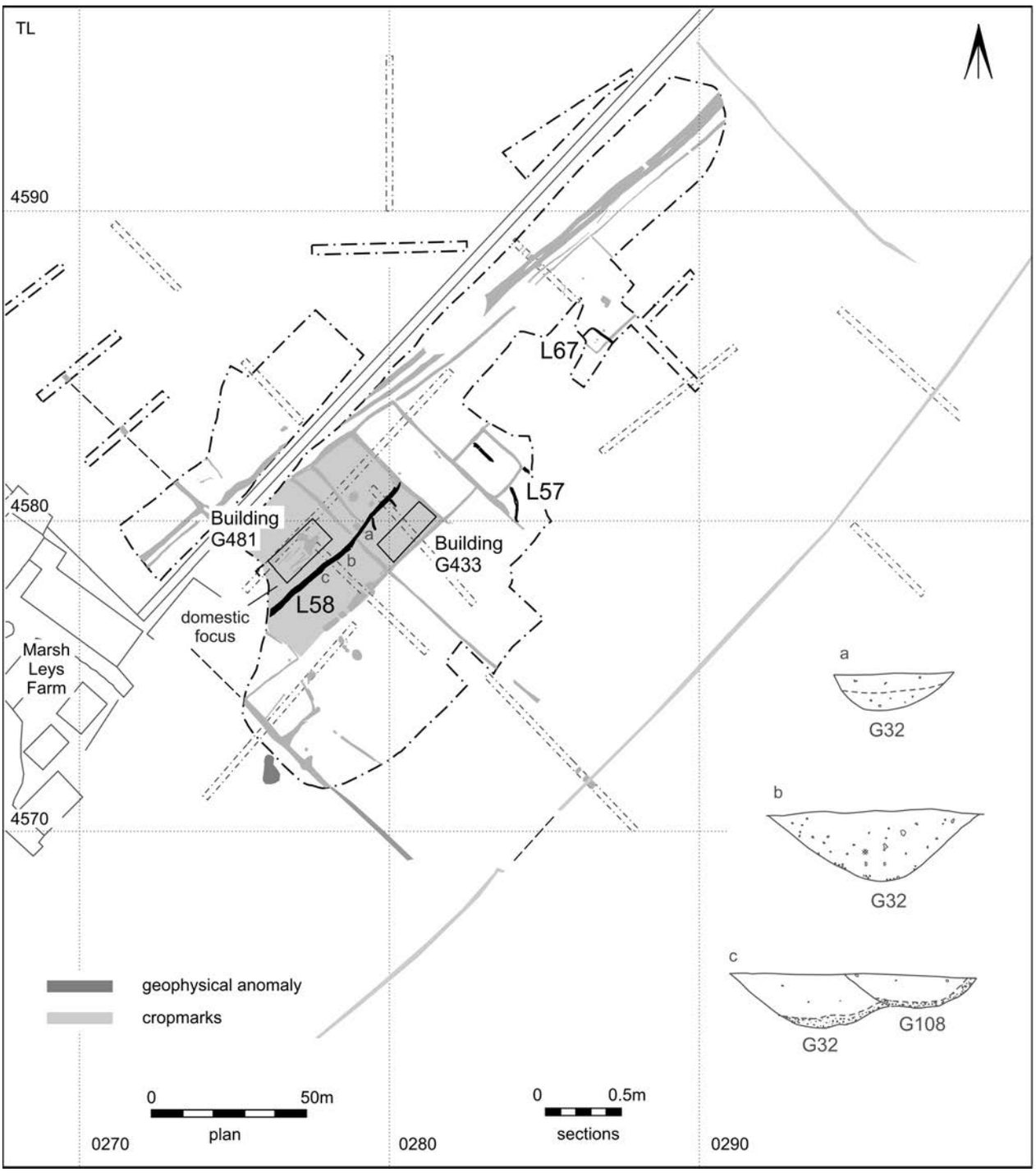


Figure 4.14 Overall plan of minor additions to the enclosure system L57, L58 and L67 (scale 1:2000), with ditch sections (scale 1:80)

with a steep-sided, irregular, concave profile and base (Fig. 4.14a and b). The wider and deeper part of the ditch lay within enclosure L16 where it may have been more regularly cleaned out and recut. However, only one short length of definite recut G108 was identified, in the vicinity of possible building G481. It was 0.8m wide and 0.45m deep, with a steep-sided, U-shaped profile and concave base (Fig. 4.14c).

The primary fill of the original ditch G32 produced 1.3kg of pottery, including a single sherd of 3rd/4th-century date. The main fill also produced a large quantity of domestic debris, including 2.4kg of pottery amongst which were five 3rd/4th-century sherds. The main fill of the recut also produced large quantities of domestic debris, including 2.7kg of pottery and possible portable kiln/oven furniture (Fig. 7.5 FC3 and FC4).

Ditch G6, L67
(see Fig. 4.10)
Ditch G6 was *c.* 0.9m wide and less than 0.25m deep, with a concave profile and flat base.

Plate 4.6 Aerial photograph of Area 2 with Farmstead 5 enclosure system clearly visible
(CgMs Consulting copyright reserved)

III. Farmstead 5

(Fig. 4.15, Pl. 4.6 and Table 4.2)

Farmstead 5 lay *c*. 320m to the south-west of Farmstead 4 and replaced the Phase 3 Farmstead 3. Some of the earlier ditches were incorporated into the new enclosure system and may have remained in use. The rectangular enclosure system of the new farmstead articulated around a major SW-NE aligned boundary L31/L61 and a second major boundary L32 (Pl. 4.6) aligned NW-SE. The parallel boundary ditches L61 and L31 may have defined a trackway, although it is less convincing than the one on Farmstead 4. The enclosure system covered an area of *c*. 2ha.

At least eighteen enclosures or fields were identified; most of them were physically linked to the major ditched boundaries. As with Farmstead 4, the enclosures have been classified as either domestic, non-domestic or fields on the basis of evidence for internal activity and the quantities of domestic debris recovered from them. Given the relatively small number of sub-surface features, the identification of two domestic foci is more tentative than on Farmstead 4 and has been more dependent on the analysis of the distribution of domestic debris across the farmstead. They were probably located in the vicinity of L48/L50/L71 and L41. Pits in L48 produced perforated clay plates and clay slabs, possibly derived from an oven or kiln.

The land to the north of major boundary L31 was divided into fields L33, L34 and L83 which, with the exception of quarry pits around the edge of field L33, typically lacked evidence for internal activity. An extensive band of intercutting pits L35 shared the same alignment as the enclosure system suggesting that quarrying took place within pre-existing boundaries. However, it occurred both to the north and south of major boundary L31.

The area between major boundary L31 and domestic focus L48/L50/L71 was occupied by a number of narrow enclosures L49, L51, L62 and L79. With the exception of a Phase 3 water pit and one inhumation, they contained no evidence for activity and are, therefore, interpreted as fields.

A series of small enclosures L36, L37, L38, L39 and L40 were attached to the east side of the NW-SE aligned major boundary L32. They produced little direct evidence for domestic activity. The interior of enclosures L38 and L40 were dominated by intercutting quarry pits. A triangular open area L55, between two of the enclosures, is intriguing and may represent a major entranceway into the farmstead from the west. Another concentration of quarry pits G402 (L41) was located to the east of these enclosures, although no physical remains of enclosing boundaries were identified.

Approximately 110m to the north-east of the main excavation area, a possible enclosure L77 was attached to major boundary L31 (Fig. 4.15).

The only evidence for activity to the west of the NW-SE aligned major boundary ditch L32 was a cluster of intercutting quarry pits and an inhumation burial L76.

As with Farmstead 4, the enclosure system was clearly maintained over a period of time — many of the ditches had been recut, albeit often only in short lengths. In addition, the two enclosures on either side of the possible major entranceway L55 were, at some point, sub-divided.

A very large quantity of pottery (*c.* 61kg) and a moderate quantity of animal bone (*c.* 29.9kg) were recovered from this farmstead — mostly from the possible domestic foci L48/L50/L71 and L41. A wide range of other everyday objects included a hair pin, hobnails, coins, a glass vessel, knives and quernstones. Items directly associated with buildings (a latch lifter, tumbler lock key, timber dog and t-clamp), agriculture (pruning hook and plough coulter) and craft activities (wood working saw, balance arm, metal-working punch) were also found. The presence of large quantities (5.6kg) of metallurgical residues, mainly associated with field L33, demonstrates not just that iron working continued to take place but that it was in a similar location to that in Phase 3 Farmstead 3.

The animal bone assemblage (cattle, sheep/goat, pig, horse and then dog) was similar to Farmstead 4. Of

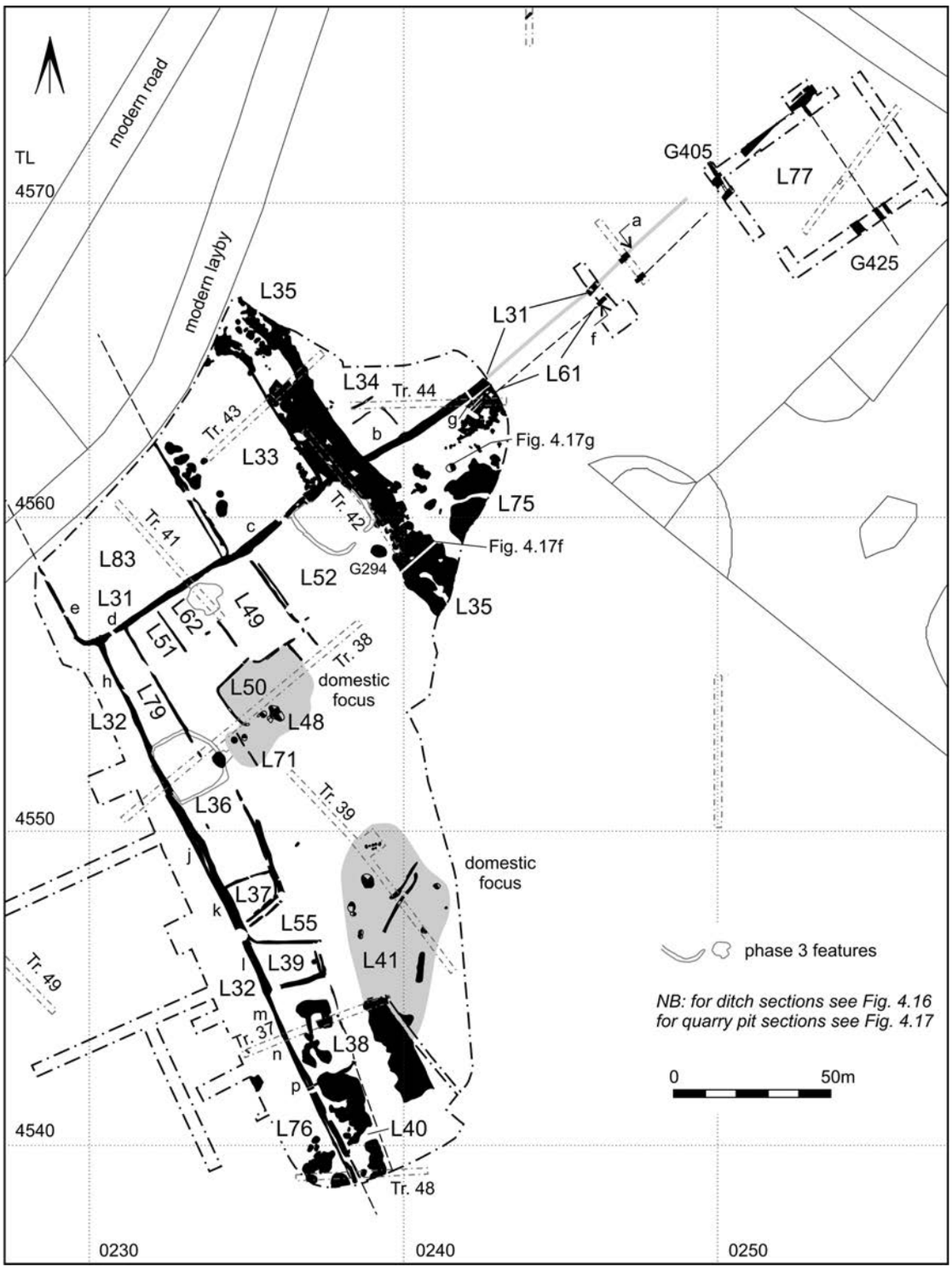


Figure 4.15 Farmstead 5 overall plan. Scale 1:2000

particular interest is the cattle bone from pit G325 (L48), which displayed chop marks indicative of the work of a single butcher over a short period of time. Overall, the quantity of dog bones in the assemblage is higher than in Farmstead 4 and a number of possible dog burials, including smaller types, were identified. Charred plant remains indicate that the inhabitants were exploiting woodland for fuel and cultivating wheat.

Major linear boundary L31/61

(Fig. 4.15, Pl. 4.7)

SW-NE aligned boundary L31 was integral to the entire enclosure system. It incorporated part of the earlier Phase 3 enclosure L27. At its south-west end, where it turned to the north-west, it formed a junction with major boundary L32 (Pl. 4.7). Different lengths of the ditch were assigned individual G numbers — *e.g.* G201, G202, G204 — to assist in the analysis of the adjacent enclosures. Cropmark evidence suggests that boundary L31 ran for *c.* 430m to

L no.	*Function*	*Extent (sqm)*	*Internal features*	*Pottery (kg)*	*Animal bone (kg)*	*Metallurgical residues (kg)*
33	Field	>1,750	• Water pit • Possible water pit • Quarry pits • Cremation burial	5.5	1.7	1.6
34	Field	>1,000	• Possible structure • Small pits	0.12	0.17	-
35	Linear band of quarry pits		• Quarry pits • Post-holes	2.8	0.48	1.5
36	Non-domestic enclosure	650	• Post-holes • Large pit	1.8	1.4	-
37	Later non-domestic enclosure	200	• None	0.09	0.46	-
38	Non-domestic enclosure	720	• Quarry pits	2.2	0.7	-
39	Later non-domestic enclosure	210	• Large pit • Cremation burial	1.7	0.54	-
40	Non-domestic enclosure	>400	• Quarry pits	-	-	-
41	Unenclosed domestic focus	>3,400	• Structural slot • Water pit • Small pits • Post-holes • Quarry pits	6.8	0.9	-
48/71	Domestic focus	450	• Water pit • Large pits • Structural slots	29.9	14.1	0.49
50	Domestic enclosure	450		1.2	3.6	
49	Narrow non-domestic enclosure	600	• Small pits	0.28	0.69	0.01
51	Narrow non-domestic enclosure	600		0.11	0.4	-
52	Field	>2,000	• Water pit	0.75	0.27	0.25
55	Non-domestic enclosure	150		-	-	-
62	Narrow non-domestic enclosure	400	• Inhumation	-	-	-
75	Field	>1,250	• Quarry pits	1.5	0.62	0.55
76	Peripheral activity focus		• Inhumations • Quarry pits			
77	Field	>1500		0.10	0.05	-
79	Non-domestic enclosure	350		-	-	-
83	Field	>1,800		-	-	-
Total				**54.95**	**26.16**	**4.4**

Note: does not summarise the major linear boundaries

Table 4.2 Summary of enclosures and fields in Farmstead 5

the edge of Farmstead 4. However, it was not identified in either the excavation or any of the transects in this area. Boundary L61 ran parallel to and *c.*3m to the south of the north-east length of L31, suggestive of ditches defining a trackway. It was traced for *c.*56m and comprised ditches G301, G302 and G406.

The north-east length of boundary ditch L31 was clearly recut at least once (G203 and G205). The form of some of the ditch's secondary fills suggests the presence of a bank on its south side.

The main fills of the ditches comprised mid/dark grey-brown silty clay with occasional small stones. Ditches L31 produced large quantities of domestic debris in contrast to the tiny quantities from those assigned to L61. This included pottery (3.5kg), animal bone (2kg) and a variety of other objects, including domestic or craft artefacts and several coins. A small quantity of metallurgical residue was also recovered.

Ditches G201, G377 (recut as G202 and then G203), G204 (recut as G205), (L31)

SW-NE aligned major boundary ditch G201, G202, G204 and its recuts G203, G205 were typically *c.*0.85m wide and up to 0.65m deep with an irregular, U-shaped profile (Fig. 4.16a-d). An exception was recut G203 which was 0.5–2m wide and 0.25–0.6m deep (Fig. 4.16b and c). The fills within some of the ditch segments may be derived from a bank on the south side (Fig. 4.16a and c).

The ditch produced a large, wide-ranging quantity of domestic debris, including pottery, animal bone and metal artefacts. The latest pottery recovered from the recuts comprised two sherds of 2nd/3rd-century types. They also contained part of a coin dated to AD 98–100 (RA 71).

Ditch G200 (L31)

At its south-west end the major boundary ditch turned onto a NW-SE alignment. This ditch length G200 was at

Plate 4.7 Major linear boundary L31 (Farmstead 5) where it changes direction to SW

least *c*.30m long and continued beyond the limit of excavation. It was *c*.1m wide and 0.25m deep with a concave profile and flat base (Fig. 4.16e).

The secondary fill of one of the excavated segments close to the corner produced seven coins, all found within a 1m x 0.8m area. Of these, only RA 122 was closely datable, to AD 260–290; the others were dated to the late 3rd–4th century AD (RA 121, 123, 124, 130, 168 and 169).

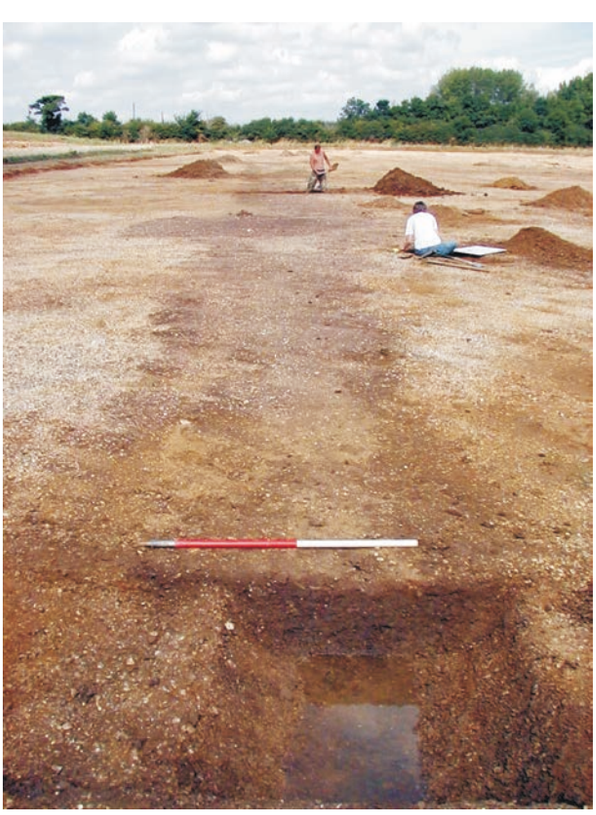


Plate 4.8 Major linear boundary L32 (Farmstead 5) during hand excavation from SE, with 1m scale

Ditches G301, G302, G406 (L61)

Three parallel ditches G301, G302 and G406 were located *c*.3m to the south of boundary L31. Adjacent ditches G301 and G302 within the main excavation area were similar — *c*.0.5m wide and 0.45m deep with U-shaped profiles (Fig. 4.16g). Ditch G406, located in transects 42, 62 and 66 to the east, appeared to be on the same alignment but its profile and dimensions were different. It was 1.8m wide and 0.55m deep with a U-shaped profile and concave base (Fig. 4.16f). Together, these ditches produced a tiny quantity of domestic debris.

Major linear boundary L32

(Fig. 4.15, Pl. 4.8)

SE-NW aligned boundary L32 was integral to the enclosure system and appears to represent its western limit. Part of the boundary incorporated the earlier Phase 3 enclosure L21/22. Where possible, the main boundary ditch has been assigned different G numbers for lengths broadly adjacent to individual enclosures, *i.e.* G224, G235, G264, G240 and G266 (from north to south).

There is clear evidence for renewal of the boundary, *e.g.* G225 replacing G224 to the north. However, many of the recuts appear to be associated with the re-establishment of individual enclosures. During analysis these recut ditches were assigned to the relevant enclosure L number.

The positioning of fills within the ditches provides only ambiguous evidence for the location of an associated bank. The main fills comprised brown-grey silty clay with frequent small stones. They produced a large quantity of domestic debris, including pottery (2.5kg) and animal bone (1.2kg). A possible 'special' deposit G235.4 was found in one part of the ditch.

Ditches G224 (recut as G225), G235, G264, G266

The ditches of the major boundary were 1.5–2m wide and 0.45–0.7m deep, with a steep-sided profile and flattish base (Fig. 4.16h-l). However, towards the south the ditch was heavily truncated and much smaller (Fig. 4.16m and p) except close to entrances (Fig. 4.16n). There was no

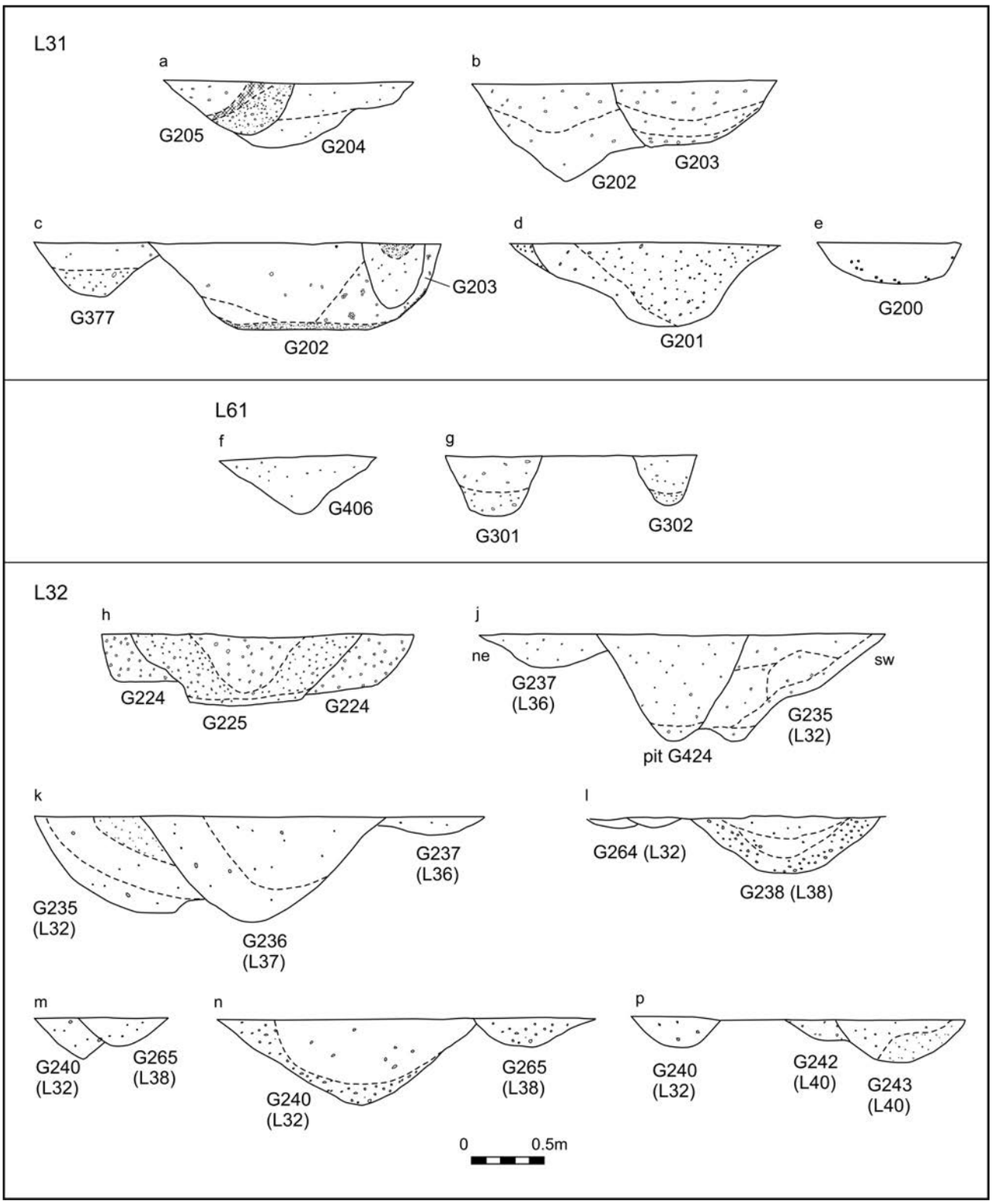


Figure 4.16 Selected ditch sections for boundary L31 and L61. Scale 1:80

clear pattern in terms of which side of the ditch the upcast was placed, so that the existence of an associated bank cannot be inferred.

Two segments towards the south contained traces of an earlier ditch G267 which were not visible in other segments. This was at least *c*.0.5m wide with shallow concave profile. The northern length of L32 was recut as G225, which was 0.9m wide and 0.6m deep with a U-shaped profile (Fig. 4.16h). Other recuts were identified but these appear to be more clearly associated with the creation or redefinition of individual enclosures.

The latest dated artefact from the large assemblage recovered from the main fill of the recuts was a single sherd of 3rd/4th-century pottery.

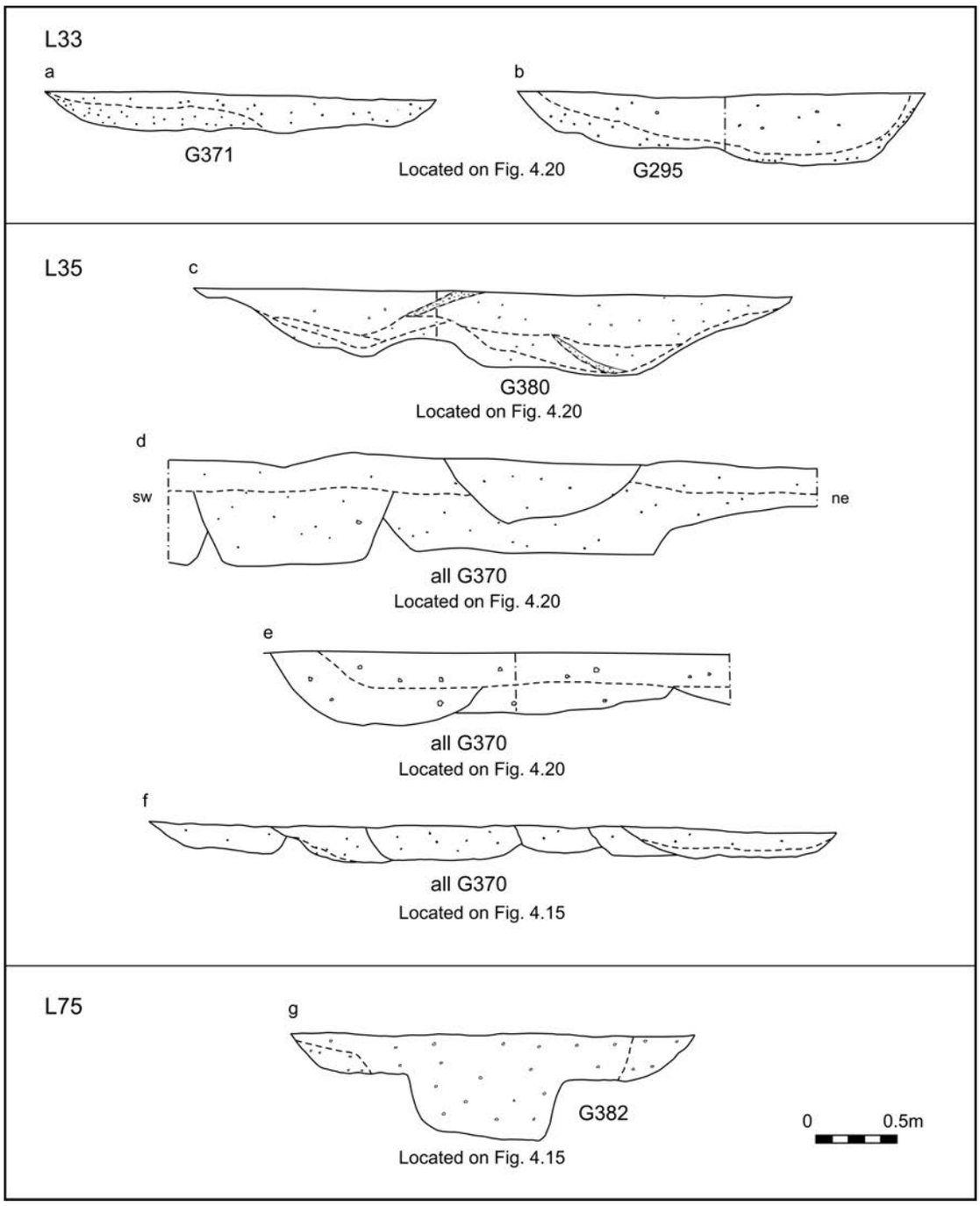


Figure 4.17 Selected quarry pit sections for L33, L35 and L75. Scale 1:80

'Special' deposit G235.4

Of particular interest is 'special' deposit G235.4, recovered from the ditch adjacent to enclosure L36 (see Fig. 4.22) at the interface between its primary and main fills. It comprised three semi-complete pots (7355), (7357) and (7359) in different fabrics — fine greyware (R06C) (Fig. 7.2 P10), black micaceous (R08) and shell (R13). They appeared to have been placed on their sides, adjacent to an upside-down dog skull.

Domestic enclosure L50

(Fig. 4.18)

A small enclosure L50 lay *c*.30m from both major boundaries L31 and L32. It was defined to the west by ditch G269 and to the north-east by several shorter lengths of ditch G275 and G277. No sub-surface evidence for a boundary on the south-east side was located. However, a weak, linear geophysical anomaly was identified in this area during the evaluation. Three possible entranceways into the enclosure were identified. Pit cluster L48 falls within the enclosure, if the geophysical anomaly does represent its south side. No other internal features were identified.

The main fills of the ditches comprised grey-brown clay silt with small stones and occasional charcoal flecks. They produced a moderate quantity of domestic debris, including 1.2kg pottery and 3.6kg animal bone.

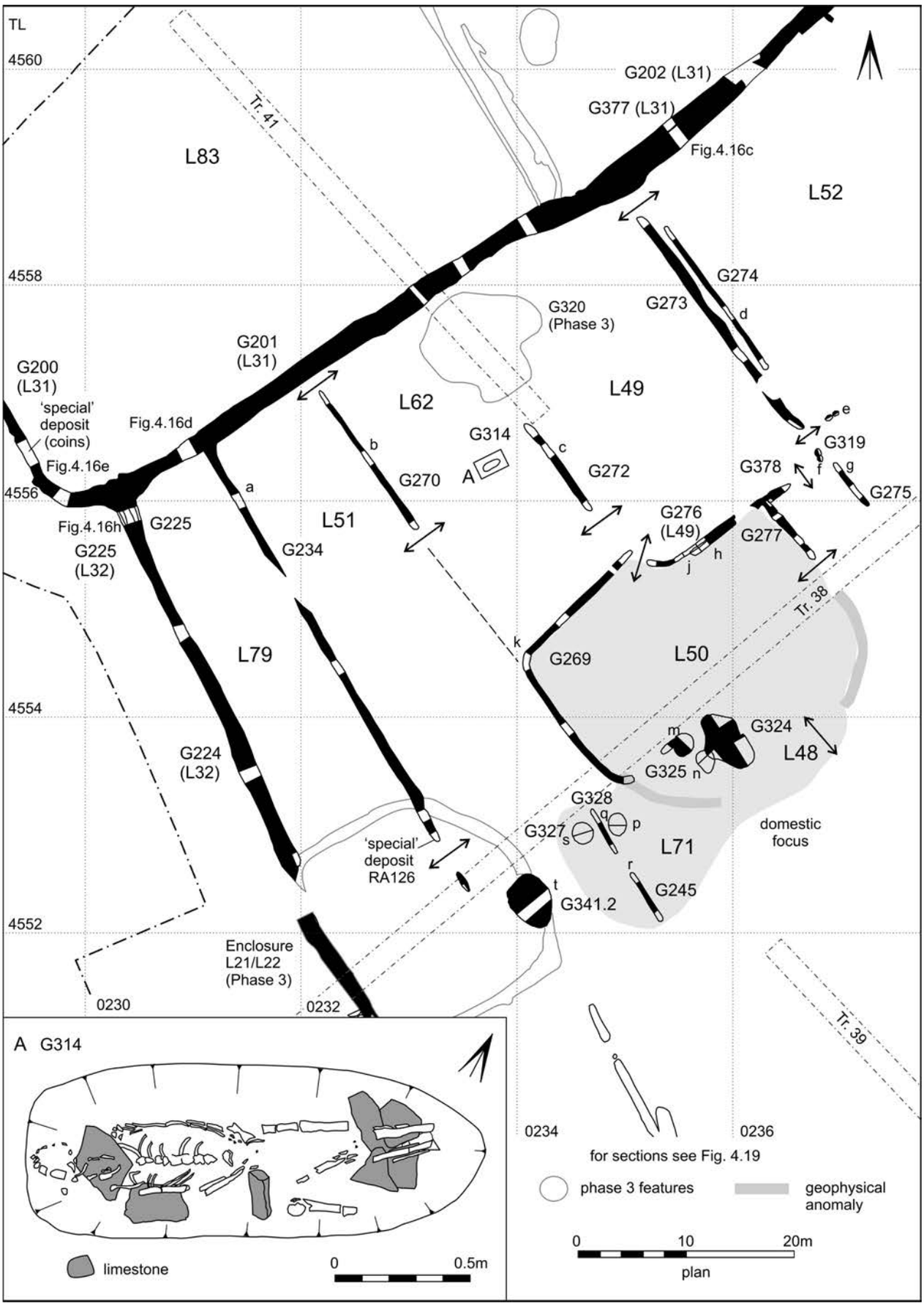


Figure 4.18 Overall plan of central part of farmstead showing domestic core L50, L48 and L71, narrow fields L79, L51, L62 and L49 (scale 1:500), with inset plan for inhumation burial G314 (scale 1:20)

Ditches G269, G277

The enclosure was defined by insubstantial ditches G269 to the west and G277 to the east. Geophysical survey suggests that these ditches were originally bigger than they appeared to be from the excavated evidence. On the north side, ditch G276 (assigned to L49) appeared to truncate G277 indicating that it was later. G269 was 0.65m wide and 0.3m deep with a U-shaped profile (Fig. 4.19k). G277 was 0.7m wide and 0.30m deep with a U-shaped profile (Fig. 4.19h).

Amongst the pottery assemblage were three sherds of 2nd-century and five sherds of 3rd/4th-century types. Other significant finds included a coin dated to AD 260–96 (RA 140).

Domestic foci L48 and L71

(Fig. 4.18)

L48 and L71 comprised a cluster of features in the vicinity of enclosure L50. They included water pit G341.2, pits G324, G325, G327 and G328 and structural slots G245 (L71). The nature of these features and the huge quantity of domestic debris they produced suggest that this area was one of the farmstead's domestic foci.

The main fills of these features comprised mid brown-grey sandy clay with frequent small stones and charcoal flecks. The lower fills, most noticeably within the water pit, were considerably darker. The main and upper fills produced the bulk of the domestic debris. Overall, nearly 30kg of pottery and 14kg of animal bone, the largest quantity from this farmstead, were recovered from these features. The large cattle bone assemblage from pit G325 showed a consistent pattern of chop marks, indicating the slaughter and butchery of several cattle over a short period of time. In addition, fragments of oven or kiln furniture were recovered, mostly from pits G324 and G325.

Water pit G341.2 (L48)

Water pit G341.2 represents the redigging of an earlier Phase 3 water pit G341.1. It was 5m long, 3.7m wide and 1.3m deep. Its steep-sided profile was slightly more gradual on the south-west side (Fig. 4.19t).

The sterile, lower fills of the water pit were dark but not obviously waterlogged. The main fills produced a moderate assemblage of domestic debris (Fig. 7.2 P13).

Pits G327, G328 (L48)

(Pl. 4.9)

Two adjacent pits on either side of a structural slot G245 lay *c*.5m north-east of the water pit. Both pits were circular, *c*.2m in diameter and less than 0.9m deep. Both had steep-sided profiles, although one was U-shaped while the other was almost V-shaped (Fig. 4.19p and s).

The majority of the domestic debris from these pits was in the upper fills. The 8kg of pottery from pit G328 was the single largest assemblage from any feature within the entire excavations (Fig. 7.2 P14-P17). It included a single sherd of 3rd/4th-century material. It also produced sufficient oven/kiln furniture (876g) to suggest the presence of such a structure in the vicinity. The only other significant artefact was an iron knife.

Pits G324, G325 (L48)

Three pits, two of which were intercutting, were located *c*.8m to the north-east of pit G328. The largest G324 was sub-oval in plan, 6m long, 4m wide and 0.7m deep with a wide, concave profile and flat base (Fig. 4.19n). This pit was truncated by one of the two pits assigned to G325. The latter were both ovoid in plan, *c*.2.15m long and 1.85m wide. One was 0.45m deep, the other 0.8m. Their profiles also differed slightly (Fig. 4.19m and n).

Plate 4.9 Two adjacent pits G327 and G328 on either side of slot G245 (L71, Farmstead 5), with 1m scale

These pits contained very similar deposits. The primary fills comprised dark blue-grey clay silt with frequent small stones and moderate quantities of domestic debris. The secondary fills were not unlike the primary fills but were less stony and produced large quantities of domestic debris, including 5.1kg of pottery (Fig. 7.3 P18-P20) and 3.7kg of animal bone. The tertiary fills comprised grey-brown silty clay with occasional small stones and charcoal flecks. These produced a very large quantity of domestic debris, including 11kg of pottery and 8.5kg of animal bone. Amongst the pottery assemblage were two sherds of 2nd/3rd-century types and three sherds of 3rd/4th-century types. A moderate quantity of fired clay and slab fragments were recovered suggesting the presence of an oven in the vicinity. The animal bone assemblage from pit G325 is particularly interesting because it exhibited a consistent pattern of chop marks.

Structural slots G245 (L71)

Two structural slots G245, on the same NW-SE alignment and separated by a gap of 2m, were identified within the pit cluster. Both were similar — *c*.5m long, 0.4m wide and 0.2m deep with U-shaped profiles and flat bases (Fig. 4.19q and r). They produced a moderate quantity of domestic debris including 862g of pottery.

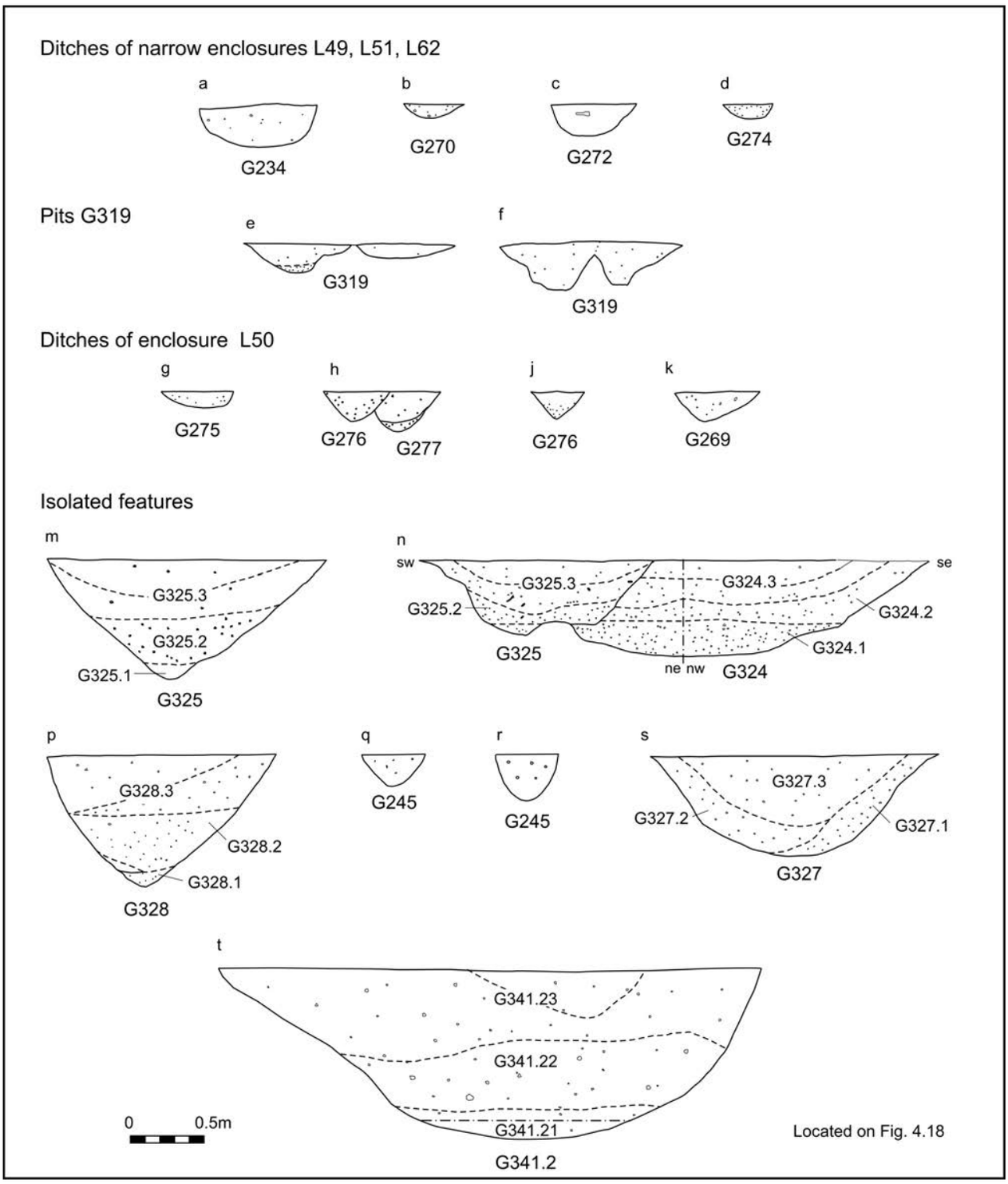


Figure 4.19 Selected sections for central part of farmstead. Sections 1:80

Unenclosed domestic focus L41
(Fig. 4.22)

Another possible domestic focus L41 was identified *c*.50m south-east of enclosure L50. It was unenclosed and covered an area of 55m by 25m. It comprised a group of pits and post-holes G410, a possible structural slot G395, a water pit G346, four groups of quarry pits G348/G349 and G401/G402, and two parallel ditches G414 and G415.

The main fills of these features comprised dark grey-brown clay silt with occasional small stones. They produced a large quantity of domestic debris, including 6.5kg of pottery and 907g of animal bone. Other objects recovered are also suggestive of domestic and craft activity.

Ditches G414 and G415

Two parallel, NE-SW aligned ditches G414 and G415 lay 1.8m apart. They were 1–2m wide and 0.15m deep with concave sides and flat bases (Fig. 4.23n). Truncation had removed any definite evidence for terminals. The ditches

produced a tiny quantity of domestic debris. Their precise function is unknown, although it may be significant that they lay at the centre of the domestic focus.

Structural slot G395
A NE-SW aligned slot G395 lay *c*.20m to the south of ditches G414 and G415. It was adjacent and parallel to the northern end of quarry pits G402 and may therefore represent a boundary to this activity. It was 1.8m long, 0.3m wide and 0.15m deep with vertical sides and a flat base, suggestive of a structural function (Fig. 4.23q).

Pits, post-holes G410
Five post-holes and two pits were located within a 5m by 5m area on the north edge of the domestic focus. The post-holes lay within 0.5m of each other and were all *c*.0.6m in diameter and less than 0.1m deep with concave profiles (Fig. 4.23h). They did not contain any evidence for post-pipes or packing. The pits lay on either side of the post-holes. They were 1.1m long, 0.7m wide and 0.1m deep with shallow sloping sides and flat bases (Fig. 4.23j). These features produced a moderate quantity of domestic debris; one of the post-holes contained 24 sherds from the same jar (Fig. 7.3 P21).

Water pit G346
Water pit G346 was located 8m to the south of the post-holes. It was sub-oval in plan, 4.5m long, 3.6m wide and 1m deep with a steep-sided profile and slightly concave base (Fig. 4.23k).

Pits G348, G349
Two pairs of intercutting pits G348 and G349 were located to the south-west of water pit G346. They were 1.45–3.3m long, 1.3–2.3m wide and no more than 0.35m deep with steep-sided profiles and flat, uneven bases (Fig. 4.23m and p).

The main fills of the later pits were blacker and contained more charcoal flecks and a larger quantity of domestic debris than the earlier pits. Amongst the pottery assemblage were sherds of 2nd/3rd-century and 3rd/4th-century date. In addition, a fragment from a glass vessel was recovered (RA 233 Fig. 7.7)

Quarry pits G401, G402, G421
A large area of intercutting quarry pits G401/G402 was located to the south of these features. They lay 10m east of the quarry pits in enclosures L38 and L40 but were on a similar alignment. The pits were confined to a rectangular area measuring 34m x 13m, although there were no obvious boundaries. Individual pits were typically at least 2m in diameter and *c*.0.5m deep, with sloping sides and flat bases. Approximately 25m to the north-east were several more individual quarry pits G421. They were 0.85–2m in diameter and *c*.0.25m deep with sloping sides and flat bases. All these pits were dug through the gravel onto the underlying clay.

In the primary fill of one of these pits was a single sherd of 3rd/4th-century pottery. The main fills produced a large quantity of domestic debris, including 30 sherds of 3rd/4th-century pottery. A range of iron objects/fragments were also recovered, including a strip (RA 247), a saw blade (RA 251), nails (RA 245, 246 and 249), a timber dog (RA 252) and another unidentifiable object (RA 250).

Field L83
(Fig. 4.15)
Field L83 was defined by the change in direction of major boundary ditch L31, which formed its south-west and south-east sides. To the north-east it was defined by ditch G207 (L33); its north-west side lay beyond the limit of excavation. The interior of the field was devoid of any evidence for activity and no entranceways were identified.

Field L33
(Fig. 4.20)
Field L33 was adjacent to field L83 on the north side of major boundary L31. To the south-west it was defined by parallel ditches G207 and G208, and to the east by ditch G211. Most of the field was devoid of evidence for activity, apart from two clusters of pits at its margins. Pits G287, G286, G289 and G295 were all located along the south-west side of the field; pits G371 were located in the south-east corner. With the exception of water pit G289, these pits appear to have been dug to extract gravel. An urned cremation burial G227 had been placed in ditch G211 and fragments of unburnt human bone were found in ditch G208.

The ditch fills comprised mid/dark grey-brown silty clay with occasional small stones. They produced a large quantity of domestic debris, including pottery (5kg) and animal bone (1.5kg). In addition, large quantities of metallurgical residues (1.6kg) and some kiln/oven furniture were recovered. The majority of the metallurgical residues derived from the pits in the southern half of the field and the adjacent ditch suggesting that iron working had taken place in the vicinity.

Ditches G207, G208, G211
The south-west side of the field was defined by two parallel ditches. Ditch G207 was 1m wide and 0.35m deep with a steep-sided concave profile (Fig. 4.20c); it got considerably smaller to the south-east (Fig. 4.20d). It is uncertain if parallel ditch G208 was contemporary because there was no stratigraphic relationship between the two. It was *c*.0.5m wide and 0.15m deep with either a concave (Fig. 4.20e) or V-shaped profile (Fig. 4.20f).

Ditch G211 formed the north-east side of the field. It was 0.5m wide and 0.1m deep to the north-west (Fig. 4.20a), increasing to 1.2m wide and 0.35m deep to the south-east (Fig. 4.20b). It typically had a concave, U-shaped profile and a flat base.

The latest dated pottery within a large assemblage from these ditches was a single 3rd-century sherd. A moderate quantity of kiln/oven furniture may indicate the presence of nearby ovens/furnaces. Sixteen fragments of unburnt human bone were recovered from the fill of G208.

Cremation burial G227
An isolated cremation burial G227 was found in the upper part of ditch G211. Although heavily disturbed by ploughing, enough of sand and grog-tempered (F09) pottery vessel 8826 survived to suggest that it represented an urn. It was associated with a tiny quantity of cremated bone (5.5g) within a dark grey-brown silty clay matrix with occasional flecks of charcoal. The majority of the bone was recovered from the lower of the two 40mm thick excavated spits.

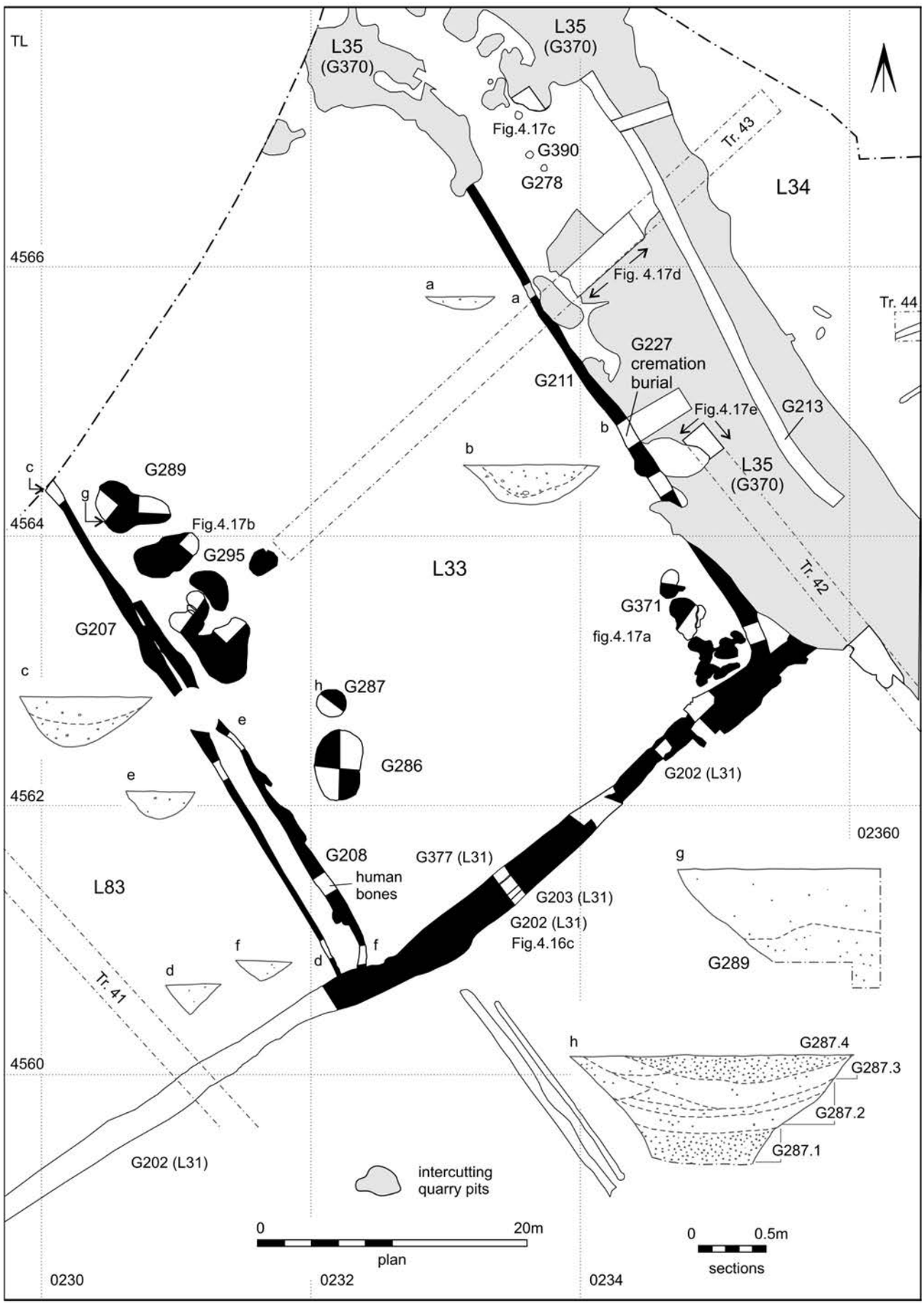


Figure 4.20 Overall plan of field L33 and part of quarry band L35 (scale 1:400), with selected sections (scale 1:80)

Water pit G289 and possible water pit G287
A large, irregular, sub-oval water pit G289 was located towards the south-west side of the field. It was *c*.5m long, 3.5m wide and at least 0.9m deep but was not bottomed. It had a steep-sided profile on the west side (Fig. 4.20g) and a more gently sloping projection to the east which may have facilitated access to the water. Another possible water pit G287 was located 17m to the south-east of G289. It was 2m in diameter with near vertical, slightly convex sides (Fig. 4.20h). It was at least 0.8m deep but was not bottomed.

The lowest identified fill within water pit G289 was very dark grey in colour. The latest dated pottery comprised two sherds of 2nd-century ware from the secondary fills.

Quarry pits G286, G295
Approximately eight large pits were arranged in a band along the south-west side of the field. A number of them G295 were intercutting. They were 2–5m long, 1–4.5m wide and 0.35–0.6m deep, with steep-sided profiles and fairly uneven bases (Fig. 4.17b). They had been dug to the top of the underlying clay and are, therefore, interpreted as gravel quarry pits.

Three sherds of 2nd/3rd-century pottery in the primary fills give a date for this quarrying. The latest pottery from the main fills was a single 3rd/4th-century sherd. They also produced 431g of slag and a number of iron objects.

Quarry pits G371
At least ten, smaller, intercutting quarry pits G371 were located in the south-east corner of the field. They were 0.9–3m long and 0.6–2.40m wide. They were consistently 0.25m deep with sloping sides and flat but uneven bases (Fig. 4.17a), suggesting that they too were dug to extract gravel. A single post-hole was found in the vicinity.

In contrast to the other quarry pits in this field they only produced a small quantity of domestic debris and one iron object.

Linear band of quarry pits L35
(see Fig. 4.15)
A NW-SE aligned band of mainly intercutting quarry pits L35 was located to the east of fields L33 and L52. It is estimated that several hundred individual pits were present. They were confined to an area *c*.15m wide and over 115m long, continuing beyond the limit of excavation in both directions. Their tight configuration suggests that they must have been dug within a carefully defined area. To the north-west, ditch G211 (L33) did appear to bound some of the pits but was also encroached upon by others (Fig. 4.20). To the north-east, ditch G213 (L34) was clearly parallel to the quarry pits but, for the majority of its length, truncated them. No similar boundaries were identified to the south of major boundary L31.

Initial investigation quickly demonstrated that the pits had been dug to extract gravel because they went no deeper than the underlying clay. Only a limited number were subject to hand excavation; intercutting pits were assigned to G370 and isolated pits to G380. Four post-holes G278 were identified towards the north of the band of pits. They were located in an area where the gravel had not been extracted, suggesting that they might be part of a structure associated with the quarrying.

Plate 4.10 Intercutting quarry pits G370 within linear band L35 (Farmstead 5), with 1m scale

The pit fills varied from orange-brown clay silt to mid brown-grey silty clay with occasional small stones. The excavated pits produced large quantities of pottery (2.7kg) and smaller quantities of animal bone (486g). They also produced 1.5kg of metallurgical residues, mainly from pits adjacent to field L33. This reinforces the idea that iron working was being carried out in the northern part of the farmstead.

Quarry pits G370, G380
(Pl. 4.10)
It is estimated that several hundred intercutting pits G370 were present. Where excavated and identifiable, the intercutting G370 and isolated pits G380 were similar in profile and dimensions. Their diameters typically ranged from 2–4m and their depths from 0.1–0.5m. They had irregular sloping sides and uneven bases (Fig. 4.17c-f).

The pottery assemblage was mixed and included both 2nd-century and 3rd/4th-century types (Fig. 7.2 P12). In addition, a coin of AD 260–96 (RA 167) and a copper alloy balance arm (RA 166, Fig. 7.6) were recovered. This mixed dating evidence suggests that the pits were probably left open for some time or were dug over a long period. Amongst the large quantity of metallurgical residue was smithing hearth cake.

Post-holes G278
Four post-holes G278 were located within 5m of one another towards the north-west part of the band of quarry pits. They were *c*. 0.5m in diameter and no more than 0.15m deep.

Field L34
(see Fig. 4.15)
Field L34 was situated to the east of the linear band of quarry pits L35 and to the north of major boundary L31. Only the south-west part of the field fell within the excavation area. It was defined to the south-west by quarry

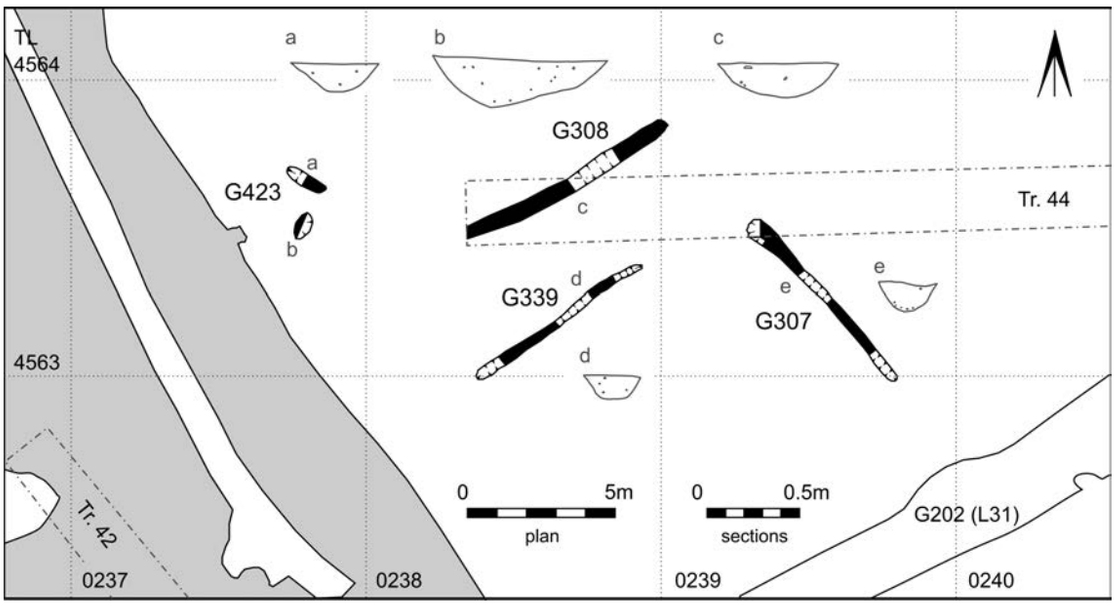


Figure 4.21 Detailed plan of structure G508 and pits G423 (scale 1:250), with selected sections (scale 1:80)

pits L35 and to the south by ditch G203 (L31). Evidence for activity was restricted to the south-west corner and comprised possible structure G508 and two nearby pits G423.

The main fills of these features comprised mid brown sandy clay with occasional small stones. Only a small quantity of domestic debris was recovered from them.

Ditch G213

Ditch G213 on the west side of the field appeared to truncate the linear band of quarry pits L35 and would, therefore, represent a re-establishment of the boundary on this side. It was 0.95m wide and 0.3m deep with a shallow U-shaped profile and concave base.

Possible structure G508

(Fig. 4.21)

Possible structure G508 was located in the south-west corner of the field. It comprised an arrangement of three slots G307, G308, G339, each *c*.7m long. Slots G308 and G339 were parallel, *c*.3.5m apart, on a SW-NE alignment, with the third slot G307 at right-angles. They were *c*.0.45m wide and 0.2m deep with U-shaped profiles and either flat or slightly concave bases (Fig. 4.21c–e).

Pits G423

Two oval pits G423, *c*.0.8m apart, were located between the slots and the west edge of the field. They were 0.95m and 1.5m long, 0.55m wide and less than 0.3m deep with concave profiles and slightly concave bases (Fig. 4.21a and b).

Field L52

(see Fig. 4.15)

Field L52 lay between domestic focus L48/50/71 and the linear band of quarry pits L35. Its north-west side was defined by major boundary L31, its south-west side by ditches G273/G274 (L49) and its north-east side by the band of intercutting quarry pits. No limit was identified to the south-east. Other than the Phase 3 enclosure L27, which may have remained in use, the only evidence for activity was water pit G294.

The main fills comprised dark grey-brown silty clay with frequent small stones and occasional charcoal flecks. They produced a moderate quantity of domestic debris, including 0.5kg of pottery and 0.25kg of animal bone.

Water pit G294

Sub-circular water pit G294 was located on the east side of the field, *c*.2.5m from the linear band of quarry pits. It was *c*.5m in diameter and over 1.2m deep with a steep-sided profile and flat base.

The fills of the water pit grew progressively darker with depth. The main and upper fills produced a moderate quantity of domestic debris, including a single sherd of 2nd/3rd-century pottery.

Field L75

(see Fig. 4.15)

Field L75 was situated to the south of major boundary L31/L61 and to the east of the band of quarry pits L35. It continued beyond the limit of excavation to the south and east. The interior contained a large number of quarry pits. Three main areas of intercutting pits G372 were identified, together with a moderate number of isolated pits G382. The majority of the pits were dug through the gravel to the level of the underlying clay.

The pit fills varied from mid brown-yellow to mid grey-brown clay silt with occasional small stones. A moderate quantity of domestic debris was recovered, including 1.4kg of pottery and 627g of animal bone.

Quarry pits G372, G382

Field L75 contained approximately 20 individual quarry pits G382 and perhaps as many as 100 intercutting quarry pits G372. Where identifiable, individual pits ranged from 1m to 6m in diameter. The majority of the excavated examples had steep-sided profiles, flat bases and were *c*.0.3m deep. The majority had been dug through the gravel but stopped when the underlying clay had been

reached. Only a handful had been dug into the clay *e.g.* Fig. 4.17g which was 0.7m deep.

The pottery assemblage was mixed and included sherds of 2nd-century and 3rd/4th-century types (Fig. 7.2 P11). The only other find of significance was 539g of metallurgical residue.

Narrow non-domestic enclosure L79
(Fig. 4.18)
Non-domestic enclosure L79 was located in the corner formed by the junction of major boundaries L31 and L32. Its north-west side was formed by ditch G201 (L31), its south-west side by G224 and its recut G225 (L32), its east side by ditch G234 (L51) and its south side by Phase 3 enclosure L21/22. No entranceways were located and it contained no evidence for internal activity.

Narrow non-domestic enclosure L51
(Fig. 4.18)
NW-SE aligned enclosure L51 was one of several situated between domestic focus L48/50/71 and major boundary L31. It was defined to the north-west by major boundary ditch G201 (L31), to the south-west by ditch G234 and to the north-east by G270. No obvious south-east limit was identified, although it may have been near pit cluster L71 associated with the domestic foci. Gaps in the ditches suggest the presence of three possible entranceways. However, the gap between G270 and G201 (L31) may reflect the presence of a bank/hedge, associated with the major boundary, rather than an entrance. No internal features were identified.

The main fills of the ditches comprised grey-brown silty clay with moderate to frequent small stones and occasional charcoal flecks. They produced a tiny quantity of domestic debris. Significant artefacts included a plough and two late 3rd-century coins.

Ditches G234 and G270
Ditch G234 defined the south-west side of the enclosure. It was 0.8m wide and 0.3m deep with a U-shaped profile and flat base (Fig. 4.19a). A terminal to the south-east indicates the position of an entranceway. Ditch G270 defined the north-east side of the enclosure. It was 0.65m wide and 0.15m deep (Fig. 4.19b).

A plough coulter RA 126 (Fig. 7.8) was found within the terminal of ditch G234 (findspot shown on Fig. 4.18). Although incomplete and not obviously deliberately broken, it may represent a 'special' deposit. Two coins were found in the other ditches: one dated to AD 268–270 (RA 101) and the other to the late 3rd-4th century AD (RA 120).

Narrow non-domestic enclosure L62
(Fig. 4.18)
NW-SE aligned enclosure L62 was located between two similar enclosures L49 and L51. It was defined to the north-west by major boundary ditch G201 (L31), to the south-west by ditch G270 (L51), to the south-east by ditch G269 (L50) and to the north-east by ditch G272 (L49). The only evidence for internal activity was inhumation burial G314, but it is possible that the Phase 3 pond G320 continued to function. Only a tiny quantity of domestic debris was recovered from this enclosure.

Inhumation burial G314
(Fig. 4.18A, Pl. 4.11)
A single inhumation was placed in a SW-NE aligned grave, situated 3.7m from the north-east side of the enclosure. The grave was oval in plan, 1.7m long, 0.65m wide and 0.15m deep with a concave profile and slightly concave base. The skeleton had been disturbed by modern ploughing — the skull was badly damaged and parts of the lower legs, pelvis, feet and hands were missing (Pl. 4.11). The remains were those of a juvenile, aged 16–18 years.

The skeleton was supine with the head at the south-west end of the grave. From the position of the arms it looked as though the hands had been placed across the pelvis. The legs were extended with the upper part of the right leg turned in, possibly as a result of the modern disturbance. Several limestone blocks, *c*.0.2m by 0.35m in size, had been placed beneath the skeleton, although they did not entirely cover the base of the grave. One beneath the lower part of the head may represent a pillow stone. Other blocks were found below the right arm, the knees and on the right hand side, close to where the pelvis would have been.

There were no associated grave goods with the burial. The grave was backfilled with a mid grey-brown clay silt, containing frequent small stones.

Narrow non-domestic enclosure L49
(Fig. 4.18)
NW-SE aligned enclosure L49 was located between a similar enclosure L62 and field L52. It was defined to the north-west by major boundary ditch G201 (L31), to the south-west by ditch G272, to the south-east by ditches G276/G378 (L50) and to the north-east by parallel ditches G273 and G274. The latter extended to the south as ditch G275. Several gaps in the ditches, mainly in the corners of the enclosure, may indicate entranceways. However, the gap in the north-east corner of the enclosure may mark the presence of a bank/hedge associated with the major boundary G201 (L31). The majority of the interior of the enclosure was devoid of evidence for activity but it is possible that the Phase 3 pond G320 continued to function. In addition, four pits G319 were located in the south-east corner of the enclosure in the vicinity of entranceways.

The main fills of the ditches comprised mid grey-brown silty clay with moderate small to medium stones and occasional charcoal flecks. The pit fills were noticeably lighter in colour, comprising mid yellow-brown clay silt with occasional to moderate small stones. They produced a small quantity of domestic debris.

Ditches G272, G273, G274, G275, G276 and G378
The north-east side of the enclosure was defined by parallel ditches G273 and G274 which were only 0.5m apart. They were 0.4–0.6m wide and no more than 0.15m deep with U-shaped profiles and concave bases (Fig. 4.19d). Ditch G273 terminated to the north-west and south-east suggesting the location of possible entrances.

To the south-east, ditches G276 and G378 also formed the boundary of domestic enclosure L50. They were 0.45–0.65m wide and less than 0.25m deep with U-shaped profiles (Fig. 4.19j and h). Some re-cutting had taken place, as ditch G276 truncated ditch G277 (assigned to L50). Ditch G275 was on the same alignment as the east side of enclosure L49. It was 0.5m wide and 0.1m deep with an

Plate 4.11 Inhumation G314 (L62, Farmstead 5) from SE, with 1m scale

asymmetrical concave profile (Fig. 4.19g). The south- west side of the enclosure was defined by ditch G272, which was 0.38m wide and 0.20m deep (Fig. 4.19c).

The pottery assemblage included 2nd/3rd-century types and a single sherd of 3rd/4th-century ware. Other finds included a coin of AD 260–96 (RA 75).

Pits G319

G319 comprises two pairs of pits that were situated *c*.2.75m apart in the vicinity of the south-east entrance to the enclosure. One pair were intercutting and, therefore, not contemporary. The pits were typically *c*.0.7m by 0.5m in extent and 0.1–0.3m deep, with asymmetrical concave profiles and flat bases (Fig. 4.19e and f). Their location in the vicinity of the entranceway suggests a possible structural purpose, although none contained any direct evidence for post-pipes or packing.

Non-domestic enclosure L36

(Fig. 4.22)

Non-domestic enclosure L36 lay between enclosure L79 and triangular open area L55. It was probably originally defined by major boundary ditch G235 (L32) to the south-west; ditches G248 and its southern continuation G249 formed the north-east side. No obvious boundary was identified to the north-west, although it is possible that one of the ditches of Phase 3 enclosure L21/22 was utilised. Three possible entranceways were identified on the north-east side and one in the south-west corner.

It is clear that the enclosure ditches were redug. One extensive episode is represented by G250 to the south and its continuation to the north-east G251. Redigging of the major boundary ditch on the west side as G237 is likely to have been contemporary. A small enclosure L37 was subsequently created in the south part of the main enclosure by the digging of ditch G252 (see below).

Four intercutting post-holes G331 and a single post-hole G390 near one of the north-east entranceways represent the only definite evidence for activity within the enclosure. It is uncertain if pit G424, dug into ditch recut G237 on the west side of the enclosure, is related to the latter's use (Fig. 4.16j).

The main fills of the ditches comprised dark grey-brown silty clay with frequent small stones and occasional charcoal flecks. They produced a moderate quantity of domestic debris, including 1.8kg of pottery and 1.4kg of animal bone.

Ditches G248 (recut as G251) and G249 (recut as G250)

The original enclosure was defined by major boundary ditch G235 (L32) (Fig. 4.16j and k), ditch G248 and ditch G249. The latter two were 0.4–0.8m wide and 0.35m deep with U-shaped profiles (Fig. 4.23b, c and e); they were much smaller than G235. They were replaced by ditches G250 and G251, which were slightly larger at 0.7–1.3m wide and 0.45m deep. They had near vertical sides and slightly concave bases (Fig. 4.23c and e). Interestingly, the recut G237 of the major boundary ditch G235 was much smaller than its predecessor.

The main fills of all the ditches produced a moderate quantity of domestic debris, in contrast to the fills of the pits and post-holes were largely sterile. The pottery assemblage included eleven sherds of 2nd-century types and nine sherds of 2nd/3rd-century types (Fig. 7.3 P22-P24).

Post-holes G331

G331 comprises four intercutting post-holes located *c*.3.5m from the south-west side of the enclosure. They were 0.3–0.55m in diameter and less than 0.2m deep, with U-shaped profiles (Fig. 4.23a). There was no evidence for associated post-pipes or packing.

Post-hole G390

Post-hole G390 was located in one of the entranceways on the north-east side of the enclosure, with which it may have been associated. It was 0.4m in diameter and 0.2m deep with near vertical sides and a flat base (Fig. 4.23b).

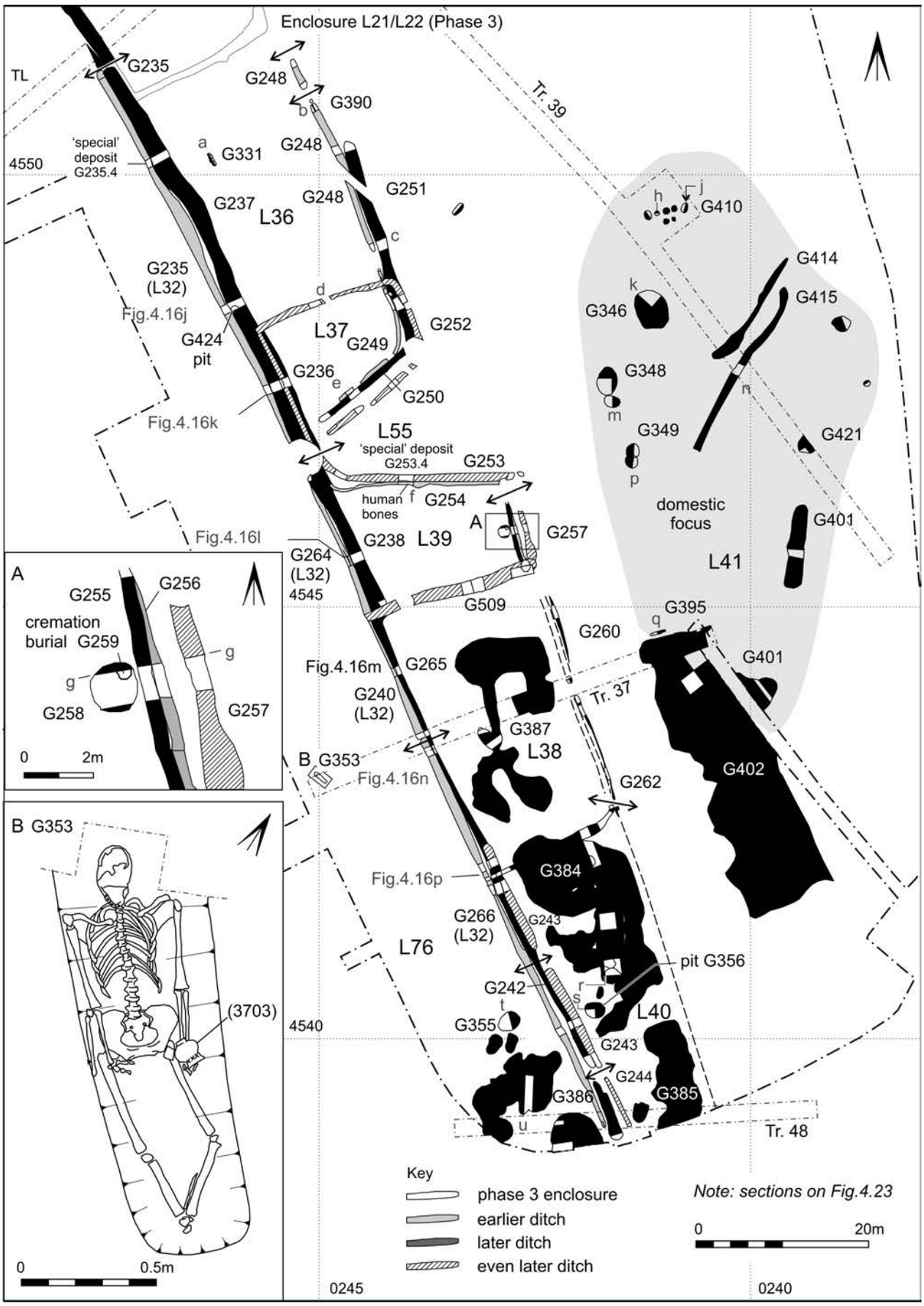


Figure 4.22 Overall plan of southern part of farmstead showing possible domestic core L41, non domestic enclosures L36, L37, L39, L38, L40 and triangular open-area L55 (scale 1:400), with insets for inhumation burial G353 (scale 1:20) and cremation burial G259 (not to standard scale)

Later pit G424
Circular pit G424 truncated the major boundary ditch G235 and its recut G237 on the south-west side of the enclosure. It was 1.1m in diameter and 0.7m deep with near vertical sides and a concave base (Fig. 4.16j).

Later non-domestic enclosure L37
(Fig. 4.22)
Sub-square enclosure L37 formed a later sub-division of the south part of enclosure L36. It was adjacent to triangular open area L55, with which it may have been associated. A fairly continuous curvilinear ditch G252 defined the majority of the new enclosure; a 1.5m gap in the south-west corner may have been part of an entranceway. No evidence for internal activity was identified.

The ditch fills were slightly unusual in that the primary deposits were dark orange-brown sandy silt with frequent small stones. The main fills comprised grey-brown silty clay with occasional small stones and charcoal flecks. These produced a tiny quantity of domestic debris, the majority of which came from the north corner of the enclosure.

Ditches G252 and G236
Curvilinear ditch G252 was *c*.0.7m wide and 0.25m deep with a U-shaped profile and flat base (Fig. 4.23d); the south part was slightly shallower at 0.15m. Ditch G236, which was a recut of the major boundary L32, was also 0.7m wide but it was deeper at 0.7m (Fig. 4.16k). Amongst the pottery assemblage from the main fill was a single sherd of 3rd/4th-century ware.

Triangular open area L55
(Fig. 4.22)
Triangular open area L55 lay between enclosures L36 and L38. It was part of the enclosure system from the outset and was retained when both these enclosures were redefined and ultimately sub-divided. It was *c*.5m wide to the west and *c*.16m wide to the east. The alignment of the ditches on its north and south sides are different to those of the other ditches within the farmstead, demonstrating that the triangular shape was a deliberate creation. This area may represent a major entranceway into the farmstead. Unfortunately, it is unclear if there was a corresponding gap in the major boundary ditch L32 because the relevant area had been dug away by later features. However, it may be significant that domestic focus L41 was located immediately to the east and that most quarrying in this area took place to the south of this open area.

Non-domestic enclosure L38
(Fig. 4.22)
Enclosure L38, to the south-east of triangular open area L55, appeared to mirror enclosure L36 to the north-west. It was probably originally defined by major boundary ditches G240 and G264 (L32) to the west, and ditches G254 to the north, G257 and G260 to the east and G262 to the south. There was evidence for a 3m wide entrance on the south-east side although the majority of the apparent gaps are the result of truncation by later features.

The evidence for the redefinition of the enclosure is not as extensive as for enclosure L36, in part due to later activity. However, it is clear from the presence of three ditches on the north-east and south-west sides that the enclosure ditches were redug on a number of occasions. One extensive episode of renewal on the west side is evidenced by ditches G238 and G265, although their juxta-position in plan suggests that the sequence of recutting was quite complex. In addition, it is probable that ditches G253, G257 and G509 represent the creation of a new enclosure L39 within the north end of the original enclosure, in the same way that L37 did within L36.

The position of the primary fill within the major boundary ditch on the west side of the enclosure suggests the presence of an outer bank (Fig. 4.16n). With the exception of intercutting quarry pits G387 in the southern part of the enclosure, the interior was devoid of evidence for activity.

The main fills of the ditches and pits comprised mid grey-brown silty clay with occasional small stones. The ditches produced a moderate quantity of domestic debris — 960g of pottery and 479g of animal bone — mostly from the east and north sides of the enclosure. By contrast, very little was recovered from the quarry pits.

Ditches G238, G254, G256 (recut as G255), G260, G262, G265
The west side of the enclosure was originally defined by major boundary ditches G240 and G264 (L32). The later ditches specifically defining this enclosure were 0.4–1m wide and 0.2–0.45m deep (Fig. 4.23f and g). Those to the north and west had V-shaped profiles, while those to the south and east were more U-shaped. All of these ditches had been truncated by ditches associated with later sub-division L39.

Amongst the pottery assemblage from the main fill of the ditches were three 2nd-century sherds. The upper fill of ditch G254 contained three fragments of human bone.

Quarry pits G387
Intercutting quarry pits G387 were located in the south part of the enclosure. They extended over an area of 21m by 10m and clearly respected the boundaries of the enclosure. The pits were *c*.2m in diameter and 0.25m deep with U-shaped profiles and flat bases.

Later non-domestic enclosure L39
(Fig. 4.22)
Sub-square enclosure L39 was a later sub-division within the north part of larger enclosure L38. It lay immediately to the south of the triangular open area L55, with which it may have been associated, and is clearly comparable to the sub-division within the larger enclosure to the north of the open area. Ditch G253 formed the north side, G257 the east and G509 the south. No definite boundary was identified to the west. However, the size of ditch G238 and its juxta-position in plan with ditch G265 to the south suggests that it may have been recut at this time. There may have been an entranceway in the north-east corner of the enclosure. However, this cannot be proven due to truncation by later features. The only evidence for internal activity was pit G258 which contained a cremation burial G259.

The ditch fills comprised mid grey-brown silty clay with moderate small stones and charcoal flecks. They produced a large quantity of domestic debris, including 1.7kg of pottery and 785g of animal bone. In addition, a possible ‘special’ deposit was identified in ditch G253.

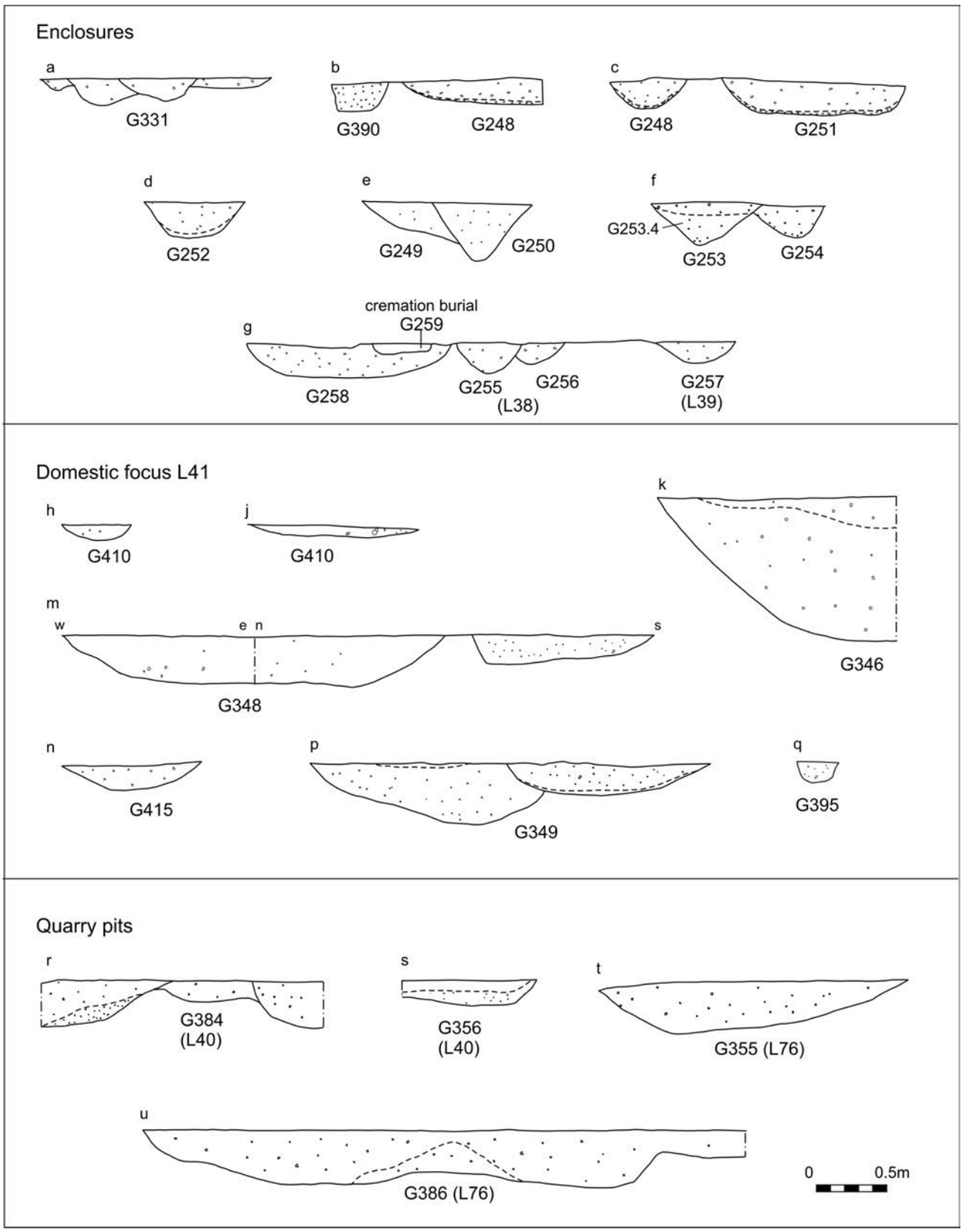


Figure 4.23 Selected sections for southern part of farmstead. Scale 1:80

Ditches G253, G257, G509

Ditches G253 and G509 formed the north and south sides of the enclosure. A number of ditches could have defined the east side but the position of G257 makes it the most likely. These ditches were all *c*.0.4m wide and 0.2m deep with U-shaped profiles (Fig. 4.23f and g). The south ditch G509 could not be unequivocally distinguished from the later Phase 5 ditch G263 but its existence can be inferred from the fact that the south side of the enclosure appears, on plan, to be twice as wide as the others.

Plate 4.12 Un-urned cremation burial G259 (L39, Farmstead 5), with 0.4m scale

Amongst the pottery assemblage were forty-seven 2nd-century and four 3rd/4th-century sherds.

Possible 'special' deposit G253.4
Deposit G253.4 was located at the interface between the primary and main fills of ditch G253 (see Fig. 4.22). Within a 1m by 1m area, *c*.70 sherds of pottery, a sheep/goat mandible, a cow scapula and a possible partial dog skeleton were found. The sherds derived from at least thirteen different vessels and none represented even semi-complete vessels. Although the pottery assemblage is unusually large there is nothing about it to suggest it was 'structured'.

Pit G258
Pit G258 was 1.3m in diameter and 0.5m deep with near vertical sides and an uneven base (Fig. 4.23g).

Cremation burial G259
(Fig. 4.22A, Pl 4.12)
A single, un-urned cremation burial G259 had been placed in the partially infilled pit G258. The grave was circular in plan, 0.4m in diameter with a shallow, asymmetrical profile and flat base (Fig. 4.23g). It was only 0.1m deep and had probably been truncated by modern ploughing.

The burial comprised 311g of cremated human bone within a yellow-grey silty clay matrix, which contained oak and ash charcoal. A probable accessory vessel (7549), damaged by ploughing, was found on its side close to the cremated bone.

Non-domestic enclosure L40
(Fig. 4.22)
Enclosure L40 was located to the south-east of enclosure L38. It was defined by major boundary ditch G266 (L32) to the south-west and G262 (L38) to the north-west. Although no boundary was identified to the north-east, the precise alignment of the eastern edge of the quarry pits within the enclosure demonstrates that one must have existed. No entranceways were identified in the major boundary ditch.

There is evidence for at least two episodes of re-establishment of the western boundary of the enclosure, both slightly to the east of the alignment of the major boundary ditch. These ditches (G242 and G243) contained entranceways, including one which was maintained for both.

The majority of the interior of the enclosure was covered with intercutting quarry pits G384 and G385. The gap between these two main areas of pits coincided with one of the western entranceways. The northern quarry pits G384 partially encroached on the north-west ditch G262. A small number of isolated quarry pits G356 were also identified.

The ditch and pits were filled by mixed red-brown and dark orange-brown sandy clay with occasional stones and were mainly sterile of finds.

Ditches G242, G243
Ditches G242 and G243 formed the west side of the enclosure. Only the later ditch G243 survived in its entirety and it was *c*.0.7m wide and 0.5m deep with concave profile (Fig. 4.16p). Its lower fill appeared to have derived from the east, possibly from material dug out of the quarry pits in this area.

Intercutting G384/G385 and individual quarry pits G356
Two large areas of intercutting quarry pits were located within the enclosure — G384 to the north and G385 to the south — along with occasional individual quarry pits G356. Individual pits were typically *c*.2m in diameter and *c*.0.3m deep, with concave profiles and flat but uneven bases (Fig. 4.23r and s). The northern pits G384 extended over an area of 24m by 12m and were separated from those to the south by a *c*.2.5m wide area of undug ground. This lined up with an entranceway in the west side of the enclosure.

No pottery or animal bone was recovered; the only find was an iron metal-working punch (RA 133).

Plate 4.13 Inhumation burial G353 (L76, Farmstead 5) within evaluation trench from SE, with 0.4m scale

Peripheral activity focus L76 to the west of major boundary L32
(Fig. 4.22)
The only evidence for activity to the west of major boundary L32 was an inhumation burial G353 and two large areas of mainly intercutting quarry pits G355 and G386. These features produced a tiny quantity of domestic debris; the burial was also accompanied by grave goods.

Inhumation burial G353
(Fig. 4.22B, Pl. 4.13)
The remains of an adult male, aged 45–55 years, were found in trial trench 37. The body had been placed in a NW-SE aligned grave, situated *c*.12m to the west of major boundary ditch G264 (L32). The grave was oval in plan, 1.4m long, 0.55m wide and 0.35m deep. It had been disturbed by plough truncation as the skull and parts of the right arm and lower legs had been damaged.

The skeleton was supine with the head at the north-west end of the grave. The left leg was flexed at the knee; the right leg was extended, crossing the lower part of the left leg. The lower part of the right arm lay across the pelvis while the left arm was extended.

An almost complete 2nd/3rd-century greyware (R06C) jar 3703 (Fig. 7.2 P8) lay on top of the left-hand finger bones, as if it had been deliberately placed in the left hand.

Quarry pits G355, G386
Two areas of intercutting quarry pits G386 lay immediately to the west of major boundary L32. The pits covered an area of 15m by 12m, continuing beyond the limit of excavation to the south-east and possibly the south-west. Individual pits were typically 0.2m–0.5m deep with steep sides and uneven bases (Fig. 4.23u). Three individual quarry pits G355 were located to the north of the main area of intercutting pits. They were *c*.3.2m by 2.2m and always less than 0.4m deep. They had asymmetrical, concave profiles and slightly concave bases (Fig. 4.23t).

Field ditches L77
(Fig. 4.15)
A number of ditches were located within transects 62, 66 and 68, *c*.100m north-east of the main excavation area. Traces of four ditches G405 and G425 (L77) were identified, although some were only visible in sections.

They produced a tiny quantity of domestic debris, including 91g of pottery but no animal bone, suggesting that this area was located some distance from the farmstead's domestic foci.

Ditch G405
NW-SE aligned ditch G405 was located in transect 62. It was at least 10m long and continued to the north-west. To the south-east it appeared to stop at major, NE-SW aligned boundary ditch G406 (L61). It was 1.15m wide and 0.45m deep with a U-shaped profile; it narrowed to the south-east supporting the suggestion that it terminated.

Ditches G425
Three NW-SE aligned ditches were located in section in transects 66 and 68. They were between 0.9m and 2.95m wide and no more than 0.55m deep with concave profiles and flattish bases.

Chapter 5. Later Romano-British farmstead (Phase 5)

I. Overview
(Fig. 5.1)

Of the Phase 4 farmsteads only Farmstead 5 survived into the later Romano-British period (Phase 5); it is designated Farmstead 7. However, the degree of continuity between the two is uncertain because the new farmstead had a significantly different layout. It comprised a small enclosure on the same alignment as the Phase 4 enclosure system and two large fields on completely different alignments to what had gone before.

Two characteristics have been used to identify the main elements of Farmstead 7. They were either stratigraphically later than Phase 4 features and/or produced pottery assemblages with a notable proportion of late Roman wares (see below) and a much smaller quantity (4%) of late Iron Age material than seen in earlier phases. The latter is presumed to be entirely residual. In addition, twenty-nine coins of late 3rd/early 4th-century date and several objects of late Roman date were found.

It is unclear when the Phase 4 farmstead on Area 1 — Farmstead 4 — went out of use. The latest features in this area were a large pond and pit (F6) which are assigned to this phase purely on the basis of stratigraphic evidence.

II. Farmstead 7
(Fig. 5.1)

Farmstead 7 comprised an enclosure L42, to the north of which were two fields L44 and L45 on a different alignment. The boundaries of the enclosure incorporated elements of the earlier Phase 4 system. Its two entrances were adjacent to the Phase 4 unenclosed domestic focus L41, which may also have retained some significance. The enclosure contained a small number of pits, including a water pit, while immediately to the north was a concentration of large pits L43. Waterlogged plant remains from one of the pits are characteristic of waste-ground.

The fields were separated by a possible trackway. Only field L44 contained evidence for internal activity in the form of a scatter of pits and a water pit. There is evidence for sequential activity within the farmstead. Some of the ditches defining enclosure L42 and field L44 were truncated by several short gullies L70, the function of which is uncertain.

A large quantity of pottery (*c.* 42kg) and animal bone (*c.* 20kg) was recovered from the farmstead. The pottery assemblage includes moderate quantities of late Roman fabric types, such as finewares from Oxfordshire, Hertfordshire and the Nene Valley, and a proportion of late coarseware forms. These are considered to be contemporary with the farmstead, as are the twenty-nine coins of late 3rd/early 4th-century date, although not all of these were found *in situ*. Continued usage of samian is indicated by the repair of two bowls. Other personal and household items recovered from the farmstead include hobnails, a hair pin, a brooch, a glass bead, a slide key, a glass vessel, a possible reaping hook or scythe, a quern, a chisel or punch, a whetstone and three knifes. No objects directly associated with craft activities were found. However, a quantity of unidentified iron objects may represent scrap, collected for reuse in iron smithing. The latter is also evidenced by very large quantities of metallurgical residues (*c*.29kg), including flake hammerscale, mostly from the northern part of the farmstead, around fields L44 and L45. One animal bone, split longitudinally, may be indicative of bone working.

This farmstead produced the largest quantity of Roman ceramic building material — brick, tile and the occasional ceramic *tessera* — from the investigations. However, there was insufficient to suggest that it derived from a structure within the site and must have been brought in from elsewhere.

Compared to Phase 4 there was a slight decline in the number of cattle and dog bones and a slight increase in horse bones. However, cattle, followed by sheep/goat, remained the most abundant species. More unusually, bones of a miniature dog breed were identified suggesting the presence of lap-dogs. Ecofactual sample 141 from well G337 (L44) contained a piece of walnut shell and fragments of leaves from the evergreen shrub, box. The latter could imply the presence of ornamental hedges or that bushes of this shrub were being cultivated — perhaps for religious purposes. However, neither of these suggestions fits particularly well with the other evidence from this farmstead. In terms of arable crops there was clear evidence that spelt wheat and barley continued to be grown and that some land was used for hay production.

Domestic enclosure L42
(Fig. 5.2)

Enclosure L42 was square in plan and enclosed an area of *c.* 1150sqm. Its north-east, north-west and south-east ditches G261 and G263 utilised, at least in part, Phase 4 enclosure ditches. The position of the primary fills in several of the excavated segments suggests that there was a bank on the outside of the enclosure (Fig. 5.2f and p). The purpose of ditch G268 is unclear; it appears to have created a narrow sub-division of the enclosure rather than being a replacement south-west boundary. There was a *c*.3.3m wide entrance in the centre of the enclosure's east side, with a narrower entrance in the south-east corner. Within the enclosure next to the main entrances were a large water pit G352 and two smaller pits G354.

The main fills of these features comprised mid/dark grey-brown silty clay with occasional small stones and charcoal flecks. They produced a large quantity of domestic debris, mainly derived from the north-east and south-east corners of the enclosure. It included a large

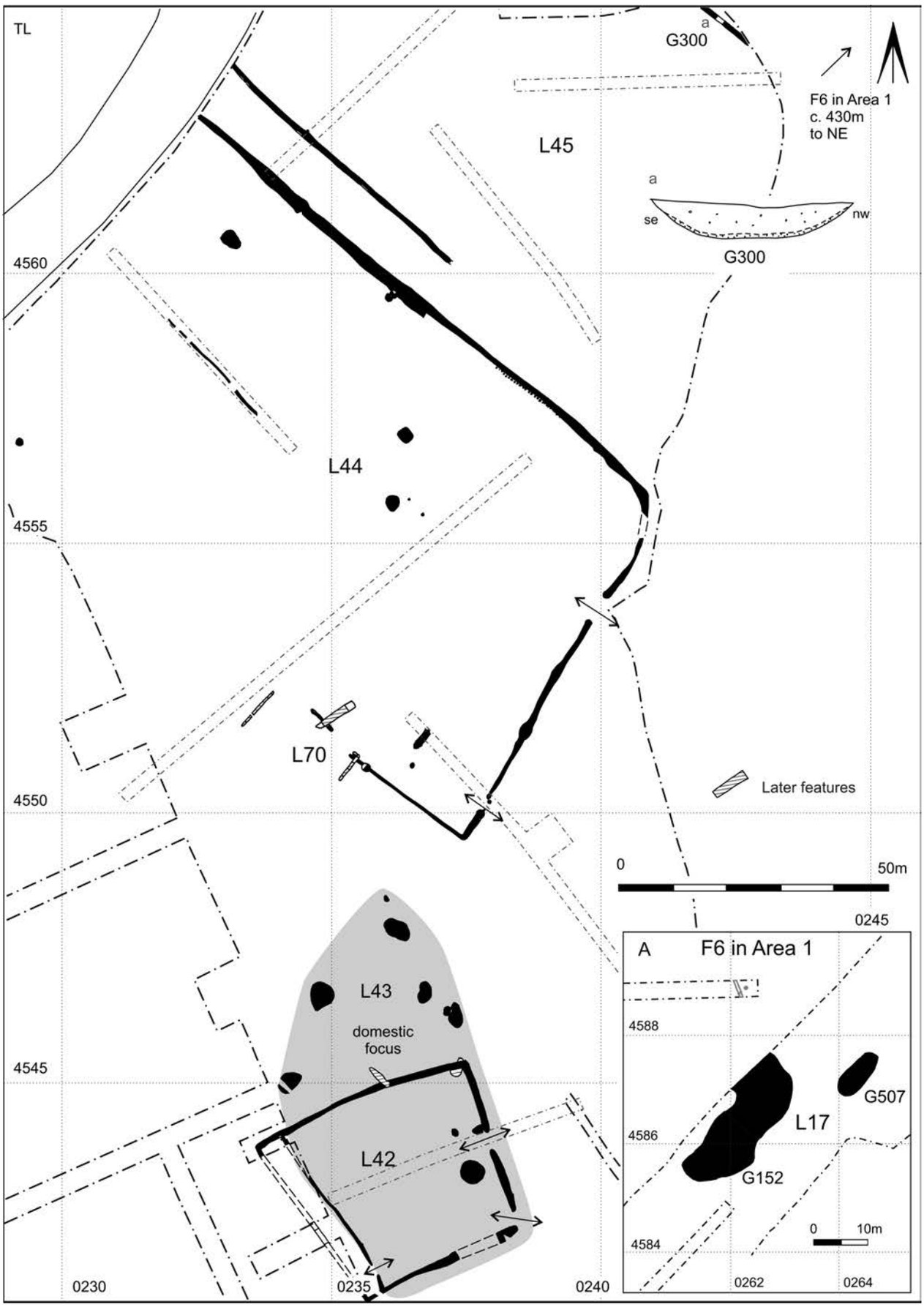


Figure 5.1 Farmstead 7 overall plan (scale 1:1000), with inset for F6, Area 1 (scale 1:1000) **[label G310 far left?]**

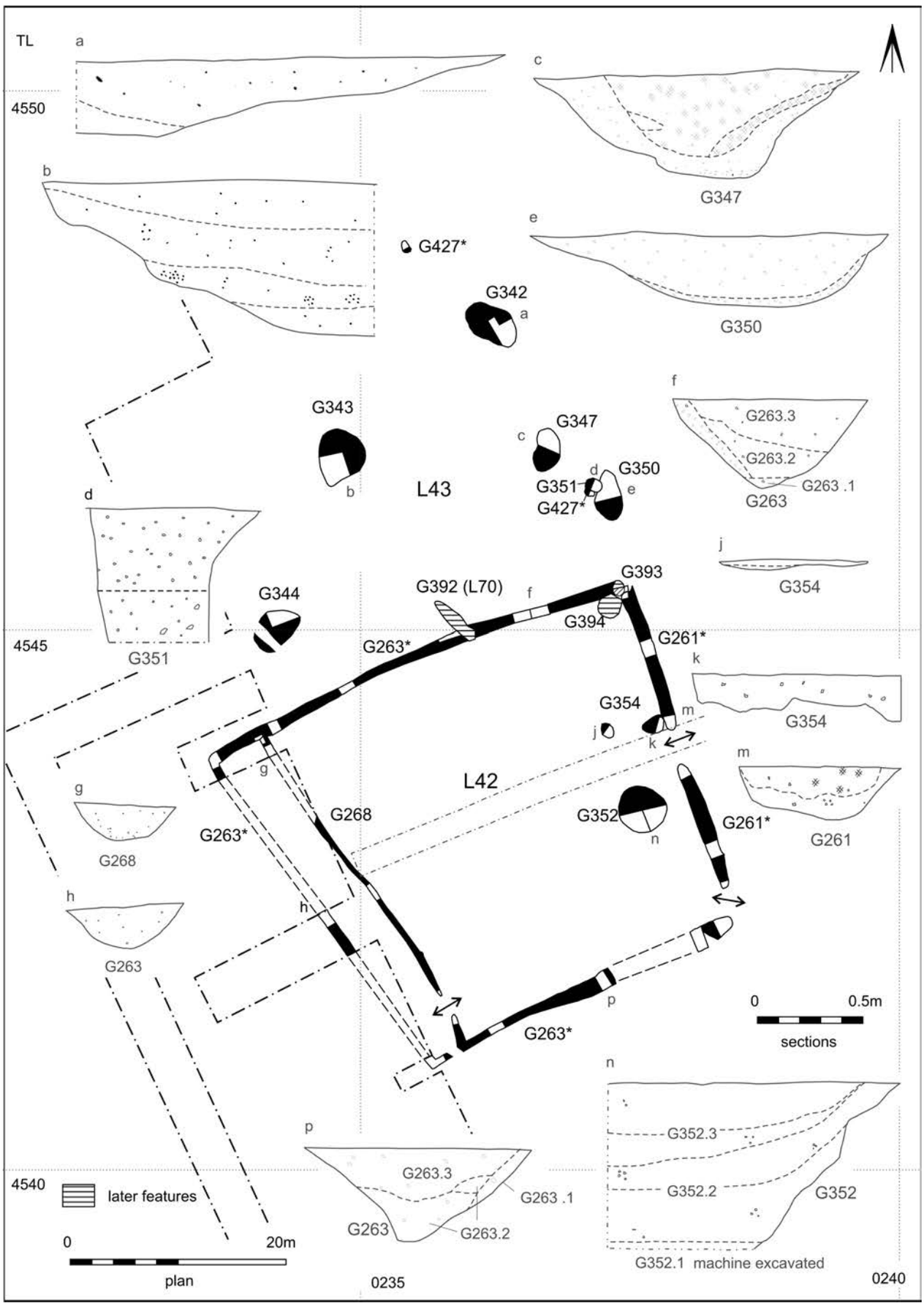


Figure 5.2 Overall plan of enclosure L42 and pits L43 (scale 1:250), with selected sections (scale 1:80)

pottery assemblage (13.5kg) and a large quantity of animal bone (2.4kg). The latter included the mandible of a miniature dog breed. Roman brick and tile, oven/kiln furniture and ferrous slag (950g) were also recovered. In contrast to the overall Phase 5 assemblage, sheep/goat represented the commonest species in the animal bone assemblage from this enclosure.

Enclosure ditches G261 and G263
Ditch G261 formed the north-east side of the enclosure with gaps indicating the location of entrances. It was *c*.1.4m wide and 0.5m deep with a wide, asymmetrical, wide U-shaped profile (Fig. 5.2m). A continuous ditch G263 defined the remainder of the enclosure. Its dimensions varied. To the west it was 0.6m wide and 0.2m deep with a concave profile and concave base (Fig. 5.2h). To the east and south it was 1.75m wide and 0.7m deep with a more V-shaped profile (Fig. 5.2f and p). The position of the primary fills of this ditch would suggest that there was a bank on the outside of the enclosure.

The primary fills of the ditches produced a single 3rd/4th-century potsherd and were waterlogged. The main fills produced over 350 sherds of pottery (Fig. 7.4 P28 and P29), 14 of which were of 3rd/4th-century date, and 38 hobnails from a single shoe (RA 192).

Ditch G268
Internal ditch G268 was parallel to the south-west side of the enclosure and appeared to define a narrow, internal space only *c*.4m wide. A 2m wide entranceway provided access to the main part of the enclosure. The ditch itself was 0.75m wide and 0.3m deep with a U-shaped profile and slightly uneven base; it narrowed to 0.5m and was 0.15m deep at the entrance (Fig. 5.2g).

Water pit G352
A large, circular water pit G352 was located *c*.3m from the central entrance into the enclosure. It was 4.5m in diameter and 1.7m deep with a steep-sided profile that was slightly convex towards the top and a flat base (Fig. 5.2n).

The water pit was largely filled by alternating sequences of dark charcoal-rich deposits and gravel. The upper fills produced nearly 400 sherds of pottery, including 32 sherds from 3rd/4th-century vessels (Fig. 7.4 P30). The lower fills were excavated by machine and only a small quantity of artefacts was recovered.

Pits G354
Two adjacent oval pits G354 were located *c*.4.5m north of the water pit on the other side of the route to the entrance. They were 1.55m and 2.2m long, 1.1m and 2m wide and 0.1m and 0.35m deep. One had a shallow, concave profile and flat base; the other had a steep-sided profile and uneven base (Fig. 5.2j and k).

Domestic focus L43
(Fig. 5.2)
Activity focus L43 extended over an area 36m by 28m to the north of enclosure L42. It comprised a central water pit G343, five large pits G342, G347, G350, G393, G394 and two small pits G351 and G427. Several of these features truncated earlier Phase 4 enclosure ditches.

The primary fills were typically mid grey-brown clay silt with occasional small stones. The main fills comprised a mix of sandy gravel and dark brown-grey silt clay with frequent small stones and charcoal flecks. They produced a large pottery assemblage (2.4kg) and a large quantity of animal bone (2.4kg). Other finds of note include numerous hobnails, Roman brick and tile, and ferrous slag (278g).

Water pits G343, G344
Water pits G343 and G344 were located *c.* 15m apart. Both were oval in plan and had slight projections which may indicate access slopes. Water pit G343 was 5m long, 4m wide and 1m deep with irregular sloping sides and a slightly concave base (Fig. 5.2b). G344 was 4.3m long, 3m wide and at least 0.8m deep with irregular sloping sides.

The lowest identified fill in G343 was mid orange-brown clay sand. It was overlain by horizontal mid brown sandy clays with frequent small stones which became darker towards the top. The main fills produced two 3rd/4th-century potsherds. The fill sequence was similar to G344 but only a small quantity of domestic debris was recovered.

Possible well G351
A possible well G351 lay just north of the north-east corner of enclosure L42, apparently truncating pits G350 and G427. It was circular in plan, *c*.1.1m in diameter and at least 1.1m deep, with near vertical sides (Fig. 5.2d). Its lower fill was waterlogged and comprised dark grey clay silt with frequent small stones. Insect remains from this fill (ecofact sample 105) included settlement-related species and species which lived in the well and around its edge.

Pits G342, G347, G350
Three large ovoid pits lay to the east of the water pits. They were *c*.4.5m long, 2.5m wide and 0.5–1m deep with asymmetrical concave profiles and slightly concave bases (Fig. 5.2a, c and e). They may have originally been dug as quarries. Some were backfilled with domestic debris.

Although they did not produce any 3rd/4th-century pottery, the pits truncated Phase 4 ditches — hence their assignment to this phase.

Later pits G393, G394
Two pits were dug in the north-east corner of the enclosure ditch. They were both sub-circular in plan; one was 1.1 in diameter, the other 2m. They had U-shaped profiles and slightly concave bases. Pit G393 produced a moderate quantity of domestic debris.

Small pits G427
Two pits, both less than 0.6m in diameter and 0.3m deep, were also identified *c.* 10m apart in the area to the north of enclosure L42. One was truncated by possible well G351, indicating that not all activity in this area was contemporary.

Field L44
(Fig. 5.3)
Rectangular field L44 was located 40m to the north of enclosure L42. It was 73m wide and over 111m long, continuing beyond the limit of excavation. A continuous ditch G219 and G221 formed the north-east side of the field, truncating one of the Phase 4 major boundary ditches. The south-east side was formed by ditch G222

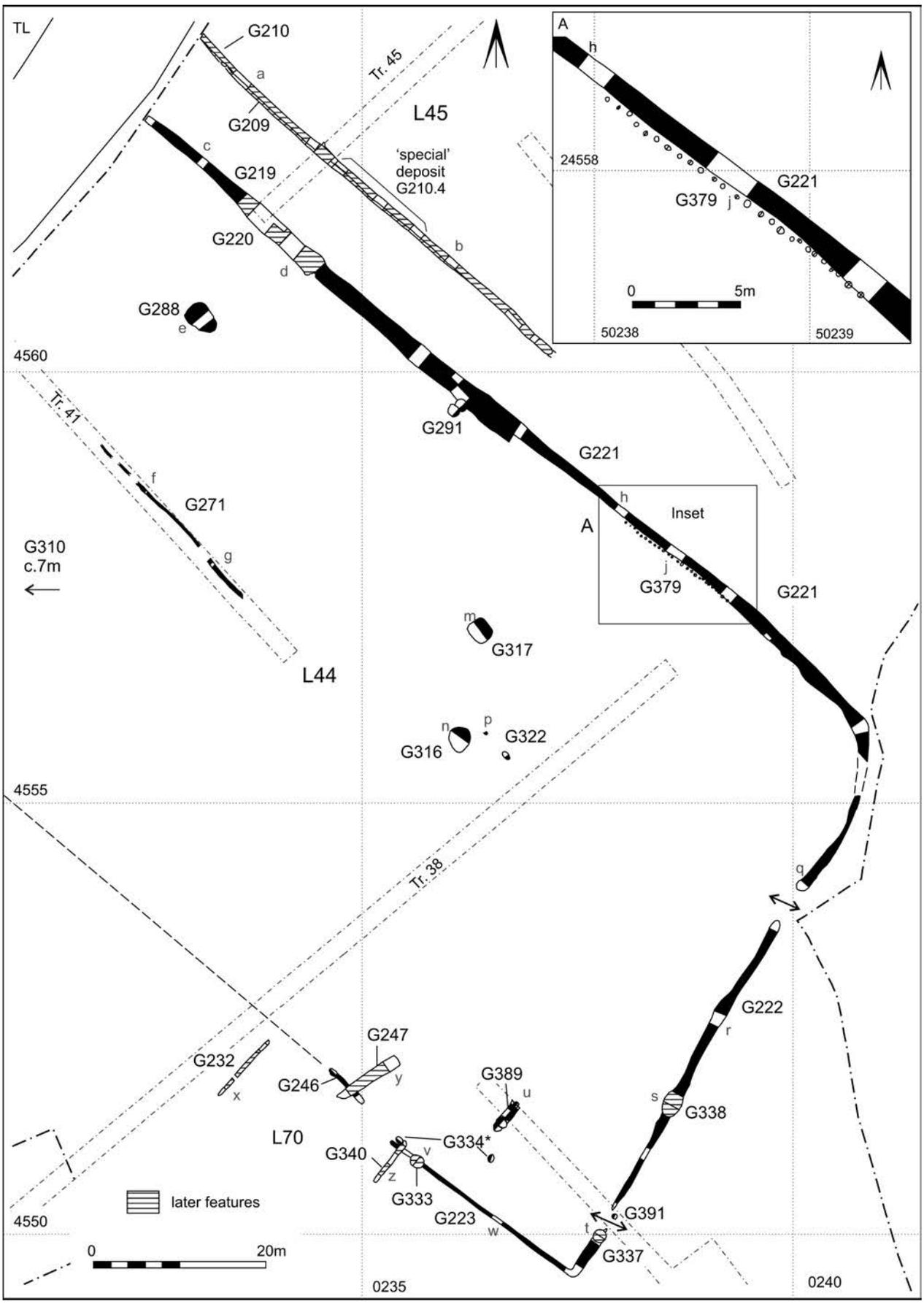


Figure 5.3 Overall plan of field L44 and later short gullies L70 (scale 1:400), with inset plan for post-hole alignment G379 (scale 1:250)

and the south-west side by ditches G223 and G246. The south-west side of the field could not be fully traced but this is believed to be the result of truncation.

There was no definite evidence for recutting of any of the ditches. However, part of the north-east ditch (designated G219) was much wider than the remainder of the ditch on this side of the field (designated G221) — possibly indicating the presence of a recut that could not be detected during the investigations. A fence G379 was constructed on the inside of ditch G221 after it had largely silted up. Two gaps in the ditches on the south-east side of the field indicate the position of possible entrances. A pit and post-hole G391 may have been associated with one of them. Ditch G271, which was only identified in a trial trench, may represent an internal sub-division of the field.

There were a few scattered features within the field: isolated pits G288, G291, G310, G317, G316 and G334 and post-holes G322. In addition, an unusual feature G389 may have been a structure. Not all of this activity was contemporary; well G337 and pits G333 and G338 truncated the ditches. All of these were located in the southern corner of the field in the vicinity of later gullies L70 and this area may therefore represent a focus of late domestic activity. Ecofact sample 141 from well G337 was exceptional in that it contained a piece of walnut shell and fragments of box leaves.

The primary fills of the ditches comprised light grey brown sandy clays with frequent small stones. The main fills comprised mid grey brown silty clay with moderate small stones and charcoal flecks. They produced a large quantity of domestic debris, including pottery (21kg) and animal bone (14kg). Other artefacts included coins, glass vessels and personal items. A short length of the ditch on the north-east side of the field (designated G220) contained a large quantity of metallurgical residues (18.8kg), indicating the presence of iron working in the vicinity. A number of fragments of miscellaneous iron objects (mainly sheets, bars and strips) probably represent scrap metal ready for reworking.

Ditches G219/G221, G222, G223, G246

The ditches defining this field varied considerably in size, possibly indicating that they had been renewed. However, no recuts could be identified, with the possible exception of G220 (see below). The two entrances on the south-east side were 2.5m and 4m wide.

North-eastern ditch lengths G219 and G221 were *c*.1.2m wide and 0.35m deep (Fig. 5.4c and h) except near one of the entrances where it was deeper (Fig. 5.4q). The south-east ditch G222 was similar in dimensions and profile to G221 (Fig. 5.4r).

Ditches G223 and G246 represent the only surviving elements of the south-west side of the field. At 0.4m wide and 0.2m deep they were much smaller (Fig. 5.4w) than the other ditches, probably due to a higher degree of truncation. Although ditch G246 was on a slightly different alignment to G223, the two were similar in size and profile.

Amongst the large pottery assemblage from the main ditches (Fig. 7.4 P27 and P33) was a single 3rd-century sherd and two 3rd/4th-century sherds. Also recovered were a copper brooch (RA 158, Fig. 7.6), two coins dated to AD 268–270 (RA 152 and 155) and a late 3rd/4th-century coin (RA 151). In contrast to ditch length G220 (see below) only one iron object was found in ditch G219.

Plate 5.1 Large block of limestone within ditch G220 (L44, Farmstead 7), with 1m scale

Ditch length G220

A *c*.12m length of the ditch on the north-east side of the field (designated G220) was significantly wider and contained distinctive fills and artefacts. It was *c*.2.1m wide, with a concave profile (Fig. 5.4d). The lower fills were similar to those of the rest of the ditch on this side of the field but the upper fills were dark grey-brown silty clays, containing fired clay, vitrified clay, burnt stone and large quantities of metallurgical residues (*c*.9kg). They also contained large quantities of oak charcoal (ecofact samples 94 and 125). The upper fill contained medium sized stones, including a single block measuring 0.9m x 0.4m x 0.3m (Pl. 5.1). All the smaller fragments of limestone showed signs of burning. There was no evidence for *in situ* burning and these deposits are presumed to be debris from nearby smithing.

Amongst the large pottery assemblage (Fig. 7.4 P26) were twenty-eight 3rd/4th-century sherds. Numerous broken iron artefacts included: nails (RA 213, 214, 215, 216, 218, 220, 239, 241 and 242); hobnails (RA 276, 289 and 292); knife blades (RA 162, 222 and 224); and sheet (RA 240) and strip fragments (RA 177, 178, 179, 180, 181, 182, 223, 235, 236, 237, 238, 264, 266 and 287). Their sheer quantity and association with large quantities of slag suggest that much of this material may have been scrap metal collected for reworking. A fragment from a copper casting gate (RA 161) was also recovered.

Pit and post-hole G391

An adjacent pit and post-hole G391 were located at the narrower of the two entrances into the field. The pit was 0.8m long, 0.6m wide and 0.5m deep with near vertical sides and a flat base. The post-hole was 0.5m in diameter and 0.2m deep with near vertical sides and a flat base. They are probably associated with an entrance structure. The pit was dug into the ditch terminal, suggesting the putative structure was built once the ditch had become partly infilled.

Internal ditch G271

A NW-SE aligned ditch G271 was located in trial trench 41 towards the centre of the field. It was *c*.0.4m wide and 0.2m deep, with a shallow U-shaped profile to the north-west (Fig. 5.4f) and a more V-shaped profile to the south-east (Fig. 5.4g).

Fenceline G379
(Fig. 5.3A)
A NW-SE aligned row of 26 post-holes G379 was located on the inside of ditch G221; they are presumed to represent part of a fence. They were 0.15–0.35m in diameter and *c*.0.15m deep with U-shaped profiles (Fig. 5.4j).

Large pits G288, G316, G317
Three large oval pits were located within the field; they were assigned to this phase because they truncated Phase 4 ditches.

Pit G288 was located to the north of the field. It was 3.8m long, 2.6m wide and 0.55m deep with near vertical sides and a flattish base (Fig. 5.4e). Pits G316 and G317 were located *c*.10m apart towards the centre of the field. Both were *c*.2.8m long and 2.6m wide with an irregular U-shaped profile and uneven base (Fig. 5.4m and n). Pit G316 was 0.9m deep and pit G317 was 0.25m deep.

Although their original functions are unknown, both pits had clearly been re-used for the disposal of domestic waste. The primary fills were dark grey-black clay silt with occasional charcoal flecks but only small quantities of domestic debris. However, the secondary fills, which were lighter in colour, produced *c*.100 sherds of pottery (Fig. 7.4 P32) including two from 3rd/4th-century vessels. Small quantities of oven/kiln furniture, fired clay, slag and animal bone were also present.

Intercutting pits G291
Two intercutting pits G291 lay close to the field's north-east ditch G221; the earlier of the two appeared to truncate the ditch. They had similar profiles and dimensions — *c*.1.3m in diameter, 0.45m deep with U-shaped profiles.

Post-holes G322
Two post-holes *c*.3m apart were located close to pit G316 towards the centre of the field; one truncated a Phase 4 gully. Both were *c.* 0.7m in diameter and 0.2m deep with rounded V-shaped profiles (Fig. 5.4p). Unusually for a post-hole, the more northerly of the two contained a moderate assemblage of domestic debris, including three 3rd/4th-century potsherds, a fragment from a glass vessel (RA 273 Fig. 7.7) and a late Roman glass bead (RA 275, Fig. 7.6).

Possible structure G389
Close to the south corner of the field was an arrangement of three features G389 which, although apparently intercutting, did appear to be associated. They comprised a short gully/scoop, a pit and a post-hole. The gully was 4m long, 1m wide and 0.15m deep with a flat base. The pit was 1.2m in diameter and 0.65m deep with near vertical sides and a concave base. The post-hole was 0.6m in diameter and 0.2m deep with a U-shaped profile (Fig. 5.4u). The arrangement of pit and post-hole being at either end of a scoop gives these features some affinities with a sunken-featured building.

The primary fill of the pit was light brown in colour and produced 26 sherds of pottery, including a single 3rd/4th-century sherd. In contrast, the main fill was black silty sand with occasional small stones and frequent charcoal flecks. It produced three coins dated between AD 270 and AD 273–276 (RA 143, 145 and 142), 74 sherds of pottery, three nails, part of a glass vessel (RA 286), copper alloy waste (RA 144 and 147) and an iron ring (RA 146). The gully and post-hole were infilled with mid yellow-brown sandy clay with frequent small stones. They produced a similar quantity of pottery to the pit.

Plate 5.2 Semi-complete grey ware vessel within pit G333 (L44, Farmstead 7) with 0.2m scale

Pits G334
Two oval pits G334 were located, *c*. 10m apart, close to the south-west side of the field. They were *c*.0.9m long, 0.6m wide and 0.15m deep with concave profiles and flat bases.

Later pit G333
Circular pit G333 truncated part of the infilled ditch G223. It was 1.5m in diameter and 0.75m deep with a V-shaped profile and concave base (Fig. 5.4v). Its main fill contained 170 sherds (1.8kg) of pottery including a semi-complete grey ware vessel on top of a larger sherd from another vessel (Pl. 5.2) and fragments of a whiteware costrel (Fig. 7.4 P31).

Later possible well G337
(Pl. 5.3)
A circular well G337 truncated one of the infilled terminals of ditch G222. It was 1.5m in diameter, *c*.1.5m deep, with fairly vertical sides and a flat base (Fig. 5.4t). The lower fill, which was machined out, contained frequent limestone slabs. They were typically 0.4m by 0.2m in size and were found lying flat on top of one

Plate 5.3 Limestone slabs within possible well G337 (L44, Farmstead 7), with 0.4m scale

another. Blue-grey clay on and around the slabs may have been packing material. These slabs were clearly not *in situ* but may represent the remnants of a robbed-out stone lining. The lower fill produced a single sherd of 3rd/4th-century pottery.

The rest of the well contained dark brown-grey clay silt with moderate quantities of small stones. Amongst the twenty-eight recovered pottery sherds were two from 3rd/4th-century vessels. Ecofact sample 141 contained a piece of walnut shell and fragments of box leaves.

Later pit G338
(Pl. 5.4)
Elongated oval pit G338 truncated part of the infilled ditch G222; it was located 15m from well G337. It was *c*.4.7m long and 2m wide with a steep-sided, concave profile (Fig. 5.4s). To the south-west it was 0.65m deep, whereas to the north-east it was 1.05m deep. Its original function is unknown but it was re-used for refuse disposal.

The primary and secondary fills produced a moderate assemblage of domestic debris, including 35 pottery sherds and a coin dated to AD 270–274 (RA 208). The upper fills were much darker and more charcoal-rich. They produced over 400 sherds of pottery including 14 sherds of 3rd/4th-century and 19 sherds of 4th-century vessels. Two coins dated to AD 260–296 (RA 255 and 206) and another coin dated to the late 3rd century (RA 209) were also found. Other artefacts of note included a late Roman bone hair pin (RA 204, Fig. 7.6) and the base of a late Roman glass drinking vessel (RA 253).

Field L45
(see Figs 5.1 and 5.3)
Field L45 was situated to the north-east of field L44. It covered at least 3,500sqm and continued beyond the limit of excavation. At one time its south-west side was probably formed by the north-east ditch G219 of field L44. However, at some point a new boundary ditch G209 was dug and was itself recut at least once (G210). Only a short length of the north-east boundary ditch G300 fell within the excavation area. Both G300 and G219 were stratigraphically later than the Phase 4 major boundary L31. No features were identified within this field.

All of these ditches contained a single deposit of grey-brown clay silt with occasional small stones. The majority of the domestic debris from this field derived from ditch G210, although it is uncertain how much of this material was residual from earlier activity. It comprised a large pottery assemblage (4.7kg) that included possible 'special' deposit G210.4 and a large quantity of animal bone (1.3kg). Other artefacts included coins of late 3rd-century date, iron objects, slag, a possible brooch and a rotary quern.

Ditches G209 (recut as G210) and G300
Ditch G209 ran for 54m, parallel to and *c*.10m to the north-east of ditch G219 (L44) (Fig. 5.3). It was 0.35m wide, 0.2m deep with a steep-sided, concave profile and flattish base. Its recut G210 covered almost its entire length. It was 0.65m wide and 0.2m deep with an asymmetrical concave profile and flattish base (Fig. 5.4a and b). Ditch G300 on the north-east side of the field was at least 15m long, 0.9m wide and 0.45m deep with an asymmetrical U-shaped profile (Fig. 5.1a).

Plate 5.4 Elongated pit G338 truncating ditch G222 (L44, Farmstead 7) as visible prior to excavation, with 1m scale

Among the 300 sherds of pottery were 27 sherds of 3rd/4th-century vessels, a coin of AD 268–70 (RA 159) and another of late 3rd/4th-century date (RA 174). Other finds of note included 3.6kg of slag, including vitrified clay and smithing hearth cakes. The majority of these artefacts came from the fill of recut G210 (Fig. 7.4 P25).

Possible 'special' deposit G210.4
Five discrete concentrations of pottery were recovered from the upper fill of ditch G210 and were assigned to G210.4. They occurred over a 10m length, but only two concentrations could be described as adjacent. At least two vessels were semi-complete (Pl. 5.5). Overall the assemblage derived from a range of different fabrics and forms.

Plate 5.5 One of the semi-complete pottery vessels in 'special' deposit G210.4 (L45, Farmstead 7), with 0.2m scale

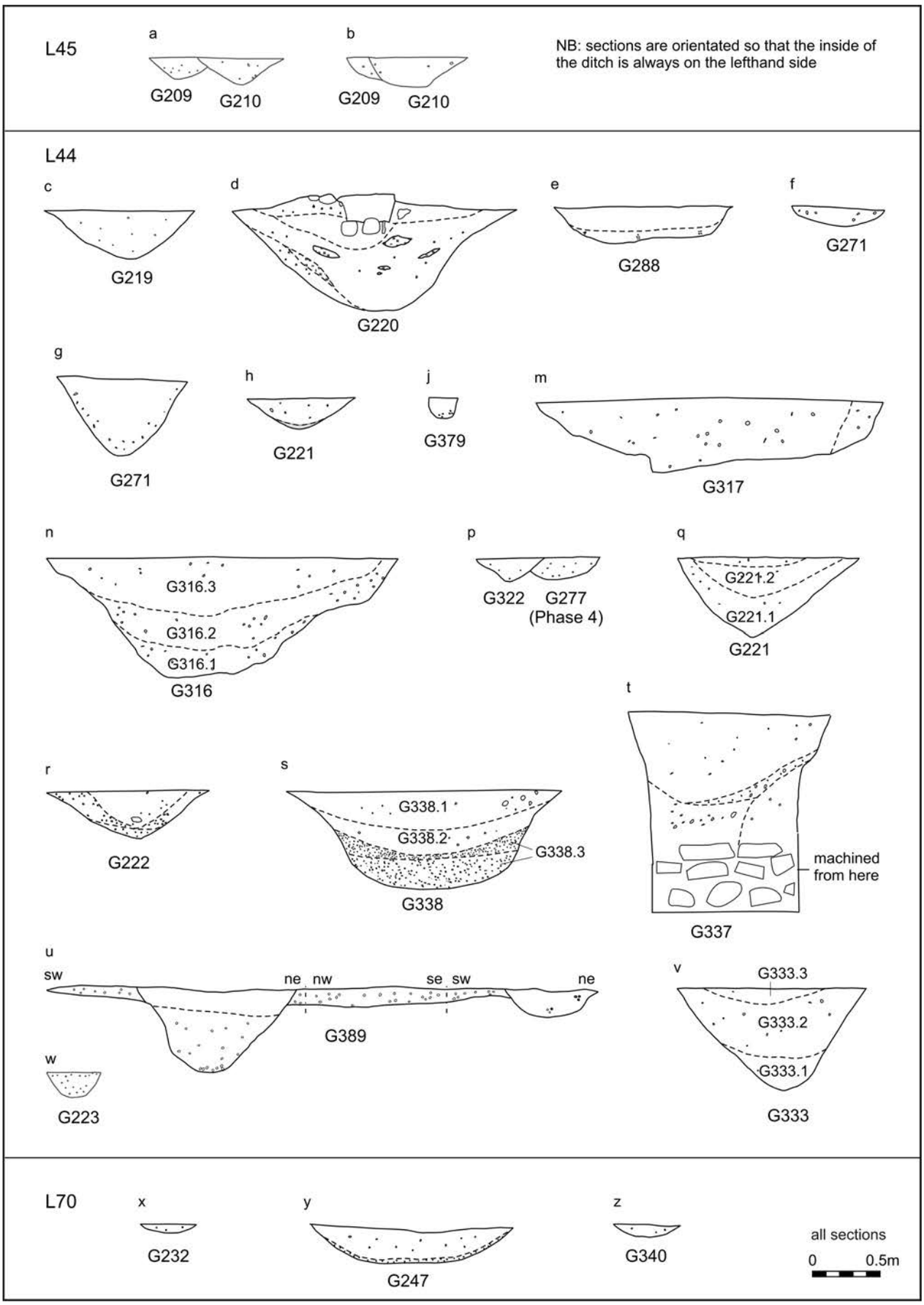


Figure 5.4 Selected sections for Field L44 and L45. Scale 1:80

Later gullies L70
(Fig. 5.3)
L70 comprises four gullies G232, G247, G340 and G392, which truncated the infilled ditches of field L44 or enclosure L42. They represent the latest evidence for activity on this farmstead. Three of the gullies were aligned NE-SW, as was possible structure G389 (Fig. 5.3). The fourth was located 50m to the south and was aligned NW-SE (Fig. 5.2).

The main fills of the gullies comprised grey-brown sandy clay with occasional small stones and charcoal flecks. They produced a small quantity of domestic debris but nothing firmly datable to the late Roman period.

Gullies G232, G340, G247, G392
These four gullies were characterised by their short length and the fact that they truncated the ditches of either field L44 or enclosure L42. G232, G340 and G247 were roughly parallel, on a similar NE-SW alignment and were all within *c.*12m of each other in the south corner of field L44 (Fig. 5.3). The other gully G392 was aligned SE-NW and was located on the north side of enclosure L42 (Fig. 5.2). All four were 4–8m long, 0.4–1.3m wide and less than 0.3m deep, with U-shaped profiles (Fig. 5.4x, y and z).

III. Latest activity on Farmstead 4
(Fig. 5.1A)

The latest activity within Farmstead 4 (Phase 4) comprised a large pond and pit which have been designated F6. Neither produced any dating evidence; they were assigned to this phase because they truncated the major Phase 4 boundary ditches and were themselves truncated by medieval furrows. For their relatively large size they contained a surprisingly small quantity of domestic debris, suggesting they were located some distance from any significant settlement activity.

Pond and pit L17
L17 comprises a pond G152 and a large pit G507, situated *c.*8m apart in the north half of Area 1. The irregular shape of G152 suggests that it may have originated as a quarry. It was 26m long and at least 10m wide, continuing beyond the limit of excavation. It was machine-excavated, demonstrating that it was 2m deep with a steep-sided, concave profile and flat base. Large oval pit G507 was 9.5m long and 3.5m wide.

Both features contained dark grey silty clays with occasional small stones and several large pieces of limestone. The only finds recovered were a few fragments of animal bone.

Chapter 6. Post Romano-British activity (Phases 6 and 7)

I. Phase 6: medieval

(Fig. 6.1)

Both the excavation areas and the trial trenches contained numerous linear features interpreted as furrows L73. Their layout within Area 2 suggests the presence of a SW-NE aligned headland, which was confirmed by a corresponding increase in topsoil depth. The full extent of the furrows within the development area is indicated by cropmarks visible on aerial photographs. A small area of ridge and furrow earthworks survived in a paddock to the south-west of Marsh Leys Farm.

The alignment of the furrows within both excavation areas broadly corresponded with the latest phase of Romano-British activity, *i.e.* with Phase 4 ditches in Area 1 and with Phase 5 ditches in Area 2.

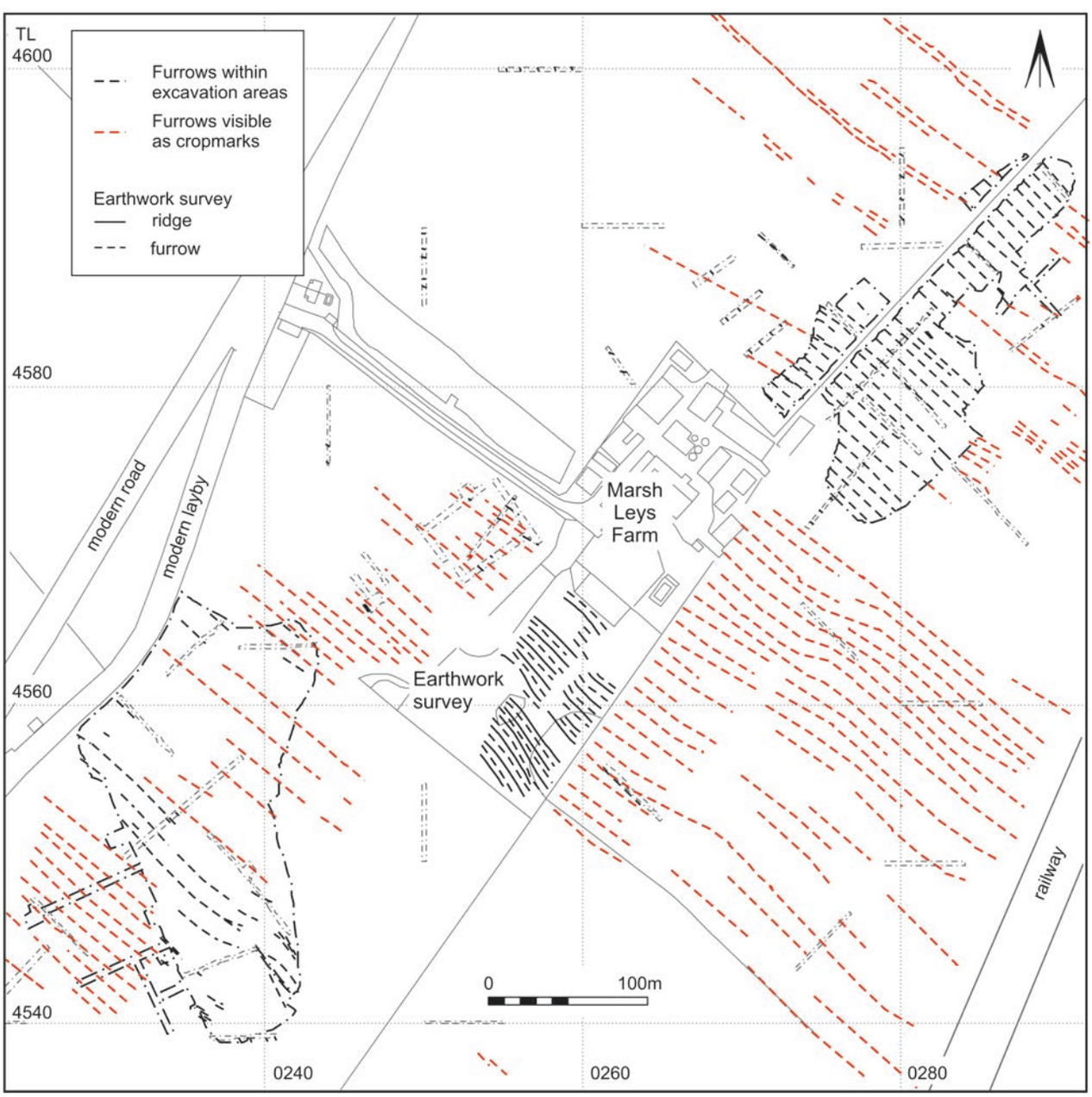


Figure 6.1 Medieval overall plan. Scale 1:4000

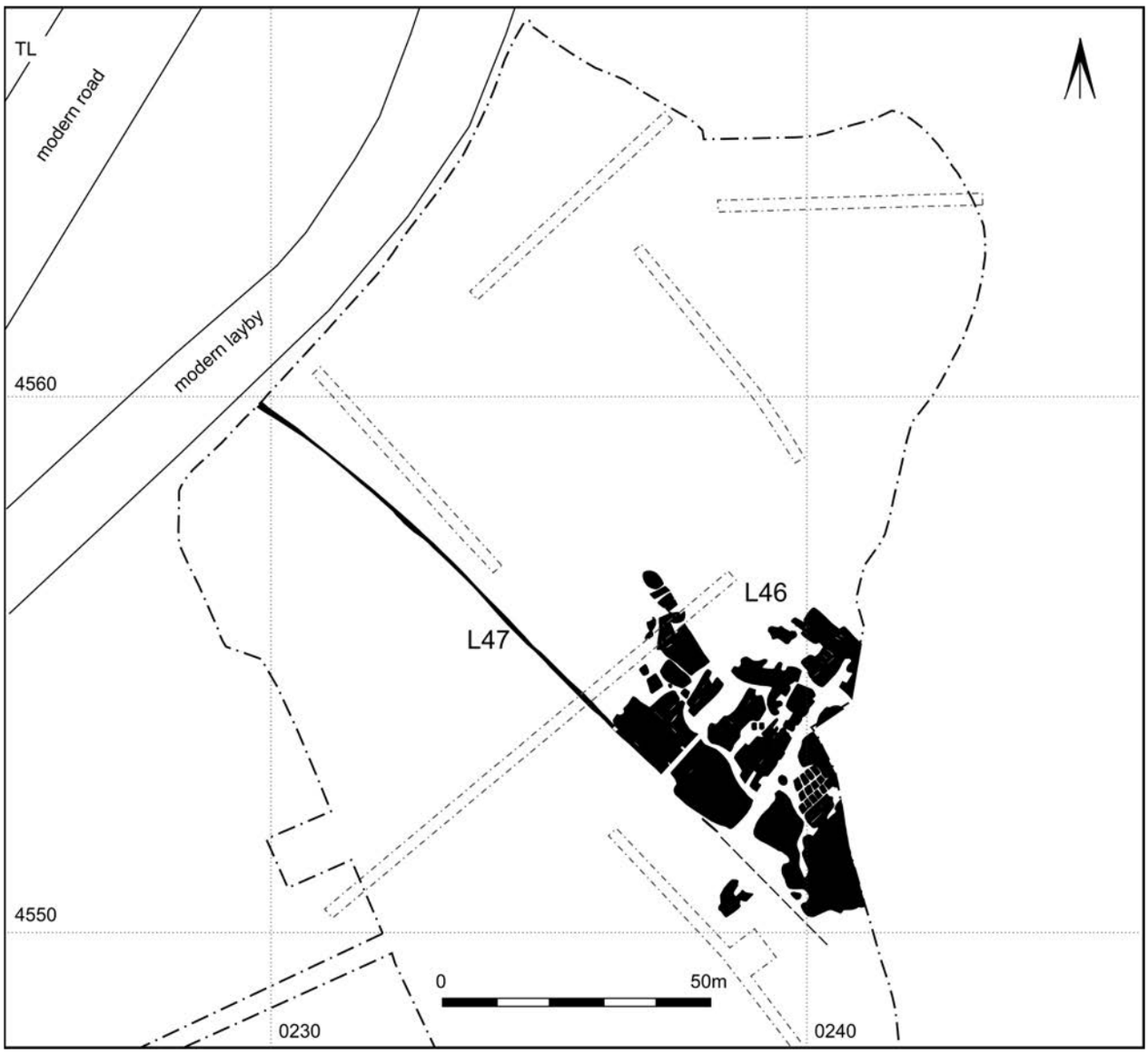


Figure 6.2 Post-medieval overall plan. Scale 1:1250

Plate 6.1 Post-medieval quarry pits L46 being exposed during machining

II. Phase 7: post-medieval
(Fig. 6.2)

Sub-surface evidence for post-medieval activity was only located in Area 2. It comprised boundary ditch L47 and an adjacent, extensive area of quarrying L46. The boundary ditch respected and was on the same alignment as the Phase 6 furrows. No stratigraphic relationships were identified between the pits and the furrows but some of the pits truncated one of the ditches of the Phase 5 field L44.

The quarry pits were dug right up to ditch L47 and respected its alignment, even in the area to the south-east where it had been removed by later truncation. A number of the pits were intercutting, suggesting that there were dug over a relatively long period of time. Others were closely spaced, square or rectangular pits ranging in size from 1.5m to 2.2m (Pl. 6.1). They were, therefore, more regular in shape than the Romano-British quarry pits but, like them, were only rarely deeper than 0.3m indicating that they too had been dug to extract gravel.

Inevitably the fills of these features contained a small quantity of residual Romano-British artefacts. The ditch produced a thin copper-alloy disc — probably a very worn, modern coin (RA 104). The quarry pits produced two post-medieval buttons (RA 149 and 148).

III. Phase 8: modern

The overburden within the excavation areas was removed by machine. Metal detected artefacts recovered from topsoil and subsoil L74 were assigned to this phase to assist in artefact analysis.

Chapter 7. Artefacts

I. Introduction
by Jackie Wells

The investigations yielded an artefact assemblage comprising pottery, ceramic building materials and iron structural fittings, personalia, and objects associated with domestic, craft-related and agricultural activity. These are discussed below by functional category. Where appropriate, methodologies are outlined in each section. More detailed information is provided in appendices for pottery fabric types (Appendix I), brick and tile fabric types (Appendix II), daub and fired clay fabric types (Appendix III), metallurgical residues (Appendix IV), catalogue of registered artefacts (Appendix V) and catalogue of coins (Appendix VI).

II. Pottery

Jackie Wells (including samian report by Felicity Wild with stamp identification by Brenda Dickinson)

Introduction
Excavation and field artefact collection yielded 10,535 pottery sherds, representing 5,034 individual vessels, weighing 183.3kg. Over 68% of this assemblage by sherd count derived from features in Area 2 (principally Farmsteads 3, 5 and 7). Pottery recovered during field artefact collection comprised 167 sherds, of which seven (71g) are datable to the late Iron Age and forty-five (286g) are Roman. The majority of this material derived from the vicinity of excavation Area 1; Area 2 was not subject to field artefact collection (Fig. 1.5). The remainder of the assemblage from field artefact collection was either medieval (7 sherds), post-medieval (85 sherds) or not attributable to a particular period (23 sherds).

Methodology
Pottery deriving from the open areas and evaluation trenches was examined by context. Fabric types were identified (see Appendix I) in accordance with the Bedfordshire Ceramic Type Series, currently maintained by Albion Archaeology. Form codes were assigned and catalogued within fabric group. Quantification was by minimum vessel and sherd count, and weight. Unless otherwise stated, quantitative data in the text is based on sherd count. Sherds belonging to the same vessel, but deriving from separate contexts, were quantified as one vessel.

The condition of the pottery and potential residuality or intrusiveness within each deposit was noted, and attributes, including decoration, manufacturing techniques, levels of abrasion and evidence of use (presence of residues, sooting, wear marks *etc*.), were recorded. All information was entered onto an Access database.

A representative sample of the pottery has been illustrated (Figs 7.1–7.4). Standard drawing conventions are used, with vessels shown at one quarter size, external view on the right and a section and internal view on the left. Wheel-thrown vessels are shown with solid sections and handmade vessels with hatched sections. The pie diagram at the base of each illustration indicates the proportion of the vessel recovered. Illustrated vessels are sequentially numbered with the prefix P and are catalogued below each figure.

Discussion of the pottery assemblage by chronological period

Early to middle Iron Age (< 1% total assemblage)
Pottery broadly datable to the early to middle Iron Age comprises seven undiagnostic handmade sherds (173g) in sand-, and grog/sand-tempered fabric types F03, F14 and F28. They occurred as residual finds within Area 1 Farmsteads 2 and 4 (Phases 3 and 4 respectively).

Late Iron Age (21% total assemblage)
The late Iron Age assemblage comprises 2,227 sherds representing 1,046 vessels, weighing 35.8kg. The pottery survives in fair condition, with moderate abrasion, although a high degree of fragmentation is indicated by a vessel to sherd ratio of 1:2 and average sherd weight of 16g.

Fabrics and manufacture
Approximately 51% of the assemblage comprises sherds containing grog tempering or grog/sand (types F06A/B/C and F09). Shell/grog- and shell-tempered sherds (types F05, F07, F08) constitute 46%, and entirely sand-tempered type F34 represents the remainder. The high proportion of grog- and shell-tempered types at Marsh Leys is characteristic of late Iron Age assemblages in north Bedfordshire, and is paralleled at a number of sites in the vicinity *e.g*. Kempston Church End (Parminter 2004, table 9.21), Great Barford (Webley 2007b, 232), Biddenham Loop (Wells 2008, 231) and Hill Field, Wilshamstead (Wells 2010b, 183). Potential sources for the shelly types may be kiln sites at Bromham or East Stagsden (Tilson 1973; Slowikowski 2000), although no petrological analysis was undertaken to substantiate this. Two vessel bases have potters' marks comparable with those observed on products of the Stagsden kiln (Fig. 7.3 P20; *c.f.* Slowikowski 2000, fig. 52, 233). Given the proximity of production sites, *c*. 5km to the north, it is interesting that shelly types do not dominate the assemblage. Provenance for other fabric types is uncertain. The majority of vessels are wheel-thrown, while a small proportion are handmade with a wheel-finished shoulder and rim. Wheel-thrown pottery occurs in this region during the 1st century BC but, as has been observed in other counties, its adoption may have been a complex process (Bryant 1997, 26). A number are entirely handmade — mainly shell-tempered, lid-seated and large coarse grog vessels in fabric types F07 and F06C respectively.

Forms

The assemblage is characterised by the prevalence of late Iron Age pottery forms, the appearance of which in the south-east Midlands is conventionally dated to *c*. 50 BC (Hill 2002, 143). Diagnostic vessels represent a standard range of domestic pottery, characteristic of the region (*c.f.* Thompson 1982, 15–16). Jars of varying sizes are dominant, ranging in diameter from 140–260mm, including cordoned (type B3; after Thompson 1982), lid-seated (C5–1, C5–2), everted (B1–2) and bead rim (C1) examples. Other forms are large storage vessels (C6), platters (G1–6), lid-seated bowls (D3–1, D3–4), butt beakers (G5–5), pedestal urns (A1) and lids (L1). Decoration is rare and comprises horizontal, vertical and random combing, incised and finger impressed motifs. One body sherd bears graffiti in the form of an incised X. Four body and base sherds have been modified by the addition of post-firing holes.

Use is attested by the presence of external and internal sooting/residues on 276 vessels. Two have a thick internal white residue, possibly representing an accumulation of limescale, and seventeen vessels have pitted internal surfaces, resulting from long-term use. Few wear marks were recorded, occurring only on the underside of two vessels.

The range of jar and bowl forms, coupled with a paucity of specialised tablewares such as cups, beakers and platters, broadly reflects the composition of contemporary assemblages in the middle Ouse Valley, such as Biddenham (Wells 2008), Great Barford (Webley 2007b) and East Stagsden (Slowikowski 2000). This may suggest the adoption of only a limited range of late Iron Age vessel types by the inhabitants.

Roman (78% total assemblage)

Roman pottery, the majority of which is datable to the 1st–3rd centuries, comprises 8,221 sherds representing 3,952 vessels, weighing 145.5kg. The pottery survives in comparable condition to the late Iron Age material, with a low average sherd weight (17g) and vessel to sherd ratio (1:2), suggesting a similar degree of post-deposition disturbance.

The assemblage comprises a comparable range of wares to those recovered from contemporary sites in the vicinity, *e.g.* Kempston Church End (Parminter 2004, 495), Biddenham Loop (Wells 2008, 271–2), Great Barford, (Webley 2007b, 247–250), Luton Road Wilstead (Wells 2010a, 133–6), and generally reflects the composition of Romano-British rural assemblages in the Great Ouse Valley. The assemblage suggests relatively low socio-economic status, with pottery mainly deriving from local sources and predominantly comprising jars for storage and cooking. The presence of imported fabric types, however, indicates wider ranging contacts and a degree of higher status consumption.

Fabrics

The assemblage is dominated by sand-tempered, reduced and oxidised coarse wares (fabric groups R05, R06, R07, R10 and R14) and shelly coarse wares (fabric R13). The sand- and shell-tempered fabric groups each constitute 41% of the pottery. Numerous sources are likely for the former, especially during the earlier Roman period when small scale, localised manufacture would have been the main means of production. Grey wares are known to have been produced at a series of sites to the south-east of Bedford, notably at Mile Road (Dring 1971), although other kilns have been identified at Cardington and Eastcotts (Simco 1984, BCAS 1995).

A number of shelly fabric forms could be paralleled with types from the Lodge Farm kilns at Harrold (Brown 1994) located *c*. 11km to the north-west. Although Harrold was a substantial and long-lived industry through- out the Roman period, it is unlikely to have been the exclusive supplier of shell-tempered pottery to sites in the locality. A small proportion are macroscopically similar to fabrics recovered from recently excavated early Roman kilns at Willington Quarry, near Bedford (Albion in prep. a).

Regionally traded wares constitute 8% of the assemblage. Although this proportion is comparable with the assemblage recovered from the farmstead at Luton Road, Wilstead (Wells 2010a, 136), it is almost double those recorded at other contemporary rural sites, such as Kempston Church End (Parminter 2004, 495), Biddenham Loop (Wells 2008, 271) and Hill Field, Wilshamstead (Wells 2010b, 200). Regional imports are represented by white ware products of the Verulamium industries (R03A/B, R18A/B and R33), Dorset Black Burnished ware (R07A), Nene Valley grey wares (R06A), mortaria (R12A) and colour-coated wares (R12B), pink grogged vessels (R09A) from either Caldecotte, Bucks. or Towcester, Northants., and small quantities of white, oxidised and colour-coated wares from Oxfordshire (R11, R11A, R11D–F), oxidised ware from Hadham, Herts (R22A), mortaria from the Mancetter-Hartshill (R20) industries, and mica-gilded wares (R02) of uncertain provenance.

Continental imports constitute 2% of the assemblage and are represented by four Spanish amphorae sherds and a small quantity of samian ware, the latter ranging in date from the mid–late 1st to the mid 2nd–3rd century (see below). A single sherd of lead-glazed ware may be of either continental or regional origin. The proportion of continental imports is similar to those recorded at Biddenham Loop (Wells 2008, 271), Luton Road Wilstead (Wells 2010a, 136), and Hill Field, Wilshamstead (Wells 2010b, 200).

Forms

A standard range of vessel forms associated with the storage, preparation and consumption of food and drink are represented. The diagnostic assemblage is dominated by jars of varying sizes, which total 62%, and range in diameter from 160–230mm. The jars include cordoned, carinated, narrow-necked and neckless forms, and have plain everted, undercut, triangular, bead, and rolled rims. Large storage jars occur exclusively in shelly fabric R13 and the majority of lid-seated vessels are also shell-tempered. In common with other contemporary sites in the vicinity, *c.f.* Biddenham Loop (Wells 2008, 272) and Luton Road, Wilstead (Wells 2010a, 136), the incidence of sooting and/or residues is largely restricted to shelly vessels, indicating their specialised use as cooking pots/ kitchen wares. Among the shell tempered vessels, 360 have external and internal sooting and/or black residues, 30 have internal white residues and 135 have pitted internal surfaces resulting from long-term use.

Bowls constitute 15% of the assemblage, and range in diameter from 130–360mm, with shelly examples generally falling at the larger end of the range. Bowls include carinated and cordoned examples and have

everted, bead, flanged, reeded, rectangular, triangular and lid-seated rims. One sandy coarse ware bowl with a flaring rim may be copying a metal example (Fig. 7.1 P5).

Decoration comprises rouletting, rilling, incised wavy lines, horizontal, vertical and random combing, rustication, burnishing (overall and lattice), slipping, barbotine and stamped motifs. The curation of vessels is evidenced by post-firing drilled holes through shoulder, body and base sherds, to facilitate repair. One damaged flagon neck has been crudely repaired using a pitch-like substance (Fig. 7.2 P7).

Less common vessel forms are ring- and plain-necked flagons, platters, poppy-head, folded and funnel-necked beakers, plain and cornice rim beakers, dog dishes, Dressel 20 olive oil amphorae, lids, strainers, Castor boxes and mortaria. The latter include mid 3rd-century M17 forms (Young 1977, 72), and a stamped example of uncertain provenance (Fig. 7.4 P26). Single examples of an unguent jar, hunt cup, globular jar, bottle (Fig. 7.2 P16), miniature vessel (Fig. 7.1 P1), possible lamp or incense burner (Fig. 7.1 P2), and costrel (Fig. 7.4 P31), the latter a rare form, were also identified. These derive from a range of local and regional sources, including the Verulamium and Nene Valley industries.

The incidence of miniature vessels in Roman Britain has been recently discussed following the recovery of a quantity from a rural religious site at Frensham Common, Surrey (Graham and Graham 2009). Residues within a number of these pots suggest they may have been used as containers for 'aromatic compounds', often used for their scent or flavour (Graham and Graham 2009, 68). The possible lamp or incense burner would have performed a similar function.

Samian ware
by Felicity Wild
(Fig. 7.1 P3, Fig. 7.3 P24 and Fig. 7.4 P32 and 33)

The investigations produced 132 plain and decorated sherds (see Appendix I), representing approximately 93 vessels: 75 (*c.* 81%) in Central Gaulish fabric R01A (including Les Martres-de-Veyre), and nine (*c.* 10%) respectively from South and East Gaul (R01B and R01C). Vessel forms are detailed in Appendix I.

Although recovered from later contexts, the earliest material is Neronian (AD 54–68), suggesting that samian ware was reaching the site in very small quantities, from the Neronian or early Flavian period (AD 54–81). Its inhabitants even managed to obtain the odd decorated bowl, highly prestigious items (*e.g.* South Gaulish Form 29, stamped Murranus, *c.* AD 50–65, and Form 37 *c.* AD 80–100).

It was not until the Hadrianic–Antonine period that samian ware became relatively common on the site, with the bulk of the material clearly arriving during the 2nd century AD. The main source was Lezoux, though the products of East Gaulish potteries such as Rheinzabern, the Argonne and La Madeleine were also reaching the site. It is uncertain how long the wares remained in use. Three sherds show evidence of repair, one from Farmstead 5 (Phase 4) and two from Farmstead 7 (Phase 5). One of the latter, a dish of Hadrianic–early Antonine date, shows four

		IA	*LIA*						*1st century*		*1st–2nd century*				
F no.	*L no.*	*F03*	*F05*	*F06*	*F07*	*F08*	*F09*	*F34*	*R01B*	*R07B*	*R02*	*R03A*	*R03C*	*R08*	*R01A*
F2	1.1		1:1					1:1							
	1.2/3		2:2		1:1		3:3							1:1	
	2.2														
	3.1														
	3.2		1:1	1:1	1:1		1:1		1:1	2:7	1:1		1:1	1:1	
	4.1		1:1				0:1								3:5
	4.2/3	1:1	6:14	1:20	14:21		7:44			1:1			1:1		
	5								2:2				1:1	1:44	
	5.2/3				3:12		1:1	1:1							
	6.3		1:1												
	7.1							1:1							
	7.2/3		1:2		1:1		1:1			1:1	1:2		1:1		4:4
	54.1		1:6				1:1								
	54.2/3		2:2		2:2		2:2								1:3
	Subtotal														
F3	21.1		1:1	1:6	1:1										
	21.2/3		2:34	5:35	3:12		4:31			1:1					
	22.2/3		6:6	4:7	10:21	1:1	7:13			2:2		2:4			
	23.3		1:2		2:7										
	24.2/3		1:1	2:3		1:1	3:3			1:5				3:4	
	25.1									1:11					
	25.2/3		3:11	4:28	9:87		1:15	4:11		1:7	1:2		1:1		
	26.1		1:1												
	26.2/3			5:5	3:4	1:3	2:3			1:4					
	27.1		1:1	1:2	2:7		2:3								
	27.2/3		4:4	6:7	2:10		3:5			2:14					
	28.1														
	28.2/3		2:8	11:20	6:10		2:2								
	29.1														
	29.2/3			4:5			1:1								
	30.1		1:1				1:1								
	30.2/3		1:1	10:21	5:5	5:8		2:3		4:24			1:1		
	78.1				1:1										
	78.2		3:4	2:4	7:11		1:1	1:1		1:2					
	Subtotal														
Total		**1:1**	**43:105**	**57:164**	**73:214**	**8:13**	**43:132**	**10:18**	**3:3**	**18:69**	**3:5**	**2:4**	**6:6**	**6:50**	**8:12**

*excludes miscellaneous unidentified fabrics
shaded area indicates contemporary ceramics

Table 7.1 Phase 3 pottery fabrics by farmstead and land use area (vessel and sherd count)

rivet holes, one retaining the lead rivet. Although not one of the later pieces from the site, care has clearly been taken in an attempt to prolong its life.

The plate and dish forms outnumber cups, which is frequently the case on rural sites in the East Midlands, particularly in the 2nd century AD, *e.g.* Orton Hall Farm (Wild 1996, 190) and Haddon (French 1994, 129). Whether this is a general trend linked to supply and availability or is due to the specific needs of farmsteads of this type is not clear. At Marsh Leys, the extent of the imbalance is perhaps surprising. Of the seventy-eight vessels identifiable by form, fifty may be classed as plates or dishes (15/17, 18, 31, 32, 36, 79, Curle 23), some 64% of the total. Next in frequency were bowls (29, 30, 37, 38) of which there were sixteen examples, eleven of them decorated (again, perhaps, a high proportion for a rural site). Of cup forms there were a mere ten examples (eight of form 33, and two base fragments, from a cup of uncertain form and a beaker respectively). Although the dish forms 36, 79 and 32 were present, there were no examples of the equivalent cup forms 35, 80 and 40. There were fragments from two samian mortaria, probably both form 45.

Post-Roman (2% total assemblage)

Post-Roman pottery comprises a shell-tempered jug handle and an undiagnostic sand-tempered sherd of early medieval date (23g), and six undiagnostic sherds of 17th–18th-century glazed earthenware (127g). All were either unstratified, or derived from post-Roman agricultural features.

Provenance of the pottery assemblage

The proportions of fabric types within each phase are presented in Table 7.1, 7.3 and 7.4, which provide the structure for the following discussion. Pottery is tabulated by farmstead and land use area, with reference to groups in the text, as required. For clarity, fabric type divisions have been amalgamated where appropriate, and are tabulated using a generic type code.

The greatest pottery concentrations derived from features within Phase 4, which yielded nearly 60% of the total assemblage. Phase 3 and 5 features respectively contained 16% and 23%, and Phase 6 and 7 deposits less than 1%. No pottery was recovered from Phases 1 or 2.

Phase 3: late Iron Age/early Romano-British farmsteads (Fig. 7.1 and Table 7.1)

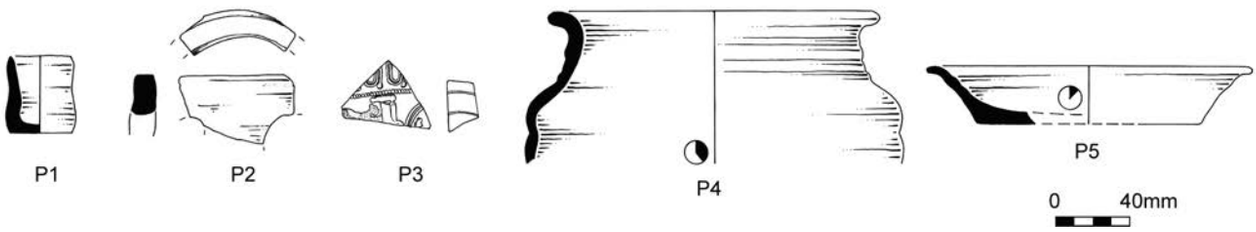
Features assigned to Phase 3 yielded 1,654 sherds representing 645 vessels, weighing 25.5kg. Late Iron Age pottery constitutes 31% of the assemblage and Roman material 69%. Vessels from each period survive in similar condition, and share a comparable average sherd weight (15g) and low vessel to sherd ratio (1:3), indicating the continuity of late Iron Age traditions alongside the introduction and use of the earliest Romanised vessels.

The composition of pottery assemblages within Farmsteads 2 and 3 is generally mixed, comprising a range of late Iron Age and early Roman fabric types, with few classifiable vessel forms, and few vessels represented by more than a single sherd. The composition and condition of the Phase 3 assemblage shows little variation between

2nd century +												*3rd–4th century*				
R05B	*R10B*	*R13*	*R01C*	*R03*	*R05A*	*R06A*	*R06*	*R07A*	*R07C*	*R14*	*R18A*	*R22A*	*R11F*	*R12B*	*Total*	*Weight*
		3:3					4:4								9:9	386
		11:13	0:1		1:1		17:20	1:1		1:1				1:1	39:45	639
							1:1								1:1	7
					1:1										1:1	58
2:2		26:54	0:1		1:1	3:4	38:50		1:1	1:1		2:2	1:1	2:2	87:134	2201
		10:12					7:7						1:1		22:27	299
		13:17		1:6			15:33		1:1						61:159	2840
					1:23		4:110								9:180	802
															5:14	629
							1:1								2:2	33
															1:1	2
		11:18		2:2			3:4			1:1					27:37	413
															2:7	107
		10:33		1:12			16:16							1:1	35:70	1088
															301:525	9504
		1:11													4:19	251
		4:18					6:12								25:143	2532
		17:29		1:2			11:23		2:3	3:3			1:1		67:115	913
															3:9	59
		9:10			1:1		11:13		1:1						33:42	365
		3:6					4:11			1:1					9:29	399
	1:3	26:55			3:3		14:25				1:2				69:250	4165
															1:1	2
		4:7					2:2			1:2					19:29	146
							2:2								8:15	117
		8:10				1:1	2:2		1:1	1:1					30:55	698
		1:6													1:6	2
		1:1													22:41	332
		4:4					1:2								5:6	381
		4:6					1:1			1:1					11:14	259
		2:2					3:3								7:7	252
		19:38			1:1		6:14		1:1	1:1					56:118	3673
		1:2							1:1						3:4	20
		10:28		1:1	1:1		13:25								40:78	1468
															344:1129	16034
2:2	**1:3**	**198:383**	**0:2**	**6:23**	**10:32**	**4:5**	**182:383**	**1:1**	**8:9**	**11:12**	**1:2**	**2:2**	**3:3**	**4:4**	**645:1654**	**25538**

*excludes miscellaneous unidentified fabrics
shaded area indicates contemporary ceramics

Table 7.1 cont'd



Illust No.	*Ware*	*Type*	*Description*	*Farmstead*	*Land Use Area*	*Group*
P1	R03C	White ware	Miniature vessel	2	5	103
P2	R05A	Oxidised sand	Possible lamp or incense burner	2	1	102.2
P3	R01A	Central Gaulish samian	Decorated bowl	2	7	112.2
P4	R06B	Grey ware	Cordoned jar	3	25	341.12
P5	R05A	Oxidised sand	Bowl	3	25	341.12

Figure 7.1 Selected Phase 3 pottery from Farmsteads 2 and 3: P1–5. Scale 1:4

primary and upper fills, although the latter generally contain larger quantities of pottery.

Farmstead 2

Thirty-two percent of the Phase 3 assemblage derived from Farmstead 2, the majority associated with the latest ditch defining enclosure L3 (2.2kg), unenclosed domestic foci L4 (3.2kg) and L5 (1.4kg), and boundary ditches L54 (1.2kg). Sixty-six percent of the features contained less than 100g of pottery and only one deposit, the secondary fill of enclosure ditch G58 (L3), yielded in excess of 1kg. The assemblage is dominated by sand- and shell-tempered coarse ware vessels. Forms, where classifiable, are utilitarian. A small quantity of specialist Roman forms such as *mortaria* occurred in the Farmstead 2 assemblage, but were absent from Farmstead 3, while the latter contained a higher proportion of storage vessels. This may imply some functional differences between the two. A single sherd of a possible lamp or incense burner (Fig. 7.1 P2) was found within the original Farmstead 2 enclosure ditch G102 defining possible shrine G69 (L1). Farmstead 2 contained eight intrusive sherds of late Roman pottery while Farmstead 3 contained only one late sherd, all recovered from the upper fills and therefore not reliable dating evidence. Samian, which was only found on Farmstead 2, is of Neronian, early Flavian and early Antonine date. Two intrusive sherds of an East Gaulish form 45 mortarium, likely to date to the late 2nd–early 3rd century AD, derived from the upper fills of enclosure ditch L1/L3. Other sherds, almost certainly from the same vessel, were recovered from Phase 4 (enclosure L20).

Five of the seven cremation burials G84 and G103 within domestic focus L5 contained pottery, representing either urns (four graves) or accessory vessels (two graves, including one with an urn) (Table 7.2). The undiagnostic nature of most vessels renders dating problematic: where diagnostic elements occur, they are broadly suggestive of the first half of the 2nd century. Most vessels are utilitarian types and appear to have been deliberately selected for use in graves, as none bear signs of previous use. With the exception of the miniature white ware vessel (Fig. 7.1 P1) from grave S322 (G103), all are highly fragmented as a result of truncation by ploughing, with only the bases and lower parts of the vessels surviving. In a recent survey of miniature vessels it was noted that although the pots 'had a variety of possible functions, in the majority of cases a religious purpose seems likely' (Graham and Graham 2009, 68). The proportion of vessels occurring as grave goods, however, is not stated.

Farmstead 3

Sixty-eight percent of the Phase 3 assemblage derived from Farmstead 3. The majority was associated with the domestic focus comprising ditched enclosure L21 (3.7kg), and activity foci L25 (4.7kg) and L30 (3.9kg). Fifty-three percent of the features producing pottery contained less than 100g, and only four deposits (6%), pits G230 (L21), G323 (L30), G332 and water pit G341 (both L25), yielded in excess of 1kg. In common with the Farmstead 2 assemblage, the pottery is dominated by sand- and shell-tempered coarse ware vessels, and utilitarian forms. In contrast to Farmstead 2, no samian ware was present. The absence of samian is interesting but it is uncertain if this indicates that Farmstead 3 is chronologically slightly earlier than Farmstead 2 or that the occupants were of a different status.

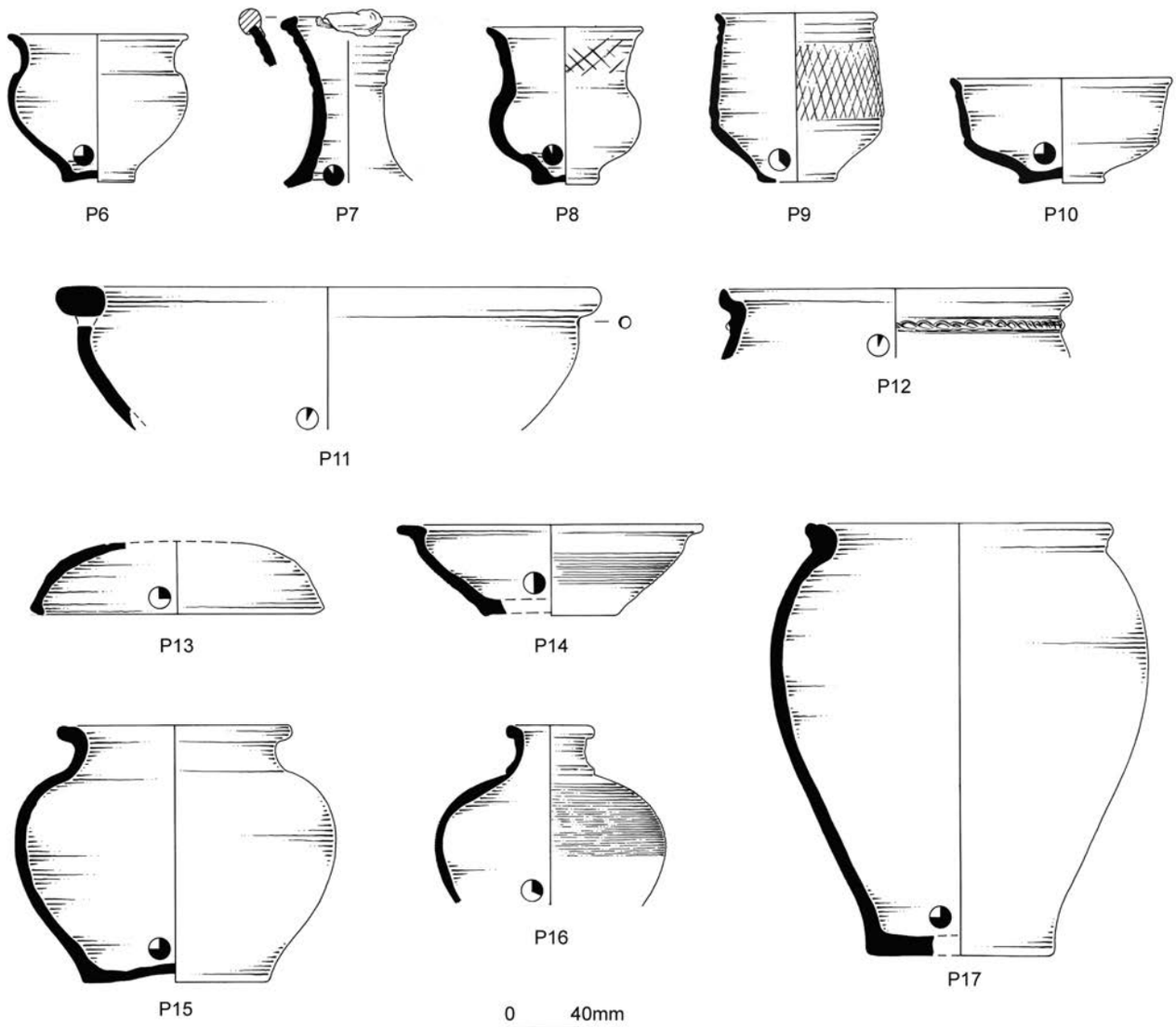
Phase 4: Romano-British farmsteads

(Figs 7.2 and 7.3; Table 7.3)

The Phase 4 assemblage comprises 6,156 sherds representing 2,894 vessels, weighing 108.8kg. Late Iron Age type pottery constitutes 24% of the assemblage and

L5		*Urn*	*Accessory*
G84	S327	5946 Micaceous blackware (R08), 113g	5944 Orange sandy (R05A) jar, 63g
	S331	5940 Micaceous greyware (R06D), 192g	-
	S333	5942 Micaceous greyware (R06D), 192g	-
	S336	5833 Coarse greyware (R06B), 225g	-
G103	S322	-	6178 Whiteware (R03C) miniature vessel, 41g (Fig. 7.1 P1)

Table 7.2 Summary of pottery vessels in cremation cemetery G84/G103, Farmstead 2



Illust No.	*Ware*	*Type*	*Description*	*Farmstead*	*Land Use Area*	*Group*
P6	R06E	Grey ware	Wide-mouthed bowl	4	14	83
P7	R03B	White ware	Ring-necked flagon with repair	4	9	66.3
P8	R06C	Grey ware	Jar	5	38	353
P9	R06C	Grey ware	Carinated jar/beaker	5	32	235.2
P10	R06C	Grey ware	Carinated bowl	5	32	235.4
P11	R13	Shell	Bowl	5	75	304.2
P12	R06E	Grey ware	Lid-seated vessel	5	35	370.32
P13	R06E	Grey ware	Lid	5	48	341.23
P14	R13	Shell	Flat-topped bowl	5	48	328.3
P15	R13	Shell	Jar	5	48	328.4
P16	R13	Shell	Bottle	5	48	328.3
P17	R13	Shell	Large jar	5	48	328.3

Figure 7.2 Selected Phase 4 pottery from Farmsteads 4 and 5: P6–17. Scale 1:4

Roman material 76%. Vessels from each period share a comparable average sherd weight (18g) and low vessel to sherd ratio (1:2). A proportion of the late Iron Age assemblage is likely to be residual, deriving from Phase 3 features. However, the overall quantity and condition of the late Iron Age material in Phase 4, and its continued association with Roman fabrics, indicates longevity of this tradition and, at least partly, contemporaneous use.

Locally produced Roman sand- and shell-tempered coarse wares (jars, bowls, beakers) constitute 18% and 14% of the assemblage respectively, supplemented by smaller quantities of pottery from continental and regional (Verulamium, the Nene Valley, Oxfordshire and Hertfordshire) sources, in a wider range of Romanised fabrics and forms. The assemblage includes higher proportions of *mortaria* and samian ware and introduces

F no.	L no.	IA	LIA	1st century		1st-2nd century					2nd century +						
				R01B	R07B	R02	R03A	R03C	R08	R01A	R05B	R10B	R19	R13	R01C	R03B	R03D
F4	8.1		9:9		1:4					1:1				4:9			
	8.2/3	1:1	76:151	1:1	4:8			3:15	1:1	1:1				34:86		2:5	
	9.1		7:14											3:3			
	9.2/3	3:4	82:167		6:7			1:1	1:2	2:2	1:1			23:33		3:7	
	10.1		2:2											6:7			
	10.2/3		1:1			1:7			1:1					10:20		1:2	
	11.2/3		3:3							1:1							
	12.2		1:1											3:3			
	13		1:1														
	13.1		1:1											2:2			
	13.2/3		7:10		2:3	1:3					1:1			22:34			
	14													1:1			
	14.1		61:97											5:5			
	14.2/3		81:173		3:8			2:3	1:3			1:1		66:143		3:6	
	15.3		1:1		2:3			1:1						3:3		1:1	
	16		1:1	1:1	2:6					2:2				45:75	2:2	2:1	1:1
	16.1				5:9			2:2						2:3			
	16.2/3		2:2											13:13	1:1		
	19.2/3		2:2		1:1				2:3					11:11			
	20.1		1:1	1:1	1:1					1:1				10:11			
	20.2/3	1:1	28:32		10:14			3:3	1:1	3:3				88:115	2:4		
	53.1							1:1									
	57.2/3		6:6		1:1					2:2				11:11			
	58.1		12:14	1:2	2:2			1:1						11:26		1:1	
	58.2		52:84		6:10				1:2					35:59		1:2	
	60.3		1:1														
	67.3		1:1														
	Subtotal																
F5	31.1		5:19		2:2	1:1			1:1					10:13		1:1	
	31.2/3		39:71		3:5				1:1	3:3	1:2			32:58		1:2	
	32.1		1:1											5:13			
	32.2/3		19:36	1:1	3:3		2:2	1:1	3:24		1:1		1:2	14:24		1:1	
	33.1									3:3				4:4			
	33.2/3		37:314		1:1		2:2			1:1				44:88		2:2	
	34.3		5:6											1:1			
	35.2/3		12:19		4:6		2:2	1:1		6:7		10:10		41:70			
	36.1													1:1			
	36.2/3		16:17	1:7	1:1		1:1	2:7	2:4	2:2			1:1	23:34		1:1	
	37.2					1:2						1:2		2:2			
	38																
	38.2/3		1:1		3:3					1:1				30:121		1:1	
	39													1:3			
	39.1																
	39.2/3		2:2		6:9		1:2					1:1		27:59		1:41	
	41.1													5:9			
	41.2/3		4:12		6:9				1:24	5:7		3:4		71:148			
	48.1		4:4		1:9				1:4					11:60			
	48.2/3		53:77	1:1	21:71	3:10	3:19	2:2	5:23	4:6	2:13			149:589		3:33	
	49.2/3		7:8		1:1				1:1	1:1				5:7			
	50.1		1:3														
	50.2/3		9:10		2:2	1:1								12:16			
	51.3		4:9														
	52.1		1:1														
	52.2/3		18:41							1:1				7:25			
	56.2		1:1														
	61.2		2:3														
	71.3		3:4		3:22									9:29			
	75.1		2:2											2:5			
	75.2/3		5:9					1:2		1:1				11:22			
	76.2				1:1												
	77.3		4:5											2:4			
	Subtotal																
Total		**5:6**	**694:1450**	**7:14**	**104:222**	**8:24**	**11:27**	**21:40**	**23:95**	**41:46**	**6:18**	**16:18**	**2:3**	**926:2078**	**5:7**	**25:67**	**1:1**

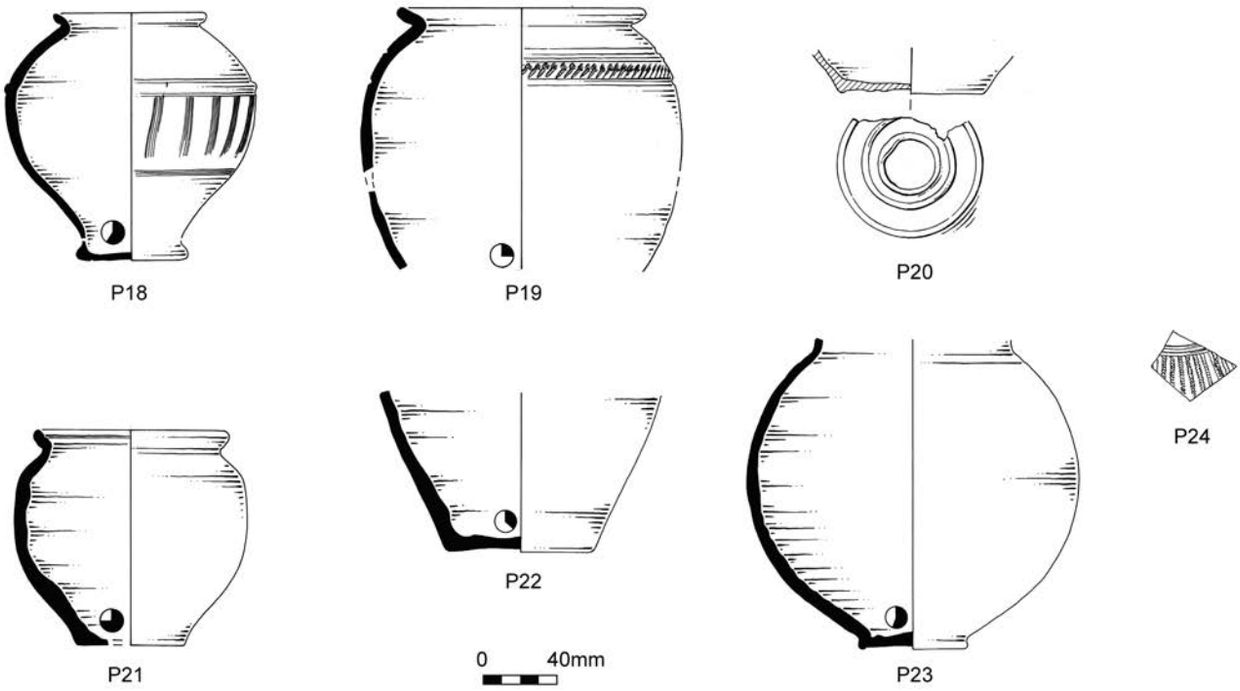
*excludes miscellaneous unidentified fabrics
shaded area indicates contemporary ceramics

Table 7.3 Phase 4 pottery fabrics by farmstead and land use area (vessel and sherd count)

2nd century +												*3rd–4th century*				
R05A	*R06A*	*R06*	*R07A*	*R07C*	*R09A*	*R33*	*R36*	*R14*	*R17*	*R18A*	*R18B*	*R22A*	*R11E*	*R12A*	*Total*	*Weight*
															15:23	736
		31:57		1:4				1:1					2:2		157:333	6707
															10:17	408
1:1		33:54		1:3		1:1		2:4							157:287	4253
		2:2												1:1	11:12	29
		5:7								1:1					20:39	401
		1:1					1:2								6:7	53
		1:1													5:5	36
															1:1	1
														0:1	3:4	142
1:1		7:8		1:1								1:1		1:1	45:63	1182
		1:7													2:8	136
		7:11						2:10							74:123	2874
		38:75		2:9				1:1	1:1				1:1	1:1	201:425	7873
		8:9												1:1	17:19	306
4:8	3:5	45:97	1:1						2:3					8:34	119:237	3845
		3:4		1:1								1:1		1:2	15:22	88
	1:1	19:25						1:1						4:5	41:48	417
1:2		4:6							1:1						22:26	562
1:1		11:14							1:1				1:1	1:2	29:34	401
		108:131		10:17	1:1			2:4	4:4			7:14	11:14	8:9	287:367	2514
															1:1	41
		4:7										2:3	3:3		29:33	427
1:1		15:40		1:1				2:2	2:3			0:1		2:2	51:96	1757
	1:1	62:113	1:1	3:3				2:19	2:7			1:5	2:5	3:3	172:314	5875
															1:1	5
															1:1	2
															1492:2546	41071
		10:18				1:3									31:58	652
3:5		27:56		1:5				1:2					1:2		79:212	2849
1:1		2:3													7:16	124
3:14		13:58						1:1						1:1	64:169	2322
		3:3													10:10	57
3:6	1:1	23:33				1:1		4:5		1:1					120:455	5529
															6:7	123
1:1	1:2	16:26		1:1		3:3		1:1						2:2	101:151	2811
															1:1	25
3:7		12:29				1:2		3:3							69:116	1814
		5:5												1:1	10:12	87
		3:6													3:6	321
		18:46	1:1	2:2				1:2		1:1					59:179	1895
															1:3	96
1:38															1:38	204
1:1	1:1	22:69	2:6	3:4				2:4					2:2	1:1	72:202	1423
		2:5				1:1								1:1	9:16	822
2:6		67:108	1:3	1:3		1:2		2:2					3:5	9:26	176:359	6002
1:3		9:14													27:94	3518
10:34	1:3	116:238		5:16		1:1		6:9		1:1	1:1				387:1147	25562
	1:1	11:12													27:31	279
		1:2													2:5	215
		9:12						2:3						1:5	36:49	945
		4:7						1:4							9:20	111
															1:1	3
		3:8													29:75	748
															1:1	14
															2:3	25
1:1		6:32													22:89	839
															4:7	310
		8:28												1:1	27:63	1187
1:1															2:2	23
		1:4													7:13	108
															1402:3610	61043
40:132	**10:15**	**795:1491**	**6:12**	**33:70**	**1:1**	**10:14**	**1:2**	**37:78**	**13:20**	**4:4**	**1:1**	**12:25**	**26:35**	**48:100**	**2894:6156**	**102114**

*excludes miscellaneous unidentified fabrics
Note: shaded area indicates contemporary ceramics

Table 7.3 cont'd



Illust No.	*Ware*	*Type*	*Description*	*Farmstead*	*Land Use Area*	*Group*
P18	R08	Black micaceous	Jar with 'London-ware' type decoration	5	48	325.2/3
P19	R07B	Black ware	Jar	5	48	325.2/3
P20	F07	Shell	Vessel base	5	48	325.2
P21	R08	Black micaceous	Jar	5	41	410.1
P22	R13	Shell	Jar base and lower body (cremation vessel)	5	32	235.4
P23	R08	Black micaceous	Jar (cremation vessel)	5	32	235.4
P24	R01B	South Gaulish samian	Decorated bowl	5	32	225.3

Figure 7.3 Selected Phase 4 pottery from Farmstead 5: P18–24. Scale 1:4

forms absent from the preceding phase, such as amphorae, ring-necked flagons, and an unguent jar.

As in the preceding phase, the composition of the pottery assemblage within Farmsteads 4 and 5 is generally mixed, comprising a range of late Iron Age and Roman fabric types. Similarly, the composition and condition of the Phase 4 assemblage shows little variation between that recovered from primary and upper fills of features. A number of specialist Roman forms such as *mortaria* and flagons occurred in both the Farmstead 4 and 5 assemblages, while the incidence of amphorae sherds was restricted to the latter. The distribution of fabric types and forms across each farmstead is, however, too random to indicate specific functional or chronological areas.

Farmstead 4

Forty-one percent of the Phase 4 assemblage came from Farmstead 4, the majority associated with domestic enclosure L14 (10.8kg), non-domestic enclosure L20 (2.9kg), boundary/trackway L8 (7.4kg) and enclosure L58 (7.6kg). Farmstead 4 contained few sizeable pottery deposits, in contrast with Farmstead 5. Fifty-five percent of the features producing pottery contained less than 100g, and fifteen deposits (11%) yielded in excess of 1kg.

		LIA	*1st c*	*1st–2nd century*					*2nd century +*						
F no.	*L no.*		*R07B*	*R02*	*R03A*	*R03C*	*R08*	*R01A*	*R05B*	*R10B*	*R19*	*R13*	*R01C*	*R03*	*R04A*
F7	L42.1		1:1							1:1		4:7		1:1	
	L42.2/3	5:5	27:39	3:4	1:1	1:3		3:4		4:23		111:324		2:3	
	L43.1		1:1												
	L43.2/3	1:1	4:4		1:1	1:1		4:8	1:3	1:1		27:79		2:2	
	L44.1	2:2	1:1			1:1		2:2	2:2			18:21			
	L44.2/3	47:62	19:55		1:1	4:11	2:2	12:21	2:3	6:6		200:371	2:2	2:2	
	L45.3	7:17	8:22		2:2	2:2	2:96	2:2		1:1	1:1	18:42		2:2	1:1
	L70.2/3	7:12	1:9									10:39			
Total		**69:99**	**62:132**	**3:4**	**5:5**	**9:18**	**4:98**	**23:37**	**5:8**	**13:31**	**1:1**	**388:883**	**2:2**	**9:10**	**1:1**

*excludes miscellaneous unidentified fabrics
shaded area indicates contemporary ceramics

Table 7.4 Phase 5 pottery fabrics by farmstead and landuse area (vessel and sherd count)

Significant among these were boundary ditch G67 (L8), layer G136 (L16) and stone surface G161 (L81), which respectively yielded 7.5kg, 3.8kg and 3.8kg of pottery.

The majority of the samian recovered from Farmstead 4 dates to the late 2nd century or later, although a small proportion of 1st-century material occurred. Of the five East Gaulish vessels, including one with the stamp of Pompeius iii of Rheinzabern (stamp no. 4; Appendix I), some may be of 3rd-century date. Enclosure L20 contained further fragments of the East Gaulish form 45 *mortarium*.

Farmstead 5

Fifty-nine percent of the Phase 4 assemblage derived from Farmstead 5, the majority associated with domestic foci L48/L71 (29.9kg) and L41 (6.8kg) and field L33 (5.5kg). Farmstead 5 is characterised by deposits containing large quantities of pottery and/or large numbers of sherds from single vessels. Significant among these are the upper fills of boundary ditch G202 (L31), and pits G324, G325 and G328 (L48), which each contained over 8kg of pottery.

Two burials within this farmstead contained pottery grave goods, broadly datable to the 2nd–3rd century. An almost complete grey ware (R06C) jar 3703 (Fig. 7.2 P8) was deliberately positioned on the left hand of the body in grave G353 (L76). Although the vessel was incomplete, this was probably due to recent ploughing. An oxidised sandy (R05A) jar (7549), likely to have been an accessory vessel, was found close to the cremated remains in grave G259 (L39). It was almost complete, although heavily cracked with the rim missing.

Two possible 'special' deposits in this farmstead contained pottery. Deposit G253.4, which included a possible partial dog skeleton within an enclosure ditch (L39), also contained 70 sherds of shell- (R13) and sand-tempered (R06, R07) coarse ware (857g). They were from thirteen different vessels and none were even semi-complete. Therefore, although large in quantity there was nothing 'special' in the pottery assemblage although its association with the partial dog skeleton is unusual. The second 'special' deposit was within major boundary ditch G235.4 (L32) and comprised twenty-five sherds (981g) from three semi-complete vessels (fabrics R13, R08 and R06C), which had been deposited on their sides in the vicinity of an upside-down dog skull.

While late 2nd-century material was present at the farmstead, a high proportion of the samian dates to first half of the century. This included a carinated bowl fragment stamped by Murranus (Type R01B, no. 2, stamp no. 3) and mainly Hadrianic–early Antonine forms in pit cluster L48. The farmstead also produced decorated sherds in fabric R01A, nos 4 and 5 and stamps 1 and 5 (of Cracuna i, *c*. AD 130–155, and Teddillus, *c*. AD 130–150: Appendix I).

Phase 5: later Romano-British farmstead

(Fig. 7.4; Table 7.4)

Farmstead 7 features assigned to Phase 5 yielded 2,429 sherds, representing 1,159 vessels, weighing 41.9kg. The material is fairly fragmented, with an average sherd weight of 17g and a low vessel to sherd ratio of 1:2. There exists a degree of overlap and continuity between the Phase 3, 4 and 5 assemblages, evidenced by similarities in composition, in terms of some long-lived fabrics and vessel forms. The most notable variation is the reduced quantity of late Iron Age pottery, which constitutes only 4% of the Phase 5 assemblage, and is likely to be entirely residual. As with the preceding phases, the assemblage is dominated by locally produced sand- and shell-tempered coarse wares which respectively total 40% and 36% of the pottery, supplemented by later Roman regional fine ware imports from Oxfordshire, Hertfordshire and the Nene Valley, and a proportion of late coarse ware forms in the ubiquitous sand- and shell-tempered fabric types.

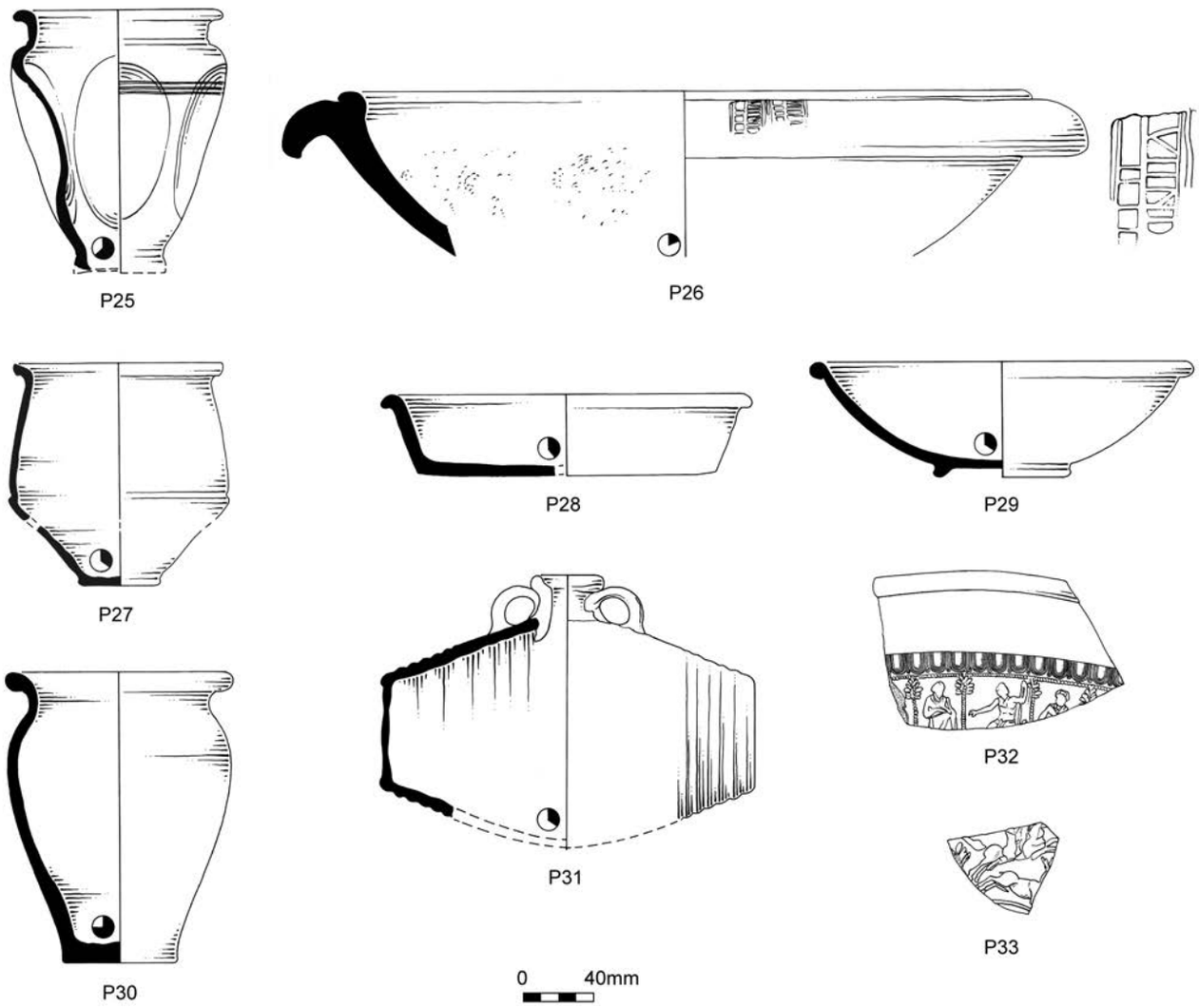
The Phase 5 assemblage includes a range of less common vessel forms, such as a costrel (Fig. 7.4 P31), colour coat bottle and Castor boxes, which perhaps imply some degree of status. The majority of the twenty-five Central Gaulish samian vessels recovered from enclosure L44 are of Antonine date and are likely to be residual. However, continued usage is indicated by two samian bowls with evidence of repair, one having four rivet holes, and the other an *in situ* lead rivet. Three stamps (nos 2, 7 and 8) and three decorated pieces (type R01A, nos 6–8) were recorded (see Appendix I).

The majority of the Phase 5 assemblage was associated with enclosure L42 (13.5kg) and field L44 (21kg). Thirty-three percent of the features producing pottery contained less than 100g, and eleven deposits (19%) yielded in excess of 1kg. The latter included upper fills of water pit G352 (L42), pit G338 (L44) and ditch G210 (L45), which respectively yielded 7.9kg, 5.2kg and 4.3kg of pottery. Possible 'special' deposit G210.4 (L45) in a ditch comprised 32 sherds (230g) in five discrete concentrations with at least two semi-complete vessel identified. Forms are a poppy head beaker, cordoned jar, everted rim jar, plain rim bowl (Pl. 5.5) and a folded beaker (Fig. 7.4 P25). They occur in fine grey ware (R06C), black micaceous (R08), coarse grey ware (R06B), sandy black ware (R07B) fabrics.

2nd century +												*3rd–4th century*			
R05	*R06A*	*R06*	*R07A*	*R07C*	*R09A*	*R33*	*R14*	*R18A*	*R18B*	*R22*	*R23*	*R11E*	*R12*	*Total*	*Weight*
	1:1	4:7										1:1		13:19	228
7:9		157:231		1:1			6:9	1:2	1:5			10:18	13:28	353:709	13116
														1:1	54
3:7		18:20		1:1			3:3					1:1	1:1	69:133	1923
1:1		9:16					1:1	1:1		1:3			1:1	40:52	1778
13:16	2:2	199:452	2:3	3:5	2:2	3:4	2:2	1:2	1:1	4:24		15:30	11:13	555:1092	18208
3:5		43:108					1:3				1:2	1:2	4:25	99:333	4743
3:3	1:2	6:22		1:3										29:90	1887
30:41	**4:5**	**436:856**	**2:3**	**6:10**	**2:2**	**3:4**	**13:18**	**3:5**	**2:6**	**5:27**	**1:2**	**28:52**	**30:68**	**1159:2429**	**41937**

*excludes miscellaneous unidentified fabrics
shaded area indicates contemporary ceramics

Table 7.4 cont'd



Illust No.	*Ware*	*Type*	*Description*	*Farmstead*	*Land Use Area*	*Group*
P25	R08	Black micaceous	Folded beaker	7	45	210.1
P26	R21	Grog/sand	Stamped mortarium	7	44	220.3
P27	R06C	Grey ware	Jar	7	44	223.1
P28	R07B	Black ware	Bowl/dish	7	42	263.3
P29	R	Non-specific Roman	Bowl	7	42	263.3
P30	R10A	Buff sand	Narrow-necked jar	7	42	352.2
P31	R03C	White ware	Costrel	7	44	333.3
P32	R01A	Central Gaulish samian	Decorated bowl	7	44	316.2
P33	R01A	Central Gaulish samian	Decorated bowl	7	44	222.3

Figure 7.4 Selected Phase 5 pottery from Farmstead 7: P25–33. Scale 1:4

Phase	*F no.*	*Tegula*	*Imbrex*	*Flue*	*Brick*	*Frag*	***Total***
7	n/a	1:422	-	-	-	-	**1:422**
5	7	36:7662	2:270	6:247	1:542	14:661	**59:9382**
4	4	23:1733	-	2:189	3:1356	-	**28:3278**
	5	9:1056	2:287	-	3:7782	14:541	**28:9666**
3	3	1:22	-	-	2:1259	2:84	**5:1365**
	Total	**70:10895**	**4:557**	**8:436**	**9:10939**	**30:1286**	**121:24113**

Note: excludes unstratified and post-Roman material

Table 7.5 Brick and tile by phase and farmstead (fragment and weight (g) count)

III. Ceramic building material and fired clay

by Jackie Wells

Introduction and methodology

The assemblage includes roof and flue tile, brick, daub, miscellaneous fired clay fragments, a small quantity of handmade slabs and portable kiln/oven furniture. The material was examined by context, and fabric types were identified for the brick and tile (Appendix II) and fired clay/daub (Appendix III) in accordance with the Bedfordshire Ceramic Type Series. 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. All the recorded information was entered onto an Access database. Illustrated artefacts are prefixed with FC. Post-medieval building material was also recorded but is omitted from this publication.

Brick and tile

(Fig. 7.5, Table 7.5 and Appendix II)

The assemblage comprises 121 pieces (24.1kg) of Roman building material, including *tegulae*, *imbrices*, flue tiles and brick. Fragments have an average weight of 200g, are moderately abraded and occur in shell- and sand-tempered fabric types, respectively constituting 70% and 30% of the material (Appendix II). The shelly fabric is comparable with pottery fabric R13, and may also derive from the Harrold kilns, which are known to have produced building material throughout the Roman period (Brown 1994). The predominance of shell-tempered fabrics is in common with other contemporary sites in the north of the county, *e.g.* Kempston Church End (Wells 2004a, 504) and Luton Road, Wilstead (Wells 2010a, 138), reflecting the dominance of the Harrold industry. Sources for the sand-tempered examples are unknown, although are also likely to have been local.

Sixteen *tegulae* fragments were sufficiently intact for some dimensions to be recorded. Body depth ranges from 16–25mm, external flange depth from 40–64mm and flange thickness from 15–30mm. Four examples have a knife-trimmed edge and two have a single finger-impressed groove in the angle between the inside of the flange and the tile face. Accidental impressions comprise a group of cat paw prints, and a single finger print along a flange top.

The four shell-tempered *imbrices* range in thickness from 15–17mm, and the flue tiles from 11–22mm. Keying patterns on the latter were achieved by combing (6–7 prongs per comb) and roller-stamping (Fig. 7.5 FC 1).

The moulded brick fragments are 30–42mm thick. Two have burnt surfaces, and one has been reused, evidenced by the presence of mortar along broken edges. Although of probable Roman date, it is unclear whether undiagnostic fragments represent thick *tegulae* or thin bricks, and for this reason they have been recorded as unidentifiable.

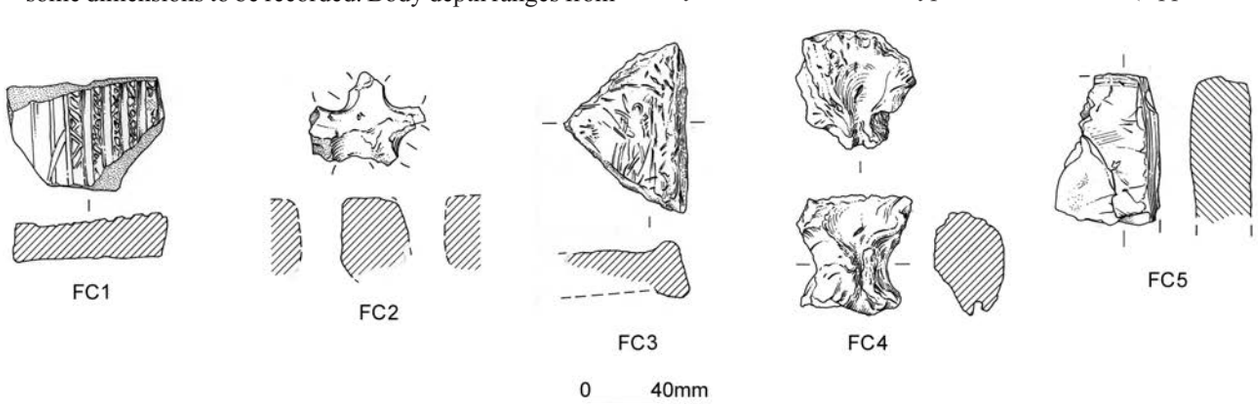
Approximately 54% and 39% of the assemblage derived, respectively, from Phase 4 and 5 features associated mainly with Farmstead 4 (L16), Farmstead 5 (L31, L35, L36, L38 and L41), and Farmstead 7 (L42, L43 and L44). Negligible quantities were recovered from Phase 3 (Table 7.5).

The quantity of brick and tile recovered from Marsh Leys was significantly greater than that from contemporary farmsteads on the Biddenham Loop (1.1kg: Slowikowski 2008, 279). However, the amount was insufficient to suggest its use in any of the buildings on the site, all of which lacked substantial foundations. If the material derived from buildings in the vicinity, they must have been located at least 500m from the farmsteads, given the extensive nature of the investigations.

Fired clay and daub

(Fig. 7.5, Table 7.6 and Appendix III)

Approximately 1,077 pieces (16kg) of fired clay were recovered, the majority associated with features in Farmstead 2 (Phase 3) and Farmsteads 4 and 5 (Phase 4: Table 7.6). All fragments are redeposited and cannot be directly associated with the use of the features from which they derived. Four fabric types were identified (Appendix



Illust No.	*Ware*	*Description*	*Phase*	*Farmstead*	*Land Use Area*	*Group*
FC1	Sandy	Roller-stamped flue tile	4	4	13	128.3
FC2	Organic	Perforated plate	3	2	4	117.1
FC3	Organic	Hand made slab	4	4	58	108.2
FC4	Organic	Miscellaneous	4	4	58	108.2
FC5	Organic	Hand made slab	3	2	4	73.12

Figure 7.5 Selected ceramic building material and fired clay: FC1–5. Scale 1:4

Phase	*F no.*	*Fired clay/daub*	*Slab*	*Kiln/oven furniture*	***Total***
7	n/a	4	-	-	**4**
6	n/a (furrows)	135	-	-	**135**
5	7	559	192	998	**1749**
4	4	4273	98	-	**4371**
	5	1120	628	1023	**2771**
3	2	5895	117	88	**6100**
	3	288	413	65	**766**
2	1	14	-	-	**14**
	Total	**12288**	**1448**	**2174**	**15910**

Note: excludes unstratified material

Table 7.6 Daub and fired clay by phase and farmstead (weight (g) count)

III). The majority of the assemblage occurs in a range of predominantly sand-tempered fabric types, with additional calcareous and/or organic inclusions. Fragments with organic and grog inclusions constitute the remainder. A number of daub fragments retain impressions of circular wattles, ranging in diameter from 10–30mm. Most have one finished surface — the oxidised external wall face, with wattle impressions on the reduced sides and reverse. However, the majority of the fired clay comprises amorphous and abraded fragments, some of which may represent degraded daub. Pieces are generally small, with an average fragment weight of 14g.

Portable furniture, deriving from either an oven or kiln, includes fragments of three perforated plates (Fig. 7.5 FC2) recovered from domestic foci L4 (Farmstead 2, Phase 3) and L48 (Farmstead 5, Phase 4); and a block or pedestal with an estimated diameter of 85mm, recovered from field L44 (Farmstead 7, Phase 5). Fragments from a number of handmade clay slabs occur in both grog and organic/sandy fabrics, the majority deriving from the tertiary fill of pits in L48. They are 15–25mm thick and have finger-smoothed surfaces and edges (Fig. 7.5 FC3–5). Although common finds on sites of late Iron Age and Romano-British date, *e.g.* East Stagsden (Gentil and Slowikowski 2000, 88), Biddenham Loop (Slowikowski 2008, 236) and Luton Road Wilstead (Wells 2010a, 139), their precise function remains unclear. Given the presence of perforated plates and a possible pedestal, it is likely that the slabs represent pre-fabricated furniture from simple ovens, hearths or drying ovens of domestic or agricultural use. However, their solid nature, which would have restricted the flow of heat, precludes the possibility that they served a similar function to perforated plates.

IV. Metallurgical residues

by Tim Young

Introduction

A total of 37.7kg of metallurgical residues, including slag and furnace lining was recovered. Apart from very limited evidence for copper alloy working, all of the metallurgical residues are indicative of iron working (blacksmithing). The bulk of the material (77%) came from the northern part of Farmstead 7 (Phase 5); 1% derived from Farmstead 4 compared with 15% from Farmstead 5 (Phase 4); and none was found on Farmstead 2 compared to 5% from Farmstead 3 (Phase 3).

Methodology

The material was examined using a low-powered binocular microscope. Material was identified within the limits of the textural and compositional identifications possible at low magnification. Some of the fine residue was washed, sieved and magnetically separated to investigate the occurrence of hammerscale.

Description

The metallurgical residue assemblage as a whole is remarkably homogeneous — almost entirely the product of iron working in a clay-lined hearth, with charcoal fuel. There is little indication of technological variation within the assemblage.

Slags

The slags comprise a mixed assemblage including smithing hearth cakes (also known as plano-convex bottoms or smithing hearth bottoms (Crew 1996) together with more amorphous smithing hearth slag lumps.

The smithing hearth cakes are buns of slag formed at the base of the hearth as a result of high temperature reactions between iron, iron scale and silica. At Marsh Leys they ranged in weight from 60–824g with some of the larger cakes being amalgamations of slag generated in different work periods. The mean weight of the thirty reasonably complete cakes is 330g. In addition there are at least nine other moderately complete cakes. Several of the cakes differ from the normal elliptical plan, in being rather more traverse, with a straight proximal margin reflecting the straight blowing wall (see below).

A characteristic of most of the amorphous slags, as well as some of the smithing hearth cakes, is the inclusion of fragments of flint. These fragments are mainly in the form of rounded pebbles and range from flecks up to pieces of 40mm maximum diameter. When present in the smithing hearth cakes these flint pebbles are found mainly within the uppermost level of the cake or in slags attached to the upper planar surface.

The mode of formation of smithing hearth cakes and the origin of the siliceous component is still a matter of debate. The Marsh Leys material adds new evidence to this discussion, because the siliceous materials are unusually coarse-grained (flint gravel) and demonstrably absent from the hearth lining.

On some sites it is possible that rock fragments enter the slag during partial melting of the hearth wall adjacent to the tuyère. The smithing hearth cake, which forms

below the tuyère, is a product of reaction between iron/iron oxides and the hearth wall. In hearths where the wall contains large siliceous grains, it is possible for them to be carried downwards by melt generated from the smaller, more rapidly reacted, particles. In the furnace lining material from this site, however, there is no indication of coarse, gravel grade, material forming a significant part of the hearth wall. It is, therefore, unlikely that the large flint grains are derived from the hearth wall.

The use of flint and other forms of silica as a flux in fire welding is well known. However, the flux used in this process is usually fine-grained, since it must penetrate across the surface of the workpiece and react quickly to form the silicate melt. Therefore, the flint seen in the Marsh Leys slag cakes is far too coarse-grained to have been used in this way. Another use of siliceous material within the hearth is to protect the workpiece from oxidation or carburisation but this would not be an appropriate interpretation of the coarse-grained siliceous material at Marsh Leys.

It is, therefore, likely that the flint pebbles in the slag assemblage entered the hearth via another route than degradation of the wall or deliberate introduction as a welding flux. Accidental introduction of gravel grade material with fuel does occur, but mainly with mineral coal rather than the charcoal clearly used at Marsh Leys; accidental inclusion of stones is much less common with the use of charcoal. This leaves the possibility that the flint was introduced deliberately, not as welding flux, but to flux the hearth slags. It is tentatively suggested that under some circumstances the reaction with the wall is insufficient to form a slag fluid enough to drop though the hearth and away from the workpiece and tuyère. The addition of silica (in the form of the flint gravel) may have been required to make the slags more fluid.

Platy slags

Within the Phase 5 assemblage there are a significant number of small pieces of a platy slag of unusual nature. These slags are typically about 5mm thick and form sheets of sand-rich glassy slags, very similar to the surficial layer on the vitrified lining. One surface however, shows a smooth, sometimes slightly wrinkled, surface of fayalitic slag, which has clearly been extremely fluid.

These slags can be interpreted as having been formed by the contact of the sandy ceramic slag with a smooth iron surface. Such a situation might arise if the slag has been formed from a clay coating over an iron workpiece. The circumstances for using a deliberate clay or slag coating on the workpiece have been described above, but include the control of carburisation and oxidation.

It is conceivable, however, that such slags might arise from the accidental placement of the workpiece into a slag mass in the hearth. The find of a smithing hearth cake with a piece of bar iron passing through the slag (ditch G200, Phase 4) shows that such events happened. It is unlikely that manipulation of the slags with tongs or a poker would produce such a slag, since the tool would not attain a high enough temperature to react.

Phase	*F no.*	*L no.*	*Weight (g)*	*Slag*	*Smithing hearth*	*Hammerscale*	*Furnace (vitrified) lining*
3	3	26	286	-	Single hearth cake	-	
		27	1,380	Several pieces of slag and fuel ash	Two hearth cakes (1054g)	-	Several pieces
		28	8	-	-	-	Several fragments
		29	538	17 pieces of lining-rich slag		-	
		63	3	Single fragment	-	-	-
4	4	19	232	Hearth slag	-	-	-
		53	14	Slag	-	-	-
	5	31	1,088	10 pieces	Two hearth cakes and fragment of another (654g)	-	Three pieces
		33	1,598	6 pieces	Two hearth cakes and small fragment of another (1076g)	Flake hammerscale	Seven pieces
		35	1,503	Several broken fragments	Four hearth cakes (1008g)	-	Two pieces
		41	250		-	Block of iron	-
		48	496	Piece of iron slag	Single hearth cake (334g)	-	-
		49	16	Few copper alloy slag fragments	-	-	-
		52	256	-	Piece of hearth cake	-	-
		75	552	Seven pieces of smithing slag	Single hearth cake (364g)	-	10 pieces
5	7	42	950	-	Two smithing hearth cakes (918g)	-	Single piece
		43	256	-	Two smithing hearth cakes	-	-
		44	23,367	599	14 smithing hearth cakes (4610g)	Hammerscale fragments	453
		45	4,042	32 pieces of slag	Seven smithing hearth cakes (1678g)	-	60 pieces
		70	260	-	Single smithing hearth cake (146g)	-	10 pieces
		Total	**37,092.3**				

Table 7.7 Summary of metallurgical residues by phase, farmstead and land use area

Hammerscale
Hammerscale is significant as it is diagnostic of the smithing process, and because it usually remains in the immediate vicinity of smithing activity, in contrast to larger smithing residues, which are more likely to have been cleared away and redeposited. The Marsh Leys assemblage entirely comprises flake hammerscale, dislodged by mechanical or thermal shock during the hot working of a piece of iron. The deposits were concentrated in the tertiary fill of G220 (L44, Farmstead 7, Phase 5).

Furnace linings
'Hearth/furnace lining is formed as the result of high temperature reactions between a clay lining and the alkali fuel or fayalitic slags, and on its own is not indicative of any particular industrial activity' (Wells *et al.* 2004, 388). However, many of the lining fragments at Marsh Leys were found with slag and are, therefore, interpreted as being associated with iron-working furnaces. The Marsh Leys vitrified lining fragments are commonly planar, suggesting a planar blowing wall for the furnace.

Three large pieces of vitrified lining show possible evidence for simple blowholes (from ditches assigned to Phase 4 and 5). The bore suggested by the fragments is, however, rather large (40–50mm, rather than the 15–25mm normally seen), and it is possible that the clay wall was pierced by a hole containing a fine tuyère. No remains interpretable as tuyères were, however, recognised. The lining fragments bearing the probable blowholes also indicate an inclination of the blowhole at 30–45° to the perpendicular to the wall face. Although blowholes are commonly gently inclined inwards towards the hearth, this angle is rather large. If these fragments are indeed blowholes, then they suggest the blowing wall was inclined inwards at an angle of 45–70° to horizontal, rather than being vertical.

Provenance of the material
Almost all the metallurgical residues came from the northern part of Area 2. An area of 0.3ha, which represents just 7% of the excavation, yielded 87% of the metallurgical residues in Phase 3, 73% in Phase 4 and 90% in Phase 5.

The following discussion is arranged by phase and, where relevant, farmstead. A detailed description of all the metallurgical residues is presented by phase, land use area and group in Appendix IV.

Phase 3 (late Iron Age/early Romano-British)
Approximately 2.2kg of metallurgical residues were recovered from the northern part of Farmstead 3, mainly associated with enclosure L27. The primary fill of the enclosure ditch produced an assemblage that included a medium-sized smithing hearth cake along with some smaller slag debris and vitrified hearth lining. Within the enclosure, pit G292 contained a similar assemblage that included an irregular smithing hearth cake. Outside the enclosure, to the north-east, a single smithing hearth cake was recovered from one of the pits G296 (L26). To the south-west, an assemblage of hearth lining fragments were recovered from pit G375 (L29) and, to the north-west, post-holes G283 (L28) contained vitrified lining fragments.

Phase 4 (Romano-British)
Farmstead 5 produced 5.8kg of residues compared with only 246g from contemporary and adjacent Farmstead 4. The majority of the Farmstead 5 material derived from either within or adjacent to field L33. The southern boundary ditch G377 of the field (assigned to L31) contained sporadic metallurgical residues in its secondary and tertiary fills. The pits within the interior of the field contained residues particularly from the tertiary fills. Residues were also recovered from the tertiary fill of the linear band of quarry pits L35 to the east of L33. Away from this core distribution very little material was found. Farmstead 4 only contained isolated material from ditches associated with field L19 and major boundary L53.

Copper alloy working is indicated by the presence of small fragments of residue within narrow, non-domestic enclosure L49 and a sprue head (RA 74, see above) from boundary L31, both to south of field L33.

Phase 5 (late Romano-British)
Farmstead 7 produced 77% of the total metallurgical residues found during excavation. The majority of this material (28.9kg) was recovered from the northern part of the farmstead, in particular the north-east boundary ditch G219/G220 of field L44. The substantial deposits of slag from the tertiary fill of G220 included flake hammerscale, which appears to represent a primary dump of material from a nearby forge. Significant quantities also came from ditch G209 and its recut G210 (L45) which were located only *c*. 10m from ditch G219/G220. Smaller quantities of material were also found in pits within field L44, in the ditch surrounding enclosure L42 and the adjacent pits L43.

Ditch length G220 also contained small pieces of waste or run-off and casting gate (RA 161, see above) indicating some copper alloy working was taking place.

Summary
Apart from the meagre evidence for copper alloy working, all of the metallurgical residues are indicative of iron working (blacksmithing) in a clay-lined hearth. Blacksmithing slags are, in general, rather poorly understood in terms of their detailed origin and relationship to different types of smithing activity. In addition, there is little direct evidence as to what iron working was being undertaken within the Marsh Leys farmsteads. However, the variability in the slags, specifically the smithing hearth cakes, suggests a variable workload.

Almost all the metallurgical residue recovered occurs in the same area, in the northern half of Farmsteads 3, 5 and 7. The material recovered from Farmstead 3 (Phase 3), despite being relatively small, is distributed around the area of enclosure L27, which would indicate that this was the main focus for this activity. The core distribution of residues in Farmstead 5 (Phase 4) was identified within field L33, situated adjacent to the Phase 3 enclosure. The bulk of the material was recovered from Farmstead 7 (Phase 5) particularly from the northern part of field L44, the same position as the Phase 4 field, and the hammerscale evidence supports this being a primary dump.

V. Other artefacts

by Jackie Wells, with a section by Peter Guest (coins)

Introduction

The assemblage comprises a standard range of personal items, structural fittings and artefacts associated with domestic, agricultural and industrial activity. It is dominated by Romano-British artefacts, many of which are long-lived, utilitarian types that are not closely datable. Most finds are incomplete, and their deposition is likely to be as a result of them being broken and thrown away. However, some of the finds may have been part of 'structured' deposits.

Identifiable Romano-British artefacts recovered from post-Roman deposits, principally topsoil/subsoil, are included in the publication. Registered Artefacts *i.e.* objects requiring more detailed recording and description than bulk finds) are catalogued in Appendix V. However, artefacts that are unidentifiable or of probable medieval or later date are omitted. A residual flint assemblage indicates limited early prehistoric activity in the vicinity and is discussed briefly. Catalogue entries for every object are available in the project archive.

Methodology

As part of the assessment, each object was assigned a preliminary identification and functional category. All ironwork and selected non-ferrous objects (mainly coins) were submitted for X-radiography; the X-ray plates forming part of the project archive. During analysis, the preliminary identification was confirmed and, where applicable, a date range assigned by reference to standard typological works. This information was established by an examination of each object, noting form, method of manufacture, material and source, and presence of diagnostic features. Parallels from comparable sites were sought and a full catalogue description entered onto the project database. Illustrated artefacts use the original RA (registered artefact) number and are prefixed with RA.

Provenance of the assemblage

(Table 7.8)

The majority of the assemblage derives from features associated with Farmsteads 4 and 5 (Phase 4: Romano-British) and Farmstead 7 (Phase 5: later Romano-British) (Table 7.8).

Discussion by functional category

Structures and associated fittings

One hundred and thirty-five iron **timber nails** and nail fragments were recovered from features associated with Farmsteads 2 and 3 (Phase 3), Farmsteads 4 and 5 (Phase 4) and Farmstead 7 (Phase 5). Despite their fragmentary state, classification of a number of nails was possible (after Manning 1985, 134–7). The majority are Type 1B examples, with flat circular or rectangular heads, and square or rectangular sectioned tapering shanks. Complete examples are 57–94mm long. Type 1B nails are usually the prevalent form on Romano-British sites, reflecting their usefulness as general purpose timber nails. Several examples are clenched, indicating use, and two retain traces of mineral preserved wood. A single example of a Type 3 nail with a small T-shaped head was also present.

Locking mechanisms are represented by an iron **latch lifter** (RA3) and two **tumbler keys** (RAs 17 and 217). An incomplete example of the former (*c.f.* Crummy 1983, fig. 138) was recovered from Farmstead 5 (Phase 4). This class of artefact represents a very simple form of key, probably operating a lock made otherwise entirely of wood. The earliest examples known from Britain are late Iron Age in date and the type remains in use throughout the Roman period in this country (Manning 1985, 88).

Two types of tumbler lock keys were identified. RA 17 is an incomplete lift key, which functioned by lifting the lock-pins (tumblers) to free a bolt, which was then operated manually. RA 217 is a slide key (Manning type 2 1985, 93), which raised the tumblers engaged in the bolt by pushing them up from underneath. When the key teeth lifted the tumblers, they were themselves engaged in, and used to slide the bolt (Crummy 1983, 125). Both types are known to have been in use throughout the Roman period. The lift key (RA 17) derived from Farmstead 4 (Phase 4) and the slide lock (RA 217) from Farmstead 7 (Phase 5).

Incomplete examples of an iron **timber dog** (RA 252), **loop-headed spike** (RA 79) and **double-spiked loop** (RA 153) derived, respectively, from Farmstead 5 (Phase 4) and Farmstead 7 (Phase 5). Timber dogs were used to hold together adjacent pieces of wood and loop-headed spikes functioned by providing a loop for attachment to woodwork or masonry (Manning 1985, 129). Both forms are ubiquitous on Roman sites. An L-shaped iron **hinge staple** (RA 56) was recovered from Farmstead 2 (Phase 3) (*c.f.* Neal *et al*. 1990, 150 and fig. 136/630). An incomplete iron **T-clamp** (RA 265) derived from Farmstead 5 (Phase 4). T-clamps are commonly recovered pieces of structural ironwork and are known to have fulfilled a variety of functions, including the attachment of tiles to walls (Manning 1985, 132).

Five loose rectangular ***tesserae*** (RAs 281–285) were collected. All are made from reused tile fragments and are approximately 30mm long, 22mm wide and 14–23mm thick. A single example derived from Farmstead 5 (Phase 4) and the remainder from Farmstead 7 (Phase 5).

Household items

The incidence of **vessel glass** was restricted to Phase 4 (Farmsteads 4 and Farmstead 5) and Phase 5 (Farmstead 7). Of the seven fragments recovered, four are colourless, two are natural blue-green, and one is yellow/brown, suggesting a 1st–3rd-century date for the assemblage. Yellow/brown glass was used for tablewares during the 1st and early 2nd centuries. Blue-green glass was the most common colour used to produce containers and tableware during the 1st–3rd centuries, while colourless glass began production in the late 1st century, and was used almost exclusively for tablewares during the 2nd and 3rd centuries (Price and Cottam 1998, 15–16). Most forms cannot be positively identified due to fragmentary survival, although they include the base of a drinking cup or small bowl (RA 253), an unguent bottle rim (RA 273, Fig. 7.7), base fragments from a square bottle (RAs 38 and 40), a possible flagon or jug handle (RA 8) and a flask, unguent bottle or jug rim (RA 233, Fig. 7.7).

Vessel repairs comprise an unstratified lead plug (RA 277), used to repair holes in ceramic vessels, recovered from topsoil/subsoil L74. Comparable examples are readily found on Roman sites (*c.f.* Neal *et al*. 1990, fig. 139/922; Howard-Davies 2007, 288).

Phase	*F no.*	*L no.*	*Landuse Area Description*	*Artefact Description*
8	n/a	74	Topsoil and subsoil	Iron brooch (**2**), lead vessel patch (**277**), quern fragment (**12, 227**), bone hair pin (**13**), lead spindle whorl (**64**, **87, 175**), copper alloy coin (**65-69, 82-84, 88, 91, 113, 170**), stone mixing palette (**278**), copper alloy scale pan (**279**)
7	n/a	46.3	Fill of quarry pits adjacent to boundary L47	Copper alloy coin (**139**), iron hobnail (**150**)
		47.3	Fill of boundary L47	Copper alloy coin (**104**)
6	n/a	73.3	Fill of furrows L73	Iron hobnails (**137**), lead spindle whorl (**157**)
5	7	43.1	Primary fills associated with activity focus L43	Ceramic *tessera* (**284**)
		43.2	Secondary fills associated with activity focus L43	Iron hobnails(**184-188**), iron nail (**189**)
		43.3	Tertiary fills associated with activity focus L43	Iron hobnail (**194, 196**)
		42.2	Secondary fills associated with enclosure L42	Lead sheet (**135**), group of 38 iron hobnails (**192**)
		42.3	Tertiary fills associated with enclosure L42	Copper alloy coin (**141**), iron bladed object (**207**)
		44.1	Primary fills associated with field L44	Ceramic *tessera* (**285**)
		44.2	Secondary fills associated with field L44	Iron strip (**235-238, 264, 287**), iron nail (**241**), iron hobnail (**276, 289, 292**), ceramic *tessera* (**282, 283**), copper alloy coin (**142, 143, 145, 208**), copper alloy waste (**144, 147**), iron harness ring (**146**), glass vessel (**286**)
		44.3	Tertiary associated with field L44	Iron object (**231**), iron bar (**232**), iron nail (**205, 213-216, 218, 220**, **239, 242, 260, 270**), iron strip (**154, 177-182, 223, 254, 258, 259**, **261, 266**), iron lump (**262, 263**), copper alloy coin (**151, 152, 155**, **165, 206, 209, 255**), copper alloy casting gate (**161**), iron knife blade (**162, 222, 224**), iron sheet (**240**), copper alloy brooch (**158**), iron double-spiked loop (**153**), iron disc (**156**), glass vessel (**253, 273**), copper alloy chain links (**274**), glass bead (**275**), bone hair pin (**204**)
		45.3	Tertiary fills associated with field L45	Copper alloy coin (**159, 174**), iron strip (**173, 288**), copper alloy fragment (**210**), iron bar (**211**), iron key (**217**), whetstone (**226**), quern fragment (**229**)
4	4	10.3	Tertiary fills associated with non-domestic enclosure L10	Quern fragment (**9, 10**), millstone (**11**)
		14	Domestic enclosure L14	Group of 49 iron hobnails (**47-49, 62**)
		12.2	Secondary fills associated with non-domestic enclosure L12	Copper alloy coin (**50**), iron hobnail (**59**)
		13.3	Tertiary fills associated with non-domestic enclosure L13	Quern fragment (**27**)
		15.3	Tertiary fills associated with non-domestic enclosure L15	Iron nail (**57**)
		16	Domestic enclosure	Glass vessel (**38**), iron nail (**37**)
		16.1	Primary fills associated with domestic enclosure L16	Copper alloy coin (**24, 25**)
		16.2	Secondary fills associated with domestic enclosure L16	Iron chain link (**28**)
		20.1	Primary fills associated with non-domestic L20	Iron nail (**44**)
		20.2	Secondary fills associated with non-domestic enclosure L20	Copper alloy fitting (**46**), iron nail (**45**),
		20.3	Tertiary fills associated with non-domestic enclosure L20	Iron hobnail (**14**)
		57.3	Tertiary fills associated with minor additions L57 to enclosure system	Quern fragment (**60**), iron hobnail (**61**)
		58.2	Secondary fills associated with minor additions L58 to enclosure system	Glass vessel (**40**)
		81.2	Secondary fills associated with field L81	Glass vessel (**8**), iron hobnail (**15**), iron object (**16**), iron key (**17**), iron nail (**43**)
		84.3	Tertiary fills associated with possible enclosure L84	Copper alloy hair pin (**42**)
	5	31.1	Primary fills associated with major boundary L31	Iron pruning hook (**202**)
		31.2	Secondary fills associated with major boundary L31	Copper alloy coin (**70, 71, 121-124, 130, 168, 169**), iron knife (**77**), copper alloy hair pin (**72**), copper alloy sprue head (**74**), iron fragment (**103**)
		31.3	Tertiary fills associated with major boundary L31	Quern fragment (**5**)
		32	Major boundary L32	Iron strip (**280**)
		32.2	Secondary fills associated with major boundary L32	Iron hobnail (**272**)
		33.2	Secondary fills associated with field L33	Iron T-clamp (**265**)
		33.3	Tertiary fills associated with field L33	Iron strip (**78**), iron loop-headed spike (**79**), iron strip (**267**), iron hooked terminal (**244**)
		35.3	Tertiary fills associated with linear band of quarry pits L35	Copper alloy balance arm (**166**), copper alloy coin (**167**)

Phase	*F no.*	*L no.*	*Landuse Area Description*	*Artefact Description*
		38.2	Secondary fills associated with non-domestic enclosure L38	Iron hobnail (**183**), iron disc (**193**)
		39.3	Tertiary fills associated with later non-domestic enclosure L39	Iron sheet (**195**), iron strip (**268**)
		40.2	Secondary fills associated with non-domestic enclosure L40	Iron metalworking punch (**133**)
		41.1	Primary fills associated with unenclosed domestic focus L41	Iron latch lifter (**3**)
		41.2	Secondary fills associated with unenclosed domestic focus L41	Iron strip (**247**), iron object (**250**), iron saw blade (**251**), iron timber dog (**252**), iron nail (**245, 246, 249**), glass vessel (**233**)
		48.3	Tertiary fills associated with domestic focus L48	Iron knife (**243**)
		49.3	Tertiary fills associated with narrow non-domestic enclosure L49	Copper alloy coin (**75**), iron nail (**102**), iron hobnail (**230**)
		50.3	Tertiary fills associated with domestic focus L50	Copper alloy coin (**140**)
		51.3	Tertiary fills associated with narrow non-domestic enclosure L51	Copper alloy coin (**101, 120**), iron plough coulter (**126**), ceramic *tessera* (281)
		61.2	Secondary fills associated with major boundary L61	Copper alloy waste (**4**)
		71.3	Tertiary fills associated with domestic focus L71	Copper alloy coin (**138**)
3	2	1.1	Primary fills associated with enclosure L1	Quern fragment (**39**)
		1.2	Secondary fills associated with enclosure L1	Iron hinge staple (**56**)
		2.2	Secondary fills associated with the redefinition of enclosure L2	Iron nail (**30**)
		3.2	Secondary fills associated with the final redefinition enclosure L3	Iron nail (**26, 53**)
		4.2	Secondary fills associated with domestic focus L4	Copper alloy hair pin (**21**), chalk spindle whorl (**22**)
		4.3	Tertiary fills associated with domestic focus L4	Copper alloy brooch (**20**), iron nail (**23**)
		7.3	Tertiary fills associated with activity focus L7	Copper alloy bracelet (**51**)
	3	22.2	Secondary fills associated with enclosure L22	Iron object (**100**)
		22.3	Tertiary fills fills associated with enclosure L22	Copper alloy coin (**129**), iron nail (**105**)
		27.1	Primary fills associated with enclosure L27	Iron strip (**6**), iron object (**7**)
		27.2	Secondary fills associated with enclosure L27	Copper alloy coin (**163**)
		27.3	Tertiary fills associated with enclosure L27	Iron strip (**271**)
		29.2	Secondary fills associated with activity focus L29	Iron wire (**234**)
		30.3	Tertiary fills associated with activity focus L30	Iron handle (**256**)
		78.2	Secondary fills associated with activity focus L78	Millstone fragment (**225**), group of 98 iron hobnails (**199**)

Note: bold figures denote registered artefact number

Table 7.8 Summary of registered and non-ceramic artefacts (excluding metallurgical residues)

Multi-purpose implements

Whetstone fragment RA 226 is an example of a secondary hone fashioned from locally obtainable quartzite. Secondary hones are objects which happen to have honing properties, but which were not specifically quarried or imported for this purpose. The fragment was recovered from Farmstead 7 (Phase 5).

Cutting implements are uncommon, represented by portions of five iron **knife blades** (RAs 77, 162, 222, 224 and 243), two deriving from Farmstead 5 (Phase 4), and three from Farmstead 7 (Phase 5). Four survive in poor condition and are unclassifiable. RA 243 may be part of a socketed knife (Manning type 22, 1985, 117), although its fragmentary nature precludes positive identification. Two of the three fragments join to form the socket.

Trade and commerce

Farmstead 5 (Phase 4) yielded an incomplete cast copper alloy **balance arm** (RA 166, Fig. 7.6). The object is paralleled by examples from Colchester (Crummy 1983, fig. 103/2507) and more locally from Pear Tree Farm, Bedford (Cool and Duncan, in prep). An unstratified copper alloy **scale pan** rim (RA 279, Fig. 7.6) derived from topsoil/subsoil L74. The object comprises a distorted sheet fragment with a cast looped fitting (*c.f.* Colchester, Crummy 1983, 100 fig. 104/2508). RA 279 could have been used for pharmaceutical weighing or for the ordinary household or commercial weighing of solid goods.

Coins

by Peter Guest

(Table 7.9 and Appendix VI)

Forty-seven Roman coins were recovered from the excavations, all but three from Farmsteads 3, 5 and 7 (Area 2). The catalogue of excavated coins is presented in Appendix VI while a summary of the assemblage is presented in Table 7.9. Of the coins recovered, thirty-one could be identified to an emperor's reign or 4th-century Issue Period. Table 7.9 shows that over three-quarters of these coins were produced during the late 3rd century, with almost equal numbers of *radiates* and their barbarous copies struck between AD 260 and 296. The assemblage

Date	*Issue Period*	*No. of coins*	*‰ of coins*
to AD 41	I	-	-
41–54	II	2	64.5
54–68	III	-	-
69–96	IV	-	-
96–117	V	1	32.3
117–138	VI	-	-
138–161	VII	1	32.3
161–180	VIII	-	-
180–192	IX	-	-
193–222	X	1	32.3
222–238	XI	-	-
238–260	XII	-	-
260–275	XIII	12	387.1
275–296	XIV	13	419.4
296–317	XV	-	-
317–330	XVI	-	-
330–348	XVII	1	32.3
348–364	XVIII	-	-
364–378	XIX	-	-
378–388	XX	-	-
388–402	XXI	-	-
	Sub-total	31	
Æ – late 3rd–4th C		15	
Æ – 'Roman'		1	
	Total	**47**	

Table 7.9 Summary of Roman coins

contained a single silver issue (a *denarius* of Elagabalus: RA 170), while the remaining coins were all bronze or silvered bronze denominations. Another sixteen coins could only be described in more vague terms (*i.e.* 'late 3rd–4th centuries').

Only five coins from the excavations pre-date the mid 3rd century — two copies of Claudian *asses* (RAs 113 and 165), an early *sestertius* of Trajan (RA 71), a *sestertius* of Antoninus Pius (RA 25), and the *denarius* of Elagabalus mentioned previously. Coins from the late 3rd century (Issue Periods XIII and XIV) were particularly common from the site. The period from AD 260 to 296 is represented by twenty-five coins, including twelve official *radiates* and thirteen *barbarous radiates*, of which the majority were struck for (or imitating coins of) the Gallic emperors, particularly Victorinus and the Tetrici. The Constantinian coin of AD 335–41 was the single 4th-century issue from the site (RA 67).

The coins from the farmsteads indicate that the main period of coin loss occurred during the 3rd and possibly into the early 4th centuries. The absence of coins during the 1st or 2nd centuries does not necessarily mean that they were not circulating at the site. This is because coinage of the early Roman period in Britain consisted of high value silver *denarii* or large bronze denominations (such as the *sestertius*, *dupondius* or *as*), which will have been more zealously and easily recovered if lost than the smaller, lower value, coinage of the later 3rd and 4th centuries. However, the absence of 4th-century Roman coins is significant and it may suggest that occupation had ceased or, unusually, that the farmsteads were not using coins during this period when low-value coinage was widely available in Roman Britain. Fourth-century coins were being lost in large quantities at the nearby and contemporary settlement at Kempston Church End (Guest 2004a and b). Therefore, the scarcity of 4th-century coins at Marsh Leys Farm is likely to point to abandonment of the settlement probably at some point before the middle of the 4th century.

The coin assemblage also included a thin, copper-alloy disk, possibly a worn modern coin (RA 104).

Personal items

Two incomplete copper alloy **brooches** (RAs 20 and 158 respectively) were recovered from Farmstead 2 (Phase 3), and Farmstead 7 (Phase 5). RA 20 comprises a coil and partial bow fragment from a possible Colchester brooch, datable to the late 1st century AD. RA 158 (Fig. 7.6) is an early plate brooch of 'Wheel' form (Hattatt 1985, 151 and fig. 63), datable to AD 40–60. The object has four straight spokes and a wide felloe with inner and outer bordering ribs with a (?)flat face in between. The 'nave' has a cup-shaped integral centre boss with up-standing central 'spike'. An unstratified iron bow brooch spring and pin (RA 2) derived from topsoil/subsoil L74.

A portion of an undecorated D-sectioned copper alloy **bracelet** (RA 51) of late Roman date was an intrusive find from Farmstead 2 (Phase 3). Such objects are commonly recovered throughout Roman Britain and are readily paralleled by local examples from Kempston and Ruxox (Wells *et al.* 2004, 418).

Two incomplete bone **hair pins** (RAs 13 and 204) were recovered. The former was unstratified (topsoil/subsoil L74) and the latter derived from Farmstead 7 (Phase 5). RA 204 (Fig. 7.6) is in two joining pieces and has a conical knob head and expanding shank, similar to a later Roman Greep type B pin (1996, 345). It may equate to Cool's metal hairpin type 1E, noted for its concentration in East Anglia (Cool 1991, 154). Knob headed pins were in use throughout the Roman period, although their greatest popularity was during the later part. RA 13 comprises an undecorated section of shank, and is unclassifiable.

Portions of three copper alloy pins (RAs 21, 42 and 72) derived from Farmstead 2 (Phase 3), Farmstead 4 and Farmstead 5 (both Phase 4). RAs 21 and 72 are shank fragments, the former decorated with incised double parallel grooves, and RA 42 comprises a shank with a distorted elongated spherical head: none are classifiable. Such items functioned primarily as decorative hair pins, although some may also have been used as garment fasteners.

Farmstead 7 (Phase 5) contained a complete, undecorated opaque oval blue **glass bead** (RA 275) of flat section (Fig. 7.6). The object is likely to be of late Roman date (*c.f.* Guido 1978, 99 and fig. 37/17). Another glass bead of probable Roman date was found *c.* 100m to the east of Farmstead 2/4 during field artefact collection.

Two hundred and twenty-two iron **hobnails** were recovered. Although undatable, hobnails generally occur on rural sites in 2nd-century and later deposits. All have short, narrow, square-sectioned shanks, many of which are clenched, and small pyramidal heads (Manning type 10, 1985, 135). Complete examples vary in length from 14.5–19mm. Most comprise single finds from features in Phase 4 Farmsteads 4 and 5 (18 examples) and Farmstead 7, Phase 5 (16 examples). Three concentrations of

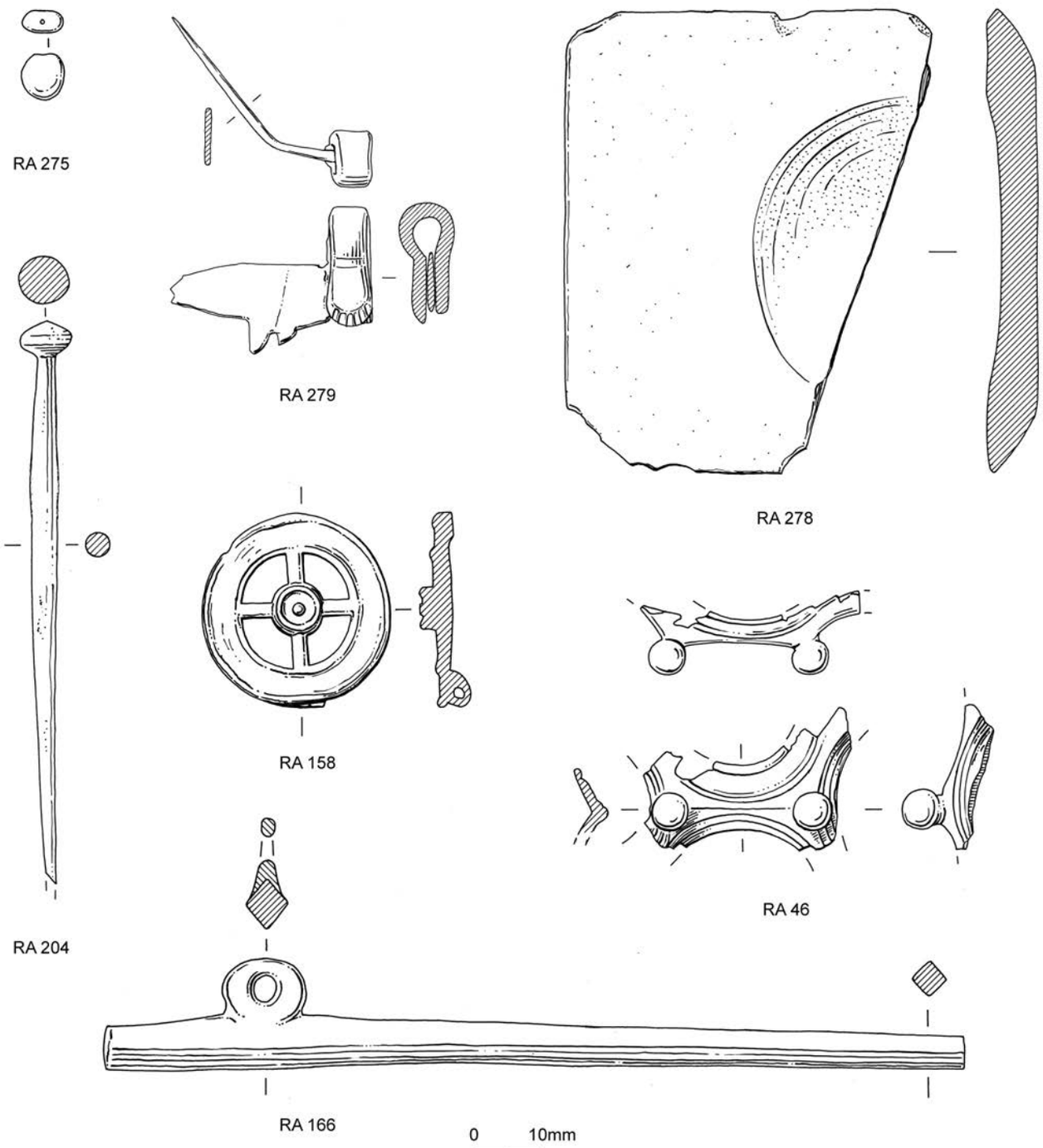


Figure 7.6 Other artefacts: RAs 275, 279, 278, 204, 158, 46 and 166. Scale 1:1

clustered hobnails also occurred. The secondary fills of ditch G214 (L78.2, Phase 3) yielded a collection of 98 nails (RA 199) deriving from a single hobnailed shoe (possibly right foot). Of these, thirty were concentrated in the heel area and the remainder in the upper sole.

Forty-nine nails represent the remains of either one or two hobnailed shoes placed as grave goods within inhumation burial G83 (Farmstead 4, Phase 4). Twenty-four hobnails (RA 47), all aligned head down, were recovered in a foot-shaped cluster from beneath the head. Two further groups of twelve and eleven nails (RAs 48 and 49 respectively) were found on either side of the head. Two isolated nails (RA 62) were present in the grave backfill.

Thirty-eight hobnails (RA 192) from a single shoe derived from the secondary fill of enclosure ditch G261 (Farmstead 7, Phase 5). Twenty were concentrated in the heel area and the remainder in the upper sole.

An unstratified, incomplete indurated mudstone **mixing palette** (RA 278, Fig. 7.6) was recovered from topsoil/subsoil L74. Small slabs of stone were used during the Roman period as palettes on which to mix cosmetics or medicines. A comparable mudstone example is known from excavations at Meadway, Harrold (Wells

forthcoming) and a quartzite palette from Luton Road, Wilstead (Wells 2010a, 143 and fig. 21).

Agricultural items

Nine fragments deriving from eight **rotary querns** and two portions of **millstone** were identified. RA 227 is of Hertfordshire Puddingstone and derives from the upper stone of a bun-shaped rotary quern, datable to the Iron Age–early Roman period. Seven flat rotary querns were also found. The latter were a post-Roman Conquest development of the British quern industries, but one that had already begun by the late 1st century (Welfare 1985, 157). Five are made from millstone grit (RAs 9, 10 (joining fragments), 12, 39, 60 and 229), likely to derive from the Pennines (King 1986, 86). One (RA 5) is manufactured from quartz conglomerate, probably from the Forest of Dean, Gloucestershire, and one (RA 27) from imported lava, originating from either the Mayen quarries of Germany or from French lava outcrops near Volvic (King 1986, 94). Burning/sooting noted on RAs 9, 10 and 229 indicates reuse. Three quern fragments were associated with Farmstead 4 (Phase 4). Single examples were recovered from Farmstead 7, (Phase 5), Farmstead 5 (Phase 4), Farmstead 2 (Phase 3), and two fragments from topsoil/subsoil L74.

A large portion of upper millstone (RA 11) derived from Farmstead 4 (Phase 4). The object is made from millstone grit, has pecking on the skirt and upper surface, and tooling marks and wear on the grinding surface. Farmstead 3 (Phase 3) yielded a millstone grit skirt fragment (RA 225), which has very little curvature on the outer edge, suggesting the fragment derives from a millstone.

A portion of tang and curved blade from an iron **pruning hook** (RA 202) derived from the primary fill of major boundary L31, Farmstead 5 (Phase 4), and an incomplete iron **plough coulter** (RA 126, Fig. 7.8) from the ditch fill of narrow, non-domestic enclosure L51, also Farmstead 5. The function of the coulter on a plough is to cut the sod vertically in advance of the share which cuts horizontally (Rees 1979, 61). Coulters could have been used on a variety of plough types, although their recurrent association with iron bar shares suggests that they were commonly used on a form of bow ard (Manning 1964, 62). The coulter may be seen as a relatively late introduction into Britain, with no certain examples pre-dating the 3rd century (Rees 1979, 60). They are not uncommon finds from Romano-British contexts in the region. A local example is known from Sandy, Beds. (Manning 1972, 235) and another has more recently been recovered from excavations at Cambourne in Cambridgeshire (Wessex Archaeology 2003).

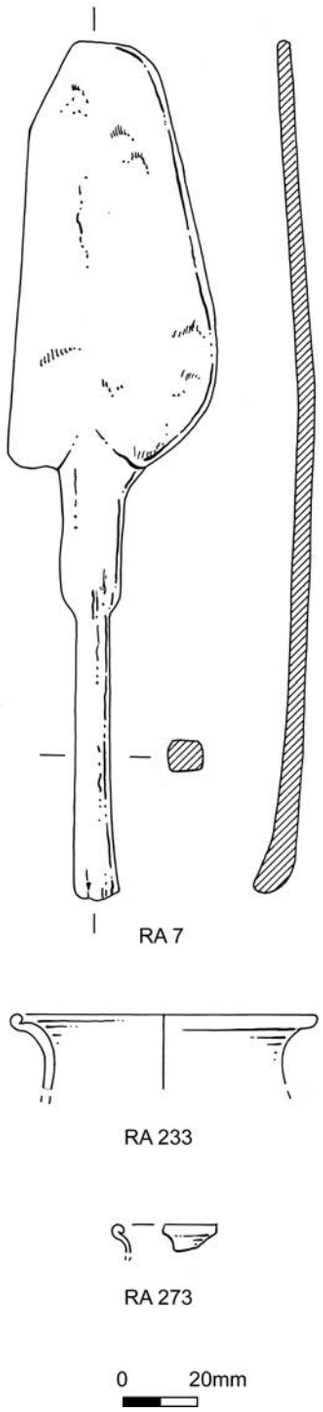


Figure 7.7 Other artefacts: RAs 7, 233 and 273. Scale 1:2

Crafts and industry

Textile working

Five **spindle whorls** were recovered. Three lead examples (RAs 64, 87 and 175) are unstratified (from topsoil/subsoil L74) and a fourth (RA 157; possibly post-Roman) derives from the fills of medieval furrows L73 (Phase 6). The only stratified example comprises an incomplete chalk whorl (RA 22), recovered from Farmstead 2 (Phase 3).

The weight and shape of spindle whorls reflects the types of yarn produced, with lighter examples spinning more rapidly (Wild 1988, 25). Three examples (RAs 64, 87, and 157) recovered from Marsh Leys Farm weigh 28–52g and may have been suitable for spinning wool, while RAs 22 and 175, each weighing less than 20g, may have been more suitable for spinning short fibres and fine yarns (Rogers 1997, 1745). However, the weight of the whorl is only one factor among many and as Rogers says 'it is dangerous to take the evidence too far'.

Wood working

A short section of an iron **saw blade** (RA 251) derived from Farmstead 5 (Phase 4). Parallels span the middle Iron

Age into the Roman period (Winham 1985, fig. 44/28; Cunliffe and Poole 1991, fig. 7/12; Manning 1985, 19–21, and B21). A similar local example is known from Groveland Way, Stotfold (McSloy and Duncan in prep).

Metal working

Copper alloy: casting of copper alloy is indicated by three small pieces of **waste or run-off,** and fragments of a **sprue head** (RA 74) and **casting gate** (RA 161), the latter for use with a two-piece mould. Two of the waste fragments and the casting gate were recovered from Farmstead 7 (Phase 5), and the sprue head and remaining waste run-off derived from Farmstead 5 (Phase 4). Only tiny quantities of metallurgical residues were found that could indicate copper alloy working (see below).

Iron: Farmstead 7 (Phase 5) yielded a tapering rectangular-sectioned **bar** (RA 231), which may represent part of a chisel or punch. The remains of a second putative **punch** (RA 133) derived from Farmstead 5 (Phase 4). A comparable example is known from Kempston Church End (Wells *et al*. 2004, 387).

Wide-ranging uses

Farmstead 7 (Phase 5) yielded an iron **annular ring** (RA 146), with a diameter of 36mm, which may have functioned as a harness or cart ring, or a ring handle on furnishings. The object is typologically undatable, although given its provenance, is considered to be of Roman origin. A series of eight small oval copper alloy **wire chain links** (RA 274) derived from the same feature on Farmstead 7. A distorted figure-of-eight type iron chain link (RA 28) derived from Farmstead 4 (Phase 4) and a short length of iron **wire** (RA 234) from Farmstead 3 (Phase 3).

Unidentified objects

Iron

A **hooked terminal** (RA 244) probably deriving from a double spiked loop or latchlifter was recovered from Farmstead 5 (Phase 4). Two **socketed sheet** fragments (RAs 256 and 250), likely to be part of an agricultural tool such as a weeding hook or billhook, derived respectively from Farmstead 3 (Phase 3) and Farmstead 5 (Phase 4). Three joining pieces of a **bladed object** (RA 207), identified as a possible reaping hook or scythe were recovered from Farmstead 7 (Phase 5). A short section of a possible **implement handle** (RA 16) derived from Farmstead 4 (Phase 4). Farmstead 3 (Phase 3) yielded an object with a square-sectioned tang flattening towards a leaf shaped flat 'blade' (RA 7, Fig. 7.7). The object is similar to one recovered from the Roman settlement at Baldock, Herts. (Manning and Scott 1986, fig. 66/523), although RA 7 lacks a perforated lobe and split ring attachment. Suggested functions for the Baldock example include a blacksmith's fire shovel, ritual 'rattle', trowel, or spearhead. The function of RA 7 remains inconclusive.

Other unidentified iron items comprise thirty-seven miscellaneous sheet, bar and strip fragments. A number of the latter are perforated and/or riveted and may derive from hinges or other structural fittings. The majority derive from the probable iron working area on Farmstead 7 (field L44, Phase 5) and may, therefore, represent scraps ready for reworking. The smaller quantity from Farmsteads 3 and 5 (Phases 3 and 4 respectively) may have been collected for the same purpose.

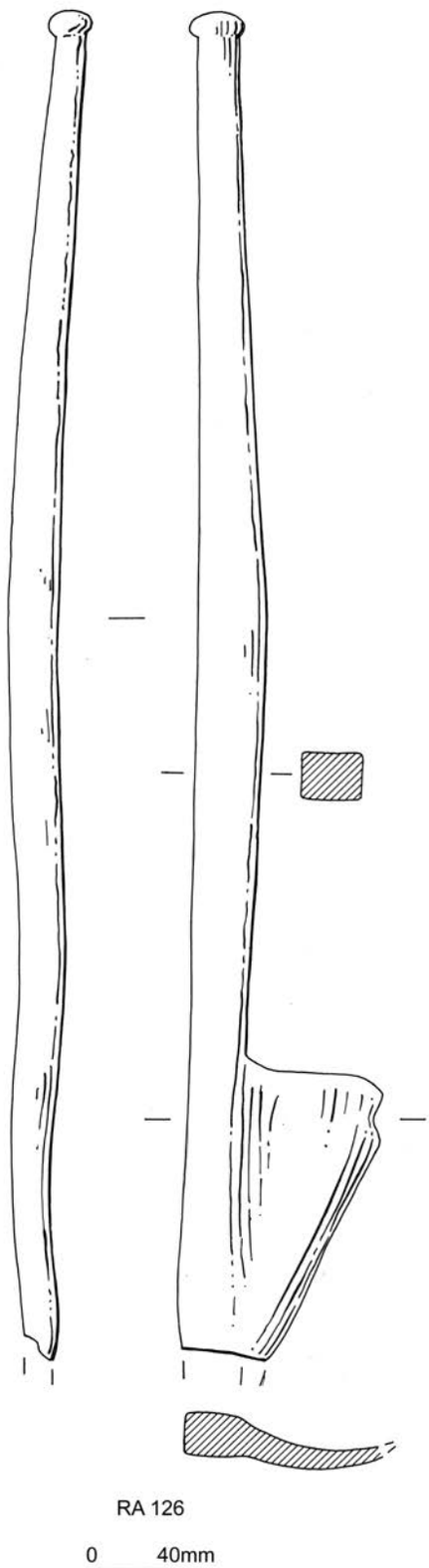


Figure 7.8 Other artefacts: RA 126. Scale 1:4

Copper alloy
Farmstead 4 (Phase 4) yielded an incomplete cast object identified as a possible **fitting** (RA 46, Fig. 7.6). No precise parallels have been found, although the object shares some affinity with a probable harness mount recovered from Gorhambury, Herts. (Wardle 1990, fig. 125/176).

Flint artefacts
Flint artefacts were recovered from open-area excavation (eight pieces) and field artefact collection (forty-three pieces). The excavated flint comprises debitage (two flakes, two blades) and tools (a denticulate, an end scraper, a crude plano-convex knife, and a possible unfinished arrowhead). The assemblage is entirely residual, occurring in late Iron Age/Romano-British features. Detailed information on the worked flint can be found in the project archive.

VI. Summary

Considered collectively, the artefact assemblage is fairly typical of Romano-British farmsteads in the region, where a combination of domestic, agricultural and craft activities (textile, wood and metal working) are standard. One interesting anomaly is the quantity of metal-working residues, which indicates iron smithing was undertaken on a larger scale than at many contemporary sites.

The assemblage indicates that the occupants had access to, and the means to purchase, traded goods (*e.g.* imported pottery, quern stones, glass vessels and a few personal objects), although the quantity of items does not necessarily suggest a high degree of disposable or material wealth.

Chapter 8. Ecofacts

I. Animal Bone

by Mark Maltby

Introduction

A total of 6483 fragments of animal bone were recovered from open-area excavation and trial trenching. All the material, both hand-collected and from sieved samples, was examined as part of the post-fieldwork assessment. The size of the assemblage has allowed inter-phase analysis of species representation. Other interesting aspects of the assemblage are also commented upon.

Methodology

The assessment characterised the preservation of approximately half the assemblage as poor, with only 3013 fragments warranting further analysis. Where appropriate, the following information was recorded: sieved sample number; species; anatomy; area of body; part of bone present; proportion of bone present; gnawing damage; surface condition; fusion data; tooth ageing data; butchery data; metrical data; other comments. Where necessary, identifications were confirmed by reference to the comparative skeleton collection housed in the School of Conservation Sciences, Bournemouth University. The data was originally recorded using shorthand codes, the key for which is in the project archive. All the recorded information was entered onto an Access database.

Tooth eruption and wear descriptions for cattle, sheep/goat and pig follow the method of Grant (1982). Unless otherwise stated, estimates of the age of cattle, sheep and pig mandibles are based on Halstead (1985), Payne (1973) and Bull and Payne (1982) respectively. Estimates of fusion ages are based on Silver (1969), Grigson (1982) and Bull and Payne (1982). Estimates of the age of horses based on the crown heights of their cheek teeth have been undertaken using the method of Levine (1982). Measurements of domestic mammals are those recommended by von den Driesch (1976), with a few additions. Withers-height estimations of the domestic species are based on the multiplication of the lengths of limb bones by factors recommended by von den Driesch and Boessneck (1974).

Table 8.1–8.6 show the amounts of bone recovered by hand collection (N= not sieved) and from ecofact samples (S= sieved).

Discussion of species

Of the 3013 fragments that warranted detailed analysis 60% (*i.e.* 1605) were identified to species: cattle 785 fragments; sheep/goat 416 fragments; horse 225 fragments; domestic fowl 81 fragments; dog 50 fragments; and pig 37 fragments. There were also tiny quantities of owl, frog/toad and hedgehog.

Discussion by provenance

Animal bone was recovered from Phase 2 (early to middle Iron Age) through to Phase 5 (late Romano-British) and is discussed by phase below. The bulk of the material is of Romano-British date with the majority deriving from Phase 4 (1873 fragments) and Phase 5 (662 fragments). Cattle are the most abundant species and were recovered from all the phases; sheep are the second most common. With the exception of Phase 2, horse was identified in all the phases, as was pig, although the latter was the most poorly represented species. Dog was recovered from all the phases. The absence of a single identification of wild mammals, with the exception of hedgehog, is unusual as evidence for deer and hare are usually found on sites of this type.

Phase 2 (pre-late Iron Age)
(Table 8.1)
Enclosure F1 produced the smallest assemblage. Of the twelve fragments, nine were hand-collected and five were from sieved ecofactual samples. Only two fragments of cattle and a single dog fragment were identified to species.

F1	*Cattle*	*Dog*	*Unid. Mammal*	***Total***
L18 N	2	1	4	**7**
L18 S	-	-	5	**5**
Total N	**2**	**1**	**4**	**7**
Total S	**-**	**-**	**5**	**5**
Total N+S	**2**	**1**	**9**	**12**

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.1 Phase 2 overall animal species (fragment count)

Phase 3 (late Iron Age/early Romano-British)
(Table 8.2 and 8.3)
A total of 204 fragments came from Farmstead 2, including 39 from sieved ecofactual samples. Farmstead 3 produced 309 fragments, including 20 from sieved samples. Of these 513 fragments, 254 were identified to species.

Cattle were the most commonly identified species (58%). They were particularly abundant in Farmstead 3, where they contributed 65% of the assemblage, while in Farmstead 2 it was 42%. Cattle mandibles were well represented and there is an indication that primary butchery waste was either deposited or survived more commonly in Farmstead 3, particularly in features associated with enclosure L21/22 and adjacent activity focus L25. The ageing evidence shows that out of twelve cattle mandibles, three belonged to adult animals with the other nine belonging to immature cattle of 12–30 months of age. The tooth eruption data indicates that most of them were slaughtered in their second year. Butchery marks were identified on twelve different cattle bones and marks made by cleavers outnumbered those made with knives, although both types were recorded on some.

Sheep/goat were the second most common species identified and provided 36% and 23% of the identified mammal elements from Farmsteads 2 and 3 respectively.

F2	*Cattle*	*Dog*	*Domestic Fowl*	*Horse*	*Pig*	*Sheep/ Goat*	*Owl*	*Unid. Mammal*	***Total***	***Total unid***
L1 N	1	-	-	1	1	3	1	6	**13**	**-**
L1 S	-	-	-	-	-	1	-	8	**9**	**-**
L3 N	8	6	1	4	-	3	-	13	**35**	**6**
L4 N	16	-	-	-	4	11	-	42	**73**	**6**
L4 S	-	-	-	-	-	1	-	20	**21**	**-**
L5 N	1	-	-	-	-	-	-	5	**6**	**-**
L6 N	1	-	-	-	-	-	-	1	**2**	**5**
L7 N	-	-	-	-	1	-	-	4	**5**	**2**
L54 N	5	-	-	-	-	7	-	19	**31**	**-**
L54 S	-	-	-	-	-	1	-	8	**9**	**-**
Total N	**32**	**6**	**1**	**5**	**6**	**24**	**1**	**90**	**165**	**19**
Total S	**-**	**-**	**-**	**-**	**-**	**3**	**-**	**36**	**39**	**-**
Total N+S	**32**	**6**	**1**	**5**	**6**	**27**	**1**	**126**	**204**	**19**
% Mam N+S	42	8	0	7	8	36	-	-	**-**	**-**

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.2 Farmstead 2 (Phase 3) animal species (fragment count)

Thirteen mandibles provided ageing data, of which eight had all the molars in wear and belonged to sheep over two years of age and probably substantially older. However, this evidence may be biased as younger mandibles may not have survived as frequently. Gnawing marks were observed on ten sheep/goat bones and butchery marks were observed on two. Knife cuts on femur shafts are commonly found on Iron Age sites but blade marks made during filleting, as found on a bone from activity focus L25 (Farmstead 3), are unusual. The metrical data is limited to four bones, three of which belonged to a sheep of a large size for this period. This may be evidence for the introduction of new improved stock to the area in the late Iron Age/early Romano-British period.

Only nine elements of pig were identified, representing 8% and 2% of the identified mammal elements from Farmsteads 2 and 3 respectively. A scapula from enclosure L1 (Farmstead 2) bore evidence of butchery with a cleaver; three bones showed damage by gnawing.

Horse provided 10% of the identified mammal bones from Farmstead 3, compared with 7% from Farmstead 2. It is not unusual for horse to outnumber pig on later Iron Age/early Romano-British rural sites. Horse remains from enclosure L3 (Farmstead 2) included bones from the same adult animal along with a radius belonging to a foal. Four bones of the same animal were also found in activity focus L25 (Farmstead 3). No butchery marks were observed on any of the horse bones but gnawing had damaged six bones.

F3	*Cattle*	*Dog*	*Domestic Fowl*	*Horse*	*Pig*	*Sheep/ Goat*	*Goose*	*Unid. Mammal*	***Total***	***Total unid***
L21 N	12	-	-	1	-	3	-	5	**21**	**24**
L22 N	13	-	-	5	-	3	1	17	**39**	**18**
L22 S	-	-	-	-	-	-	-	1	**1**	**-**
L23 N	6	-	-	-	-	1	-	10	**17**	**23**
L24 N	7	-	-	2	-	-	-	15	**24**	**31**
L25 N	25	-	-	4	-	6	-	9	**44**	**48**
L25 S	-	-	-	-	-	-	-	5	**5**	**-**
L26 N	3	-	-	-	-	-	-	6	**9**	**36**
L26 S	-	-	-	-	-	1	-	5	**6**	**-**
L27 N	8	1	-	1	3	6	-	18	**37**	**93**
L28 N	5	-	-	-	-	9	-	13	**27**	**49**
L28 S	-	-	-	-	-	1	-	6	**7**	**-**
L29 N	9	-	-	3	-	3	-	7	**22**	**38**
L30 N	19	-	11	-	-	4	-	15	**49**	**26**
L30 S	-	-	-	-	-	-	-	1	**1**	**-**
Total N	**107**	**1**	**11**	**16**	**3**	**35**	**1**	**115**	**289**	**386**
Total S	**-**	**-**	**-**	**-**	**-**	**2**	**-**	**18**	**20**	**-**
Total N+S	**107**	**1**	**11**	**16**	**3**	**37**	**1**	**133**	**309**	**386**
% Mam N+S	65	1	-	10	2	23	-	-	**-**	**-**

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.3 Farmstead 3 (Phase 3) animal species (fragment count)

Dog bones provided only 1% of the assemblage from Farmstead 3 compared with 8% from Farmstead 2. A total of fourteen bird bones were identified, all but two from Farmstead 3. The majority of the identified domestic fowl came from activity focus L30 (Farmstead 3). Although domestic fowl were introduced into Britain during the Iron Age, with one or two exceptions, they are not commonly found in the late Iron Age/early Romano-British period (Maltby 1997). A radius of an owl, likely to be a barn owl, was recovered from enclosure L1 (Farmstead 2) and a goose ulna from enclosure L22 (Farmstead 3). The latter was the size of a greylag or its domestic equivalent.

Phase 4 (Romano-British)
(Tables 8.4 and 8.5)
Farmstead 4 produced 994 fragments, of which 528 were identified to species, while 879 fragments were recovered from Farmstead 5, of which 520 were identified to species.

Cattle continue to be the most commonly identified species, providing 55% of the identified mammal elements from each farmstead. This percentage is higher than in contemporary deposits from other sites such as Biddenham Loop (Maltby 2008, 283) and Kempston Church End (Roberts 2004), but is perhaps to be expected given the lowland location of the Marsh Leys farmsteads and the availability of pasture and water. A total of 36 butchery marks were identified on cattle bones, including several bones with more than one type of mark. Most of the marks were created by cleavers, although fine incisions made with knives were also observed. The trend towards greater reliance on the use of cleavers in the Romano-British period has been noted on other rural settlements which were occupied during the Iron Age and Romano-British periods, *e.g.* Biddenham Loop (Maltby 2008, 283) and Wavendon Gate (Dobney and Jaques 1996, 219–20).

A large cattle assemblage was recovered from pit G325 (L48, Farmstead 5). It shows a consistent pattern of chop marks, indicating that several cattle were slaughtered and processed over a short period of time, perhaps even at one time, by the same butcher. The production of such a large amount of meat may have provided food for a large gathering of people or it is possible that salting and/or smoking preserved the meat. The metrical data shows that at least some of the cattle were quite large for the period and could indicate that improved stock had been introduced into the area by this time. The ageing evidence shows the presence of cattle of all ages — from neonatal calves to elderly animals — indicating that cattle were

F4	*Cattle*	*Corvid*	*Dog*	*Domestic Fowl*	*Frog/ Toad*	*Horse*	*Pig*	*Sheep/ Goat*	*Unid Bird*	*Unid Mammal*	***Total***	***Total unid***
L8 N	8	-	1	1	-	-	-	15	-	25	**50**	**31**
L8 S	-	-	-	-	-	-	-	-	-	1	**1**	**-**
L9 N	22	-	-	-	-	3	2	14	-	40	**81**	**128**
L10 N	1	-	-	-	-	-	-	3	-	1	**5**	**-**
L10 S	-	-	-	-	-	-	1	-	-	8	**9**	**-**
L11 N	5	-	-	-	-	-	-	1	-	12	**18**	**20**
L11 S	-	-	-	-	-	-	-	-	-	1	**1**	**-**
L12 N	-	-	-	-	-	1	-	-	-	3	**4**	**9**
L12 S	1	-	-	-	-	-	-	-	-	-	**1**	-
L13 N	38	-	-	-	1	1	1	4	-	39	**84**	**40**
L13 S	-	-	-	—	-	-	-	-	-	9	**9**	**-**
L14 N	43	-	1	1	-	3	-	31	-	53	**132**	**8**
L14 S	1	-	-	-	1	-	—	3	-	36	**41**	**-**
L15 N	1	1	-	-	-	9	1	1	-	3	**16**	**-**
L15 S	-	-	-	-	-	-	-	-	-	4	**4**	**-**
L16 N	5	-	1	59	-	-	1	6	-	12	**84**	**50**
L16 S	-	-	-	-	-	-	-	-	-	1	**1**	**-**
L19 N	4	-	2	-	-	-	-	1	-	-	**7**	**9**
L20 N	56	-	-	-	-	11	4	13	1	114	**199**	**154**
L20 S	-	-	-	-	-	-	-	2	-	9	**11**	**-**
L53 N	1	-	-	-	-	1	-	-	-	-	**2**	**4**
L57 N	1	-	-	-	-	-	-	2	-	5	**8**	**-**
L57 S	-	-	-	-	-	-	-	1	-	19	**20**	**-**
L58 N	14	-	-	2	-	1	2	24	-	32	**75**	**8**
L58 S	-	-	-	-	-	-	-	-	-	3	**3**	**-**
L60 N	-	-	-	-	-	89	-	-	-	-	**89**	**-**
L60 S	-	-	-	-	-	4	-	-	-	35	**39**	**-**
Total N	**199**	**1**	**5**	**63**	**1**	**119**	**11**	**115**	**1**	**339**	**854**	**461**
Total S	**2**	**-**	**-**	**-**	**1**	**4**	**1**	**6**	**-**	**126**	**140**	**-**
Total N+S	**201**	**1**	**5**	**63**	**2**	**123**	**12**	**121**	**1**	**465**	**994**	**461**
% Mam N+S	55	-	1	-	-	8	3	33	-	-	**-**	**-**

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.4 Farmstead 4 (Phase 4) animal species (fragment count)

raised in the area. They were most commonly slaughtered in their second year.

Sheep/goat were the second most commonly identified species, providing 33% and 26% of the Farmstead 4 and 5 assemblages respectively. Tooth ageing data indicates that out of 24 mandibles, half belonged to lambs culled at 6–12 months of age. Four were from animals probably slaughtered in their second year while the remainder were from sheep over two years of age and some over six. Gnawing damage was observed on 33 bones while butchery marks were noted on seven bones, with both knife cuts and chop marks recorded. The metrical data indicates the sheep varied quite substantially in size. In addition, unlike on Biddenham Loop where only horned were present (Maltby 2008, 284), both hornless and horned skulls were present indicating that more than one type of sheep was exploited.

Pig is again poorly represented and only contributes 2–3% of the identified mammal assemblages. This is an extremely low figure and shows that the increase in pork consumption evident on some types of high status Roman sites (King 1999; Grant 2002) is not apparent here. In addition, pig bones are less well represented at Marsh Leys than on contemporary sites in the area, *e.g.* Biddenham Loop where they provided 8% of the identified mammal bones (Maltby 2008, 284). Although the Marsh Leys assemblage was small, one of the bones had been split with a cleaver while gnawing damaged others. Three mandibles provided tooth ageing data for animals probably culled at 6–12 months and, in one case, at 2–3 years of age.

Excluding the skeleton from L60, horse provided 8–9% of the identified mammal elements from both farmsteads and is comparable to other sites in the area, *e.g.* Biddenham Loop (Maltby 2008, 284). Burial G101 (L60, Farmstead 4) was of an adult animal and the degree of wear on the mandibular third molar suggests it was 11–13 years old, based on Levine's (1982) crown height ageing method. Metrical analysis is restricted because of the fragmentary nature of some of the bones. Those measurements that could be taken on limb bone lengths indicate that the animal had a withers height of about 130cm (12.5 hands). Two of the right tarsals had fused pathologically, indicating some deterioration of the hock joint. Two conjoining thoracic vertebrae had articular surfaces that were pitted and porous. Although there are no skull fragments, part of the right mandible is present. This, and the absence of evidence for butchery or gnawing, suggests that the complete carcass was buried and that plough disturbance has resulted in the loss and fragmentation of some bones.

Most of the other horse bones from the investigations also belong to adult animals and this probably reflects their use as beasts of burden and transport rather than being bred for their meat. However, two observations of butchery were made on the horse assemblage. Chop marks were recorded from bones found in enclosure L15 (Farmstead 4) and the radius of a foal from water pit G294

F5	*Cattle*	*Dog*	*Domestic Fowl*	*Frog/ Toad*	*Horse*	*Pig*	*Sheep/ Goat*	*Unid. Mammal*	***Total***	***Total unid***
L31 N	22	2	-	-	5	2	3	47	**81**	**85**
L32 N	15	6	-	-	8	2	3	32	**66**	**20**
L32 S	1	-	-	-	-	-	-	8	**9**	**-**
L33 N	29	-	-	-	1	3	19	48	**100**	**99**
L34 N	1	1	-	-	-	-	1	2	**5**	**19**
L35 N	9	-	-	-	-	-	1	15	**25**	**27**
L35 S	-	-	-	-	-	-	-	2	**2**	**-**
L36 N	11	-	-	-	1	1	8	18	**39**	**85**
L37 N	2	-	-	-	1	-	2	3	**8**	**-**
L38 N	6	1	-	-	-	-	6	19	**32**	**33**
L39 N	10	12	-	-	1	-	3	7	**33**	**-**
L41 N	2	-	-	-	2	-	5	20	**29**	**66**
L41 S	-	-	-	3	-	-	3	17	**23**	**-**
L48 N	152	11	-	-	27	2	68	45	**305**	**373**
L49 N	6	-	-	-	-	-	3	9	**18**	**12**
L50 N	3	-	-	-	1	-	-	14	**18**	**34**
L51 N	3	-	-	-	1	-	1	12	**17**	**22**
L52 N	3	1	-	-	1	-	2	14	**21**	**16**
L52 S	-	-	-	-	-	-	-	1	**1**	**-**
L71 N	5	-	-	-	-	-	3	8	**16**	**3**
L75 N	6	1	1	-	-	1	4	10	**23**	**17**
L75 S	-	-	-	-	-	-	-	7	**7**	**-**
L77 N	-	-	-	-	-	-	-	1	**1**	**3**
Total N	**285**	**35**	**1**	**-**	**49**	**11**	**132**	**324**	**837**	**914**
Total S	**1**		**-**	**3**	**-**	**-**	**3**	**35**	**42**	**-**
Total N+S	**286**	**35**	**1**	**3**	**49**	**11**	**135**	**359**	**879**	**914**
% Mam N+S	55	7	-	-	9	2	26	-	-	-

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.5 Farmstead 5 (Phase 4) animal species (fragment count)

in field L52 (Farmstead 5) had an oblique knife cut on the distal part of its shaft that may be indicative of filleting. It is therefore possible that animals who died of natural causes may have been used to a limited extent but it is unclear whether the occupants actually ate horseflesh. It is clear that the carcasses were accessible to dogs as 24 bones showed evidence of gnawing damage.

Dog bones provided only 1% of the identified mammal fragments in Farmstead 4 compared with 7% in Farmstead 5. In addition, their presence is indicated by the existence of gnawed bones of other animals within the assemblage. Several small groups of associated bones were present in Farmstead 5, *e.g.* dog skull within 'special' deposit G235.4 (L32), partial skeleton within 'special' deposit G253.4 (enclosure L39). It can be argued that most of the dog remains represent the deposition of complete carcasses that have been subsequently heavily disarticulated and redeposited. Metrical data was extremely limited but the presence of bones of small dogs was noted. There was no evidence that any of the bones were butchered.

It is interesting that not a single wild mammal bone was identified. Small numbers of deer are usually present on Romano-British sites, *e.g.* Biddenham Loop (Maltby 2008, 284). Similarly, no fish bones were recovered. All but one of the 65 bird bones identified belonged to domestic fowl. Of these, 59 were recovered from possible ritual post setting G96 (L16, Farmstead 4). These bones belonged to two adult domestic fowl that were deposited in the post-hole. With the exception of the heads, they are likely to represent the disposal of complete bodies and there was no evidence of butchery. The birds were of a similar size and relatively large compared with other specimens of Romano-British date.

Phase 5 (later Romano-British)
(Table 8.6)
Farmstead 7 produced 662 fragments of which 323 were identified to species. The assemblage recovered from field L44 dominates the sample.

Cattle remain the most abundant species identified (51%), although this percentage declined slightly from previous phases. The cattle tooth ageing data shows a continuing bias towards the presence of immature cattle. Butchery marks were identified on 13 cattle bones, the majority of which consisted of chop marks. An astragalus recovered from field L44 shows evidence of knife cuts made during skinning and disarticulation from the lower tarsals and foot bones. The bone was then split longitudinally, probably when it was still attached to the tibia, during marrow extraction. A femur from enclosure L42 and a tibia from field L44 have evidence for longitudinal splitting, in one case perhaps for bone working. The increase in the percentage of chop marks could indicate that the cleaver was becoming more prevalent in butchery; however the sample size is too small to be certain.

Sheep/goat continues to be the second most commonly identified species, providing 33% of the identified mammal fragments. These include 14 bones definitely belonging to sheep and a goat horn core from enclosure L42. Both horned and hornless sheep were present. Thirteen mandibles provide tooth eruption evidence of which two belong to lambs under a year old. There is a fairly even distribution of specimens belonging to subsequent stages of the eruption sequence. Two mandibles have evidence of severe malocclusion of the cheek teeth, perhaps indicative of dietary stress. Only five sheep/goat bones provide butchery evidence — four with chop marks and one with knife cuts.

Pig continues to be poorly represented in this phase; the six bones provide 2% of the identified mammal bones.

Horse provided 12% of the identified mammal bones from Farmstead 7, which included ten associated bones from pit G316 (L44). The ageing evidence suggests that most horses continued to live until adulthood. The only evidence of butchery consists of a chop mark on the shaft of a tibia recovered from L44 and some bones display gnawing damage.

Only five dog bones, providing 2% of the assemblage, were identified. They include the mandible of a miniature breed from enclosure L42. Miniature or lap-dogs were introduced to Britain (perhaps as pets) either in the Romano-British period (Harcourt 1974) or perhaps, in a few cases, as early as the late Iron Age. They are considered to be more common on 'heavily Romanised settlements of higher status' (Dobney and Jaques 1996, 223), but are known on farmsteads, *e.g.* Biddenham Loop (Maltby 2008, 284).

F7	*Cattle*	*Corvid*	*Dog*	*Domestic Fowl*	*Frog/ Toad*	*Horse*	*Pig*	*Sheep/ Goat*	*Hedge-hog*	*Unid Bird*	*Unid. Mammal*	***Total***	***Total unid***
L42 N	19	-	3	-	-	4	-	23	-	-	31	**80**	**206**
L42 S	-	-	-	-	-	-	-	-	1	-	10	**11**	**-**
L43 N	18	-	-	-	-	3	2	5	-	1	28	**57**	**90**
L43 S	-	-	-	-	-	-	-	-	-	-	2	**2**	**-**
L44 N	106	2	2	5	-	27	3	68	-	1	206	**420**	**404**
L44 S	-	-	-	-	4	-	-	4	-	-	33	**41**	**-**
L45 N	12	-	-	-	-	2	1	2	-	-	23	**40**	**145**
L45 S	-	-	-	-	-	-	-	1	-	-	-	**1**	**-**
L70 N	5	-	-	-	-	-	-	1	-	-	4	**10**	**14**
Total N	**160**	**2**	**5**	**5**	**-**	**36**	**6**	**99**	**-**	**2**	**292**	**607**	**859**
Total S	**-**	**-**	**-**	**-**	**4**	**-**	**-**	**5**	**1**	**-**	**45**	**55**	**-**
Total N+S	**160**	**2**	**5**	**5**	**4**	**36**	**6**	**104**	**1**	**2**	**337**	**662**	**859**
% Mam N+S	51	-	2	-	-	12	2	33	0.3	-	-	-	-

N=not sieved (hand-collected), S=sieved (ecofact samples)

Table 8.6 Farmstead 7 (Phase 5) animal species (fragment count)

Deer (even antler offcuts) and hare bones continue to be absent from the assemblages; the only wild mammal bone to be identified is of a hedgehog. No fish bones were recovered. Nine bird bones were retrieved, including two unidentified fragments. The only species identified are domestic fowl and rook/crow.

Summary

The pattern of species representation at Marsh Leys is fairly typical of Romano-British rural sites, which are usually dominated by cattle, sheep/goat with a low incidence of horse and pigs (King 1999), *e.g.* Biddenham Loop (Maltby 2008) and Haddon, Peterborough (Baxter 2003). The quantity of domestic fowl, excluding those from ritual deposits in G96 (Phase 4), is very low. No wild mammals or fish bones were present.

The assemblages from Phases 3, 4 and 5 contain butchery marks with those made by cleavers outnumbering those made with knives. This evidence for the use of cleavers, especially in Phase 3, is interesting as their use generally became more prevalent in the Romano- British period on urban and military sites (Maltby 1989), rather than on late Iron Age/early Romano-British farmsteads such as Marsh Leys. However, recent analyses have suggested that cattle carcasses on other types of Romano-British settlements, *e.g.* the farmsteads on the Biddenham Loop (Maltby 2008, 283), were also processed with cleavers as well as knives, showing the spread of new techniques. The evidence from the Marsh Leys farmsteads would reflect this trend.

II. Charred and waterlogged remains

by Mark Robinson

Introduction

A total of 112 ecofactual samples were taken from a range of feature types, including ditches, gullies, pits, post-holes, inhumation burials and cremation burials. Samples were 10–20 litres in size.

Methodology

Samples were processed by bulk flotation onto a 0.25mm sieve and allowed to air dry. All the dry flots were scanned at up to x50 magnifications and the waterlogged flots were sorted in water. They were assessed for their potential for detailed analysis and thirty-four samples from deposits across all phases were subject to further work. These included twenty-one with significant charred plant remains, three from waterlogged deposits and the remainder for charcoal.

Table 8.7 gives the results for charred plant remains and Table 8.9 for waterlogged plant remains, nomenclature following Clapham *et al*. (1987). Charcoal from these samples was examined at up to x400 magnifications and the results are presented in Table 8.8. The results for the beetle and other insect remains from the two waterlogged samples are given in Table 8.10, nomenclature follows Kloet and Hincks (1977) for Coleoptera.

Discussion by provenance

(Tables 8.7–8.10)

Phase 2 (pre-late Iron Age)

The evidence from Phase 2 is extremely limited, with only a single unidentified cereal grain to show the use of cereals. Small quantities of charcoal of Pomoideae (hawthorn, apple *etc*.) and *Corylus avellana* (hazel) suggest the availability of these woods as fuel.

Phase 3 (late Iron Age/early Romano-British)

Ecofactual samples from both Farmsteads 2 and 3 contain charred plant remains. The remains mostly comprise unidentifiable cereal grains and are probably a background presence of redeposited debris from crop processing. The majority of the identifiable cereal remains are from *Triticum* sp. (wheat) including *T. spelta* (spelt wheat). *Hordeum* sp. (barley), including hulled *Hordeum vulgare* (six-row hulled barley), is only present in samples from Farmstead 3. A few grains of *Avena* sp. (oats) are present in some of the samples but they are not abundant and, given the date of this period of occupation, it is more likely that they are from wild oats growing amongst the seeds rather than a cultivar. There is a single seed of a third crop, *Linum usitatissimum* (flax), in sample 80 (G112, L7, Farmstead 2) which represents the only evidence for non-cereal crops.

The majority of the weed seeds are of species which grow readily amongst arable crops. Sample 22 (G91, L54, Farmstead 2) contained many seeds of *Montia fontana* ssp. *chondrosperma* (blinks). This is a low-growing plant of shallow, open temporary puddles, *e.g.* in wheel ruts and compacted areas in cultivated fields. It is likely that there was such a wet area on the surface of the field from which the crop represented in this sample had been harvested. Otherwise, the weed flora suggest relatively well-drained soil — there is only a single seed of *Carex* sp. (sedge) and *Eleocharis palustris* (spike rush) is absent. Soil fertility levels were probably relatively low. Seeds from nitrophilous weeds, such as *Chenopodium album* (fat hen), are absent whereas *Vicia* or *Lathyrus* spp. (vetch and tare) seeds are well represented. These latter plants have a symbiotic relationship with bacteria on their roots which enables them to utilise atmospheric nitrogen and, therefore, they thrive in soils with low nitrogen levels. Although snail shells were present in the fills of some of the pits and ditches of this phase, implying calcareous conditions, the occurrence of a few seeds of *Raphanus raphanistrum* (wild radish) and *Rumex acetosella* agg. (sheep's sorrel) suggests that the fields from which the cereals had been harvested included areas of circumneutral or even acidic soil. Other weed seeds present include various species of Gramineae (grasses) and *Tripleurospermum inodorum* (scentless mayweed). However, seeds of *Galium aparine* (goosegrass), a common weed of autumn-sown crops, are absent. Samples 22 and 30 from pits G91 (L54) and G98 (L4) respectively in Farmstead 2 contain much higher concentrations of charred remains than the other samples from this phase. Chaff and weed seeds in both samples outnumber grain. The remains are probably waste from the de-husking and final cleaning of weed seeds from spelt wheat.

The charcoal shows the use of fuel from woodland trees in the form of *Quercus* sp. (oak) alongside shrubs of hedges or thorn scrub, especially Pomoideae indet. (hawthorn *etc*.). In addition to charcoal from fuel, two post-holes from Farmstead 3 (G283, L28 and G408, L30) contained very large quantities of oak charcoal. The location of the charcoal in the post-pipes suggests that it derives from the burnt-out

remains of the timbers they formerly supported. Charcoal is absent from the majority of the cremation burials but G103 (L5, Farmstead 2) and G411 (L63, Farmstead 3) contain high concentrations of Pomoideae.

Phase 4 (Romano-British)
The charred plant remains from both farmsteads in this phase give a similar picture to that from the previous phase. They mostly derive from the processing of spelt or emmer wheat and to a lesser extent hulled barley. However, the occurrence of a grain of free-threshing *Triticum* sp. (rivet or bread wheat) and a couple of other short grains of *Triticum* sp. raises the possibility that bread wheat was also being cultivated. The same range of weed seeds is present as in the previous phase suggesting that the areas under cultivation and agricultural practices remained the same. The most numerous weed seeds are of *Vicia* or *Lathyrus* spp. (vetch or tare) and various species of grass including *Bromus* cf. *secalinus* (brome grass). In addition to cereal remains, sample 79 from the fill of a pit G111 (L10, Farmstead 4) contains charred fragments of nutshell of *Corylus avellana* (hazel) showing that at least limited exploitation of woodland resources was also occurring. Most of the flots probably represent a general background scatter of processing debris over the site. However, sample 10 from the fill of enclosure ditch G43 (L15, Farmstead 4), contains pure grain and is perhaps the result of fully cleaned wheat accidentally being burnt. In contrast, sample 67 from the fill of another enclosure ditch G18 (L13, Farmstead 4), is dominated by chaff and was probably waste from the de-husking of spelt wheat.

The charcoal recovered from the samples in this phase suggests the use of *Quercus* sp. (oak) and Pomoideae (hawthorn *etc*.) for domestic fuel. High concentrations of oak charcoal were found in ecofact samples 32 and 33 from the post-pipe in post-hole G93, (L16, Farmstead 4). It is very likely that this charcoal is from a timber that had been burnt *in situ*.

The majority of the waterlogged seeds from sample 76, the fill of well G89 (L14, Farmstead 4), are from plants suggestive of the presence of nutrient-rich, disturbed and/or neglected ground. The vegetation of less disturbed areas includes *Conium maculatum* (hemlock), *Chelidonium majus* (greater celandine) and *Urtica dioica* (stinging nettle). The vegetation of more open areas includes *Ballota nigra* (black horehound) and, in more disturbed areas, *Stellaria media* gp. (chickweed), *Atriplex* sp. (orache) and *Polygonum aviculare* (knotgrass). The flora include *Hyoscyamus niger* (henbane), a poisonous weed of farmyard middens that is now very rare but was common up until about 150 years ago. Thorny twigs of *Prunus* sp. (sloe) or *Crataegus* sp. (hawthorn) had perhaps been cut from a hedge associated with the enclosure ditch. Two seeds and some capsule fragments of *Linum usitatissimum* (flax) were also found in the well suggesting that flax continued to be processed during this phase.

The insect remains confirm the evidence from the seeds for the neglected-ground vegetation of the site. The phytophagous insects include the beetle *Brachypterus urticae* and the bug *Heterogaster urticae*, both of which feed on stinging nettles. Several of the ground beetles, *e.g. Nebria brevicollis*, readily occur in such habitats. While the waterlogged seeds provide no evidence of vegetation growing in the well, the insects suggest the well supported a fauna of water beetles including small species of *Helophorus*. Other beetles such as *Lesteva longoelytrata* and *Platystethus cornutus* gp. probably lived in a splash zone at the edge of the well. Slight evidence for timber structures is given by the occurrence of a couple of individuals of *Anobium punctatum* (woodworm beetle). The beetle *Oxyomus sylvestris* suggests midden-type organic material. However, insect pests of stored products are absent. Scarabaeoid dung beetles, including *Geotrupes* sp. and several species of *Aphodius*, are sufficiently abundant to suggest that domestic animals were being grazed locally.

Phase 5 (late Romano-British)
Ecofact evidence for this phase derived from Farmstead 7. The only cultivated plants represented are *Triticum spelta* (spelt wheat) and hulled *Hordeum* sp. (barley). A similar range of weed seeds to the previous phase is present. With the exception of sample 140, the assemblages are all derived from the dehusking and cleaning of hulled cereals. Sample 140 from the lower fill of water pit G352, L42, contains a high concentration of glumes from the dehusking of spelt wheat. However, other cereal remains from it include culm nodes from the burning of cereal straw. There are also seeds of grassland plants including *Ranunculus* Sect. *Ranunculus* sp. (buttercup) and *Plantago lanceolata* (ribwort plantain). Two of the grassland plants *Leucanthemum vulgare* (ox-eye daisy) and *Centaurea* sp. (knapweed) are species of hay meadow rather than pasture. The material in this sample has perhaps derived from the burning of a mixture of animal bedding and fodder. However, it is useful to have the evidence that some of the grassland of the Marsh Leys farmsteads was probably being managed for hay production.

The charcoal recovered from the samples in this phase suggests the use of *Quercus* sp. (oak) and *Prunus* sp. (sloe, plum *etc*.) in Farmstead 7. Particularly large quantities of *Quercus* sp. (oak) were recovered from samples 94 and 125 (ditch length G220). Sample 117 (pit G338, L44) contains a very large quantity of *Prunus* sp. (sloe, plum *etc*.) charcoal.

Sample 141 from well G337 (L44) (Table 8.9) contains a nutshell fragment of *Juglans regia* (walnut) and leaf fragments of *Buxus sempervirens* (box). Walnuts could have been grown locally or have been imported. The box leaves could imply either that there were ornamental hedges on the farmstead or that bushes of this shrub were being cultivated — perhaps for a religious significance attached to its evergreen leaves.

The insect remains from sample 105 from possible well G351 (L43, Farmstead 5), are mostly of species that lived in the pit, *e.g.* a Trichoptera (caddis fly) larva, and species from the mud around the edge, *e.g. Platystethus nitens*. There are also a few insects from other settlement-related habitats, such as the nettle-feeding beetle *Brachypterus urticae* and a couple of dung beetles from the genus *Aphodius*.

Summary
The charred plant remains from the Marsh Leys farmsteads represent what seems to be the usual pattern for Romano-British farmsteads in the region, *e.g.* Biddenham Loop. (Pelling 2008), Luton Road Wilstead (Robinson 2010, 149–50) and Haddon (Fryer 2003). The

		Phase	*2*				*3*								*4*							*5*		
		F no.	*1*	*2*	*2*	*2*	*3*	*3*	*3*	*3*	*4*	*4*	*4*	*4*	*5*	*5*	*5*	*5*	*5*	*7*	*7*	*7*	*7*
		L no.	*18*	*54*	*4*	*7*	*26*	*25*	*28*	*28*	*15*	*13*	*13*	*10*	*39*	*35*	*48*	*52*	*41*	*44*	*43*	*44*	*42*
		G no.	*40.2*	*91*	*98.1*	*112.2*	*91.1*	*330.2*	*282.2*	*283.1*	*43.1*	*18.1*	*25.1*	*111.1*	*259*	*370.32*	*341.21*	*294.2*	*349.22*	*220.2*	*351.22*	*221.1*	*352.1*
		Sample		*22*	*30*	*80*	*113*	*120*	*126*	*127*	*10*	*67*	*69*	*79*	*102*	*121*	*123*	*124*	*128*	*95*	*103*	*116*	*140*
Grain																							
Triticum spelta L.	spelt wheat	-	4	1	-	-	-	-	-	8	-	-	1	-	-	-	-	1	-	-	1	2
T. dicoccum Schübl. or *spelta* L.	emmer or spelt	-	5	4	1	2	-	-	-	22	3	2	5	-	-	-	2	-	2	1	1	1
Triticum sp. - free threshing	rivet or bread wheat	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Triticum sp.	wheat	-	-	2	-	1	-	-	-	2	1	-	-	-	-	-	-	1	-	-	-	-
Hordeum vulgare sp. - lateral	six-row barley	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hordeum sp. - hulled median	hulled barley	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Hordeum sp. - hulled	hulled barley	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	1	-	1	-	-	-
Hordeum sp.	barley	-	-	-	-	-	-	-	3	-	-	1	-	-	-	-	1	-	-	-	-	-
cereal indet.		1	28	9	1	3	1	-	-	16	7	6	12	4	2	3	8	3	4	3	6	2
Total grain		1	37	16	2	6	2	3	4	49	11	9	18	4	2	3	12	5	7	4	8	5
Chaff																							
Triticum spelta L. - glume		-	23	11	-	-	-	-	-	-	6	4	1	8	1	7	3	1	1	-	4	132
T. dicoccum Schübl. or *spelta* L. - glume	emmer or spelt	-	59	20	2	1	-	-	-	-	37	15	5	9	1	10	4	-	2	-	15	60
Cereal straw culm nodes		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31
Total chaff (excluding culm nodes)		0	82	31	2	1	0	0	0	0	43	19	6	17	2	17	7	1	3	0	19	192
Other food plants																							
Linum usitatissimum L.	flax	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corylus avellana L. - nutshell frags	hazel	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-
Total other food plants		0	0	0	1	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
Weed seeds																							
Ranunculus Sect. *Ranunculus* sp.	buttercup	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2
Brassica rapa L. ssp. *sylvestris*	wild turnip	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Raphanus raphanistrum L.	wild radish	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montia fontana L. ssp. *chondrosperma*	blinks	-	25	6	-	-	-	-	-	-	-	-	-	-	-	-	5	-	3	-	-	1
Atriplex sp.	orache	-	-	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Malva sylvestris L.	common mallow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Vicia or *Lathyrus* sp.	vetch or tare	-	16	7	-	2	1	-	-	-	1	1	2	1	1	-	1	2	1	2	3	1
Medicago lupulina L.	black medick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
cf. *Medicago lupulina* L.	black medick	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
cf. *Trifolium* sp.	clover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Prunus spinosa L. or *domestica* L.	sloe or plum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Umbelliferae indet.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Polygonum persicaria L.	red shank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
P. lapathifolium L.	pale persicaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Rumex acetosella agg.	sheep's sorrel	-	3	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
Rumex sp. (not *acetosella*)	dock	-	-	-	4	-	-	-	-	-	1	-	2	5	-	-	-	-	-	1	1	2
Hyoscyamus niger L.	henbane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-

Solanum sp.	nightshade	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Odontites verna (Bell.) Dum.	red bartsia	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Prunella vulgaris L.	self-heal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Plantago lanceolata L.	ribwort plantain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4
Sherardia arvensis L.	field madder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Tripleurospermum inodorum (L.) Schul. B.	scentless mayweed	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2
Leucanthemum vulgare Lam.	ox-eye daisy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Carduus or *Cirsium* sp.	thistle	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Centaurea sp.	knapweed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
cf. *Luzula* sp.	wood rush	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Eleocharis palustris (L.) Roem. & Sch.	common spike-rush	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Carex sp.	sedge	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1
Bromus cf. *secalinus* L.	brome grass	-	2	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	1
Avena sp.	wild oats	-	2	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cf. *Avena* sp.	wild oats	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gramineae indet.	grass	-	24	7	-	3	1	-	-	-	2	-	1	-	3	-	9	-	8	3	3	14	
Weed indet.		-	18	9	-	5	1	-	-	-	3	-	-	2	2	-	1	-	4	2	3	6	
Total Weed seeds		0	93	33	5	10	3	0	1	0	7	2	11	9	8	1	18	3	21	9	14	43	
Other plant remains																							
grass rhizomes		-	-	-	-	2	1	-	-	-	1	-	2	-	-	-	1	-	1	-	-	-	

Table 8.7 Charred plant remains (by number of items)

	Phase	*2*						*3*								*4*				*5*		
	F no.	*1*	*1*	*2*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*4*	*4*	*5*	*5*	*7*	*7*	*7*		
	L no.	*18*	*18*	*4*	*25*	*28*	*28*	*30*	*63*	*63*	*63*	*63*	*63*	*16*	*16*	*39*	*39*	*44*	*44*	*44*		
	G no.	*40.2*	*72.2*	*98.1*	*330.2*	*282.2*	*283.1*	*408.2*	*411*	*411*	*366.3*	*411*	*411*	*93.2*	*93.2*	*259*	*259*	*220.3*	*338.4*	*220.3*		
	Sample	*17*	*48*	*30*	*120*	*126*	*127*	*130*	*132*	*133*	*134*	*137*	*138*	*32*	*33*	*101*	*102*	*94*	*117*	*125*		
Prunus sp.	sloe, plum *etc.*	-	-	-	++	-	-	-	-	-	-	-	-	-	-	-	-	-	†	-		
Pomoideae indet.	hawthorn, apple *etc.*	-	+	+	+	-	-	-	‡	‡	†	†	†	-	-	-	-	-	+	-		
Corylus avellana L.	hazel	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Quercus sp.	oak	+	+	+	-	++	†	‡	-	-	-	-	-	†	†	+	-	†	+	†		
Fraxinus excelsior L.	ash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	†	+	-	-	-		

+ present, ++ some, +++ much, † very much, ‡ over 0.5l

Table 8.8 Charcoal (by abundance)

	Phase	*4*	*5*	*5*
	F no.	*4*	*7*	*7*
	L no.	*14*	*43*	*44*
	G no.	*89.1*	*351.21*	*337.1*
	Sample	*76*	*105*	*141*
Ranunculus cf. *repens* L.	creeping buttercup	2	1	+
Papaver argemone L.	prickly-headed poppy	-	1	-
P. rhoeas tp.	field poppy	1	1	-
Chelidonium majus L.	greater celandine	5	-	-
Fumaria sp.	fumitory	-	1	-
Brassica rapa L. ssp. *sylvestris*	wild turnip	1	-	-
Coronopus squamatus (Forsk.) Asch.	swine cress	-	5	++
Capsella bursa-pastoris (L.) Medic.	shepherd's purse	10	-	-
Sisymbrium officinale (L.) Scop.	hedge mustard	4	-	-
Cerastium cf. *fontanum* Baum.	mouse-ear chickweed	1	-	-
Stellaria media gp.	chickweed	16	-	+++
Montia fontana L. ssp. *chondrosperma*	blinks	-	1	-
Chenopodium polyspermum L.	all-seed	6	2	-
C. cf. *rubrum* L.	red goosefoot	1	-	-
Atriplex sp.	orache	27	-	+
Malva sylvestris L.	common mallow	1	-	-
Linum usitatissimum L.	flax	2	-	-
L. catharticum L.	fairy flax	1	-	-
Rubus fruticosus agg.	blackberry	-	3	-
Potentilla anserina L.	silverweed	-	4	-
P. reptans L.	creeping cinquefoil	1	5	+
Agrimonia eupatoria L.	agrimony	1	-	-
Anthriscus caucalis Bieb.	bur chervil	1	-	+
Aethusa cynapium L.	fool's parsley	1	-	-
Conium maculatum L.	hemlock	13	1	+
Torilis sp.	hedge parsley	1	-	-
Polygonum aviculare agg.	knotgrass	12	2	+
P. persicaria L.	redshank	2	-	-
Rumex conglomeratus Mur.	sharp dock	2	1	-
Rumex sp.	dock	4	3	+
Urtica urens L.	small nettle	7	3	+
U. dioica L.	stinging nettle	48	112	++
Juglans regia L.	walnut	-	-	+
Hyoscyamus niger L.	henbane	2	2	-
Lycopus europaeus L.	gypsywort	-	1	-
Prunella vulgaris L.	self-heal	-	-	+
Ballota nigra L.	black horehound	14	2	-
Galeopsis tetrahit agg.	hemp-nettle	-	1	-
Glechoma hederacea L.	ground ivy	-	1	-
Plantago major L.	great plantain	1	4	-
Sambucus nigra L.	elder	1	-	-
Carduus or *Cirsium* sp.	thistle	2	3	+
Onopordum acanthium L.	cotton thistle	1	-	-
Lapsana communis L.	nipplewort	1	1	-
Sonchus oleraceus L.	sow thistle	-	-	+
S. asper (L.) Hill	sow thistle	7	-	+
Alisma sp.	water plantain	1	-	-
Juncus effusus gp.	tussock rush	-	4	-
J. bufonius gp.	toad rush	-	15	-
J. articulatus gp.	rush	1	-	-
Juncus spp.	rush	2	20	-
Carex spp.	sedge	2	1	-
Bud scales indet.		3	1	-
Bryophyta indet. - stem with leaves	moss	+	-	-
Linum usitatissimum L. - capsule frags.	flax	2	-	-
Salix sp. - bud	willow	-	-	+
Buxus sempervirens L. - leaf frag	box	-	-	+
Prunus or *Crataegus* sp. - thorny twig	sloe or hawthorn	+	-	-

+ present, ++ some, +++ many

Table 8.9 Waterlogged plant remains

	Phase	*4*	*5*
	F no.	*4*	*7*
	L no.	*14*	*43*
	G no.	*89.1*	*351.21*
	Sample	*76*	*105*
Coleoptera			
Nebria brevicollis (F.)		2	-
Trechus obtusus Er. or *quadristriatus* (Schr.)		1	-
Bembidion guttula (F.)		-	1
Bembidion sp.		1	-
Pterostichus melanarius (Ill.)		1	1
Calathus melanocephalus (L.)		2	-
Amara sp.		1	-
Harpalus rufipes (Deg.)		1	-
H. S. Ophonus sp.		1	-
Helophorus grandis Ill.		1	-
Helophorus sp. (*brevipalpis* size)		7	2
Cercyon sp.		1	-
Megasternum obscurum (Marsh.)		1	1
Hydrobius fuscipes (L.)		1	-
Ochthebius cf. *bicolon* Germ.		1	-
Ochthebius sp.		-	1
Ptenidium sp.		1	-
Choleva or *Catops* sp.		1	-
Lesteva longoelytrata (Gz.)		1	-
Platystethus cornutus gp.		1	4
P. nitens (Sahl.)		-	3
Anotylus rugosus (F.)		1	-
A. sculpturatus gp.		1	-
Stenus sp.		-	1
Xantholinus linearis (Ol.) or *longiventris* Heer		1	-
Philonthus sp.		1	-
Tachyporus sp.		1	-
Aleocharinae indet.		-	1
Geotrupes sp.		1	-
Aphodius granarius (L.)		2	-
A. rufipes (L.)		1	-
A. cf. *sphacelatus* (Pz.)		1	-
Aphodius sp.		1	2
Oxyomus sylvestris (Scop.)		1	-
Cantharis sp.		1	-
Anobium punctatum (Deg.)		2	-
Brachypterus urticae (F.)		3	1
Cryptophagidae indet. (not *Atomaria*)		1	-
Lathridius minutus gp.		1	-
Anthicus antherinus (L.)		1	-
Phyllotreta nigripes (F.)		1	-
Chaetocnema concinna (Marsh.)		1	1
Psylliodes sp.		2	-
Apion radiolus (Marsh.)		1	-
Apion sp. (not *radiolus*)		-	1
Alophus triguttatus (F.)		1	-
Ceuthorhynchinae indet.		1	1
Total		54	21
Other insects			
Forficula auricularia L.		1	-
Heterogaster urticae (F.)		2	1
Scolopostethus sp.		1	-
Aphrodes sp.		1	-
Trichoptera indet. - larval case		-	1
Hymenoptera indet. (not Formicidae)		1	-
Diptera indet. - adult		2	-

Table 8.10 Coleoptera and other insect remains (Minimum no. Indiv)

processing of spelt wheat and six-row hulled barley, as at Marsh Leys, were important activities on these sites. The use of both woodland and scrub or hedgerow for timber and fuel was also common on other farmsteads. Of the non-cereal crops there is limited evidence for flax which was also identified in waterlogged deposits at Eastcotts, 5km to the east (Albion in prep. b). The discovery of walnut at Marsh Leys is interesting because this is usually found in towns, although it was also recorded from Eastcotts.

III. Molluscs

by Mark Robinson
(Table 8.11)

The molluscs from a representative range of samples from Romano-British Phases 3 to 5 were analysed. Quantities of shells of marine, land and freshwater molluscs are present. Nomenclature follows Kerney (1999).

Marine shells — all *Ostrea edulis* (oyster) — occur for the first time in Phase 4 but continue into Phase 5 and have clearly been imported to the farmsteads. Both the land and freshwater molluscs show a similar range of species, indicating well-drained, open conditions but with a water table that was relatively close to the surface. Species of well-drained, open habitats such as *Vallonia excentrica* along with species of more general terrestrial habitats were noted. However, land snails of shaded terrestrial habitats are absent. Waste-ground vegetation was present within the farmsteads and there is also an element in the assemblage from vegetation of trampled ground, including *Coronopus squamatus* (swine cress). Most of the flots also contain shells of amphibious or stagnant-water snails, suggesting that some features had puddles of water at the bottom.

The widespread occurrence of *Lymnaea truncatula*, which thrives in water-filled features, supports the plant remains evidence for a high water table. It also has implications for the range of domestic animals that could have been raised on the farmsteads because it is the intermediate host of the sheep liver fluke, a debilitating parasite. Curiously, three species of water snail, *Lymnaea truncatula*, *L. peregra* and *A. leucostoma* are present in sample 102 from shallow cremation burial G259 (enclosure L39, Farmstead 5).

IV. Human bone

by Simon Chapman

Introduction

The investigations recovered both cremated and inhumed/unburnt human remains from nineteen discrete features from Phases 3 and 4 (Table 8.12). All of these remains were examined but the analysis was affected to a certain degree by their variable preservation.

Methodology

The inhumations/unburnt remains were examined using methods described by Bass (1987), Brothwell (1981) and the Workshop of European Anthropologists (1980), although some aspects of such analysis were made redundant either by incompleteness of the skeleton, or due to bone fragmentation. Ages and sexes were estimated by employing standard anthropological techniques (based on Cox and Mays 2000; Scheuer and Black 2000). The differentiation of non-human bone from human bone was based on the morphology of the skeletal elements. Measurements were taken with callipers and osteometric boards, in order to gather data on the stature and robustness of the skeletons.

Phase	*3*	*3*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*4*	*5*
F no.	*4*	*3*	*4*	*4*	*4.1*	*4*	*4*	*4.1*	*5*	*5*	*5*	*7*
L no.	*20*	*26*	*20*	*20*	*14*	*14*	*11*	*12*	*39*	*35*	*48*	*43*
G no.	*46.3*	*297.2*	*47.1*	*46.3*	*30.2*	*30.2*	*15.2*	*16.2*	*259*	*370.32*	*241.21*	*351.22*
Sample	*20*	*113*	*16*	*20*	*31*	*51*	*61*	*63*	*102*	*121*	*123*	*103*
Carychium sp.	-	-	+	-	-	-	-	-	-	-	+	-
Aplexa hypnorum (L.)	-	-	+	-	-	-	-	-	-	-	-	+
Lymnaea truncatula (Müll.)	-	+	++	-	+	+	+	++	++	++	-	+
L. peregra (Müll.)	-	-	-	-	-	-	-	-	+	-	+	+
Anisus leucostoma (ill.)	-	+	+++	-	+	+	-	+	+	+++	+	++
Cochlicopa sp.	+	+	+	+	-	-	-	-	+	+	+	+
Vertigo pygmaea (Drap.)	+	-	+	+	-	-	+	-	+	+	-	-
Pupilla muscorum (L.)	-	+	-	-	-	-	-	+	+	+	+	+
Vallonia costata (Müll.)	+	-	-	+	+	+	-	-	+	+	++	+
V. pulchella (Müll.)	-	-	+	-	-	-	-	+	-	-	-	-
V. excentrica Sterki	+	-	+	+	+	+	+	+	++	++	-	+
Vallonia sp.	+	+	+	+	+	+	+	+	+	+	++	++
Nesovitrea hammonis (Ström)	-	-	-	-	+	-	-	-	-	-	-	-
Trichia hispida gp.	-	-	+	-	+	+	+	++	+	+	-	+
Cepaea sp.	-	-	-	-	+	-	-	-	-	-	-	-
Helix aspersa Müll.	-	-	+	-	-	-	-	-	-	-	-	-

+ present, ++ some, +++ many

Table 8.11 Land and freshwater molluscs (by abundance)

Provenance of the human remains
(Table 8.12)

Phase 3 (late Iron Age/early Romano-British)
A total of eight cremation burials and two occurrences of unburnt bone fragments occurred in Phase 3. Seven of the cremation burials (G84/G103) were located within a cemetery on the periphery of Farmstead 2, while cremation burial G411 was located on the periphery of Farmstead 3. In addition, part of a skull was found in the ditch defining roundhouse G57 (Farmstead 2) and fragments of human bone were also recovered from water pit G341.1 in Farmstead 3.

Farmstead 2 — cremation cemetery
(Fig. 3.11 and Table 8.13)
Cremation cemetery G84/G103 (L5) contained seven graves, all of which had been truncated by recent ploughing. The graves survived as features only 50mm–0.15m deep, with quantities of human bone varying from 6g (S333) to 436g (S322). An indication of sex and age could only be determined in three deposits. The presence of a fully developed premolar tooth root in S325 indicates that this individual was older than 15 years of age. The survival of a well developed nuchal crest in S331 is typical in males (Keen 1950) and the survival of a large mastoid process, a typical finding in males, in S320 suggests this individual was also likely to be male. With the exception of two graves (S325 and S327) all the cremated bone is mid/pale grey. Colour differences are caused by proximity to the fire and length of burning, with white calcined bone having been exposed to higher temperatures for a longer period of time than blue or grey. Although the bone from S325 is mostly pale grey in colour, it shows some signs of incomplete organic combustion on some of the long bones (remaining grey-blue-black in colour); whereas the bone from S327 is mostly dark orange-brown in colour, indicative of incomplete organic combustion. The fragments are 20–52mm in size. Although the majority of the identifiable fragments were from long bones, cranial fragments were present in small numbers in all but one grave.

Farmstead 2 — unburnt bone
The skull of a mature female was found in the ditch defining roundhouse G57 (L5). A total of 61 cranial fragments were recovered, representing frontal, pareatal, temporal and occipital bones of the skull. They derive from the cranial vault (upper segment of the skull) of a single individual. The presence of small/flat supraorbital (brow) ridges indicates that these remains belong to a female. From the fact that the cranial sutures are fully fused and partly obliterated, along with the presence of well developed pacchionian depressions on the inside of the pareatal bones, it can be presumed that this individual was of mature adult age at the time of death (Todd and Lyon 1924 and 1925).

Farmstead 3 — cremation burial
(Table 8.14)
G411 (L63) may have been an un-urned cremation burial but the calcined human bone was intermixed with a large quantity of charcoal and carbonised twigs, possibly more suggestive of a pyre-related deposit. Approximately 190g of calcined human bone was present and this had a maximum fragment size of 56mm which is the largest of all the Marsh Leys cremation deposits. The bone is mostly pale grey in colour but shows some signs of incomplete organic combustion on some of the lower limb bones. Cranial, axial and lower limb bones were positively identified, although no positive identification of upper limb bones could be made. The individual is likely to have been a mature adult because of the extent to which the sagittal suture of the cranium had closed. This is indicative of a minimum age of *c*.30 years (though likely to be older), based on the findings of Todd and Lyon (1924 and 1925).

Phase	*F no.*	*L no.*	*G no.*	*S no.*	*Feature*	*Type*	*Age*	*Sex*
3	2	5	84	325	Grave	Cremation Un-urned	>15 yrs	Indeterminate
				327	Grave	Urned Cremation	Indeterminate	Indeterminate
				331	Grave	Urned Cremation	Indeterminate	Male?
				333	Grave	Urned Cremation	Indeterminate	Indeterminate
				336	Grave	Urned Cremation	Indeterminate	Indeterminate
			103	320	Grave	Cremation Un-urned	Indeterminate	Male?
				322	Grave	Cremation Un-urned	Indeterminate	Indeterminate
			57.2	193	Roundhouse	Un-burned deposit	Mature Adult	Female
	3	63	411	1773	Grave?	Cremation Unurned	Mature Adult	Indeterminate
		25	341.12	1661	Waterpit	Un-burned deposit	Adult	Male?
4	4	13	82	313	Grave	Inhumation	Adult	Male
		14	83	316	Grave	Inhumation	35-45 yrs	Female
			127.2	519	Building	Un-burned deposit	Indeterminate	Indeterminate
	5	38	353	1711	Grave	Inhumation	45-55 yrs	Male
		39	259	1243	Grave	Un-urned cremation	Adult	Male?
		62	314	1506	Grave	Inhumation	16-18 yrs	Indeterminate
		39	254.1	1231	Ditch	Un-burned deposit	Indeterminate	Indeterminate
		33	227	1038	Grave	Urned Cremation	Adult	Indeterminate
			208.2	1026	Ditch	Un-burned deposit	Indeterminate	Indeterminate

Table 8.12 Summary of human remains from all phases

Farmstead 3 — unburnt bone
The fragments recovered from water pit G341.1 (L25) represent the remains of a single unsided femur (midshaft). Two of these fragments could be joined. The remains appear to be quite robust and heavy which could be consistent with having come from an adult male, though this diagnosis of sex must remain uncertain in the absence of more reliable sexually diamorphic features (*e.g.* the femoral head).

Phase 4 (Romano-British)
This phase produced a total of four inhumation burials, two cremation burials and three occurrences of unburnt bone fragments. Farmstead 4 contained two inhumation burials (G82 and G83) and unburnt human bone from the wall slot of rectangular building (G433). Farmstead 5 contained two inhumation burials (G314 and G353), two cremation burials (G227 and G259) and two separate groups of unburnt human bone fragments from a field ditch (G208) and enclosure ditch (G254).

Farmstead 4 — inhumation burials
(Figs 4.6B and 4.9A)
Grave G82 (L13) had been badly affected by ploughing and contained the partial remains of an extended articulated inhumation. These remains comprised the right leg (upper and lower) with associated fragmented pelvis. Upon analysis the following remains were identified: a carpal, a distal metacarpal, a femoral head, three femur midshaft fragments and eight fibula midshaft fragments. The large diameter of the femoral head indicates that these bones are likely to have come from an adult male (Bass 1987). The femoral head and the epiphyses of the metacarpals were fully fused suggesting that this individual was over the age of 20 years at the time of death.

Grave G83 (L14) contained the burial of an adult female. This was determined on the particular morphology of the pelvis (consistent with a wide 'child bearing' pelvis), the skull (small brow ridges, mastoid processes and nuchal crest) and the overall small appearance of the bones. The age at death is estimated at 35–45 years, based on the dental wear stage of the 1st and 2nd molar teeth (Miles 1963) and by the fact that all of the bones present were fully fused, including the clavicles which are fully fused by the age of 30 years (McKern and Stewart 1957). Some minor pathology was observed on the lower thoracic vertebrae (mid-back) in the form of marginal bony growths around the vertebral bodies. These growths of osteophytes are a common feature in the over 40s and can be regarded as normal degenerative changes caused by the wear and tear of mature age, most likely associated with osteoarthritis of the back.

Farmstead 4 — unburnt bone
A fragment of human rib bone was recovered from slot G127, part of building G433 (L14). However, it was unable to provide any information on the age or sex of the individual from which it came.

Farmstead 5 — cremation burials
(Table 8.14)
Truncated urned cremation burial G227 had been placed in the upper fill of field ditch G211 (L33). It contained

	S325	*S327*	*S331*	*S333*	*S336*	*S320*	*S322*
Type	*Un-Urned*	*Urned*	*Urned*	*Urned?*	*Urned*	*Un-Urned*	*Un-Urned*
Total weight	68g	56g	370g	6g	133g	415g	436g
Identifiable bone	7g (10.3%)	24g (42.9%)	102g (27.5%)	3g (50%)	32g (24%)	127g (30.6%)	129g (29.6%)
Cranial	1g (14.3%)	-	19g (18.6%)	2g (66.6%)	6g (18.8%)	28g (22%)	6g (34.7%)
Axial	-	-	12g (11.8%)	-	-	2g (1.6%)	25g (19.4%)
Upper Limb	4g (57.1%)	7g (29%)	20g (19.6%)	-	15g (46.9%)	37g (29%)	38g (29.5%)
Lower Limb	2g (28.6%)	17g (71%)	51g (50%)	1g (33.4%)	11g (34.3%)	60g (47.4%)	60g (46.4%)
Unidentified bone	61g (89.7%)	32g (57.1%	268g (72.5%)	3g (50%)	101g (76%)	288g (69.4%)	307g (70.4%)
Of which undefined limb	23g	14g	33g	-	21g	30g	50g
Fragment sizes:							
>10mm	14g (20.6%)	34g (60.7%)	144g (40%)	4g	52g (39%)	215g (51.8%)	264 (60.5%)
10–5mm	53g (77.9%)	21g (37.5%)	185g (50%)	2g	81g (61%)	197g (47.5%)	172 (39.5%)
< 5mm	1g (1.5%)	1g (1.8%)	41g (10%)	-	-	3g (0.7%)	-
Maximum fragment size	20mm	33mm	43mm	24mm	48mm	40mm	52mm
Minimum no. of individuals (MNI)	1	1	1	1	1	1	1
Age	>15	Indeterminate	Indeterminate	Indeterminate	Indeterminate	Indeterminate	Indeterminate
Sex	Indeterminate	Indeterminate	male	Indeterminate	Indeterminate	male	Indeterminate
Colour	Pale white/grey	Dark orange/ brown	Mid-pale grey	Mid-pale grey	Mid-pale grey	Mid-pale grey	Mid-pale grey
Serrated cracking	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Curving Cracks	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crazing	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 8.13 Summary of cremated human bone from cemetery G84/G103, Farmstead 2

5.5g of calcined human bone with only cranial fragments positively identified. The bone is mostly blue-grey in colour and of very small fragment size (maximum 18mm). It has been classified as an adult on the basis of the presence of a single adult molar tooth root.

Un-urned cremation deposit G259 was deposited in the upper fill of a pit in enclosure L39. It contained 311g of calcined bone that was mostly mid/dark grey in colour. This individual has been classified as an adult from the presence of a single adult molar tooth root and sexed as a male by the presence of a well developed nuchal crest (Keen 1950).

Farmstead 5 — inhumation burials
(Figs 4.18A and 4.22B)
Grave G314 (L62) contained the extended articulated remains of a single juvenile of 16–18 years of age. Most of the skeleton, albeit highly fragmented, was available for analysis. Age determination was based on the presence of a partial (75%) fusion line on the epiphysis of the right femoral head, which is usually fused by the age of 20 years (McKern and Stewart 1957). Due to the juvenile status of this individual, it has not been possible to estimate sex, as sexually dimorphic changes of the skeleton are only present in adults.

An adult male was placed in grave G353 (L76). The sex determination was based on the morphology of the pelvis, skull and the overall robusticity of the bones, which all indicate that this individual was almost certainly male. The age at death is estimated as 45–55 years, on the basis of the dental stage of the 1st and 2nd molar teeth (Miles 1963). In addition, all of the bones present are fully fused, including the clavicles which are fully fused by the age of 30 years (McKern and Stewart 1957). The fact that the thoracic and lumbar vertebrae all show signs of osteoarthritis are also an indication that this individual was well into middle age. The living stature of this individual is estimated to be 165.06m ±3.94cm based on a complete left femur.

Farmstead 5 — unburnt bone
Other fragments of unburnt bone recovered from Farmstead 5 include sixteen fragments from field ditch G208 (L33) and three fragments from enclosure ditch G254 (L38). Of the bone from ditch G208 it was only possible to identify one fragment of femur. Its small size may be indicative of either a female or juvenile male. The human bones from ditch G254 all comprise tibia fragments that again hint at a female or juvenile male, although without the ends of the long bone it is impossible to state which.

Summary
The analysis of the human remains was affected by the heavy truncation and fragmentation of all burials. Although age and sex could be determined in some cases, it has not been possible to make much comment on the general health of the farmsteads' inhabitants or population dynamics. However, analysis of the remains from Phases 3 and 4 has given some insight into the nature of this small rural population. In addition, the changing tradition from the late Iron Age cremation burial to the adoption of inhumation burial during the Romano-British period has been observed.

During the late Iron Age/early Romano-British period (Phase 3) a small cremation cemetery comprising seven

	Phase 3	*Phase 4*	
	Farmstead 3	*Farmstead 5*	
	G411	*G227*	*G259*
Type	*Pyre deposit?*	*Urned*	*Un-urned*
Total weight	190.5g	5.5g	311g
Identifiable bone	51g (26.8%)	0.4g (7.3%)	119g (36%)
Cranial	7g (13.7%)	0.4g (100%)	30g (25.2%)
Axial	1g (2%)	-	8g (6.7%)
Upper Limb	-	-	6g (5%)
Lower Limb	43g (84.3%)	-	75g (63.1%)
Unidentified bone	139.5 (73.2%)	5.1g (92.7%)	192g (64%)
Of which undefined limb	48g	0g	46g
Fragment sizes:			
>10mm	68.5g (35.9%)	1g (18%)	171g (55%)
10–5mm	108.5g (57%)	3.25g (59%)	140g (45%)
< 5mm	13.5g (7.1%)	1.25g (23%)	-
Maximum fragment size	56mm	18mm	46mm
Minimum no. of individuals (MNI)	1	1	1
Age	Mature Adult	Adult	Adult
Sex	Indeterminate	Indeterminate	male
Colour	Mid grey-black	Mid-blue/grey	Mid-dark grey
Serrated cracking	Yes	Yes	Yes
Curving Cracks	Yes	Yes	Yes
Crazing	Yes	Yes	Yes

Table 8.14 Summary of cremated human bone from G411 (Phase 3), G227 and G259 (Phase 4)

graves was established on the periphery of Farmstead 2. Although clearly truncated, the small total weight and presence of bones from all regions of the skeleton could suggest that only a token quantity of bone was recovered from the pyre for burial. An un-urned cremation burial was found on the periphery of Farmstead 3 and the presence of large quantities of charcoal may suggest it was a pyre-related deposit rather than a formal burial. A number of non-funerary deposits also contained unburnt human bone, the most significant being part of a skull from roundhouse G57.

Four inhumation burials assigned to Phase 4 (Romano-British) represent the burial rite which had become the 'norm' by this time. However, two cremations burials were also identified. The two inhumations within Farmstead 4 were in the vicinity of the domestic foci, while those from Farmstead 5 were in more peripheral locations.

Of the unburnt fragments of human bone from this period, the fragment of rib bone from building G433 is particularly interesting because it may represent a 'placed' foundation deposit. Little can be said about the two unburnt bones from Farmstead 5, although it is intriguing that both were found in the vicinity of cremation burials.

Chapter 9. Discussion

by Mike Luke, incorporating in places the conclusions and ideas of Simon Chapman, Peter Guest, Mark Maltby, Tracy Preece, Mark Robinson, Drew Shotliff, Jackie Wells, Felicity Wild and Tim Young

I. Introduction

Archaeological evidence for six successive phases of human activity was recovered. The late Neolithic Age/early Bronze Age struck flint (Phase 1) is entirely residual within later features or the ploughsoil and is, therefore, not discussed here. The earliest surviving sub-surface features relate to a non-settlement enclosure, dated tentatively to the pre-late Iron Age (Phase 2); it is only briefly discussed.

The vast majority of the archaeological evidence from the investigations is associated with two farmstead sites, located *c*. 400m apart, which originated in the late Iron Age. Although they essentially remained in the same location, both underwent significant change and development, to the extent that, during analysis and in this publication, their chronologically different forms were distinguished by different farmstead numbers. Both appear to have been abandoned in the early 4th century AD.

Neither the medieval open fields (Phase 6) or the post-medieval boundaries and quarry pits (Phase 7) are discussed further here.

Discussion of the late Iron Age/Romano-British farmsteads is organised around a number of themes: chronological development, extent, components, ritual and religion, economy, environment, status and the wider landscape. Neighbouring sites referred to in this chapter are located on Fig. 1.1.

II. Chronological development

(Figs 9.1–9.8)

The Phase 2 enclosure was trapezoidal in shape and covered an area of *c*. 4100sqm (Fig. 2.1). Its ditches produced no datable artefacts but they were stratigraphically earlier than the late Iron Age/early Romano-British Farmstead 2. Although small in quantity and residual in later features, the earliest dated pottery from the investigations was concentrated around the trapezoidal enclosure. Pottery fabric types F03, F14 and F28 are known to have originated in the late Bronze Age/early–middle Iron Age and are believed to have remained in use throughout the Iron Age. Late Bronze Age/early Iron Age enclosures of comparable size and shape were found at Gold Lane, Biddenham. On the basis of the presence of pits, post-holes and domestic debris they were interpreted as a 'focus of settlement activity' (Dawson 2004, 9–11). However, the minute quantity of domestic debris and absence of internal features indicate that the Marsh Leys enclosure was not occupied; it is more likely to have been associated with livestock management.

Farmsteads 2 and 3 (Phase 3) originated prior to the Roman conquest and their layout remained unchanged until the middle of the 2nd century AD. However, the longevity of late Iron Age pottery forms and fabrics makes precise dating impossible, as on other sites in the area, *e.g.* Haynes Park, Beds. (Wells 2004b, 90–1). The farmsteads were established on previously unoccupied land, fitting the local pattern whereby surprisingly few late Iron Age/early Romano-British settlements have early–middle Iron Age antecedents (see Luke 2008, 46). Their creation is also part of a wider phenomenon in Britain where 'the closing centuries of the first millennium BC saw settlement expansion into many previously sparsely settled areas' (Haselgrove *et al*. 2001, 29). The expansion of settlements and intensification in land use has been discussed on a regional basis by Bryant (1997, 27–8) and for the upper Thames valley by Hingley and Miles (1984, 65). The pottery assemblage from both farmsteads is characterised by a range of late Iron Age wheel-thrown types. Mid to late 1st-century samian ware was present in very small quantities on Farmstead 2 but the majority was dated to the 2nd century. The ceramic vessels associated with the cemetery on the periphery of Farmstead 3 were also 2nd-century in date.

The farmsteads comprised one or two small ditched enclosures next to a domestic focus (Fig. 9.1). In each farmstead one of the enclosures was integrated into a major linear boundary. The appearance of small ditched enclosures has been identified as a general development during this period (Bryant 1997, 28; Williams *et al*. 1996, 24). Comparable enclosures in the vicinity are known at Biddenham Loop (Fig. 9.2; Luke 2008, fig. 2.10) and Ruxox, Beds. (Dawson 2004, 20, fig. 3.5); there is a slightly earlier example at Wavendon Gate, Milton Keynes (Williams *et al*. 1996, fig. 5). Similar, though more rectangular, enclosures have also been identified at Monument 97, Orton Longueville, Cambs. (Mackreth 2001, fig. 4) (Fig. 9.2).

Farmstead 2 at Marsh Leys occupied the same location as the Phase 2 enclosure, with evidence for both continuity and discontinuity between the two. For example, the linear boundary of the new farmstead was on the same alignment as one side of the earlier enclosure. However, the farmstead's enclosure destroyed part of the earlier ditch (Fig. 9.3).

Around the middle of the 2nd century, substantial changes were made to the layout of both Marsh Leys farmsteads with the creation of more extensive systems of rectangular enclosures and fields (Farmsteads 4 and 5) (Fig. 9.4). In places, these incorporated the earlier single enclosures and linear boundary ditches, suggesting a degree of continuity with the previous phase of occupation

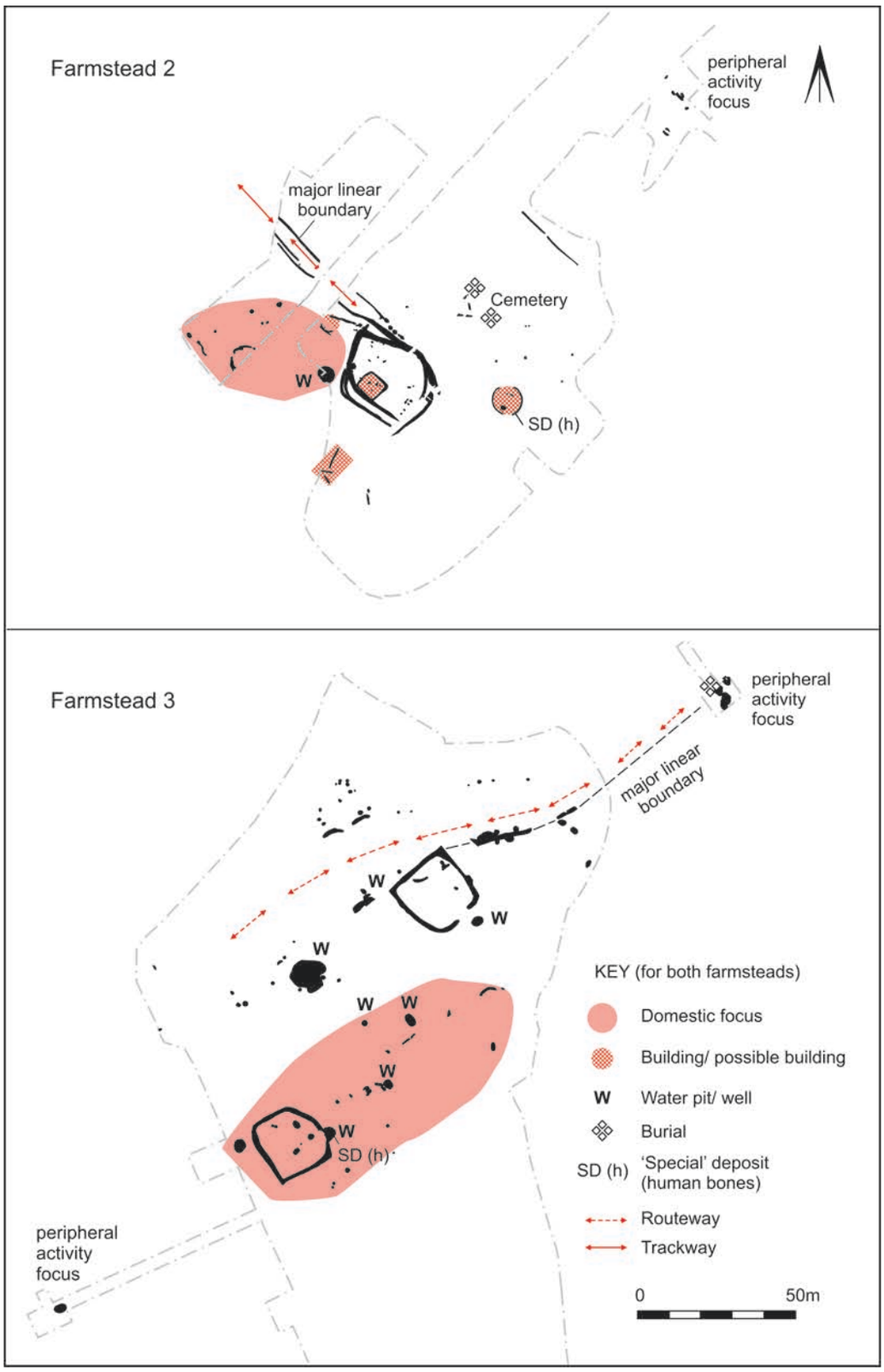


Figure 9.1 Interpretive plans for Marsh Leys late Iron Age/early Romano-British (Phase 3) Farmsteads 2 and 3. Scale 1:2000

(Fig. 9.5). A similar phenomenon has been observed at several other farmsteads in the vicinity, *e.g.* Biddenham Loop (Luke 2008, 56) and Luton Road Wilstead (Luke and Preece 2010, 152). The domestic foci in the new layouts were adjacent to those of the earlier unenclosed farmsteads which also indicates a degree of continuity (see below). The presence of samian ware dating predominantly to the late 2nd century suggests that the new systems were fully established by that time.

Such a change to more extensive enclosure systems is commonly seen on Bedfordshire farmsteads in the early part of the Romano-British period, *e.g.* Biddenham Loop

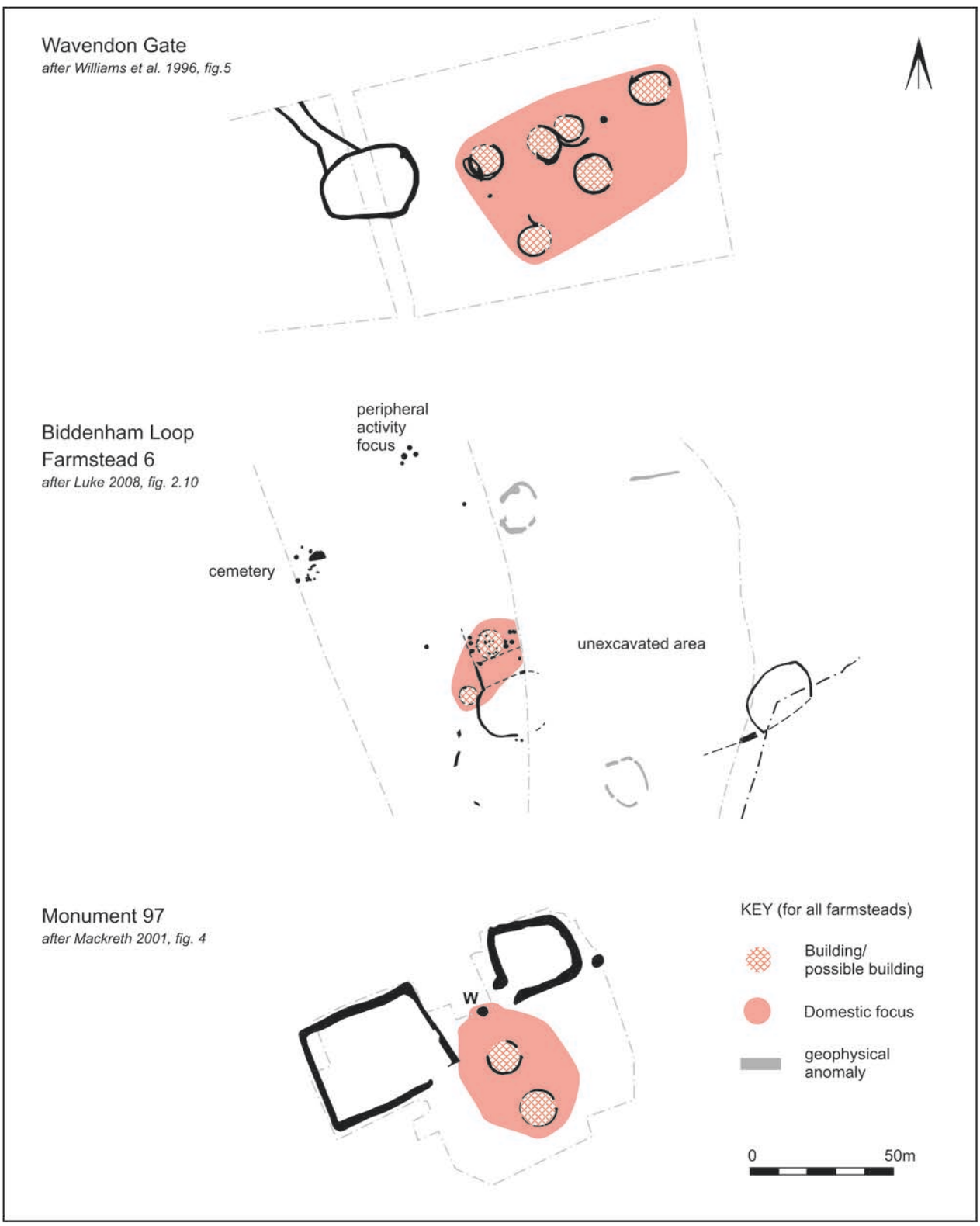


Figure 9.2 Interpretive plans of other sites similar in layout to the Marsh Leys late Iron Age/early Romano-British (Phase 3) Farmsteads 2 and 3. Scale 1:2000

(Luke 2008, 56), Great Barford Bypass Site 8 (Poole 2007b, 150–1), Haynes Park (Luke and Shotliff 2004, 119), Hinksley Road Flitwick (Luke 1999, 83) and Luton Road Wilstead (Luke and Preece 2010, 152). It is also known further afield, *e.g.* Wavendon Gate (Williams *et al*. 1996, 83) and Haddon, Cambs. (Hinman 2003, 19) (Fig. 9.6). At all these settlements large enclosed areas were created during the second half of the 1st century AD, fitting a pattern that was common in lowland Britain at this time (Williams *et al.* 1996, 83. It is, therefore, of interest that the changes at Marsh Leys occurred at least half a century later, at a similar date to that suggested for the

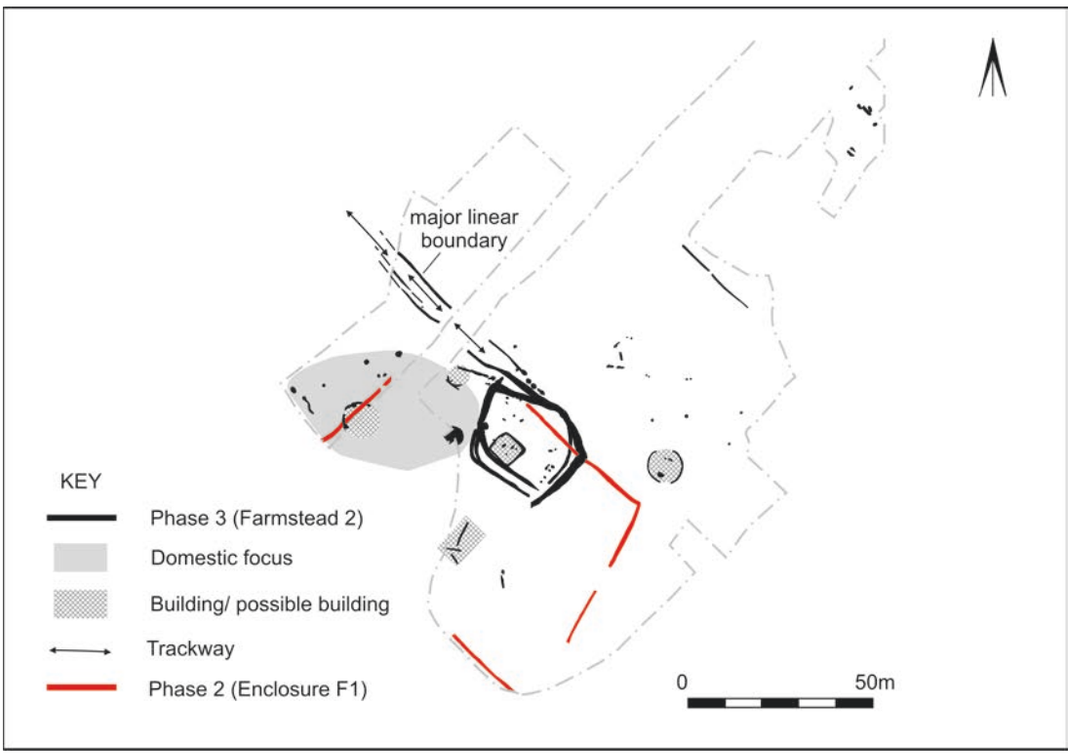


Figure 9.3 Continuity between the Marsh Leys late Iron Age/early Romano-British (Phase 3) Farmstead 2 and pre-late Iron Age (Phase 2) enclosure F1. Scale 1:2000

completion of the enclosure systems at Stagsden (Dawson 2000, 127). The exact reasons behind the creation of extensive enclosure systems and their occurrence at later dates on some sites are uncertain. It is possible that it was linked to the finalisation of land ownership following the conquest — a process which did not necessarily occur immediately (Mattingly 2006, 354). A more practical reason for the relatively late changes at Marsh Leys might relate to the suitability of the land for crop or animal husbandry. However, the Great Barford, Luton Road Wilstead and Stagsden settlements, and, to a degree, Marsh Leys, were all located on similar heavy clays. Within this context it may be significant that both the Marsh Leys and East Stagsden farmsteads were situated on low-lying land. Of course, it may simply be that the inhabitants of Marsh Leys and Stagsden did not want, or were unable, to replicate the changes that others in the area were making in the 1st century AD.

Only Farmstead 5 at Marsh Leys underwent significant further change in the later Romano-British period (Farmstead 7, Phase 5). A new enclosure L42 and two fields were laid out on different alignments, in part, to the earlier ones (Fig. 9.7). The pottery assemblage is characterised by a greater proportion of late 3rd/4th-century regional fine wares and later forms amongst the coarse wares. The ceramic dating is complemented by twenty-six late 3rd/early 4th-century coins. Similar developments took place at this time at Great Barford Site 8 (Poole 2007b, 151) and Luton Road Wilstead (Luke and Preece 2010, 152) (Fig. 9.8). Smaller enclosures, like L42, were also created at this time at Wavendon Gate (Williams *et al*. 1996, 75) (Fig. 9.8).

It is unclear whether Farmstead 4 at Marsh Leys remained in use during the later Romano-British period. The absence of late 4th-century coins seems to indicate that both farmstead sites had certainly been abandoned by the middle of the 4th century. This corresponds to the end dates for the farmsteads at Biddenham Loop (Luke 2008, 56), Luton Road Wilstead (Luke and Preece 2010, 152) and Wavendon Gate (Williams *et al.* 1996, 85).

III. Settlement type and extent

(Figs 9.1, 9.4 and 9.7)

Dawson has identified four main types of Romano-British rural settlement in Bedfordshire: planned villages, linear row settlements, focused possibly nucleated farmsteads, and substantial farms or villas (2007, 73). Because their full extent was determined by a combination of excavation and non-intrusive survey, the settlements at Marsh Leys can be characterised as focused/nucleated farmsteads.

The settlements in the late Iron Age/early Romano-British period (Phase 3) were unenclosed and it is likely that Farmsteads 2 and 3 were respectively *c.* 1ha and *c.* 1.5ha in extent (Fig. 9.1). During the subsequent Romano-British period (Phase 4) the enclosure/field systems on Farmstead 5 covered *c.* 2ha. It is comparable, therefore, to the Romano-British enclosure systems associated with the Biddenham Loop farmsteads, which were *c.* 1.5ha (farmsteads 13 and 14), *c.* 2ha (farmstead 12) and *c.* 2.5ha (farmstead 20) in extent (Luke 2008, 58). Although very different in layout, at *c.* 3.3ha Marsh Leys Farmstead 4 was similar in size to Wavendon Gate (Williams *et al.* 1996, 83). Overall, the Marsh Leys farmsteads fit into the size range identified both locally (see above) and nationally (Taylor 2007, 102–4). It is, of course, uncertain whether this increase in settlement size corresponds to an increase in the actual population.

Figure 9.4 Interpretive plans for Marsh Leys Romano-British (Phase 4) Farmsteads 4 and 5. Scale 1:2000

Figure 9.5 Continuity between Marsh Leys Romano-British (Phase 4) Farmstead 4 and 5 with late Iron Age/early Romano-British (Phase 3) Farmsteads 2 and 3. Scale 1:2000

IV. Components

The overall characteristics of all the Marsh Leys farmsteads have been described above. Throughout their history, there were similarities between their constituent parts — domestic and non-domestic enclosures, buildings, wells, pits and burials — which merit discussion.

Domestic foci

(Figs 9.1, 9.4, 9.7, 9.9, 9.10 and 9.11)

The domestic foci, sometimes referred to as 'compounds' (Hingley 1989, 55), are where the farmsteads' occupants actually lived. At Marsh Leys they have been identified on the basis of the presence of buildings, pit and post-hole groups, wells and water pits. In addition, especially where only limited evidence for these types of features was found, the presence of significant quantities of domestic debris, such as pottery, has been taken into account (Figs 9.9 and 9.10).

The domestic foci of the two late Iron Age/early Romano-British (Phase 3) farmsteads were unenclosed. They included roundhouses and other settlement-type features adjacent to small ditched enclosures (Fig. 9.1). Similar arrangements are quite common during this period, *e.g.* Biddenham Loop (Luke 2008, fig. 2.10), Wavendon Gate (Williams *et al.* 1996, 12–5, fig. 5) and Monument 97, Orton Longueville (Mackreth 2001, 7, fig. 4) (Fig. 9.2).

Although the Romano-British (Phase 4) farmsteads were laid out very differently to their predecessors, the domestic foci essentially remained in the same place (see Fig. 9.5). The domestic focus of Farmstead 4 consisted of small enclosures (L14 and L16) adjacent to the main trackway (Fig. 9.11). These contained rectangular buildings, other structures, wells, various post-holes and pits, and burials. This arrangement is comparable to some of the Biddenham Loop farmsteads (Luke 2008, 58) and a number of the enclosures within the Kempston Church End settlement, *e.g.* L11 (Dawson 2004, 187–9). Two domestic foci were present within Farmstead 5; the northern one, although smaller, coincided with the preceding domestic focus. Of the two foci, only the northern one was enclosed; both were situated adjacent to the main enclosure/field system but were not part of it (Fig. 9.4). This is comparable to the suggested 'farmyard' at Haddon (Hinman 2003, fig. 13). No buildings were identified within Farmstead 5 and it contained noticeably fewer pits and post-holes than Farmstead 4. This apparent contrast is probably in part the result of plough truncation.

On the later Romano-British Farmstead 7 (Phase 5), the domestic focus was located adjacent to the preceding southern focus of Farmstead 5. It appears to be centred on the square, ditched enclosure and adjacent concentration of larger features, including water pits, to the north (Fig. 9.7). Although no buildings were identified, the features in this area produced significant quantities of domestic debris.

Major linear boundaries

(Figs 9.1, 9.4 and 9.7)

The major linear boundaries on both late Iron Age/early Romano-British farmsteads (Phase 3) may define routeways. The boundary in Farmstead 2 was over 50m long and appeared to be integrated with the small enclosure; the actual junction between the two was defined by a number of small pits. It comprised several parallel ditches, some of which appeared to delineate a trackway. A single boundary ditch in Farmstead 3 also appears to have been linked to one of the small enclosures and may have been part of a routeway. However, the evidence is not as convincing as that for Farmstead 2 (see below).

The major boundaries on the Romano-British farmsteads (Phase 4) were more extensive and had also been recut on a number of occasions. Some clearly defined trackways (see Farmstead 4, below); others also formed the sides of numerous adjacent enclosures and fields. One of the major boundaries on Farmstead 5 was associated with a short length of parallel ditch, again suggesting the presence of a trackway. Most sides of its enclosure system were also defined by major boundaries. The absence of features to the west of the NW-SE aligned major boundaries on Farmsteads 4 and 5 might suggest that they define settlement limits and possibly even indicate different ownership.

Similar major boundaries are known on other Romano-British farmsteads, *e.g.* Wavendon Gate (Williams *et al*. 1996, 83), Haddon (Hinman 2003, 42) and Luton Road Wilstead, Beds. (Luke and Preece 2010, 152). They were absent on the Biddenham Loop farmsteads where it was tentatively suggested that this might be because the farmsteads were tied settlements within a larger single estate and, therefore, did not require this degree of demarcation (Luke 2008, 58).

Track/route-ways

(Figs 9.1, 9.4 and 9.7)

The parallel ditches of the major linear boundary on the late Iron Age/early Romano-British Farmstead 2 (Phase 3) is suggestive of a NW-SE aligned trackway. It may subsequently have been blocked, or controlled, by the alignment of pits adjacent to the small enclosure (Fig. 9.1). On Farmstead 3 there was probably also a routeway to the north of the major SW-NE aligned boundary (Fig. 9.1). Although no parallel ditch was identified, the absence of features in a linear band and positioning of features to the north, suggests the presence of a routeway (Fig. 9.1).

On Romano-British Farmstead 4 (Phase 4) a NE-SW aligned trackway was defined by parallel ditches *c*. 6m apart (Fig. 9.4) closely comparable to those within the farmsteads on the Biddenham Loop (Luke 2008, 62–3). Wheel ruts between the ditches and to the north indicate the existence of a routeway here prior to the establishment of the ditched boundary. On Farmstead 5 part of the NE-SW aligned major boundary featured two ditches *c.* 3m apart possibly indicating the presence of a narrow trackway. This evidence is not particularly convincing but is supported by the existence of the earlier Phase 3 routeway (Fig. 9.1) in this location.

Trackways associated with farmsteads are known on the Biddenham Loop (Luke 2008, 62–3), Great Barford Site 8 (Poole 2007a, 107), Broom (Cooper and Edmonds 2007, fig. 6.4) and Haddon (Hinman 2003, 32, fig. 13) and are sometimes interpreted as droveways. At Biddenham Loop and Broom they were designed to control the movement of animals from the floodplain, through the farmsteads, to the land beyond. The alignment of the trackways at Marsh Leys makes this interpretation less

certain, although the major linear boundaries may have controlled movement in a similar way. At Marsh Leys it seems odd that the NE-SW aligned trackways on Farmsteads 4 and 5 don't appear to join up. The main concern of the occupants may have been to keep livestock away from settlement areas and arable fields, rather than to provide a routeway between two separately owned farmsteads.

Enclosures/fields

(Figs 9.1, 9.4, 9.7, 9.11 and 9.12)

Given the extensive nature of the evaluation at Marsh Leys, most of the boundaries defining enclosures and fields are likely to have been identified even if they lie some distance from the open-area excavations (see Fig. 1.4). With the exception of the major boundaries and trackways (described above) there is no evidence for extensive field systems away from the farmsteads. A similar situation was noted along the Great Barford Bypass (Poole 2007b, 149).

The three late Iron Age/early Romano-British (Phase 3) enclosures were all quite similar. They were generally sub-square in plan — enclosure L1 (Farmstead 2) was perhaps more polygonal than the others — and *c.* 450sqm in extent (Fig. 9.12). They were defined by large, redug ditches. All featured entranceways without any apparent preference in terms of location. All contained internal features, which appear to indicate different uses. For example, enclosure L1 (Farmstead 2) contained a possible shrine, enclosure L27 (Farmstead 3) contained little evidence for a domestic function, in contrast to enclosure L21/22 (also Farmstead 3) which did. Similar small enclosures are known from several sites in the area, *e.g.* Biddenham Loop (Luke 2008, fig. 2.10) and Wavendon Gate (Williams *et al*. 1996, fig. 5). The more polygonal Marsh Leys enclosure bears comparison with enclosure 45 at Great Barford (Poole 2007a, 79–82, fig. 4.9), enclosure 2 at Bancroft, Milton Keynes (Williams and Zeepvat 1994, 83, fig. 42) and Beauford Farm, Beds. (Edmondson and Preece forthcoming) (Fig. 9.12). These are discussed in more detail below (Chapter 9.V Ritual and religion; possible shrine).

The Romano-British enclosures/fields (Phase 4) were all rectangular in plan and defined by medium-sized ditches. There were fourteen on Farmstead 4 and eighteen on Farmstead 5. This is comparable with the numbers at Haddon (Hinman 2003, fig. 13); there were far fewer on the Biddenham Loop farmsteads (Luke 2008, 58) (Fig. 9.6). Entranceways into some, but not all, of the Phase 4 enclosures/fields were identified. The absence of entranceways, in general, could suggest access was *via* planks or logs positioned over open ditches or that redigging of the ditches had removed the evidence for earlier causeways.

Surprisingly, on Farmstead 4 there appeared to be no direct access from the adjacent trackway (Fig. 9.4); nor was there any obvious point of access through any of the major linear boundaries. East-west movement between the domestic and non-domestic enclosures to the north of one of the buildings in the core of the farmstead was facilitated by a series of narrow entranceways (Fig. 9.11). At *c.* 1.8m wide, they were more suitable for people than animals. Entranceways into the other enclosures/fields from within the interior of the enclosure system were also identified.

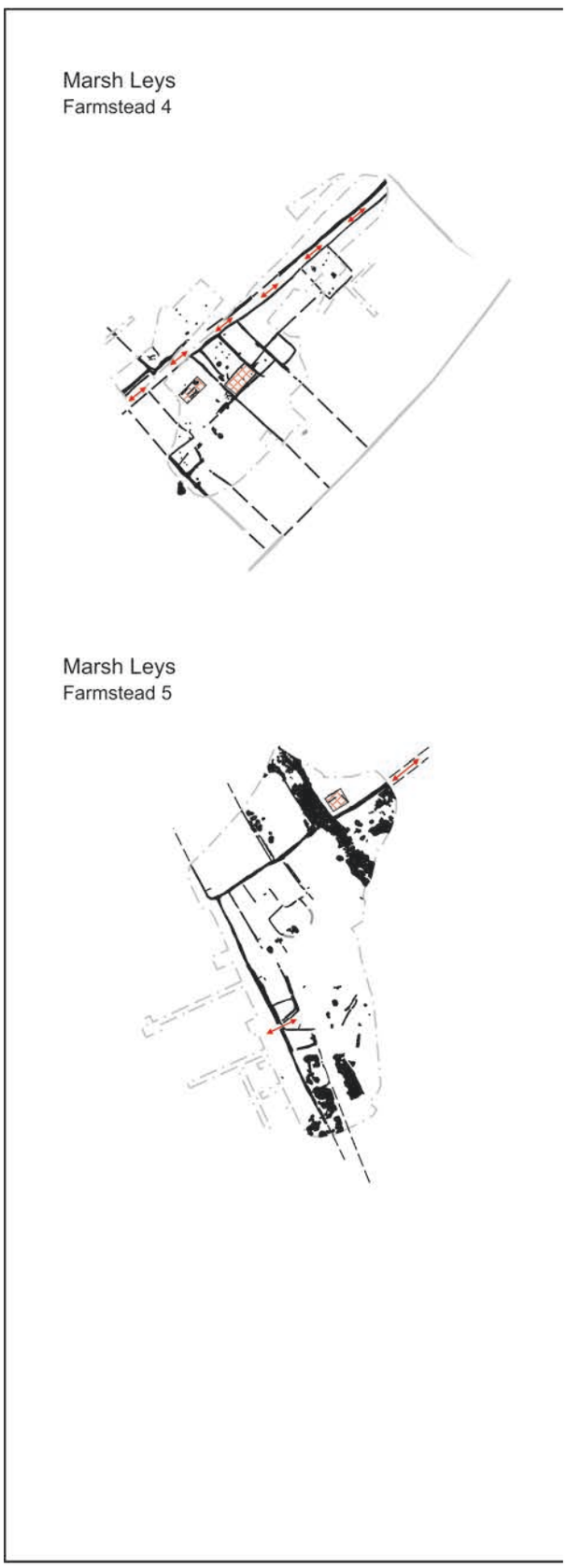


Figure 9.6 Interpretive plans of other sites similar in

layout to Marsh Leys Romano-British (Phase 4) Farmsteads 4 and 5. Scale 1:4000

Figure 9.7 Interpretive and continuity plan for Marsh Leys late Romano-British (Phase 5) Farmstead 7 and Romano-British (Phase 4) Farmstead 5. Scale 1:2000

On Farmstead 5 there were a series of narrow entranceways through the SE-NW aligned major linear boundary (Fig. 4.22), although these were not all contemporary. Open area L55 could represent a significant entranceway through this boundary, leading to one of the farmstead's domestic foci (Fig. 9.4). The triangular shape is unusual and the enclosures on either side of it are small and similar in shape and size. As with Farmstead 4, other entranceways facilitating movement into the enclosures/fields from within the interior of the enclosure system were also identified.

The Phase 4 enclosures/fields have been classified as either domestic enclosures, non-domestic enclosures or fields. They ranged in size from 230–3250sqm (Farmstead 4) and 150–2000sqm (Farmstead 5), with the larger examples interpreted as fields. Much larger enclosures and fields were identified on the Biddenham Loop: *c.* 2500sqm (farmstead 13) and 4900sqm (farmstead 14) (Luke 2008, 58) (Fig. 9.6). The size range at Marsh Leys is comparable to that at Odell, Beds., where 'cultivation plots' of 250–2500sqm were identified (Dix 1979; 1980; 1981). Similar, small enclosures at Haddon were thought to be associated with stock management (Hinman 2003, 41). Both interpretations are possible for the small enclosures at Marsh Leys.

At Marsh Leys, the larger fields tended to be on the periphery of Farmsteads 4 and 5. Where their full extent is known they covered 1450–3250sqm. Three field sizes were defined at Old Covert, Milton Keynes: 500sqm, 1000sqm and 10,000sqm (Petchy 1978, 639). The two smaller sizes are equivalent to the non-domestic enclosures at Marsh Leys. The variation in size and shape of the fields may indicate a variety of uses, including both arable and pasture. Where sub-surface features were identified within the non-domestic enclosures/fields at Marsh Leys, they tended to be either around the edges (*e.g.* the pits within field L33 on Farmstead 5) or in the corners (*e.g.* the structure within field L34 on Farmstead 5), leaving the interior space free. Water pits were identified roughly in the centre of a small number of the larger fields, *e.g.* within L19 and L81 on Farmstead 4.

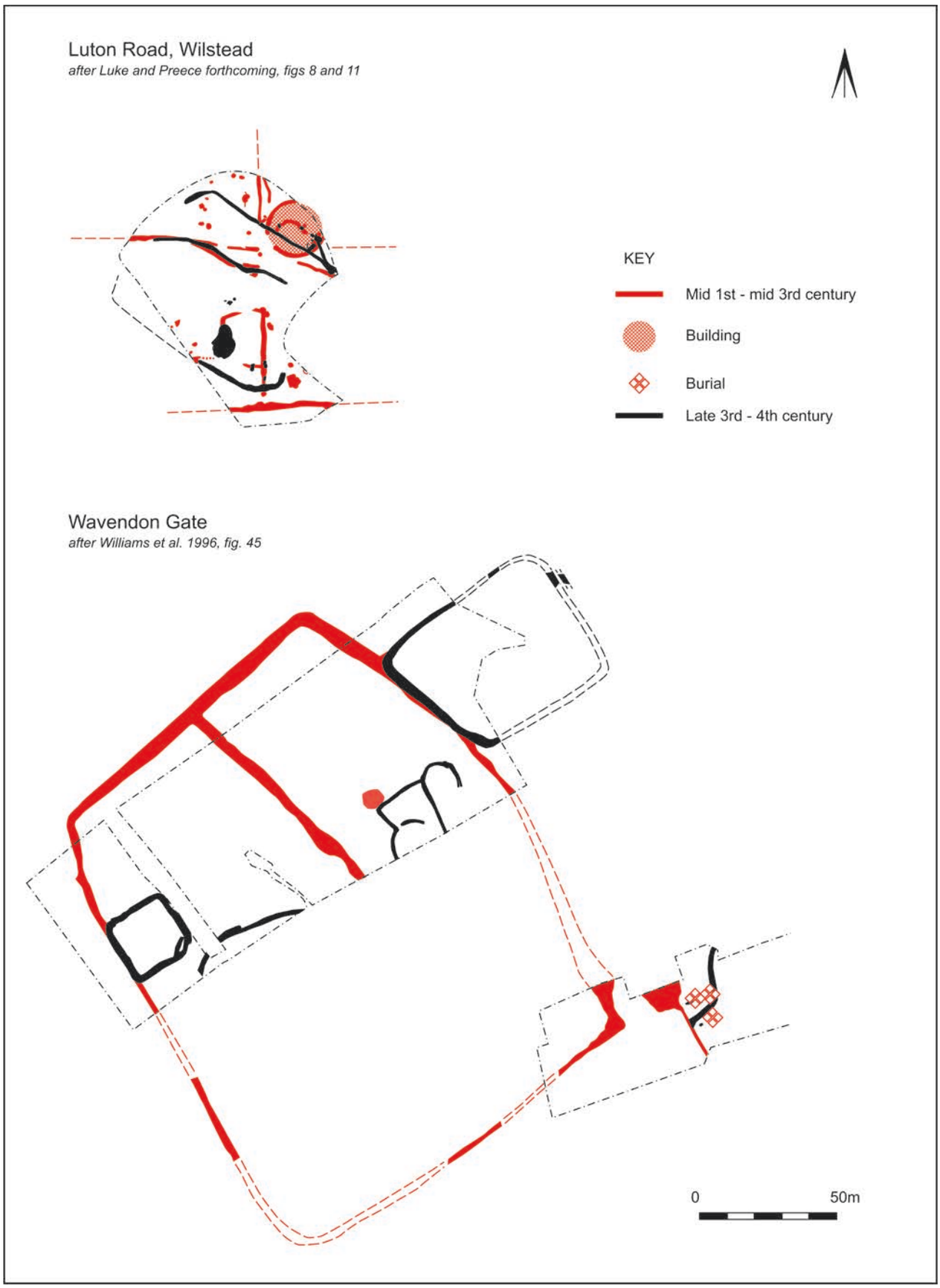


Figure 9.8 Continuity plans of other sites with similar layout changes to that at Marsh Leys during the later Romano-British period. Scale 1:2000

Figure 9.9 Distribution of pottery within Farmsteads 2 (Phase 3) and 4 (Phase 4) indicating domestic focus of settlements. Scale 1:2000

Figure 9.10 Distribution of pottery within Farmsteads 3 (Phase 3) and 5 (Phase 4) indicating domestic focus of settlements. Scale 1:1000

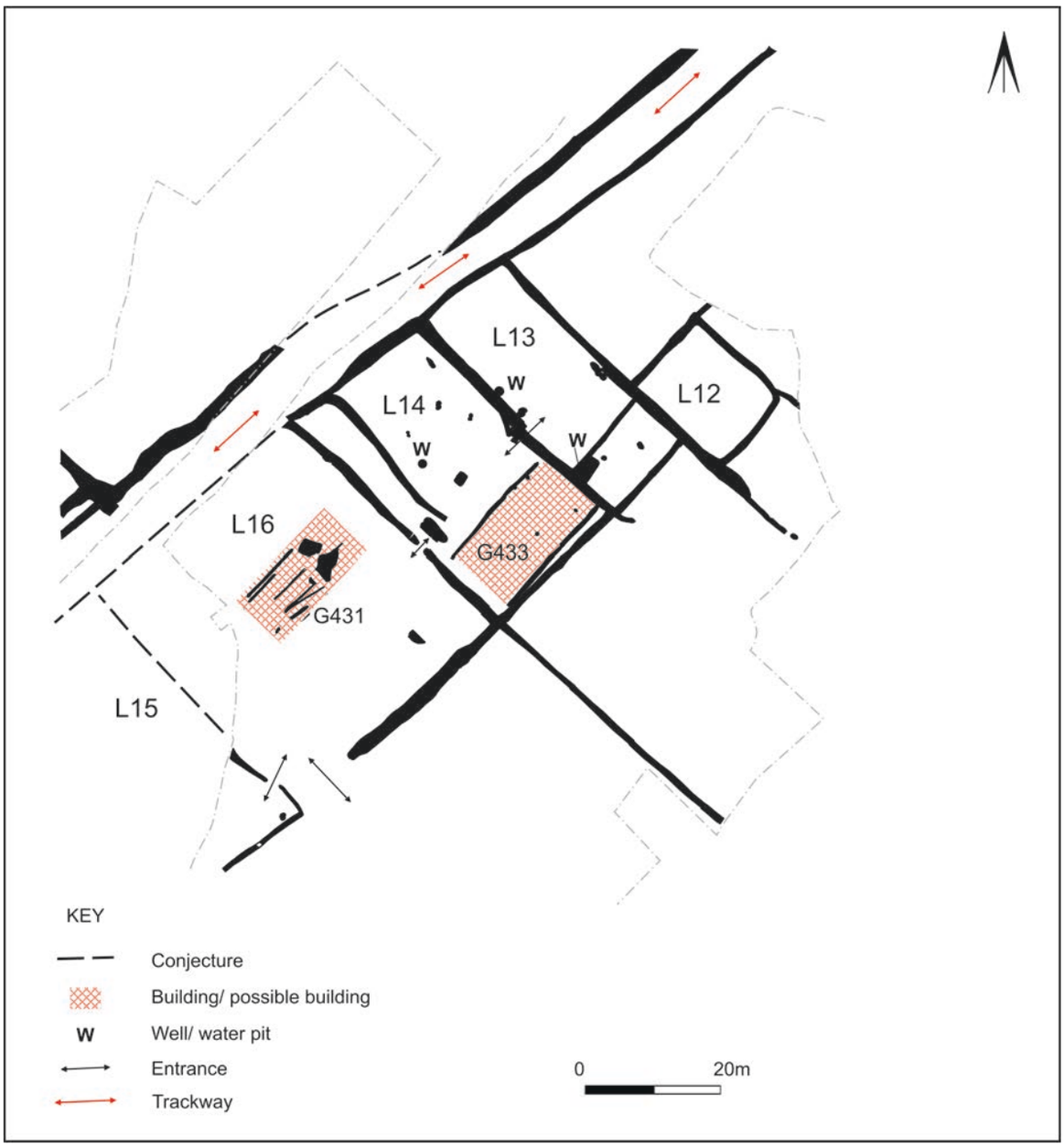


Figure 9.11 Domestic enclosures/core of Marsh Leys Farmstead 4. Not to standard scale

Enclosure L42 on the later Romano-British Farmstead 7 (Phase 5) was 1150sqm in extent (Fig. 9.12). It falls midway between the sizes of the two late 3rd–4th-century enclosures at Wavendon Gate (Williams *et al.* 1996, fig. 45). Like enclosure L42, the latter were constructed within an earlier enclosure system (Fig. 9.8).

Buildings

A number of different building types were identified on the late Iron Age/early Romano-British (Phase 3) and Romano-British (Phase 4) farmsteads — roundhouses, possible rectangular buildings and a square building.

Roundhouses

(Fig. 9.13)

Four possible roundhouses were identified; all were late Iron Age/early Romano-British (Phase 3) (Fig. 9.13). Roundhouses G57 and G73 were the most convincing. They were defined by small drainage ditches with a diameter of *c.* 9m, similar in size to roundhouses from Stagsden and Wavendon Gate (783). Gaps in the ditches suggest that roundhouse G57 had a *c.* 2.5m wide, south-facing entrance, while G73 had a *c.* 1.3m wide, northwest-facing entrance. These buildings do not, therefore, fit the pre-Roman trend of having an entrance that faces the rising sun, *i.e.* east to south-east (Hill 1995b, 54). As is so often the case on sites in the region, no post-holes or stakeholes were found that could be interpreted as doorposts or part of external walls or roof supports. Internal features were only identified in G57. These are presumed to be contemporary with the roundhouse, given the absence of similar external features, although their purpose is unknown. Two curving ditches — G56 (Farmstead 2) and G358 (Farmstead 3) — may indicate the location of two other roundhouses, which would have had diameters of *c.* 5m and *c.* 12m

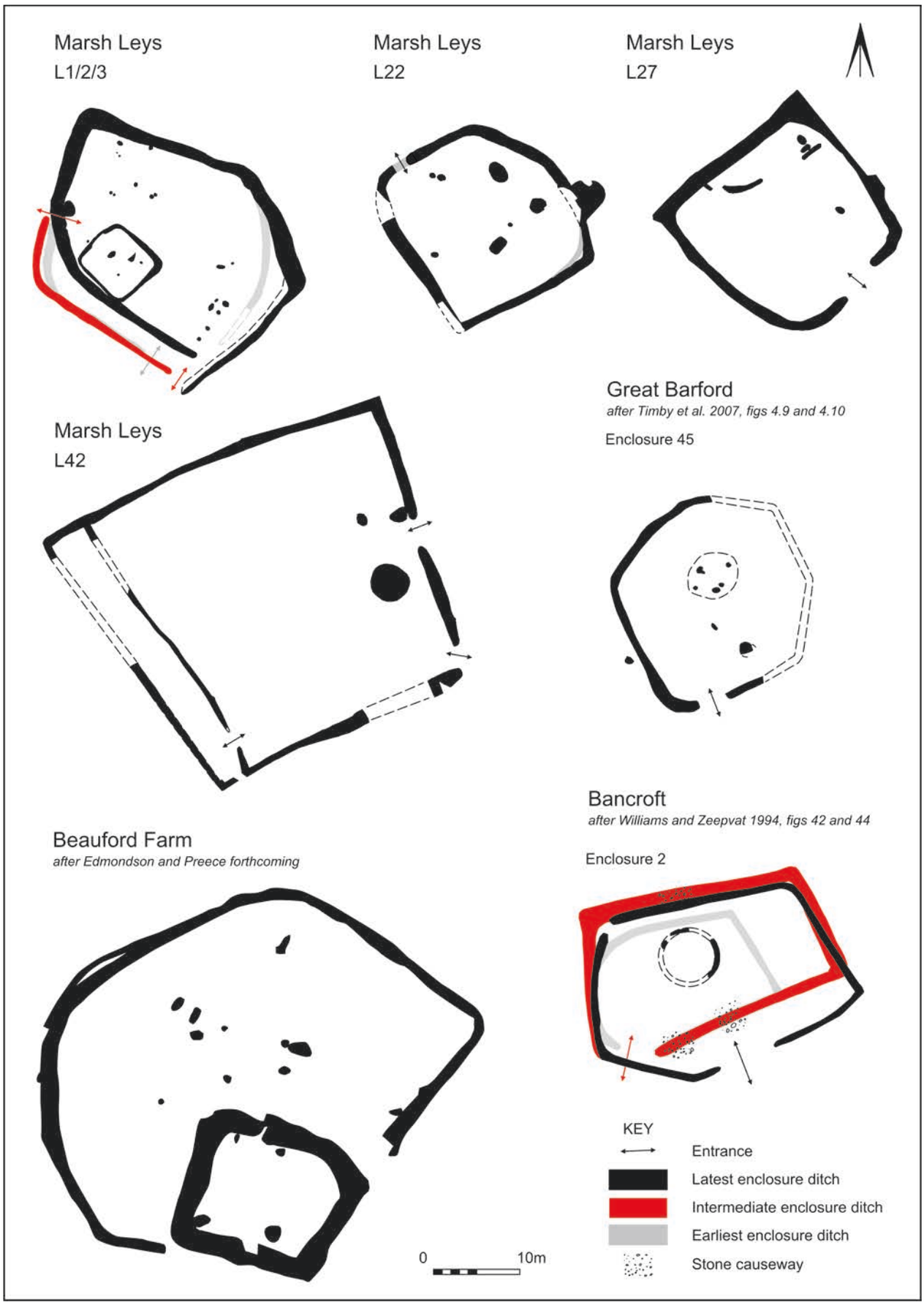


Figure 9.12 Marsh Leys single enclosures and comparable ones from other sites. Scale 1:500

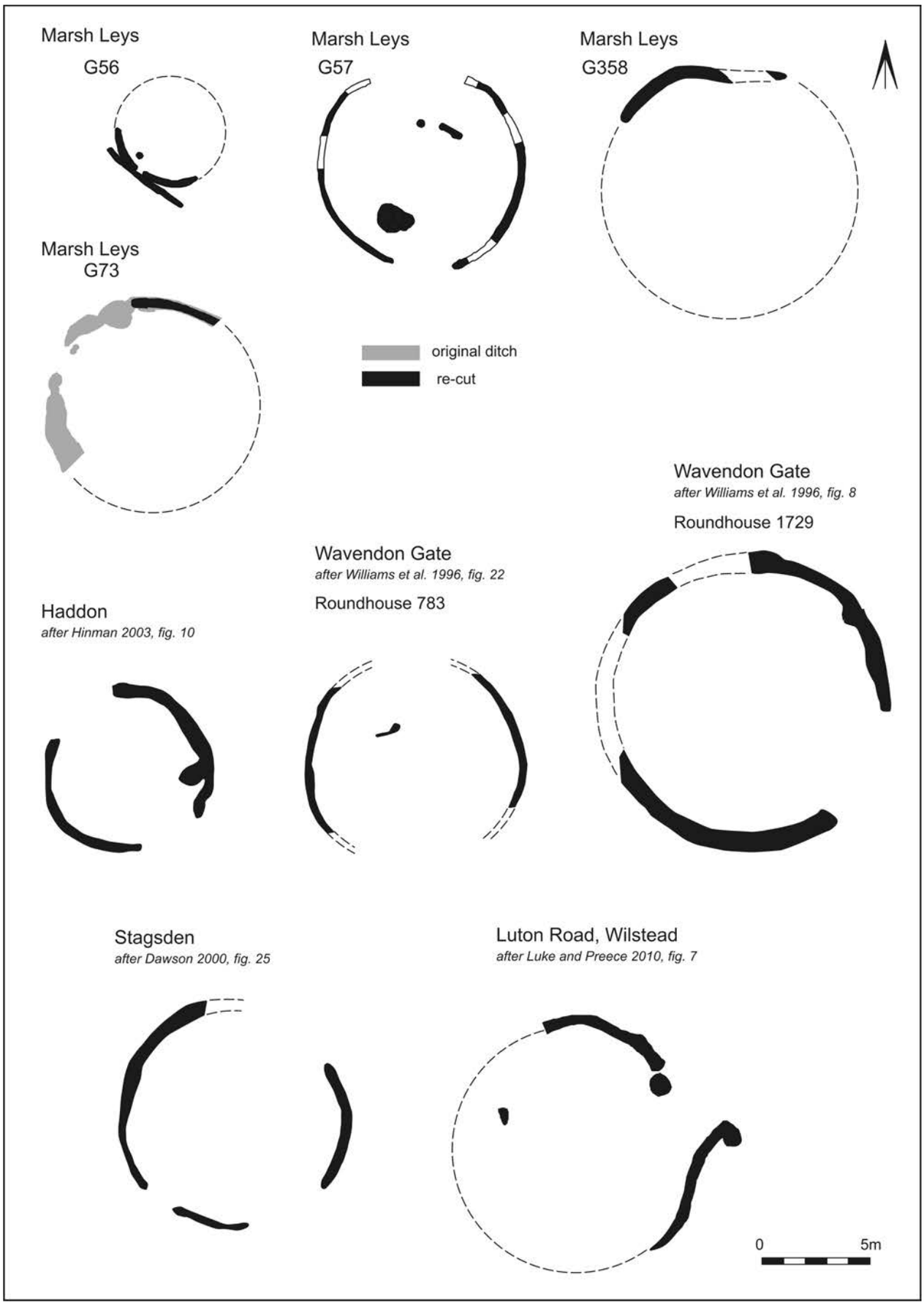


Figure 9.13 Late Iron Age/ Romano-British (Phase 3) Marsh Leys roundhouses. Scale 1:250

respectively. The latter shares some similarities in width of drainage ditch and overall diameter with that at Luton Road Wilstead (Luke and Preece 2010, 111)

Quantities of late Iron Age/early Romano-British pottery were recovered from all the possible roundhouse ditches. The nature and quantity of occupation debris from G73 — 1kg of pottery, charcoal and fired clay fragments including slabs possibly from an oven — suggest this building definitely had a domestic function. It was also the only roundhouse with a redug ditch. Part of the skull of a mature woman had been placed upside down on the base of the ditch defining G57, close to its southern terminal (see below).

Similar roundhouses are known on the contemporary rural settlements at Luton Road Wilstead (Luke and Preece 2010, 152–3), East Stagsden, Beds. (Dawson 2000, 33–4), Wavendon Gate (Williams *et al.* 1996, 36–7) and Haddon (Hinman 2003, fig. 10) (Fig. 9.13). At under half the diameter of the others, roundhouse G56 was very small. However, similarly sized examples are known — building 6 at Gorhambury, Herts. (Neal *et al.* 1990, 26, fig. 28) and G1014 at Bedford Western Bypass Area 1 (Albion 2008b, 27–8), which had diameters of *c.* 7.3m and *c.* 5m respectively. Hingley believes that roundhouses may have been very common throughout lowland Britain during the 1st and 2nd centuries AD and that at some sites they continued in use into the 3rd/4th century (1989, 31). Roundhouses dated to the later Roman period are known throughout the region, *e.g.* Great Barford Bypass (Poole 2007a, 110–2), Luton Road Wilstead (Luke and Preece 2010, 153), Wavendon Gate (Williams *et al.* 1996, 86) and Somersham, Cambs. (Hingley 1989, 172). Their absence from the Marsh Leys farmsteads at this time is thus slightly unusual and is discussed below.

Rectangular buildings
(Fig. 9.14)
Up to five rectangular buildings were identified on the Marsh Leys farmsteads (Fig. 9.14). The two most convincing were within the domestic core of Farmstead 4; they were both aligned SW-NE. Building G433 was *c.* 20m by 10m, defined by two parallel slots which formed the outer walls. Building G481 was *c.* 19m by 9m and comprised a series of linear slots. They might suggest the presence of a raised floor, as seen in building 10 at Gorhambury (Neal *et al.* 1990, 29, fig. 35). The dimensions of the Marsh Leys buildings are comparable to rectangular buildings found on other sites in the region, *e.g.* Orton Hall Farm, Cambs. (Mackreth 1996, 55–70, table 1) and Great Haddon, Cambs. (Hinman 2003, table 3.1).

The apparent absence of rectangular buildings, in contrast to roundhouses, has been noted on many sites in the region, *e.g.* Biddenham Loop (Luke 2008, 61) and Wavendon Gate (Williams *et al.* 1996, 86). This may in part be explained by the fact that most roundhouses are enclosed by a drainage ditch which tends to survive all but the most severe truncation. Some rectangular buildings may have been constructed in a way that left little sub-surface evidence. This might account for the more speculative buildings at Marsh Leys which are discussed below.

Ephemeral slots, sometimes associated with post-holes, are often interpreted as foundation trenches for walls, *e.g.* building 22 at Gorhambury (Neal *et al.* 1990, 39, fig. 49). The nature, dimensions and proximity of linear slots G79/80/82 (Farmstead 2), G388/408/409 (Farmstead 3) and G307/308/339 (Farmstead 5) suggest a structural function and these features could represent the remains of rectangular buildings (Fig. 9.14). They are similar to four slots (G6/G20/G21), also within 10m of one another, identified at Luton Road, Wilstead (Luke and Preece 2010, 110, fig. 5) and have some similarities to slots associated with buildings F181 and F182 at Ivy Chimneys, Essex (Turner 1999, 26–29). Like the Luton Road Wilstead example, the Marsh Leys slots were not associated with numerous post-holes, did not have the characteristics of beam slots and did not form a pattern that can be easily interpreted as a building. However, it is their relative proximity and uniqueness within the farmsteads that supports a structural interpretation.

A rectangular arrangement of ditches has been used on some sites, *e.g.* Luton Road Wilstead (Luke and Preece 2010, 153) and Ivy Chimneys (Turner 1999, 41 and fig. 37), to suggest the location of rectangular buildings, *c.* 27m by 13m in extent. At Marsh Leys, there are at least two candidates for this: enclosure L13 on Farmstead 4 which has very similar dimensions (Fig. 4.9); and, less convincingly, enclosure L50 on Farmstead 5 (Fig. 4.18).

Square building
(Fig. 9.15)
A late Iron Age/early Romano-British (Phase 3) square building G69 was identified within enclosure L1 (Farmstead 2). It comprised a continuous drainage gully, defining an area of *c.* 7m by 6m which contained two post-holes and two pits (Fig. 9.15). It has been dated to this period on the basis of a small pottery assemblage and its stratigraphic relationship with a later ditch. A similar shaped contemporary gully was found on the Biddenham Loop (Luke 2008, 227–231, fig. 9.16). The presence of post-holes and a large number of nails suggest that it contained a square building. It is largely on the basis of this comparative evidence that the Marsh Leys gully has been interpreted as the remains of a square building.

Similar square gullies, with evidence for internal timber structures but not necessarily buildings, have been found at the late Iron Age religious site of Westhampnett, West Sussex (Fitzpatrick 1997, 40) and the earlier Iron Age site of Maxey West Field, Cambs. (Pryor *et al*. 1985, 63, 73). Two further small, square gullies have recently been found on the Biddenham Loop (Albion 2008d, 9). They had clearly been heavily truncated which may explain the absence of post-holes, although they did contain shallow pits. There is no direct evidence for the function of the square building at Marsh Leys, although by inference from other sites a religious purpose, possibly as a 'shrine', could be suggested (see Chapter 9.V Ritual and religion; possible shrine).

Other structures
No *in situ* hearths, ovens or kilns were identified. However, the presence of hearth bottoms, portable oven/kiln furniture, fired clay fragments, charcoal and burnt stones indicate that they were once present. It may be significant that the majority of the fired clay perforated plate and slab fragments (Fig. 7.5 FC2–5), interpreted as portable furniture associated with ovens or kilns, were recovered from the domestic foci of Farmstead 2 (L4, Phase 3) and Farmstead 5 (L48, Phase 4). Although a

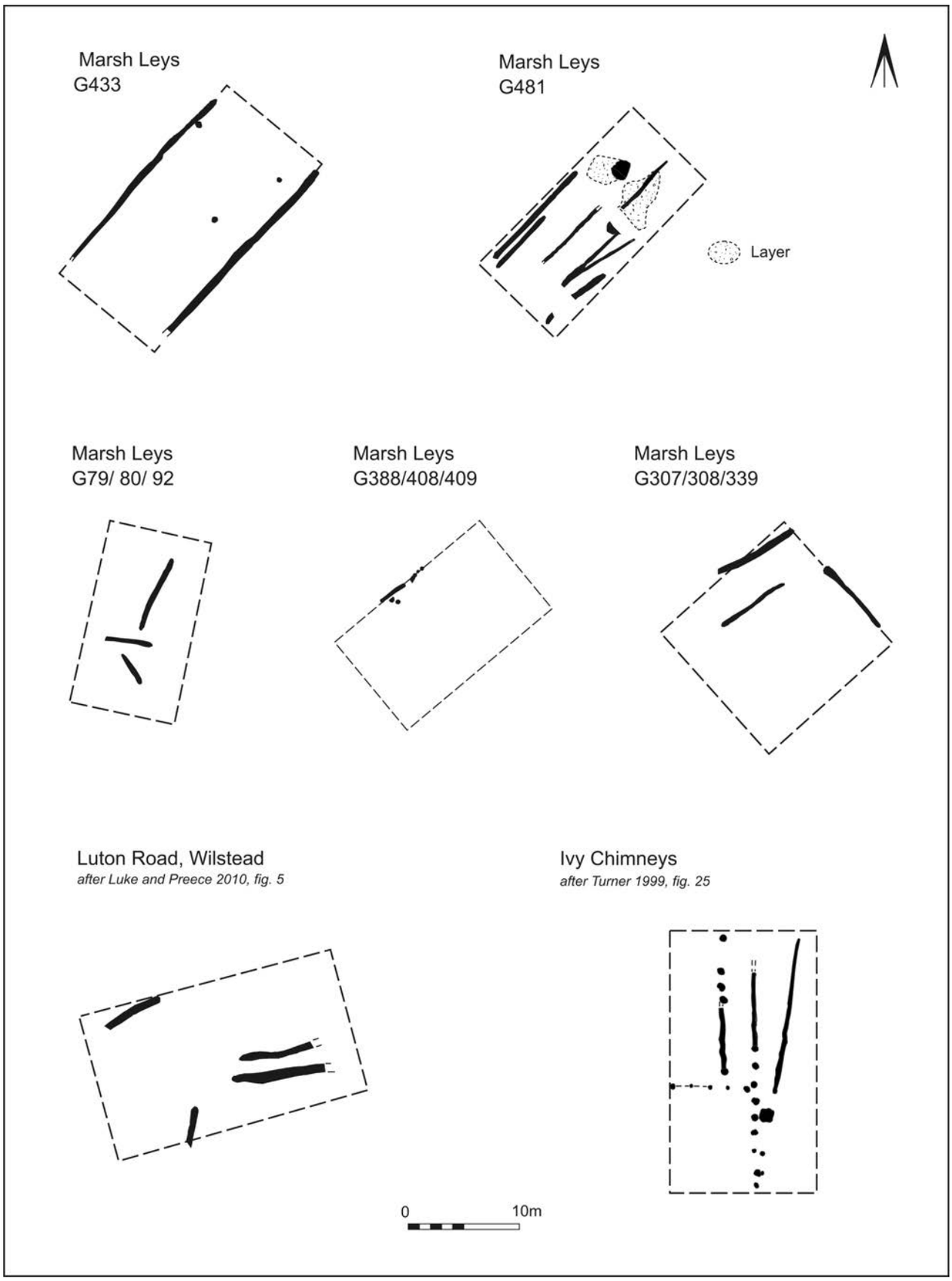


Figure 9.14 Marsh Leys possible rectangular buildings/structures with similar ones from other sites. Scale 1:500

common find on sites of this period, *e.g.* East Stagsden (Gentil and Slowikowski 2000, 88), Biddenham Loop (Slowikowski 2008, 236) and Luton Road Wilstead (Wells 2010a, 139), their precise function within these types of structures remains unclear.

Wells and water pits

(Table 9.1)

Twenty-five possible wells and/or water pits were identified (Table 9.1). The term *well* has been used where a stone or timber-lined shaft was located or its existence suspected. The term *water pit* has been used for deep features where no stone or wood lining was evident. Given that the wells were usually constructed within large pits and that their linings had often been removed for re-use, there is clearly possible overlap between the two terms. In addition, some of the larger water pits could be classed as ponds, *e.g.* G320 (L24, Farmstead 3), G503 (L30, Farmstead 3).

At Marsh Leys there were far fewer wells than water pits and they tended to be within or adjacent to domestic foci. Well G89 (within domestic enclosure L14, Farmstead 4) was the best preserved, in part because only the top of the lining had been robbed. The well shaft lay within a large construction pit, *c.* 3m in diameter, and was lined with coursed limestone slabs, giving it an internal diameter of 0.65m and a depth of *c.* 2.5m. It is similar to wells found at Kempston Church End, Beds., *e.g.* G4020 (Dawson 2004, 214, fig. 5.108). The other possible wells at Marsh Leys featured either profiles and/or fills containing limestone slabs, which were suggestive of a robbed out lining. Similar features were also interpreted as wells at Kempston Church End, *e.g.* G4022 (Dawson 2004, 212).

Where a water pit occurred within 10m of another, this tended to occur in domestic foci and may indicate the digging of replacements. They ranged in diameter from 3–10m and were on average 1m deep and all were dug through the gravel into the underlying clay. The shallow depth of some in comparison to well G89 suggests that they were designed to hold water on a seasonal basis or after heavy rainfall. The depth and steep sides of the majority suggest the use of buckets on rope to extract the water, rather than direct access. A similar interpretation was made for the water pits at Luton Road Wilstead (Luke and Preece 2010, 153) and Wavendon Gate (Williams *et al.* 1996, 64–66). However, access ramps were tentatively identified in G74, G289, G343 and G344. Evidence for maintenance of water pits was limited and only G341 produced clear evidence for substantial redigging. It is presumed that they were regularly maintained to prevent silting up and to ensure access to their contents.

The presence of water pits on Romano-British farmsteads is relatively common, *e.g.* G33, G34 and G43 at Luton Road Wilstead (Luke and Preece 2010, 153); G11 at East Stagsden (Dawson 2000, 50–51); pit 651 and 786 at Haddon (Hinman 2003, 37–38); and pit 835 at Wavendon Gate (Williams *et al.* 1996, 64–66). However, the number of water pits at Marsh Leys is perhaps unusual. For example, at Luton Road Wilstead only a single water pit was present within each of the three phases of Romano-British settlement. At Haddon only two water pits, referred to as cisterns, were identified. The presence of so many water pits within the same phase of activity at Marsh Leys may simply reflect the fact that the shallow water table and impermeable underlying clay meant that it was relatively easy to dig pits for water storage.

Phase	*Farmstead*	*L number and description*	*G no.*	*Type*	*Depth*	*Diam*
Phase 3	Farmstead 2,	Domestic focus L4	G170	Water pit	> 0.8m	4.6m
	Farmstead 3	Activity focus L24	G320	Water pit/pond	> 1.2	10m
		Domestic focus L25	G341.1	Water pit	*c.* 1.05m	4m
		Activity focus L29	G290	Well?	>1.2m	
			G422	Water pit	> 0.8m	3.6m
		Activity focus L30	G321	Water pit/well	0.8m	1.55
			G323	Water pit	0.85	3 x 2.3
			G357	Water pit	0.95	4 x 2.5
		Peripheral focus L56	G417	Water pit	0.85m	6m
Phase 4	Farmstead 4	Non-domestic enclosure L13	G128	Water pit	>0.85	3.4 x 2.2
		Domestic enclosure L14	G89	Well	2.5m	
		Field L19	G504	Water pit	Not known (geophys)	5 x 3m
		Field L80	G503	Water pit/pond	Not known (geophys)	9 x 5
		Field L81	G86	Water pit	1 m	3.5m
		Non-domestic enclosure L84	G74	Water pit	1m	5 x 3.6m
	Farmstead 5	Field L33	G289	Water pit	>0.9m	5 x 3.5
			G287	Water pit?	>0.8m	2m
		Domestic focus L41	G346	Water pit	1m	4.5 x 3.6
		Domestic focus L48	G341.2	Water pit	1.3m	5 x 3.7
		Field L52	G294	Water pit	> 1.2m	5m
Phase 5	Farmstead 7	Domestic? enclosure L42	G352	Water pit	1.7m	4.5
		Domestic? focus L43	G343	Water pit	1m	5 x 4m
			G344	Water pit	> 0.8m	4.3 x 3m
			G351	Well?	>1.1m	
		Field L44	G337	Well?	*c.* 1.5m	

Table 9.1 Summary of wells and water pits from all phases

It is likely that the larger water pits and those located within more peripheral fields were associated with livestock, as at Stratton, Biggleswade, Beds. (Edmondson and Preece forthcoming). However, given the proximity of the Elstow Brook to the Marsh Leys farmsteads it is likely that during the summer months, at least, animals were taken to water rather than *vice versa*.

Quarry pits

Quarrying at Marsh Leys appears to have peaked in the Romano-British period (Phase 4). It was focused on tightly defined areas within Farmstead 5. Linear band L35 comprised several hundred intercutting pits covering an area of 115m x 15m. At the south end of the farmstead, quarrying was confined to two ditched enclosures — L38 (21m x 10m) and L40 (24m x 12m) — and another rectangular area G402 (L41) (34m x 13m), which must have been defined in a way that has left no trace in the archaeological record. Individual pits were typically no more than 0.5m deep (see Fig. 4.17). They were dug to extract gravel and invariably stopped when the top of the underlying clay had been reached.

Other similarly restricted areas of quarrying are known on other sites, albeit on a smaller scale, *e.g. c.* 550m to the north on Bedford Western Bypass Site 11 (Albion 2008a, 54), Great Barford Site 8 (Poole 2007a, 107). At Roughground Farm, Glos., quarrying was confined to a 70m x 30m area, next to a major boundary ditch between two groups of enclosures (Fig. 9.6; Allen *et al*. 1993, 109–10). Elsewhere on Farmstead 5, there were quarry pits around the edges of some of the fields, *e.g.* L33. The edge also seems to have been the starting point for the quarrying which eventually covered nearly the whole of field L75.

Evidence for gravel quarrying on the extensive scale identified at Marsh Leys is unusual on contemporary farmsteads in the region where quarrying typically takes the form of a smaller number of much larger pits, *e.g.* Ruxox, Beds. (Dawson 2004, 25, 127–9) and Shefford (Luke *et al*. 2010, 333). The quarrying at Roughground Farm was more similar to the intercutting, wide and shallow hollows seen at Marsh Leys.

The reason for the extensive gravel quarrying at Marsh Leys is unclear. As at Ruxox (Dawson 2004, 25–6, 125–9), it occurs mainly on the farmstead where iron working took place. However, there is only evidence for iron smithing at Marsh Leys and while this might require sand for use as a silica flux, it would not be required in the quantities suggested by the scale of the quarrying. The site was low-lying and there is some evidence that it was affected by rising groundwater. In these circumstances, the gravel was perhaps needed to build up the ground level in certain parts of the farmstead to combat flooding.

Other pits

In common with other late Iron Age/Romano-British farmsteads, the function of the smaller pits at Marsh Leys is uncertain. They were typically oval, 0.5–2m in diameter and no more than 0.5m deep. They occurred mainly within, or near to, the domestic foci. Pit clusters also occurred in more isolated locations, termed 'peripheral activity areas' for want of a better alternative.

It is possible that many of these pits were originally dug as small, intermittent quarries to extract gravel or clay for use in buildings and other structures. A few may have originated as storage pits (*e.g.* G321 (L30, Phase 3)) and were comparable to some of those found at Biddenham Loop (Luke 2008, fig. 10.9) and Ruxox (Dawson 2004, 25). Only one rectangular, clay-lined pit was found at Marsh Leys — G90 (Phase 4) in the centre of domestic enclosure L14. Clay-lined pits are relatively common on contemporary farmsteads, *e.g.* Pennyland (Williams 1993, 38–9) and are usually linked with either cooking or water storage. In the absence of any evidence for burning, the latter is the more likely explanation at Marsh Leys.

It is clear that whatever the original function of the Marsh Leys pits, a number of them were subsequently used for the disposal of domestic debris, *e.g.* G323 (L30, Phase 3), G324 and G325 (L48, Phase 4). Again, this is commonly seen on other contemporary sites.

V. Ritual and religion

The majority of the firm evidence for ritual and religion derives from formal human burials, although a number of non-funerary deposits also contained human bone. Complete and partial animal skeletons were also recovered. On site, a small number of deposits were identified as 'special' because they contained large or unusual deposits of artefacts or ecofacts. A number of these are interpreted as 'structured' deposits and are discussed below. The identification of a possible shrine within Farmstead 2 is of particular interest because it may have served as the focus of the farmstead.

Formal burials

Cremation was the only late Iron Age/early Romano-British (Phase 3) funerary rite identified at Marsh Leys. A small cemetery of seven graves was located on the periphery of Farmstead 2. Four of the graves contained urns and two, including an un-urned burial, contained accessory vessels. The urns are utilitarian types mainly of early to mid 2nd-century date and appear to have been deliberately selected for use in graves, as none bear signs of previous use. One of the accessory vessels was a white ware miniature pot placed against the side of the grave. Similar vessels have been found in numbers on religious sites, *e.g.* Frensham Common, Surrey and Uley, Glos. (Graham and Graham 2009, 68). The concentrated nature of the cremated bone suggests that the un-urned burials had probably been placed in fabric or leather containers which did not survive. The small quantity of bone recovered is likely to be a result of plough truncation. However, the presence of bones from all regions of the skeleton appears to be more significant and could suggest that only a token quantity of bone was buried. Some form of selection of bone from the pyre debris is supported by the small quantity of charcoal recovered from the graves. The cemetery is comparable in size to one found at Site 4 on the Great Barford Bypass, which also contained seven graves (Poole 2007a, 88–90). The peripheral location of the cemetery is similar to examples at Biddenham Loop (Luke 2008, 51) and Wavendon Gate (Williams *et al.* 1996, 43).

Although G411 (Farmstead 3) was probably an un-urned cremation burial, the presence of large quantities of charcoal and only small quantities of cremated human bone raises the possibility that it represents a pyre-related deposit rather than a formal burial. Similar deposits are known from pyre sites, *e.g.* Westhampnett, Sussex

(Fitzpatrick 1997, 231–3), but unlike G411 they usually contained a mixed charred plant assemblage and were associated with short gullies containing evidence of *in situ* burning.

Four Romano-British (Phase 4) inhumation burials are representative of the burial rite which had become 'common' by the mid 3rd century (Philpott 1991, 53). The small numbers at Marsh Leys fit the regional pattern of only limited evidence for rural burials and cemeteries (Going 1997, 40). All were located towards the periphery of farmsteads — again a common phenomenon on Romano-British settlements, *e.g.* Wavendon Gate (Williams *et al*. 1996, 80–2, 89). At Marsh Leys, graves G82 and G83 (Farmstead 4) and grave G314 (Farmstead 5) were situated within *c.* 15m of domestic foci. In contrast, G353, one of two graves within Farmstead 5, lay some distance from the domestic core to the west of the major boundary of the main enclosure system.

Two of the inhumation burials contained grave goods: a 2nd–3rd-century grey ware jar had been placed in the left hand of the man in grave G353 and hobnail shoes had been placed under the head of the woman in grave G83. The latter also contained a narrow-necked grey ware jar, found partly in the woman's left hand and partly underneath the left arm suggesting it had been broken prior to being placed in the grave, presumably as part of the funerary rite. Although such occurrences appear to be fairly rare, two of the graves at Ashton, Northants. contained deliberately broken, shell-gritted jars (Philpott 1991, 105).

The presence of hobnail shoes in grave G83 accords with Philpott's observation that this rite was 'most firmly established in the countryside' and appears to be concentrated in south central England (1991, 167). The nearby Kempston Church End cemetery is another local example — 4% of the graves contained hobnails (Dawson 2004, 55). Philpott notes that these burials 'become more numerous in the late 2nd and 3rd century, although by far the majority of datable examples occur in the 4th century' (1991, 167). The shoes within grave G83 were placed under the head which is uncommon but not unknown, *e.g.* Bredon Hill (Philpott 1991, 168). The possible significance or otherwise of the differences between shoes worn on the feet, as opposed to those placed elsewhere in the grave, have been summarised by Philpott with reference to cemeteries at Colchester, Lankhills and Kelvedon (1991, 168).

None of the inhumations at Marsh Leys produced any evidence for the use of coffins. However, the body in grave G314 appears to have been placed on deliberately positioned, flat limestone slabs. Although no vertical slabs were present, this is a possible cist-type burial. Many of the graves within the 4th-century AD cemetery at Bletsoe, Beds. were lined with limestone slabs, although only grave 102 was clearly a cist-type burial (Dawson 1994, 29, fig. 14). An isolated burial of this type was also found on farmstead 14 at Biddenham Loop (Luke 2008, 264).

Two Romano-British (Phase 4) cremation burials were also identified. Cremation G227 had been placed in an urn; the other G259 was un-urned but accompanied by an accessory vessel. Cremation burials are known to have continued throughout the Romano-British period 'in some rural areas' (Philpott 1991, 8).

Possible shrine

(Fig. 9.15)

Square enclosure G69 (L1, Farmstead 2) has been tentatively identified as the site of a late Iron Age/early Romano-British (Phase 3) shrine — it has the general characteristics of such structures, *i.e.* small, square and 'spatially separated from domestic buildings' (Woodward 1992, 31–2). The irregular nature of the ditch suggests that it was open during the life of the building and presumably served as a drain. The deeper eastern corner may have been a sump. The ditch enclosed a *c.* 7m x 6m area, which contained two post-holes but no clear evidence for the walls of the building.

G69 is similar to small square enclosures found elsewhere in the country and typically interpreted as shrines or mausolea (Fig. 9.15). The most convincing is enclosure 20706, one of several such features on the periphery of the late Iron Age religious site at Westhampnett, West Sussex, (Fitzpatrick 1997, 15–18, 40 and fig. 33). It is comparable to the three found together at Biddenham Loop (Luke 2008, 227–31; Albion 2008d, 9) and one dated to the earlier Iron Age at Maxey West Field, Cambs. (Pryor *et al.* 1985, 63, 73). Other comparable but slightly different examples are known from the settlements at Stansted (Brooks 1989, 323–4; Brooks and Bedwin 1989) and Heybridge (Atkinson and Preston 1998, 92–3), both in Essex. As at Stansted, the Marsh Leys 'shrine' appeared to be located within the centre of a settlement.

The two shallow pits within G69 are similar to ones found at Biddenham Loop (Luke 2008, 231) and Stansted (Brooks 1989, 323–4). Their function is uncertain, although they were clearly not structural. They may originally have contained a cremation burial, like feature 20566 within the enclosure at Westhampnett (Fitzpatrick 1997, 40). However, as at Biddenham Loop, no human remains were found within the Marsh Leys building or its enclosure ditch. The only potentially 'special' artefact was a possible lamp or incense burner (Fig. 7.1 P2) found within the original enclosure ditch L1. Human remains and 'special' artefacts were found at Westhampnett and Stansted respectively.

The Marsh Leys building is also unusual because it was not aligned east–west (Fig. 9.15) and was located within a polygonal ditched enclosure L1 (Fig. 9.12). The latter's shape and dimensions are comparable to enclosure 45 at Great Barford (Poole 2007a, 79–82, fig. 4.9), enclosure 2 at Bancroft (Williams and Zeepvat 1994, 83, fig. 42) and Beauford Farm, Beds. (Edmondson and Preece forthcoming). The Bancroft example is particularly interesting because, at a later date, it contained a circular shrine and it was adjacent to the temple-mausoleum (Williams and Zeepvat 1994, figs 41, 42). Poole suggested that enclosure 45 at Great Barford may have contained a central circular building (Poole 2007a, 79). Pits and post-holes were present within parts of the interior of enclosure L1 at Marsh Leys, although a large area to the north-east of the possible shrine was devoid of features. The enclosures at Great Barford, Beauford Farm and Bancroft were also largely devoid of internal activity.

There is no firm evidence that enclosure 45 at Great Barford or enclosure 2 at Bancroft served a religious function. However, at Bancroft the excavators noted that 'the volume of domestic refuse was comparatively small, certainly insufficient to suggest that domestic occupation

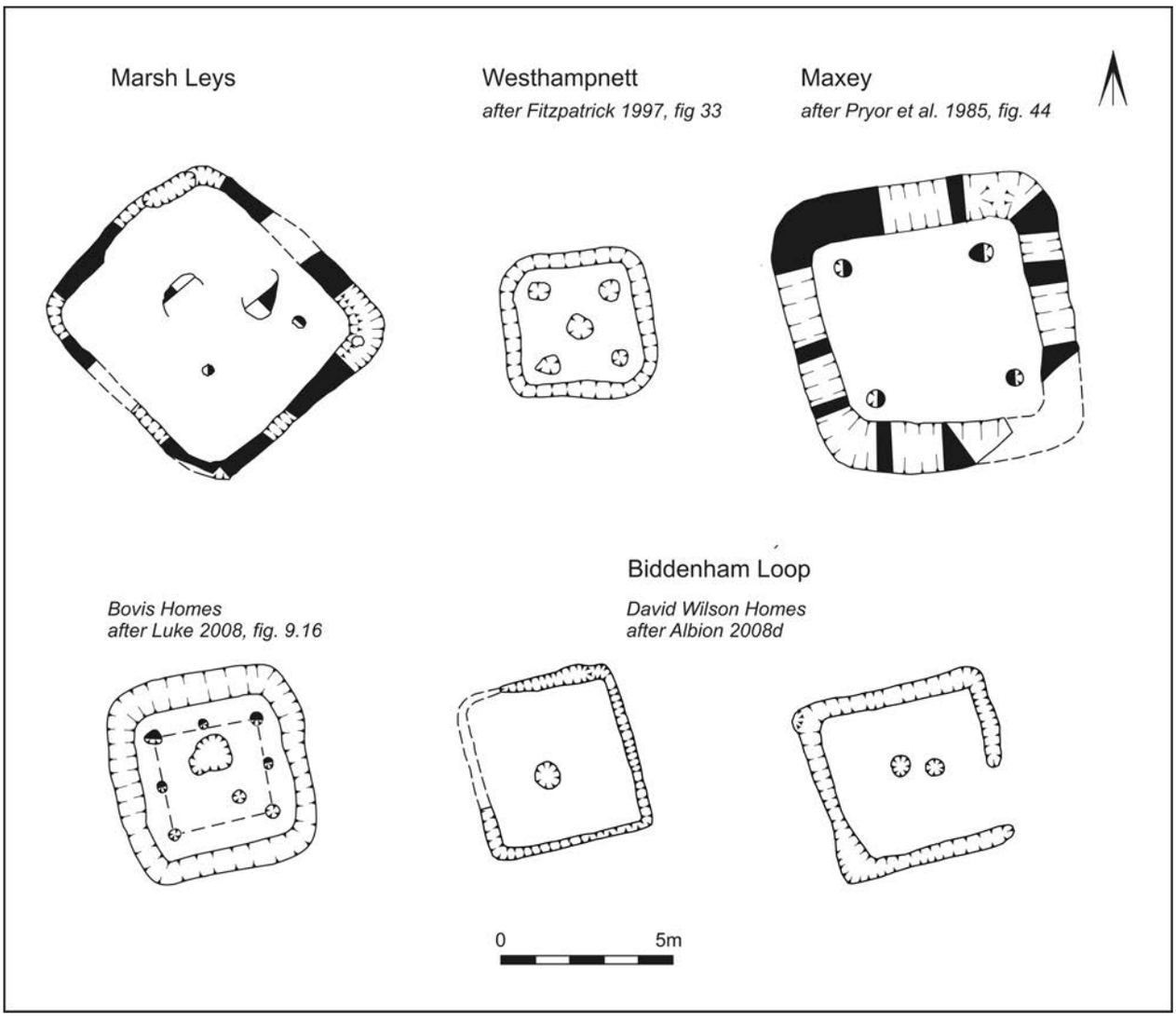


Figure 9.15 Comparative plans of late Iron Age/Romano-British 'shrines'. Scale 1:200

had ever occurred' (Williams and Zeepvat 1994, 87). They also noted that: 'the importance of the enclosure is indicated by the fact that it was recut at least twice'. Although very tentative, the similarity of the enclosures and the presence of small buildings within them at Great Barford, Bancroft and Marsh Leys does make a religious function a strong possibility. At Bancroft the building was dated to the mid–late 4th century, several centuries later than the enclosure. However, the presence of stone causeways across the enclosure ditch adjacent to the building suggests that the two may be broadly contemporary. The building was interpreted as a shrine because it contained a pig burial and a number of metal artefacts (Williams and Zeepvat 1994, 109–11, fig. 51).

'Special' deposits

It has long been recognised in Iron Age studies that certain deposits may be 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' (2001, 199). He presented a number of case studies of such deposits in secular contexts — all from cities and small towns, not rural settlements. At Marsh Leys the term 'special' was used to identify deposits with unusual artefactual or ecofactual content. Where identified during fieldwork, this ensured that they were recorded to a level of detail that would allow their potential status as 'structured' deposits to be further investigated during analysis. Initial identification was based on broad criteria such as the presence of human bones, complete or near- complete animal skeletons, complete or near-complete pottery vessels and metal artefacts. It is not easy to distinguish ritual deposition from discard for other reasons. However, the nature of the deposits and, at least within Farmstead 5, their concentration along the western boundary of the settlement (see Fig. 9.4) suggest that, even on a rural settlement like Marsh Leys, Iron Age practices continued into the Romano-British period. For convenience the following section is sub-divided into a number of different types of 'structured' deposits, on the basis of the principal component. It is accepted that this is not ideal because it is often the combination of different components that characterises these deposits.

Human bone

There were five instances of unburnt human bone in non-funerary deposits: two assigned to the late Iron Age/early Romano-British period (Phase 3) (Fig. 9.1) and three to the Romano-British period (Phase 4) (Fig. 9.4). A strong case can be made for three of these that they represent 'structured' deposits.

Part of the skull of a mature adult was found near the terminal of roundhouse ditch G57 (L5, Farmstead 2) and fragments of femur were found in water pit G341.1 (L25, Farmstead 3). Little can be said about the latter other than to note it was found in a feature within the domestic focus of the farmstead. In terms of the human skull, Cunliffe noted that these were 'noticeably more common than other human bones' from Iron Age occupation sites (1991, 506). Skull fragments have been found at Iron Age sites in deposits associated with a roundhouse at Bancroft, Milton Keynes (Williams and Zeepvat 1994, 55) and in an enclosure ditch at Site 2 on the Great Barford Bypass, Beds. (Webley 2007a, 14). Cunliffe commented that 'it must be assumed that skulls were selected for some kind of special treatment, which eventually resulted in token pieces being retained by individuals, perhaps as good-luck charms' (1991, 507). Adult skull fragments are also found on Roman sites, *e.g.* in a late Iron Age/early Roman depression F4502 at Ivy Chimneys, Essex (Turner 1999, 237) and in the late Roman depression G46 at Luton Road Wilstead, Beds. (Luke and Preece 2010, 154). At both sites it was suggested that they could be associated with votive activity. It therefore seems clear that the 'special' treatment of skulls, known to have occurred in the Iron Age, continued into the Romano-British period. One can only speculate as to whether the skull found at Marsh Leys was originally displayed at the doorway or inside the roundhouse and whether this has any significance for the functional interpretation of the building. However, the display of heads away from religious sites/buildings is known to have occurred in the Iron Age (Cunliffe 1991, 519) and the practice may have continued at Marsh Leys during the late Iron Age/early Romano-British period.

One of the three Romano-British (Phase 4) deposits to contain unburnt human bone comprised one of the wall slots of building G433 (L14, Farmstead 4) which produced a rib bone. This is particularly interesting because it may represent a 'foundation deposit'. Its discovery is also intriguing because it occurs in the same location as earlier Farmstead 2 (Phase 3) which featured a fragment of skull associated with a roundhouse. This might suggest that the inhabitants of the later farmsteads shared the beliefs of their predecessors. Less can be said about the two deposits containing unburnt human bone from Farmstead 5. Both were found within ditches (G208 and G254) in the vicinity of cremation burials and, in the case of the bone from G254, in the vicinity of 'special' deposit G253.4.

Animal burials/remains

The only complete animal burial recognised during excavation was that of a horse. However, a number of deposits containing animal remains were also classed as 'special'.

Horse burial G101, a complete adult animal of 11–13 years of age, was found on the periphery of Farmstead 4 (Phase 4). There was no evidence for deliberate killing, butchery or gnawing and it perhaps represents the burial of a valued transport or pack animal. Horse burials such as this are relatively unusual; those associated with ritual practices are more common, *e.g.* Farmoor, Oxon. (Wilson 1979, 130–2).

An upside-down dog skull, adjacent to three semi-complete pottery vessels, is likely to represent a 'structured' deposit (G235.4, L32, Farmstead 5, Phase 4 — see below). There is abundant evidence that dog skulls may have been retained and used in rituals, although Woodward does not believe they were the most common sacrificial animal at this time (1992, 78–9). Fulford notes the large number of animal skulls, especially from dogs, found at Silchester (2001, 205), although they are also frequently found on rural settlements. Nearby examples occur in a late Iron Age pond at West Stagsden (Roberts 2000, 122) and in an empty late Romano-British grave at Kempston Box End (Luke and Preece forthcoming).

Another 'special' deposit G253.4 (L39, Farmstead 5, Phase 4) contained a partial dog skeleton. This was not recognised as an articulated skeleton during excavation but analysis of the bones suggests that a complete carcass was buried. Three separate partial dog skeletons, two of which did not have skulls, were found at Shefford (Luke *et al*. 2010, 335). Two dogs, one 'perhaps skinned', were found with a partial sheep skeleton in an early Romano-British pit at East Stagsden (Roberts 2000, 122). In cases where the skeleton appears to be complete it is often difficult to determine whether burial is as a result of natural death or religious practice. However, because of the absence of butchery marks or gnawing on this and all the dog bone from Marsh Leys, it is clear that they were not exploited for food or their pelts and are likely to have been buried shortly after death, however that came about.

Post setting deposit

On Farmstead 4, a post-hole-like feature G96 (L16, Phase 4) contained a 'structured' deposit — two headless domestic fowl skeletons and two Roman coins. The latter were of AD 138–161 and AD 260–296, indicating that the event took place no earlier than the late 3rd century. The sacrifice of animals and their association with particular deities or festivals throughout the year were features of Romano-British ritual and religion (Henig 1984, 22–35) — the continuation of the widespread Iron Age custom of burying whole or partial animal carcasses, presumably after sacrifice (Woodward 1992, 78). Chickens and cockerels 'came to be associated with particular gods or goddesses' during the Roman period (Woodward 1992, 54). Other local examples include Wavendon Gate, where an adult cockerel was buried in a post-hole not unlike G96 (Williams *et al.* 1996, 68). Further afield a complete cock skeleton was found in pit 14 at Neatham, Hants.; on the basis of its unusual overall finds assemblage it was considered to be 'special' (Fulford 2001, 208; Millet and Graham 1986, 32). At the Romano-British settlement of Kempston Church End, headless hens were deposited with two cremation burials and a complete cockerel was buried with an inhumation (Roberts 2004, 304).

Other

Five other 'special' deposits, all within ditches, were located mainly on the western fringes of Farmstead 5 (Phase 4) and are likely to be 'structured'. Deposit G235.4 comprised an upside-down dog skull adjacent to three semi-complete pottery vessels (see above); it was located

within the western major boundary ditch. Seven late 3rd–4th-century coins were clustered in a 1m x 0.8m area within another western major boundary ditch G200. The terminal of enclosure ditch G234 contained a semi-complete iron plough coulter (RA 126 Fig. 7.8) but no other material. Hingley believes that even 'single items of iron could represent significant deposits of material' (2006, 215) and it is noteworthy that the enclosure ditch was on the western periphery of the farmstead where the majority of the 'structured' deposits occur.

Perhaps slightly less convincing as 'structured' deposits were G253.4 (Farmstead 5, Phase 4) and G210.4 (Farmstead 7, Phase 5). These contained large but very mixed pottery assemblages although G210.4 did include semi-complete vessels. These could be explained as the dumping of mixed domestic debris within convenient hollows. However, other components, *e.g.* a partial dog skeleton in G253.4, and their spatial location — G253.4 is near a deposit containing human bones and G210.4 is in an area where large quantities of metallurgical residues were deposited — hint at an alternative interpretation.

At Silchester, Fulford commented that 'the incidence of placed deposits in pits and wells represents a persistently recurring feature' (2001, 207) and he made a similar observation about Baldock, Herts. (2001, 209). It is, therefore, interesting that the majority of the 'special' deposits identified during excavation at Marsh Leys were in ditches. However, two possible 'structured' deposits in pits were identified during post-excavation analysis. Pit G328 (L48, Farmstead 5, Phase 4) produced 7.9kg of pottery — the single largest assemblage from any feature on the site — and two conjoining fragments of a possible iron knife (RA 243) which may have been deliberately broken. (By contrast, the very similar adjacent pit G327 (Pl. 4.9) produced only 0.5kg of pottery.) Pit G333 (L44, Farmstead 7, Phase 5) produced 1.8kg of pottery, including fragments from a white ware costrel and a semi-complete grey ware vessel which may have been deliberately placed on top of a large sherd from another vessel (Pl. 5.2). It is uncertain why the excavators did not identify these two deposits as 'special'. However, it is possible that they were subconsciously predisposed not to characterise unusual deposits in pits as 'special' because pits were 'expected' to contain large quantities of pottery, artefacts and animal bone.

VI. Economy

On low-lying land in the vicinity of the Elstow Brook, the Marsh Leys farmsteads were in a good topographical location for a mixed farming economy. As at Great Barford 'the apparent absence of larger field systems may indicate either extensive areas left unenclosed as permanent pasture or that many arable fields did not require drainage ditches' (Poole 2007b, 149). In terms of non-agricultural activities there was significant evidence for smithing and more meagre evidence for bronze, textile, wood and bone working.

Cultivation

The charred and waterlogged plant remains from the excavations provide only a general picture of the crops grown on the site. No significant evidence was recovered from pre-late Iron Age (Phase 2) deposits, so it is unclear if arable cultivation was a component of the economy at that time.

For the later periods, the evidence for cultivated plants and background flora is closely comparable to the nearby farmsteads at Biddenham Loop (Luke 2008, 63) and Luton Road Wilstead (Robinson 2010, 149–50), and further afield at Haddon, Cambs. (Fryer 2003, 133). The weed assemblage suggests that soil fertility in some parts of the farmsteads may have been quite low (see Chapter 8.II Charred and waterlogged plant remains). However, spelt wheat was the dominant species and was identified in all phases of the farmsteads. Barley, including the six-row hulled type, and oats were also present. The occurrence of free-threshing rivet or bread wheat indicates that bread formed part of the cereal diet in the Romano-British period (Phase 4). It is possible that flax, which is likely to be under-represented in the archaeological record, was a major non-cereal crop that continued to be grown into the later Romano-British period (Phase 5). There is some evidence to suggest that more grassland was managed in the later Romano-British period (Phase 5), presumably to provide hay for winter fodder.

The cultivation and processing of cereals, specifically spelt wheat, seems to have been a major activity on the farmsteads. The majority of the charred plant assemblages represent a general background scatter of processing debris, including waste from the de-husking and final cleaning of weed seeds. One sample from Farmstead 4 contained pure grain and is perhaps the result of fully cleaned wheat having been accidentally burnt.

All the farmsteads produced evidence for crop processing in the form of fragments of querns. In addition, Farmstead 3 contained a millstone skirt fragment and Farmstead 4 contained a large portion of an upper millstone. Direct evidence for cultivation was found in the form of an iron plough coulter (Fig. 7.8). These were designed to cut the sod vertically in advance of the share which cuts horizontally (Rees 1979, 61). The only other agricultural implement of note is an iron pruning hook.

Animal husbandry

The pattern of species representation at Marsh Leys is fairly typical of Romano-British rural settlements (King 1999). Cattle were dominant (varying from 58%–55%), followed by sheep/goat (23%–36%) with a low incidence of horse and pigs, as at Biddenham Loop (Maltby 2008) and Haddon (Baxter 2003). No significant changes in these proportions were identified over time.

King 1984 argued that cattle tend to be less well represented on Romano-British rural settlements when compared to urban and military assemblages. However, as at Marsh Leys, cattle were predominant over sheep/goat on many sites in the Ouse Valley *e.g.* Biddenham Loop (Maltby 2008), Stagsden (Roberts 2000) and beyond *e.g.* Wavendon Gate (Dobney and Jaques 1996). However, there is a minority of sites, *e.g.* Great Barford site 8, where sheep/goat were clearly the dominant species (Holmes 2007, table 10.21). The environs of Marsh Leys would have provided excellent conditions for the raising and pasturing of cattle. The large size and characteristics of the cattle bone assemblage from pits L21/22 and L25 (Farmstead 3) and L48 (Farmstead 5) suggest that carcass processing was carried out in the same general area over a considerable period of time, despite re-design of the Farmstead 5 enclosure system. Butchery marks indicate a

trend towards greater reliance on the use of cleavers. This has been noted on other contemporary rural settlements, such as Biddenham Loop (Maltby 2008, 283) and Wavendon Gate (Dobney and Jaques 1996, 219–20). Cattle of all ages were found, suggesting that they were not just kept for meat.

The presence at Marsh Leys of several sheep that had been culled at a young age, prior to attaining full size, indicates the slaughtering of surplus, immature stock. Adult ewes no longer required for breeding were also present. Some sheep were culled at an ideal age for meat (2–3 years); other animals of this age may have been sent to market. In the later Romano-British period (Phase 5) there may have been a greater emphasis on keeping sheep alive longer, both for the local consumption of meat and the production of wool. This is evidenced on Farmstead 7 which produced a fairly even distribution of specimens of various ages rather than predominantly immature sheep.

Horse outnumbered pig, which is not an uncommon occurrence on later Iron Age and Romano-British rural sites, *e.g.* Haddon, Cambs. (Baxter 2003, 120). Most of the Marsh Leys horse bones belong to older, mainly adult animals suggesting that they were not primarily exploited for their meat and would have been valued as transport animals, possibly also serving a ranching function associated with the herding of other animals. The presence of foals indicates that the inhabitants may have been breeding horses.

The dog bones appear to represent depositions of complete carcasses and there is no evidence that any of the bones were butchered. Presumably they were kept as farm dogs. The presence of small dogs in Phase 5 is interesting because they are more common on higher status sites (see below).

Excluding the ritual deposit in G96 (Phase 4), the quantity of domestic fowl bones at Marsh Leys was very low. This fits a general trend which indicates that they are rarer on rural, lower status settlements than in Roman towns and villas (Maltby 1997, 421). This is illustrated by the relatively high percentage of domestic fowl at the higher status settlement at Shefford, Beds. (Maltby 2010, 320).

Indirect evidence for animal husbandry is indicated by the presence of trackways, which may have served as droveways for controlling the movement of stock, and by the number of non-domestic enclosures. Some of the latter may have existed to provide short-term holding pens for animals perhaps on a seasonal basis. A number could have functioned as paddocks.

Wild resources

Woodland was available as a source of timber and, at least to a limited extent, as a source of hazel nuts. Much of the fuel, including that used for human cremations in the late Iron Age/early Romano-British period (Phase 3), was obtained from the clearance of thorn scrub or the cutting back of hedgerows. The charcoal present in later Romano-British (Phase 5) samples shows that woodland was still available, although again, scrub or hedges continued to supply wood for fuel. It is possible that some of the woodland would have been managed to ensure supplies of suitable wood.

With the exception of a hedgehog, no wild mammal or fish bones were identified, suggesting that they were not exploited by the inhabitants of the Marsh Leys farmsteads. Given the extensive sieving programme, if wild species had been consumed on the site, their remains would have been found. The absence of fish at Marsh Leys is particularly notable because the farmsteads were located within 300m of the possible course of the Elstow Brook. Dobney and Ervynck's article on fish consumption around the North Sea concludes that the absence of fish on Iron Age sites was 'a real phenomenon, not merely an artefact of various taphonomic processes' (2007, 409). They argue that this was probably the result of the way 'communities perceived and classified the natural world', and they also suggest that there is evidence for an increase in the consumption of freshwater fish on sites in inland England in the Romano-British period (Dobney and Ervynck 2007, 408, 409), although there is no evidence for this at Marsh Leys. Similar absences have been noted on comparable sites in the region and are discussed below in connection with the 'status' of the farmsteads.

Crafts

The majority of the evidence for non-agricultural activities is associated with iron working and specifically smithing. There is also limited evidence, mainly from the artefact assemblage, for textile, wood and bone working, but there was no evidence for pottery manufacture. This is perhaps surprising, given the presence of clay at a shallow depth across the site. It is possible that the occupants of some farmsteads specialised in a specific craft, *e.g.* blacksmithing at Marsh Leys, pottery manufacture at another, with the need for particular goods met through purchase or exchange.

Iron working

(Fig. 9.16)

Nearly 38kg of metallurgical residues were recovered; the material is indicative of iron working (blacksmithing) in clay-lined hearths. The variability in the slags, specifically the smithing hearth cakes, suggests a variable workload.

In Phases 3, 4 and 5 almost all of the metallurgical residues were from the same part of the site — the northern half of Farmsteads 3, 5 and 7 (Fig. 9.16). This long-lived, small-scale smithing suggests that the same community occupied this location from the late Iron Age to the later Romano-British period. A similar pattern was identified within the nearby settlement at Kempston Church End, where specific smithing areas remained in use from the early 2nd to the early 4th century (Dawson 2004, 54). The presence of iron working in the earliest farmstead is of interest because it has been suggested that the expansion of settlements into thinly-settled areas was frequently linked with craft specialisation (Haselgrove *et al.* 2001, 29). Other than the presence of a source of fuel, assuming woodland survived around the Marsh Leys farmsteads, it is difficult to see any other advantages in undertaking iron working in this area.

The iron working area at Marsh Leys appears to have always been located away from the farmsteads' domestic foci (Fig. 9.16), as it was at Bancroft (Williams and Zeepvat 1994, 195–6). Hingley noted 'that during the later Iron Age distinct smithing areas were being established on sites' and 'that these areas were often situated in the periphery of enclosed sites' (1997, 12), for which Henderson suggested both practical and symbolic reasons (1992, 114). Given the fire risk and the disagreeable fumes, it is not surprising that at Marsh Leys the iron

Figure 9.16 Distribution of metallurgical residues across Farmstead 3 (Phase 3), Farmstead 5 (Phase 4) and Farmstead 7 (Phase 5). Not at standard scale

working area was located downwind of the domestic foci to the north or north-east (Fig. 9.16). However, this pattern is not universally observed (Hingley 1997, 13). Hingley also suggested that iron smithing may have had magical and symbolic associations which may have influenced its location within settlements. He noted a preference for locations near entrances and in positions for which a cosmological basis could be adduced. The material from Marsh Leys cannot really contribute to this debate, although in Farmstead 3 (Phase 3) and Farmstead 5 (Phase 4) metallurgical residues were concentrated near possible routeways. If the regenerative principle for iron working suggested by Hingley is valid, then a location near a routeway or on the margins of a settlement could be associated with 'the process of giving birth to iron at a place of passage' (Hingley 1997, 13).

Most of the metallurgical residues at Marsh Leys were recovered from Farmstead 7 (Phase 5) — particularly ditch length G220, which also produced large quantities of charcoal, fragments of burnt limestone and hammerscale, indicative of a primary dump from nearby smithing. One of the pieces of limestone was a large single block, which may have been associated with the forge. The ditch also contained a relatively large number of broken iron artefacts such as nails, knife blades and miscellaneous fragments of sheet/strips/bars which is suggestive of scrap metal collected for reworking. A similar interpretation was put forward for a comparable group of iron objects found in pits at Kempston Church End (Dawson 2004, 54).

The actual scale of iron working is not easily deduced from the quantity of metallurgical residues recovered. However, it is noticeable that Marsh Leys produced more than the *c.* 19kg at Kempston Church End, *c.* 26.5kg at Ruxox, (both Wells *et al.* 2004, 387–9) and *c.* 25.6kg at Bancroft (McDonnell 1994, 376–9). However, some sites in the region are known to have produced considerably larger quantities, *e.g.* 80kg from Hacheston, Suffolk (Starley 2004, 141–3).

Evidence for iron smithing at contemporary sites in the vicinity is restricted to Kempston Church End (Dawson 2004, 54). No or only very limited evidence was found at the farmsteads on the Biddenham Loop (Luke 2008, 64), Great Barford Bypass (Poole 2007b, 154) and Luton Road Wilstead (Luke and Preece 2010, 153). This pattern suggests that specific farmsteads in a locality specialised in iron working, just as some may have specialised in pottery manufacture (see below).

Other craft activities

There was limited evidence for textile, wood, bone and bronze working. Five spindle whorls in lead and chalk were recovered, although only one was from a stratified deposit. Their respective weights suggest that three were for spinning wool and two for spinning a lighter yarn. A single fragment of an iron saw blade from Farmstead 5 is the only evidence for wood working. The longitudinal split on a cattle bone from Farmstead 7 (Phase 5) is indicative of bone working rather than just marrow extraction. Small pieces of waste or run-off and a casting gate from Farmstead 7 (Phase 5) are the only evidence for bronze working.

VII. Environment

Throughout the Romano-British period the Marsh Leys farmsteads were located in a relatively open landscape, although many of the enclosures and fields had hedges running alongside them. Much of the fuel, including that used for human cremations in the late Iron Age/early Romano-British period (Phase 3) and for the iron working activity in the later Romano-British period (Phase 5), was obtained from woodland, the clearance of thorn scrub or the cutting back of hedgerows. Woodland was also present as it provided a source of timber and, at least to a limited extent, a source of hazel nuts. Its precise location in relation to the farmsteads is unknown. However, one possible explanation for the apparent absence of fields away from the farmsteads is that this area contained woodland or scrub regeneration.

The snails and plant remains suggest that the water table was relatively high, which would have aided the provision of water for cattle. Water was supplied from fairly shallow wells and water pits that held stagnant water. These varied in depth but were generally shallower in the later periods, possibly suggesting a rise in the water table. However, no direct evidence for flooding was identified, although the presence of blinks suggests that puddles or seasonal muddy patches on the surface of fields were common. The high water table enabled the snail *Lymnaea truncatula*, which spreads sheep liver fluke, to thrive in the enclosure ditches. However, sheep bones constantly represented between 23% and 35% of the identified mammal elements suggesting this was not a huge problem for the occupants of the farmsteads.

Vetch and tare were identified from the late Iron Age/early Romano-British period (Phase 3) onwards, suggesting the presence of soils with low nitrogen levels. Although the soil fertility was perhaps rather low, the cultivation and processing of spelt wheat remained a major activity throughout the farmsteads' existence. The presence of scentless mayweed and sheep's sorrel attests to the cultivation of lighter, well-drained soils, as does the absence of plants like spike rush.

The plant remains included henbane, a poisonous weed, and indicate the presence of both farmyard middens and weedy, neglected and trampled ground around some of the buildings in the enclosures. The presence of decaying organic material, including manure, is also indicated by the presence of dung beetles.

VIII. 'Status' and 'Romanisation'

Some evidence for the 'status' of the occupants of the Marsh Leys farmsteads can be derived from the structural, artefactual and ecofactual data-sets. 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 'status' is inextricably linked to the occupants' adoption of Roman culture and the two may not necessarily be directly linked.

It has been suggested that the switch from roundhouses to rectangular buildings could represent 'the desire of individuals or families to acquire symbols of wealth and civilization' (Hingley 1989, 34). On this basis it may be significant that at Marsh Leys, although this change did take place, it did not happen immediately after

the conquest but rather in the middle of the 2nd century. However, nationally 'there has been an increasing recognition that the roundhouse was a much more enduring feature of the Romano-British landscape' (Mattingly 2007, 375). There are a number of farmsteads in the vicinity where roundhouses continued in use throughout the Romano-British period, *e.g.* Biddenham Loop (Luke 2008, 58) and Luton Road Wilstead (Luke and Preece 2010, 153). Mattingly believes 'roundhouses should not automatically be viewed as low-status or poor dwellings' (2007, 375). Others have also suggested that the straightforward equation of building form and status does not work (see Taylor 2001, 49–50). This is particularly clear in areas of non-villa settlement, like the central Fenland, where wealth takes the form of portable material items rather than 'obvious and overt symbols of status such as winged corridor buildings, courtyard buildings, mosaics, tessellated floors or bath-houses' (Hingley 1989, 159). Hingley goes on to say: 'clearly some farmers were using their wealth for other purposes, and villas were not the only type of status symbol available to them'. Therefore, although the change from roundhouse to rectangular building at Marsh Leys is significant in terms of a move away from a traditional building style, the new buildings may not have been any more comfortable or expensive to build than the older style.

Major boundaries defining the edges of enclosure systems have been identified at Marsh Leys, Luton Road Wilstead (Luke and Preece 2010, 152) and Wavendon Gate (Williams *et al*. 1996, 83), where they could be interpreted as land ownership divisions. The absence of such boundaries at Biddenham Loop led to the suggestion that the farmsteads belonged to a single estate and, therefore, did not require demarcation (Luke 2008, 58). While the inhabitants of the Marsh Leys farmsteads may have been owner-occupiers, they were not necessarily any wealthier than their counterparts on the Biddenham Loop.

It is clear that ritual and religious activities took place within the Marsh Leys farmsteads, most obviously from the presence of the possible shrine. It is uncertain if this is a reflection of the status of the inhabitants, because shrines in the form of separate buildings mainly occur within larger settlements or in isolation, rather than within farmsteads as at Marsh Leys. On the Biddenham Loop, shrines were located in a ritual complex away from the farmsteads, suggesting that they may have served a wider community (Luke 2008, 53–5; Albion 2008d). It could be tentatively argued that the existence of the shrine *within* one of the Marsh Leys farmsteads indicates that the inhabitants were not part of a larger estate but were owner-occupiers. Ritual activity, in the form of animal burials and artefacts associated with a solar cult, were identified at Wavendon Gate (Williams *et al.* 1996, 62, 68, 69–70) but the site was nonetheless still considered to be a farmstead (Williams *et al.* 1996, 61).

The regional and continental components of pottery assemblages have sometimes been used to elucidate site status. The Marsh Leys assemblage is characterised by domestic and utilitarian types and forms, dominated by locally-made coarse wares. Regional imports constitute 8% of the assemblage which is comparable to that recovered from the farmstead at Luton Road Wilstead (Wells 2010a, 136), but is almost double that recorded at other contemporary rural sites, such as Biddenham Loop (Wells 2008, 271) and Hill Field, Wilshamstead (Wells 2010b, 200). However, continental imports made up only 2% of the Marsh Leys assemblage which is comparable to that recovered from other contemporary rural settlements in the vicinity, such as Biddenham Loop (Wells 2008, 271), Luton Road Wilstead (Wells 2010a, 136), and Hill Field, Wilshamstead (Wells 2010b, 200). The percentages of continental imports at these rural settlements are significantly lower than the 5% found at the nearby Kempston Church End Romano-British large planned village (Dawson 2004, table 9.21) and may, therefore, reflect a difference in wealth between the occupants of these two different types of settlement. Of course, there may be other reasons for this variation, including access to markets and whether the inhabitants actually wanted these types of pottery.

Small numbers of a wide range of everyday objects were recovered from Marsh Leys, including jewellery, hair pins, coins, hobnail shoes, a glass bead and fragments of vessel glass. These items are found on farmsteads such as Luton Road, Wilstead (Luke and Preece 2010, 155) and are not restricted to higher status sites such as Gorhambury, Herts. (Neal *et al*. 1990, 113). Glass objects occur at Marsh Leys in small quantities but only in the later phases of the farmsteads (Phase 4 and 5).

Small quantities of shells from marine oysters are present within all phases of the Marsh Leys farmsteads. However, as with the greater variety of everyday objects, this may simply indicate access to a market, perhaps at Kempston Church End, rather than reflecting the 'wealth' of the occupants.

The absence of wild animal bone suggests that hunting or fishing were rarely undertaken by the inhabitants of the Marsh Leys farmsteads. The limited evidence for fishing on Iron Age sites around the North Sea has been discussed above (see Section VI). Regionally, wild species are either absent or found in small numbers, *e.g.* Biddenham Loop (Luke 2008, 64), Great Barford Site 4 and 8 (Holmes 2007, 358), Haddon (Baxter 2003, 129) and Orton Hall Farm, Cambs. (King 1996, 218). However, larger numbers of wild animal bones occur on so-called higher status settlements, *e.g.* Shefford (Maltby 2010, 320) and Gorhambury (Locker 1990). Mackreth suggested for Orton Hall Farm that deer may have been 'reserved only for the highest classes' (1996, 225). It has also been suggested that the occupants of the Biddenham Loop farmsteads either didn't have the time or the rights to undertake hunting (Luke 2008, 57) and perhaps the situation was the same at Marsh Leys.

A number of pieces of evidence in the ecofactual data-sets could be used to suggest that the later Romano-British Farmstead 7 (Phase 5) was of a higher status than is suggested by the artefactual and structural evidence. The presence of small lap-dogs, identified in the animal bone assemblage, is unusual and is considered to be more common on higher status sites (Harcourt 1974; Dobney and Jaques 1996, 223). However, a miniature or lap-dog was found within one of the farmsteads at Biddenham Loop (Maltby 2008, 284). Walnuts were recovered from Farmstead 7. They are more commonly found in towns and villas, although they were also found on the Bedford Southern Bypass investigations at Eastcotts (Albion in prep. b), perhaps indicating that they were grown locally rather than imported. The presence of box leaves within Farmstead 7 could imply the existence of ornamental hedges. This

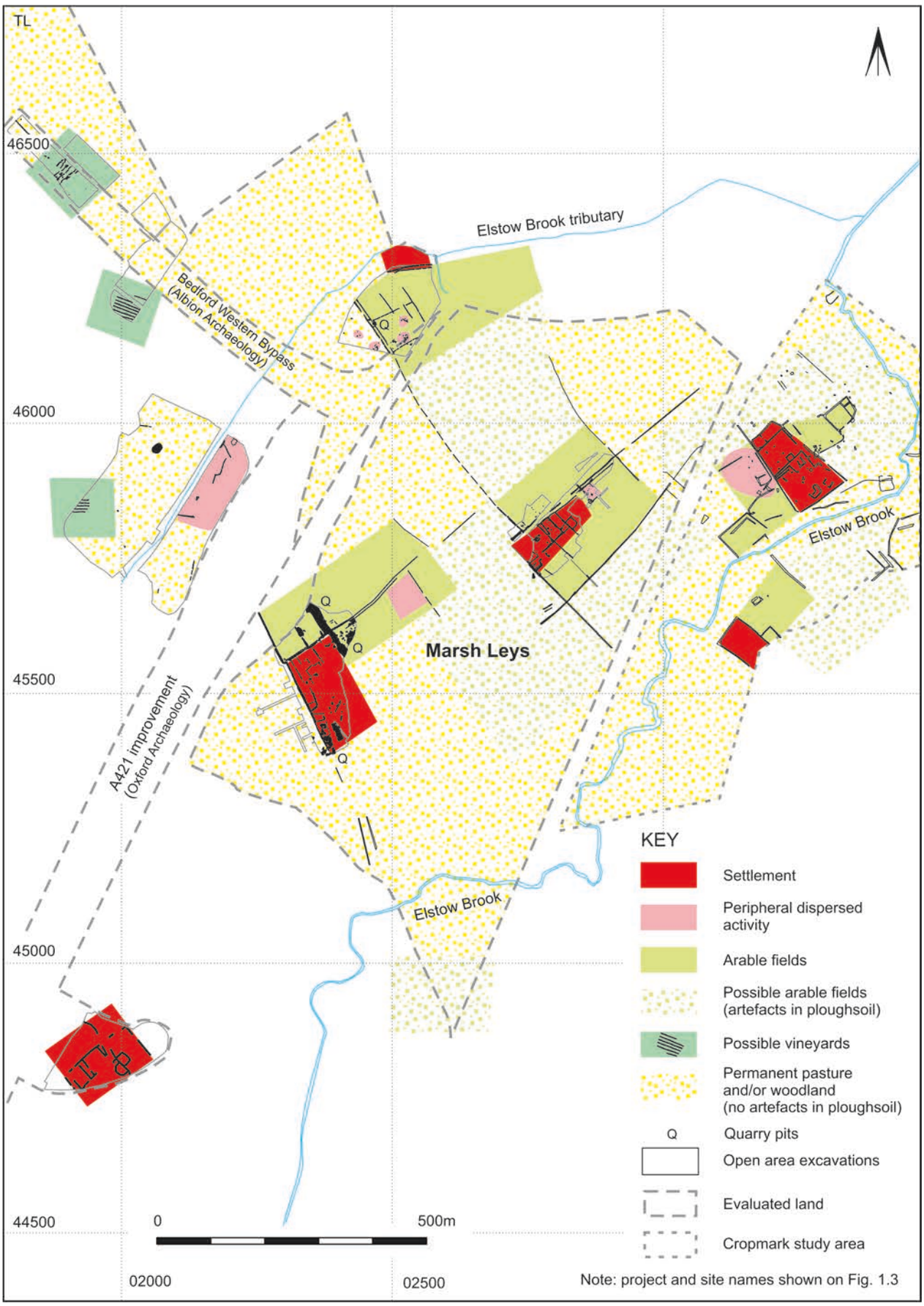


Figure 9.17 The Romano-British environs of Marsh Leys. Scale 1:10000

would be surprising because they are more usually found on high status sites (see Cunliffe 1971, 128 for discussion of gardens and box hedges). However, box was also noted on the farmstead at Farmoor, Oxon., where its presence was considered to indicate the existence of ornamental hedges (Lambrick and Robinson 1979, 121); its simply growing wild was considered a remote possibility because its favoured habitat is chalk and limestone scarps. It is, however, possible that bushes of this shrub were being cultivated at Marsh Leys — perhaps for a religious significance attached to its evergreen leaves. Taken separately, it is possible to dismiss each of these pieces of evidence; yet when considered together, it is striking that they all derive from the same farmstead, perhaps indicating that its occupants had achieved a higher 'status' than their predecessors.

IX. The farmsteads in the wider landscape

Overview

The farmsteads were located on the edge of the Marston Vale, one of the Oxford Clay areas of Bedfordshire. There was no evidence for Romano-British activity from Marsh Leys at the time of Simco's (1984) survey of Roman Bedfordshire. This was the 'norm' for the Bedfordshire claylands, leading to the belief that they were 'largely unsettled in the Roman period' (Simco 1984, 21). Since then, there has been a dramatic increase in the number of Romano-British sites identified in Bedfordshire in general and specifically on the Oxford Clay (see Poole 2007b, 145–9; Luke and Preece 2010, 156). It is now believed that in some parts of the county, settlements occurred at intervals of 0.5–2km, *e.g.* the Great Barford Bypass (Poole 2007b, 148–9). This is comparable to settlement densities on the Great Ouse gravels, *e.g.* on the Biddenham Loop where sites occurred at intervals of *c.* 350m–1.2km (Luke 2008, 57), and along the River Ivel near Broom (Cooper and Edmonds 2007, fig. 6.4).

The immediate environs of the Marsh Leys farmsteads (Fig. 9.17)

The scale of the evaluation at Marsh Leys and the results of a number of nearby, developer-funded projects (see Fig. 1.3) have, together, considerably enhanced our understanding of the farmsteads' environs. Figure 9.17 is interpretive, based on a combination of both solid and more circumstantial evidence, but it tries to give an impression of the landscape around the farmsteads. The evidence for settlements, peripheral dispersed activity, arable field systems, trackways, possible vineyards and quarry pits is largely derived from open-area excavation. However, much of the rest of the landscape is reconstructed from the results of non-intrusive evaluation, which are notoriously unreliable on the clays west of Bedford. The absence of Roman artefacts in areas subject to field artefact collection has been used to postulate the location of permanent pasture or woodland. In the absence of information on the course of the Elstow Brook and its tributary during the Roman period, their modern locations are shown.

The Marsh Leys farmsteads were located in similar topographical positions, *c.* 400m apart on the north side of the Elstow Brook, a tributary of the River Great Ouse. Approximately 450m to the east there is clear cropmark evidence for another settlement, similar in nature to those at Marsh Leys (Fig. 9.17). It appears to be located closer to the Elstow Brook, although the latter's precise course at this time is uncertain. Approximately 750m to the south-west another farmstead has recently been partially revealed on the A421 improvement scheme (Oxford Archaeology in prep.). Some evidence for the existence of another settlement was identified on the very periphery of Bedford Western Bypass Area 11 (Albion 2008a, 47). It would have been located to the north of Marsh Leys on low-lying land adjacent to the Elstow Brook tributary, in a similar topographical position to the Marsh Leys farmsteads. How, if at all, these sites relate to the Marsh Leys farmsteads is uncertain but it may be significant that one of the major boundaries on Farmstead 4 corresponds with a trackway/major boundary on Bedford Western Bypass Area 11 (see below). The Marsh Leys investigations and the cropmark evidence to the east suggest that many of the major boundaries of these settlements were aligned broadly at right-angles to, or parallel to, the Elstow Brook. Several are known to extend for over 300m across the landscape and may represent property boundaries. The one between Farmstead 4 at Marsh Leys and Bedford Western Bypass Area 11 runs for *c.* 530m (Albion 2008a, 53) (Fig. 9.17).

Although geophysical survey did not identify significant anomalies away from the farmsteads, the evaluation trenches and mitigation transects did locate activity foci on the periphery of the settlements (see Fig. 9.1 and 9.4). However, because the ditches and pits in these areas contained only small quantities of datable domestic debris, they are difficult to interpret. Another such area was found within Bedford Western Bypass Area 13 (Albion 2008c, 53) (Fig. 9.17), although it is uncertain if it was in the vicinity of another farmstead.

A field system covering at least 2.5ha was identified *c.* 450m to the north of Marsh Leys within Bedford Western Bypass Area 11. It comprised an arrangement of large, rectangular fields, incorporating two trackways (Albion 2008a, 53–4). At some point one of the trackways went out of use and became the focus of gravel quarrying. Ultimately, the original fields were sub-divided into smaller strips of land. Given the proximity of another probable settlement, it is unlikely that this field system was associated with the Marsh Leys farmsteads, even though it was linked to Farmstead 4 by a trackway/major boundary.

A low-level scatter of Romano-British pottery was found during field artefact collection at Marsh Leys; the main concentration was over the eastern farmstead site. At both Marsh Leys and on the Bedford Western Bypass, areas that were devoid of surface artefacts may indicate the location of permanent pasture or woodland (Fig. 9.17).

To the north-west of the Elstow Brook tributary, three areas of parallel trenches, on *c.* 5.5m spacings, have been dated to this period (Albion 2008a, 53; Albion 2008c, 30). They covered areas of *c.* 50m x 50m and did not appear to be connected, although their full extent was not determined. They have been interpreted as bedding trenches; an association with viniculture has been suggested for comparable features at Wollaston, Northants. (Meadows 1996) and Caldecote, Cambs. (Kenney 2001).

As at Marsh Leys, the evaluation trenches on the Great Barford Bypass produced sparse and 'debatable' evidence for fields, trackways and other dispersed features (Poole 2007b, 149). The apparent absence of larger systems of fields away from farmsteads has been touched on above

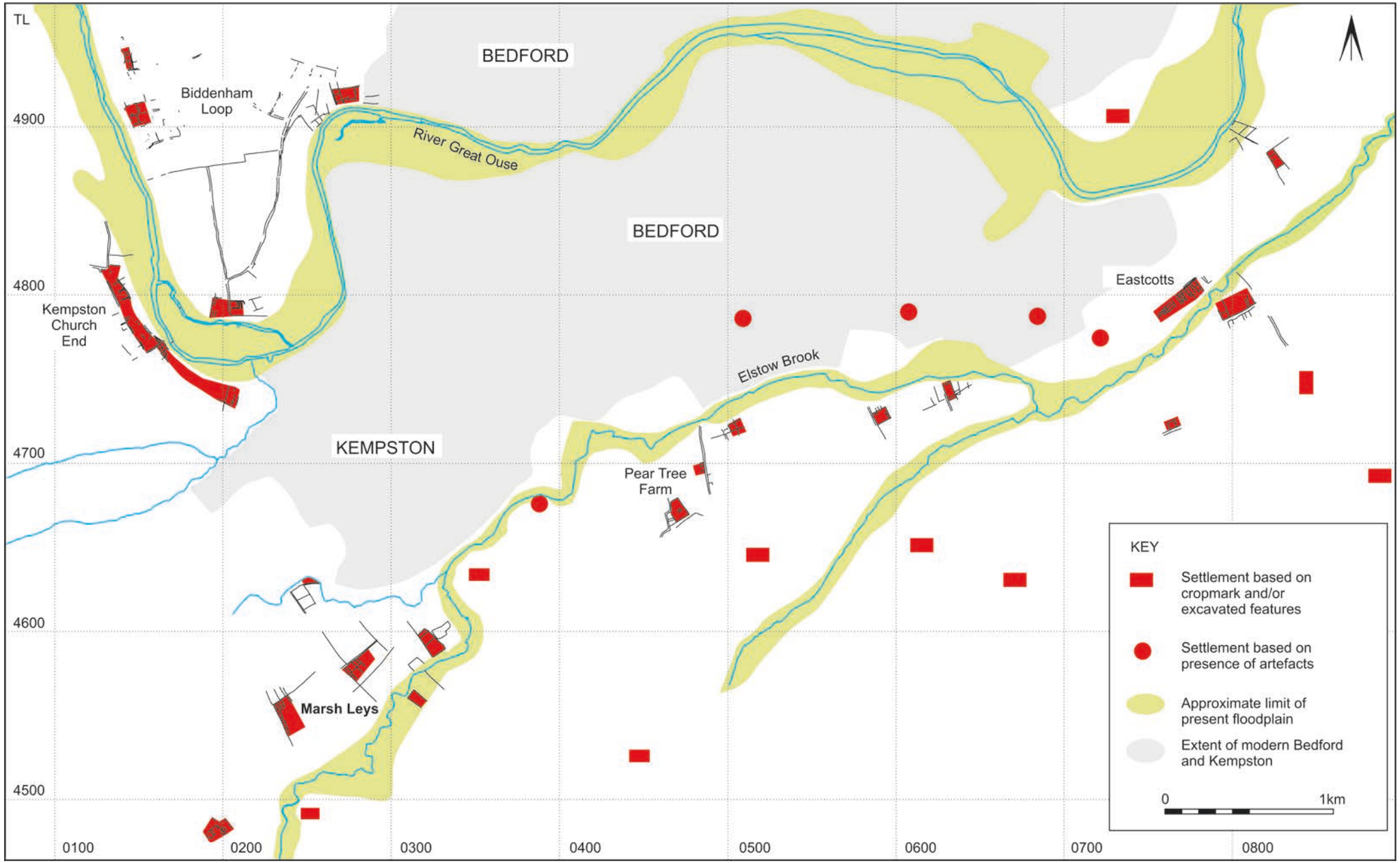


Figure 9.18 The Romano-British landscape along the Elstow Brook. Scale 1:30000

(see VI Economy). It, like the absence of feature concentrations, could be variously taken to indicate the presence of woodland, unenclosed permanent pasture or even arable fields which did not require drainage/ boundary ditches (see Poole 2007b, 149). For this reason the types of landscape use depicted on Figure 9.17 will always be, to some extent, indicative. It is also impossible to be sure how much of the peripheral activity — trackways, field systems and/or quarrying — was directly associated with the Marsh Leys farmsteads. A simplistic view would be that the occupants utilised all the land between the Elstow Brook and its tributary to the north. However, the presence of another possible settlement within Bedford Western Bypass Area 11, adjacent to the tributary, hints at a more complex situation. However, it is clear that the environs of the Marsh Leys farmsteads were intensively exploited for a diverse range of activities.

Settlement patterns along the Elstow Brook
(Fig. 9.18)

On both the north and south sides of the Elstow Brook, especially downstream of Marsh Leys, there seems to have been a string of settlements, probably *c*. 0.5km apart, in similar topographical locations (Fig. 9.18). The outskirts of modern Bedford make it very difficult to determine their precise location and nature on the north side of the Brook. However, even here, a number of discoveries have demonstrated their existence, *e.g*. Dring 1971 and 1972. Several settlements on both sides of the brook were identified and in some cases investigated prior to construction of the Bedford Southern Bypass (BCAS 1995).

The settlement pattern along the Elstow Brook upstream of Marsh Leys is less clear. However, on the basis of cropmark evidence, investigations around Marston Moretaine (Edwards and Wells in prep.; Albion 2004; Shotliff and Crick 1999; Connor 2000) and recent discoveries within the A421 improvement scheme, it seems likely that a similar string of farmsteads on either side of the brook awaits discovery.

Appendix I. Pottery type series

by Jackie Wells

Fabrics are summarised below by chronological period, using type codes and common names in accordance with the Bedfordshire Ceramic Type Series, currently held by Albion Archaeology. Where relevant reference has been made to the National Roman Fabric Reference Collection handbook (NRFRC; Tomber and Dore 1998), where comprehensive descriptions can be found. Bracketed figures after each fabric type denote a percentage of the total excavated assemblage; percentages are only noted for fabric types constituting over 1% of the assemblage. An asterisk denotes fabrics identified from both excavation and field artefact collection.

I. Early to middle Iron Age

Type F03 Grog and sand
Fabric: hard to medium fired, generally smooth to the touch, occasionally with a slightly sandy feel. Variable colour ranging between grey-black to dull buff-orange. Contains frequent buff or dark grey subrounded grog 0.5–2.0mm; common, well-sorted, subrounded or rounded quartz, 0.1–0.5mm; very occasional calcareous inclusions, 0.5–0.7mm (possibly crushed shelly pot). Also sparse, rounded black and red iron ore, 0.2–0.5mm and elongated black voids where organic matter, probably chopped straw or grass, has burnt out.

Forms: undiagnostic handmade body sherds.

Comments: originating in the early-middle Iron Age and continuing into the late Iron Age contemporaneously with wheel-thrown late Iron Age pottery.

Type F14 Fine mixed inclusions
Fabric: fairly hard, moderately smooth fabric, sometimes with a lumpy feel. Usually dark grey in colour, but with occasional buff-orange to grey-brown patchy surfaces. Contains sparse to moderate, poorly sorted shell. 0.3–1.0mm; moderate, poorly sorted, subangular to subrounded orange-buff or grey grog, 0.5–2.0mm; sparse to moderate, moderately sorted, subrounded quartz, 0.2–0.5mm; elongated black voids where organic matter has burnt out and very occasional subangular black iron ore, 0.5–3.0mm. Additionally, some examples also contain rare angular flint, approx. 0.5mm. The fabric is characterised by it highly mixed, poorly sorted suite of inclusions, which vary greatly in their proportions between vessels.

Forms: undiagnostic handmade, perforated (pre-firing) base sherd.

Comments: originating in the middle Iron Age and continuing into the late Iron Age contemporaneously with wheel-thrown late Iron Age pottery.

Type F28 Fine sand
Fabric: hard-medium fired, sandy or occasionally harsh to feel with even fracture. Variable colour, can be dark-grey throughout, or have mid brown or reddish brown surfaces. Contains abundant, well-sorted, rounded or sub-rounded, clear or milky-white quartz 0.1–0.4mm (occasionally up to 0.8mm); sparse, well-sorted, rounded, black and red iron ore 0.2–0.5mm. Additionally, the matrix may contain sparse, greenish glauconite inclusions 0.1–0.2mm.

Forms: undiagnostic handmade body sherds.

Comments: originating in the late Bronze Age/early Iron Age and continuing into the middle Iron Age.

II. Late Iron Age

Type F05 Grog and shell* (2.4%)
Fabric: hard to medium fired, smooth with a soapy texture. Colour varies from dark grey throughout, to varying shades of buff or mid-brown. Contains common, well-sorted, subrounded, buff or dark grey grog, 0.5–0.8mm and common to sparse, plate-like fossil shell (or voids, where leached), 0.3–0.8mm. May also contain sparse quantities of fine quartz and black or red iron ore.

Forms: lid-seated jars, storage jars; single examples of a cordoned jar, bead rim jar, plain rim bowl and beaker. Both wheel-thrown and handmade vessels occur. Decoration comprises horizontal combing and grooves, and random combed motifs.

Type F06 Grog* (5.1%)
Fabric: soft to medium hard and soapy to the touch, with an even fracture. Variable surface colour which ranges from orange-brown to grey-black; with a buff-dark grey core. Contains frequent, rounded and well-sorted dark grey or buff grog inclusions, sparse fine well sorted quartz and red or black iron ore. Three sub-divisions of this type have been defined, based on the size and frequency of the grog inclusions; F06A 0.1–0.5mm; F06B 0.5–1.5mm and F06C *c*. 1.5–4mm. All occur at Marsh Leys.

Forms: F06A: (fine): butt beaker, lid, jars with undercut and bead rims, cordoned, everted and narrow necked jars, with cordons and incised lattice decoration. One base sherd has been modified with post-firing perforations. Three vessels are deliberately oxidised.

F06B: (medium): lid-seated, cordoned, narrow necked and neckless jars, lids, a plain rim bowl, and jars with bead and everted rims. Decoration comprises cordons and incised horizontal grooves. Nine vessels are deliberately oxidised.

F06C: (coarse): storage jars, roll rim jars, cordoned and neckless jars, a lid-seated bowl, and jars with bead and everted rims. Decoration comprises horizontal and vertical combing, linear and wavy incised motifs, and random combing. Predominantly wheel-made, although handmade examples are known.

Type F07 Shell (7.0%)
Fabric: fairly hard fired, usually oxidised throughout to a bright orange-buff colour, although pale orange-brown or grey examples also occur, with occasional pale buff or cream cores. Contains abundant, well sorted rounded shell 0.1–0.3mm and frequent moderately sorted elongated shell 0.4–6mm. Larger shell inclusions often leach out of the fabric, leaving a 'corky' appearance to the surfaces. Also contains sparse moderately sorted, rounded multi-coloured quartz 0.5–1.0mm, sparse poorly sorted red iron

ore 0.1–0.4mm and rare elongated black voids where organic matter has burnt out.

Forms: handmade, sometimes wheel-finished, storage jars and lid-seated vessels with vertical and/or horizontal combing, horizontal grooves, and finger nail slashing.

Illustration: Fig. 7.3 P20.

Type F08 Shell and grog

Fabric: fairly soft and smooth; generally buff-grey in colour throughout, although external surfaces may be patchy orange. Contains frequent moderately sorted, subangular shell 0.1–0.8mm; frequent moderately sorted, subrounded grog 0.1–0.6mm, some ranging to 1.5mm, and moderate poorly sorted, elongated shell 1.0–2.0mm. Also sparse poorly sorted, multi-coloured subangular quartz 0.1–0.2mm. Fine voids are often visible due to the weathering out of shell and grog tempering.

Forms: lid-seated jar with horizontal combing

Type F09 Sand and grog* (5.9%)

Fabric: hard fired, slightly harsh, reduced grey-black or grey-brown in colour throughout, with an occasional paler core. Contains abundant, subrounded buff-black grog 0.1–0.6mm, frequent, moderately sorted subangular-subrounded multi-coloured quartz, 0.2–0.6mm, and sparse fine red and black iron ore. *c.f.* Milton Keynes fabric group 47 (Marney 1989, 193–4).

Forms: lid-seated, plain and bead rim bowls, bead and everted rim jars, cordoned, lid-seated, narrow-necked and neckless jars, storage jars, platters and a lid. Decoration comprises wavy incised lines, combing, incised horizontal grooves, stabbing, finger nail slashing and burnishing. Fourteen vessels are deliberately oxidised and two have been modified with post-firing holes.

Type F24 Buff shelly

Fabric: fairly hard, smooth and moderately soapy to the touch. Typically buff throughout, with occasional dark brown or grey exterior patches and a light grey core. Contains frequent to abundant, poorly sorted, coarse shell, 0.2–2.5mm; sparse to moderate, poorly sorted, subrounded limestone fragments, 0.5–1.0mm; and sparse moderately sorted, subrounded clear quartz, *c*. 0.5mm. Surfaces often have voids where shell has leached out.

Forms: undiagnostic wheel-thrown body sherds.

Type F34 Sand

Fabric: fine, hard-fired fabric with buff-orange surfaces and variable grey core. Contains sparse, well-sorted, sub-rounded quartz 0.1–0.5mm, and occasional mica.

Forms: bead rim jars and bowls, cordoned jars and lids. Decoration comprises horizontal grooves, rouletting and burnished lattice motifs.

III. Roman

Samian identifications are by Felicity Wild and information on potters' stamps by Brenda Dickinson.

Type R01A Central Gaulish samian ware*

Fabric: NRFRC codes LMV SA, LEZ SA 1; Tomber and Dore (1998, 30–32).

Forms: bowls (forms 18/31, 31, 18/31R, 31R, 31 or 31R variant), cylindrical bowl (form 30), conical cup (form 33), dishes (forms 36, 79 and Curle 23), hemispherical bowls (forms 37 and 38) and mortarium (form 43 or 45).

Decorated ware: Figure types are cited from Oswald 1936–37 (O.) and decorative details from Rogers 1974 (Rogers). Numbers in lower case Roman numerals after the potter's name are used to denote homonyms according to the system used in the *Index of potters' stamps on samian ware* (Hartley and Dickinson 2008).

1. Form 37(?), tiny scrap probably showing the ovolo motif (Rogers B213) used by Libertus and Butrio. Hadrianic. Ph 3, L4.1, Farmstead 2.
2. Form 37, burnt, showing panel decoration with Cinnamus ii's small bowl ovolo (Rogers B231) and panels containing a festoon with his panther (O.1518) and a double medallion. Although the ovolo was also used on work in the style of Hadrianic–Antonine potters such as X.7 and Pugnus ii, who also used the panther, the beaded borders make it more likely to be the work of Cinnamus. *c*. AD 150–180. Ph 3, L7.2, Farmstead 2. Illustration: Fig. 7.4 P33
3. Form 37(?), tiny flake, showing part of the festoon (Rogers F70) used at Les Martres-de-Veyre and by Hadrianic–early Antonine potters at Lezoux. The fabric is probably that of Les Martres-de-Veyre, suggesting a date *c*. AD 100–120. Ph 4, L20.1, Farmstead 4.
4. Form 37, showing the ovolo with pin-head tongue (Rogers B105) used by the Paternus v group and other potters of the Antonine period. *c*. AD 150–190. Ph 4, L75.2, Farmstead 5.
5. Form 37, small sherd with abraded surface showing part of the bear (O.1627) used by Cerialis ii-Cinnamus ii, and probably their characteristic leaf-tip space filler. *c*. AD 135–170. Ph 4, L35.2, Farmstead 5.
6. Form 30, two fragments, one, with rivet hole, showing the ovolo Rogers B143 or 144, probably the former, used on bowls in Cinnamus ii's mature style, and the top of panel decoration. The other shows the base of panel decoration with the feet probably of the Venus (O.286) used on bowls in Cinnamus style. *c*. AD 150–180. Ph 5, L44.3, Farmstead 7.
7. Form 37, showing a freestyle hunting scene with horseman (O.245) and stag (O.1720). The leaf tuft (Rogers N15) was used by Cinnamus ii, as were both types. A stamped bowl from Lezoux (Rogers 1999, pl. 32, 45) shows the leaf tuft and both types in a similar hunting scene. *c*. AD 150–180. Ph 5, L44.3, Farmstead 7. Illustration: Fig. 7.1 P3
8. Form 37, showing the same ovolo with pin-head tongue (Rogers B105) as no. 6 above, and panel decoration with the draped male figure (O.911), Jupiter (O.4) and another draped figure, probably female (not in O.?). The style suggests Albucius ii, who used the ovolo, the two identifiable types and the leaf (Rogers J146), which appears as here at the top of his panel border on a bowl from London (Stanfield and Simpson 1958, pl. 121, 9). *c*. AD 150–180. Ph 5, L4.2, Farmstead 7. Illustration: Fig. 7.4 P32

Type R01B South Gaulish samian ware

Fabric: NRFRC code LGF SA, MON SA; Tomber and Dore (1998, 28–29).

Forms: platter (form 15/17, 15/17R), plate (form 18), carinated bowl (form 29), cup/dish (form 35/36), hemispherical decorated bowl (form 37).

Decorated ware:

1. Form 37, two joining fragments showing the distinctive trident-tongued ovolo used by M.Crestio, over panels. *c*. AD 80–100. Ph 4, L58.1, Farmstead 4.
2. Form 29, fragment of lower zone consisting of straight, corded, gadroons, with the stamp of Murranus (stamp no. 3) impressed into the mould on top of one gadroon. A bowl from Vindonissa (Mees 1995, Taf. 148, 3) also shows his mould-stamp in an identical zone of gadroons, as well as his stamp in the interior of the bowl. *c*. AD 50–65. Ph 4, L32.3, Farmstead 5. Illustration: Fig. 7.3 P24

Type R01C East Gaulish samian ware
Fabric: NRFRC code ARG SA, MAD SA, RHZ SA (Tomber and Dore 1998, 34 and 38–9).

Forms: bowl (form 31 or variant), dishes (forms 32 and 36) and mortarium (form 45).

Date: mid 2nd–3rd century.

Samian stamps
by Brenda Dickinson
Each entry gives: contextual information, pottery (i, ii *etc.*, where homonyms are involved), die, form, reading, published example (if any), pottery of origin and date.

Superscript a, b and c indicate:

a A stamp attested at the pottery in question.
b Not attested at the pottery, but other stamps of the same potter used there
c Assigned to the pottery on the evidence of fabric, distribution, *etc*.

Ligatured letters are underlined.

1 Ph 4, L48.3, Farmstead 5, (8435) Cracuna i 2a 18/31–31 [CRACVN]AÿF (Hartley 1972, fig. 81, 69) Lezouxa. *c*. AD 130–155.
2 Ph 5, L43.3, Farmstead 7, (7987) Liberalis ii 1a' 18/31–31 [LIBER]ALIS Lezoux. The die for this stamp was probably made, by *surmoulage*, from an impression on a pot. *c*. AD 140–155.
3 Ph 4, L32.3, Farmstead 5, (7663) Murranus 8a 29 (from a mould stamped in the decoration) [OF?]MVRRAN retr. (Knorr 1952, Taf. 44, B) La Graufesenque. *c*. AD 50–65.
4 Ph 4, L20.2, Farmstead 4, (5966) Pompeius iii 2a 32 *etc*. POMP[EIV F] (Ludowici 1927, 226, a) Rheinzabern. Late 2nd century or first half of 3rd century.
5 Ph 4, L31,2, Farmstead 5, (7122) Teddillus 4a 18/31–31 O–ITEDDII–O Lezoux. *c*. AD 130–150.
6 Ph 8, L74, G165, (7001)]ITI?M? on form 33, Central Gaulish. Hadrianic or early Antonine.
7 Ph 5, L45.3, Farmstead 7, (7297)]A (probably ligatured to an M) on form 31, Central Gaulish. Early-to-mid Antonine.
8 Ph 5, L44.3, Farmstead 7, (7457) /ED /[on form 18/31R, East Gaulish, probably from La Madeleine. Hadrianic–Antonine.

Type R02 Mica gilded wares*
Fabric: fine, sandy to the touch with soft buff-pale brown surfaces and a paler grey core. Contains abundant well-sorted, subrounded quartz 0.1–0.4mm, and a scatter of larger rounded grey or opaque quartz pieces. Characterised by a surface dusting of mica. *c.f.* Marney (1989, 185: fabric 34c).

Forms: folded beaker, plain rim dish, flanged, bead rim and carinated bowls.

Date: late 1st–2nd century.

Type R03A Verulamium region white ware
Fabric: NRFRC code VER WH; Tomber and Dore (1998, 154).

Forms: necked jar, plain and ring-necked flagon.

Date: late 1st–2nd century.

Type R03B Gritty white ware (1.3%)
Fabric: hard fired, gritty to the touch with buff-white surfaces and variable pale orange-pink core. Contains well-sorted subrounded translucent pink-red and opaque white quartz 0.2–1mm, and sparse red iron ore. *c.f.* Marney (1989, 186: fabric 39).

Forms: plain and ring-necked flagon, reed rim jar, necked jar, and rouletted unguent jar.

Date: 2nd century+

Illustration: Fig. 7.2 P7

Type R03C Smooth white ware
Fabric: hard fired smooth fabric, cream-buff throughout. Contains common, well-sorted, sub-rounded clear or opaque quartz, 0.1–0.5mm, and occasional red iron ore.

Forms: cornice rim beaker, reed rim and triangular rim bowl, plain-necked flagon and costrel. Decoration comprises rouletting and horizontal grooves.

Date: late 1st–2nd century.

Illustration: Fig. 7.1 P1 and Fig. 7.4 P31

Type R03D White ware with fine shell
Fabric: hard fired smooth fabric, cream-buff throughout. Contains frequent poorly sorted subangular multi-coloured quartz 0.1–0.3mm, moderate, poorly sorted fine shell (some sub-rounded and others linear), sparse poorly-sorted mica, visible on the surfaces.

Forms: undiagnostic fine-walled body sherd.

Date: 2nd–3rd century.

Type R04A Rhenish ware
Fabric: NRFRC code CNG/MOS BS; Symonds (1992).

Form: fine walled beaker.

Date: 2nd–3rd century.

Type R05A Orange sandy* (2.0%)
Fabric: hard fired fabric, orange-buff throughout, although surfaces are often slipped white. Contains frequent to abundant subangular quartz inclusions, 0.5–1.0mm.

Forms: folded beaker, cordoned, flanged and triangular rim bowls, flagons, everted and reed rim jars, and a globular jar. Decoration comprises rouletting, horizontal grooves, overall and external white slip.

Date: 2nd century+.

Illustration: Fig. 7.1 P2 and P5

Type R05B Fine orange sandy
Fabric: hard fired fabric with buff-orange surfaces (often slipped white) and variable pale grey core. A finer version of type R05A, containing frequent, well-sorted subangular quartz inclusions, 0.1–0.5mm.

Forms: cornice rim beaker, folded beaker and triangular rim bowl.

Date: 2nd century+.

Type R06A Nene Valley grey ware
Fabric: Marney (1989, 179: fabric group 14).

Forms: flanged bowl, everted rim jar, narrow necked and neckless jars. Decoration comprises rouletting, horizontal grooves, burnishing and external black slip.

Date: 2nd–3rd century.

Type R06B Coarse grey ware* (5.6%)
Fabric: harsh gritty fabric, with variable reduced core and surfaces, the latter often smoothed and/or burnished. Contains abundant, ill-sorted, sub-rounded quartz, 0.5–1.0mm.

Forms: poppyhead and folded beakers, cordoned, flanged and necked bowls, bowls with plain, rounded, rectangular, triangular and undercut rims, 'dog' bowls with upright and rounded rims, jars with bead, everted, triangular and undercut rims, strainers, lid-seated jars, cordoned, neckless and narrow-necked jars. Decoration includes linear and wavy burnished motifs, burnished lattice, vertical combing, horizontal grooves, and external black and white slip.

Date: 2nd century+.

Illustration: Fig. 7.1 P4

Type R06C Fine grey ware* (13.0%)
Fabric: hard fired, smooth fabric with variable reduced surfaces and paler core. Contains frequent, well-sorted fine quartz, 0.1–0.5mm.

Forms: plain and everted rim beakers, poppyhead and folded beakers, reed rim bowls, bead, triangular and rectangular rim bowls, flanged, lid-seated and plain rim bowls, carinated bowls and cups, dishes, 'dog' bowls with rounded and upright rims, cordoned jars, narrow-necked and lid-seated jars, bead, everted, triangular, undercut, bifurcated and reed rim jars, neckless and narrow-necked jars, and lids. Decoration comprises horizontal grooves, wavy incised lines, rouletting, burnished horizontal lines, external black and white slip, burnished and incised lattice, cordons, and overall burnishing.

Date: 2nd century+.

Illustrations: Fig. 7.2 P8, P9, P10 and Fig. 7.4 P27

Type R06D Micaceous grey ware* (4.3%)
Fabric: soft fired fabric with mid-grey surfaces and paler core. Contains common, well-sorted, sub-rounded fine quartz, 0.1–0.5mm, and sparse inclusions of larger grains. Also rare red iron ore.

Forms: plain and everted rim beakers, poppyhead jars and beakers, a reed rim bowl, plain and triangular rim bowls, carinated bowls and jars, 'dog' bowls with upright and rounded rims, bead, everted and triangular rim jars, cordoned, lid-seated, neckless and narrow-necked jars, and lids. Decoration comprises rouletting, horizontal grooves, internal white slip, cordons and burnishing.

Date: 2nd century+.

Type R06E Calcareous grey ware (3.1%)
Fabric: hard fired fabric with variable reduced surfaces and core, characterised by a vesicular appearance resulting from the leaching or burning out of calcareous inclusions, up to 0.5mm in size. Also contains abundant clear or opaque white quartz, 0.1–0.5mm.

Forms: everted rim and poppyhead beakers, reed rim, plain rim, flanged and lid-seated bowls, bowls with rectangular and triangular rims, 'dog' bowls with upright and rounded rims, dishes, everted, rectangular and triangular rim jars, lid-seated, cordoned, narrow-necked and neckless jars, and lids. Decoration is restricted to linear and wavy incised motifs, and cordons.

Date: 2nd century+.

Illustration: Fig. 7.2 P6, P12, P13

Type R06F Grog and sand grey ware
Fabric: hard fired, dense fabric, smooth to the touch, with variable grey-brown surfaces and core. Contains frequent well-sorted subangular quartz, 0.1–0.3mm, powdery buff grog particles, 0.5–1.0mm, and sparse black iron ore.

Forms: cordoned, everted and lid-seated jars.

Date: ?2nd century+.

Type R06G Silty grey ware
Fabric: soft fired dense fabric, smooth and soapy to the touch, with mid-dark grey surfaces and paler core giving a characteristic sandwich appearance in break. Contains sparse, moderately sorted, clear rounded quartz 0.5–1.0mm (some up to 3.0mm), sparse, moderately sorted subangular shell 0.5–1.0mm and sparse, moderately sorted red iron oxide.

Forms: undiagnostic body sherds with horizontal grooves.

Date: ?2nd century+.

Type R06H White-slipped grey ware
Fabric: hard fired fabric, mid–dark grey throughout. Two groups have been defined a) coarse — abundant well-sorted, well-rounded white quartz; average size <0.1mm with sparser incidence of larger quartz <0.5–0.6mm, and b) fine — sparse to common clear and white quartz inclusions 0.1–0.3mm. Both groups contain sparse iron ore and rare shell inclusions.

Forms: everted rim beaker, plain rim bowl, neckless and narrow-necked jars.

Date: ?2nd century+.

Type R07A Black burnished ware
Fabric: NRFRC code DOR BB 1; Tomber and Dore (1998, 127)

Forms: flanged and plain rim bowls, everted rim jar, and burnished 'dog' bowl with upright rim.

Date: late 2nd century+.

Type R07B Sandy black ware* (4.2%)
Fabric: hard fired fabric, with black surfaces and grey-black core, often with red margins. Contains frequent well-sorted, sub-rounded fine quartz, 0.1–0.5mm, and sparse inclusions of larger grains.

Forms: everted rim beakers, cordoned, flanged and lid-seated bowls, bowls with bead, flat-topped, undercut and triangular rims, carinated bowls and jars, plain rim dishes, jars with bead, everted and undercut rims, 'dog' bowls with rounded and upright rims, cordoned, lid-seated, neckless and narrow-necked jars, and a single lid. Decoration comprises horizontal combing, rouletting, incised horizontal grooves, overall burnishing, burnished horizontal lines and burnished and incised lattice designs.

Date: late 1st century+.

Illustration: Fig. 7.3 P19 and Fig. 7.4 P28

Type R07C Gritty black ware
Fabric: coarse, hard fired fabric with black, often burnished surfaces and grey-black core. Contains abundant, ill-sorted, sub-rounded quartz, 0.1–1.0mm.

Forms: bead, plain rim, flanged and lid-seated bowls, dishes, 'dog' bowls with rounded and upright rims, everted rim, narrow-necked and cordoned jars, and a platter. Decoration comprises horizontal grooves, overall burnishing, burnished horizontal, vertical and diagonal lines, burnished and incised lattice, and cordons.

Date: 2nd century+.

Type R08 Black micaceous (2.3%)
Fabric: fine, hard fired black fabric, with soft smoothed micaceous surfaces. Also contains sparse poorly-sorted quartz 0.1–0.4mm.

Forms: everted rim and folded beakers, plain rim bowl, carinated jar, 'dog' bowl with rounded rim, triangular rim jar, cordoned and lid-seated jars. Decoration comprises rouletting, fine vertical combing, horizontal grooves and burnishing.

Date: 1st–2nd century.

Illustration: Fig. 7.3 P18, P21 and P23, Fig. 7.4 P25

Type R09A Pink grogged
Fabric: NRFRC code PNK GT; Tomber and Dore (1998, 210).

Forms: undiagnostic body sherds with horizontal grooves.

Date: 2nd century+.

Type R10A Coarse buff gritty
Fabric: hard gritty fabric, with buff surfaces and variable buff to grey core. Contains frequent, poorly sorted sub-angular quartz, 0.5–1.0mm (some up to 1.5mm).

Forms: everted rim jar.

Date range: 2nd century.

Illustration: Fig. 7.4 P30

Type R10B Fine buff gritty*
Fabric: fine smooth fabric with soft, often micaceous surfaces, generally buff throughout. Contains moderate, poorly sorted sub-angular quartz *c.*0.1–0.3mm. Some vessels retain traces of a dark slip.

Forms: burnished flanged bowl and flagon.

Date: late 1st–late 2nd century.

Type R11 Oxford oxidised ware*
Fabric: Young (1977, 185).

Forms: bead rim bowl with horizontal grooves.

Date: 3rd–4th century.

Type R11D Oxford colour coat
Fabric: NRFRC code OXF RS; Young (1977, 123).

Forms: rouletted bowl and miscellaneous vessel with incised horizontal grooves.

Date: mid 3rd–4th century.

Type R11E Oxford white ware mortaria*
Fabric: NRFRC code OXF WH; Young (1977, 56).

Forms: wheel-made body sherds.

Date: mid 3rd–4th century.

Type R11F Oxford colour coat mortaria
Fabric: NRFRC code OXF RS; Young (1977, 123).

Forms: wheel-made body sherds.

Date: mid 3rd–4th century.

Type R12A Nene Valley mortaria
Fabric: NRFRC code LNV WH; Tomber and Dore (1998, 119).

Forms: wheel-made body sherds.

Date: mid 3rd–4th century.

Type R12B Nene Valley colour coat (1.5%)
Fabric: NRFRC code LNV CC; Tomber and Dore (1998, 118), Marney (1989, 176: fabric 6)

Forms: plain, cornice and everted rim beakers, folded beakers, a bottle, bead rim bowl, castor box, flagon and everted rim jar. Decoration includes rouletting, roughcasting, applied scales, and barbotine.

Date: late 3rd–4th century.

Type R13 Shell* (32.6%)
Fabric: Brown (1994) for products of the Harrold kilns.

Also includes a variant, which may derive from a different source (possibly kilns at Willington).

Forms: range from the 1st century, with lid-seated jars and bowls, narrow-necked and square rim jars, to the 4th century, represented by jars with everted, triangular and undercut rims, large storage jars, small and large bowl forms, with flanged and rectangular rims, and dishes. Single examples of a lid and bottle were also noted. All are wheel-made. Surface finishes range from simple smoothing or wiping, to combing or rilling, the latter being more common on vessels of later date. Decoration is restricted to rilling, vertical and random combing, wavy incised lines, and horizontal grooves. Ten vessels have been modified with post-firing holes in neck, body and base sherds.

Date: 1st–4th century.

Illustrations: Fig. 7.2 P11, P14–17, Fig. 7.3 P22

Type R14 Sand (red-brown harsh) (1.0%)
Fabric: harsh, hard fired fabric with variable orange-grey-brown surfaces and core. Contains abundant, fine, clear or opaque quartz, 0.3–1.0mm, and sparse red iron ore.

Forms: bowls with bead and rectangular rims, neckless jars, cordoned bowls and jars, and a possible strainer. Decoration is restricted to horizontal grooves and external black slip.

Date: ?2nd–4th century.

Type R17 Smooth orange ware
Fabric: hard fired, smooth fabric with pale orange surfaces and variable orange-buff-grey core. Contains abundant, well-sorted, sub-angular quartz, *c*. 0.1–0.3mm, sparse red and black iron ore and occasional mica.

Forms: everted rim beaker and plain rim bowl with rouletting and incised lattice decoration.

Date: ?2nd–4th century.

Type R18A Pink gritty*
Fabric: harsh and granular, variable pale to dark pink-orange in colour throughout. Contains frequent well-sorted, subrounded multi-coloured quartz 0.2–0.6mm, frequent red and black iron up to 1.0mm. Also occasional calcareous inclusions and sparse white mica throughout.

Forms: flagon and plain rim dish.

Date: 2nd century.

Type R18B Pink fine
Fabric: fairly hard fired, although soft-fired examples occur with powdery surfaces. Variable pale to dark pink throughout. Contains frequent, well sorted subrounded multi-coloured quartz 0.1–0.2mm, frequent black iron ore, up to 1.0mm, and sparse red iron ore, up to 1.0mm.
Forms: fine-walled flagon.
Date: ?2nd century+.

Type R19A Dressel 20 amphora
Fabric: NRFRC code BAT AM 2 (Tomber and Dore 1998, 85).
Forms: wheel-thrown body sherds.
Date: 2nd–mid 3rd century.

Type R20 Mancetter-Hartshill white ware
Fabric: NRFRC code MAH WH; Tomber and Dore (1998, 189).
Form: wheel-thrown mortaria sherds.
Date: 2nd–4th century.

Type R21 Unsourced mortaria
Fabric: hard fired with buff surfaces and dark grey core. Contains abundant, well-sorted sub-rounded quartz, *c*. 0.2–0.5mm. Trituration grits are poorly-sorted opaque, grey-white quartz.
Form: wheel-thrown body sherds.
Date: uncertain.
Illustration: Fig. 7.4 P26

Type R22A Hadham oxidised
Fabric: NRFRC code HAD OX; Tomber and Dore (1998, 151)
Forms: beaker, bead rim bowl, flagon and jar. Decoration comprises burnishing, horizontal grooves and external white slip. One rim sherd is marked with three incised vertical parallel lines.
Date: mid to late 2nd century+, with the widest distribution occurring in the 4th century.

Type R22B Hadham reduced
Fabric: NRFRC code HAD RE 1; Tomber and Dore (1998, 152).
Form: undiagnostic body sherds.
Date: mid to late 2nd century+, with the widest distribution occurring in the 4th century.

Type R23 Roughcast colour coat
Fabric: hard fired, occasionally powdery, pale orange-buff to cream fabric. The colour coat is variable pale brown-orange matt, and often mottled in appearance. Contains sparse, well-sorted very fine sub-angular quartz, *c*.0.1mm.
Forms: folded beaker.
Date: ?late 2nd–4th century.

Type R32A Lead glazed ware
Fabric: Arthur (1978).
Forms: white-slipped and glazed bowl.
Date: 1st–early 2nd century.

Type R33 Verulamium region mortaria
Fabric: NRFRC code VER WH; Tomber and Dore (1998, 154).
Forms: wheel-thrown body sherds.
Date: 1st-2nd century+.

Type R36 Orange gritty
Fabric: rough, gritty fabric with pale buff-orange surfaces and an orange laminated core. Contains abundant opaque sub-rounded milky quartz 0.1–0.2mm, with sparse larger pieces up to 0.5mm. Also sparse red iron ore, some small voids and mica.
Forms: undiagnostic bodysherds.
Date: 2nd century+.

Type R38 Unsourced colour coat
Fabric: separately described in the site archive.
Forms: everted rim beaker and plain rim bowl.
Date uncertain.

Type R Non-specific Roman
Six sherds which could not be assigned a fabric type, but whose form or context suggest a Roman date. These are fully described in the site archive. Also two sherds from a hemispherical bowl.
Illustration: Fig. 7.4 P29.

Appendix II. Brick and tile type series

by Jackie Wells

Fabrics are summarised below using common names in accordance with the Bedfordshire Ceramic Type Series, held by Albion Archaeology. Bracketed figures after each fabric type denote a percentage (by weight) of the total excavated Roman assemblage.

Shell (70.3 %)
Fabric: Brown (1994).

Forms: brick, *tegulae, imbrices* and flue tile.

Source: uncertain, however, the fabric is comparable to examples recovered from kilns at Harrold Lodge Farm, Beds. Although these are *c*. 11km to the NW of Marsh Leys, this kiln complex is known to have exported its shell tempered building material and pottery widely within the Ouse Valley and its tributaries (Brown 1994, 104–5). Shell tempered vessels within the Marsh Leys pottery assemblage were also in a fabric comparable with those from the Harrold kilns.

Sand (29.7%)
Fabric: hard fired, orange throughout, turning brick red where over-fired. Occasionally fragments have a distinctive reduced blue-grey core. Generally finely tempered, although some fragments are coarsely made and contain angular quartz of up to 6.0mm in size. Inclusions are frequent, well-sorted, sub-angular multi-coloured quartz *c*. 0.2–0.5mm and dark red and black iron ore *c*. 0.1–0.3mm. Also rare angular flint pieces of up to 5mm in size.

Forms: brick, *tegulae,* and flue tile.

Source: although no production centres are known in the immediate vicinity, it is likely that quartz inclusions found in sandy types derive from the Greensand Ridge.

Illustration: Fig. 7.5 FC1

Appendix III. Daub and fired clay type series

by Jackie Wells

Four fabric types were identified: all are likely to have derived from locally extracted clay. Bracketed figures after each type denote a percentage (by weight) of the total excavated Iron Age and Roman assemblage.

Calcareous and sand (53.6%)
Coarse, friable pink-orange-buff fabric with variable dark grey patchy reduction. Inclusions are as sand tempered type, but this fabric is also characterised by the addition of moderate sub-rounded calcareous pieces *c*. 0.5–1.0mm. Some larger fragments contain sub-angular/angular flint or chert pebbles ranging in size between 10–20mm.

Organic and sand (36.9%)
Fine pink-buff-orange fabric, dark blue-grey where reduced. Inclusions are moderate, poorly sorted, sub-angular multi-coloured quartz *c.* 0.1–0.5mm, occasionally ranging to 1.0mm and frequent organic material (?straw), evidenced by elongated voids where the latter has burnt out. Some fragments contain a lower proportion of sand than others and are almost entirely organic, although the small quantity did not merit a separate fabric type.

Illustration: Fig. 7.5 FC2–5

Sand (5.4%)
Coarse, friable mid to dark orange-red fabric with variable dark grey-black patches where reduced. Inclusions are abundant sub-rounded and sub-angular quartz *c*. 0.1–0.5mm and rare red iron ore *c*. 0.5mm. Some larger fragments contain sub-angular/angular flint or chert pebbles ranging in size between 10–20mm.

Grog (4.1%)
Soft orange-brown fabric with smooth, soapy texture. Contains moderate orange-buff grog pieces *c*. 0.3–0.5mm, some ranging up to 5.0mm. Also rare, poorly-sorted sub-angular multi-coloured quartz *c*. 0.1–0.5mm.

Appendix IV. Metallurgical residues

by Tim Young

Phase	*F no.*	*L no.*	*G no.*	*Weight (g)*	*Description*
3	3	26	296.2	286	broken shallow smithing hearth cake with high vesicularity and charcoal inclusions, base prilly, 70x90x30, disc like
		27	217.1	810	574g smithing hearth cakes, 12 other pieces of vitrified lining and slag, some of which is flint rich
			217.2	4	badly altered piece of blue fuel ash slag with included flint
			292.2	566	very irregular smithing hearth cake, 100x90x45, 480g, upper surface with some flint; two other pieces of dimpled slag with charcoal
		28	283.1	8	platy fragment of vitrified lining
		29	375.2	538	*c*. 17 pieces of lining-rich slags, but most show crusts, dimples or lobes suggesting these are smithing hearth slags
		63	411	0.3	fragmented **bleb** of dark vesicular slag
4	4	19	174.1	232	ball shaped hearth slag, starting to 'explode' indicating iron inclusion(s)
		53	420.1	14	slag with abundant flint
	5	31	200.2	408	single smithing hearth cake - looks conventional from outside, broken to reveal 55x20mm piece of iron sheet inside oriented vertically.
			202.2	110	smithing hearth cake fragment
			203.2	160	3 pieces of thick vitrified lining
			377.2	134	3 small pieces; plus planar slab possibly with blowhole at 60° to face, but not certain
			377.2	276	136g, half a deep rusty charcoal-rich smithing hearth cake; 104g glassy-topped Fe-slag with much flint; plus 7 small pieces
		33	286.3	602	large piece 510g, multiply stacked smithing hearth cake - but incomplete; 2 small lining pieces; plus 38g piece probably iron (plate 40mm square?)
			286.3	550	468g block of probable smithing hearth cake, broken on removal? Slightly rusty 75x85x60mm, 56g tiny flint-rich smithing hearth cake?, couple of broken slag fragments
			287.3	76	4 small pieces of smithing slag; 1 piece vitrified lining; 2 pieces of moderately thick vitrification
			295.3	98	broken piece of smithing hearth cake
			295.3	234	probable corroded iron
			295.3	24	2 pieces of vitrified lining , dark glass very quartz rich, 1 piece shows possible flake hammerscale inclusion
			371.2	14	corroded vitrified lining with slag attached
		35	370.1	182	2 pieces of extensively vitrified thick lining, quite rich in flint grains on the vitrified surface
			370.1	1320	156g smithing hearth cake with lobate top, 80x70x40mm but twisted; 216g block of corroded iron approx 35mm cube; 278g smithing hearth cake, rusty 90x70x40mm; 284g smithing hearth cake, 95x75x35mm; 290g deep smithing hearth cake 90x85x50mm; several small broken slag fragments.
			370.32	1	flint to 8mm in some melt
		41	401.2	250	block of iron
		48	324.1	162	weathered dense vesicular coarse iron slag, slightly dimpled lower face with charcoal, upper face smothered in flint pieces of up to 10mm
			324.3	334	90x90x40mm small smithing hearth cake, charcoal inclusions, planar top, very coarse distally, flint not prominent
		49	273.1	16	Cu-alloy slag fragment - pieces of stone and **shale** bonded in mixed metal slag
		52	294.3	256	tiny lining chip; most is a slab from a smithing hearth cake, well flown top with high flint content, basal crust well developed with large bubbles between two
		75	304.2	168	1 large and six small pieces of smithing slag in fragments and nubs
			304.2	384	75x110x50mm, 364g smithing hearth cake in two pieces; 10 piece of vitrified lining
5	7	42	263.3	946	558g 100x110x40mm rather irregular rusty smithing hearth cake; 360g broken smithing hearth cake (flow on broken edge?) 75x95x50mm; plus small fragments, all v rusty
			352.3	4	quartz-rich vitrified lining
		43	393.1	102	part of very small smithing hearth cake - maybe 50%, charcoal well preserved
			393.1	22	corroded iron disc
			393.1	154	irregular, possibly contorted small smithing hearth cake, 80x60x40mm
		44	219.3	1.9	slagged lining with possible hammerscale fragments in lining
			219.3	664	large piece is an almost complete smithing hearth cake, plano-convex, 110x85x45mm with further 10mm raised above flat proximally, oblique break at proximal end means *c*. 5% missing, 542g; also c6 small pieces, all probably smithing slags
			219.3	70	*c*. 13 pieces of vitrified lining or pieces of lining slag

(Table A1)

Phase	*F no.*	*L no.*	*G no.*	*Weight (g)*	*Description*
			219.3	26	2 pieces of lining-rich smithing slag
			219.4	430	iron bar, triangular cross-section?
			219.4	1495	at least 4 moderately complete small smithing hearth cakes, 122g, 172g, 150g, 66g?; 36 other pieces of other more amorphous material; plus a piece of flat sheet slag with 1 sandy face and one very fluid-looking fayalitic face.
			219.4	148	7 pieces of vitrified lining
			220.1	100	large pieces of thickly vitrified lining, together with small blebs of lining slag
			220.2	9	two small nubs of lining slag, 1 has bright green glass included
			220.3	2	vitrified lining
			220.3	170	*c*. 113 small pieces of slag and lining
			220.3	8	7 pieces of vitrified lining
			220.3	25	fused flint pebbles with abundant blue glass, attached to small area of more Fe-rich vitrified lining with sand-sized quartz
			220.3	1155	v nice smithing hearth cake at 824g, 110x130x40, proximal with ?flow on wall then free distally, very slightly concave top, charcoal; 6 fragments of Fe object - curved sheet?; 7 pieces of irregular vesicular slag lumps with brown glass; 2 larger and denser but similar twisted lumps; 1 small (100) incipient smithing hearth cake with v smooth top (40x55x45)
			220.3	146	7 pieces: largest irregular dimpled lump with large flint to 22mm in Fe-slag matrix, some bright glass; 1 small piece of vitrified lining; others are highly vesicular iron slag with large flint pieces and patches of bright glass
			220.3	20	broken piece of slag with partly melted flint gravel, with some specks of blue glass
			220.3	1680	*c*. 85 pieces of dominantly lining, but also some slag dominated by flint fragments
			220.3	1455	*c*. 39 pieces of vitrified lining, some large (max 130x110mm). Mainly planar. Lining is sandy and red, and has no flint
			220.3	1655	*c*. 140 pieces of lining and lining slag: 1 piece iron; 2 possible blowhole fragments, each suggestive of 40-50mm diameter hole at 45-55° to planar surface; at least 10 of the pieces of a sand-rich material forming slabs a few-mm thick with angular re-entrants, with a finish like hammerscale on one surface
			220.3	1815	80 pieces dominantly vitrified lining, 5 pieces dominantly slag. No particularly indicative material except one large piece of probable supra-blowhole damage
			220.3	1470	*c*. 200 pieces plus small detritus. 6 pieces of thin flat material. Ranges from burnt flint through to small smithing hearth cake fragments, not sorted in detail as pieces too small for reasonable identification
			220.3	164	*c*. 99 small fragments of slag and lining blebs
			220.3	28	7 pieces of variably vitrified hearth lining
			220.3	604	60 pieces (including 1 sheet piece as above), mainly small blebs, couple of prills, also bag with 30g of magnetic separates, mainly flake scale (a separate collection of scale has been made from the dust in the context 8060 bags)
			220.3	2080	18 pieces of smithing slag; 558g very irregular cake with flint; 382g transverse cake without flint; 306g very irregular lump; 136g small transverse sheet, probably incipient smithing hearth cake
			220.3	2015	150g corroded fe object/billet 50mm long, 15x25mm at one end wedging to edge at other; rest 24 pieces, very irregular smithing hearth slags in moderately complete pieces
			220.3	2130	280g transverse smithing hearth cake, 60x120x40mm; part of *c*. 200g smithing hearth cake, total 45 pieces
			220.3	2060	approx. 75 pieces of broken smithing slags and lining, mostly rather irregular, flinty tops, some well flowed, one very dense burr, 1 piece of possible smithing floor
			220.3	104	irregular runnel of slag. Probably not true tap slag, but an in-hearth flow from a smithing hearth.
			221.3	1080	758g large deep smithing hearth cake, 90x130x85mm; tall narrow smithing hearth cake, with lots of included charcoal, probably multilayer; other fragments from 1(?) additional smithing hearth cake with basal tubular vesicles
			222.3	40	3 pieces: 1 sand grade quartz in dark glass, other 2 pebble grade flint with very little melt, locally dark flowed surface, locally bright blue glass
			222.3	58	3 pieces of vitrified hearth wall. Two larger show hammerscale in clay, some flint
			246.2	7	lining, partially vitrified and\with Fe-slag coating, some sky blue glass interstitially and reddy-brown glass bubbles on one surface
			288.2	94	7 pieces of highly weathered smithing hearth cakes, 1 small piece of corroded iron
			291.2	54	very dense piece - probably a burr from a large smithing hearth cake
			317.2	42	v dense slag, weathered, slag matrix has pale weathering laths in dark glass, contains large pebbles, some flint - some v dark
			389.11	10	1 piece vitrified lining, 1 piece vitrified lining with fe-slag, 1 ammonite fossil
		45	338.3	252	'exploded' piece of corroded iron - large flared object
			210.1	894	478g large part of thin but well formed smithing hearth cake, wide flat v smooth top; 214g iron-rich irregular smithing slag; 12 other pieces of smithing slag and lining
			210.1	254	136g, small smithing hearth cake; plus three other bits, all rusty

(Table A1)

Phase	*F no.*	*L no.*	*G no.*	*Weight (g)*	*Description*
			210.1	78	4 lining fragments plus 3 pieces (6g) of vitrified lining attached to iron slag with abundant blue glass
			210.1	343	304g almost complete triangular cross-sectioned smithing hearth cake, Fe -rich, no flint; plus 2 pieces of lining
			210.1	212	25 small pieces of lining and smithing slag, flint rich
			210.1	96	6 pieces of broken Fe-slag - varying from v dense to flint rich
			210.1	144	12 pieces of vitrified lining plus 1 piece flint-rich Fe-slag
			210.1	102	broken Fe-slags, 4 main pieces, 1 extremely dense
			210.1	7	vitrified lining
			210.1	930	106g small highly dimpled cake; 258g dense cake with large central upper vesicle slightly dimpled lower; remainder nubs and fragments of smithing slags, some with large flints
			210.1	4	irregular piece of vitrified lining
			210.1	348	many small pieces (max 20mm) of lining, vitrified lining slag, and iron slag with flint gravel. Gravel associated with blue glass.
			210.1	86	small piece of weathered smithing hearth cake broken into three
			210.1	4	2 small nubs of part vitrified lining slag
			210.1	230	small piece vitrified wall material, with Fe-slag and large flint pieces. Larger block probably near burr of deep smithing hearth cake (>45mm)
		70	247.2	260	146g small smithing hearth cake; plus 10 pieces lining and associated material
7	n/a	46	396.1	568	110x75x45 looks like smithing hearth cake but 'exploding' & very dense. May be block of iron or smithing hearth cake with big metal content

Table A1 Catalogue of metallurgical residues by phase, farmstead, landuse area and G no

Appendix V. Registered Artefact catalogue

by Jackie Wells

The catalogue is organised by registered artefact number. Only those objects relevant to the publication are listed; individual descriptions are omitted for the iron carpentry nails, hobnails and coins, which are discussed collectively. In all cases measurements denote the maximum surviving artefact length unless otherwise stated. A coin catalogue is presented in Appendix VI. Full details of post-Roman artefacts are contained within project archive.

The coding which prefixes each catalogue entry contains the following information:

RA 20	Registered artefact no.
G98.1	Group
L4	Land use area
Farmstead 2	Farmstead
Phase 3	Phase
Fig. * no.	Illustration no.

RA 2 Topsoil/subsoil. *Iron brooch*. Four coiled spring, external chord and partial square-sectioned tapering pin from a bow brooch. Length 45.4mm.

RA 3 G401.1, L44, Farmstead 7, Phase 5. *Iron latch lifter.* Incomplete portion of square-sectioned handle and sub-rounded curving stem. Late Iron Age–Roman. Length 115.4mm.

RA 5 G202.3, L31, Farmstead 5, Phase 4. *Quartz conglomerate rotary quern fragment*. Portion of upper stone with partial skirt and worn grinding surface. Surface not dressed. Estimated diameter 300mm; thickness 41.0mm.

RA 7 G217.1, L27, Farmstead 3, Phase 3, Fig. 7.7. *Iron object*. Square-sectioned tang (length 110mm), flattening towards a leaf-shaped flat 'blade' (length 120mm; maximum width 60mm).

RA 8 G161.3, L20, Farmstead 4, Phase 4. *Glass vessel fragment*. Flat piece of translucent yellow/brown glass with one finished edge. Possible edge of a flagon or jug handle. Thickness 3.8mm. ?1st–2nd century.

RA 9 G116.1, L10, Farmstead 4, Phase 4. *Millstone grit rotary quern fragment*. Indeterminate fragment with pecked surface. Burnt, indicating re-use. Thickness 52.0mm. Joins RA 10.

RA 10 G116.1, L10, Farmstead 4, Phase 4. *Millstone grit rotary quern fragment*. Indeterminate fragment with pecked surface and skirt. Burnt, indicating re-use. Thickness 50.0mm. Joins RA 9.

RA 11 G116.1, L10, Farmstead 4, Phase 4. *Millstone grit millstone fragment*. Large portion of upper millstone, pecked on skirt and upper surface; grinding surface has tooling marks and wear. Estimated diameter 730mm; maximum thickness 57.0mm.

RA 12 Topsoil/subsoil. *Millstone grit rotary quern fragment*. Portion of upper stone with pecked dressing on surface and radial tooling on grinding surface. Thickness 67.0mm

RA 13 Topsoil/subsoil. *Bone hair pin*. Incomplete circular-sectioned, polished tapering pin shank, broken at both ends. Length 31.5mm; diameter 3.5mm.

RA 16 G163.1, L20, Farmstead 4, Phase 4. *Iron object*. Square-sectioned, gently curving object, broken at both ends. Possible implement handle. Length 92.6mm

RA 17 G163.1, L20, Farmstead 4, Phase 4. *Iron lift key.* Incomplete square-sectioned handle, thickening towards one end, with partial bow. Length 154mm.

RA 20 G98.1, L4, Farmstead 2, Phase 3. *Copper alloy brooch*. Coil and partial bow fragment, from a possible Colchester type; surviving in very poor condition. Late 1st century AD. Length 14.2mm

RA 21 G117.2, L4, Farmstead 2, Phase 3. *Copper alloy hair pin*. Upper portion of pin shank, decorated with incised double parallel grooves. Head missing. Length 54.7mm.

RA 22 G117.2, L4, Farmstead 2, Phase 3. *Chalk spindle whorl*. Half spindle whorl with two equal flat faces and a rounded edge; external diameter 38.8mm; thickness 11.5mm; diameter of perforation 9.5mm; weight 13g.

RA 27 G126.1, L13, Farmstead 4, Phase 4. *Lava rotary quern fragments*. Five amorphous pieces retaining no diagnostic traits or surfaces. Weight 21g.

RA 28 G137.2, L16, Farmstead 4, Phase 4. *Iron chain link*. Distorted figure-of-eight type, slightly open at the centre. Length 42.0mm.

RA 38 G136, L16, Farmstead 4, Phase 4. *Glass vessel fragments*. Two translucent natural blue/green base fragments from a square bottle. Mid 1st-late 2nd century. Thickness 4.8mm.

RA 39 G102.1, L1, Farmstead 2, Phase 3. *Millstone grit rotary quern fragment*. Two joining pieces of indeterminate form, worn grinding surface. Burnt indicating re-use. Thickness 45.0mm.

RA 40 G108.2, L58, Farmstead 4, Phase 4. *Glass vessel fragment*. Translucent natural blue/green base fragment from a square bottle. Mid 1st–late 2nd century. Thickness 4.5mm

RA 42 G74.3, L84, Farmstead 4, Phase 4. *Copper alloy hair pin*. Upper portion of pin shank with distorted, elongated spherical head. Survives in poor condition. Length 55.5mm.

RA 46 G47.2, L20, Farmstead 4, Phase 4, Fig. 7.6. *Copper alloy ?fitting*. Cast object with a raised central ridge terminating in a spherical projection at either end. Four 'openwork' circles (estimated diameter 18mm) appear to have been symetrically placed at the ends and sides of the ridge. Length 35.0mm.

RA 51 G110.1, L7, Farmstead 2, Phase 3. *Copper alloy bracelet*. Incomplete, 'D'-sectioned fragment, undecorated. Late Roman. Estimated diameter 70.0mm; length 62.0mm.

RA 56 G107.2, L1, Farmstead 2, Phase 3. *Iron hinge staple*. L-shaped with long rectangular-sectioned tapering arm and short circular-sectioned arm. Length 105.0mm.

RA 60 G9.1, L57, Farmstead 4, Phase 4. *Millstone grit quern fragment*. Two joining fragments of indeterminate form. Thickness *c*. 30mm.

RA 64 Topsoil/subsoil. *Lead spindle whorl*. Unfinished biconical whorl with central perforation not fully drilled through. External diameter 26.4mm; thickness 14.8mm; diameter of perforation 8.9mm; weight 52g.

RA 72 G201.2, L31, Farmstead 5, Phase 4. *Copper alloy hair pin*. Incomplete, bent, tapering shank, broken at both ends. Estimated length (straightened) 77mm.

RA 74 G201.2, L31, Farmstead 5, Phase 4. *Copper alloy sprue head*. Cast object with central perforation and flared lobate edges. Length 14.5mm.

RA 77 G201.2, L31, Farmstead 5, Phase 4. *Iron knife*. Tapering triangular-sectioned blade fragment, with both ends broken off. Length 76.0mm.

RA 79 G286.3, L33, Farmstead 5, Phase 4. *Iron loop-headed spike*. Incomplete, with looped-over head, and square-sectioned shank tapering to a wedge-shaped point, tip damaged. Length 110mm; width 14mm.

RA 87 Topsoil/subsoil. *Lead spindle whorl*. Complete biconical whorl. External diameter 19.1mm; thickness 16.0mm; diameter of perforation 5.6mm; weight 33g.

RA 126 G234.1, L51, Farmstead 5, Phase 4, Fig. 7.8. *Iron plough coulter*. Incomplete. Rectangular-sectioned shaft, tapering slightly in thickness toward the terminal which has a flattened, burred head. The blade is concave in section, triangular in plan with the tip of the blade missing. 3rd–4th century AD. Current length 710mm; blade length *c*. 160mm; blade width 110mm; shaft width 33mm; shaft thickness 24.8mm.

RA 133 G384.2, L40, Farmstead 5, Phase 4. *Iron metal-working punch*. Remains of a square-sectioned tapering bar, possibly a cold-working spike or iron 'plug'; also remains of a poorly smelted tap slag. Length 51.7mm.

RA 146 G389.22, L44, Farmstead 7, Phase 5. *Iron harness ring*. Complete square-sectioned harness ring. Diameter 36.4mm.

RA 153 G222.3, L44, Farmstead 7, Phase 5. *Iron double-spiked loop*. Incomplete, square-sectioned with one surviving out-turned arm indicating use. Height 73.5mm; width of loop *c*. 33mm; thickness of loop 10.5mm.

RA 157 Medieval furrows, Phase 6. *Lead spindle whorl*. Complete plano-convex whorl. External diameter 25mm; thickness 8.7mm, diameter of perforation 9.0mm; weight 28.4g.

RA 158 G221.3, L44, Farmstead 7, Phase 5, Fig. 7.6. *Copper alloy brooch*. Wheel brooch with four straight spokes and a wide felloe. The 'nave' has a cup-shaped integral centre boss with upstanding central 'spike'. The felloe has inner and outer bordering ribs with a (?)flat face in between. Fastenings for hinged pin on reverse, pin does not survive. AD 40–60. Diameter 30.5mm.

RA 161 G220.3, L44, Farmstead 7, Phase 5. *Copper alloy casting gate*. Sprue head and two channels running off. 2 piece mould. Length 37.1mm.

RA 162 G220.3, L44, Farmstead 7, Phase 5. *Iron knife or shears blade*. Triangular-sectioned strip fragment broken at both ends. Length 97.6mm.

RA 166 G370.1, L35, Farmstead 5, Phase 4, Fig. 7.6. *Copper alloy balance arm*. Incomplete, cast object, lozenge-shaped in cross-section. Tapering toward one end, both ends broken. A perforated plano-convex tab is situated near the thicker end. Length 140mm; thickness ranges from 5.5–6.5mm.

RA 175 Topsoil/subsoil. *Lead spindle whorl*. Complete whorl with two flat faces, rectangular in section, with small central, rounded perforation. Damage to one edge evident. External diameter 21mm; max. thickness 5mm; diameter of perforation 3.7mm; weight 15.1g.

RA 202 G201.1, L31, Farmstead 5, Phase 4. *Iron pruning hook*. Portion of square-sectioned tang and start of curved blade. Length 65.6mm.

RA 204 G338.4, L44, Farmstead 7, Phase 5, Fig. 7.6. *Bone hair pin*. Incomplete, two joining pieces with damaged tip. Knob head of conical shape, unevenly tapering shank which expands slightly part way down its length (*c*. 16mm below the head). Greep type B — it could equate to Cool's metal hairpin type 1E. Later Roman. Length 93mm.

RA 207 G352.4, L42, Farmstead 7, Phase 5. *Iron bladed object*. Three joining pieces, flattened ?socketed (formed from rolled sheet) and start of blade, junction with socket and blade at an angle suggesting a possible reaping hook/ scythe or similar item. Length 168.4mm

RA 217 G210.1, L45, Farmstead 7, Phase 5. *Iron slide key*. Square-sectioned handle fragment, partial bit and tooth. Manning type 2. Length 47.4mm.

RA 222 G220.3, L44, Farmstead 7, Phase 5. *Iron tanged knife blade*. Junction of tang and blade, tang at mid-point, blade not surviving. Length 45.7mm.

RA 224 G393.1, L43, Farmstead 7, Phase 5. *Iron blade fragment*. Rectangular, slightly tapering fragment with triangular section, suggestive of shears or knife blade. Length 65.6mm.

RA 225 G214.2, L78, Farmstead 3, Phase 3. *Millstone grit millstone fragment*. Skirt fragment, diameter not determinable. Skirt edge smooth and at a very slight bevel. Smoothed grinding surface. Thickness 45mm.

RA 226 G210.1, L45, Farmstead 7, Phase 5. *Quartzite whetstone*. Incomplete. Small portion of one smoothed face surviving. Length 56.0mm.

RA 227 Topsoil/subsoil. *Hertfordshire Puddingstone bun-shaped rotary quern*. Incomplete. Approximately quarter of an (?) upper stone retaining outer edge and worn grinding surface. Central feeder and handle hole do not survive. Estimated diameter 280–300mm; thickness 92mm.

RA 229 G210.1, L45, Farmstead 7, Phase 5. *Millstone grit rotary quern*. Incomplete. Two joining pieces; neither skirt nor other diagnostic features survive to determine if upper or lower stone. Worn grinding surface. The fragments are heat-affected. Thickness 48.5–53.5mm.

RA 231 G219.3, L44, Farmstead 7, Phase 5. *Iron object*. Rectangular-sectioned, slightly tapering bar, broken at both ends. Possible chisel or punch. Length 68.8mm; width 18.3mm; thickness 12.5mm.

RA 233 G349.22, L41, Farmstead 5, Phase 4, Fig. 7.7. *Glass vessel fragment*. Translucent natural blue/green rolled-in rim and part cylindrical neck. Possible start of vertical trail or bubble just below rim. Flask/ unguent bottle/jug rim. ?1st–3rd centuries AD. Diameter 40mm.

RA 234 G290.2, L29, Farmstead 3, Phase 3. *Iron wire*. Square-sectioned, slightly tapering fragment. Length 60.1mm

RA 243 G328.4, L48, Farmstead 5, Phase 4. *Iron knife*. Three pieces of a socketed object, two joining to form the socket, with break before start of possible blade? Length 140mm.

RA 244 G295.3, L33, Farmstead 5, Phase 4. *Iron hooked terminal*. C-shaped square-sectioned rod; probable double spiked loop or latchlifter terminal. Length 32.9mm.

RA 250 G401.2, L41, Farmstead 5, Phase 4. *Iron object*. Curving sheet, forming a socket, probably part of an agricultural tool (weeding hook, billhook *etc*.) Length 114mm.

RA 251 G401.2, L41, Farmstead 5, Phase 4. *Iron saw blade*. Short section of blade, both ends broken. Teeth appear to slope backwards to give an effective cut on the backstroke. Length 42.1mm; width 29.5mm; thickness 2–3mm.

RA 252 G401.2, L41, Farmstead 5, Phase 4. *Iron timber dog*. Square-sectioned with one arm missing. Length 75.6mm.

RA 253 G338.4, L44, Farmstead 7, Phase 5. *Glass vessel fragment*. Partial base in clear colourless glass with a slight greenish tinge, numerous small bubbles in matrix. Base of a small ?drinking cup or ?bowl. Late 1st–4th century. Estimated diameter 40mm, with very slight 'kick'; thickness 2.4mm.

RA 256 G321.3, L30, Farmstead 3, Phase 3. *Iron handle*. Four joining pieces forming a socket, probably part of an agricultural tool (weeding hook, billhook *etc*.) Poor condition. Length 67.2mm; diameter of socket 46.3mm.

RA 265 G371.2, L33, Farmstead 5, Phase 4. *Iron T-clamp*. One complete arm and one broken, and partial square-sectioned stem. Length 23.1mm.

RA 273 G322.1, L44, Farmstead 7, Phase 5, Fig. 7.7. *Glass vessel fragment*. Translucent colourless rolled-in rim fragment with pale blue/green tinge. Mid 1st–late 2nd century AD. External diameter *c*.30mm.

RA 274 G322.1, L44, Farmstead 7, Phase 5. *Copper alloy chain links*. Series of eight oval wire links. Length of cluster 12.8mm; diameter of links 5.5mm.

RA 275 G322.1, L44, Farmstead 7, Phase 5, Fig. 7.6. *Glass bead*. Complete undecorated opaque blue oval bead of flat section. ?Late Roman. Length 7.7mm.

RA 277 Topsoil/subsoil. *Lead vessel patch*. Sub-rounded object, surviving in poor condition. Length 36.4mm.

RA 278 Topsoil/subsoil. Fig. 7.6. *Indurated mudstone mixing palette*. Incomplete, rectangular in plan, three bevelled edges on the reverse surface. Obverse surface worn very smooth, with part of a central circular indentation remaining. Length 58.6mm; width 73.8mm; thickness 8.6mm.

RA 279 Topsoil/subsoil, Fig. 7.6. *Copper alloy scale pan rim*. Distorted sheet fragment with cast looped fitting similar to harness strap loop, the latter decorated with a series of six longitudinal grooves. Length (sheet) 54.1mm; length (fitting) 24.9mm.

RA 281 G234.1, L51, Farmstead 5, Phase 4. *Ceramic tessera*. Rectangular block (re-used tile fragment) in fine oxidised sandy tile fabric. Length 27mm; width 22mm; thickness 14mm.

RA 282 G337.3, L44, Farmstead 7, Phase 5. *Ceramic tessera*. Rectangular block (re-used tile fragment) in fine oxidised sandy tile fabric. Length 32mm; width 22mm; thickness 23mm.

RA 283 G337.3, L44, Farmstead 7, Phase 5. *Ceramic tessera*. Rectangular block (re-used tile fragment) in fine oxidised sandy tile fabric. Length 28mm; width 22mm; thickness 19mm.

RA 284 G351.21, L43, Farmstead 7, Phase 5. *Ceramic tessera*. Rectangular block (re-used tile fragment) in fine oxidised sandy tile fabric. Length 30mm; width 23mm; thickness 14mm.

RA 285 G389.21, L44, Farmstead 7, Phase 5. *Ceramic tessera*. Sub-rectangular block (re-used tile fragment) in fine oxidised sandy tile fabric. Length 24mm; width 20mm; thickness 19mm.

RA 286 G389.22, L44, Farmstead 7, Phase 5. *Glass vessel fragment*. Pale green, almost colourless translucent sliver of indeterminate form. Interior straight walled and with rough surface. Rim sharply everted, small out-turn, interior surface of rim appears to have been chipped off and not ground. Exterior surface smooth expanding to fairly thick-walled vessel (4.1mm) approximately 10mm below rim. May have been altered. ?Late date.

Appendix VI. Coin catalogue

by Peter Guest

(Table A2, on facing page)

Phase	*F no*	*L no.*	*RA no.*	*Denom*	*Date*	*Obverse*	*Reverse*	*Mint-mark/Mint*	*Reference*	*Remarks*
8	-	74	65	Radiate	260–68	POSTUMUS	SAECVLI FELICITAS		Elmer 593; Cun. 2444	
		74	66	Barb. radiate	270–96	as Tetricus I	as Comes Aug			
		74	67	AE3	335–41	House of Constantine	GLORIA EXERCITVS (1 std)	//[…..]		
		74	68	AE3	late 3rd–4th c.	uncertain	uncertain			
		74	69	AE2	Roman	uncertain	uncertain			
		74	82	Radiate	270	DIVO CLAUDIO	CONSECRATIO - altar			
		74	83	AE3	late 3rd–4th c.	uncertain	uncertain			
		74	84	Radiate	260–96	uncertain	uncertain			
		74	88	Barb. radiate	270–96	as Tetricus I	uncertain			
		74	91	Radiate	260–68	GALLIENUS?	SOLI C[ONS] AVG - pegasus l.			
		74	113	As copy	43–64	as Claudius I	as Minerva - SC		as RIC 100	diam. 26 mm; weight 10.2 g
		74	170	Denarius	218–22	ELAGABALUS	SALVS AVGVSTI	Rome	RIC 141	
7	8	47.3	104	AE1	modern?	uncertain	uncertain			thin disk - ?modern coin
		46.3	139	Barb. radiate	260–96	as Gallienus	as Iovi Propugnat	XI/-//-		
5	7	42.3	141	AE3	late 3rd–4th c.	uncertain	uncertain			
		44.2	142a	Radiate	270	QUINTILLUS	APOLLINI CONS	-/H//-	RIC 9; Cun. 2346	
		44.2	142b	Radiate	270–74	TETRICUS I?	SALVS?			
		44.2	143	Radiate	273–74	TETRICUS II	uncertain			
		44.2	145	Barb. radiate	273–96	as Tetricus II	uncertain			
		44.2	208	Radiate	270–74	TETRICUS I	PAX AUG			
		44.3	151	AE3	late 3rd–4th c.	uncertain	uncertain			
		44.3	152	Radiate	268–70	VICTORINUS	uncertain			
		44.3	155	Radiate	268–70	VICTORINUS	PIETAS AVG	Mint II	Emer 741; Cun. 2574	
		44.3	165	As copy	43–64	as Claudius I	as Minerva - SC		as RIC 100	diam. 23 mm; weight 6.27 g
		44.3	206	Barb. radiate	260–96	uncertain	uncertain			
		44.3	209	AE2/3	late 3rd c.	uncertain	uncertain			
		44.3	255	Radiate	260–96	uncertain	uncertain			
		45.3	159	Radiate	268–70	VICTORINUS	INVICTVS	*/-//- Mint I	Elmer 683; Cun. 2534	
		45.3	174	AE4	late 3rd–4th c.	uncertain	uncertain			
4	4	16.1	24	Radiate	260–96	uncertain	uncertain			
		16.1	25	Sestertius	138–61	ANTONINUS PIUS	uncertain	Rome		
		16.1	50	Radiate	268–70	VICTORINUS	SALVS AVG?			
	5	31.2	71	Sestertius	98–100	TRAJAN	uncertain			obv. legend: [ES TRA]; early bust
		31.2	121	AE4	late 3rd–4th c.	uncertain	uncertain			
		31.2	122	Barb. radiate	260–96	uncertain	uncertain			8mm diam.
		31.2	123	AE3/4	late 3rd–4th c.	uncertain	uncertain			
		31.2	124	AE4	late 3rd–4th c.	uncertain	uncertain			
		31.2	130	AE4	late 3rd–4th c.	uncertain	uncertain			

		31.2	168	AE4	late 3rd–4th c.	uncertain	uncertain		
		31.2	169	AE4	late 3rd–4th c.	uncertain	uncertain		
		35.3	167	Barb. radiate	260–96	uncertain	uncertain		
		49.3	75	Barb. radiate	260–96	garbled legend	uncertain		
		50.3	140	Barb. radiate	260–96	uncertain	uncertain		
		51.3	101	Radiate	268–70	VICTORINUS	PIETAS AVG	Mint II	Elmer 741; Cun. 2572
		51.3	120	AE3	late 3rd–4th c.	uncertain	uncertain		
		71.3	138	AE3	late 3rd–4th c.	uncertain	uncertain		
3	3	22.3	129	Barb. radiate	270–96	as Tetricus I	as Salus		
		27.2	163	AE3/4	late 3rd–4th c.	uncertain	uncertain		

Table A2 Catalogue of coins by phase, farmstead and landuse area

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