

Transactions
Volume 49 1998



LAMAS



London and Middlesex Archaeological Society

Hon Archaeological Editor:

John Shepherd
Archaeological Archive
Museum of London
46 Eagle Wharf Road
London N1 7EE
0171-566 9317

Hon Local History Editor:

Eileen Bowlt
7 Croft Gardens
Ruislip
Middlesex HA4 8EY
01895 638060

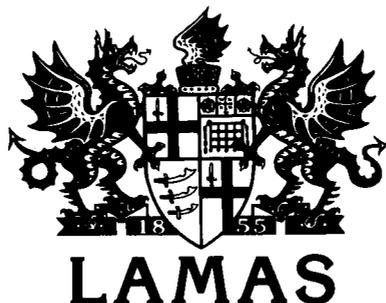
Production Editor:

Gillian Clegg
33 Chiswick Staithe
Hartington Road
London W4 3TP
0181-995 5333

Editors' note: the editors are happy to consider articles for publication in *Transactions*. New contributors are advised to ask the Production Editor for a copy of *LAMAS Notes for Contributors* before submitting papers.

Front cover: Carved memorial slab with a runic inscription along the left hand edge. It was found in the churchyard of St Paul's Cathedral during the 19th century and is of 11th-century date and Danish in inspiration. The front of the stone shows a beast in zoomorphic interlace in low relief. Traces of blue paint with details in brown and white suggest that it was originally coloured. An illustration from *Inscriptions, writing and literacy in Saxon London* on page 81 of this volume. (Courtesy of the Museum of London).

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Transactions of the
**London and Middlesex
Archaeological Society**

Volume 49
1998

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London & Middlesex Archaeological Society

Registered as a charity

ESTABLISHED IN 1855

Patrons: the Most Rev The Archbishop of Canterbury; the Right Rev The Bishop of London; The Right Hon The Lord Mayor of London; HM Lieutenant for Greater London and Custos Rotulorum; HM Assistant Lieutenant for the Middlesex area of Greater London; The Very Rev The Dean of St Paul's.

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London and Middlesex Archaeological Society

142ND ANNUAL REPORT OF COUNCIL FOR THE SUBSCRIPTION YEAR
ENDING 30TH SEPTEMBER 1997

It has been 'business as usual' this year though there have been few changes in the membership of Council, we welcome Newsletter editor Colin Thom. It has proved increasingly difficult to persuade LAMAS members to help on the Society's Sub-committees. The Greater London Local History Sub-committee needs new blood to ensure the continuation of its annual conference, and the Historic Buildings and Conservation Sub-committee needs new members to give effective coverage to London buildings.

During the year, a new LAMAS website was launched, thanks to the work of Francis Grew. This site offers benefits such as publicising conferences and events, on-line contents pages and abstracts of Transactions, and the possibility of attracting new subscriptions from individuals and institutions in this country and overseas. There are plans to further develop the site.

There was no John Stow Memorial Service and Ceremony of the Quill this year. The Merchant Taylors' Company is no longer able to support an annual event, and it has been agreed to hold the service every three years, beginning in 1999. We hope to secure the attendance of the Lord Mayor.

Council was concerned about proposed developments at the Globe Theatre site, and monitored the situation during the course of the year.

Meetings and visits

The series evening talks at the Museum of London opened in October 1996 with a talk by Colin Sorensen entitled *Looking for London on film*, coinciding with the exhibition 'London on Film' and including the showing of film extracts not seen in the exhibition. The Hugh Chapman Memorial Lecture in January 1997 was given by Joanna Bird on the theme of the Roman cult of Mithras and was well attended. Other talks in the season were Dr Frank Meddens on prehistoric trackways in the Thames Valley; Bill McCann on the use of geophysics and other techniques used in the Fleet Valley excavations; Judith Stevenson on *Women in Medieval London*; Christine Jones of the National Postal Museum on types of post boxes, and Bernard Nurse, Librarian of the Society of Antiquaries of London, on the Society's collection of prints and drawings. Attendance varied from 15 to 40 people. After the Annual General Meeting on 18th February, the President Mark Hassell gave his presidential address on *Roman London and Roman Paris – a tale of two cities*.

Publications

Work has continued on *Transactions* to increase the rate of publication. Once again, the Council wishes to record their sincere thanks to Gillian Clegg, the Society's Production Editor, for the production of two further volumes this year – Volume 45 (1994) appeared in December and Volume 46 (1995) in June. The Society's thanks are expressed to John Shepherd and Eileen Bowlt, the archaeological and historical consultants, and to Oliver Pearcey, the chair of the Publications Committee. It is anticipated the next year will see the publication date for *Transactions* back on target.

Membership and finance

At 30th September 1997 there were 556 fully paid-up members, made up of 381 individual, 33 joint, 51 affiliated societies, 53 corporations or institutions, and 3 students, plus 2 honorary members and 33 life members. Contrasting with last year there has been a rise in individual members, and a drop in corporate membership. There are 53 new members, compared with 34 in the previous 12 months. The increase of fully paid-up members over the last year may reflect more vigour in chasing payment.

Archaeological Research Committee

The Archaeological Research Committee met four times during the year, in October, January, April and July. Regular reports on archaeological fieldwork and post-excavation projects were received from MoLAS and the Greater London Archaeology Advisory Service.

Much of the Committee's time this year was spent discussing the current crisis surrounding the closure of the London Archaeology Archive by the Museum of London, and in lobbying for its reinstatement.

As usual the public highlight of the Committee's year was provided by the Annual Conference of London Archaeologists (the 34th), held in March in the Museum of London. This occasion also marked the inception of the Ralph Merrifield Award for services to London archaeology, which was presented to the Richmond Archaeology Society by Lysbeth Merrifield for work on the Thames foreshore. The Conference morning session was devoted to recent work across London, while the afternoon session: *Full time archaeology in Southwark: the first 25 years* was addressed by Harvey Sheldon, Ian Tyers, Brian Yule and Simon Blatherwick.

Local History Committee

The principal work of the committee was the organisation of the 31st Local History Conference, which took place on 9th November 1996. As usual the conference proved to be popular and was extremely well attended. The subject was *London Industry – from Workshop to Factory*, with seven speakers giving presentations on the following subjects: *Man and Machine 1550–1700*, *London Manufacture in the 18th and 19th centuries*, *the South London Pottery Industry 1700–1980* and *Industries of the Great West Road*. After the conference it was gratifying for the committee to receive so many favourable comments not only on the breadth and diversity of the subjects, but also on the choice of speakers.

Historic Buildings and Conservation Committee

The principal business of the Committee is to examine listed buildings applications for most of London on behalf of the Council for British Archaeology. During the year the Committee looked at 252 cases emanating mainly from Westminster, Redbridge, Bromley, Tower Hamlets, Bexley, Islington, and Camden. Long-time Chairman Dennis Corble spent months in hospital, and as a result Jon Finney has joined as the new Chairman, and Dennis has become Vice Chairman.

BY DIRECTION OF COUNCIL

LONDON & MIDDLESEX ARCHAEOLOGICAL SOCIETY
 INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30th SEPTEMBER 1997
 AND BALANCE SHEET AS AT 30th SEPTEMBER 1997

	1995/96	1996/97		1996	1997
Income			Assets		
Subscriptions	5,937	9,019	INVESTMENTS AT COST		
Sale of Shares	0	3,635	Sundry Debtors	1,127	1,127
Dividends and Interest	1,205	1,046	Bank & Cash Balances	0	0
Sales of Publications	1,604	675	Building Society Deposits	14,069	14,069
Grants for Publications:				<u>24,432</u>	<u>24,432</u>
English Heritage	5,477		Liabilities		
Museum of London	1,052	11,175	GRANTS UNEXPENDED		
Miscellaneous	134	0	Future Publications	850	850
TOTAL INCOME:	<u>£15,409</u>	<u>£25,550</u>	Archaeological Projects	910	910
			Wheatley Bequest	439	439
Expenditure				<u>2,199</u>	<u>2,199</u>
Publications:			Provision for Transactions	10,000	10,000
Publications Assistant	350	700	Publication Fund	6,066	6,629
Transactions	10,756	19,132	G.E. Eades Memorial Fund	118	118
Newsletter	1,164	1,431			
	<u>12,270</u>	21,263	ACCUMULATED FUNDS		
Lectures and Visits	102	0	General Fund:		
Local History Conference	(855)	(828)	Balance at 1.10.95	16,645	
Archaeological Committee	(658)	(812)	Transfer to Publications Fund	(563)	
Historic Buildings Committee	0	35			
Postage, Printing & Stationery	173	491	Surplus\ (Deficit) for the Year	4,600	20,682
Subscriptions and Donations	93	64			
Sundry Expenses	30	737			
SCOLA	250	0			
TOTAL EXPENSES	<u>11,405</u>	<u>20,950</u>			
Surplus\ (Deficit) for the Year	4,004	4,600			
	<u>£15,409</u>	<u>£25,550</u>			<u>£39,628</u>

A MIDDLE BRONZE AGE FIELD DITCH? EXCAVATIONS AT BANKSIDE CLOSE, ISLEWORTH

Graham Hull

With contributions by Steve Ford, Tessa Machling, Mark Robinson and David Williams

SUMMARY

An excavation in advance of development in Isleworth has produced evidence of Middle Bronze Age non-funerary activity in the form of a rectilinear ditch. It is argued that this feature is part of a field system which is a rare find in the regional context of the middle Thames Valley during the Middle Bronze Age.

INTRODUCTION

An archaeological evaluation (Ford 1998) and excavation were carried out during the summer of 1998 prior to the development of land off Bankside Close, Isleworth, for housing (TQ 1589574935) (Fig 1). Site Code BKC98. Thames Valley Archaeological Services were commissioned by St James Homes Ltd to carry out the fieldwork so that the archaeological condition on the planning application could be discharged. The site comprises a rectangular parcel of land, c.1.2 hectares in area, formerly used as allotments. It lies to the east of Mogden Water Treatment Works and to the rear of properties fronting Twickenham Road, Briar Close, Manns Close, and Trevor Close. The site is situated approximately 400m to the west of the River Crane and 1 km from the river Thames, at a height of 25m above Ordnance Datum. The underlying geology is brickearth above gravel (BGS 1981).

ARCHAEOLOGICAL DEPOSITS

An area centred on the archaeological deposits located during the evaluation (Ford 1998) was machine stripped of topsoil (Area A) and subsoil (Figs 1 and 2). (The topsoil was 0.3m deep and the subsoil 0.35m deep.) The subsoil had been disturbed by ploughing and gardening in the post-Medieval period. Two ditches that met at right-angles were revealed [2000 and 2001] and an area measuring 27m by 15m was stripped around them. The machined surface was cleaned by hand but no further archaeological features were found within the area. Ditch [2000] which ran north-south, terminated within Area A. However, to ensure that this was not a break in the ditch, a small area north of the main trench was also stripped; no continuation of the ditch was found. No indication of any more distant continuation of this ditch was found in the evaluation trenches to the north or north-west. A second area (B) was opened to the east of the main trench but this contained no archaeological deposits. A third area (C) to the west of the main trench showed that ditch [2001] probably continued in this direction. Also found in this area was posthole [1025].

Seven slots excavated across ditches [2000 and 2001] showed that they were between 0.78m and 1.25m wide, and 0.57m and 0.98m deep. The ditches have been dated by pottery to the Middle Bronze Age. In total, 50% of the area of the

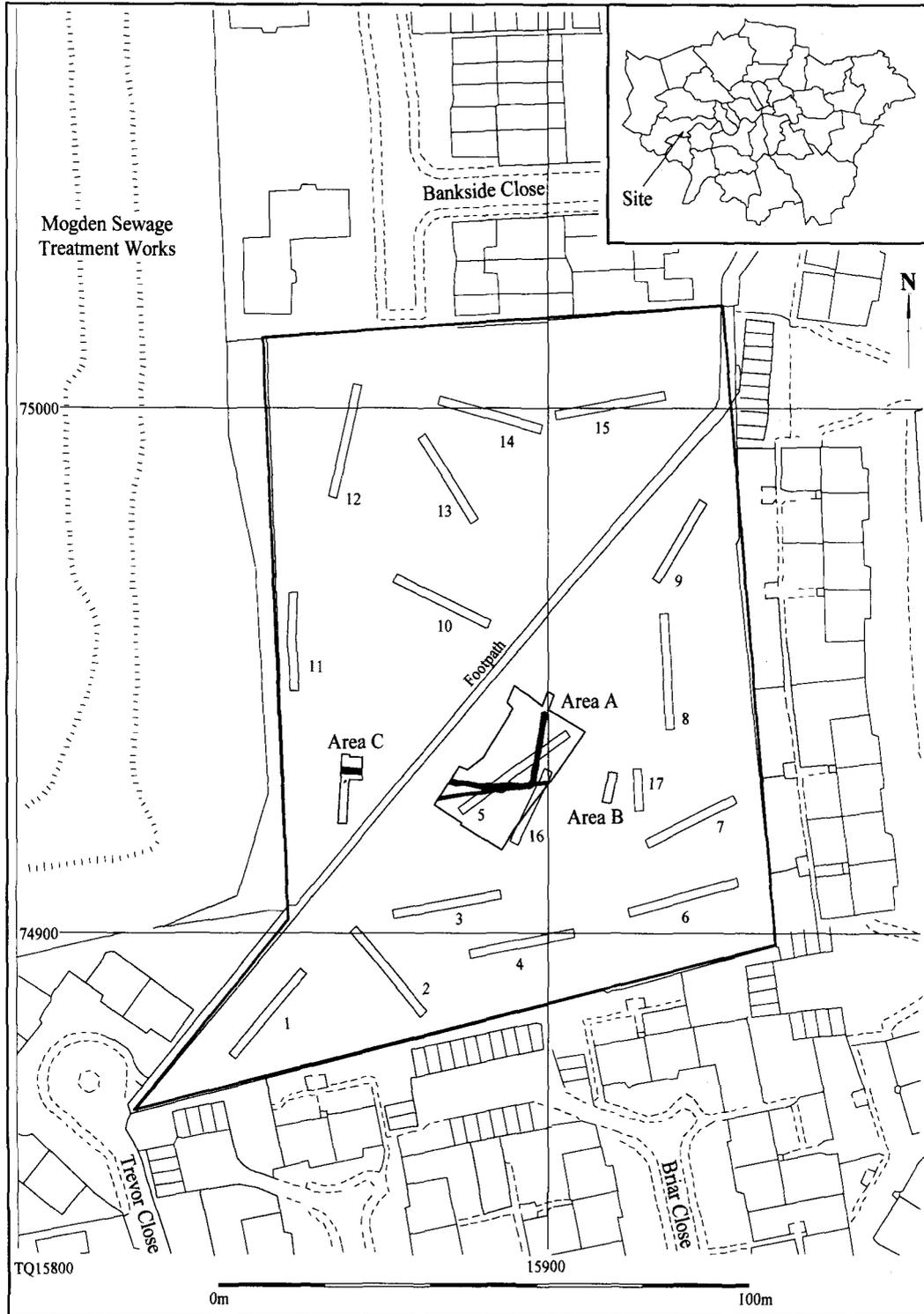


Fig 1. Location of the site in Greater London and Isleworth showing excavated areas and evaluation trenches

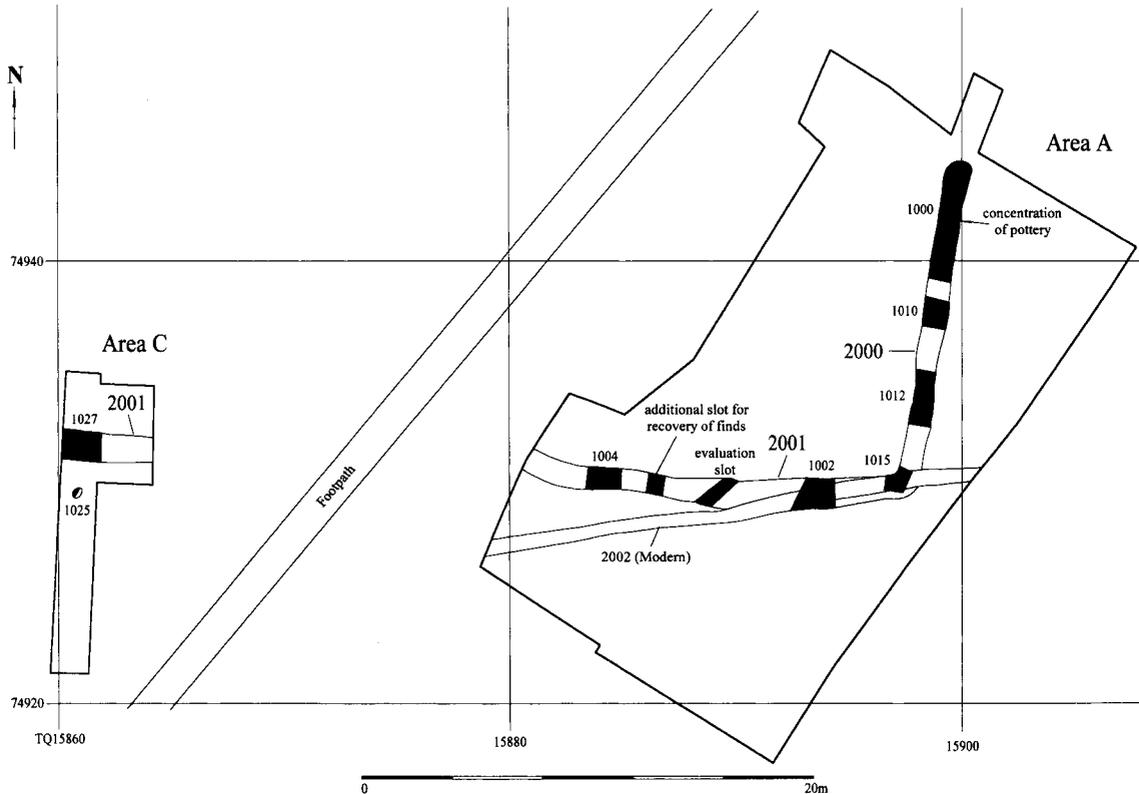


Fig 2. Trench location plan showing all archaeological features

exposed parts of the ditches was excavated. The ditch fills were not uniform across the site and between two and four phases of backfilling/silting were observed (Fig 3). The slot targeting the junction of the two ditches [1015] established that they were probably originally dug as one event.

Apart from the two ditches and a modern gully [2002] there was only one other archaeological feature; an ovoid posthole in Area C [1025] measuring 0.50m by 0.32m in plan and 0.26m deep. Smears of charcoal within its dark humic fill, as well as the fact that it appeared to be cut from c.0.2m higher than the surviving level of the neighbouring ditch, suggest that it was relatively recent in date.

Out of a total of 176 sherds of Middle Bronze Age pottery recovered during the evaluation and excavation, 147 came from ditch [2000] and the majority of these came from a localised area near the terminus. A piece of possible quern was also recovered from this area. Twenty-nine burnt flints and 16 stuck flints were also recovered.

The ditch fills were sampled (230 litres) for charred plant remains and small artefacts. These produced a single identifiable ancient cereal grain and ten fragments of burnt flint. No bone was recovered at any stage of the project.

THE FINDS

Pottery

Tessa Machling

The prehistoric pottery assemblage from Bankside Close comprised 176 sherds weighing 2479 gms. Of this total approximately 26% by number showed diagnostic traits (*eg* rims, bases, and decorated sherds). The assemblage quality was generally good with most sherds being reasonably large and unabraded. Most of the pottery came from secure contexts and, in conjunction with the high proportion of diagnostic sherds and the good quality of the assemblage, numbers and

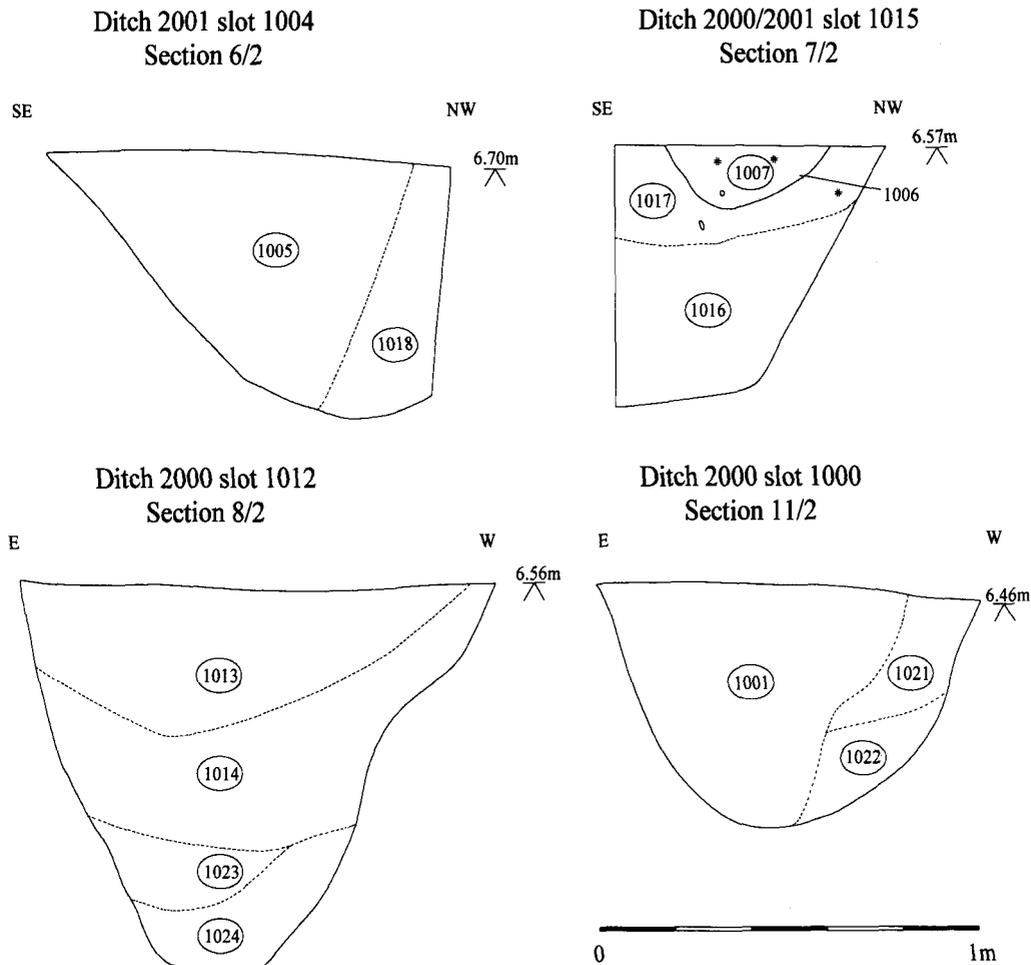


Fig 3. Selected sections (heights are in metres above Ordnance Datum)

forms of the vessels present can be given with reasonable confidence.

The assemblage was analysed and recorded following recommended guidelines for the analysis of prehistoric pottery (PCRG 1997). All sherds were assigned a fabric type after macroscopic examination and the use of a hand lens ($\times 10$ and $\times 20$ power), and the sherds were then counted and weighed to the nearest whole gramme. Surface treatment, evidence of manufacturing technology, and decoration, *etc.*, were also noted. The assemblage did not justify the use of further scientific analysis (*eg* thin sectioning).

Description of pottery fabrics

Three flint fabrics were identified. Table 1 shows the quantity and percentage of each fabric type

present. In the descriptions below, the terms used to describe the size of inclusions are defined as follows: very fine ($< 0.1\text{mm}$), fine ($0.1\text{--}0.25\text{mm}$), medium ($0.25\text{--}0.5\text{mm}$), coarse ($0.5\text{--}1\text{mm}$), very coarse ($1\text{mm}+$). Terms used to describe the frequency of inclusions are defined thus, based on the density charts devised by Terry and Chilingar (1955): rare ($1\text{--}3\%$), sparse ($3\text{--}10\%$), moderate ($10\text{--}20\%$), common ($20\text{--}30\%$), very common ($30\text{--}40\%$), abundant ($40\%+$).

Fabric F1: A hard, irregularly fired, very coarse fabric with sparse to moderate amounts of fine to very coarse (7mm) crushed, calcined flint temper. Similar amounts of fine to very coarse argillaceous material (possibly grog) is also present. Rare amounts of fine to medium quartz sand, ferruginous material and mica are also

Table 1. Pottery fabric totals by context

Fabric Context	F1 No of sherds	F1 Weight (gms)	F2 No of sherds	F2 Weight (gms)	F3 No of sherds	F3 Weight (gms)	Total no. of sherds
Tr 5 (55, 56, 59)	5 (3%)	112 (5%)	6 (3%)	27 (1%)	—	—	11 (6%)
Unstratified	2 (1%)	24 (<1%)	2 (1%)	24 (<1%)	6 (3%)	18 (<1%)	10 (6%)
2000, 1000 (1001)	—	—	72 (41%)	1660 (67%)	1 (<1%)	6 (<1%)	73 (42%)
2000, 1010 (1011)	—	—	—	—	3 (2%)	2 (<1%)	3 (2%)
2000, 1012 (1013)	—	—	4 (2%)	10 (<1%)	—	—	4 (2%)
2000, 1012 (1014)	8 (5%)	238 (10%)	—	—	42 (24%)	168 (7%)	50 (29%)
2000, 1012 (1023)	1 (<1%)	6 (<1%)	—	—	16 (9%)	70 (3%)	17 (10%)
2001, 1004 (1005)	—	—	4 (2%)	34 (1%)	—	—	4 (2%)
2001, 1015 (1017)	—	—	4 (2%)	80 (3%)	—	—	4 (2%)
<i>Totals</i>	16 (9%)	—	92 (52%)	—	68 (39%)	—	176
<i>Totals</i>	—	380 (15%)	—	1853 (74%)	—	264 (11%)	—

present. This fabric comprises 9% by number of the assemblage and is usually associated with thick-walled vessels (17mm thick) and would seem to be associated with classic Middle Bronze Age bucket/barrel urns of the Deverel-Rimbury tradition.

Fabric F2: A hard, irregularly fired, coarse fabric with moderate to common amounts of fine to very coarse (4mm) crushed, calcined flint temper. Rare amounts of fine to medium quartz sand, ferruginous material and mica are also present. This fabric is similar to fabric F1, but is less coarse and is usually associated with thinner walled vessels (x-section 11mm). This fabric comprises 52% by number of the assemblage and would also seem to be associated with bucket/barrel urns of the Middle Bronze Age Deverel Rimbury tradition.

Fabric F3: A fine, irregularly fired, hard fabric with moderate to common amounts of medium to coarse crushed, calcined flint temper. Sparse to rare amounts of fine to medium quartz sand, ferruginous material and mica are also present. This fabric, which comprises 39% by number of the assemblage, is associated with thin walled (x-section 5mm) vessels highly burnished on the exterior surface. The form of these vessels corresponds with undecorated globular urns of the Middle Bronze Age Deverel Rimbury tradition.

Discussion of fabrics

The three fabrics from Bankside Close represent standard Middle Bronze Age types. The forms present support this interpretation (eg barrel/bucket and globular urns). Comparison can be

made with the Bankside Close material and other assemblages from the vicinity. Middle Bronze Age pottery is uncommon in this area and the material from Bankside Close provides one of the best assemblages of well-stratified, probable domestic material. There are a few Middle Bronze Age sites which show comparable heavily flint-gritted fabrics (eg Sunbury, Littleton Reservoir, Acton, Yiewsley (Barrett 1973), Kempton Park (Sheppard 1975), Osterley (Cotton 1981), and Yeoveney Lodge (Robertson-Mackay 1987)). However, many of these represent cemetery finds or isolated sherds with little contextual/depositional information.

The majority of sites in the locality, eg Caesar's Camp (Grimes & Close Brooks 1993), Moor Lane, Harmondsworth (Cotton 1990), Avenue Gardens, Acton (Cotton 1993), Carshalton (Adkins and Needham 1985), and Snowy Fielder Way, Isleworth (Timby 1996), show only later Bronze Age and Early Iron Age activity, with the flint-gritted fabrics seen in the Middle Bronze Age sites continuing in use into the Iron Age. At Snowy Fielder Way, Isleworth (*ibid*) the presence of ferruginous inclusions (found in all three of the Bankside Close fabrics) in the Late Bronze Age/Early Iron Age would suggest similar clay resource utilization from the Middle Bronze Age through to the Iron Age.

At Moor Lane, Harmondsworth (Cotton 1990), an apparent overlap between the classic Middle Bronze Age Deverel Rimbury type sites described by Barrett (1973), and the Late Bronze Age/Early Iron Age sites of Caesar's Camp (Grimes & Close Brooks 1993), can be seen. On this site, fabric 1 would seem to have an Early/Middle Bronze Age origin (indeed it compares very favourably with Bankside Close fabrics F1 and F2) and has been described as representing an initial phase

of activity prior to the classic later Bronze Age phases on the site. However, the form and fabric of the Moor Lane vessel might suggest an even earlier date, preceding the classic Deverel Rimbury sites, in the Early Bronze Age.

The best evidence for comparison comes from five cemeteries (Barrett 1973; Sheppard 1975) and one possible domestic assemblage (Cotton 1981). At Kempton Park (Sheppard 1975) two barrel urns of a heavily flint-gritted fabric were located. Exact fabric descriptions are not given, but they would seem to be comparable to fabrics F1 and F2 at Bankside Close. Four cremation cemeteries discovered in the late 19th and early 20th centuries (Barrett 1973) also show a similar range of fabrics. At Sunbury, the fabric is described as having a flint filler of up to 7mm grain size which compares well with fabric F1 from Bankside Close. From Littleton Reservoir, fabrics are again comparable and the cross-section measurements from the sherds of 13–15mm are similar to those typical of fabrics F1 and F2 at Bankside Close. Acton provides fabrics better compared with fabrics F2 and F3. At Yiewsley comparable fabrics can also be seen, although the presence of a probable biconical urn might suggest an earlier date for this site. From Osterley (Cotton 1981) a handful of sherds recovered from a possible domestic context show two fabrics comparable with fabrics F1/2 and F3, similarly associated with barrel/bucket urns and globular urns respectively.

Resources for the pottery

It is generally accepted that if suitable resources can be found within 7–10km of a site, the pottery made from those resources can be said to be of local production (Arnold 1985). Clays that derive from outside this area can be treated as non-local.

The presence of common inclusion types such as flint and quartz sand could suggest both a local or non-local source. However, the absence of any diagnostic, non-local inclusions would make a local resource more probable. Ferruginous pellets have been recognized on other, albeit later, sites in the vicinity and are provenanced locally (Timby 1996; Williams 1993). The flint and quartz inclusions can be seen to derive from the river sands and gravels which surround the site.

Vessel forms

Sherds representing at least three (and possibly five) vessels were found. Diagnostic form sherds comprise 26% by sherd number of the assemblage (2% rims, 22% bases, and 2% decorated sherds). This high percentage is biased by the presence of large sections of one/two vessels from context [1001], which comprise 15% of the total diagnostic sherds. Thirty-two sherds (18% of total) could not be assigned a definite form type although it is almost certain that fabrics F1 and F2 correspond to barrel/bucket urns and fabric F3 to globular urns. Forms represented include barrel/bucket urns and globular urns. Parallel forms from other published sites are given in Table 2. The forms represented represent standard Middle Bronze Age types of the Deverel Rimbury tradition.

At least two barrel/bucket urns were present, both from ditch [2000], one each from slots [1000] (1001) and [1012] (1014). The slightly flaring profile of some of the sherds from [1000] (1001), if compared to the other sherds from this context, might suggest that two vessels were present in this context: one with a bucket-shaped profile and one with a barrel-shaped profile. Both of the vessels from slot [1000] (1001) were decorated with a finger-tipped, horizontal applied cord around the neck of the vessel.

One plain, flat rim sherd (fabric F2) from [1000] (1001) gives a diameter of approximately 18–24cm for one of the vessels and this, alongside a base diameter of approximately 24–28cm, would give a standard barrel profile for the vessel. The vessel from [1012] (1014) (fabric F1) was slightly larger with a base diameter of 32cm, but not enough of the profile existed for this to be reconstructed with accuracy.

The globular urns represented all appeared to be undecorated but the lack of profiles does not allow them to be assigned a definite type. However, from evidence of the surrounding area it would be unlikely that the vessel would correspond with Calkin's (1962) vessel series (Barrett 1973).

One rim sherd from [1000] (1001) suggests a globular urn with a rim diameter of 18cm. Slot [1012] (1014) contained 42 sherds from another such vessel with a rim diameter of 16–20cm and a base diameter of 16cm, and would seem to have a more ovoid rather than a bag-shaped profile. Context [1023], in slot [1012], contained sherds from a globular urn with a base diameter

Table 2. Pottery vessel forms

General form type	Specific vessel type	Context	Published example	Approx. number of vessels
Urn	Barrel/Bucket Urn (61% of total by fabric: F1 and F2)	1001	Sunbury, fig 1:3,13, Acton fig 4:5 etc. For possible bucket urn see Sunbury fig 2:26, Littleton fig 3:1	1/2
—	—	1014	As above	1
—	Globular: Type uncertain (39% of total by fabric: F3)	1001	Osterley, fig 1:5, Sunbury, fig 2:15	1?
—	—	1014	As above	1
—	—	1023	ditto	Same vessel as 1014
<i>Total</i>	—	—	—	<i>3/5 Vessels</i>

of 16cm. As context [1023] was below [1014] and due to the similarity of the base diameter, it would seem that the sherds from [1014] and [1023] derive from the same vessel. The similarity of the rim diameter of the vessel from [1014] to that of [1001] might suggest that the sherd from [1001] also came from this vessel, although this cannot be proved.

Surface treatments, decoration and residues

Sixty-two percent of the total by sherd number show evidence of surface treatments, decoration and residues (55% surface treatments, 5% residues, and 2% decorated). The good quality of the assemblage and the high percentage occurrence of such treatments/residues, *etc*, suggests that a true proportion is represented and that this has not been remarkably altered during deposition.

Surface treatments were represented by burnishing and finger smoothing. Burnishing occurred on 48 sherds (27% of total) from contexts [1001, 1014 and 1023] and was solely associated with fabric F3 globular urns. Finger smoothing occurred on 48 sherds (27% of total) from [1001] and [1017] and is only associated with fabric F2.

Residues were found on only nine sherds (5% of the total number) of fabric F2 from context [1001]. The residue appears to have been burnt and occurs on the interior of base and lower vessel sherds. No further comment may be made about the precise origin of these residues.

Four decorated sherds were recovered (2% of the total number). All four sherds came from [1001] and would appear to be associated with one (possibly two) bucket/barrel urns of fabric F2. The decoration consists of an applied horizontal cordon around the neck of the vessel

which has then been decorated with finger-tipping. This classic Deverel Rimbury technique further reinforces the interpretation of a secure Middle Bronze Age date.

The one surviving rim sherd from this vessel did not show any finger-tipping, holes or lugs on the upper rim, a method of decoration often seen at Sunbury, Acton, and Littleton Reservoir (Barrett 1973), possibly suggesting that the Bankside Close vessel represents a slightly earlier phase or distinct local form. Unfortunately, this cannot be proved and further investigation in the area would be necessary to elucidate this problem. No decoration was seen on the globular urn sherds.

The distribution of the pottery

Eleven sherds were recovered from the evaluation and ten sherds from unstratified areas. The bulk of material came from secure contexts, a few of which were related stratigraphically. Ten sherds were recovered from soil samples. However, as the pottery would appear to be of a broadly contemporary date in the Middle Bronze Age, little phasing evidence can be seen. The pottery has been grouped according to ditch group number and then by ditch slot and context.

Ditch [2000]

This group provided pottery from two ditch slots [1000] and [1012] and produced by far the largest quantity of material, comprising 147 sherds (85% by total number of sherds). Pottery was recovered from five contexts, three from slot [1012] and one each from slots [1010] and [1000].

Slot [1012]: Seventy-one sherds (41% of the total number) were recovered from this slot. Context

[1013], the upper context, contained four small sherds of fabric F2 and, due to the truncation of the ditch, should probably be treated with caution. The middle context, [1014], contained 50 sherds, the main proportion of which comprised sherds from one globular urn of fabric F3. Seven sherds of fabric F1 were also included. Context [1023], a lower fill, contained a similar proportion of fabrics F1 and F3, the fabric F3 sherds belonging to apparently the same vessel as those from context [1014]. The lowest fill [1024] contained no pottery. It would therefore appear that contexts [1014] and [1023] may represent the same phase of activity, with perhaps context [1013] representing a later episode of silting which brought the small sherds into the ditch. From the diagnostic sherds recovered it would appear that the lower section of a globular urn had been deposited into the lower level of the ditch (see discussion below).

Slot [1010]: Two small sherds of fabric F3 were recovered from context [1011].

Slot [1000]: Seventy-one sherds (42% of the total number) were recovered from one context, [1001], from this slot. Of this total, only one small rim sherd of a F3 globular urn was found, the rest of the collection comprising sherds of fabric F2. As has already been discussed, the fabric F2 sherds may be evidence of two vessels, but it is accurate to say that at least one large lower section of a bucket/barrel urn is present, with a few decorated sherds and a single plain rim giving an accurate profile of the vessel.

Ditch [2001]

Two ditch slots [1004] and [1015] yielded pottery from two contexts [1005] and [1017], one from each slot. Only eight sherds (4% of the total number) were found.

Slot [1004]: Four small sherds (approximately 2% of the total number of sherds) of fabric F2 were recovered from [1005], the upper context of the ditch in this slot.

Slot [1015]: The middle context, [1017], of the ditch in this slot provided four small sherds (approximately 2% of the total number) of fabric F2. The sherds show evidence of finger-smoothing on the exterior surface.

Discussion of pottery distribution

Excluding the evaluation and unstratified pottery, the percentage proportions of the pottery found from ditch [2000] (96%) when compared to ditch [2001] (4%), even allowing for a greater excavated area in ditch [2000], showed a remarkable discrepancy. The low quantity and restricted range of the pottery recovered from ditch [2001], if compared to ditch [2000], might suggest a different phase of construction for each ditch. However, the apparently indistinguishable nature of the pottery fabrics does not allow for secure interpretation; the difference can be seen from the quantities of pottery alone.

Base sherds and lower vessel sherds are found in far larger proportions if compared to upper vessel sherds such as rims and decorated sherds. This would suggest that many of the vessels deposited in the ditch had already lost their upper sections prior to deposition, and that those that were deposited were introduced into the ditch in large sections. The fact that the ditch is thought to have been heavily truncated at a later date may also explain the loss of upper pot sections, if it is assumed that the vessels were placed upright into the ditch terminal and then subsequently lost their upper sections when the ditch was truncated.

The remarkable difference in the quantities of pottery from the two ditch groups and the sections of the vessels recovered, as well as the paucity of material from slot [1010], if taken together, could be seen as the result of deliberate selection and inclusion of the vessels as part of a 'foundation' deposit. However, it could equally be possible that once vessels had lost their upper portion they were dumped into the ditch as rubbish. The presence of the highest quantity of pottery in two distinct areas, one near the ditch terminal and the other in the area of slot [1012] and the absence of pottery from the lower levels of ditch [2001] would seem to make the former explanation likely, although neither can be proved with confidence.

Conclusions

The pottery assemblage recovered from Bankside Close, although small, included a reasonable range of forms and decoration typical of the Middle Bronze Age Deverel-Rimbury tradition. The contextual and stratigraphic relationships

have allowed for the assemblage to be placed within a secure dating framework, and have provided possible phasing for the ditch and evidence for the cause of deposition.

The assemblage has further added to the picture of Middle Bronze Age sites in this little excavated area of the Thames Valley. The significance of this assemblage is further highlighted by a general lack of well dated, comparable assemblages within the area, especially from domestic sites of the period. The presence of equal proportions of bucket/barrel and globular urns further supports Needham's (1987) suggestion that the restricted range of form types, seen in cremations, does not continue into domestic sites of the period in this area.

Struck flint

Steve Ford

A small collection of 14 pieces of struck flint was recovered from the evaluation and excavation. This excludes a spall from chalk flint found during the evaluation, which is thought to be of recent origin. The collection comprised nine flakes, two spalls, a core fragment and two broken narrow flakes. Where cortex was still present, a gravel source for the raw material was evident. Most of the pieces were in a fresh condition.

The two possible broken blades or narrow flakes may be of Mesolithic or earlier Neolithic origin. The remainder of the material is not closely datable but would not be out of context in the Middle Bronze Age or Late Bronze Age.

Burnt flint

Thirty-nine pieces of burnt flint (231gms) were recovered from the fills of the ditches.

Stone

David Williams

A single piece of non-flint stone was recovered during the excavation from slot [1000] (1001) across ditch [2000]. It was a broken fragment of sarsen with one slightly concave surface, which shows some evidence of wear, suggesting that it

may possibly have been part of a saddle quern. It weighed 655gms and was quite likely obtained from the local Tertiary formations.

Carbonised plant remains

Mark Robinson

The fills of the ditches were bulk sampled for artefacts and ecofacts. In total, 230 litres were floated for carbonised plant remains and the residues wet-sieved for finds. Approximately six carbonised cereal grains were recovered from the flots. The only ancient material recognisable was a single grain of *Triticum cf Dicoccum* (emmer wheat). This cereal is typical of the Middle Bronze Age, as is the paucity of remains from that period.

DISCUSSION

Steve Ford and Graham Hull

The excavation has examined two small Middle Bronze Age ditches which met at right angles. The artefacts from the ditches were stratigraphically secure with no finds dating from later than the Middle Bronze Age. It was considered that the fairly discrete clustering of the majority of the pottery at the terminus of one of the ditches was residual, being the product, for example, of a later ditch having truncated an earlier feature. However, the fact that Middle Bronze Age pottery came from a context that extended the length of the ditch makes this an unreasonable proposition. Pottery placed at the terminus of ditch [2000] may have been a 'foundation event'. A possible parallel may be drawn with the later deposits at Petters Sports Field, Egham (O'Connell 1986). The pottery assemblage is likely to represent three to five vessels and these probably came from a domestic setting. Other finds from the ditches were: a piece of sarsen that may have been part of a saddle quern; a small assemblage of struck flints; some burnt flints, and a few burnt cereal seeds.

It has been considered that these features define a partially enclosed settlement, similar to those excavated on Cranborne Chase at Down Farm and Angle Ditch, Dorset (Barrett *et al* 1991, 185, 219), but there is little evidence to support this view. If occupation had been characterised

by a small number of shallow cut features, then subsequent ploughing and allotment working may have removed all such traces, apart from the deeper ditches. However, other sites in the region such as Prospect Park, Harmondsworth (Andrews 1996a) do have evidence of Middle Bronze Age activity represented by a small number of cut features such as postholes and stray finds even though intensive ploughing has occurred. A ditch adjacent to an occupation site might have been expected to contain a greater range of finds and charcoal from hearths, but these were absent at Bankside Close. For the Bronze Age and earlier periods the characteristics of what constitutes a 'typical' settlement site is open to debate. The possibility that the deposits at Bankside Close represent occupation activity cannot be dismissed out of hand, but a more likely explanation for the function of the ditches is that they served to enclose an area of land and may be more appropriately described as field boundaries. If correct, this is a rare discovery for the region.

Evidence for Prehistoric field systems and enclosure has been widely recognized across the British Isles and Western Europe, for example fields of Neolithic date have been found in Ireland (Caulfield 1983), and Bronze Age fields have been discovered at Fengate (Pryor 1978), Corfe River, Dorset (Cox & Hearne 1991), Cranborne Chase, Dorset (Barrett *et al* 1991), and Dartmoor (Fleming 1978, 1983). The gravel terraces of the middle Thames Valley also have a share of Prehistoric field and enclosure systems such as at Reading Business Park (Moore & Jennings 1992) and Weir Bank Stud Farm, Bray (Barnes & Cleal 1995). The clearest examples comprise rectilinear arrangements of fields defined by ditches, banks, walls, or lynchets and can include trackways and boundaries. The larger rectilinear systems with a regular layout indicate a planned use of the landscape, whereas irregular or curvilinear fields point to a more piecemeal approach.

In order to assess the regional significance of the Bankside Close findings, Table 3 has been compiled to summarise the results of a search of published, unpublished, and Sites and Monuments Record sources for sites where field systems or enclosures of Bronze Age date have been suggested. Figure 4 shows the location of the sites detailed in Table 3. Despite prevailing opinion that Middle and Late Bronze Age field systems are widespread in the middle Thames

Valley, our search has suggested that sites with unambiguous dating evidence are surprisingly few. The table contains just 16 entries, including Bankside Close. The evidence for field systems of Middle Bronze Age date or earlier is very limited and the evidence is only marginally better for the Late Bronze Age and Early Iron Age. Three sites in Table 3 are attributed to the Middle to Late Bronze Age (8, 9 and 10) and four sites are dated to the Late Bronze Age (2, 3, 7 and 12). Five sites possibly have Middle Bronze Age elements (1, 4, 5, 6 and 11). Of these, two have only been reported in assessment or evaluation reports (4 and 5) and convincing evidence of Middle Bronze Age field systems has not been demonstrated. The site at Muckhatch Farm (1), has not been fully published and previously has been regarded as a settlement enclosure (Ford 1991). It is a poor candidate for a Middle Bronze Age field system. The interim report for Sipson Lane (8) provokes discussion as to what special circumstances allowed a Neolithic ditch to remain visible to be recut in the Middle Bronze Age.

There are a number of large scale projects currently in progress in the region for which there are no formal reports available. Two of the projects are being carried out by Oxford Archaeological Unit. At the Eton College Rowing Lake site at Dorney (13) a number of field ditches have been evaluated which are thought to be of Middle/Late Bronze Age date (Allen & Welsh 1998, fig 7). Similarly, excavation of sites at Dorney along the line of the nearby Maidenhead Flood Relief Scheme at Marsh Lane East (14) has revealed what is thought to be a Middle Bronze Age field system, and that at Lake End Road (15) has revealed a complete Bucket Urn in a boundary ditch (Yates 1997, G20; A Barclay pers comm). Work in advance of the extension to Heathrow Airport (16) has reputedly located widespread Bronze Age field systems (J Lewis pers comm) but no reports could be made available at this time to assess the extent, nature, and chronological basis for these claims.

The sites at Weir Bank Stud Farm (6) and Bankside Close (11), and possibly the more recent discoveries, may be the only well-dated and unambiguous Middle Bronze Age field systems recognised in the region.

The evidence for these field systems has also to be considered against the wider background of Bronze Age settlement in the region. Fieldwork and research in the 1970s generated a great deal

Table 3. Bronze Age sites on the gravel terraces west of London with claimed evidence of field systems and related features

No	Site Name	Comments	Reference
1	Muckhatch Farm, Thorpe	Deverel-Rimbury pottery associated with a curvilinear ditch. Probably part of a settlement enclosure.	Johnson 1975
2	Stanwell	Late Bronze Age trackway and field system? Some indication of scattered habitation.	O'Connell 1990
3	Reading Business Park	Late Bronze Age settlement and field systems.	Moore & Jennings 1992
4	Wall Garden Farm, Sipson	Large elongated pit with pieces of Deverel-Rimbury pottery, struck flints, daub, and cylindrical loom weights. C14 date 1140 +/- 70 bc. Two unconnected stretches of ditch seen as possibly representing an enclosure.	MoLAS 1993
5	Northolt Road, Longford, Hillingdon	Middle Bronze Age settlement and possibly field boundaries represented by pits and shallow ditches.	MoLAS 1995
6	Weir Bank Stud Farm, Bray	Middle Bronze Age field system and occupation. C14 date cal bc 1872-1129 (26) UB-3513 and UB-3514.	Barnes & Cleal 1995
7	Prospect Park, Harmondsworth	Late Bronze Age field boundaries and settlement.	Andrews 1996a
8	Sipson Lane, Harlington	Middle Bronze Age recut of Neolithic enclosure ditch. Some linear and discrete features assigned broadly to Middle to Late Bronze Age.	WA 1997
9	Holloway Lane, Harmondsworth	Middle to Late Bronze Age activity. Rectangular enclosure defined by three ditches. Middle Bronze Age pottery fragments in a pit nearby.	MoLAS 1997
10	Cranford Lane, Harlington	Circle of cooking and refuse pits around a well that probably dates to the Middle Bronze Age. Middle to Late Bronze Age field system identified.	MoLAS 1997
11	Bankside Close, Isleworth	Deverel Rimbury pottery associated with Middle Bronze Age ditches.	this report
12	Jewsons, Yard, Uxbridge	Late Bronze Age trackway. Middle Bronze Age gully nearby.	Barclay et al. 1995
13	Eton College Rowing Lake, Dorney	Field system ditches with Middle/Late Bronze Age pottery in evaluation trenches.	Allen & Welsh 1998
14	Marsh Lane East, Dorney	Field system with Middle Bronze Age pottery.	Yates 1997;
15	Lake End Road, Dorney	Ditch with complete Middle Bronze Age bucket urn.	A Barclay pers comm Yates 1997;
16	Heathrow Airport Terminal 5	Bronze Age field systems?	A Barclay pers comm J Lewis pers comm

of interest in the Bronze Age (*cf* Barrett & Bradley 1980) and this work produced a framework with which to understand the period. One particular theme that emerged was the nature and chronology of Bronze Age settlement. Ellison (1981) provided an overview of the period and concluded that permanent well-established settlement commenced in the Middle Bronze Age (and see Childe 1947, 186-9). Subsequent research has looked at these broad patterns on a regional basis. For the middle Thames region it was concluded that the evidence to support Ellison's overview was insubstantial and that there was little evidence for large-scale permanent settlement or land use until the Late Bronze Age (Ford 1991). The number of Late Bronze Age and Late Bronze Age/Early Iron Age occupation sites far exceeds those of the Middle Bronze Age (*ibid*, figs 6.12 and 6.13). If this pattern was largely the result of taphonomic processes it

might be reasonable to expect that the considerable archaeological response to development pressure in recent years would have redressed the balance. This work has led to an increase in the number of Bronze Age sites recorded in the region (O'Connell 1990; Filer 1991; Moore & Jennings 1992; Grimes & Close Brooks 1993; Barnes & Cleal 1995; Cotton 1993; MoLAS 1995; Andrews 1996a; Andrews 1996b; Bell 1996; MoLAS 1997; WA 1997; Ford forthcoming; Allen & Welsh 1998) but has, if anything, reinforced the pattern in favour of the Late Bronze Age. As Table 3 shows, apart from Weir Bank Stud Farm and Bankside Close, and perhaps the sites not yet fully reported on, archaeological fieldwork has had little impact on either the numbers of claimed or genuine Middle Bronze Age field systems. Ellison's (1981) overview is now somewhat dated and for the middle Thames Valley it is not until the Late Bronze Age that permanent

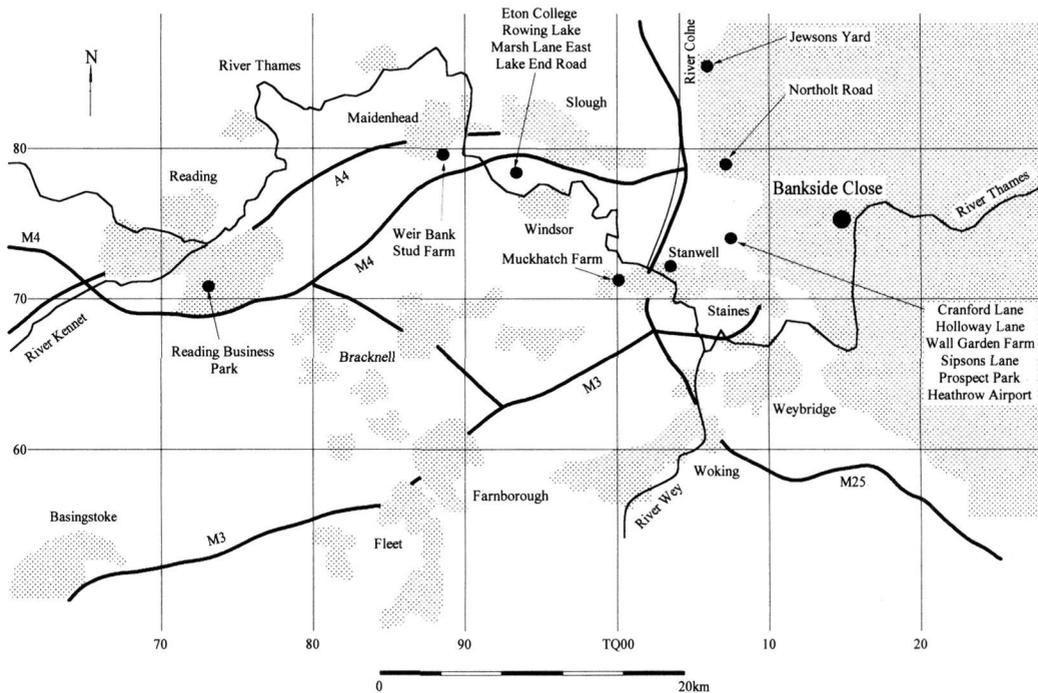


Fig 4. Location of sites mentioned in Table 3

well-established settlement is an appropriate description.

The Bankside Close site is, therefore, of particular interest. First, it adds to the modest corpus of non-funerary Middle Bronze Age pottery from the region. Secondly, the site appears, along with Weir Bank Stud Farm, to be unusual in indicating the presence of Middle Bronze Age field boundaries.

The ditches excavated at Bankside Close and this synthesis of recent work in the region suggest that field boundaries may have begun to be defined in the middle Thames Valley in the Middle Bronze Age. Like the *proven* examples of Bronze Age field systems on the chalk downlands of southern England (Bowden *et al* 1991–3, 130) they are, however, an uncommon occurrence. The development of enclosed landscapes, which leave physical traces, may have been a more gradual process than was hitherto supposed.

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A ROMANO-BRITISH FARMSTEAD AT ST MARY ABBOTS HOSPITAL, MARLOES ROAD, KENSINGTON

Elizabeth Howe

With contributions from John Giorgi, Louise Rayner and Angela Wardle

SUMMARY

Excavations at the former St Mary Abbots Hospital revealed the first archaeological evidence for Late Iron Age and early Roman occupation in Kensington. Structural remains in the form of postholes, slots and gullies represent farm buildings of the early Roman period. Along with a series of linear and curvilinear ditches this is the earliest recorded evidence of occupation in Kensington and makes an important contribution to archaeological knowledge of this area of London.

INTRODUCTION

An archaeological evaluation followed by an excavation took place between 25 July and 16 September 1994 in the grounds of the former St Mary Abbots Hospital, Marloes Road, Kensington W8. The site lies on the eastern side of Marloes Road and south of Kensington High Street (TQ 2567 7916; Fig 1). The evaluation and excavation were undertaken by the Museum of London Archaeology Service prior to redevelopment. The main excavation area totalled 1145sq m and the total area investigated was 1500sq m. The evaluation stage identified Roman features in one of seven trenches, and subsequent excavation concentrated on an area extending out from this productive trench. (Site Code MAK 94.)

No Late Iron Age activity had been documented in the area before the present excavations

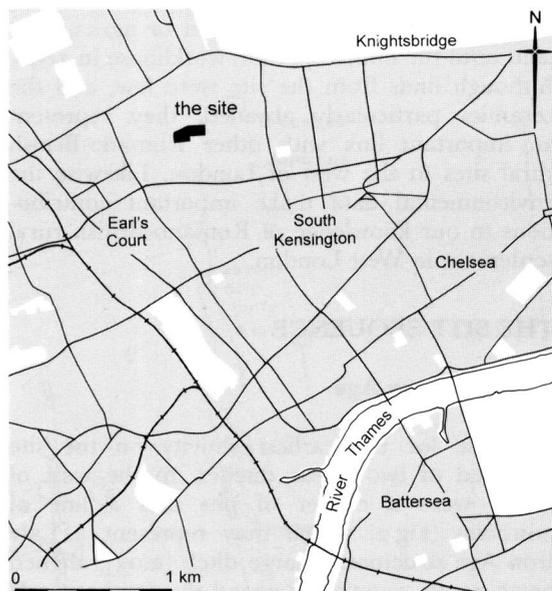


Fig 1. Site location

took place. The main Roman road from *Londinium* to *Calleva Atrebatum* (Silchester) lies beneath the modern Holland Park Avenue and Notting Hill Gate, passing about 1.3km to the north of the site. It has been suggested that a subsidiary Roman road, 'Akeman Street', runs along the line of the present Kensington High Street, approximately 400m to the north of the site, but this remains unconfirmed (Merrifield 1983, 122).

Excavations at 11–15 Thorney Court, 500m to the north-east, in 1976 found that most of the archaeological evidence had been destroyed by quarrying (Hill 1994, 11). There was little other evidence of Roman activity within a 1km radius of the site, the only find being a samian lamp recovered during the construction of Gloucester Road underground station, approximately 200m to the south-east. A possible Roman 'villa' may have existed in the region of Lansdowne Road, Notting Hill, approximately 1.5km to the north-east, where two stone coffins were found in the mid 19th century (Whipp 1975, 4).

The site lies to the west of the Roman city of *Londinium* and just outside the 'town zone' (Merrifield 1983, 127), which is thought to have extended to the present day Marble Arch. No Roman occupation immediately to the west of the town zone had been recorded before the excavations at Marloes Road.

These excavations revealed the first evidence for a multi-phase occupation of the site during the Late Iron Age and early Roman periods, after which it remained as open or agricultural land until the building of the workhouse in 1848. Although finds from the site were few, and the ceramics particularly abraded, they represent an important link with other Romano-British rural sites to the west of London. Likewise the environmental data make important contributions to our knowledge of Romano-British rural settlement in West London.

THE SITE SEQUENCE

The Late Iron Age

Evidence for the earliest activity on the site consisted of two linear ditches, to the west of which were a cluster of pits and a line of postholes (Fig 2) which may represent a Late Iron Age structure. A large ditch [2.03], aligned north-south, extended beyond the southern and northern limits of the excavation, curving to the south-east and possibly enclosing land to the east. A second ditch [2.02], of which only a 1.6m length was recorded, was also aligned north-south (Fig 8, section 1). The relationship between the two ditches was lost as a result of modern truncation, so that it is uncertain whether or not they together formed part of a field system. It would seem, however, that the larger ditch defined the eastern limit of the Late Iron Age occupation, and that the secondary ditch defined

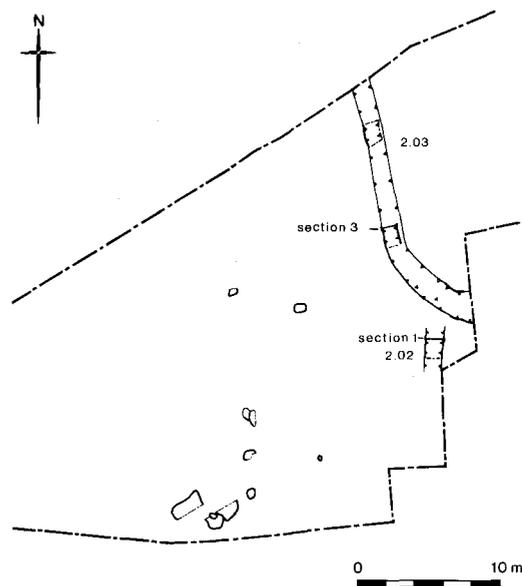


Fig 2. Late Iron Age features

it further south. The larger ditch measured at least 19m in length and was up to 2m wide and 0.96m deep. Pottery recovered from its fills has been dated to the late 1st century BC and early 1st century AD (see pottery report below). Environmental samples from the fills produced the largest concentration of environmental

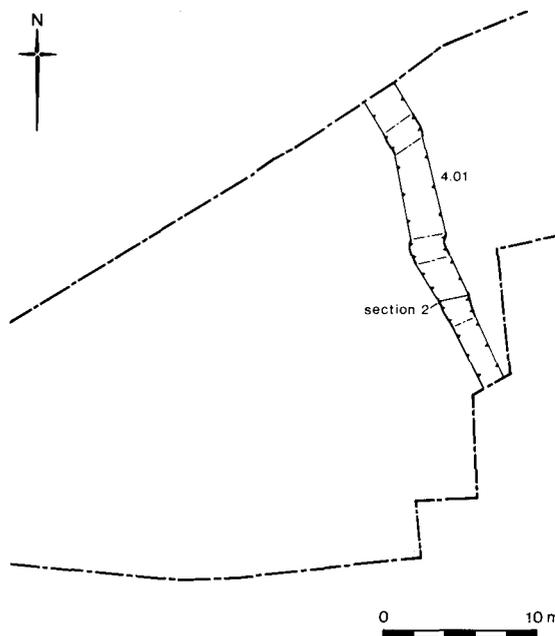


Fig 3. Roman boundary ditch

remains from the site (see below). Roman tile, along with large quantities of daub, was also recovered from the feature, but may have been intrusive. Fragments of loomweight of probable Iron Age date (see below) were also recovered. The presence of demolition material, mostly consisting of small fragments of daub, suggest a wattle-and-daub building nearby. A large fragment of mudbrick recovered from the secondary ditch also indicated the presence of a nearby building.

To the west of these ditches a series of postholes were recorded, five of which formed a north-south alignment parallel to the main ditch. The postholes were up to 0.80m in diameter and 0.18m deep. Pottery recovered from the backfill suggests an early 1st-century date. The size of the postholes suggests that they may have formed part of a substantial structure. Two very irregular features were excavated to the west of the

postholes and produced small amounts of 1st-century pottery and burnt flint. It is possible that these features, which survived to a depth of 0.50m, were pits for the storage of food, although there is no environmental data to substantiate this.

Early Roman period

This represents a second phase of the site, although the sequence between phases 1 and 2 was very tight. During this period the major north-south ditch was recut on almost the same alignment, although this time it did not curve to the south-east but continued south to the limit of excavation (Fig 3, Fig 8 sections 2 and 3). It divided an occupation area to the west from open land in the form of a field system to the east. A series of north-south and east-west linear features with associated postholes formed the

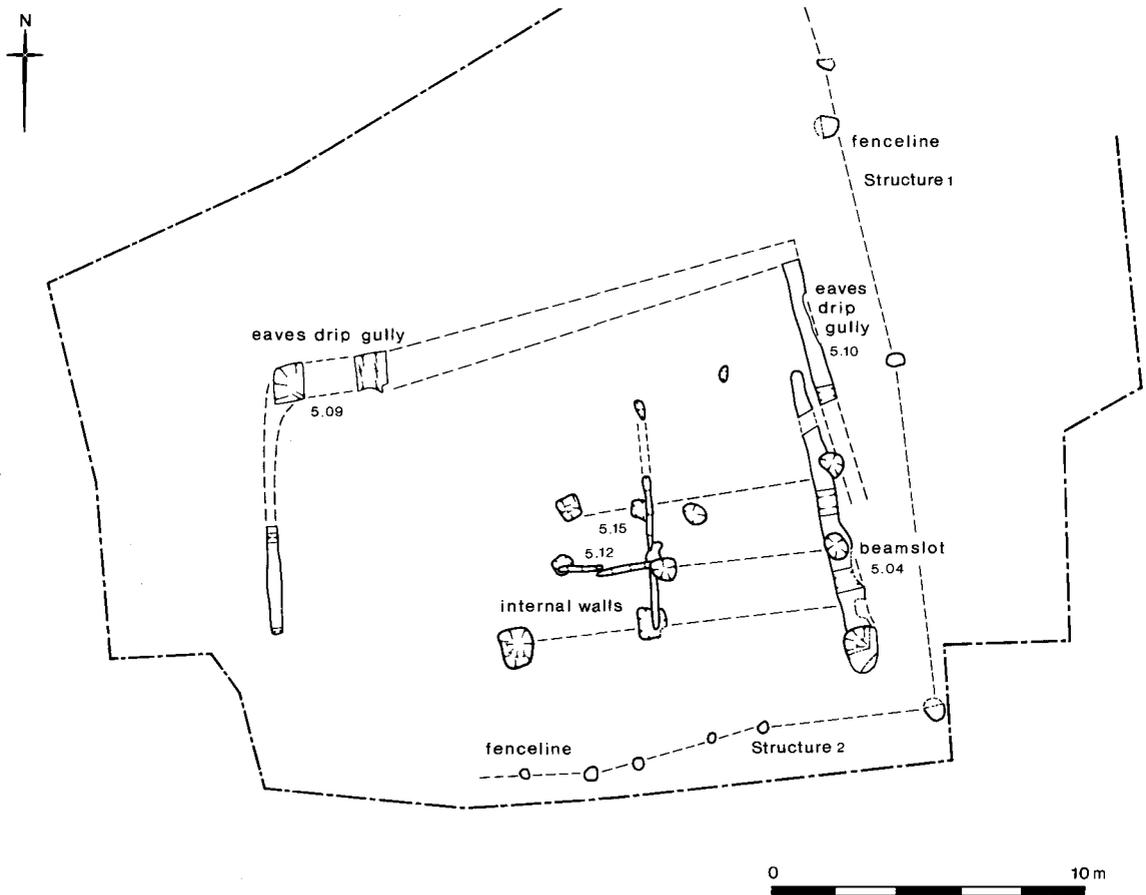


Fig 4. Roman Building 1

foundations of a large rectilinear building (Fig 4) which was subsequently enlarged to the east and north (Fig 5). Contemporary with the ditch and Buildings 1 and 2 was a series of ditches to the east which formed part of a complex field system severely truncated in the building of the later hospital. The buildings, ditch and field system appear to have been abandoned towards the end of the 2nd century.

The major north-south boundary ditch was very productive of both finds and environmental data. Pottery recovered from the lower primary usage fills of the ditch has been dated to AD 60-70. The upper disuse fills have been dated to the mid 2nd century suggesting that the feature was in use throughout this period. Other finds included a fragment of Iron Age loomweight and several fragments of Roman 1st-century glass (see below). A fragment of mudbrick and fragments of Roman tile and daub were also recovered

from the later fills. Environmental samples produced the second largest amount of seeds found on site.

To the west of the ditch and aligned with it were the truncated remains of a possible wattle-and-daub building. Two linear features formed the external western, northern, and eastern limits of Building 1. The linear feature [5.09] in the west ran north-south for 9m then turned to the east through 90° and ran for 3.7m before being truncated by later features. Up to 0.80m wide and 0.50m deep, this L-shaped linear feature served as an eaves drip gully. Parallel to it to the east was another linear feature [5.10] aligned north-south and measuring 4.8m in length by 0.56m wide and 0.20m deep. This may also have served as an eaves drip gully. Immediately to the west and parallel to this a third linear feature [5.04] was excavated. This was 4.9m long, 0.50m wide and 0.33m deep and was interpreted as a

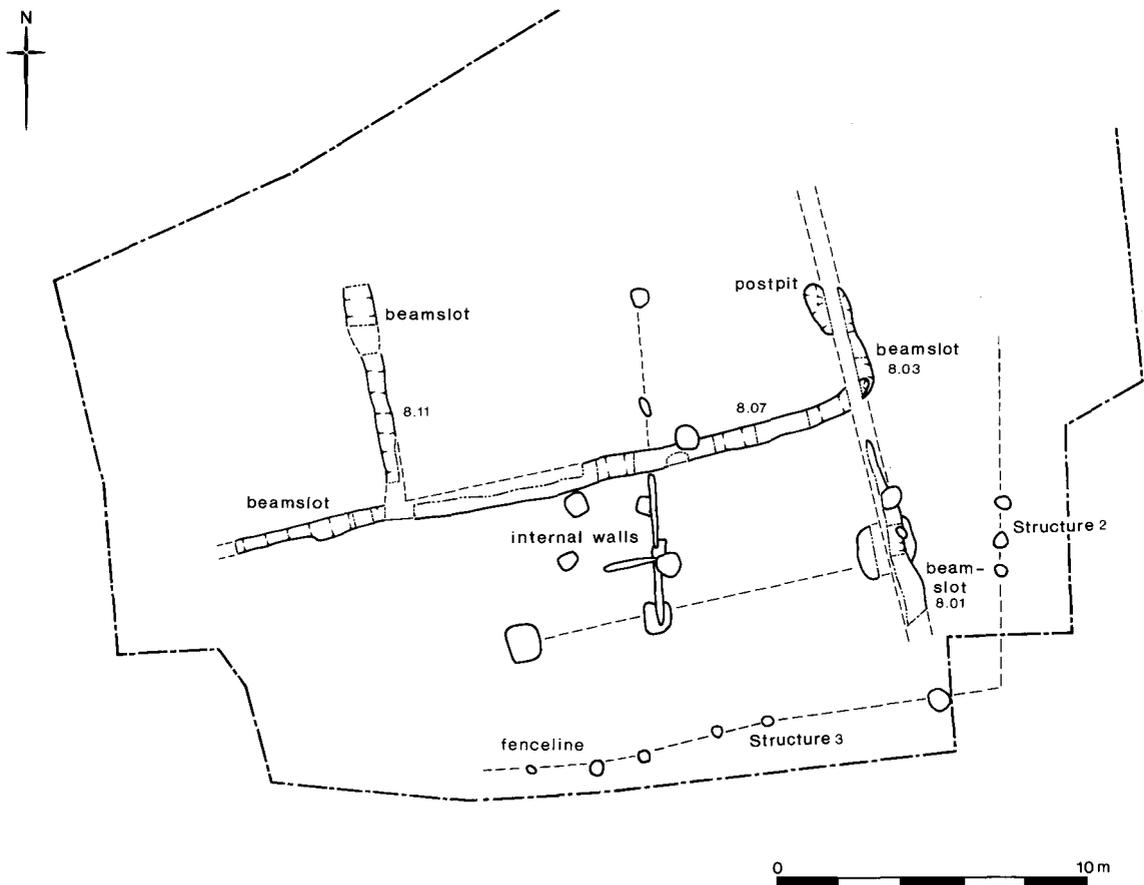


Fig 5. Roman Building 2

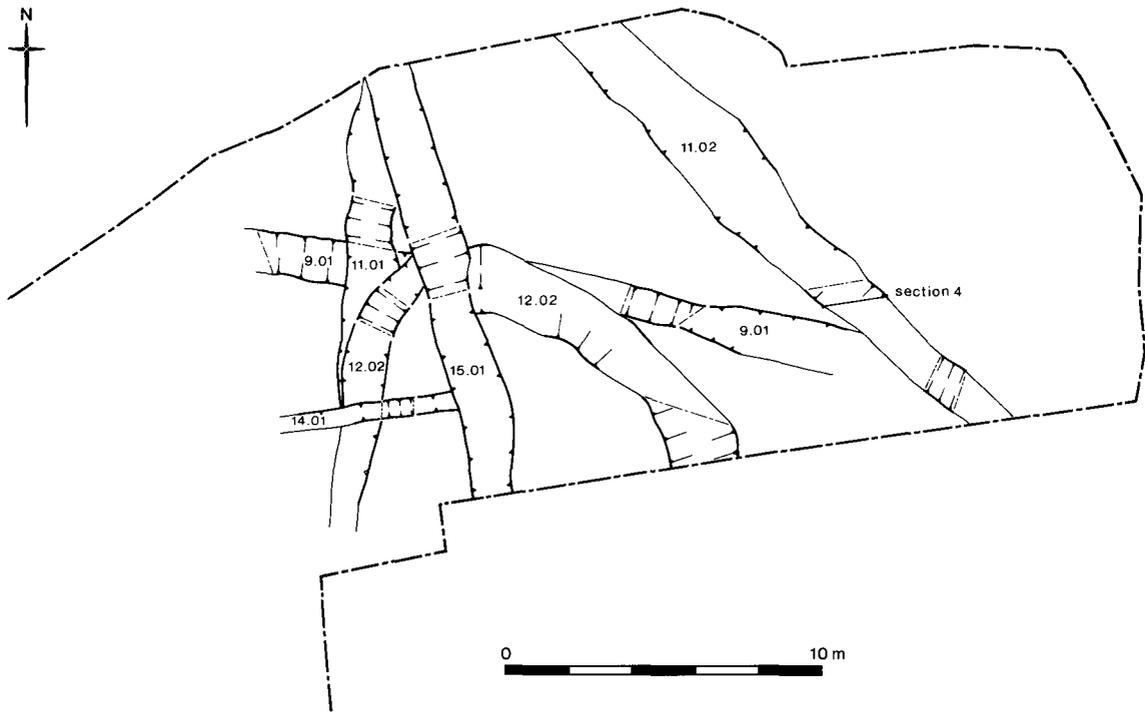


Fig 6. Roman field system

beamslot. The fill contained charcoal and daub fragments. Four large postholes truncated this feature. The posthole at the southern end of the beamslot measured up to 1.38m in diameter and was 0.39m deep, while those to the north measured up to 0.90m in diameter and were 0.2m deep. The size of these postholes suggests that they may have been supports for a substantial building, and that the beamslot and postholes formed the eastern wall of Building 1. Within the area delineated by the eaves drip gullies and beamslot, a series of intercutting narrow slots and postholes was excavated. The four slots [5.12], [5.15] formed the internal partition walls of the building and were aligned north-south and east-west. At the junction of these slots were two substantial postholes measuring up to 0.76m in diameter and 0.11m deep, the second of these apparently a replacement for an earlier post. The east-west wall was recorded to the west of the north-south wall and no sign of the partition wall was recorded to the east, perhaps the result of later truncation. At least two smaller rooms measuring 5m by 2m were created by these internal walls. To the east and west of the

building two rows of postholes, Structure 1 and 2, may represent north-south and east-west fencelines around Building 1.

Building 1 was later extended to the east and west. A linear feature [8.07], 20m in length and

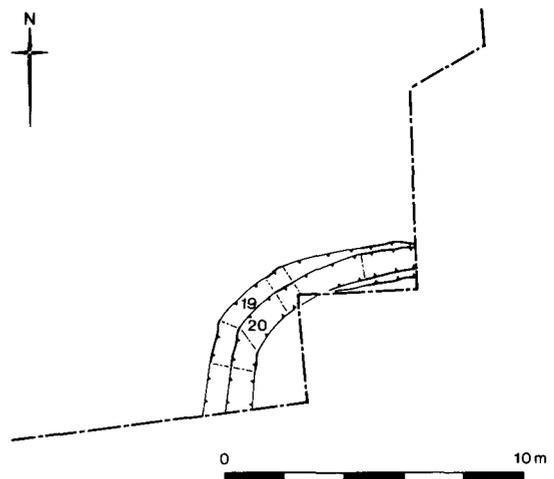


Fig 7. Roman curvilinear ditches (19=12.01; 20=13.01)

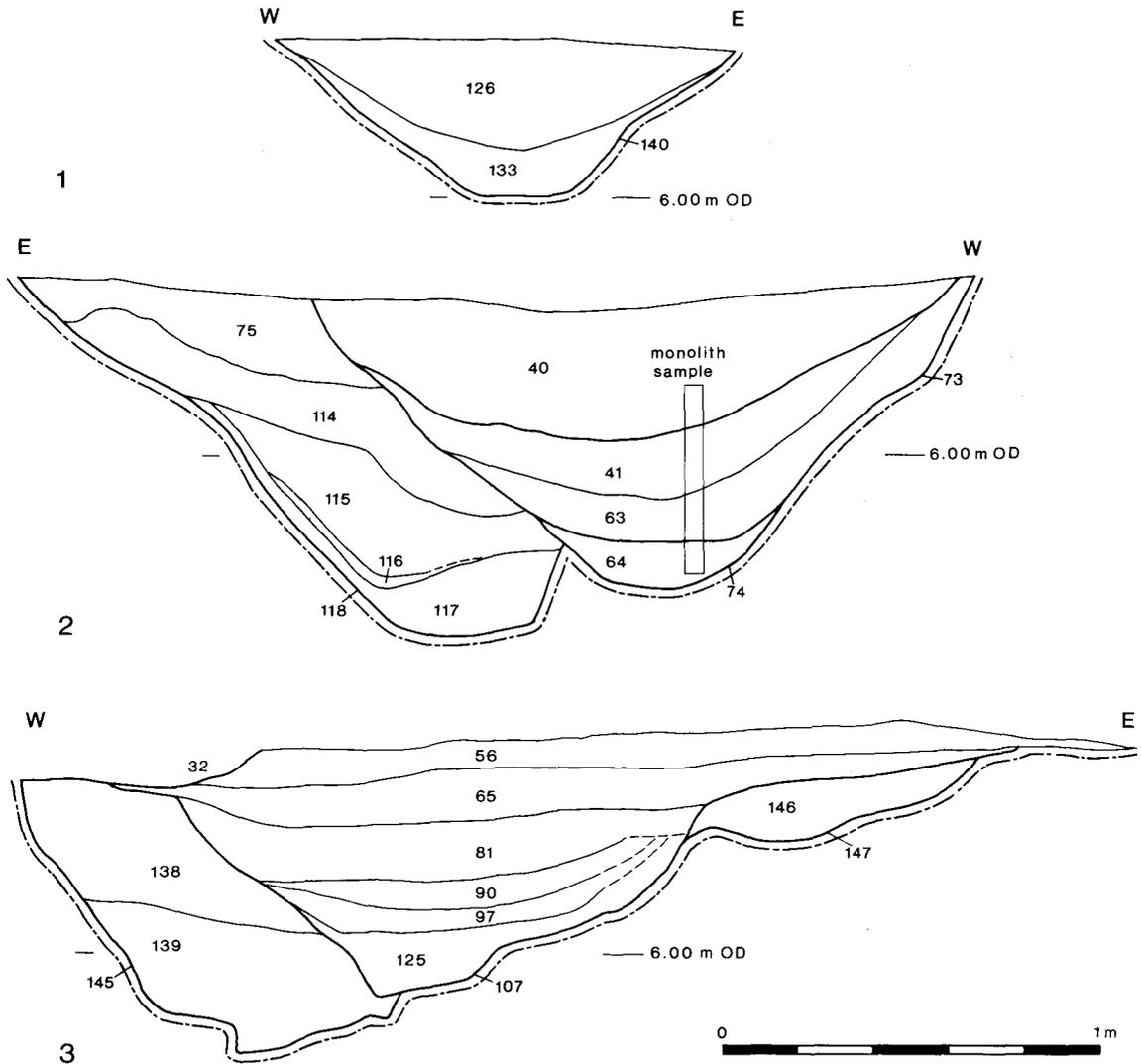


Fig 8. Sections 1-3

truncated to the west, bisected Building 1 to the north and south. The eastern wall was also extended at this time, moving beamslot [8.01], [8.03] 2m to the east. No additional eaves drip gullies survived, perhaps the result of modern truncation. To the north, one or possibly two, rooms were formed measuring up to 14m by 7m, while in the west a further north-south slot [8.11] formed an additional room 7m by 5m. To the south the internal partitions were retained, abutting the east-west slot. The fenceline to the south was retained while the eastern fenceline was moved 2m to the east (Structure 3).

To the east of the north-south boundary ditch six intercutting ditches were excavated and recorded in an area 28m by 14m (Fig 6), severely truncated by foundations of the hospital building. The ditches formed no particular pattern and were curvilinear as well as linear. The earliest [9.01], aligned north-west-south-east and extending 19m, was 1.2m wide and 0.34m deep. It was truncated by a north-south ditch [11.01] parallel to the boundary ditch. This was recorded for 10m, and was 1.5m wide and 0.84m deep. To the east a north-west-south-east ditch [11.02] was recorded for 19m. It extended into the

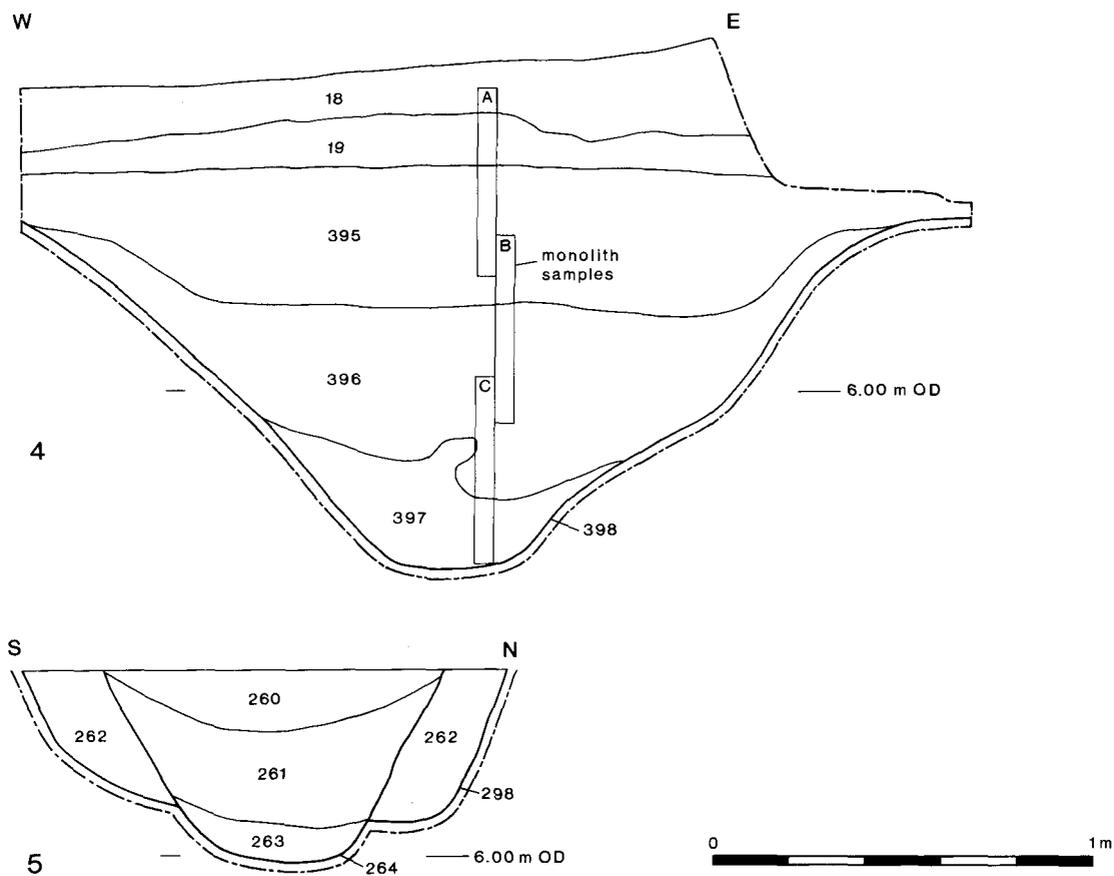


Fig 9. Sections 4 & 5

northern and southern limits of excavation (Fig 9 section 4). The north-south ditch was replaced by a curvilinear ditch [12.02] 19m long in total and extending beyond the southern limit of excavation. The fill contained medium fragments of daub and tile, and appears to have been naturally deposited with cultural material washed in. An east-west V-shaped ditch [14.01], 5.2m long, up to 0.60m wide and 0.54m deep, the narrowest ditch in the sequence, replaced the curvilinear ditch. It was succeeded by a north-south ditch [15.01] which extended to the northern and southern limits of excavation. This measured 14.5m in length, 1.7m in width and was 0.30m deep, and was the latest in the series of ditches. Pottery recovered from its fill is dated late 1st century to the second half of the 2nd century.

To the south of Buildings 1 and 2 and to the south-west of the field system a curvilinear ditch [12.01] (Fig 7) cut through the southern part of

Building 2. This ditch was recut within a short period, and was 10m long, 1.26m wide and up to 0.83m deep. The fill of the earlier ditch was a clayey silt with burnt flint and pottery fragments, occasional daub fragments and a partial samian dish. The later recut of this ditch [13.01], on the same alignment, was 9m long, 0.88m wide and up to 0.52m deep. The fills were clayey silt and sandy silt, and the ditch would appear to have silted up and gone out of use. The fills contained burnt flint and pottery. The dating of the recut is late 1st to late 2nd century.

Several undated and unstratified features did not appear to belong to either Building 1 or 2 although their size and shape was indicative of postholes. The excavated area was sealed by a post-Roman alluvial deposit up to 0.38m thick which resulted from a complex process of flooding and dry land (Howe 1995, 9). Finds recovered from this deposit range from the Late Iron Age to the post-medieval period.

The charred plant remains

John Giorgi

The site was extensively sampled for charred plant remains, samples being taken mainly from ditch and posthole fills from all phases of the site. Sample size ranged from five to 60 litres. Eighty-six samples were processed by flotation using mesh sizes of 0.25mm and 1mm for the recovery of flot and residue respectively. The flots were dried and scanned using a binocular microscope, while the residues were dried and sorted for environmental remains and artefactual evidence.

Twenty-six samples produced identifiable charred plant remains, with mixed assemblages of mainly cereal grains plus smaller amounts of chaff fragments (spikelet forks, glume bases, rachises) and weed seeds (Table 1). The ditch fill [2.03] produced over 50% of all remains, although individual sample assemblages were generally small. Very small fragments of animal bone were sorted from 12 sample residues, although virtually all the bone was simply classified as indeterminate sheep-size fragments due to the poor state of preservation; one fragment from ditch fill [4.01] showed evidence of burning, while a sheep or goat tooth fragment was identified in ditch fill [2.03].

Cereals included wheat (*Triticum* spp.), barley (*Hordeum* sp.) and oat (*Avena* sp.). Almost 60% of the grains, however, could not be identified owing to their poor state of preservation. Wheat was the best represented cereal, with several species identified on the basis of both grain and chaff fragments; this included the glume wheats emmer (*Triticum dicoccum*) and spelt (*T. spelta*) and one grain of either emmer or einkorn (*T. monococcum*). Grains of free-threshing bread wheat (*Triticum aestivum* s.l.) were recognised by their characteristic short, squat, rounded morphology. Several well preserved hulled barley grains were present. Oat grains and awn fragments were also found but the absence of diagnostic floret bases meant that it was not possible to establish whether these grains were derived from wild or cultivated species.

A small number of weed seeds was recovered although few could be identified to species level. Most of the better represented taxa were from high seed-producing plants, for example, goosefoots (*Chenopodium* spp.), rushes (*Juncus* spp.), and possibly mayweed (*cf. Tripleurospermum* sp.). The

seeds were from plants that can grow in a range of habitats but particularly from weeds of waste places and cultivated ground, and from grasses, especially bromes (*Bromus* spp.), which were well represented. Other common species included sheep's sorrel (*Rumex acetosella* agg.), which may be found on heaths, short grassland and cultivated ground, mainly on acidic, sandy gravels. Sixteen rush seeds were found; these are usually indicative of damp conditions.

Previous archaeobotanical research in the area is limited; however, several sites to the west of St Mary Abbots, in the vicinity of Heathrow on the West London gravels, produced the same range of charred cereals, represented by grains and chaff fragments, both in Iron Age deposits at Stockley Park, Dawley, and early to late Roman deposits at Wall Garden Farm, Sipson (Giorgi 1993). At Long Lane, Ickenham in north-west London, a small number of bread wheat grains were also identified in Roman deposits (Giorgi 1995b). Urban deposits from Roman London show that spelt wheat and barley are generally the best represented grains, with emmer and bread wheat appearing less frequently and oat being only occasionally found. Archaeobotanical results from other Iron Age and Romano-British sites suggest a similar pattern for the rest of the country (Greig 1991, 310), although bread wheat and oats may have become more widely cultivated in the later Roman period (Jones 1991, 23); the earliest samples at St Mary Abbots however contained both bread wheat and oat. Emmer has been mainly recovered from sites in the south-west and far north of the country, while einkorn was rare in the Roman period and was probably only a weed of the other cereals. All the cereals may have been used for human consumption; bread wheat produces a soft flour with good bread-making qualities, and all the other grain types may have been used on their own or in mixes for bread or in soups or stews. Barley may have been used for brewing and, together with oats, as animal fodder.

The detection of crop husbandry practices is limited by the fact that few weed seeds were found and even fewer could be reduced to species level. As different species within a genus may also grow in a wide range of habitats, it is difficult to determine whether many of the seeds represent weeds of cultivated ground or of waste places and disturbed ground. Rush seeds in the richest sample could indicate cultivation of damp soils or plants simply growing in one of the ditch

features. The range of weed seeds, however, compares well with other Roman rural sites but is also comparable with urban sites in Roman London.

The small size of most of the individual charred assemblages makes it difficult to determine whether they represent the residues of products or by-products of particular stages of crop-processing. The three samples which produced more than 50 plant remains, the ditch fills [2.03] and posthole fill [5.07], showed a predominance of grain, which was also evident in most of the other samples. The grains and chaff fragments are indicative of the later stages of crop-processing and cleaning; indeed, glume wheats are often stored in their husks for transport and storage. It is difficult to interpret the weed seeds in terms of crop-processing by-products for the reasons given above, but some of the larger grass seeds, for instance the bromes, are characteristic of stored grain products, as being of a similar size, they are difficult to separate from the grain by sieving. Most of the charred plant remains were recovered from ditch fill samples in close proximity to the building; this suggests that activities associated with the preparation of cereals for consumption may have been taking place within, or close to, the building.

The registered finds

Angela Wardle

The identifiable objects of Iron Age and Roman date in this small assemblage are all domestic items as, for example, the four ceramic weights which may provide evidence of textile production. Six glass vessel fragments, which comprise the major part of the Roman group, date from the 1st, or at the latest, early 2nd century. Four fragments derive from ditches [4.01], [12.02], [13.01], two from other Roman features and a bead comes from the post-Roman alluvium, which was the most productive context on the site (eight finds). The glassware includes some fine tablewares, for example fragments of good quality 1st-century monochrome glass, notably a brown ribbed bowl which suggests that the local inhabitants had sufficient wealth to purchase these items as well as more utilitarian containers. Although small, the Roman assemblage is of some significance, providing evidence of 1st-

century activity in an area of London about which little is yet known.

Fired clay weights

Two of four weights made of fired clay (Fig 10) came from Roman contexts, and two were from ditch fills of the north-south boundary ditch which contained pottery of 1st-century date or earlier (Groves 1994). Weights of varying form have been found on many Iron Age sites, the triangular shape being the most common, as at Danebury (Poole 1984, 406). Such objects are conventionally interpreted as loomweights and as such would have been used on a warp-weighted vertical loom, archaeological evidence for which is limited, being generally confined to the weights themselves (Wild 1970, 61-3). Weights made of fired clay could clearly be used for purposes other than weaving, but the presence of several fragments in a restricted area strengthens their identification as loomweights, as was the case at Glastonbury, where groups of triangular weights were found with weaving combs (Poole 1984, 406). Interpretation of the objects as loomweights would provide evidence of textile production in the area during the Late Iron Age. The degree of abrasion, however, indicates considerable movement in the soil, and their exact source is unknown.

A small collection of flints was recovered from the site but no diagnostic artefact types were present.

Ceramic building material

A quantity of highly abraded ceramic building material was recovered from the excavation. The majority of the material comprised small fragments of highly abraded daub with a small amount of ceramic tile. The daub bore no impressions such as wattle marks, and although some of the fragments had been partly burnt it is not possible to say whether they formed part of wattle and timber walls or hearths (Howe 1995, lxxxii). Two fragments of possible mud-bricks could have formed part of a clay and timber building somewhere in the vicinity. Two fragments of roofing tile and one of box flue-tile were also recovered, and although their presence might suggest a building with a tiled roof and a

Table 1. The charred plant remains

Species	Common name	Group Feature	2.03 Ditch	2.03 0-100	2.03 0-70	2.02 Ditch	2.04 ph	5.04 Cut	5.15 Cut	5.15 Cut	5.08 ph	4.01 Ditch	5.21 ph	5.23 ph
<i>Triticum dicoccum</i>	Emmer	FI	4											
<i>T. cf. dicoccum</i>	Emmer	FI	4	1										
<i>T. monacocum/dicoccum</i>	Einkorn/emmer	FI	1											
<i>T. monacocum/dicoccum</i>	Einkorn/emmer	FI	5											
	Glume base													
<i>T. spelta</i>	Spelt	FI	1											
<i>T. spelta</i>	Spelt spikelet fork	FI	1											
<i>T. spelta</i>	Spelt glume base	FI	3											
<i>T. cf. spelta</i>	Spelt	FI	1					1						
<i>T. dicoccum/spelta</i>	Emmer/spelt	FI	5	1										
<i>T. aestivum</i> s.l.	Bread/club wheat	FI	3							2				
<i>T. cf. aestivum</i> s.l.	Bread/club wheat	FI	5											1
<i>T. spelta/aestivum</i>	Spelt/bread wheat	FI	6											
<i>Triticum</i> spp.	Wheat	FI	35	1	4						3		8	1
<i>Triticum</i> spp.	Wheat spikelet fork	FI			3									2
<i>Triticum</i> spp.	Wheat glume base	FI	25	7			1	1	1			1	2	
<i>Triticum</i> spp.	Wheat rachis	FI	14											
<i>Hordeum sativum</i>	Barley	FI	2		2						3		1	
<i>cf. H. sativum</i>	Barley	FI	2		2									
<i>Hordeum/Triticum</i> spp.	Barley or wheat	FI												
<i>Hordeum/Triticum</i> spp.	Barley or wheat awn	FI	4								14	1		1
<i>Avena</i> spp.	Oat	AFI	3											
<i>Avena</i> spp.	Oat awn	AFI	4											18
<i>cf. Avena</i> spp.	Oat	AFI	2								13			
Cerealia	Indet. cereal	FI	84	1	49	2			1		25	3	16	5
Cerealia	Indet. cereal culm node	FI	1											2
<i>Chenopodium</i> spp.	Goosefoot etc	ABCDFH	20	1					1	1			1	6

Table 1. (Cont.)

Species	Common name	Group	2.03 Ditch	2.03 0-100	2.03 115	2.03 126	2.04 Ditch	2.04 0-70	2.04 156	2.04 239	5.04 Cut	5.04 40-400	5.15 Cut	5.15 40-400	5.15 Cut	5.08 50-400	4.01 Ditch	5.21 50-160	5.23 100-160
<i>Atriplex</i> sp.	Orachic	ABFGH	1																
cf. <i>Medicago/Trifolium</i> spp.	Medick/clover	ABDI																	
Leguminosae indet.	—	—	1																
<i>Polygonum aviculare</i> agg.	Knograss	ABG	1																
<i>Polygonum</i> sp.	—	ABCDEFG																	
<i>Rumex acetosella</i> agg.	Sheep's sorrel	AD	26	2															
<i>Rumex</i> spp.	Docks	ABCDEFG	2																
cf. <i>Trifoliarosperum</i> spp.	Mayweed	AB	10																
<i>Onopordium acanthium</i> L.	Scotch thistle	ABC																	
<i>Juncus</i> spp.	Rush	ADEH	16																
<i>Lolium</i> cf. <i>temulentum</i>	Rye-grass	AB	2																
<i>Lolium/Festuca</i> spp.	Rye-grass/fescue	BCD	2																
<i>Bromus</i> spp.	Bromes	ABD	15																
<i>Bromus/Lolium</i> spp.	Bromes/rye-grass	ABDI		4															
<i>Avena/Bromus</i> spp.	Oat/brome	ABCDI	2	3															
<i>Phalaris</i> type	Reed grass/canary grass	BE	2																
Gramineae indet.	—	ABCDEFHI	3																
indeterminate	—	—	16	3															
TOTAL			330	2	83	3	1	7	2	2	7	60	5	48	15	26	1	2	1

Species	Common name	Group	8.01 lin	16.04 cut	16.05 ph	13.01 ditch	13.01 ditch	16.11 pit	16.12 pit	16.11 ph	16.18 ph	16.19 ph
<i>Triticum aestivum</i> s.l.	Bread/club wheat	FI	1									
<i>Triticum</i> sp.	Wheat	FI	1									
<i>Hordium/Triticum</i> sp.	Barley or wheat	FI	1									
Cerealia	Indet. cereal	FI	3	3								
cf. <i>Medicago/Trifolium</i> spp.	Medick/clover	ABDI		1								
<i>Rumex acetosella</i> agg.	Sheep's sorrel	AD	15									
<i>Bromus</i> spp.	Brome	ABD										
<i>Avena/Bromus</i> sp.	Oat/brome	ABCDFI	2	1	4	1	1	1	1	1	1	1
indeterminate	—	—	4	4	24	1	2	3	2	1	6	2
TOTAL			4	4	24	1	2	3	2	1	6	2

Key: A = weeds of cultivated ground; B = weeds of waste places and disturbed ground; C = plants of woods and marginal land; D = open environment (fairly undisturbed); E = plants of damp, wet environments; F = edible plants; G = medicinal plants; H = commercial, industrial use; I = planted, cultivated in.

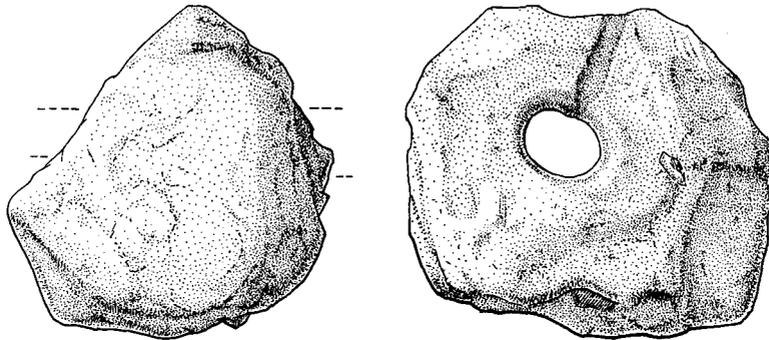


Fig 10. Fired clay weight

heating system there is no other evidence to support such a speculation.

The pottery

Louise Rayner

The site produced a total of ten standard MoL boxes of pottery, dating to the Late Bronze Age/Early Iron Age, Late Iron Age and Roman periods. The condition of the pottery is generally poor with fragmentary sherds and highly abraded surfaces. The assemblage was recorded using standard MoLAS codes for fabric, form and decoration and quantified by weight and estimated vessel equivalents (EVEs). The assemblage totalled 27.8 EVEs and 25,024g. The assemblage is important for two reasons. First, for the material dating to the late Iron Age since there are only a handful of chronologically comparative groups from the London region as a whole, and secondly for the location of the site to the west of *Londinium*.

A small number of sherds were identified as Late Bronze Age-Early Iron Age in date. These were recovered residual with later material, but distinctive in both coarse and fine, flint-tempered fabrics. An abraded rim sherd from a bipartite jar was recovered from context 235 which dates from the end of the 2nd millennium BC through to the ninth century BC in the Thames Valley (Barrett 1980).

A total of 35 contexts assigned to the Late Iron Age phase produced pottery (1.17 EVEs/1305g); the majority (1.13 EVEs/1105g) being recovered from excavated sections of the large north-south ditch [2.03]. All of the pottery from this phase has either grog-tempered or

vesicular fabric and most vessels, where identifiable, are handmade. The most commonly recorded form is a simple bead-rimmed jar. This form is consistently present in the vesicular fabric, the shape of the voids suggesting the fabric was predominately shell-tempered. At least six individual vessels of this type have been recorded from the large ditch, including context 114, where a fragmentary but partially complete example was recovered (Fig 11, No.5). The jars are very simple in character; the rims have slight internal thickening but no external groove to demarcate the bead. This form, developing from the middle Iron Age tradition of wide-mouthed, rimless jars, appears to begin in the 1st century BC and continues as a handmade form into the post-conquest period (Stead & Rigby 1989, 192; Thompson 1982, 235).

Other vessels from the Iron Age ditch include a necked jar and a cordoned beaker with combed decoration. Both these vessels are in a hard fired, thin walled, grog-tempered fabric. The necked jar is handmade with a slight cordon at the base of an upright neck. The beaker is very fragmentary and the internal surface so badly damaged that it is not possible to establish the method of manufacture. However, the sherds clearly represent a single vessel with multiple cordons and zones of vertical combed decoration, most probably from a barrel or butt beaker. Grog-tempered imitations of Gallo-Belgic forms are a common component of Late Iron Age and early Roman assemblages, particularly in the south-east of England, where wheel thrown copies form part of a ceramic tradition, commonly termed 'belgic' (Thompson 1982).

The dating of this group rests largely on the presence of the grog-tempered vessels, including one of Gallo-Belgic derived form, and on the

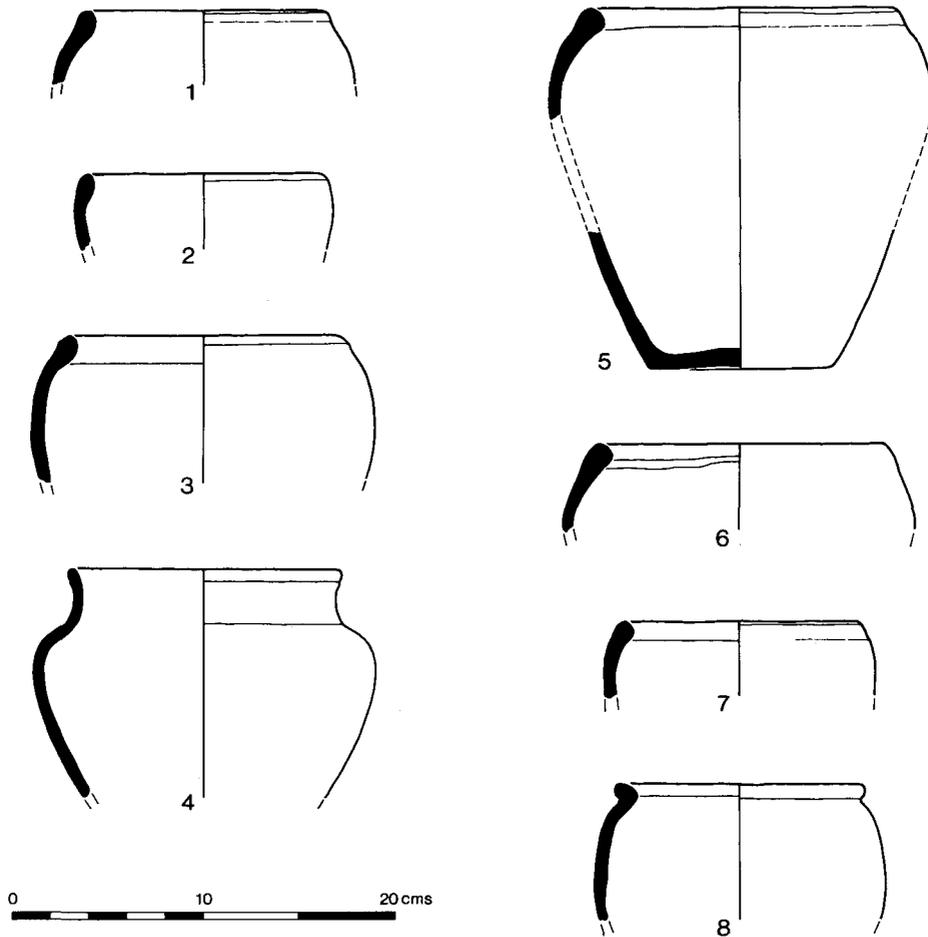


Fig 11. The pottery from Iron Age ditch [2.03]: 1. Shell-tempered bead rim jar. 0.11 EVEs; 24g [context 164]; 2. Shell-tempered bead rim jar. 0.22 EVEs; 116g. [context 165]; 3. Shell-tempered bead rim jar. 0.27 EVEs; 235g [context 165]; 4. Grog-tempered necked jar. 0.14 EVEs; 120g [context 165]; 5. Shell-tempered bead rim jar; base and lower part of vessel. 0.20 EVEs; 477g [context 114]; 6. Shell-tempered/quartz bead rim jar. 0.12 EVEs; 84g [context 114]; 7. Shell-tempered bead rim jar. 0.16 EVEs; 28g [context 116]. From Roman Ditch [4.01]: 8. Grog-tempered bead rim jar. 0.94 EVEs; 205g [context 97]

absence of products from the Romanised industries, common in London by c.50/55AD. The lack of comparable assemblages and absence of associated imports, or other intrinsically datable artefacts, makes closer dating more difficult, but the group clearly belongs to a ceramic phase earlier than the assemblages from the earliest levels in the City and Southwark, most probably lying within the last decades of the 1st century BC and early 1st century AD.

Comparable assemblages are rare from the London region, but two are worth noting in relation to the material from St Mary Abbots, as they are likely to be broadly contemporary. Assemblages from both Park Street, Southwark

(PRK90) and site 14 at Brentford include vesicular and shell-tempered bead rim jars alongside grog-tempered necked and cordoned jars. A probable sherd of imported Gallo-Belgic white ware butt beaker was also in the Park Street assemblage (Groves in prep; Tyers 1996; Parnum & Cotton 1982).

By comparison the early Roman assemblage is distinguished by the presence of wheel-thrown sandy wares, including vessels produced by the main industries that supplied the City and Southwark from c.50/55AD until the mid 2nd century AD, such as kilns in the Verulamium region, Highgate Wood, and Alice Holt/Farnham, Surrey. Imported wares are recorded

for the first time in this phase, with small quantities of South Gaulish samian. In general, the composition of the Roman assemblage fits within the pattern of ceramic supply established for the City and this is no doubt a reflection of the near proximity to a road providing access to traded goods, going both into and out of *Londinium*.

The early Roman phase appears to date from the late Neronian/early Flavian period (c.60–70AD), with the main north-south Roman ditch [4.01] producing material of this date in the lower fills and of mid 2nd-century AD date in the upper fills. This ditch group also includes re-deposited material from the earlier phase, probably derived from the cutting of the Roman ditch along a similar alignment to the Iron Age ditch. The grog-tempered bead rimmed jars are of interest from this phase. These jars differ from the Iron Age examples, with a more triangular rim profile and an external groove to demarcate the bead (Marsh & Tyers 1979, type IIA1–4). Also present are bead rimmed jars with square rim profiles and a groove on the shoulder (Marsh & Tyers 1979, type IIA7–8), which are frequently found in the pre-Flavian groups from the City and Southwark. The comparison of the two ditch assemblages has highlighted typological changes in the bead rimmed jar which appear to have chronological implications.

Both the Late Iron Age and Roman assemblages are clearly domestic in character, as both are dominated by a range of vessels used for food preparation, cooking and storage. For the Late Iron Age, the presence of some partially complete, if fragmentary, vessels may suggest the *foci* of occupation is within the nearby vicinity.

DISCUSSION

The archaeological evidence at St Mary Abbots Hospital provides the first evidence of Late Iron Age and early Roman activity in the area directly to the west of the Roman city of *Londinium*. Other sites to the west, particularly Long Lane, Ickenham (Lakin 1994, 1–12), and Holloway Lane, Harmondsworth and Wall Garden Farm, Sipson (Lewis & Mason in prep). Sites on the West London Gravels, have also produced occupation and agricultural evidence for this period. The St Mary Abbots site, however, provides an important link between the two periods, indicating that occupation was continu-

ous in this area. The large rectilinear building is unusual in that the shape and construction was uncommon until the later Roman period. There are examples of this type of building, however, at Ditchley, Oxfordshire (Frere 1978, 305), Barton Court, Abingdon (Branigan 1987, 86), and at Ilchester (Smith 1987, 298–9) where remains of timber-framed buildings have been recorded dating to the 1st century. There is less evidence in the environs of London, where Romanisation saw the replacement of circular buildings by rectilinear ‘villas’, usually built of stone, in the 3rd to 4th centuries. Timber-framed buildings have been recorded to the west in both Brentford and Staines. At Brentford there was little information concerning size or shape, though the buildings dated to the 1st century (Canham 1971, 294), and at Staines postdated the 3rd century (Crouch 1976, 85–6). Excavations at Wakerley in the Welland valley recorded an enclosed settlement, established in the Belgic period and occupied through to the Roman period, that included possible rectilinear timber buildings and a late 2nd-century barn of roughly the same size as that at St Mary Abbots (Branigan 1985, 132).

Although the Late Iron Age features were not sufficiently detailed to confirm that they represent a structure, their function as part of a possible enclosure certainly indicates activity at this date, while the artefacts, in particular the pottery and loomweights, suggest that a settlement existed close by. It is probable that later activity, especially the construction of the hospital, has destroyed much of the evidence, though it may still survive in the unexcavated area to the south-east. The lack of definite Late Iron Age features may also indicate that occupation of the building was continuous into the early Roman period. The presence of Late Iron Age pottery in the boundary ditch may indicate earlier activity in the area. The fact that the boundary ditch was recut after a relatively short period on almost the same alignment also suggests that occupation was continuous between these periods. The lack of archaeological evidence for Late Iron Age activity to the east of the boundary ditch implies that this area was not developed agriculturally until the early Roman period.

The major north-south ditch is important. It might represent an enclosure ditch of which all other evidence has been lost, but as it was not seen to the south of the occupation area during the evaluation stage it may not have turned to

the west at all and so would not have enclosed the area where occupation activity was recorded. If not an enclosure ditch, what can its purpose have been? No notable gradient was observed during excavation, so that it cannot have been primarily intended as a drain. It does however appear to have served as a demarcation between an area possibly used for cultivation and one given over to occupation. The dating of cultural material from the ditch suggests that it went out of use by the end of the 2nd century, which corresponds with the disuse of the building. It is not possible to define the relationship between this ditch and the curvilinear ditch which postdated the building. This would appear to have been the latest Roman feature on site, and it perhaps enclosed uninvestigated land to the south.

The lack of determinate features such as hearths, floor surfaces, and of agricultural evidence such as corn dryers, impedes interpretation of the rectilinear structure and the site at large. The evidence of the fragment of flue tile and roofing tile tentatively suggests the existence of a larger, possibly masonry, building in the vicinity, for which there is no other evidence. The size of the building, however, would suggest that it served as a barn where animals and agricultural products may have been kept. As noted above, the presence of the larger grass seeds is characteristic of stored grain and may add weight to the possibility that grain was being produced as well as stored at St Mary Abbots before being distributed to *Londinium*.

As such a small area was excavated, it was not possible to distinguish any field system, and modern buildings to the north and south of the excavated area may have destroyed further evidence of the ditches. No archaeological activity was recorded in trenches 75m to the east and 30m to the south-east. With little of the environmental evidence coming from the 'cultivated' part of the site no fuller interpretation is possible.

CONCLUSIONS

The excavations at St Mary Abbots Hospital have produced, for the first time in Kensington, important archaeological evidence of the Late Iron Age/early Roman period. This compares with contemporary sites further to the west of London and provides an important link between

the hinterland of *Londinium* and the capital itself. The pottery recovered from the site indicates that activity was taking place over a long period of time. Although there is no direct evidence for an Iron Age settlement the presence of the pottery in the boundary ditch does suggest that such a settlement was nearby. The pottery also shows that occupation continued into the Roman period suggesting that the farmstead had existed over a period of time. Environmental evidence was unable to confirm that farming was taking place on the site, but it does show that the final processes of crop cleaning took place in the area of the building, supporting its interpretation as a farmstead. The closeness of the farmstead to the putative Roman road 'Akeman Street' would have allowed easy access to *Londinium* 6km to the north-east. The presence of Roman glass would also suggest that trade was taking place between the City and the farmstead which, if it was crop producing, could have supplied the City. The decline of *Londinium* in the late 2nd and early 3rd centuries, which saw many areas abandoned and the population reduced, may help account for the decline and disuse of the farm building and field system at St Mary Abbots. If food consumption and the demand for staple food products dropped, small farms in the hinterland would have been the first to be affected.

The archaeobotanical data from St Mary Abbots provides some information on the range of cereals consumed at the site, which was similar to charred remains from other Roman settlements in the area. The quantity and quality of the evidence on its own however is insufficient to determine whether it was a crop-producing site; most of the charred remains were mainly derived from the final stages of crop cleaning. On the other hand, the range of weed seeds and crop-processing debris, albeit limited, is comparable with that of other rural Romano-British sites. It is therefore possible that the area around the site was being used for cereal cultivation.

The coincidence between the decline of the city of *Londinium* and that of St Mary Abbots is suggestive, although a direct link between the two cannot be made and depends largely on negative environmental data and imprecise information about the actual course of 'Akeman Street'. There is evidently a need for further archaeological investigation in the hinterland of the Roman city, particularly in the area to the west, with a view to collating data concerning

food production and communications. It is understood that recent work in the area of Kensington High Street to the north of the site carried out by Pre-Construct Archaeology (PCA) has uncovered further important evidence of possible Roman and Saxon occupation in the Kensington area. Future work of this kind may facilitate interpretation of the settlement at St Mary Abbots and lead to a wider understanding of the infrastructure that supported the population of the capital.

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EXCAVATIONS OF A ROMANO-BRITISH ROADSIDE SITE AT BROCKLEY HILL, STANMORE, MIDDLESEX, 1995-7

Jacqueline I. McKinley

With contributions by Rowena Gale, Moira Laidlaw, Emma Loader and Rachael Seager Smith

SUMMARY

Excavations at the base of Brockley Hill, on the west side of Watling Street, revealed evidence of sporadic Romano-British activity, of a varied, but somewhat enigmatic nature. There was no evidence of any domestic occupation of the site and no obvious link with the Brockley Hill kilns to the north. Discrete deposits of gravel and concentrations of fragmentary and abraded Roman masonry and ceramics were found adjacent to the road in the south of the site, and this area may have served as a road-maintenance depot. Evidence of industrial activity was recovered in the north of the site, but its precise nature is unclear. The presence of a series of large ponds or wells may be linked with the industrial use of the site or indicate that it also served as a watering place for drovers travelling between London and Verulamium. Evidence from the verge of the current A5 suggests that the original route of the Roman road did not swing across to the east at the base of the hill as was previously thought but may have continued a straight course on the west side of the current road.

INTRODUCTION

Between January and March 1997, Wessex Archaeology conducted an archaeological excavation (Site Code LRS 95) within and adjacent to former Ministry of Defence (MoD) land situated between London Road (A410) and the A5 at Brockley Hill, Stanmore, in the London

Borough of Harrow (Area 1: TQ 182 928, Area 2: TQ 181 929; Fig 1). The investigations were required in advance of housing development by Barratt North London. The proposed development site was situated on the west side of the major Roman routeway of Watling Street (the current A5) and 1.5km south of the early Roman pottery kilns at Brockley Hill. The overall area of proposed development had been subject to an archaeological evaluation in December 1995 (Wessex Archaeology 1995) and, on the basis of the results, two discrete areas had been specified for full excavation in agreement with English Heritage London Division (Areas 1 and 2; Fig 1). In addition, two small trenches (Areas 3 and 4) were to be excavated across the Brockley Hill roadside verge, along the proposed course of sewer and storm drains.

The areas of excavation were located on relatively flat ground between the 75m and 80m contours towards the base of Brockley Hill. The natural contours of the land show a very gradual incline northwards from the London Road, and a slight increase from east (76.99m aOD) to west (80.60m aOD) at the north end of the site. The underlying geology is predominantly London Clay with patches of Stanmore Gravels (British Geological Survey, Geological Map 256). To the NW of the site, around Brockley Hill, there is an outcrop of the Claygate Beds overlain by Pebble

Gravels. The nearest water-course is at Newlands, 0.5km NW of the site, where a spring-line pond drains south-eastwards to form the Edgware Brook. At the time of the investigations, Areas 1 and 2 had largely been cleared of the, mostly single storey, MoD buildings which occupied much of the site, though demolition was continued elsewhere. It was apparent that varying degrees of terracing had occurred, predominantly in the vicinity of Area 2 to the north, associated with construction of the MoD buildings and service roads.

ARCHAEOLOGICAL BACKGROUND

Small numbers of Mesolithic and Neolithic flint artefacts have been recovered during fieldwalking to the NE of London Road. Fragments of pottery and flintwork recovered from around Brockley Hill indicate Bronze Age activity within the vicinity. Earthworks and Belgic pottery recovered within the area also suggest some Late Iron Age presence (Chadwick 1995). However, the archaeological evidence from the immediate vicinity is predominantly of Romano-British date.

The eastern boundaries of the main areas of excavation were situated 24m west of the A5, which follows the course of the Roman road, Watling Street. The latter, laid out c.AD 43-49, formed one of the principal routeways, running between *Londinium* (London) and *Verulamium* (St Albans) and thence to the Midlands, Wales and the North-West (Codrington 1919; Roucoux 1984). Excavations conducted on Brockley Hill between 1937 and 1974 (Castle 1976, fig 1) indicated that the course of the road may have been slightly to the west of that followed by the current A5 as it descends Brockley Hill, certainly to within c.310m north of the site. Recent evaluation in the southern part of the area investigated by Castle (Bowsher 1995) found further evidence for the Roman road, confirming its course on the west side of the A5 (*ibid*, fig 3). This latest evidence suggests that the embankment in the front gardens of the houses fronting the east side of the A5 at Newlands noted by O'Neil (1950), is unlikely to have represented the *agger* of the Roman road, unless the course of the road shifted over time (Fig 2).

Brockley Hill was an extensive pottery manufacturing centre in the early Romano-British period. Castle (1976, 224) describes a 'vast industrial complex' strung-out along the sides of

the road, consisting of pottery kilns, more than a dozen of which have been excavated, workshops, dwellings, clay pits and puddling holes. Occupation of the site is postulated to have been of a seasonal nature, the local clays apparently being unworkable in either frosty or dry conditions. The earliest kilns were established c.AD 50-60 and manufacture reached its peak in the late first-early second centuries (Castle 1976, 223-4). Production had declined by AD 120-130, possibly because of the scarcity of suitable clays. Area 2 lies c.1.3km south of the nearest known kiln (kiln 8, in use during the peak period of production).

There is a belief that the Roman road station between *Londinium* and *Verulamium* (St Albans), named *Sulloniacis*, was adjacent to the road where it crossed the high ground of Brockley Hill, 1.5km north of the site (Castle 1976; Sheldon 1996). However, no convincing evidence has yet been recovered. The various excavations have provided no evidence for a civil settlement, substantial buildings or a posting station (Castle 1976; Bowsher 1995).

The 1995 archaeological evaluation (Wessex Archaeology 1995; Fig 1) indicated two areas of Romano-British activity, one in the SE corner (subsequently Area 1) and one in the NE corner (subsequently Area 2). The evidence from the NE suggested activity spanning much of the Romano-British period. The features observed, including two late Romano-British ditches, and the nature of the artefactual and environmental evidence, did not suggest domestic occupation but rather the possibility of some form of industrial activity. Evidence from the SE appeared confined to the latter part of the Romano-British period, with ditches and deposits of faced and dressed limestone.

The location of the development site adjacent to Watling Street, potentially within the known vicinity of the road station of *Sulloniacis* and the relative proximity of the manufacturing complex at Brockley Hill, rendered it important to investigate. Understanding the date and range of activities which took place along such an important routeway and the potential links between settlements, manufacturing and industrial areas, were primary objectives within the archaeological investigations.

METHODS

Two areas of the development site had been targeted for excavation (Wessex Archaeology

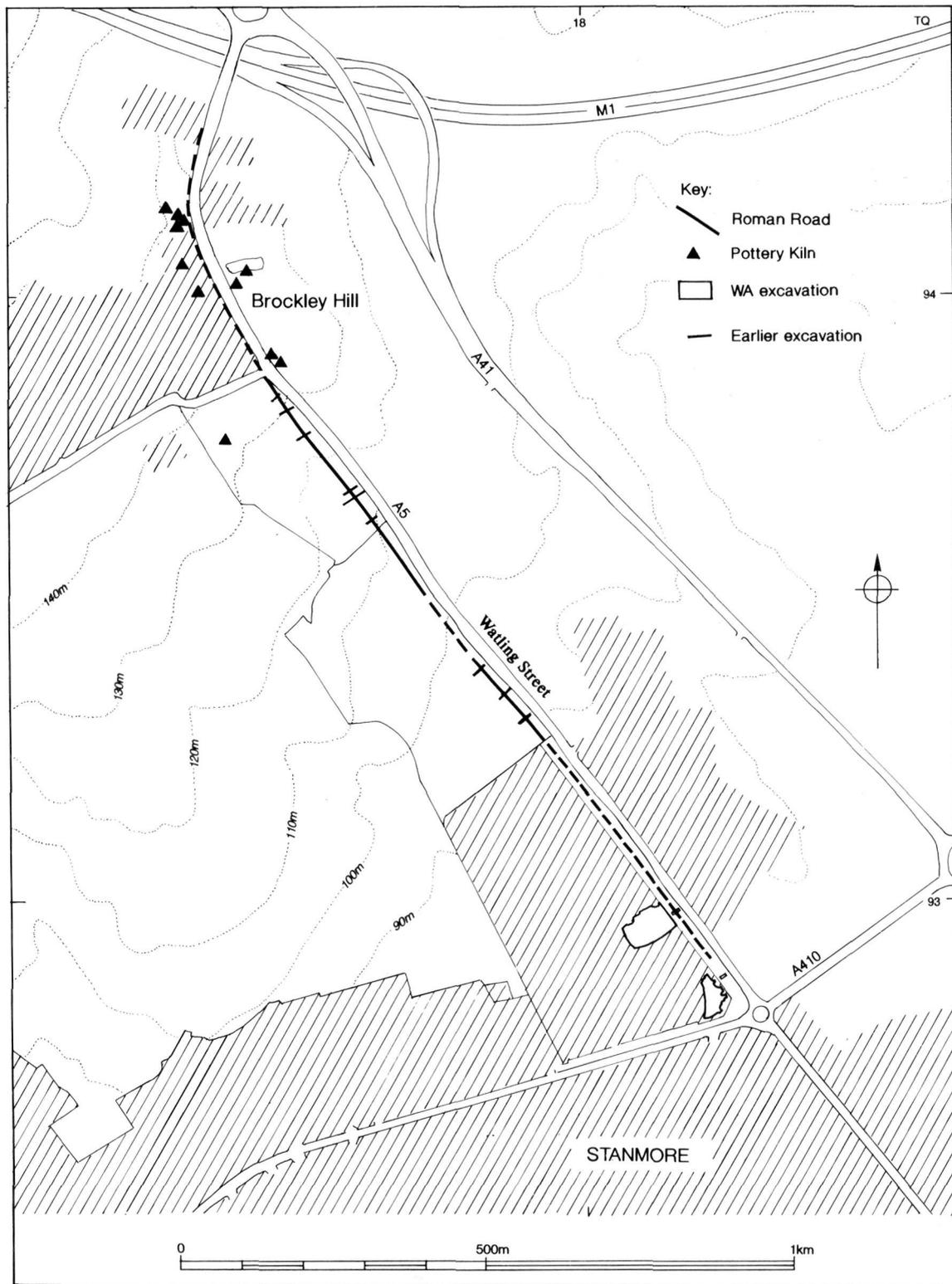


Fig 2. The known position of the Roman road (Watling Street) as excavated by Castle (1976, fig 1) and Bowsher (1995, fig 3) with the projected line along the current roadside verge

1995). Archaeological features and deposits had occurred in four of the 29 trial trenches excavated in the evaluation, in the NE and SE corners of the site (Fig 1). Area 1, in the SE, adjacent to the junction between the A410 London Road and the A5, comprised an irregular-shaped area $c.40 \times 70\text{m}$ (Figs 1 and 3). Area 2, in the N corner, adjacent to the A5 just below its increased ascent of the ridge, was a rectangular trench $c.70 \times 50\text{m}$. Two 1.60m-wide trenches were also excavated across the roadside verge between the A5 and the perimeter fence around the development site, following the routes of the storm drain and foul sewer pipe that were to be inserted as part of the development (Fig 1).

In the two main areas of excavation, the former MoD buildings and associated services had caused substantial disturbance to both the archaeological and underlying natural deposits (Figs 3 and 4). The modern overburden was removed by machine to the top of the archaeological or natural deposits, but some of the deeper modern intrusions were left *in situ* since their removal would have had a detrimental affect on the archaeological remains. The size and shape of Area 1 (Fig 1 and 3) was affected by the presence of several trees and the course of live electricity cables. The length of the trenches in Areas 3 and 4 was similarly affected by the presence of services in the roadside verge.

Much of the eastern portion of Area 2 (Figs 1 and 4) was found to be covered by a series of archaeological layers or spreads which were believed to seal earlier features. Hand excavation of these spreads, to ascertain their relationships, form and nature, was carried out via a series of 17 slots (A-Q), covering a $c.16\%$ sample (Fig 5). Individual slots were 1.5-2.0m wide and 3-12m in length and were distributed at intervals across the spreads, each one crossing at least one boundary between apparently different contexts. Each spread was examined with at least two slots in order to monitor finds distribution within the layers. Following hand excavation, the remainder of the spreads were machine excavated under constant archaeological supervision, ensuring further artefact recovery, to reveal any underlying features.

All archaeological features were investigated by hand. However, the depth of feature 279 (3.18m) necessitated machine excavation to provide a safety step after each 1.20m-deep stage of hand excavation. A minimum 10% sample of linear features was excavated, together with all

intersections and terminals. Non-linear features were generally 50% excavated. All excavated deposits containing carbonised remains were bulk sampled for environmental data. Soil monoliths and snail columns were taken from appropriate features.

The full archive is presently held at the offices of Wessex Archaeology at Salisbury under the archive code LRS 95, to be deposited with the Museum of London in due course.

RESULTS

Introduction

Archaeological deposits in Area 1 lay immediately below a 'buried' topsoil, up to 0.60m thick, which survived as a complete layer in the south and as truncated islands in the north. The central section of the site had been badly disturbed by the insertion of the MoD structures (Fig 3), and the apparent lack of archaeological features/deposits within this part of the site may therefore be misleading.

The depth of the topsoil and subsoil in Area 2 showed a gradual increase from $c.0.30\text{m}$ in the east to $c.0.85\text{m}$ at the west end of the site. This increase was largely the result of two levels of terracing before construction of the MoD buildings, there being a slight natural increase in the level of the land to the west. Along the north-eastern side of the site, a $c.9\text{m}$ wide area had been cut to a minimum depth of 0.20m to the natural clay to accommodate the perimeter road and main sewer pipe. Most of the western half of the site had also been terraced down to the natural clay to create a level area for construction. The maximum extent of the terracing was along the west side, where the clay natural had been removed to a depth of $c.0.36\text{m}$. There were extensive modern intrusions across the whole of Area 2 (Fig 4) in the form of wall foundations, square footings and pipe trenches. A $c.10\text{m}$ -wide NW-SE strip across the centre of the site had sustained substantial damage from deep foundations and dumps of rubble over the soft clay natural.

In Area 1 and the adjacent Area 4 archaeological deposits overlay London Clay. In Area 2 there was, in addition, an outcrop of natural gravel containing pockets of clay (Stanmore Gravels) along the eastern 12m strip, extending into Area 3.

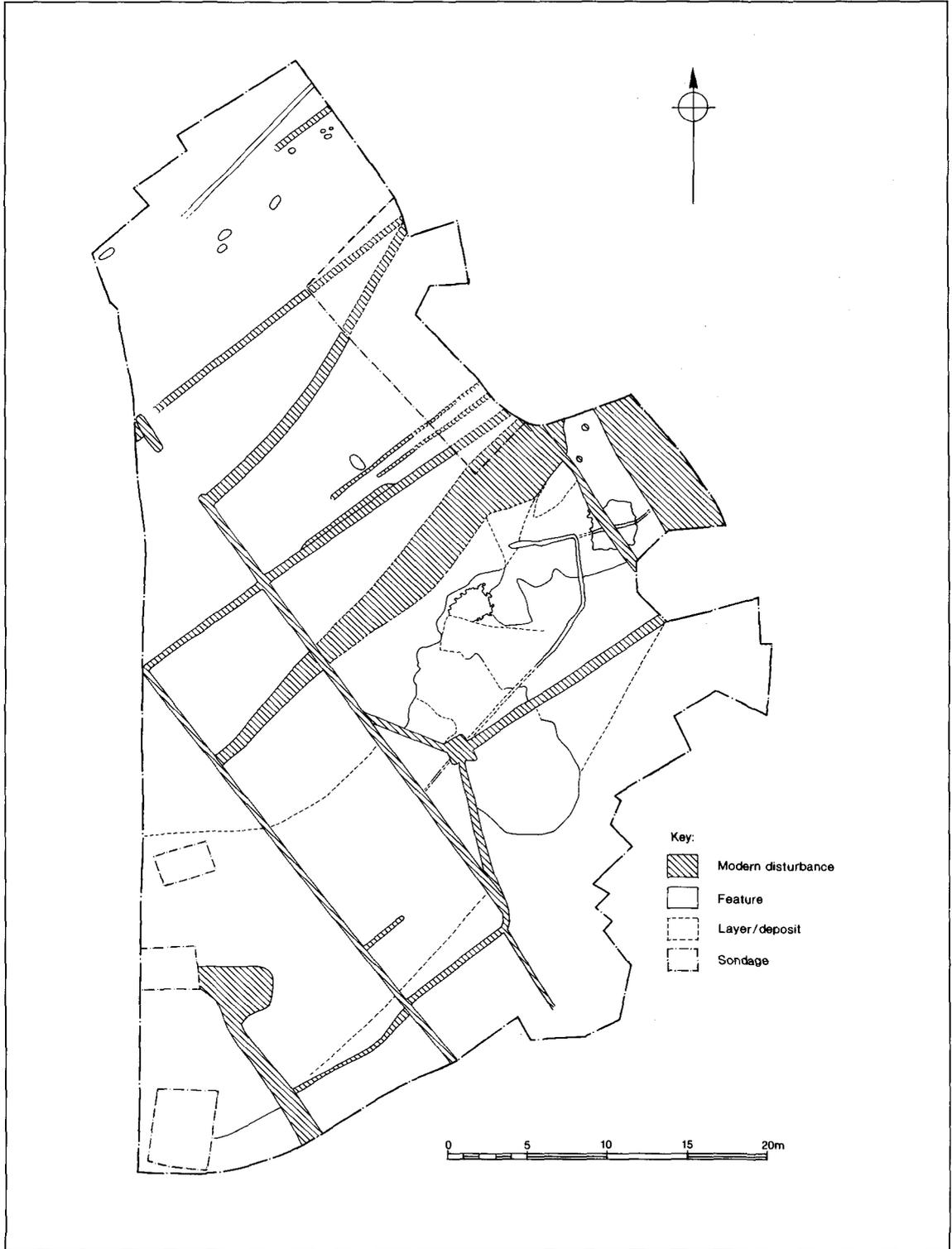


Fig 3. Area 1: all features/deposits

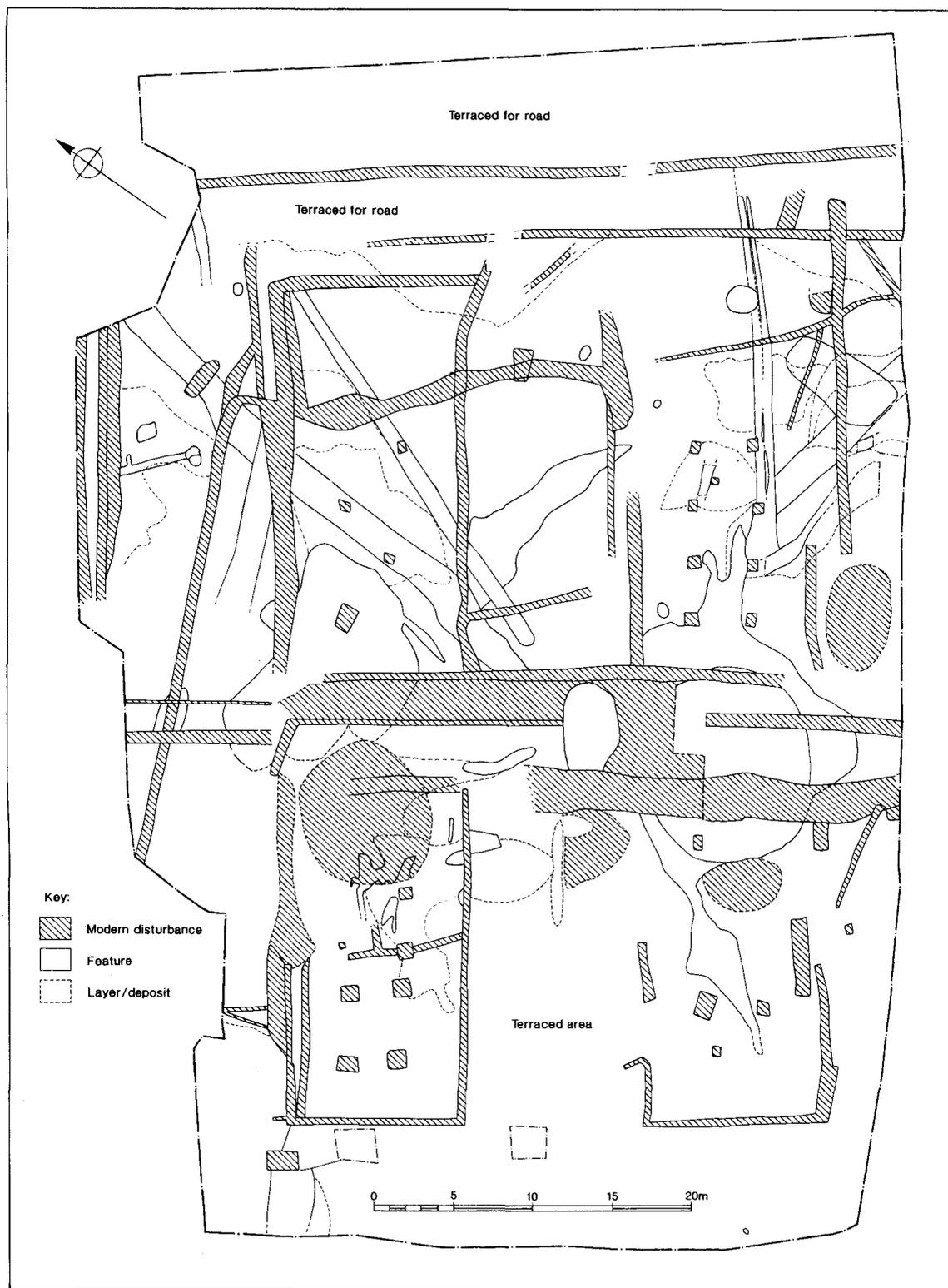


Fig 4. Area 2: all features/deposits

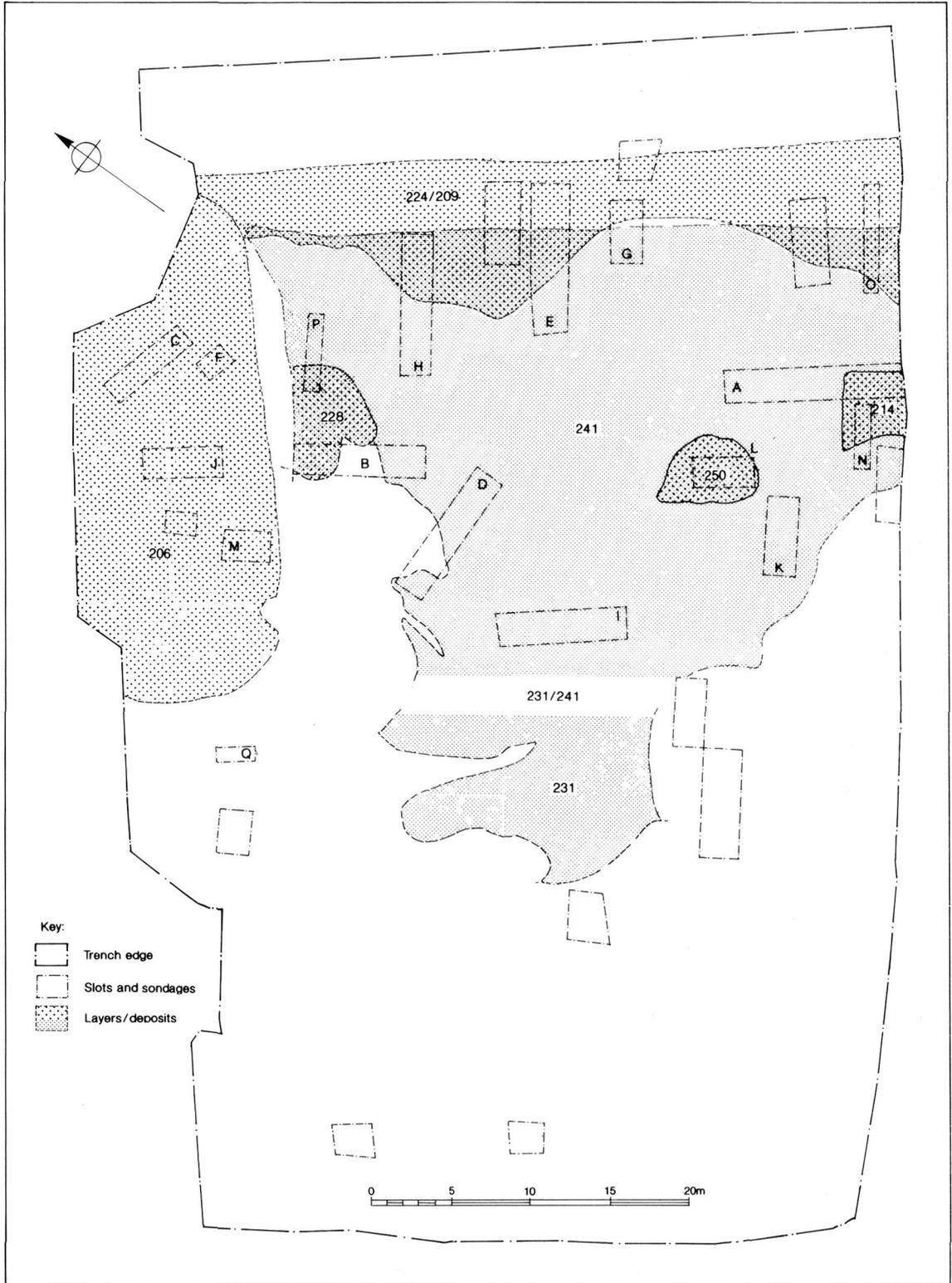


Fig 5. Area 2: main Romano-British spreads and location of excavated slots

The archaeological evidence from the two main areas of excavation differed substantially in form and nature, though the artefactual evidence consistently indicates predominantly late Romano-British activity (AD 240-400). Deposits in Area 1 were dominated by an extensive gravel spread in a NE-SW swathe across the south of the site, accompanied by discrete deposits of worked limestone (Fig 1, 3 and 5). A small group of shallow slots, postholes and a linear feature were excavated in the northern part of the Area, cutting through a shallow layer of silty clay overlying the clay. In Area 2, a series of spreads or layers containing varying quantities of residual Romano-British ceramic building material (CBM) and pottery covered the eastern part of the site. The western limits of these spreads was partly defined by two ditches set at right-angles to each other and $c.45^\circ$ to Watling Street (Fig 4). Most other archaeological features were confined to the eastern side of these ditches, towards Watling Street. The area to the west was largely devoid of any apparent activity other than the three large ponds/wells and their associated feeder channels. The other archaeological features, including a number of ditches/gullies, pits and slots, were largely sealed by the spreads, though most were of late Romano-British date. An alluvial episode, possibly medieval, survived in the central-western part of Area 1. Colluvial deposits, apparently both pre- and post-Roman in date, survive on the northern edge of Area 2. A number of other spreads, ditches/gullies and postholes in both Areas were of post-medieval origin. Features of Romano-British date were also noted in the Area 3 trench. No archaeological deposits were found in the trench in Area 4 and this Area is not discussed further.

Area 1

Early Romano-British (ERB)

No features of this date were definitely identified although it is possible, on stratigraphic grounds, that the spread of mottled silty clay [112] in the northern part of the site may be early in date (Fig 6). The layer was clearly cut by several late Romano-British features, including ditch [124]. The spread survived to a maximum depth of only 0.06m and its full extent is uncertain.

Late Romano-British (LRB): I

Modern disturbance effectively divided the archaeological features and deposits into two groups which cannot be stratigraphically related (Fig 3). Only in the south of the site can the LRB deposits be split into two distinct phases. For the purposes of this description, all the features in the northern group have been placed in this primary phase, though there is no evidence that they are strictly contemporary with the deposits to the south or to each other, and no indication as to how long they remained in use.

The phase was represented by a gravel spread (group no. 556), three or four slots, four postholes and a narrow ditch [124] (Fig 6). The gravel spread, with a silty clay matrix, lay directly over the natural clay and extended in a broad curve of 5-16m-width and $c.44$ m long NE-SW beyond the limits of the trench. It was excavated as a series of contexts which varied in depth and quantity of archaeological components. It was thickest in the north (0.2-0.29m), thinning to less than 0.1m in the SE and consistently towards its edges. The density of finds also decreased from NE to SW (*ie* away from the road). The slots [105, 107, 113, ?103] and postholes [110, 125, 129, 134] clustered within a 5m-wide strip at the north end of the site, south of ditch [124], and appeared to cut the earlier spread [112]. All survived as only shallow features (0.07-0.27m) and contained mottled, slightly silty clay. The slots (0.85-1.60m long, 0.4-0.52m wide) had shallow sloping sides and flat bases; the postholes were subcircular with flat bases (0.11-0.30m diameter). Although lying roughly parallel to ditch [124], no obvious spatial patterning was apparent for this group. A similar slot [135], in the central part of the Area, survived to a depth of only 0.12m and was sealed by medieval deposit [141/168]. It contained fragments of LRB pottery. The narrow (0.44m wide) ditch, [124], produced 3rd-century pottery and may have marked the northern extent of LRB I features in this area.

Late Romano-British: II

Two discrete, roughly square, deposits ($c.3 \times 3$ m in extent and 0.12-0.22m thick) of worked oolitic limestone [100/101] and [102] overlay gravel spread [556] in the NW (Figs 1, 3 and 6), infilling shallow 'dips' in its surface. The worked stone

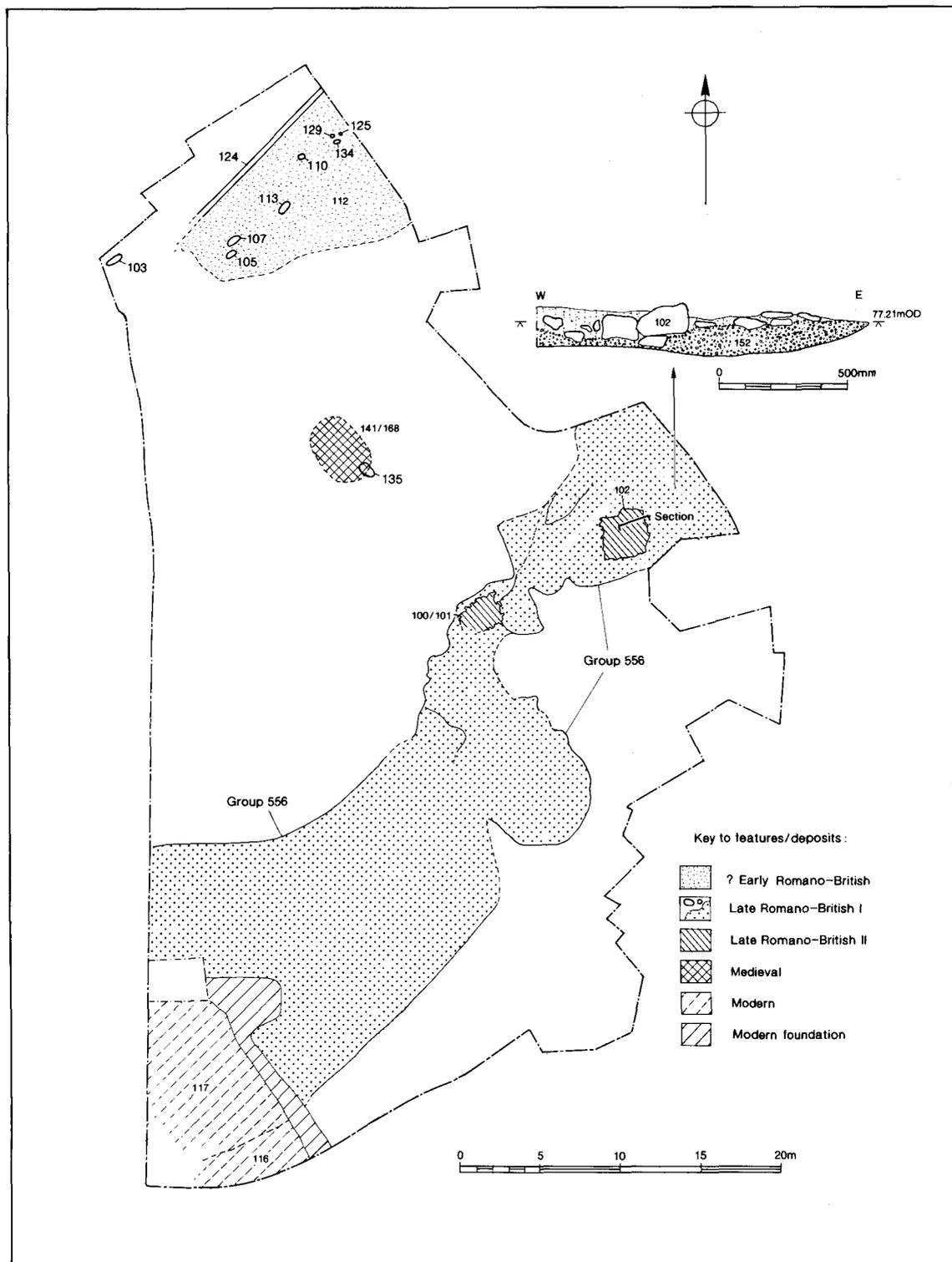


Fig 6. Area 1: archaeological features, all phases

included fragments of possible columns and other architectural components, representing demolition debris from Romano-British structures.

Medieval and later

Fragments of residual Romano-British and medieval pottery were recovered from an ambiguous fluvial deposit [141/168] in the central area of the site. Although only $c.5 \times 3\text{m}$ in extent at the time of excavation and a maximum of 0.15m deep, it is likely that this mottled grey clay was originally more extensive, but had been removed by MoD buildings.

Area 2

Early Romano-British

Evidence for activity within this early phase is limited to three features and one spread (Fig 7). Stratigraphically these are the earliest archaeological features in this area but their suggested date is based on the recovery of exclusively ERB pottery throughout or within the lower fills. This pottery is likely to be residual ($c.39\%$ of the Romano-British pottery from Area 2 was early) but there was no accompanying LRB pottery.

Three features [279, 215/545 and 554], each containing a varying number of layers and lenses of varying silty blue/grey clay, seem to have been ponds. Feature [279] was the least disturbed by modern building. It was roughly subcircular, $c.1.2\text{m}$ across with an outer 'ledge' $c.1.2\text{m}$ wide and $c.0.6\text{m}$ deep and a deeper, central area of $c.9\text{m}$ diameter sloping steeply to a concave base of $c.1.65\text{m}$ diameter at a maximum depth of 3.18m. Three general episodes of accumulation are apparent in its 17 fills (Fig 8), extending from the ERB to LRB (IV) (below). The full profile was sampled for snails, with negative results, and by a series of five monoliths for soil descriptive purposes, providing a palaeo-environmental interpretation of the sedimentation of the pond (see below).

The earliest three fills ([459-457]; 0.45m) were distinctive grey, heavily gleyed clays with coarse laminations, typical of mud settling in standing water which dried out seasonally, though the horizons remained waterlogged. They were sealed by 0.51m of slightly silty clay [355] containing a fragment of Verulamium Region

White ware, CBM, a few fragments of fuel ash slag and several fragments of animal bone (large mammal). A profusion of organic material (leaf mould) was noted in the lower part of this layer and fragments of a possible plank and a stake were excavated from the upper levels. Above this was a series of slumped layers of fine-grained silty clays, probably resulting from a single, rapid event. However, many of the horizons were distinctly structured, possibly indicating some stabilisation and hiatuses within the sediment accretion history (especially [352]). Numerous fragments of timber, representing the remains of stakes and planks, one of them mortised (see below), were recovered from the central-lower fills, together with one LRB sherd, a few fragments of CBM and animal bone (large mammal).

Other features assigned to this phase were an irregular feature [501], $c.1.4\text{m}$ long, 4m wide and 0.14m deep containing charcoal flecks, Romano-British CBM and 24 ERB sherds including Verulamium Region White ware ($c.AD$ 50-160) in a mottled silt clay fill; the scant remains of a ditch [553], the earliest of three cut along the same line (subsequently [190] and [552]), of which only the lower $c.0.20\text{m}$ was evident in section (Fig 9) at 0.77m below ground level (78.86m aOD) and a spread of mottled silty clay $7 \times 5\text{m}$ in extent and $c.0.25\text{m}$ deep containing frequent charcoal flecks, some CBM and a Verulamium Region White ware sherd. The ditch was noted in the evaluation (Wessex Archaeology 1995, fig 6) but probably terminated somewhere in the 5m between the evaluation trench and slot B of the excavation (Fig 5).

Late Romano-British

It was not possible to divide the LRB into separate phases on the basis of artefactual evidence but clear stratigraphic divisions were evident and this criteria was used to split the period into four general phases with subdivisions (a-c) in Phase I. Only the relative phasing, not the actual dates of these divisions could be ascertained and there may have been only weeks or months between the formation of some features/deposits, with years or decades between others. Features from earlier phases may still have been evident or in use into later ones, as with the pond [279]. Features from LRB: Ic may still have been extant in LRB II, but the major

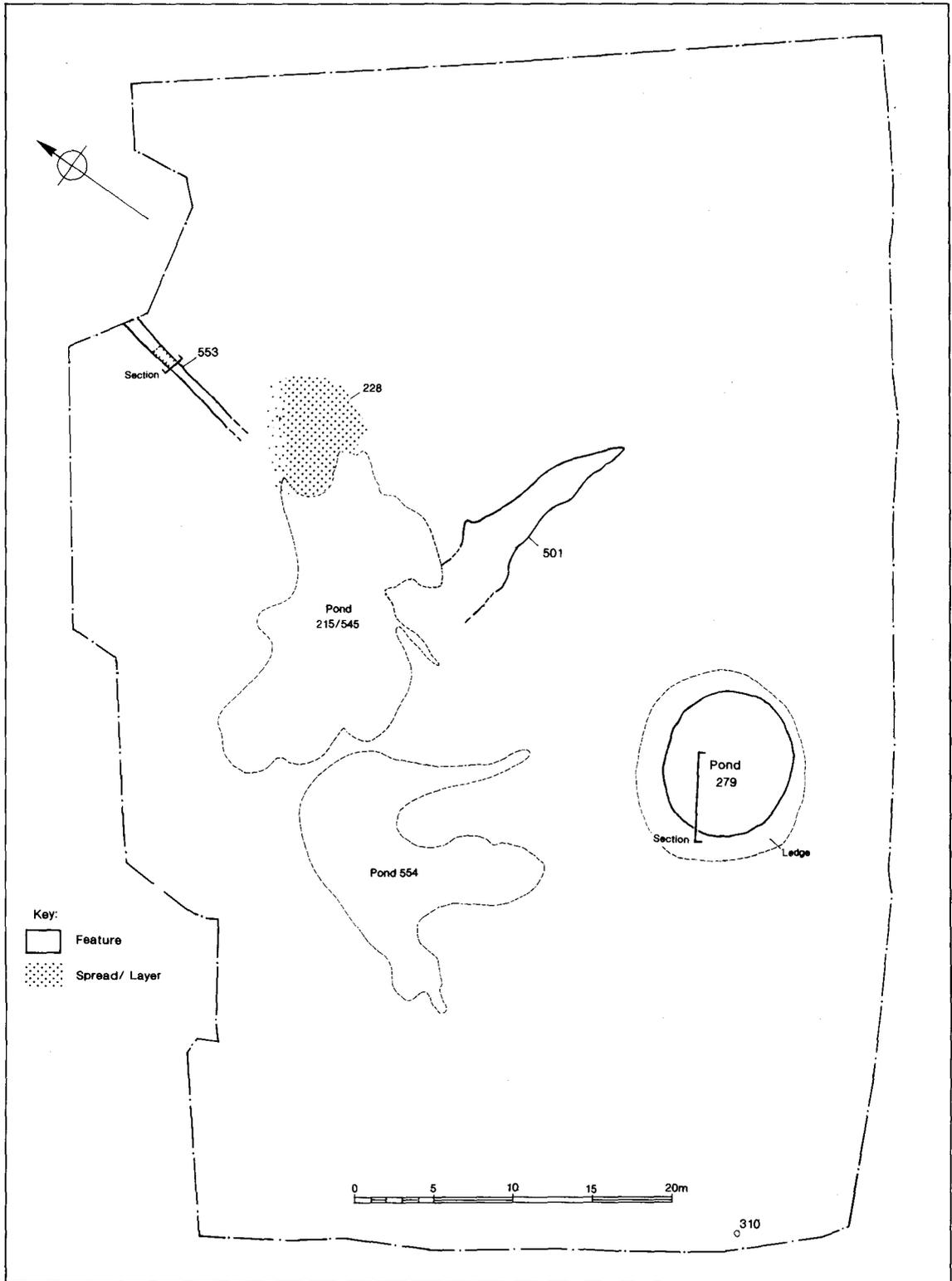


Fig 7. Area 2: Early Romano-British features

spread deposited over the site in LRB III clearly signalled the end of use for most features.

Late Romano-British: I

Two groups of features, at the north and south end of the site, were attributed to this phase, though the precise stratigraphic relationship of the groups to one another is unknown. The intercutting of features within the groups led to further division into subphases Ia-Ic.

Late Romano-British: Ia was represented by an east-west ditch [483] with two associated gullies [538 and 536]; small segments of three shallow ditches or gullies [338, 349, 460]; three subcircular pits, ([516] incorporating a stakehole, [533], [547]) all of similar dimensions (0.8–1.2m) lay close together in the north of the Area; and a posthole cut through the base of pit [533]. The flat based, E-W ditch [483] extended beyond the limits of the site to the east and probably originally extended beyond the later ditches [370] and [427] (Fig 10). It survived to a depth of 0.28m and was 1.39m wide. Shallow gullies [538] and [536], 0.06m deep, were cut into its base at either side, probably forming an integral part of the main ditch cut, the single, clay fill of [538] extending partly across the ditch base. Pit [516], 0.45m deep contained a few fragments of CBM, pottery and, notably, cattle bone (animal bone was recovered from only one other feature in Area 2 – pond [279]).

Late Romano-British: Ib was represented by pit [546] (0.8 × 0.6m), the base of which showed evidence of *in situ* burning although the 0.50m silty clay fill included only occasional flecks of charcoal; a NW-SE ditch/gully [548] which terminated in the upper fill of the phase Ia pit [547] and joined (in an unclear stratigraphic relationship) E-W ditch [513]; two parallel NE-SW ditches ([370] and [427]) and a shallow, sub-rounded feature [480], only discernable in section. Ditches [370] and [427] had an uncertain stratigraphic relationship, following the same line and being of similar dimensions (0.56–0.70m wide, max 0.31m deep) and fill. Fragments of Romano-British pottery, including some LRB, CBM and occasional charcoal flecks were recovered from the single fills of each.

Late Romano-British: Ic was characterised in the northern part of the site by a colluvial deposit [206], which partially or completely sealed most of the earlier phase I features shown in Fig 10.

Fragments of mid-late Romano-British pottery (*c.*AD 150 onwards) and CBM were recovered from the mottled, firm sandy clay layer.

Romano-British pottery of mixed date was recovered from the single fill (0.29m deep) Rectangular feature [505] (7.8 × 3.4 × 0.29m) produced Roman pottery of mixed date together with fragments of CBM and occasional flecks of charcoal. A rather amorphous linear feature ([435]; 0.3–1.6m wide, 0.17m deep) cut the western ends of the earlier ditches [370] and [427] but petered out at either end. The earliest of a number of solitary pits [487] contained an almost complete wall-sided bowl (*c.*AD 240–400), which, in contrast to the highly abraded state of most of the pottery, was in good condition. The oval pit, 1.0 × 0.65m, had steep sides and a concave base, the single fill also containing fragments of CBM and charcoal flecks.

Late Romano-British: II

In the northern part of the site, the ERB ditch [553] was recut by a slightly shallower (0.70m) but wider (1.75m) ditch, [190], which was visible over a 34m length from the NE corner of the site, aligned directly towards pond [279] in the south (Figs 9 and 11). It was cut through the colluvial deposit [206], which presumably still covered most of the northern part of the site. In the segments excavated at the north end (one in the evaluation stage) the primary fills were angled from the west side and comprised a charcoal rich deposit (0.03m), incorporating a wide range of taxa and a few fragments of fuel ash slag, together with a fragment of charred grain and a hazelnut shell, and a 0.21m deep layer of mottled clay silt with charcoal flecking. Subsequent layers were angled-in from the other side and mostly comprised lenses of sandy clay (0.15m) sealed by a 0.06m deep layer of gravel. Finds of ERB date were recovered from layers [281] and [270] (Fig 9), ERB and LRB pottery being recovered from layers equivalent to [270] in the segment excavated further south. The LRB phasing is also attributable on stratigraphic grounds.

In addition, a narrow ditch/gully ([227]; 0.8m wide) and a substantial, dark grey, silty clay spread [224/209] are attributed to this phase. The clay spread was deposited directly on the natural gravel along the eastern side of the site, sealing some of the phase I features in the south.

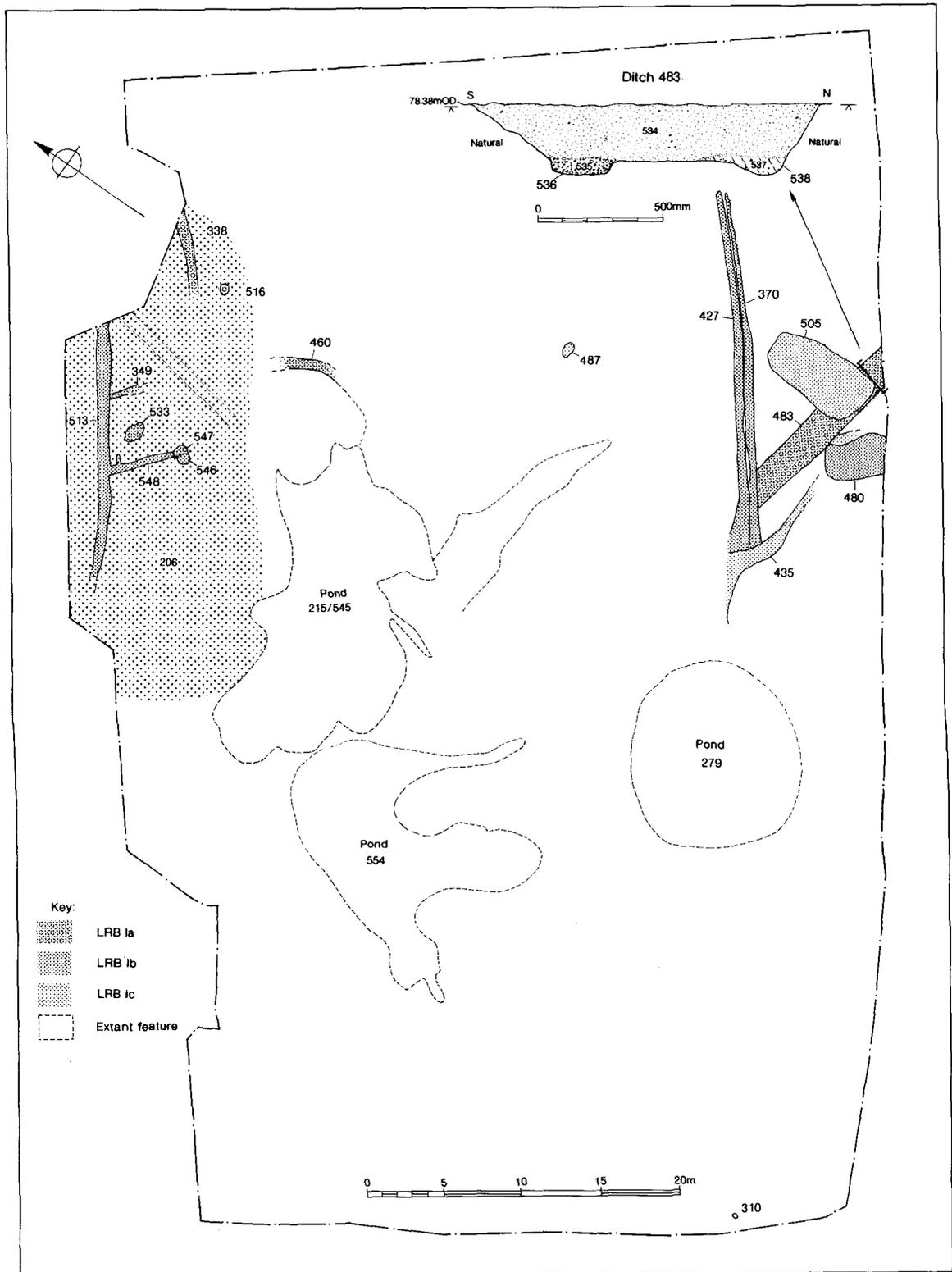


Fig 10. Area 2: Late Romano-British Phase I features and deposits with inset of section through linear feature [483]

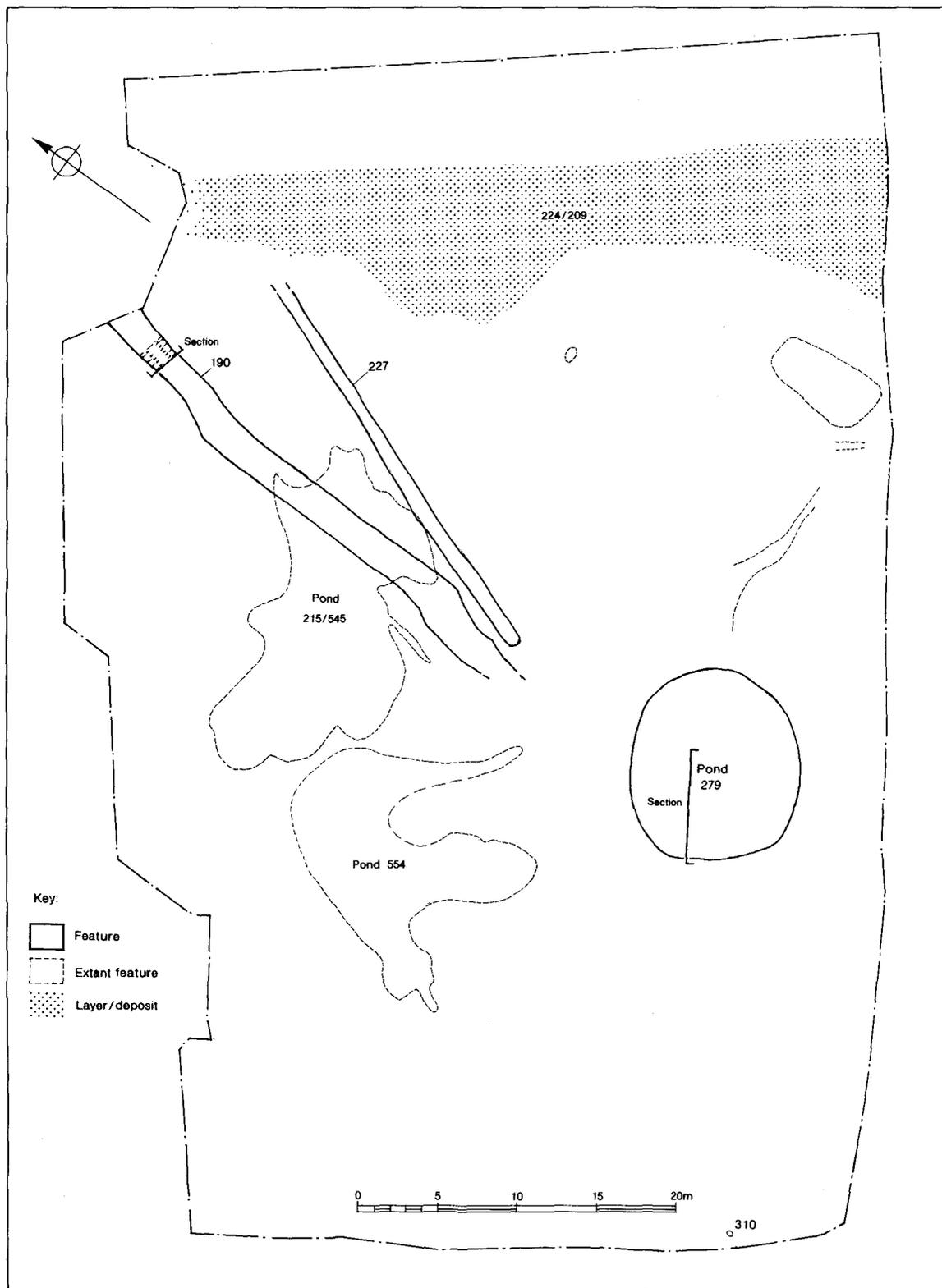


Fig 11. Area 2: Late Romano-British Phase II features and deposits

It varied in thickness from 0.03-0.21m over natural undulations in the surface. The spread clearly continued eastwards towards Watling Street but had been removed during MoD terracing. Large quantities of mostly LRB pottery and CBM were recovered, representing 25% of all the CBM recovered from Area 2 and 24% of all the pottery, with 54% of the fired clay being collected from [209] (the SW 10m of the spread). The pottery from [209] represents one of the latest groups on the site, with very little residual earlier sherds. In contrast, 37.5% of the sherds from [224] represented residual ERB pottery. Within this layer, ([381], slot G; Fig 5), a discrete area of burnt soil and charcoal is believed to represent the remains of a small bonfire for the burning of general wood debris (see below).

Late Romano-British: III

An extensive spread of mottled silty clay, [231/241], was deposited over much of the site, completely or partially covering all of the features remaining from the previous phases with the exception of the ponds (Fig 12). Dispersed fragments of Romano-British pottery (mixed date) and CBM were recovered. It sealed the SW end of ditch [190] which had probably been backfilled by this stage. The latest recut to ditch [552] was observed only in the most northerly of the excavated segments (Figs 9 and 12). Of concave profile, the 0.70m wide and 0.39m deep recut contained five fills which appeared to be angled primarily from the east and then from the west side. Initial silting was followed by a thin, charcoal rich deposit - similar in character and taxa to that from the earlier cut [190] - sealed by a layer of coarse sand [262] below 0.25m of gravel and a tertiary fill of silty clay. All except the primary silting contained fragments of LRB pottery (layer [262]) and CBM.

Late Romano-British: IV

The predominant feature of this phase was the extension of the feeder streams to the ponds and puddling associated with their final backfilling. Although clearly extant features throughout the LRB, the ponds probably ceased to function as such well before the end of the period and were left to slowly silt-up.

Three pits [235, 239, 251] were cut through the spread [231/241] in the south of the site. These were circular or sub-circular with dimensions of 0.4-1.8m and were all less than 0.5m deep. LRB sherds and CBM were recovered, together with two joiners dogs/staples and a fragment of copper alloy from pit [251]. The final recut of the N-S ditch [552] may have continued in use into this phase of the site (Fig 13).

In addition two discrete spreads of material ([250], a thin gravel spread producing LRB pottery and [214], clay), overlay spread [231/241] in the south.

Undated features

A posthole [310], 0.45 × 0.36m, was cut into the unterraced natural clay on the SW margin of the site, at 80.06m aOD. The single fill (0.07m) contained charcoal flecking but no dating evidence. The feature cannot be linked stratigraphically to any others on the site.

Area 3

All the features recorded in the trench were sealed below 0.45m of subsoil and topsoil and cut into the natural gravel. The only feature containing any dating evidence was a probable tree-bowl ([446]; c.0.90m diameter and 0.06m deep) from which a fragment of Romano-British pottery was recovered (Fig 14). The potential level of truncation along the roadside verge in this area is indicated by comparison with the levels taken on the main site. The LRB spreads [224] and [209] were at 79.38m and 78.82m aOD respectively, directly overlying the undisturbed natural gravel at 78.46m aOD. Terracing of the gravel by the MoD for the perimeter road had lowered the level of the undisturbed gravel to c.78.20m aOD. The top of the archaeological deposits in the Area 3 trench, only 3-4m to the east, was at 77.69m, suggesting up to c.0.51m of truncation of the deposits in the roadside verge.

A shallow ditch [444], of NNW-SSE orientation, roughly parallel with Watling Street, was situated at the west end of the trench. It was 1.50m wide and 0.35m deep, with obtuse, slightly concave sides and a fairly flat base (Fig 14). The four fills (respectively silty clay with gravel, clay, sand, and silty clay) were angled in from the east side. All except the primary fill [474] were

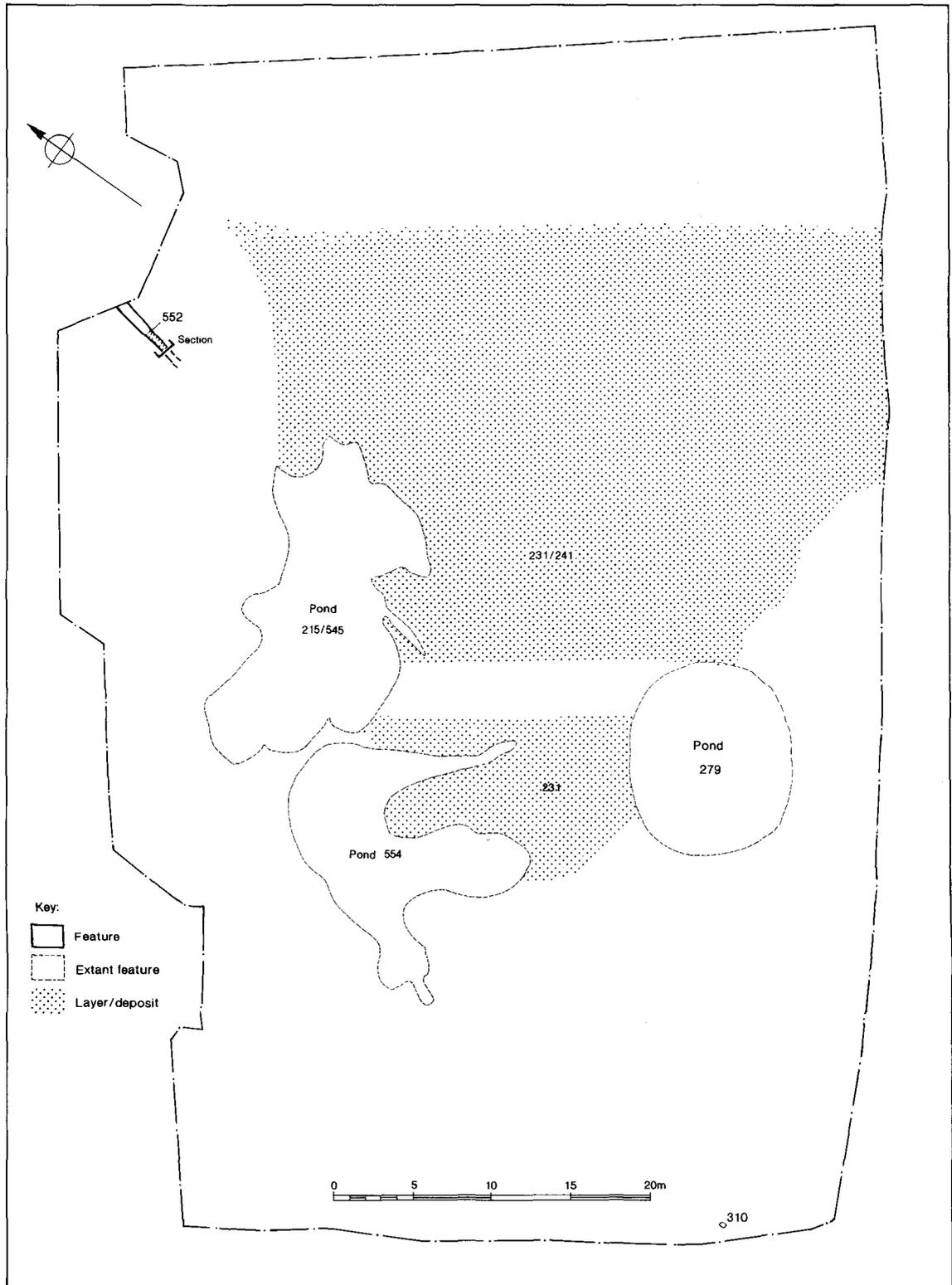


Fig 12. Area 2: Late Romano-British Phase III features and deposits

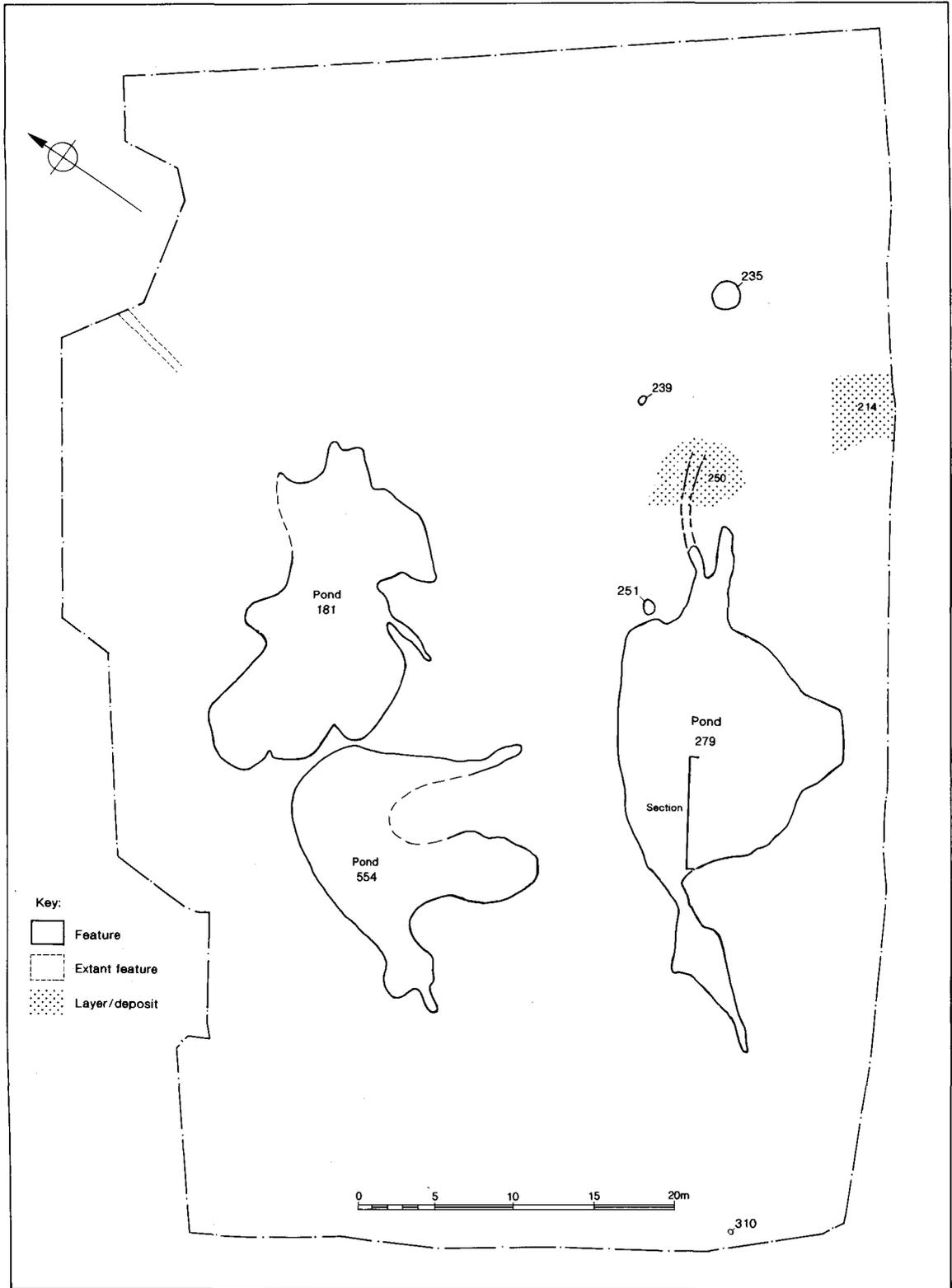


Fig 13. Area 2: Late Romano-British Phase IV features and deposits

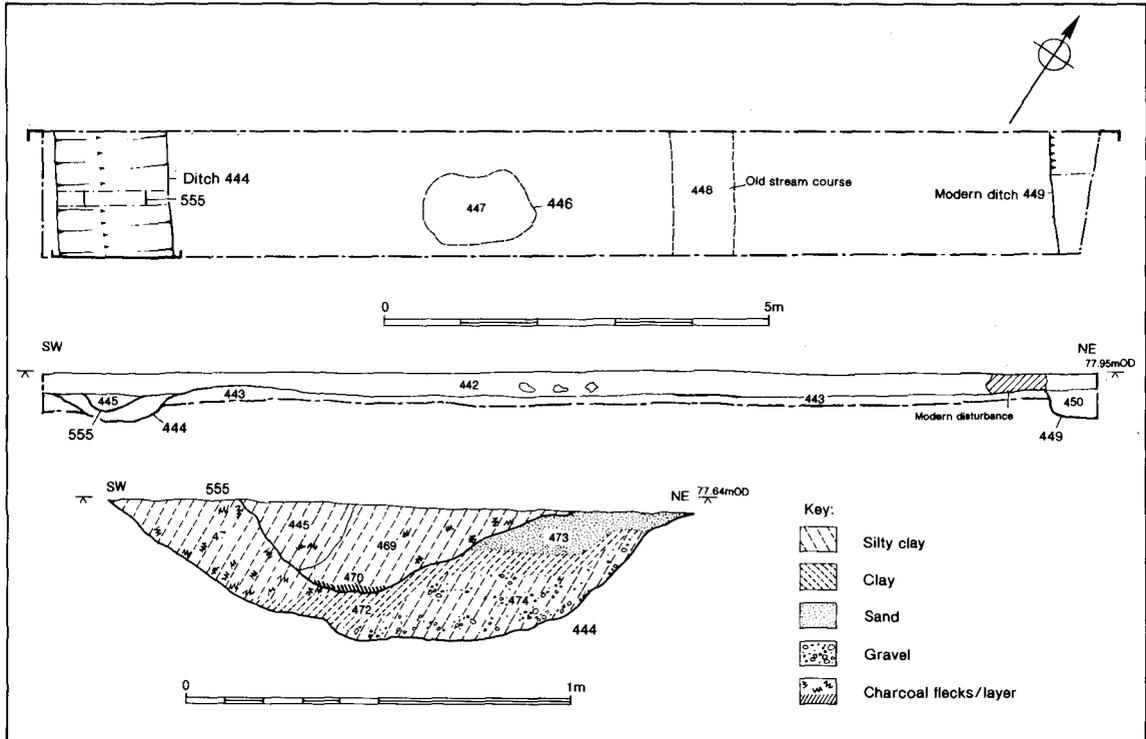


Fig 14. Area 3: plan of all features, with main trench section and section through Romano-British ditch [444] and recut [555]

truncated by a later recut, [555], narrower (0.85m wide) and shallower (0.23m deep) than the original ditch and apparently cut along its centre. The primary fill of the recut comprised a thin layer of charred material [470], representing a mix of damp soil and charcoal indicative of burning on damp, muddy ground. The remaining two layers of silty clay with charcoal flecks also appeared to be tipped from the east. No dating evidence was recovered.

THE FINDS

Metalwork

Emma Loader

Nineteen iron objects, an unidentified piece of copper alloy and a fragment of lead sheet were recovered. All items were x-radiographed. Eleven metal objects were recovered from Romano-British contexts.

Seven nails include three post-medieval types from unstratified contexts (two from Area 1, one

from Area 2) and four Romano-British (all Area 1). One is possibly a Manning type 6 (1985, fig 32) and is probably a masonry, rather than a timber nail. A large, square headed nail was decorative rather than functional and may have been used as a stud on a wooden object. Two nails (Manning type 1B, Manning Type 1A; 1985, fig 32) would have been used for timber. All the Romano-British nails, with the exception of the Type 6, are common on sites of this period.

Four horseshoes and a fragment of a horseshoe heel were found; one modern (from Area 2), the others (from Area 1) of later medieval (14th-16th century) types (Clark, 1986, fig 8).

The other iron objects consist of a swivel from a swivel and loop chain for suspending a cauldron (Manning 1985, pl 64: S4); two joiners dogs or staples with stout stems for joining timbers from the lower fill of LRB:IV pit [251] in Area 2 (Manning 1985, pl 61: R52); an unusually large (193mm long), complete needle from a modern feature in Area 2 (identified by x-ray), similar in size to Manning's type D33 (1985, pl 15) although it differs in form, designed for working heavy or thick material, probably packing or a

mattress; an incomplete, possible needle shank or heckle from a wool comb; and a flat, unidentified object from ditch [501] in Area 2.

The flat, probably waste, fragment of lead sheet was from a modern feature [336] in Area 2, and the small, unidentified fragment of copper alloy was from the upper fill of LRB:IV pit [251] in Area 2.

Pottery

Rachael Seager Smith

The pottery assemblage comprised 781 sherds (10313g). Most were Romano-British in date with small quantities of medieval (15 sherds, 184g) and post-medieval pottery (32 sherds, 461g).

Analyses followed the standard Wessex Archaeology pottery recording system and terminology (Morris and Mephram 1994). The Oxfordshire wares were recorded using the published corpus (Young 1977) but otherwise a site-specific vessel form series was created and a selection illustrated (Fig 15). After consultation with the Museum of London, the fabrics and forms were, where appropriate, placed within the framework of the existing type series for the London area (*ie* Marsh and Tyers 1979; Symonds and Tomber 1992). The pottery was quantified using the number and weight of sherds by fabric type for each context. Pottery fabric totals are given in Table 1 and Table 2 summarises the vessel forms present in each fabric type.

The average sherd weight was 13.24g. The condition of the sherds was extremely poor with many fragments appearing heavily eroded. To provide a relative assessment of the degree of abrasion, 'condition' was scored on a scale of 1–5 (Table 3). All the fresh sherds were of post-medieval date while, of the 41 with only slight ware, 12 were post-medieval and two medieval. The condition and average sherd weight of each fabric type, and from different areas of the site, were compared. The spatial patterning is discussed below. In general, the softer, less well-fired fabrics were in even poorer condition than the harder fabrics. Among the Romano-British sherds, the oxidised wares were smaller (only 7.9g compared with 16.6g) and less well preserved than the non-oxidised fabrics. No other significant patterning was apparent (*eg* local fabrics had not survived particularly better or worse than 'imported' ones). Sandy, iron-rich concretions

were noted on 62 sherds (8%), derived from post-depositional iron panning.

The condition of the sherds had a significant effect on the level of detail attainable in recording and on the reliability of the analysis. The absence of surfaces made precise fabric identification impossible, hence the use of broad, generalised fabric groups based on predominant inclusion type and containing products of more than one source. Some sherds may have been wrongly assigned, *eg* the Oxfordshire red/brown colour-coated wares and the coarse sandy oxidised wares may both include Much Hadham products. Estimated vessel equivalents were not used in quantification given the relatively small size and highly fragmentary nature of the assemblage.

Romano-British

The assemblage (734 sherds, 9668g) spans the entire Roman period with an emphasis on the later Roman (3rd–4th centuries AD). Most of the early Roman (1st–2nd century AD) material was residual in later contexts.

The only Continental finewares recognised were 12 sherds of extremely abraded (category 5) samian. The Southern Gaulish samian included sherds from a Drag 18 platter and sherds from two Drag 33 cups were the only forms recognised from Central Gaul. The only other 1st–2nd-century fineware was the hard, fine white ware; one sherd possibly from a ring and dot beaker. The only other Continental imports were the amphorae. One sherd of a Southern Gaulish wine amphora was identified; the others were from Dressel 20 vessels from Southern Spain. Sherds of both the earlier (*c.*AD 50–170) and later (*c.*mid 2nd-century AD onwards) fabrics (Symonds and Tomber 1992, 94–5) were recognised.

Other early Roman fabrics include local white wares (181 sherds) and white slipped red wares (seven sherds) produced from *c.*AD 50–160 in the Verulamium region. There are many kilns in the Verulamium region and it is not presently possible to distinguish between the products of different centres, which include Brockley Hill, Radlett, Little Munden and St Albans (Tyers, 1996, 201). Most sherds were residual and generally in very poor condition (93% condition classes 4 and 5). Vessels included ring-necked flagons (Fig 15, No.18) in both fabrics, and S-necked flagons (Fig 15, No.12), a range of jar

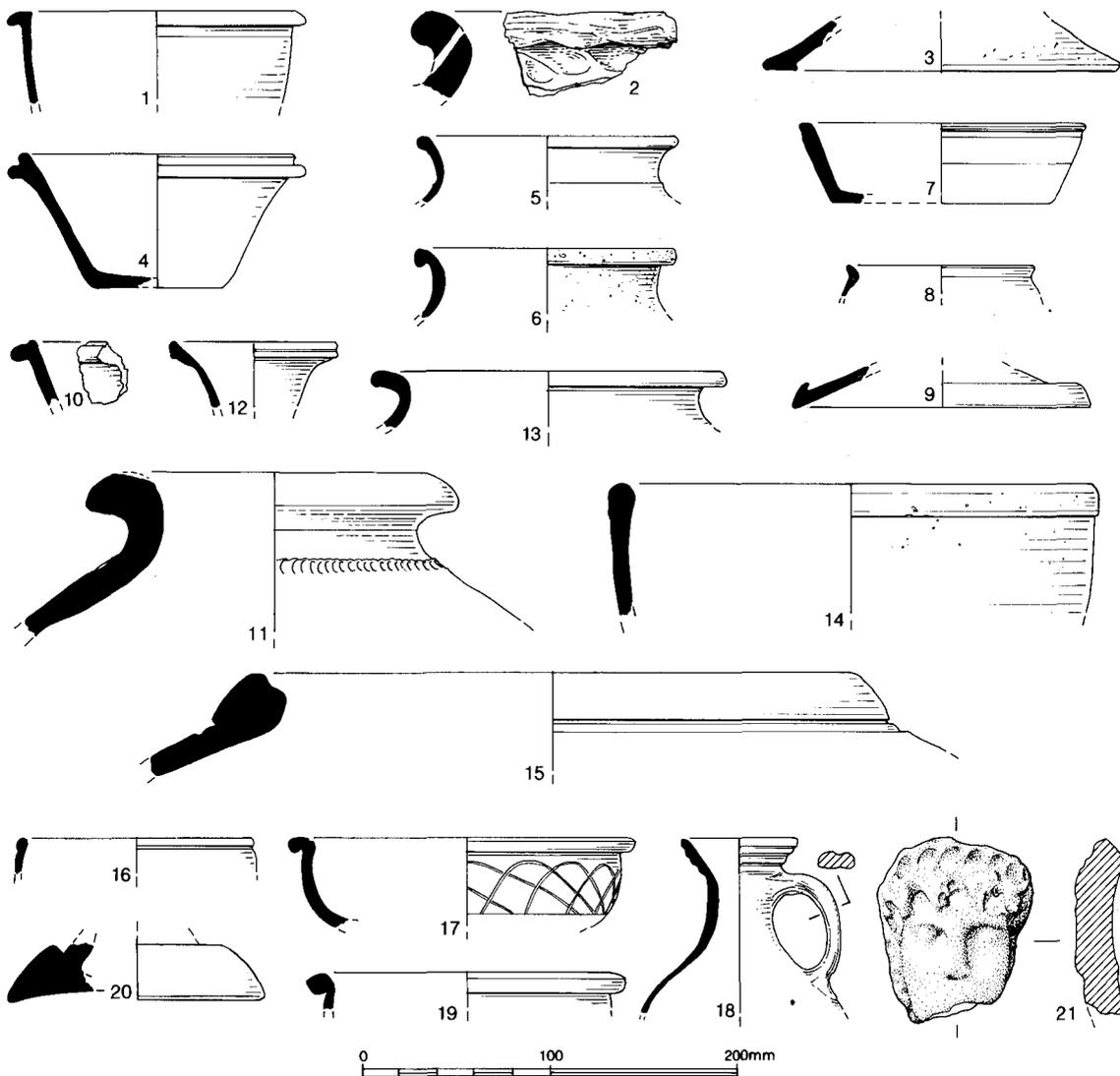


Fig 15. *Romano-British pottery*

forms (Fig 15, No.13) and a lid (Fig 15, No.9) in the white ware fabric only. These fabrics dominate the oxidised ware group, the Verulamium Region White wares alone accounting for almost 25% of the entire Roman assemblage.

The difficulties of recognising specific fabric types among coarse grey sandy wares are well known and were exacerbated by the condition of the material. Eight sherds of Highgate C ware (c.AD 70-160) were recognised, including a rounded bowl with a small out-turned, lid-seated rim (Fig 15, No.17). Sherds of an imitation Black-burnished ware fabric present in London from

c.AD 250 onwards (fabric BBS; Symonds and Tomber 1992, 94), included a dog-dish (Fig 15, No.7) and parts of two dropped flange bowls. Vessels from the Alice Holt/Farnham region represented 28% of the greywares with one or two sherds from Alice Holt/Surrey. The forms predominantly belong to the later industry (Lyne and Jefferies 1979, 34-50) and included 'beehive' (Fig 15, No.2) and other large storage jars (Fig 15, No.15), dropped flange bowls/dishes and necked jars (types 104 and 105 respectively). Unusually, the Cam 306 bowl (Fig 15, No.14), found in ditch [237] (Area 2), also seems to be made from

Table 1. Overall number and weight of sherds by fabric

Fabric	Total No.	Total Wt. (g)	Ave wt. (g)	% of R-B No.
Samian				
South Gaul	5	22	4.40	0.68
Central Gaul	7	67	9.57	0.95
British finewares				
Unass. Brit. colour-coat	6	100	16.67	0.82
Hard, fine white ware	2	6	3.00	0.27
Oxf. red/brown colour coat	51	359	7.04	6.95
Nene Valley colour coat	36	489	13.58	4.90
Oxidised wares				
Verulamium white ware	181	1086	6.00	24.66
Unass. sandy oxid. wares	70	339	4.84	9.54
Verulamium white slipped	7	123	17.57	0.95
Oxf. white colour-coated red	7	29	4.14	0.95
Oxf. parchment ware	21	636	30.29	2.86
Oxf. oxidised wares	3	95	31.67	0.41
Coarsewares				
Black-burnished ware	7	36	5.14	0.95
Porchester D type ware	2	14	7.00	0.27
Much Hadham ware	4	34	8.50	0.54
Grog-tempered wares	56	1679	29.98	7.63
Fine sandy grey wares	32	321	10.03	4.36
Coarse sandy grey wares	150	2277	15.18	20.44
Coarse, gritty grey ware	6	101	16.83	0.82
Calcareous wares (voids)	40	455	11.38	5.45
Mortaria				
Oxf. white ware	5	150	30.00	0.68
Oxf. white colour-coat	1	113	113.00	0.14
Oxf. red/brown colour-coat	15	307	20.47	2.04
Nene Valley white ware	4	153	38.25	0.54
Amphora				
Dressel 20	15	662	44.13	2.04
Pélichet 47/Gauloise 4	1	15	15.00	0.14
Total	734	9668	19.7	99.98
Medieval				
Sand and sparse flint	13	130	10.00	1.66
Coarse sandy glazed ware	1	3	3.00	0.13
Coarse sandy, white-slip	1	51	51.00	0.13
Total	15	184	5.6	1.91
Post-medieval				
Red wares	11	331	30.09	1.41
Unass. slip wares	1	16	16.00	0.13
Staffs. type slip ware	1	17	17.00	0.13
Fine white wares	12	45	3.75	1.53
Unass. stonewares	3	39	13.00	0.38
Porcelain	4	13	3.25	0.51
Total	32	461	14.40	4.09
TOTAL	782	10354	13.24	

an Alice Holt/Farnham fabric. These vessels are relatively common in London from the early to mid 3rd-century AD onwards (Symonds and Tomber 1992, 70, fig 8, 53-6) but are not part of the normal repertoire of the Alice Holt potters.

One sherd (from a large storage jar) of Highgate Wood B ware (c. AD 40-100) was recognised among the grog-tempered wares. Twenty-one sherds (2.7% of total) of a distinctive pink-grogged fabric (Marney 1989, 64-9; Booth

and Green 1989) from the Towcester/Milton Keynes region and dating from the mid 2nd-century AD onwards, were also recognised. Most were from large storage jars (Fig 15, No. 11), the most characteristic and widely traded (as specialist containers) form in this fabric, although the presence of thin-walled body sherds suggests that other forms may have been present.

The sherds that originally contained calcareous tempering materials were all in extremely poor

Table 2. Vessel forms from the site-specific type series, giving number of occurrences

	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	
British finewares																									
Unass. Brit. colour-coat																									
Nene Valley colour-coat																				1					
Oxidised wares																									
Verulamium Region white ware																									
Unass. oxidised wares																									
Verulamium Region whit-slipped red																									
Coarsewares																									
Black burnished ware																									
Porchester D type																									
Grog-tempered wares																									
Fine sandy grey																									
Coarse sandy grey																									
Coarse gritty grey																									
Calcareous wares																									
Mortaria																									
Nene Valley white ware mortaria																									

KEY TO VESSEL FORM:

101 = flat-flange bowl/dish, Fig. 15, 1; 102 = 'beehive' type storage jar, Fig. 15, 2; 103 = lid, internally bevelled, Fig. 15, 3; 104 = dropped flange bowl/dish, Fig. 15, 4; 105 = necked jar, Fig. 15, 5; 106 = necked jar with collared or hooked rim, Fig. 15, 6; 107 = dog-dish, Fig. 15, 7; 108 = beaker with sloping shoulder, Fig. 15, 8; 109 = lid, Fig. 15, 9; 110 = bowl/dish with a grooved flange, Fig. 15, 10; 111 = square rim storage jar, Fig. 15, 11; 112 = flagon with rim, neck and body in a continuous curve, Fig. 15, 12; 113 = necked jar/bowl with flat, out-turned rim, Fig. 15, 13; 114 = storage jar with wedge-shaped rim, not illustrated; 115 = Cam. 306 bowl, Fig. 15, 14; 116 = storage jar with a lid-seated rim, Fig. 15, 15; 117 = bead rim jar/beaker, Fig. 15, 16; 118 = bowl with out-turned, lid-seated rim, Fig. 15, 17; 119 = ring-necked flagons, Fig. 15, 18; 120 = bowl with a thickened rim, Fig. 15, 19; 121 = round shouldered necked jar, not illustrated; 122 = beaker rim, not illustrated; 123 = necked jar with everted D-shaped rim, not illustrated; 124 = mortaria with upstanding rim and wide, unbent flange, not illustrated.

Table 3. Condition of sherds

Condition category	Definition	No. of sherds	% total no. of sherds
1	Very severe abrasion; no surviving surfaces & rounded edges	331	42%
2	Well-worn but with some surface & edge definition surviving	283	36%
3	Average	120	15%
4	Slight ware	41	6%
5	Fresh, crisp condition	7	<1%

condition and badly leached. At least four sherds were of the 4th-century CALC fabric (Symonds and Tomber 1992, 94) while one other was similar to the late Roman Kentish shelly wares (Pollard 1988, 213). Together with the Porchester D sherds, which post-date AD 350 in London, these wares represent the latest Roman coarsewares present. Both fabrics were represented by necked jars with hooked or collared rims (Fig 15, No.6).

One of the major suppliers of the pottery recovered from the site was the Oxfordshire industry (c.AD 240-400+); its products represent 14% of all sherds. The red/brown colour-coated wares were in very poor condition but a range of common, widely distributed beaker and bowl types (Young 1977, types C22, C45, C51, C75 and C81) and one mortarium (type C97) were recognised. The facemask (Fig 15, No.21) found in the Area 2 spread [224], was derived from a very uncommon flagon form dated to the second half of the 4th century AD (Type 150). Similar vessels were also made at Much Hadham, although the quantity of biotite mica in this example confirms its Oxfordshire origin. The Parchment-ware sherds were all from wall-sided bowls, a common type throughout the life of the industry but especially during the 4th century AD (Young 1977, 173, type P24). Sherds from a single, near-complete example were found in pit [487] (Area 2) with one sherd of Much Hadham ware. The vessel had been partially burnt but was otherwise in relatively good condition suggesting it was deposited under different circumstances to the rest of the assemblage, perhaps closer to the point of initial discard. The heavy base (Fig 15, No.20) from tree bowl [132] (Area 1), was identified as Oxfordshire oxidised ware but the form is not illustrated by Young (1977) and no parallels have yet been found. Only body sherds of the white colour-coated red ware were noted.

Nene Valley colour coated wares and mortaria were present in small quantities. Dated from c.AD

150 onwards, the forms included a wide mouthed jar or bowl (Fig 15, No.19) and a round shouldered necked jar (type R122, not illustrated). Sherds from a 3rd-century necked and folded beaker and part of the lid of a Caistor box were also recognised.

The remaining fabrics, *ie* Black-burnished ware and Much Hadham ware, represent only minor components of the assemblage or 'catch-all' groups for otherwise unassigned sherds. The largest of these contains 70 very fragmentary oxidised sherds (average 4.84g) in extremely poor condition (91% in condition categories 4 and 5). This group contains the products of more than one source, probably spanning a wide date range. Six sherds of colour-coated ware, probably from beakers, also remain unassigned and undated due to the poor condition of the sherds.

Medieval and post-medieval

Three fabrics were identified, of 12th-13th-century sand and sand with flint tempered coarsewares from Areas 1 and 2, and one sherd from a 13th-14th-century white-slipped, glazed jug from Area 2. The post-medieval wares comprise glazed and unglazed redwares, fine white wares, slip wares, stone wares and porcelain from linear 109 (Area 1) and topsoil, make-up layers and ploughmarks in both areas.

Discussion

The assemblage from Area 1 (80 sherds, 1159g) represented only 10% of the overall number of sherds (11% by weight) and contained no positively identifiable early Roman fabrics or forms. A Black-burnished ware dog-dish rim was the only sherd from Area 3. The remaining sherds were all from Area 2. The recognition of specific patterns of deposition or distribution was hampered by the relatively small size of the

assemblage but those present are discussed below. All the fabrics and forms are encompassed by the range of products expected in this area (Fiona Sealey pers comm), but the exceedingly poor condition of the assemblage makes it exceptional. While this may be due in part to the harsh soil conditions, the high degree of residuality in the assemblage suggests that much of the material was exposed for some time prior to its incorporation in the deposits in which it was found. With the possible exception of the almost complete Oxfordshire Parchment-ware bowl, most of the sherds, regardless of date, were probably derived from activity in areas remote from the site, although the processes by which they arrived are unclear. There is no evidence from the pottery assemblage for domestic occupation of the site, a suggestion supported by both the nature of the excavated features and the environmental evidence. The presence of a number of large storage vessels is notable.

Ceramic building material

Rachael Seager Smith

The ceramic building material was predominantly of Romano-British date but medieval and post-medieval/modern fragments were also identified. A total of 1143 pieces, weighing 116.412kg was recovered. Details can be found in the archive.

The Romano-British material (1010 pieces, 109.477g) was divided into types (*tegulae*, flue tiles, flat fragments *etc.*). Fabrics were defined by the predominant inclusion type and recorded using the standard Wessex Archaeology terminology for pottery analysis (Morris and Mephram 1994). The number and weight of fragments of each tile type were recorded by fabric for each context, together with variables such as the thickness and presence of signatures, stamps and tally marks.

The assemblage was very fragmentary, no complete lengths or widths were recovered and flat or undiagnostic pieces dominated in all periods. The softer fabrics were often very abraded. The mean fragment weight for the Romano-British pieces was 108.4g.

Six Romano-British fabric groups were identified. The most numerous group was a moderately hard, sandy fabric (42% of pieces) and a soft, fine micaceous fabric (39%). A very hard, often overfired, cherry-red fabric (14%), flint (4%) and

grog (1.5%) tempered fabrics completed the assemblage.

Forty *tegula*, 25 *imbrex* and three box flue tiles were recognised. All the other pieces were flat or undiagnostic fragments, three of the former were combed on one surface. Where measurable, the *tegulae* ranged between 11mm and 31mm thick, with most between 16mm and 26mm. The *imbrices* were generally between 13mm and 18mm thick. The flat fragments, identified as Romano-British by their fabric type, varied from 13mm and 50mm thick, with a clustering between 32mm and 42mm. While some of the flat fragments may derive from *tegulae*, the greater thickness suggests that the majority were from bricks. These were produced in a variety of sizes to serve specific purposes, but based on the figures given by Brodrigg (1987, 34–62) it is possible that *bessales*, *pedales*, and *lydion* are represented here. *Bessales* and *pedales* were primarily used for hypocaust pillars, although they were also used in floors, arches and in bonding. The *lydion* was most suitable for use in the bonding or lacing courses in walls (Brodrigg 1987, 34–7).

Roof tiles were comparatively poorly represented. The predominance of brick fragments is of interest concerning the origin of the material, the poor condition of the assemblage and absence of structures indicate that it has been redeposited. None of the fragments bore any traces of mortar or other bonding agents. The often very overfired fabric may suggest the presence of production waste although the evidence is far from conclusive.

Sixteen fragments had deliberate marks on them, including incised tally marks (three fragments) and 'signatures' (12 fragments), all occurring on flat or unidentified fragments which could not be assigned to a specific brick/tile type. However, while 'signatures' are most common on *tegulae*, tally marks are perhaps most frequently found on bricks (Brodrigg 1987, 99–135). None of the 'signatures' was complete but most are probably part of alpha marks (Brodrigg 1987, fig 47, 5), others consisted of a finger smeared X (context [140], Area 1) and a smeared wavy line (unstratified, Area 2), both on flat fragments. The tally marks were on the narrow edges of the fragments – single vertical lines on two pieces (unstratified) and an incised V on one piece (context [209]) from Area 2. A carefully executed open-diamond lattice was preserved on a flat fragment (context [181], Area

2). This design may have served as keying for mortar, but the care with which it was undertaken might suggest that it was intended to be visible. This piece was 27mm thick and may have been used as a gaming board.

Worked stone

Rachael Seager Smith

Four fragments of probable rotary quern were recovered, two of Greensand (contexts [1214 and 224], Area 2), one of a coarse-grained sandstone ([140], Area 1) and one of a conglomerate rock, probably Hertfordshire Puddingstone ([112], Area 1). Parallel tool-marks were visible on the unworn grinding surface of one Greensand fragment.

All the building stone, recovered from two discrete deposits in Area 1 (Fig 5), was oolitic limestone, the petrological analysis of which showed it to originate from the Ancaster area of Lincolnshire (David Williams, pers comm). A total of 340 fragments (c.416.5kg) was retained as a sample, including 293 pieces from [100/102] and 17 pieces from [102]. The remaining 30 pieces were from slot [109], a post-medieval/modern feature cutting through [102].

The stone was divided into three basic categories as shown in Table 4. 72% of the assemblage (246 pieces) was clearly worked, the remainder being either heavily fragmented or severely weathered with none of the original surfaces surviving. Tooling was noted on 62 pieces (18%), varying from roughly scabbled facings to fairly fine, smooth surfaces with narrow, diagonal chisel marks.

Most fragments were from roughly square or rectangular blocks. No complete lengths or widths were preserved and none bore any traces of mortar. Two polygonal stones c.0.1m and 0.14m in diameter respectively were possibly derived from columns or pillars, and 13 other

fragments may be from columns between 0.14m and 0.5m in diameter. Four pieces have at least one fairly smooth, regular face with an upstanding border, while the worked surface of one other fragment was stepped at the edge to provide an upstanding face. One very badly weathered, roughly tooled fragment has a rectilinear perforation. Two fragments of decorative architectural mouldings, possibly from around windows or doors, were also noted.

The form and weathered condition of the stone suggests it once formed part of substantial structures, possibly public buildings, demolished or dismantled during the Roman period. The fragments recovered here would have been deemed unsuitable for re-use being too small and abraded.

Approximately half a small, plain, lathe-turned shale armlet was found in [1115] (Area 1). The internal surface is sharply chamfered, leaving a 'ledge' on the inside. The interior diameter was 50mm. Shale armlets were made from the Iron Age until at least the end of the Roman period but within this range, individual examples are not closely datable.

Worked wood

Moirá Laidlaw

A small quantity of worked timber was excavated from pond/well [279]. Most of the wood was in poor condition and fragmentary, with fissured surfaces and edges. Each timber fragment was allocated an object number in excavation and fully recorded. After lifting, which proved difficult because of the poor condition of the wood, the timbers were carefully washed and recorded. Each numbered fragment was sketched and details of condition, form, dimensions and evidence of tool marks were noted. Small samples were taken for species identification before the timbers were wrapped in polythene.

Table 4. Quantification of building stone categories by context

Context	Total No.	Total Wt.	1 worked face	2+ worked faces at 90°	2+ worked faces at other than 90°	No. of tooled pieces
100/101	293	342.195kg	89	112	22	60
102	17	49.225kg	6	10	1	2
109	30	25kg	3	3	—	—
Total	340	416.420kg	89	125	23	62

The worked timber may be divided into two main forms, stakes and planks. Stakes are any conversion form which has been shaped to form a point and planks are any radial split (with the grain) or tangential split (across the grain). Because of the poor condition of the surfaces it was often difficult to attribute fragments to a particular form and conversion type.

Fragments from four possible stakes (Object nos 2016, 2017, 2019 and 2021) were recovered laying at steep angles within layers [355] and [285] (equivalent to [261]) in pond [279]. The fragments are roundwoods with a diameter range of 0.05m to 0.08m and are 0.61m to 1.4m in length. No point fragments were recovered but the fragments are slightly tapered. No facets are visible as the surfaces are very fissured. One fragment of roundwood from [285], c.40mm in diameter (in its collapsed state), was assessed for type. Identification was difficult but characters similar to hazel (*Corylus*) or alder (*Alnus*) were noted.

Four fragments of timber have been identified as planks. One from layer [355] was laying horizontally, as was one of the two from layer [353] (Fig 7), the other of which was at a very slight angle. The fourth fragment, from layer [261/285] was at a 45° angle. All are split timbers with mainly rectangular cross-sections and are tentatively identified as having been split tangentially. The surfaces are flat and fissured, often with squared edges. The plank fragments range in length from 0.55m to 2.42m and from 0.10m to 0.20 in width, and are generally 0.05m thick. One (no.2014) has a possible mortise hole, 0.045m × 0.02m and another (no.2026) is notched along one side which may represent a joinery feature. The notch is 0.06m by 0.01m. The remainder of the timber fragments are possibly derived from planks as they tend to be thin with flat surfaces and were found laying horizontally within the pond.

Spatial patterning of finds

Quantitative and qualitative analysis of the spatial distribution of pottery and CBM within the spreads was undertaken. Variations in overall density of the two groups of artefacts was assessed, together with the form and fabric types, and the degree of fragmentation and abrasion. The groups of material were assessed within the associated LRB: II (Fig 11) and LRB: III (Fig 12)

spreads, and comparison was made between the two phases.

Pottery

The spreads contained 41% of the Romano-British pot fragments from Area 2 (33% by weight); 17% (20% by weight) within the phase II spread [224/209] and 24% (12%) in the more widely dispersed phase III spread [231/241]. The average weight per fragment in phase II was just over twice that of the fragments in the later spread, and the density of pottery per unit area was slightly more than double in the earlier phase compared with the later, though neither was particularly great. Analysis also showed a slight, but gradual increase in the density of pottery towards the south-east within both phases, and there was a noticeable decrease in the density of sherds towards the west.

Fragments of 37 different Romano-British vessel forms were recovered from Area 2, but most sherds comprised plain bodies and fragments of base and handle (all forms undistinguished). A slightly greater variety of forms was noted in the earlier spread than in the later one, and in phase III there was a slightly greater variety of forms in units to the SW.

Twenty-seven Romano-British fabric types were identified from Area 2, most commonly Verulamium Region White wares (25%) and grey coarse wares (21%). A larger variety of fabric types were recovered from the phase II spread compared with phase III. There was a higher frequency of different fabrics from the southern 10m of the phase II spread [209], than from the rest of the deposit (14 compared with eight) and there appeared to be a similar north-south variation in phase III. The material from the southern end of the phase II spread was predominantly late in date, whilst the rest was more mixed (37% ERB sherds).

There was some slight variation in fragment size between the machine and hand excavated sections of the individual spreads, but the lower fragment sizes could not be directly linked with the mode of recovery. Overall, pottery abrasion was high (Table 3), though in general, the pottery from phase II was slightly less abraded than that from phase III.

Ceramic building material

The two spreads contained 45% of the fragments of CBM from Area 2 (39% by weight). Most came from the phase II spread, 31%, compared with 14% from phase III. In both phases, the greatest density of CBM, and more diagnostic forms, were recovered from the southern portions of the spreads.

Discussion

One characteristic of relatively small pottery assemblages is the presence of a few examples of many different pot forms, and this factor renders the detailed analysis of spatial distribution unfeasible: the small size of the sample being statistically unviable. However, there are a number of general observations which may be made with respect to the assemblage of both pottery and CBM from the phase II and phase III spreads which may be indicative of their formation processes.

There was a noticeable increase in density, and a slightly greater variety of forms and recognisable fabric types towards the SE of the spreads in both phases (though the increase in recognisable fabric types may have been affected by the greater ease with which late fabrics may be recognised). There was also some variation between the phases, with a slightly greater density of pot sherds, and more variety in form and fabric types in the earlier phase. The material from the later phase appeared slightly more abraded than that from phase II. Similar patterns were also noted amongst the CBM, both with respect to location and phase.

These observations suggest that the material incorporated within the spreads was derived from a concentration to the SE, outside the area of excavation, probably nearer Watling Street if not directly beside it (see Fig 1). The lack of homogeneity in distribution, together with the lack of other 'domestic type' debris, may be indicative that this does not represent a normal 'middens' type deposit, spread across fields in the course of manuring, though the London Clays and Gravels are known to encourage poor preservation of bone (M.J. Allen, pers comm). The highly abraded nature of both the pot and CBM assemblages implies that it has been 'reworked' and it is likely that the material was subject to a series of deposition episodes prior to

its arrival beside the road at Brockley Hill. The lower density of material, decrease in variety, smaller fragment size and greater degree of abrasion seen in the phase III material, may indicate that this spread, which does not extend to the east of the earlier spread but does slightly overlap and therefore post-date it, may itself have been derived from the earlier assemblage; material from the phase II spread being reworked across to the west.

The predominance of LRB pottery in the south of the phase II spread compared with the more mixed nature of the material to the north and west is more difficult to explain. The most likely reason is that rather than being the product of a single 'roadside' deposition from one place of origin, the material was derived from successive dumps of debris, possibly from different places. So, although the material within the spreads may all have been deposited by the roadside roughly contemporaneously, they may first have accumulated elsewhere, some deposits becoming more mixed than others.

ENVIRONMENTAL EVIDENCE

Charcoal

Rowena Gale

Species identification of 10 samples of charcoal (nine from Area 2, one from Area 3) from Romano-British pits, ditches, layers and miscellaneous features was undertaken to assess the type and character of the fuel deposits. Bulk soil samples were processed by flotation using standard methods. The charcoal was separated from the seed and plant macro-fossils by Sarah Wyles.

Charcoal was abundant in many of the contexts and fragments measuring >5.6mm were common. Ten samples of charcoal from the larger fractions were selected for identification. Although plentiful, much of the charcoal was poorly preserved and some appeared partially vitrified (indicative of charring at temperatures >800°C). The charcoal was prepared for examination using standard techniques. The fragments from each sample were fractured to expose fresh transverse surfaces and sorted into groups based on the anatomical features observed using a ×20 hand lens. Representative fragments from each group were selected for further

examination under high magnification. Freshly fractured surfaces were prepared in the transverse, tangential and radial planes. The fragments were supported in sand and examined using a Nikon Labophot incident-light microscope at magnifications of up to $\times 400$. The anatomical structure was matched to reference material. The dried wood was hard and structurally collapsed; it was prepared for examination using the method described above.

Where appropriate the maturity (sapwood/heartwood) of the wood was assessed and the number of growth rings recorded. It should be noted that the measurements of stem diameters are from charred material; when living, these stems may have been up to 40% wider.

The results are summarised in Table 5. The anatomical structure of the charcoal was consistent with the taxa (or groups of taxa) given below. It is not usually possible to identify to species level. The anatomical similarity of some related species and/or genera makes it difficult to distinguish between them with any certainty, *eg* members of the Pomoideae and Salicaceae. Classification is according to *Flora Europaea* (Tutin, Heywood *et al* 1964–80).

Species represented are: Aceraceae: *Acer* sp., maple; Aquifoliaceae: *Ilex* sp. holly; Betulaceae: cf *Alnus* sp, alder; Corylaceae: *Corylus* sp, hazel; Fagaceae: *Quercus* sp, oak; Oleaceae: *Fraxinus* sp, ash; Rosaceae; Pomoideae: *Crataegus* sp, hawthorn, *Malus* sp, apple, *Pyrus* sp, pear, *Sorbus* spp, rowan, service tree and whitebeam (these genera are anatomically similar); Prunoideae: *Prunus* spp,

P. avium, wild cherry, *P. padus*, bird cherry, *P. spinosa*, blackthorn (it is sometimes difficult or impossible to differentiate between these species but in this instance the charcoal was more characteristic of blackthorn); Salicaceae., *Salix* sp, willow, *Populus* sp, poplar (these genera are anatomically similar).

Area 2

Samples were examined from the LRB ditch [190] and a later recut, [552] (Figs 9, 11 and 12) in Area 2. The samples were collected from two of the excavated segments, including one from the evaluation (linear feature [1189], equivalent to [190]). A charcoal rich lens in the base of ditch [190] [297] was mimicked by a similar lens towards the base of the recut layer [263] where it overlay a thin primary deposit of sand (Fig 9). The samples were composed of large fragments of charcoal (mostly >5.6 mm), some of which were too poorly preserved or too highly carbonised (partially vitrified) to identify. A wide range of taxa was common to both samples (Table 5) including maple (*Acer*), hazel (*Corylus*), ash (*Fraxinus*), holly (*Ilex*), hawthorn type (*Pomoideae*), blackthorn (*Prunus spinosa*), oak (*Quercus*), and willow/poplar (Salicaceae). Oak predominated in both samples and consisted mainly of heartwood, with fragments indicating periods of both slow and fast growth. The early growth rings of some roundwood fragments of oak and hazel were wide and indicative of rapid

Table 5. Charcoal; number of fragments identified is indicated

Sample	Acer	Corylus	Fraxinus	Ilex	Pomoideae	Prunus	Quercus	Salic
AREA 2								
Linears 190 and 552								
263 1003	1	—	1	2	8	3	63sh	3
297 1006	1	3r	2	—	6r	2	17sh	—
1202 e706	3	—	1	—	6	1	114sh	3
1209 e707	3	6r	6r	—	10r	6r	175rh	—
Pits 533 and 544								
532 1061	—	—	—	—	—	—	3h	—
544 1062	—	3r	—	—	—	1r	4h	—
Spread 224/209								
381 1012	3	—	—	—	—	2	8rh	—
Misc. feature 501								
492 1056	—	2	—	—	—	cf.1	34h	—
499 1057	2	—	1	—	—	1	24sh	2
AREA 3								
Linear 555								
470 1055	1	1	4r	—	4	3	37sh	1

Key: Salic = Salicaceae; r: roundwood (diameter <2 mm); s: sapwood; h: heartwood

growth of the stems, whereas the Pomoideae type roundwood appeared to be of consistently slow growth, eg charred diameter of 14mm with 21 narrow growth rings. The samples from the ditch segment excavated in the evaluation (Wessex Archaeology 1995) also produced abundant charcoal. Sample 707, from the equivalent layer to [281] (Fig 9), contained a lens of clayey sand with charcoal and a few fragments of fuel ash slag. A few fragments of fuel ash slag were also recovered from sample 706 from [1202] (equivalent to [280], Fig 9). The character of the wood and range of taxa identified was similar in both segments of the ditch (Table 5).

Charcoal was examined from the fills of two adjacent pits on the NE margin of Area 2 (Fig 10), the fragments were reasonably large but comparatively sparse. Oak (*Quercus*) heartwood was identified from the fill of pit [533] (fill [532]). The sample from the fill of pit [546] [544] included oak roundwood (diameter 75mm), sapwood and heartwood, and roundwood from blackthorn (*Prunus spinosa*; diameter 3mm) and hazel (*Corylus*; diameter 20mm).

Burnt soil and charcoal were present in the coarse fraction of the sample from context [381] (slot G), part of the spread [224/209] (Figs 5 and 11). The charcoal consisted of roundwood from oak (*Quercus*) and blackthorn (*P. spinosa*), with wide early rings in the oak, and oak heartwood and maple (*Acer*). Charcoal from two excavated segments of the ERB feature [501] (Fig 7) was also examined. Sample 1056 (Table 5) was composed mainly of oak (*Quercus*) heartwood plus some sapwood, with a small quantity of hazel (*Corylus*) and possibly *Prunus*, although the latter was too poorly preserved to verify. Sample 1057 also included mostly oak (*Quercus*) heartwood with some sapwood but also some maple (*Acer*), ash (*Fraxinus*), blackthorn (*P. spinosa*), and willow/poplar (*Populus*).

Area 3

The shallow ditch [555], a recut of ditch [444] (Fig 13), contained charcoal and burnt soil which appeared to have resulted from a fire in a damp muddy area. The sample, from the primary fill of the recut [470], was predominantly oak (*Quercus*) heartwood, with a small amount of sapwood, together with small quantities from ash (*Fraxinus*) roundwood (diameter 12mm), maple (*Acer*), hazel (*Corylus*), blackthorn (*P. spinosa*),

hawthorn type (Pomoideae), and willow/poplar (*Salix/Populus*).

Discussion

Oak (*Quercus*) was dominant in all contexts, particularly the heartwood. Charcoal from the ditches in Area 2 included the widest diversity of taxa: oak (*Quercus*), maple (*Acer*), hazel (*Corylus*), ash (*Fraxinus*), holly (*Ilex*), hawthorn type (Pomoideae), blackthorn (*Prunus spinosa*), and willow/poplar (*Salix/Populus*), although it should be noted that these samples also included the greatest volume of charcoal. Such a mixture of taxa suggests that the charcoal was more likely to have derived from, for example, deposition of fuel debris than from structural origins such as boundary fences. Taxa identified from the pits and the spread were more sporadic (Table 5) although oak heartwood was common to all.

The mixture of charcoal and burnt soil in the spread [381], equivalent to [224/209], (Fig 11) was characteristic of burning *in situ* and may have been the result of a bonfire, possibly on open land. The remains of oak heartwood amongst other debris of maple and blackthorn suggests a scene of general burning of debris rather than, for example, trimmings from brushwood.

The sample from the shallow ditch in Area 3 [555] identified similar taxa to those used in the Romano-British contexts in Area 2, and a similar preference for the use of oak heartwood was also evident.

The abundant deposits of charcoal from ditches and pits, assumed to have been fuel residues, included relatively large fragments of material. With the exception of willow/poplar, the taxa identified produce dense, high-calorie wood fuel. The large dimensions of some charcoal fragments suggests that a high proportion of the wood was probably composed of billets of oak, mature enough to have produced heartwood. There were also much narrower pieces of roundwood from a range of taxa. This combination of roundwood from high-energy wood fuel, and oak billets, giving longer-lasting heat, would have had the capacity to provide an intense heat source.

The charcoal frequently appeared to have been subjected to temperatures high enough (>800°C) to have caused vitrification, a process whereby the tissues 'melt' and fuse together,

producing a glassy effect. This is more likely to have occurred in an industrial context than in a domestic hearth and suggests that the charcoal was probably waste from kilns or furnaces (although probably not from bread ovens or other cooking apparatus since food residues were absent). Activities which require high temperature heat-sources should therefore be considered as the most likely point of origin.

The requisites for charcoal-making appear to have been to hand (wood, and water from the ponds), and also easy access to routes for dispatch. Charcoal production has, however, a tradition of careful control (Edlin 1949) and it seems improbable that charcoal clamps would have been consistently subjected to temperatures likely to have damaged the quality of the product; it is doubtful that the charcoal originated from spoil directly associated with charcoal-making. The traditional method of charcoal-making, however, used billets of wood (Edlin 1949) and the charcoal from this site was certainly composed of fragments large enough for billets. The possibility that charcoal fuel was used, particularly with the overtones of industrial use, can not be ruled out.

The environment

The range of taxa identified suggests that the local heavy clay soils probably supported mixed oak woodland. Evidence of the use of coppiced/pollarded wood was sparse and inconclusive. The innermost growth rings of some pieces of oak and hazel roundwood (from ditch [190] and the spread) indicated the use of fast-grown stems, but other material was slow-grown.

Local woodlands probably provided the fuel source for the large-scale pottery unit established on Brockley Hill (see above). The excavated kilns were operating in the early Romano-British period, whereas activity at this site was within the later phases of this period. If the kilns were operating fairly continuously throughout this time fuel demands would have been high, and unless some system of woodland management operated, demand may have outstripped supply fairly quickly. Woodland may, therefore, have been coppiced to provide faggots and wider poles. Here, the fuel residues probably consisted of a mixture of 'managed' and 'unmanaged' wood, and possibly even charcoal. The position of the site, close to the main road would also

have allowed faggots and other fuel to have been brought into the area relatively easily.

Conclusions

Relatively large quantities of charcoal associated with a small number of possible industrial features, dated to – or suggested to be – late Romano-British, indicated the use of firewood (or possibly charcoal) from various species, but predominantly composed of oak (*Quercus*) billets or logs. The condition of the charcoal was consistent with high-temperature combustion and this fact, together with the absence of domestic artefacts on the site, endorsed the suggestion that the charcoal residues originated from some type of industrial activity. Consideration was given to possible sources but the lack of conclusive supportive evidence renders any suggestions conjectural. Environmental data from the charcoal analysis suggested that mixed deciduous oak woodland predominated on the heavy clay soils of the region. By implication, it is likely that woodlands were managed, but insufficient evidence was available to support this suggestion.

DISCUSSION

The nature of Romano-British activity on this site is somewhat enigmatic, it is perhaps easier to say what it was not, rather than what it was. Several of the features were of an undiagnostic form which offered no obvious interpretation, whilst the nature of the various linear features and pits was not always clearly defined. An additional problem in interpreting the site as a whole was posed by the high levels of modern disturbance in all areas, particularly the central portion of Area 1, and the west and east sides of Area 2. The substantial truncation which had clearly occurred along the eastern margins of Area 2 and the verge of the A5 (Areas 3 and 4), estimated at between 0.51m and 0.75m, will have removed archaeological evidence in this key, Roman roadside area (*c.* 12m wide).

No real link can be made between the activity at the base of Brockley Hill and that known to have taken place along the southern slopes and towards the top of the ridge (Fig 2), in the areas excavated by Castle (1976). Production at these pottery kilns was well in decline (AD 120–130) before the main era of activity at this lower

roadside location apparently commenced. Although c.25% of the Romano-British pottery recovered comprised Verulamium Region White wares, which may include pottery from the Brockley Hill kilns, there are many kilns within this region and currently it is not possible to distinguish between the products of the different centres (Tyers 1996, 201). In addition to which, most of the sherds were in very poor condition and clearly residual. The nearest known kiln is c.1.3km north of Area 2 (Fig 2) and none of the features excavated could be interpreted as indicative of activity connected with pottery production.

As in the previous excavations in the vicinity (Castle 1976; Bowsher 1995), there was no evidence of the illusive *Sulloniacis* posting station. Given the purpose of such establishments – *mansiones*, providing accommodation for authorised persons, with changes of horses and vehicles, and *mutationes*, which functioned as changing stations for remounts and replacement draught animals (Smith, 1987, 11) – one would expect substantial, masonry buildings and stabling facilities, probable examples of which have been found at various points along Roman roads at, for instance, Chelmsford, Godmanchester and Wanborough (Smith, 1987, 11–19).

There is, in fact, no evidence for domestic occupation of any sort on the site, either in the form of structural, artefactual or environmental remains. No *in situ* structures were observed and there was nothing to indicate the presence of buildings constructed from organic materials (eg beam slots). The postholes and slots at the north end of Area 1, while apparently orientated in relation (perpendicular) to the road, do not, as excavated, appear to have related to a building and are more likely to have formed a fence line. However, the possible existence of structures constructed of wood, daub, etc cannot be entirely ruled out. The negative features left by such structures are not of the most robust nature and the level of modern disturbance in both Areas was such that it is not impossible that relevant evidence may have been totally destroyed in some parts of the site. However, the presence of the LRB spreads in Area 2, which would have sealed evidence of earlier features or been cut by any features post-dating them, suggests that here, at least, no such structures could have existed. It may, of course, be that buildings were constructed closer to the road, to the east of the area of excavation (Fig 1). Here, on the western verge of

the current A5, the level of modern truncation (estimated to be a minimum of 0.5m) is such that no traces of anything other than substantial structures are likely to survive.

In addition to the lack of structural evidence, is the absence of artefactual or environmental material indicative of domestic occupation within the confines or the immediate vicinity of the site. The Romano-British CBM from both Areas represents heavily abraded demolition debris which, together with the pottery assemblage, appears to have been redeposited several times over. The discrete deposits of worked stone from Area 1 (also abraded), although derived from what must have been a substantial Romano-British structure(s), represents fragments of the type remaining once stone fit for re-use had been removed. No structure of the form implied – eg a public building, villa, shrine etc – has yet been located in the immediate vicinity of the site.

The Roman road

Although no dating evidence was recovered from the ditch at the west end of the Area 3 trench (Figs 1 and 14), there is compelling circumstantial evidence to suggest it is Romano-British in date and may represent the remnants of the western roadside ditch. The course of the Roman road as it descended Brockley Hill was first plotted by Castle via a series of slot trenches excavated in the 1950s and 1960s (Castle 1976, fig 1: Fig 2). Castle's projected line to the south was confirmed during investigations by MoLAS in 1995 (Bowsher 1995, figs 3 and 4) to within 335m north of the site (Fig 2). Thereafter, Bowsher's figure 3 depicts the line reconverging with the current A5, but there is no evidence that it actually does so. If the line of the road was projected south in a straighter line, it would run along the western verge of the A5 adjacent to the site, ditch [444] being in appropriate alignment with the western roadside ditch (Fig 2). The form and width of [444] (Fig 14) corresponds closely with that of the western roadside ditch in Bowsher's trench 10 (1.60m wide, 0.80m deep); both ditches have later, smaller recuts and both were predominately silted from the east side (Bowsher 1995, fig 6b). The shallow depth of ditch [444] is the result of truncation, the ground level along the roadside verge adjacent to Area 2 having been reduced by an estimated minimum of 0.5m (see above). Assuming the base of the

ditch to have been at the same level below the road surface as that in Bowsher's figure 6b, this degree of truncation would have removed all traces of the road surface and the *agger*. No indication of an eastern roadside ditch was noted, but this may be due to a modern ditch cut [449] at the eastern end of the trench (Fig 14). The intervening area between ditches [444] and [449] was *c.*1.0m; the width of the Roman road surface excavated by Bowsher was 9.40m.

No features were noted in the Area 4 trench through which the projected line of the Roman road may also have been expected to pass (Fig 2). The level of the undisturbed natural clay in Area 1 compared with that in the Area 4 trench shows an estimated minimum of 0.75m truncation, which could have removed any traces of archaeology associated with the road.

Gravel metalling

The LRB gravel spread in Area 1 was not compacted, had no associated features and did not have the appearance of a structural foundation deposit or formal 'surface'. The gravel had simply been deposited on the ground surface, adjacent to the Roman road, with odd dumps of worked limestone over the top of it. It was noted that the clay surface below the gravel had a 'trampled' appearance in places and the implication is that the original topsoil was thin and unworked.

The deposits suggest one of two possible functions. Some form of activity may have been undertaken in the vicinity which required a stable, dry ground surface. The ground being clay based, therefore prone to holding water and puddling, gravel was spread across it to give a better surface, the limestone being deposited as hardcore.

Alternatively, the area may have been used as a 'depot' for road metalling material, either on a temporary basis for the adjacent stretch of road (in which case what remains may have been surplus to requirements) or longer-term storage for material intended to serve a larger area. Parts of Watling Street excavated to the north (Castle and Warbis 1973; Bowsher 1995) and to the south in Edgware (Codrington 1919, 60) demonstrated that rammed gravel was used as metalling over the built-up clay base of the road surface. Certainly in the latter location, gravel was not available in the immediate vicinity and must

have been brought in – the nearest natural outcrop probably being the Stanmore Gravels at Brockley Hill. Roman road surfaces were commonly subject to one or more episode of resurfacing (*eg* Bowsher 1995; Adam *et al* 1992) and patching (Margary 1949, 18; Castle and Warbis 1973, 89). Metalling and mending material not infrequently incorporated fragments of pottery and CBM, and occasionally other archaeological material, including in this instance unwanted worked stone. Bowsher (1995) also encountered dumps of gravel in several of the evaluation trenches excavated to the north of the site, which he felt may have been related to construction of the road. The location of this material at the base of a substantial hill on a heavily used road may be indicative of its significance.

Industrial activity

The taxa and form of the charcoal recovered from several pits and ditches at the north end of Area 2 and in the adjacent Area 3, represent a combination of high-energy and long-lasting fuel, capable of providing an intensive heat source of the type associated with some form of industrial activity. However, in the absence of any supportive evidence, the nature of any such 'industry' remains unknown; a few fragments of fuel ash slag were recovered with some of the charcoal, but this general slag may form in any type of fire which produces sufficient heat for its formation (*c.*1000°C). There is some suggestion that the debris may have been associated with charcoal production but the evidence is inconclusive. All except one of the charcoal samples were derived from non-contemporaneous features in the northern corner of the site, indicating a discrete area of activity subject to more than a single episode of usage.

The pond

The deep, central area (base at *c.*76.0m aOD) of feature [279] (Fig 8) was surrounded by a ledge which appears to have supported, at least in parts, a timber platform of planks possibly secured in position by stakes. This would have provided a firm footing on the clay surface, which would have been hazardous to walk on, especially when wet. The sedimentary evidence

indicates that the lower fills were formed under almost permanent water, supporting the archaeological evidence for this representing the functioning period of the pond/well. The secondary fills accumulated after the pond had gone out of use, fragments of the timber platform as well as other LRB artefacts accumulating within the largely dried-up feature. The presence of some animal bone within the layers suggests that at least a modicum of 'domestic' type refuse was originally present in the vicinity, but has not survived other than in damp conditions. The sedimentary analysis indicates that the upper stratum of fills, again as suggested by the archaeological evidence, represented a broader phase of deposition extending beyond the immediate boundaries of the cut feature and related to the 'puddling' stage.

The feature differs in size and form from the clay pits excavated by Castle on Brockley Hill (Castle 1972; 1976; Castle and Warbis 1973). The latter features were generally found adjacent to kilns, smaller in plan and substantially shallower than [279], with a gentler concave profile, and the fills incorporated quantities of pot sherds and other material, but no timbers.

The absence of a water source in the immediate vicinity was noted by Chadwick (1995) and the ponds may have been excavated to rectify the omission. A small well, 2.13m diameter, was partially excavated adjacent to the Roman road towards the summit of Brockley Hill (Castle and Warbis 1973, fig 2), in association with the kiln sites. The roadside settlement at Hibaldstow had an early Romano-British pond covered by a later building (Smith 1987, 67). Ponds and wells in association with Roman settlements are not unusual features, but in this instance, the nature of the associated activity is not clear.

The spreads

The main ditches [190, 483, 552, 553] in Area 2 appear to have formed a crude 'boundary' to the western and northern extension of the phase II and, possibly the phase III spreads. Both spreads directly overlay natural indicating, as in Area 1, the existence of only a thin topsoil/subsoil. While the general existence of the spreads within this confined area suggests manuring, the lack of homogeneity in distribution and the absence of other 'domestic-type' debris indicates the

pottery and CBM probably did not originate from a normal 'midden'-type deposit. All the material within the spreads appears to have been derived from a concentration to the SE, adjacent to the road and outside the area of excavation (truncated by the MoD). The material within the spreads probably originated from some location outside the immediate vicinity and was subject to a series of deposition episodes prior to being dispersed across Area 2. The later phase III spread is likely to have been derived directly from its earlier counterpart, forming a western extension to the worked soil. If these spreads do represent manuring of the area for agricultural purposes, the location of the farmstead they pertain to is not known – there is no indication of such a settlement, or any other, on the west side of the road. Perhaps something exists on the east side? Alternatively, if, as appears to be the case, a growing mound of ceramic material was being dumped on the side of the road, the spreads may indicate an attempt at levelling.

CONCLUSION

The site does not fall into any of the categories of 'roadside settlement' discussed by Smith (1987), indeed it cannot be said to constitute a 'settlement' as such, representing more an area of roadside 'activity', possibly sporadic and taking a variety of forms.

The deposits in Area 1 appear to represent road-metalling material, and the area may have served as a general depot or repair yard, the northern limits of which were bounded by the possible fence-line. Area 2 appears to have had a more varied usage. The several large ponds or wells may have been associated with whatever form of industrial activity was being undertaken in the northern part of the site. The location, at a half-way stage between London and the next major Roman town of *Verulamium*, and at the base of a relatively substantial rise, may have led to the site serving as resting place on the journey, giving a short break prior to continuing up the hill. It may have been where cattle/sheep drovers stopped to water their animals at the ponds/wells before continuing on to London or *Verulamium*. In the later Roman period, it seems to have served, in part, as a roadside dumping ground for broken pottery and CBM, possibly also originally intended to be used in road mending, but subsequently subject to levelling being

unwanted and possibly posing something of a nuisance as a large mound.

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EXCAVATIONS AT 11 IRONMONGER LANE, LONDON EC4

Ian Grainger

SUMMARY

In 1995 excavation and recording took place in the basement of 11 Ironmonger Lane, London, EC4, on the site of a previously excavated Roman town house dating to the 3rd century AD. A number of features of both Roman and medieval date were revealed, including a Roman quarry pit which contained a large and important group of pottery dated to the mid or later 2nd century; a wall from the Roman town house; a later 4th-century Roman building, probably of timber; and two medieval rubbish pits. The results of this work are considered in relation to those of the earlier 1949 and 1983 excavations.

INTRODUCTION (Figs 1, 2)

In the summer of 1995 archaeologists from the Museum of London Archaeology Service (MoLAS) undertook an archaeological watching brief and excavation at 11 Ironmonger Lane, City of London, EC4 (TQ 3253 8126; Museum of London Site Code IRL95). The site is bounded by Gresham Street to the north, Old Jewry to the east, Cheapside to the south and Ironmonger Lane itself to the west (Fig 2). It is currently occupied by an office building which is largely of modern date but has retained an 18th-century frontage. The archaeological work was carried out in the base of a new lift shaft excavated in the basement during the refurbishment of the building. The area available for excavation was thus fairly small: 5m by 3m.

In 1949 an archaeological excavation by Adrian Oswald revealed the remains of a Roman town house, medieval buildings, and medieval burials (Guildhall Museum site 219). Parts of the mosaic flooring of the Roman town house were

also discovered and, in one place, preserved *in situ* for display in the basement. In 1983 the preserved portion of the mosaic was lifted for conservation and the stratigraphy beneath it was excavated by Patrick Allen (Museum of London Site Code BOA83) revealing a series of earlier metalled surfaces. These two excavations have been published (Dawe & Oswald 1952; Shepherd 1987, 34–8), and the results of both are briefly summarised below.

GEOLOGY

The geology and topography of the site and surrounding area have already been examined and published in some detail by Shepherd (1987, 16–23). The site overlies London Clay capped by river terrace gravels which, when untruncated, are typically found at a height of c.9.5m OD. However, on most parts of the site the gravels have been truncated, c.8.8m OD being the lowest depth recorded during the 1995 excavation. The site occupies a relatively flat, low lying, natural terrace to the north of the River Thames. A tributary of the River Walbrook perhaps flowed close to the southern boundary of the site in the Roman period; traces of a possible water course were found there during the 1949 excavations (Dawe & Oswald 1952, 114).

HISTORICAL BACKGROUND

The following historical information is taken from Dawe & Oswald (1952, 15–108) and Keene & Harding (1990, 134–58). From the early part of the 12th century the land between the

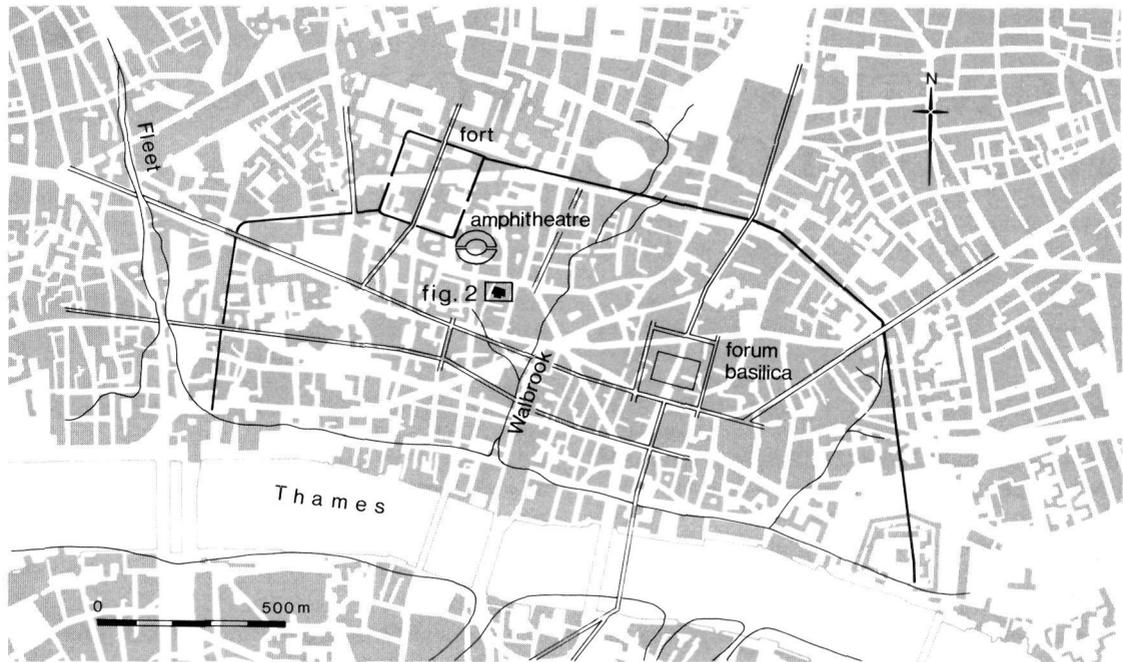


Fig 1. Plan of central London showing the location of the site within the Roman city

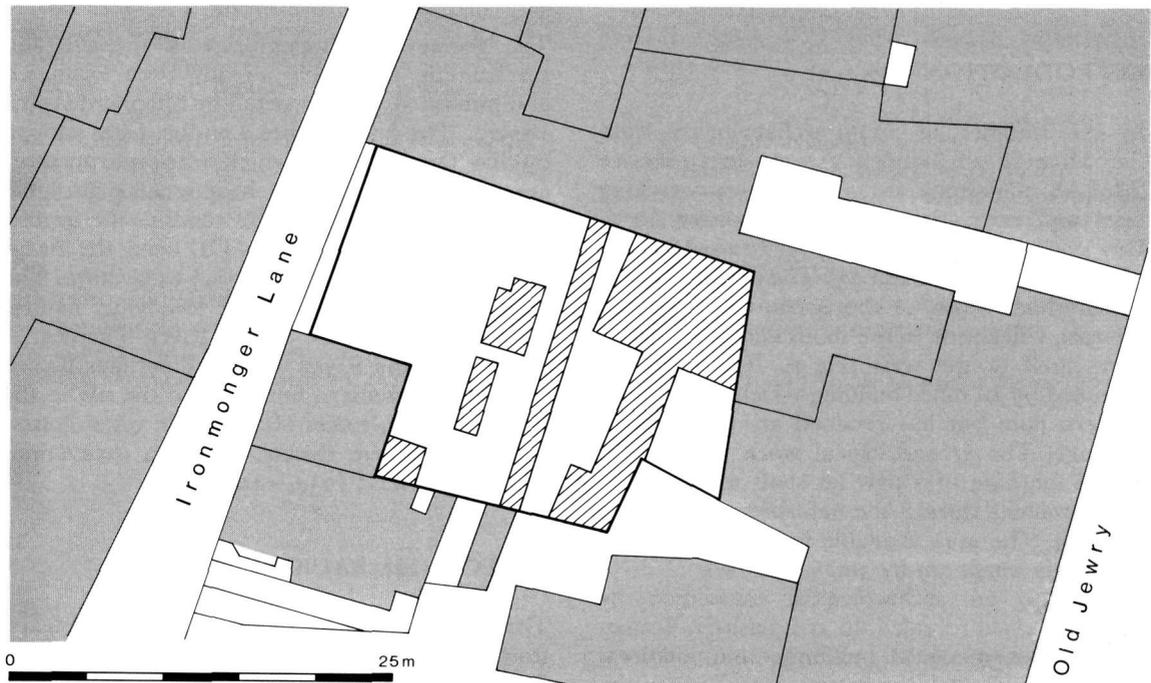


Fig 2. Location map of site in relation to the modern streets and showing areas excavated from 1949 onwards

northern parts of Ironmonger Lane and Old Jewry, bordered to the south by the churchyards of St Martin Pomeroy and St Olave Old Jewry, was occupied by town houses and land belonging to a succession of wealthy Jews in the parish of St Martin. The earliest documentary reference to Jews in the vicinity of the site comes from a land schedule dated to *c.*1130. It is possible that at this date the site was part of the property of a Jew called Lusbert or, more likely, shared its eastern boundary with his property. By 1275 the site was occupied by the house and gardens of Hagin the Jew who served as arch-presbyter of all the Jews in England. The first reference to the church of St Olave is in 1181; the smaller church of St Martin Pomeroy is referred to in 1175 when it was given to the prior and convent of St Bartholomew, Smithfield. The northern parts of the churchyards of both of these churches extended up to the southern part of the site. The first record of the name Ironmonger Lane occurs in 1215, but archaeologically the lane is inferred to have existed by *c.*1050 (Schofield *et al* 1990, 152).

After the expulsion of the Jews in 1290 their properties between Old Jewry and Ironmonger Lane were seized by the Crown and granted to a number of individuals before being given as a whole to Piers Gaveston, Earl of Cornwall, becoming known as the 'wardrobe of the Earl of Cornwall' and used by him as a town depot or store. The Earl was executed in 1312, and his widow Margaret, later wife of the Earl of Gloucester, retained the wardrobe until 1342. On her death Edward, the Black Prince, acquired the property which duly became part of the Prince's wardrobe. The buildings on the site and surrounding it may have been extensively rebuilt at this stage. The prince may have used this as his principal town house from 1359 onwards. After the Black Prince's death in 1376 the wardrobe passed to his widow Joan, and subsequently for life to Richard II's queen, Anne, who died in 1394.

The property continued to be called the 'Prince's Wardrobe' for another century and a half, but it was now used in part as a town house for the monarch's more important servants. By 1404 parts of it were used by the Mercers' Company for meetings. In 1549 the buildings, still referred to as the Prince's Wardrobe, were sold to Sir Anthony Cope. By 1554 the buildings were sold to Hugh Pope, who ran a tavern there, possibly on the site itself, before they were

demolished in the 1560s to make way for new town houses. These houses, together with the churches of St Martin and St Olave, were destroyed by the Great Fire of 1666.

In 1668–9 a house with three storeys and a cellar was built at 11 Ironmonger Lane by John Davenport. This was demolished in 1768 and replaced by a new house built by Thomas Fletcher. During the 1830s the property was bought by Samuel Mullen and became Mullen's Hotel. When this venture failed the building was converted to offices in 1898 and renamed Selborne House. In October 1944 the rear of the property was destroyed by a flying bomb, though the 18th-century frontage survived. It was the rebuilding of the rear of the property and the extension of its basement in 1949 that gave archaeologists an opportunity to examine the earlier history of the site.

THE 1949 EXCAVATION (Fig 3)

This excavation appears to have been conducted largely as a watching brief on work undertaken by contractors on the basements of the offices destroyed in the war, though parts of the work did amount to controlled archaeological excavation. The published report of the excavation (Dawe & Oswald 1952, 111–29) is summarised here.

The new basement

During the ground reduction by contractors for a new basement on the eastern half of the site, chalk walls with vaulted arch foundations were found, along with disturbed human burials. The arched foundations descended to a depth of more than 14ft (4.25m) below street level.

Foundation trenches

Three north–south internal wall foundation trenches were then excavated by contractors.

Trench 1

Trench 1 was excavated in the already basemented area to the west. Immediately beneath the slab was Roman stratigraphy. The earliest

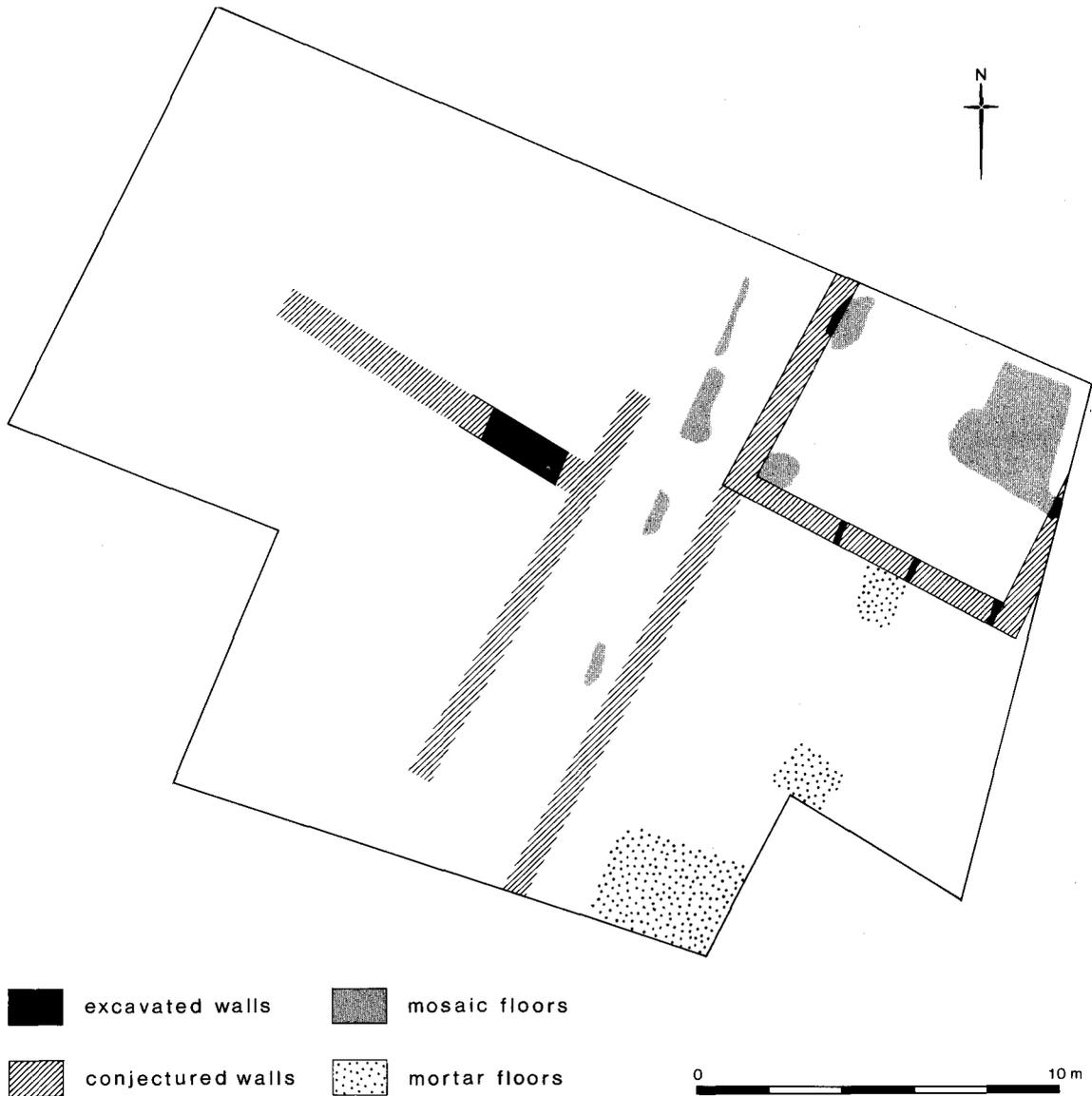


Fig 3. The structural remains of the 3rd-century town house as found in 1949, 1983 and 1995

features recorded were a number of shallow pits cutting the natural gravels at *c.*9.4m OD. These were sealed by grey silt and partially by a series of thin charcoal layers, one of which to the south contained pottery dated to AD 40–60. These layers were in turn cut by a large pit which contained Roman Castor ware dated to the first half of the 3rd century. Above this were two phases of flooring. The Castor ware pit was sealed by a pink mortar floor which extended

over much of the trench and was covered in part by the second floor, a rough tessellated pavement composed of red and grey *tesserae* at approximately 10m OD. The mortar floor was cut by modern walls and medieval burials.

Trench 2

This was dug in the previously unbasemented area to the east of Trench 1 after the initial

basement excavation described above, and the area of excavation was extended for more careful examination by the archaeologists. The natural gravels were sealed by a deposit of grey soil overlaid by a rammed gravel surface which produced pottery with a date range of AD 120–160. This was sealed by a further deposit of grey soil above which was laid a mosaic floor at c.10m OD. The floor, part of which still survives *in situ*, is in four colours (red, yellow, blue and white) in a geometric design consisting of flowers within roundels contained by lozenges. The mosaic was dated to later than c.AD 220 by Adrian Oswald on the basis of its probable contemporaneity with either of the two floor levels which sealed the Castor ware pit found in Trench 1. Portions of the ragstone retaining wall for the mosaic were also found, although heavily robbed. In the southern part of this trench were further Roman mortar floors related to the mosaic floor. They were greatly disturbed by medieval burials and wall foundations. The medieval walls included a large chalk foundation forming part of the eastern boundary wall of the site which featured a number of post-medieval brick additions. The vaulted arch foundations formed part of the south-east corner of the site, were probably of 14th-century or later date and possibly part of a 15th-century aisle added to the church of St Olave. Two further fragments of the north–south aligned medieval chalk foundations were found in the area of the preserved mosaic. These were probably later than 1300, in that one wall included fragments of 14th-century pottery in its matrix and sealed a pit, which contained a pottery jug of late 13th or early 14th-century date. They were almost certainly part of the Earl of Cornwall's or Prince's wardrobe rather than any earlier medieval house.

Trench 3

Trench 3, to the east of Trenches 1 and 2, produced a quantity of 1st and 2nd-century pottery, but no Roman features were recorded.

Underpinning work

To the west, a series of underpinning holes was dug by the contractor. The southernmost of these produced late Roman pottery in a layer of black silt that appeared to have been part of a stream bed. A number of fragments of glass mosaic,

considered by Oswald to be of possible medieval date, were found in the other underpinning pits, the excavation of which does not appear to have been closely monitored by the archaeologists.

THE 1983 EXCAVATION (Fig 3)

By 1983 the condition of the preserved portion of the mosaic floor had deteriorated to such an extent that it was decided to lift the mosaic and re-lay it on concrete above the underlying river terrace gravels. This provided an opportunity to excavate the stratigraphy beneath the floor, though the area available, 1.5m by 2m, was limited. The following section summarises the published account of this work (Shepherd 1987, 34–8).

Natural gravels were recorded between 9.15m and 9.17m OD, a slightly truncated level in view of the values recorded elsewhere on the site. These were cut by a probable quarry pit which was only partially excavated and not bottomed.

Above the quarry pit was a layer of grey pebbly sand and silt with compact gravel lenses at its base which appeared to represent a disturbed external surface. This surface was later repaired with a less extensive layer of compact orange gravel at 9.53m OD. Above this was a rubbish deposit consisting of dark grey silt and charcoal. This was sealed by another gravel layer sloping down to the south, followed by a layer of redeposited compact brickearth forming a surface with a level of 9.60m–9.63m OD. Replacing this was a thin compact layer of dark brown gravel above a probable bedding layer of tan brickearth. This surface lay at between 9.67m and 9.75m OD. These roughly metallated external surfaces were dated by pottery to the late 1st and early 2nd centuries.

A thick layer of humic silt accumulated above the latest surface, possibly suggesting a period of disuse. On this was laid a compact buff-yellow pebbly concrete slab 40–100mm thick to form the bedding for the mosaic described above. The *tesserae* were set in a thin layer of *opus signinum* which was attached to the underlying bed by a thin layer of yellow mortar. The mosaic was subsequently relaid close to its original level.

THE 1995 EXCAVATION (Figs 3–9)

Phase 1: Open Area 1

The earliest deposits recorded were the naturally deposited river terrace gravels. Along the western

and northern edges of the trench these survived to a maximum level of $\approx 9.4\text{m OD}$, which may represent their largely untruncated surface, though in much of the trench they were truncated down to a level of $\approx 8.8\text{m OD}$.

Phase 2: Open Area 1 (Figs 4, 9)

The natural sands and gravels were truncated by the northern end of a large quarry pit which occupied virtually the entire base of the trench. The eastern, western, and northern edges of this feature were nearly vertical and roughly coincided with the edges of the excavation, the southern edge lying beyond the limit of excavation. The pit had a flat base at $\approx 8.8\text{m OD}$. It was backfilled to a maximum level of $\approx 10\text{m OD}$ with a dark grey brown sandy silt which contained frequent lenses of sand, gravel, brickearth, burnt clay, lumps of mortar and *opus signinum*, with occasional fragments of very decayed timber. There was

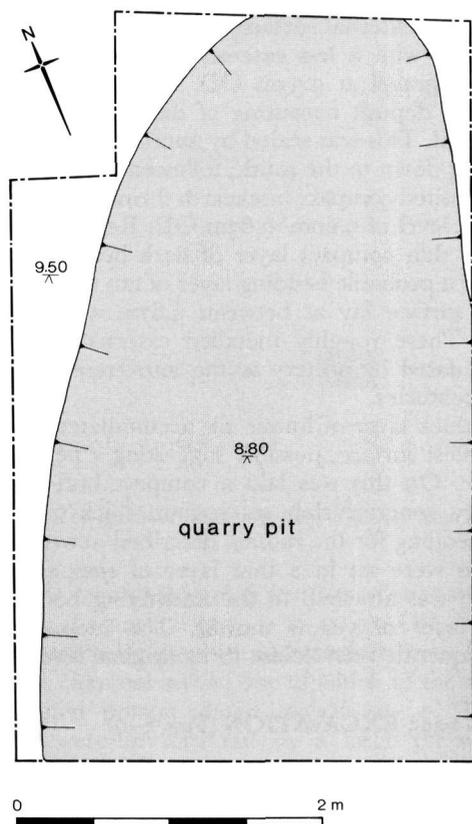


Fig 4. Phase 2

little slumping of the edges and the fill was very mixed, suggesting that the pit had been backfilled fairly rapidly.

The backfill produced a large amount of domestic refuse and demolition rubble. This contained a large and important group of pottery dated to AD 140–180, composed of 659 sherds which contained a large residual element and may in fact have been no later than AD 160. This assemblage is being published in detail elsewhere (Symonds in prep). The more noteworthy vessels in the group include nine pieces of stamped samian ware, one with a lead rivet and a graffito on samian ware, and three stamps on mortaria. The samian also includes two unusual versions of Dr15/17 plates from La Graufesenque and Montans, both rarely found in Britain. Vessels of Verulamium Region ware included an unusually shaped top of a form 1J amphorae, a miniature dolium, and a funnel. There was a tripod bowl in Local Mica-dusted ware which included two of the legs. This context also produced a fragment of a bone hairpin and a complete bone needle with a wide spatulate head pierced with a single circular hole. The circular hole in the head of the latter bone object is unusual for the Roman period; Roman needles more usually have oblong or figure-of-eight eyes. Six fragments of Roman glass were also recovered, including a natural greenish-blue pillar moulded bowl, dated to the late 1st or 2nd century and a fragment of the base of a natural greenish-blue bottle with concentric moulding of a similar date (Wardle 1995). The building material assemblage dates from the 1st through to the early 3rd century. It includes fragments of flue tile from a hypocaust heating system, one of which was decorated with a knife scored lattice and was probably of 1st-century date. One brick bears a knife-cut cross-shaped tally mark. A number of fragments of painted wall plaster included a very unusually decorated piece with slightly raised white streaks above a grey background, possibly an attempt to imitate marble. The assemblage also included what was probably part of a lamp chimney made of pottery rather than tile fabric, circular with vents cut into the side. Finally from this context was one small fragment of slate, probably for roofing. Slate was a rare building material in Roman London, and generally only appears at the very end of the Roman occupation (Betts 1995). No metal objects were recovered from this context, with the exception of the lead rivet noted above,

or from any of the later contexts, despite the occasional use of a metal detector during the excavation.

All this suggests that the pit was dug for the extraction of sand and gravel for a nearby building project, and was then used for the disposal of building material and other rubbish from the demolition of a nearby building or buildings. The presence of burnt clay, timber and wall plaster, in the fill of the pit may suggest the destruction of a number of fairly substantial clay and timber structures in the mid 2nd century or slightly later.

Phase 3: Open Area 1 (Figs 5, 9)

The quarry pit was sealed by two mid-brown silt layers which may have been imported to the site to level up the ground surface to *c.*10.5m OD in preparation for the construction of a wall in Phase 3a, but are more likely to represent a period of disuse or garden activity in the late 2nd and early 3rd centuries. The layers may be the equivalent of the dark grey-brown humic silt

identified immediately below the mosaic floor in 1983. Both had slumped into the earlier quarry pit. The lowest produced a medium sized group of 2nd-century pottery dated AD 120–200, with some attributes in common with the group produced by the Phase 2 quarry. The same layer also produced some daub, probably from a clay and timber building. The upper layer contained a medium sized group of 3rd-century pottery dated AD 180–300, which included a higher proportion of Central Gaulish samian ware and some Thameside Kent (Black-burnished ware) (Symonds & Stephenson 1995). It also produced two fragments of Roman glass: a natural greenish-blue Aryballos handle and body of late 1st or 2nd-century date. The finds assemblage also included a bone needle with a flat, squared head and an elongated figure-of-eight eye made by drilling two adjacent circular holes; and a bone hairpin with a conical head and the point missing. The building material, of 1st to mid 2nd-century types, included seven *tesserae*, one fragment of flue tile with a deep wavy combing made with a wide comb, and one small fragment of plain white wall plaster.

The upper of these two layers was cut by a small pit, with two fills. The upper fill produced a small quantity of residual pottery dated AD 50–100.

Phase 3a: Building 1 (Figs 5, 6, 9)

The small pit of Phase 3 was cut by a substantial east–west aligned wall foundation, *c.*1m wide and 1.2m deep, which extended beyond the eastern limit of excavation and was truncated by the foundations of the basement wall at the western limit of excavation. The wall foundation was composed of loose mortar and flint nodules with some ragstone. Little of the wall survived above the level of the foundations, only a single course of unworked ragstone fragments set in a hard mortar being found. This included two reused brick floor tiles in an unusual laminated variant of fabric type 2459A at *c.*10.5m OD. No floor surfaces associated with the wall on either side survived truncation by a number of cut features described in Phase 4. The wall foundation produced a small amount of residual pottery dated AD 70–100. Given the date of the pottery group from the upper layer in Phase 3, this foundation can have been constructed no earlier than the 3rd century. It was almost certainly part

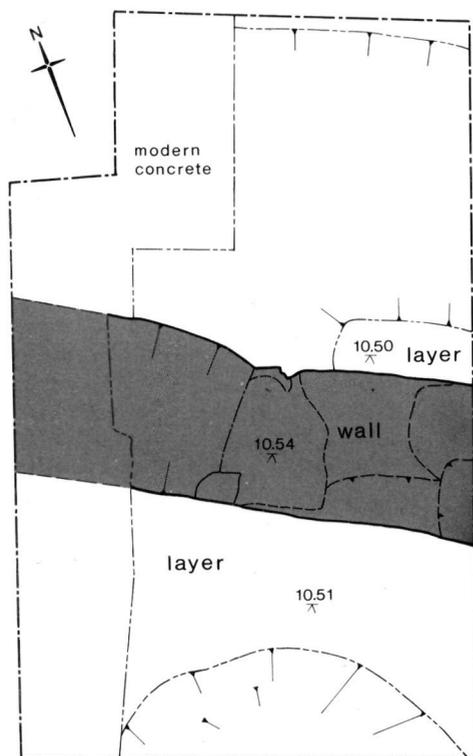


Fig 5. Phases 3 and 3a

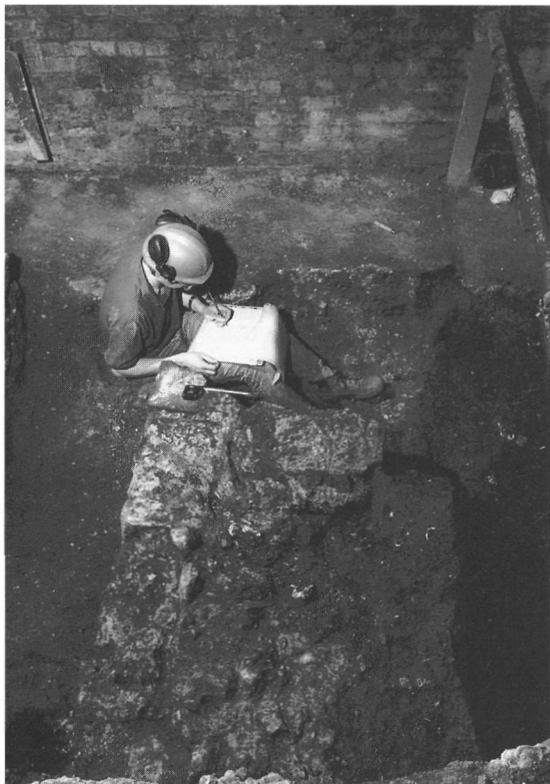


Fig 6. The wall of the Roman town house under excavation in 1995

of the Roman town house, and was sufficiently large to be a load-bearing wall.

Phase 4: Open Area 2

Against the north face of the wall was a north-south robber trench which, though heavily truncated, suggested that a later, much smaller, wall had been removed and quarried for building material. The fill of this trench produced a small quantity of residual pottery dated AD 50–100. The foundations of the wall were then partially robbed by a similar, undated, trench at the western limit of excavation which truncated the first robber trench.

These two trenches were truncated by a large rectangular pit. The fill of this produced pottery dated AD 250–400. A similar pit partially truncated the wall to the east and the fill of this produced a small amount of pottery dated AD 270–400. Both features were then cut by a third rectangular pit to the south of the wall. The fill

of this was dated to AD 350–400 and produced a fragment of Roman glass: the brown rim of a jar of 1st or 2nd-century date. The purpose of these pits is uncertain, but as in each case the amount of pottery and building material recovered was small it is unlikely they were used for rubbish disposal.

Both the pits and the robber trenches represent the demolition and disuse of the Phase 3a wall, and possibly of the town house as a whole, in the 4th century. The pottery from the latest pit fill suggests that this occurred in the second half of the 4th century rather than earlier.

Phase 5: Building 2 (Figs 7, 9)

The latest Phase 4 pit was cut by a posthole, which was in turn sealed by a compact sandy-mortar silt floor at 10.6m OD. This floor partially sealed the Phase 3a wall and was probably internal. The fill of the posthole produced a small amount of pottery dated AD 350–400. The

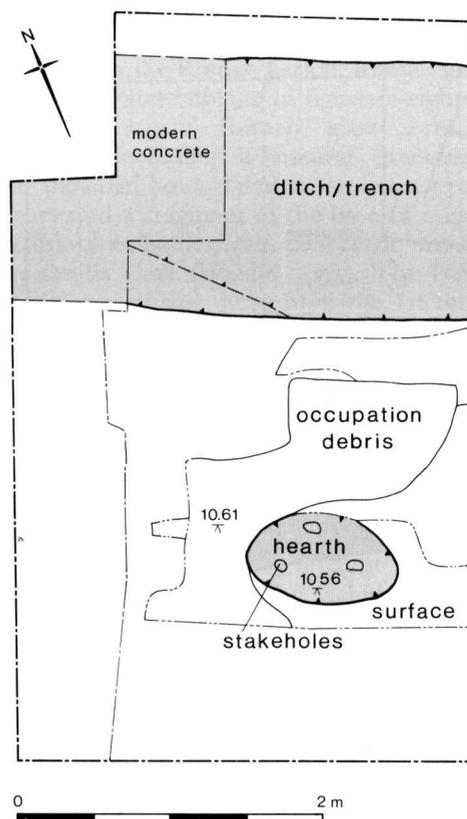


Fig 7. Phase 5

floor surface produced three sherds of Roman pottery dated AD 120–250 and two sherds of medieval pottery dated 1150–1250. The medieval pottery is perhaps intrusive: the base of a medieval rubbish pit (Phase 7) was positioned directly above this surface and material from it may have contaminated the earlier context. The Roman pottery is probably residual.

The floor was stratigraphically contemporary with a make-up layer which produced pottery dated AD 50–400 and with a second surface of compact gravel which also partially sealed the Phase 3a wall and extended to the north. This surface was also at approximately 10.6m OD and may have been an external yard surface.

Both surfaces were cut by postholes, one of which produced residual pottery dated AD 120–250 from the fill. Both postholes and surfaces were sealed by a thin layer of occupation debris which contained pottery dated AD 240–400 and was sealed by a patch of silty ash which may represent the remains of a short-lived hearth. Three stakeholes were identified as cutting it, perhaps for stakes to hold a cooking pot over the fire. A length of badly decayed timber was also identified lying above the conjectured hearth, pottery associated with which was dated to AD 250–400.

To the north the gravel surface was cut by an east–west aligned ditch or trench which followed the line of the Phase 3a wall and similarly extended beyond the eastern limit of excavation, but was truncated to the west. The alignment of this ditch or trench suggests either that part of the wall was still visible above ground level, which was not the case in the area investigated, or that the building constructed above it, and described in this phase, continued the wall line and influenced the alignment of the cut. Given the change from a probably internal surface to a probably external one above the wall, the latter seems more likely. The fill produced a small amount of Roman pottery dated AD 270–400, indicating a 4th-century date, and a fragment of Roman glass — a handle with horizontal ribs from a bottle of late 1st or 2nd-century date. During the excavation the ditch appeared to have been cut by a pit, though the edges of this were indistinct and appeared in part to coincide with those of the ditch, so that the feature may simply have been an upper fill of the ditch. The fill of the pit produced pottery dated AD 250–400.

The contexts outlined above probably represent the construction of a timber building

above the demolished or partially demolished remains of the wall. In view of the date of the pottery from the earliest posthole, and Phase 4, this can have been constructed no earlier than the second half of the 4th century. The temporary hearth may suggest a period of squatter occupation toward the end of the timber building's life.

Phase 6: Open Area 3 (Fig 9)

Both the ditch and the remains of the probable timber building of Phase 5 were cut by a number of small sub-rectangular and sub-circular pits, the fills of which included a limited amount of 3rd- and 4th-century pottery. The amount of pottery found was small and likely to be residual. The activity must have occurred in an open area in the later 4th century or possibly even the early 5th century.

Phase 6a: Open Area 3 (Fig 9)

These pits were sealed by a thick silt layer which raised the ground surface to above c.11.5m OD (the uppermost level of archaeological survival beneath the basement slab). This silt layer produced a few sherds of pottery dated AD 250–400. It could in part represent the 'ploughed through', poorly differentiated upper fills of the pits described in Phase 6.

Phase 7: Open Area 3 (Figs 8, 9)

The Phase 6a silt layer was cut by a large rubbish pit with steep sides, cut from above 11.5m OD and with a flat base at 10.6m OD, which, as noted in Phase 5, was directly above the internal floor surface there. The backfill produced a quantity of pottery dated to 1080–1150, including Coarse London-type ware, Early Surrey ware, Early Medieval Shelly ware and Stamford ware. This context also produced a small amount of residual Roman pottery dated AD 250–400.

This pit was probably cut by a second large rubbish pit to the north. The interface between the two cuts was poorly defined and the relationship between them difficult to determine, but the backfill of this second pit contained a large quantity of later medieval pottery dated 1270–1300. This assemblage includes one com-

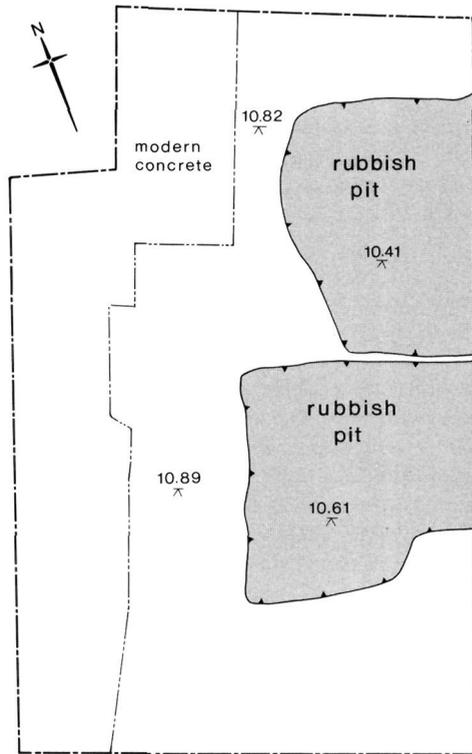


Fig 8. Phase 7

plete London-type ware bottle or measure, a polychrome, highly decorated conical London-type ware jug decorated with lines of applied pellets and green glazed applied roller stamped strips, a range of South Hertfordshire cooking pots including the complete profile of one example and the rim of a very large diameter South Hertfordshire storage jar. Other vessels represented included South Hertfordshire jugs, a London-type ware baluster jug, and a Kingston-type ware jug and cooking pot. The pit also produced a number of fragments of peg tile with splash glaze and two round nail holes. It also contained some residual Roman pottery dated AD 270–400.

The Phase 6 silt layer was also cut by a small east–west aligned wall foundation or robber trench which was recorded only in section. This was probably the wall of a small building or garden of 11th-century or later date, and may have been in contemporary use with either or both of the two rubbish pits, particularly the southern one which respected the north face of the wall.

Phase 8: Building 3 (Fig 9)

A number of post medieval features were recorded in section. The latest Phase 7 rubbish pit was also cut to the north by the brick floor of a cellar of 17th or 18th-century date. The make-up layers of this produced a small amount of both residual medieval and Roman pottery. The floor was in turn cut by a post medieval pit which may have robbed the south wall of the cellar or postdated the robbing. This pit was cut by a trench which appeared to be associated with an east–west aligned 19th-century wall foundation belonging to the present building.

DISCUSSION AND CONCLUSIONS

The stratigraphic sequence excavated in 1995 both confirms and amplifies the early history of 11 Ironmonger Lane as outlined by the previous excavations. It cannot, however, provide any new information about the earliest Roman activity because of the intrusion of the Phase 2 quarry pit at the base of the sequence in the mid 2nd century or slightly later. The 1983 excavation had suggested that the earliest phase of activity was the quarrying of sand and gravel for local building work in the later 1st and early 2nd centuries. Several quarry pits, dated to the later 1st century, were also excavated nearby at 24–5 Ironmonger Lane and St Margaret's Rectory (Norton 1982, 172; Shepherd 1987, 52), but there is no evidence at present that any other part of the present site was given over to quarrying at this date. The shallow pits recorded by Oswald at the base of the sequence in Trench 1 are unlikely to have been quarries, and may even represent foundation trenches for clay and timber buildings. The 1949 excavation suggested, and the 1983 excavation confirmed, that in the north-east corner of the site at least the quarry was followed in the late 1st and early 2nd centuries by the laying of four successive external surfaces. Unfortunately the area excavated in 1983 was too small to determine whether these represented a road or yard, and no further trace of them has been found. The external surfaces were probably associated with clay and timber buildings, although with the possible exception of the shallow cuts recorded by Oswald no *in-situ* evidence has been found for these at 11 Ironmonger Lane. The fill of the Phase 2 quarry almost certainly indicates the demolition of one

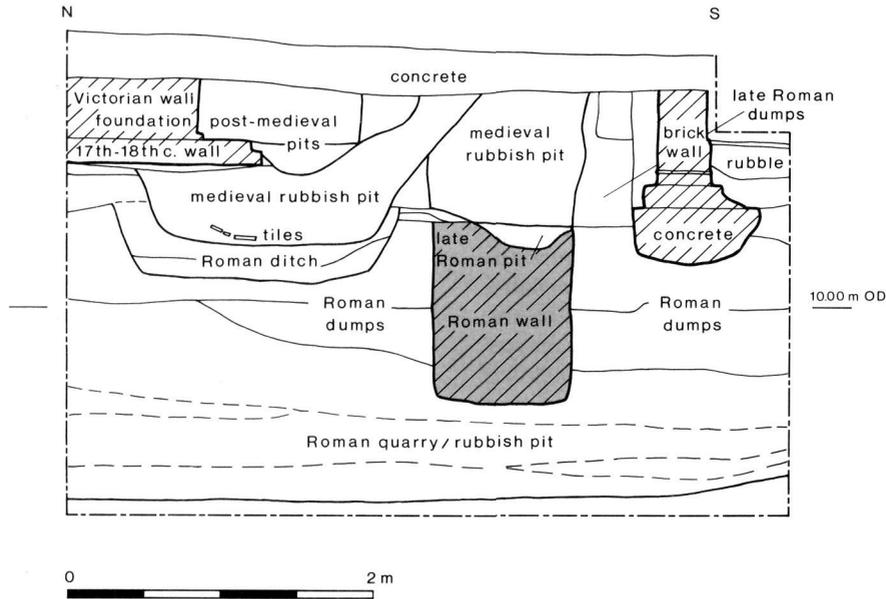


Fig 9. The west-facing section of the 1995 trench, showing the major archaeological features excavated

or more such buildings on, or close to, the site in the mid or slightly later 2nd century. Five successive phases of clay and timber building have been found immediately to the south at St Margaret's Rectory (Shepherd 1987, 52), and other examples of similar structures nearby come from 24-5 Ironmonger Lane and 36-7 King Street (Norton 1991, 57-63; Rowsome 1987, 46-50). The impression given by the excavation of these structures is of closely packed domestic and commercial buildings.

The excavation of a large quarry pit in Phase 2 is perhaps an indication of the later 2nd-century decline of the Roman city, a phenomenon already widely noted and discussed, in an area previously occupied by businesses and dwellings (Marsden 1983, 107-17). The pit certainly postdated the Hadrianic fire of *c.*AD 125-130 which destroyed most of the city and appears to have signalled the start of the decline, although the site itself has produced no convincing evidence of this fire or indeed the earlier, Boudiccan fire (even taking into account the charcoal layers recorded in 1949 in Trench 1). Quarries are not usually dug in the middle of thriving communities. Nevertheless the quarrying does represent fairly vigorous activity for a recognisable local purpose: the pit was excavated for sand and gravel as building material, and then backfilled with demolition material and

domestic refuse, in a relatively short space of time – perhaps no more than a week. It would not have remained open as an eyesore, and the nature of its backfill implies the clearance and demolition of part or all of an unwanted (possibly derelict) previous building or buildings so that the space could be used for other purposes, possibly for more spaciouly laid out structures.

More reliable indications of decline are probably the sealing of this quarry pit by the 'dark earth' layers of Phase 3, dated to the later 2nd and 3rd centuries, and of the external surfaces excavated in 1983 by a layer of dark humic silt of a late 2nd-century date recorded elsewhere in the City. At 24-5 Ironmonger Lane the earlier buildings were sealed by similar 'dark earth' deposits bounded by a ragstone retaining wall; no further evidence for Roman buildings was found although an earlier road continued in use (Norton 1991, 63). A similar deposit above the clay and timber buildings was also located at the top of the sequence at St Margaret's Rectory (Shepherd 1987, 52). The significance of these deposits is uncertain; they may imply that large parts of the Roman city were now given over to agricultural or horticultural use as market gardens, or simply represent the residue of a neglected ground surface. Both the small pit of Phase 3 and the Castor ware pit excavated in 1949 may suggest a low level of activity and

limited rubbish disposal in a garden or similar open area during the 3rd century.

The Roman town house was constructed at some point in the 3rd century, as is confirmed by the dating evidence from the upper Phase 3 layer and the Castor ware pit. The 1949 excavations indicated at least two phases of flooring within part of the house. The remains excavated were those of a small room (containing the polychrome mosaic) with a flanking corridor to the west (containing the rough tessellated pavement) and further undefined rooms to the south denoted by the isolated patches of mortar floor found there. More evidence of this building may have been discovered during the demolition of St Olave's in 1888 when F.W. Reader noted a red tessellated pavement 20ft (7m) long and 3ft (1m) wide at a distance of 16ft (4.80m) below the present street level, together with a wall running parallel to Old Jewry 12ft (3.60m) below street level and standing 12ft high and 3ft wide, also a deposit of black mud containing Roman pottery and other artefacts (VCH 1909, 124). The location of these remains was poorly defined; they may have lain beneath either St Margaret's Rectory or the adjacent 27–32 Old Jewry. The red tessellated pavement may or may not have been part of the same house, and the wall could easily have been medieval rather than Roman in origin.

The 1949 excavation suggested a Roman town house with an L-shaped or courtyard-style plan. The flanking corridor is an important feature with respect to the groundplan of the house, as it may indicate the position of the eastern side of the courtyard or the western side of the house as a whole. The wall of Phase 3a adds a little to our knowledge of the building and allows some further, limited, speculation about the groundplan. This east–west wall was not noted during the 1949 excavations to the east, and in view of the location of one fragment of the red and grey *tesserae* pavement recorded immediately to the east in Trench 1 (see Fig 3), is unlikely ever to have extended that far. This reinforces Oswald's suggestion that the pavement lay within a north–south corridor, and indicates that the wall must have terminated almost immediately beyond the eastern limit of the 1995 excavation with a T-junction, a north return, or a south return. If the wall ended in a T-junction or a north return it could have been recorded in Trench 1 of the 1949 excavation, although it may of course already have been destroyed by medieval or

modern truncation. A southern return would take the wall through an area largely unexcavated in 1949, beneath the level of the basements and away from the foundation trenches. This may therefore place the wall at the inner corner of the north and east wings of the house. However, the corridor as delineated by the 1949 tessellated pavement extended well to the north and south of the wall line (see Fig 3), perhaps implying a T-junction where the wall represented part of a room projecting west from either a simple rectangular house, the west wing of the house, or the east wing and into a courtyard. One of the first two options is more likely in view of the deposit of 'black mud' containing late Roman pottery which was found in 1949 in an underpinning pit to the west of the corridor and which suggested the presence of a watercourse there. Little is known about this feature, however, and the 1995 work has shown that the underpinning holes of 1949 were relatively small and narrow excavations. The deposit may have been part of a cut feature filled in prior to the construction of the house, or may postdate its destruction. The possibility that a much smaller wall projected northward from the surviving wall, as suggested by the Phase 4 robber trench, could apply equally to any of the options set out above.

Whatever the actual groundplan of the 3rd-century town house, its construction fits currently held views on the pattern of settlement within the later Roman city, and particularly the Walbrook valley. After the construction of the city wall between AD 180 and 210, the earlier pattern of occupation characterised by densely packed clay and timber buildings, frequently commercial in character, appears to have been replaced by a preference for fewer and more isolated stone structures which were largely private houses (Perring & Roskams 1991, 120). The remains of such town houses have been found elsewhere in the City, most notably at Billingsgate where a small private bathhouse was incorporated within the courtyard, and also at Mansion House, Lime Street and Watling Street, as well as beneath the church of All Hallows Barking, close to the Tower of London (Marsden 1983, 149–51).

The 1995 excavation at Ironmonger Lane allows for a more detailed consideration of the date of destruction of the town house, and of the activity which replaced it, than was previously possible. It confirms, albeit to a limited extent, Oswald's suggestion that the former occurred in

the late 4th or early 5th century (Dawe & Oswald 1952, 117–8), for the features excavated in Phase 4 to Phase 6a also suggest that the end of the town house came in the late 4th century, or at the latest the early 5th. With the exception of the possibly intrusive medieval pottery found on the internal surface in Phase 5, none of the pottery from these features was dated later than AD 400, and a number of groups could be no earlier than AD 350. The town house can therefore have survived little more than a century, and possibly less. The building which replaced all or part of it in Phase 5 was clearly a much more modest affair than its predecessor; probably in timber and reusing part of the stone wall foundations, and perhaps a lean-to within or against the shell of the earlier house. The features excavated in Phase 5 may represent the insertion of a large entrance, possibly for a barn-like structure, in one or more rooms of the still standing house. Sufficient effort was put into the construction for both internal and external surfaces to have been laid down, and for a possible drainage ditch to the north to have been dug later. However, the purpose of this building is unknown, neither the occupation debris nor the possible fire debris producing any conclusive evidence, and both may in any case have resulted from transient squatter activity after the building's disuse. A possible 4th-century building represented by a sill-beam slot and insubstantial brickearth floors was found nearby at 36–7 King Street in 1985 (Rowson 1987, 50).

The timber building appears to have had a very short life span, the pits of Phase 6 again being probably no later than early 5th century in date. These may have been dug in a yard, garden or wasteland. The 'dark earth' deposit which sealed them in Phase 6a was similar to that described in Phase 3. In many areas of the City the 'dark earth' which began to accumulate in the late 2nd century continued to do so without interruption until the end of Roman occupation in the early 5th century (Marsden 1983, 25).

The two rubbish pits of Phase 7 provide no evidence for the reoccupation of the site before the late 11th century at the earliest, and if the three intrusive medieval sherds in Phase 5 were added to the earlier pit fill the date must be pushed forward to no earlier than the mid 12th century. This at least would accord well with the available documentary evidence. However, a sunken timber building and a deep cesspit of late

9th- or 10th-century date have been found at 24–5 Ironmonger Lane (Schofield *et al* 1990, 150–52), and it is possible that 11 Ironmonger Lane was likewise occupied substantially earlier than the later 11th century.

Both rubbish pits appear to have been dug in a garden area immediately to the north of the churchyards of St Martin Pomeroy and St Olave. The Phase 7 chalk wall or robber trench may even represent part of the property boundary between churchyards and garden. It is also possible that both rubbish pits fell within the period of Jewish occupation of town houses in the locality. This is indeed highly likely in the case of the earlier pit, though the later may well have belonged to the years immediately after the expulsion of the Jews in 1290, possibly when the site formed part of the Earl of Cornwall's wardrobe. There is nothing about either of the pottery assemblages from the pits that is distinctively Jewish; both are typical of their period. The latter group of pottery was much larger and the decorated wares suggest a relatively high economic status for the household which owned it. The medieval Jew was often richer than his Christian counterpart, and it is probable that the town houses here were built of stone rather than the more usual wattle and daub. Two stone houses belonging to Moses, the Jew of Canterbury, in the parish of St Olave during the reign of Henry III (1216–1272), are mentioned by John Stow (Kingsford 1908, 280). But there is also little doubt that at least as high a level of prosperity would have been in evidence at the Earl of Cornwall's wardrobe.

It would seem that virtually all the medieval features in the northern part of the site beyond the two churchyards and recorded in 1949 fall within the later period of the wardrobes of the Earl of Cornwall and the Black Prince. The same conclusion probably also applies to the walls associated with the church of St Olave, although a number of the burials found in both churchyards may well have been earlier.

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INSCRIPTIONS, WRITING AND LITERACY IN SAXON LONDON

Nick Holder

SUMMARY

At least 20 inscriptions survive from Saxon London; several are recent finds from excavations in the City and Covent Garden. Three inscriptions are on memorial stones and one is on a stone sundial. Five inscriptions are on luxury metalwork: a sword, a knife, a binding strip, a ring and a gold disc. Five inscriptions are on more ordinary objects: two on pieces of bone, one on a bone object, one on lead waste and one on a small fossil. There are at least six inlaid inscriptions on imported swords. The inscriptions use both the roman and runic scripts and are in English, Latin and Norse languages.

Other examples of writing in Saxon London are also discussed: charters, books, seals, church inscriptions, coins and coin-brooch legends. Aspects of writing and literacy are discussed including the scripts and languages used, the question of who was writing inscriptions and to what degree they were literate, and the function or purpose of inscriptions. It is suggested that from the 8th century there were a number of semi-literate people, perhaps artisans, who could carry out simple inscriptions and who aspired to use the written word because of its associations of power and prestige.

INTRODUCTION

For the majority of us in Britain today literacy is something we probably take for granted: thanks to our national education system we can nearly all read a newspaper or write a letter in the same language using the same script. Beneath this rather simplistic surface there lies a wealth of complexities such as the debate on the way literacy and language are taught, the varying standard of writing or reading English, regional or ethnic languages such as Welsh or Gujerati,

and different scripts such as Arabic or secretarial shorthand. These themes of languages, scripts and standards of literacy are also encountered when looking at inscriptions and writing in the Anglo-Saxon period.

This article will attempt to survey the surviving inscriptions from Saxon London and its hinterland and examine the background of literacy by considering the forms of writing that Londoners may have encountered. The concept of the 'London area' is a little vague and it could well be argued that the M25 is not a very Saxon boundary as boundaries go but it does at least define a hinterland that was roughly a day's travel from the City. This hinterland included several monastic institutions from Chertsey in the west to Barking in the east. This area, as well as being an important Anglo-Saxon political and economic region, has the advantage of being one of the most densely excavated areas in the world. Modern archaeological excavation is getting quite good at 'recovering history' lower down the social scale and it is hoped to show that this works for inscriptions as well as, say, buildings.

The academic study of literacy falls across several disciplines and there is now a large body of writing on the subject.¹ Anthropologists such as Goody have viewed writing as a technology whose introduction to a non-literate society can have profound effects (1977). More recently David Barton has looked at the 'ecology' of literacy and has discussed a number of points that are significant in relation to writing in the Anglo-Saxon period (1994). He distinguishes between 'literacy practices', the general way that literacy is used in a particular culture, and 'literacy events', specific activities where literacy

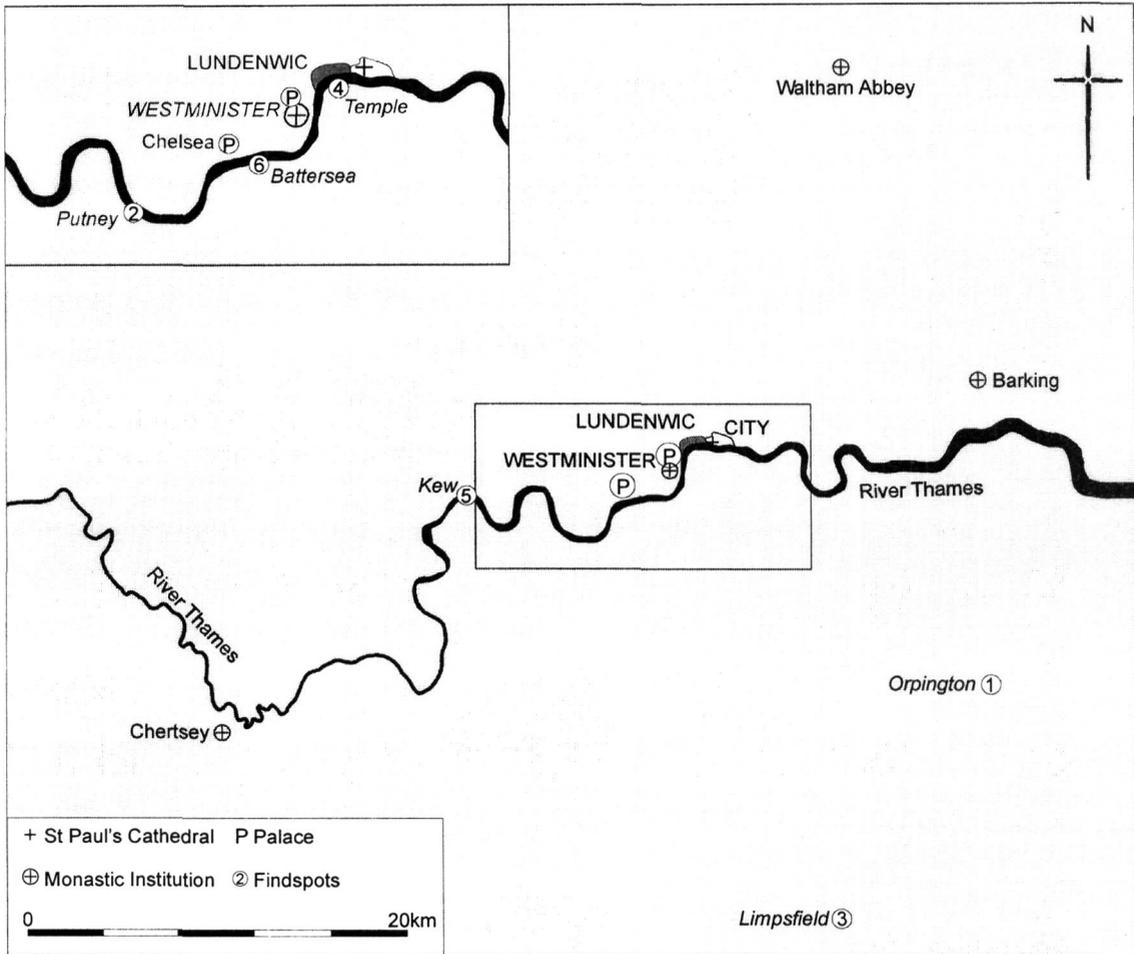


Fig 1. Map of Saxon London area. The find-spot numbers are referred to in the text

is used (Barton 1994, 33–7). Individuals have different ‘literacies’ for different occasions, and have developing ‘literacy histories’ marked by personal literacy events (38–40, 49–51). The results of literacy events are ‘texts’ that range in scope from, for example, telephone messages to legal announcements or school graffiti to exercise book tests (57–64, 179–181). He also notes that the literacy events of writing and reading can be significantly different, particularly in the case of learners (154–8).

Literacy practices, to use Barton’s terms, clearly develop during the Anglo-Saxon period. Right at the beginning of the period there was the existing Romano-British tradition of Latin literacy using the roman script. There is extensive evidence from early Christian inscriptions that this tradition survived in the ‘Celtic’ south-west

of Britain (Howlett 1998) and it could also be argued that vestiges of the tradition of writing survived in ‘Anglo-Saxon’ areas in the form of visible Romano-British inscriptions and Roman or Merovingian coin legends. Germanic settlers brought the less developed runic literacy which is seen in simple inscriptions in continental Europe and early Anglo-Saxon England (Hines 1990). The Christian missions of Augustine in the south and Irish missionaries in the north allowed the development of new, predominantly Latin, literacy practices associated with a ‘religion of the book’ (Archibald *et al* 1997). It is possible that the use of the English language in Northumbrian and Mercian manuscripts from the mid 7th century has a wider political and social dimension as it coincides with the first references to ‘the English’ people and nation

(Toon 1985, 89). In the 9th century Viking raids and settlement brought a new language, Old Norse, to Danelaw England as well as a Scandinavian version of the runic script. Anglo-Saxon society became increasingly literate from the 9th century with the use of legal documents by royalty and aristocracy, and it is possible that late Anglo-Saxon England had a more literate bureaucracy and culture than early Norman England (Kelly 1990; Clanchy 1979, ch 1).

A variety of literacy events can be seen in the texts of Anglo-Saxon inscriptions and manuscripts. The majority of inscriptions are clearly at the more basic end of the spectrum of literacy, comparable perhaps to the examples of graffiti and telephone messages that Barton gives (see above). Some inscriptions may hardly be literacy events at all in the sense that they may be more decorative than literate. An important difference between Anglo-Saxon and modern literacy practice is that the act of *writing* was almost certainly viewed as a separate professional skill to be learned by monks or in some circumstances by tradesmen who might be called on to execute an inscription. In Asser's biography of Alfred, for example, he notes that the king learned to read and translate but apparently not to write (Keynes & Lapidge 1983, 99–100).

In Bede's History written in the early 8th century he describes five languages current in the British Isles: English, British, Irish, Pictish and Latin (Sherley-Price 1968, 38). Had Bede lived a century later he would have added Norwegian to that list. For our purposes, looking at the London area, Old English and Latin are the main languages, with Old Norse potentially appearing from the 9th century. There is no extant evidence in south-east England for the survival of the British language into the Anglo-Saxon period. It is worth noting that there might be varying standards of literacy in different languages: Alfred, in a well known passage in his introduction to his translation of Pope Gregory's Pastoral Care, laments the decline of Latin literacy in England and recommends that other important religious texts be translated into English so that they might be more widely available (Keynes & Lapidge 1983, 124–6).

The variations in language and script clearly had different associations but there were no hard and fast boundaries, for example, between 'secular' English and 'religious' Latin or 'manuscript' roman and 'inscribed' runes. Recent articles have looked at both the links between

the two scripts and the varying associations of script and language (Page 1997; Okasha 1990). By the 9th century the English language was commonly used in many ecclesiastical legal documents but Latin still tended to be used for royal documents perhaps because of the greater 'authority' still implied by the use of Latin. Regarding the choice of script, runes were clearly more suited to inscriptions than to manuscript use but they do appear surprisingly often in religious and literary works, for example in the Gospel book now in Leningrad where they are used for two names in the margin (Page 1995a, 3) or as a 'signature' to poems by Cynewulf (Bradley 1982, 165; Whitelock 1970, 177).

Before turning to the London inscriptions and to other forms of writing it might be appropriate to draw attention to the problems of the sample we have. With runic inscriptions René Derolez guessed that less than 1% of the total number originally carved may have survived (1990, 399). This reminds us that that we should be cautious in drawing general conclusions about literacy from the surviving examples. Furthermore new inscriptions are currently being discovered at a rate of nearly one a year so there may well be a few surprises to come.

INSCRIPTIONS

Monumental stone inscriptions

Anglo-Saxon inscriptions on memorial stones or cross-slabs represent quite a significant proportion, perhaps nearly three-quarters, of the surviving inscriptions from England. However there are only three surviving memorial inscriptions from London – not a very impressive total when compared with, say, seven from the City of York or as many as 15 from the priory at Lindisfarne (see Okasha 1971).² All three of the London stones date from the late 10th or 11th century and at least two have a Scandinavian connection. A stone slab discovered during 19th-century building works at St Paul's Cathedral churchyard has an Old Norse inscription in Scandinavian runes which records, interestingly, the people who had the stone erected and not the deceased person (Fig 2). There are two inscribed stones from the church of All Hallows-by-the-Tower on the east of the City; the church also has elements of Saxon fabric in the crypt. Neither text is complete but one of the



Fig 2. 11th-century memorial stone with runic inscription from St Paul's Cathedral (Museum of London)

inscriptions has an Old English memorial formula written in roman script which commemorates both the deceased and the person who had the monument erected. Both the language and the decoration show Scandinavian influence (Okasha 1967; Okasha 1971, nos 87 & 88).

It would seem that in the case of London it can be argued that there was a new fashion for decorated and inscribed memorial stones in high status circles under Anglo-Danish rule in the first half of the 11th century. Furthermore it may have been as important to name the donor or sponsor of the stone, perhaps a surviving relation or heir, as the deceased.

The only other surviving inscription on stone is on a carved sun dial incorporated in the fabric of All Saint's church, Orpington, probably originally in the late Saxon village church (Fig 7 and findspot 1 on Fig 1).³ Three roman script texts are complemented by a short runic inscription. The three main texts are descriptive in a cryptic, rather playful way, using both English and Latin: 'for him who knows how to seek (it)', 'to tell and to hold', 'clock' (Okasha 1971, no.105). The runic text, consisting only of three vowels, may well be more decorative than linguistic though it might be functional in the sense that the runes could mark out sections of the dial corresponding to different times of the day (Page 1967).

Inscriptions on 'luxury' objects

Five inscriptions on what might be termed items of luxury metalwork are known from the London area. A decorated iron knife found by metal detecting on the Thames foreshore at Putney has an inlaid inscription in niello on both faces of the blade (findspot 2 on Fig 1). Both of the texts are in roman script though only one is now legible: this gives the Anglo-Saxon male name Osmund (Okasha 1983, no.174). A large fragment of a silver-gilt binding strip (also found in the Thames), possibly for a late 8th-century knife scabbard, has a fairly obscure Anglo-Saxon runic inscription (Wilson 1964, no.45; Webster & Backhouse 1991, no.179). The inscription may be some sort of cryptogram or anagram since it contains sequences of the roman alphabet when transliterated: 'abcde', 'hik' and 'rst' (Page 1995b, 120-1). A small gold disc, 9mm in diameter, found by metal detecting at Limpsfield Grange in Surrey has an image of an eagle and the roman script letters 'a' and 'q' (findspot 3 on Fig 1). This is interpreted as the symbol of St John the evangelist with an abbreviated Latin *aquila*, 'eagle'. The disc presumably comes from a larger piece, perhaps a reliquary, and it is probably 9th century in date (Okasha & Youngs 1996). There is no obvious local Saxon context for the find but a settlement and church at Limpsfield are recorded in Domesday Book and evidence of earlier Anglo-Saxon cemeteries has been found nearby.⁴

The most luxurious item is an impressive decorated iron short sword dating to around the late 9th century that is often referred to as the Thames scramasax since, once again, it was found in the Thames probably during river dredging. The sword bears an Anglo-Saxon runic inscription that has been elaborately inlaid using twisted bronze, copper and silver wire (Wilson 1964, no.36). The inscription has a complete (if unusual) 'abc' or 'futhorc' of 28 letters followed by the Old English male name Beagnoth.

A probably 10th or 11th-century lead tin alloy ring, which could perhaps be a hilt-band from a very small knife, comes from excavations at the Thames Exchange site in the City (Fig 3). Excavation showed that from the 10th century the Roman river foreshore was being reclaimed by a series of late Saxon banks and revetments (Schofield 1998, 282-3). The ring has a short Anglo-Saxon runic inscription that may contain the runic equivalent of our 'abc' – the beginning



Fig 3. 10th or 11th-century ring with runic inscription from Thames Exchange excavation (Museum of London Archaeology Service)

of the runic alphabet ‘fup’ – and a possible English male name Ine (Gosling 1989 & 1991b).

Four of these five inscriptions seem to have some common elements: the use of a personal name and the alphabetic ‘futhorc’ or ‘abc’ elements. Given that these inscriptions are on items of luxury metalwork that were presumably commissioned and paid for by someone of a certain wealth and social status, we might assume that the owner would have his name on the object. This is not however an altogether safe assumption since other inscriptions on objects can name the donor, composer, craftsman or even the repairer. We might suggest that there are hints of some sort of charm or ‘magical’ significance in the use of the ‘futhorc’ and ‘abc’ in these inscriptions. Most runologists tend to play down the magical connotations of the runic script – it is certainly the case that very few of the surviving inscriptions can be shown to have any obvious magical content. However even the self-avowed sceptic R. I. Page suggests that there might be magical connotations in the Thames scramasax and the binding strip inscriptions (Page 1995b, 120–1). We are somewhat in the realms of speculation but we might imagine these inscriptions to have some sort of talismanic function such as to bring good luck or good cutting or stabbing to the named owner.

Inscriptions on simple objects

Whereas in the past only the more impressive or obvious inscriptions on swords or stones tended to get noticed, thanks to modern archaeological excavation techniques five ‘casual’ inscriptions on more humble objects have recently come

to light. The reason for this is partly thanks to careful excavation techniques and also due to new techniques such as on-site metal detecting and the routine collection of soil samples and animal bone in order to study diet, animal husbandry and the environment. On some sites literally tonnes of soil and animal bone are collected and washed and so occasional inscriptions are coming to light thanks to the attention of those doing the processing and analysis.

In 1985 archaeological excavation confirmed the suggestion that the middle Saxon (7th to 9th-century) town of London, the trading port of *Lundenwic*, lay not within the walls of the Roman city but to the west in the area of modern Covent Garden (Cowie & Whytehead 1988). Archaeological evidence is beginning to flesh out Bede’s description of an ‘emporium for many nations’ (Colgrave & Mynors 1969, 142–3). An inscribed bone object was found in recent excavations at the Royal Opera House within the middle Saxon town. It looks like a small knife handle made from a sawn length of sheep bone but it could perhaps be a needle case. It is decorated with incised concentric circles and hatching that are designed to frame a runic inscription that runs up the length of the object. The object came from a pit, dating to around the mid 8th century, which lay between two properties in a dense network of alleys and building plots (Malcolm *et al* forthcoming). The inscription is in Anglo-Saxon runes and is quite difficult to interpret: it may even be deliberately obscure or ‘riddling’ (Page 1998, 13). It might be interpreted as the name Æthilward if we suppose that the inscriber used the (repeated) first runic letter to represent the full rune-name ‘æthil’ as opposed to its normal meaning of the vowel ‘æ’ (Page 1998, 13).

Another runic inscription has come to light even more recently at excavations at the National Portrait Gallery, right at the west of the *Lundenwic* settlement. There are two short inscriptions on a single sheep vertebra which R. I. Page has provisionally read as one or possibly two personal names, apparently written by two different people.⁵

Excavations at a middle Saxon butchery site at the Lyceum Ballroom in Exeter Street, also within *Lundenwic*, produced a rather peculiar inscription on a fossilised sea-urchin from one of the butchers’ waste pits (Farid & Brown 1997). The three roman script letters may be a personal name and the fact that they were inscribed on

such a distinct object might suggest that the object was special in some way, perhaps an amulet (Okasha 1996).

An 11th-century bone 'trial piece' from excavations at Guildhall Yard in the City has a name inscribed on both sides and interlace ornamentation on one side (Fig 4). Both the decoration and the inscriptions were presumably inscribed for practice, using the bone as an 'exercise book'. The two inscriptions are variations of what is probably the Old English male name *Ælfbeorht*, though the female name *Ælfburh* is a possibility. Though the inscription uses roman script, some of the letters appear to be influenced by runic forms which suggests an interesting 'cross-fertilisation' (or confusion?) of literacy (Okasha 1991; Gosling 1991a & 1991b).⁶ The object comes from a large pit, possibly a backfilled well, which lay to the rear of timber buildings perhaps used for metalworking and the manufacture of horn and bone objects in the 11th century, probably before the Conquest.⁷

A small irregular piece of lead, perhaps spillage from metal working, was found within the walls of what was probably an 11th-century Viking hall at Waltham Abbey. This lead fragment bears a tiny, nearly complete alphabet less than 50mm across (Okasha 1976). Like the Guildhall Yard inscription this alphabet would seem to be a trial piece inscribed by a craftsman as practice.

These five inscriptions on ordinary objects might make us reconsider the social connotations of literacy. A surprising degree of literacy is perhaps suggested by the three *Lundenwic* inscriptions. It could be argued that all three were carried out by the owners of the objects since they do not seem to be 'professional' inscriptions commissioned and executed like those on luxury metalwork items discussed above, nor do they seem to be trial pieces. They would seem to suggest a certain 'spontaneous' literacy on the part of the inscribers. The Guildhall Yard trial piece and the Waltham Abbey alphabet both suggest a professional secular literacy, albeit



Fig 4. Inscribed 11th-century bone trial-piece from Guildhall Yard excavations (Museum of London Archaeology Service)

perhaps of limited scope compared with the professional literacy of the *scriptorium*.

Imported objects with inscriptions

At least six iron swords bearing an inlaid iron 'inscription' have been found in the London area. In each case the text is in roman script and almost certainly names the manufacturer. As Ellis Davidson notes in her book on Anglo-Saxon swords, these are relatively common, particularly swords bearing the maker or workshop marks of Ulfberht and Ingelrii (Davidson 1962, 45–8). These weapons have been dated to between the late 9th and 11th centuries and were probably made in the Rhine area. Five swords come from the Thames, three of which bear the name Ingelrii (Fig 5 and findspots 2, 4 and 5 on Fig 1),⁸ and two which have now fairly illegible inscriptions that seem to copy the style of the presumably famous Ulfberht and Ingelrii manufacturers (findspot 6 on Fig 1).⁹ A sword from a gravel pit on a silted up tributary of the Thames at Chertsey is probably a 'genuine' Ulfberht sword (East *et al* 1985; 'Chertsey' on Fig 1). Two further swords have possible inscriptions or makers' marks but are illegible.¹⁰

It is interesting to note that five of these swords were found in or by the River Thames and the sixth probably comes from a now silted tributary of the Thames, the Abbey River: one is tempted to associate them directly with battles or perhaps the rituals or festivities that followed the battle or the death of a warrior. The Viking campaigns of the late 9th and early 11th centuries may be the obvious candidates to explain the presence of some of these swords in the Thames. Regarding the inscriptions themselves we can note that some of the very earliest runic inscriptions are found on weapons (Page 1973, 105–7; 1987, 23–5). The description of Grendel's sword in the poem *Beowulf* emphasises that the owner's name was marked in runes, perhaps on the hilt (Swanton 1978, 1.1694–6; Cramp 1957, 65–7). It is possible that these later inlaid sword inscriptions, as well as being some sort of professional 'branding', were intended somehow to 'fortify' the sword and were perhaps consciously in a tradition of inscribing weapons. Even though these inscriptions do not prove literacy on the part of the user or purchaser they do at least demonstrate further exposure to the written word

and perhaps the association of the written word with status, prestige or even power.

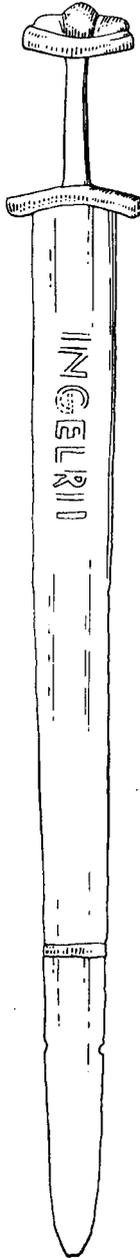
MANUSCRIPT PRODUCTION IN THE LONDON AREA

Charters and codices

We will now survey the evidence for the more formal 'literacy practice' of the production of charters and books. Manuscript production is obviously associated with monastic *scriptoria* but not all monastic institutions produced all types of manuscripts and some may have had no *scriptorium* at all. The best evidence for manuscript production and writing is of course surviving manuscripts which can be dated palaeographically and for which there is an indication of the place of production. There is evidence for professional production of charters at Barking Abbey from the end of the 7th century (Fig 6),¹¹ at St Paul's Cathedral from the late 8th century¹² and at Westminster Abbey from the late 10th century.¹³ There is also evidence of manuscript production at the secular site of Offa's palace at Chelsea from the second half of the 8th century,¹⁴ though the actual documents were probably drawn up by clerics from Canterbury.¹⁵ There is some evidence that royal documents were drawn up, or at least sealed, in a royal chancery or secretariat at Edward the Confessor's palace at Westminster (Clanchy 1979, 17; Keynes 1990, 256-7). However since the palace was only around 100 metres from the Abbey,¹⁶ and given the fact that at least one genuine royal document was produced in the Westminster Abbey *scriptorium*, we should not push the evidence for a distinct royal chancery too far (Clanchy 1979, 17).

Few larger works such as codices of religious or literary material with a definite London provenance survive.¹⁷ A 10th or 11th-century gospel book and part of an 11th-century volume of saints' lives were probably produced at Barking Abbey.¹⁸ Extracts of a 10th-century English translation of Bede's *Historia ecclesiastica* and an 11th or 12th-century volume of English laws were probably written at St Paul's.¹⁹ An 11th or 12th-century volume of medical recipes comes from Westminster Abbey.²⁰ A recently discovered 11th-century fragment of Old English homily texts may also come from Westminster.²¹

There is some additional evidence of London book production in the form of medieval or later



INGELRII

Fig 5. 10th or 11th-century imported sword with inlaid iron inscription naming the manufacturer, found at Putney. Scale 1 : 4

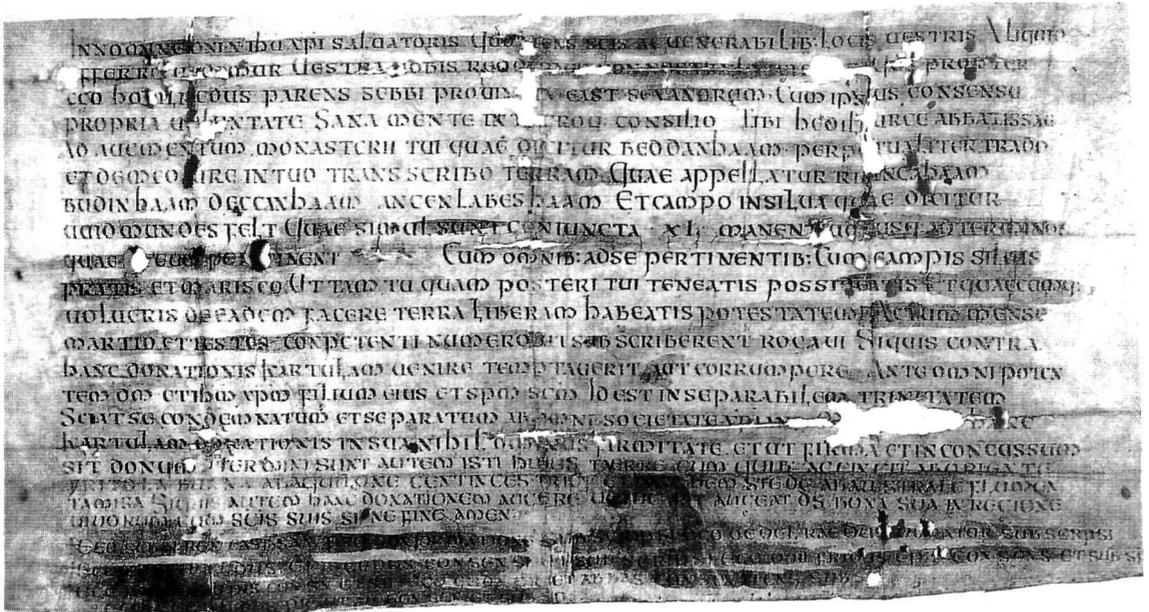


Fig 6. Charter probably written at Barking Abbey, c.686–8, with 8th-century alterations (British Library)

inventories. An inventory of 1538 from Waltham Abbey lists two gospel books ‘of the Saxon tongue’ that were perhaps produced at the 11th-century college that preceded the abbey (Ker 1990, xlviij). The St Paul’s inventory of 1255 mentions an old psalter, ‘psalterium interlineatum anglico’, that may well have been written in the Saxon cathedral (Ker 1990, 579). There may have been much more Anglo-Saxon material that survived: Ker notes that many medieval catalogues ignored Anglo-Saxon material since it had generally become obsolete or illegible to the medieval reader.

In terms of quantity, less than 1% of all surviving Anglo-Saxon codices were written in London monastic *scriptoria* whereas around 6% of surviving original charters may have been produced in the London area.²² The figure of 6% for surviving charters is quite substantial considering that London is not usually counted as an important centre of diplomatic production in the same way as say Canterbury or Durham. It is worth emphasising that it would appear to be only certain types of manuscripts that were produced at London *scriptoria*. They are nearly all charters recording royal or ecclesiastical grants of land, with some royal writs coming from Westminster Abbey (and/or the possible royal chancery). Few of the documents that became more common from the 9th century, such as

wills, leases or documents relating to property negotiation, survive.

In conclusion the evidence suggests that London *scriptoria*, together with the occasional ‘secular’ manuscript centres at royal palaces at Chelsea and later at Westminster, produced a significant quantity of ‘diplomatic’ manuscripts but do not seem to have specialised in the production of books of religious or literary material. Described in other terms, the late Saxon monastic *milieu* of the London area may have had a written archive and communications ‘network’ nearly as strong as the more famous monastic centres to the south or north.

Archaeological evidence of manuscript production

The ‘tools’ of literacy and manuscript production can in some cases survive as long as the manuscripts themselves and these tools are quite often found during archaeological excavation of monastic sites. The stylus, generally made of iron or bone but sometimes of copper alloy or silver, was used both for writing on wax tablets and for pricking and ruling the vellum of manuscripts. A few have been found in the City,²³ and several were found recently in an 8th-century context during excavations at Barking Abbey (Webster &

Backhouse 1991, 90). Other 'tools' of literacy survive, some of which have been found during excavation of high-status or monastic sites elsewhere in Britain: wooden or bone writing tablets, reading pointers, even ivory book-covers (Webster & Backhouse 1991, nos. 64–5, 259–60 & 141).

Unfortunately this archaeological evidence does not suggest any 'new' sites where there might have been manuscript production but from where no manuscripts survive – no styli or other tools have been found at Saxon sites such as Chertsey Abbey or the possible Saxon antecedent of Bermondsey Abbey which may date from before the Conquest.

Seals

Seals were occasionally used in Anglo-Saxon England to impress an image, often accompanied by a name, onto hot wax in order to give a physical seal to a document. The earliest seals are known from the 9th century (such as of Cenwulf King of Mercia or Bishop Æthelwold of East Anglia) but the earliest known documents with surviving seal marks date from the reign of Edward the Confessor in the 11th century (Harvey & McGuinness 1996, 1–4). Seals were usually only used by the king, a bishop or a monastery though by the 10th or 11th century a few secular seals of knights or 'thegns' are known (Backhouse *et al* 1984, 113–4). It can be argued that the royal authority contained both in the image and the word on a seal was echoed in the use of seals by important secular figures – once again secular society was aspiring to literacy and the power of the written word.

OTHER EXPOSURE TO THE WRITTEN WORD

Churches

Christianity has always considered itself a religion 'of the book' and early illuminated manuscripts make clear the strong links between religion, the written word and images (see Archibald *et al* 1997). Surviving Anglo-Saxon churches tend to give us an impression of cool stone austerity but medieval and later descriptions of monastic churches such as Wilton Abbey in Wiltshire and Ely Abbey in Cambridgeshire give us an image

of richly decorated churches with sculpture, paintings, textiles, metalwork and ivories (Backhouse *et al* 1984, 141). The written word would seem to have been an important and complementary part of this luxurious church decoration. William of Malmesbury's account of Glastonbury Abbey and Leland's account of the monastery at Reculver both mention explanatory inscriptions that accompany the sculpted and painted images (Hardy 1840, I, 25; Rahtz 1993, 33–6; Smith 1909, IV, 59–60). An indication of the fragility of such painted inscriptions is that in Leland's day he noted that three out of five painted inscriptions were 'now obliterated' and today none survive (Smith 1909, IV, 60; Backhouse *et al* 1984, 40–1).

Most of the descriptions of luxurious internal decoration refer to monastic institutions which may have been of limited accessibility for most people. It might be suggested that cathedrals such as St Paul's had similar paintings and sculpture with explanatory inscriptions. Minsters such as St Mary's Lambeth or smaller churches such as St Andrew's Holborn may well have had less grand decorative schemes but the written word may still have been present and visible. The sun dial inscription from the presumed Saxon church at Orpington, discussed above, seems to be directly addressed to a 'readership' and several other descriptive or explanatory inscriptions survive from smaller churches elsewhere in Anglo-Saxon England (Fig 7).²⁴

An idea of the relatively simple levels of literacy on the part of this 'readership' might be gained from a modern parallel. In 20th-century Britain few people are literate in Greek or Latin but many of us can walk into a church and recognise familiar Latin words such as *dominus* or *deus*, understand the significance of abbreviated Latin inscriptions such as I.N.R.I., and perhaps even transliterate and comprehend short Greek texts such 'α ω', or 'χριστός'. Similarly in Saxon London people may well have been exposed to the written word in churches like Orpington and have been literate enough to be able to translate or comprehend parts of Latin or English texts.²⁵

Coins

In the early 7th century imported coins had a limited commercial use in Anglo-Saxon England and by the mid 7th century gold *thrymsas* or shillings were being coined in England. The end

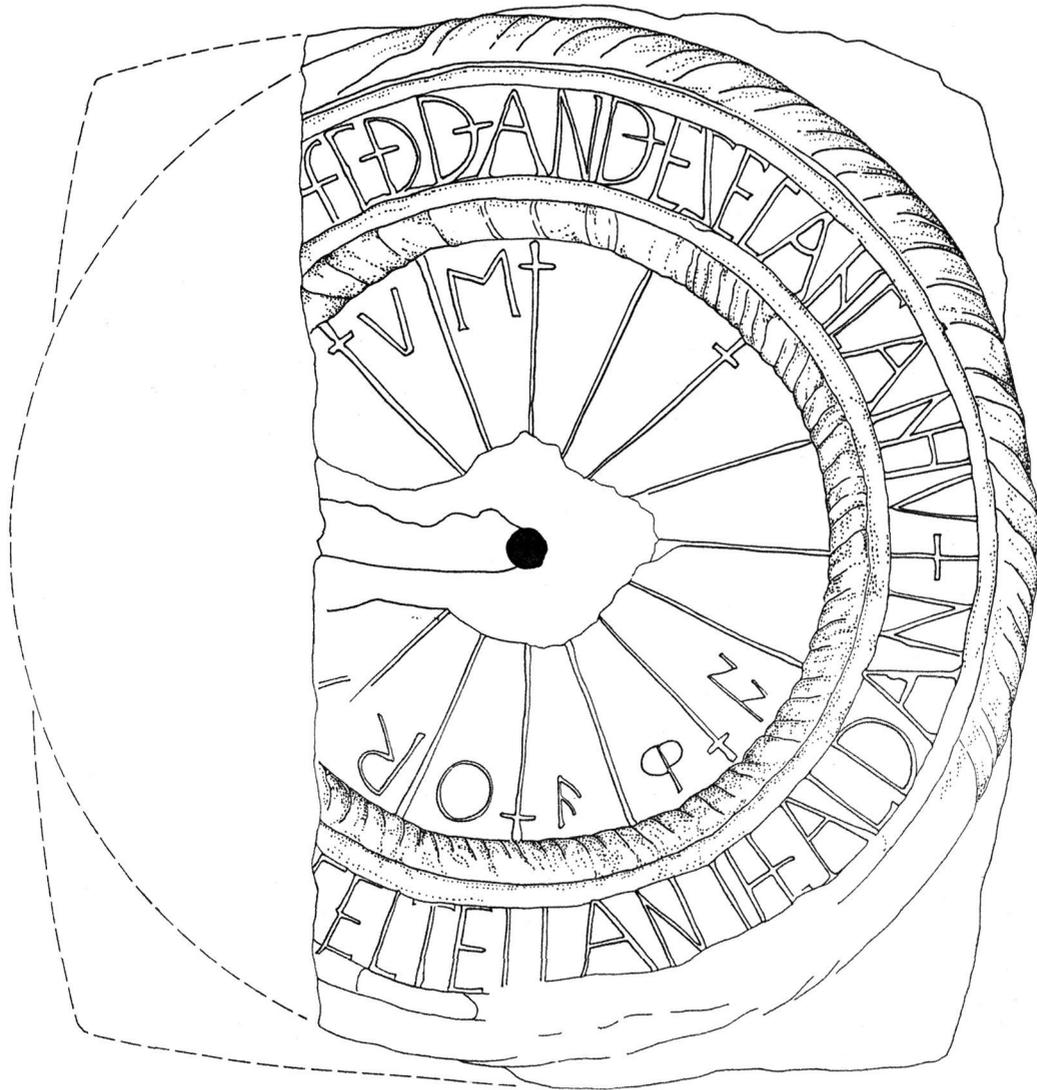


Fig 7. Late Saxon sundial from All Saints Church, Orpington. The roman text is in Latin and English and the three runic letters may be markers. Scale 1:4

of the century saw an expansion in coin use with the introduction of silver pennies, often referred to as *sceattas*. After a lapse of coining in the mid 8th century the 'broader penny' was coined at several mints. By the late 9th century the coinage was becoming more standardised, though still produced in regional centres, and in the late 10th century a reform by Edgar meant that coins were produced using centrally issued dies (Grierson & Blackburn 1986, 155–89 & 267–325; Archibald 1984). From the beginning London was one of the important mints and by the 11th

century it was the principal mint for centralised die cutting (Vince 1990, 109–17).

The earlier coins are generally uninscribed except for illegible 'pseudo legends' copied from the (often Roman) prototype. Some early coins have legible runic inscriptions that name the moneyer or the mint, though these are rare on London coins and more common on Kentish and East Anglian coins (Blackburn 1991, 167–9). For example Pada, a later 7th-century moneyer probably from an east Kent mint, produced a gold shilling with a just about legible but



Fig 8. Gold solidus or mancus struck by the moneyer Pendræd at London in the 770s (British Museum)

meaningless roman script legend accompanied by a larger and clearer runic inscription of his name (Webster & Backhouse 1991, 64–5; Grierson & Blackburn 1986, no.668). The implication of this may be that the moneyer was more literate in the runic script than the roman script. Later pennies nearly always name the king who issued them and occasionally the mint or moneyer, using roman script legends. The late 8th-century London moneyer Pendræd, for example, based a coin (in fact a gold *mancus* or *solidus*) on a Roman coin but replaced the Emperor Augustus's name with his own (Fig 8. Webster & Backhouse 1991, 106). This would imply a certain degree of roman script literacy.

Even though the Anglo-Saxon economy never became as monetary as later periods, most people, particularly in an urban context such as London, would presumably have handled coins and been familiar with the images and legends on the coins. Semi-literate people may well have been able to read the name of the moneyer or king on coins and even if the user of a coin was not literate he or she would probably have associated the writing on the coin, in combination with an image of royalty, with prestige and status since the name acts as a 'guarantee' or validation of the coin.

Coin brooches

An indication of the status of coins and their inscriptions is given by the careful re-use or imitation of coins in the form of 'coin brooches'. Early examples are actual coins, usually imports, that are re-used as a brooch or other jewellery item. A coin of Theodosius (408–50) was mounted in a gold ring found in Euston, perhaps indicating an early Saxon settlement in the

vicinity (Whitehead & Blackmore 1983, 84). In the 9th century, coin brooches that copy coins were occasionally imported and by the 10th century coin brooches were being produced in Anglo-Saxon England. These mimic Roman, continental European, Anglo-Saxon or even Arabic coins but usually the inscription is an illegible or illiterate series of lines.

Until recently few coin brooches had been found in London: a 10th-century pewter brooch apparently copying an 8th-century Ummayyad Arabic coin was found in Cloak Lane in the City in the 19th century (Wilson 1964, no.39; Okasha 1971, 150). Recent Museum of London excavations at Bull Wharf in the City revealed the Alfredian harbour of Æthelred's Hythe, now known as Queenhithe, which produced seven coin brooches of 9th to 10th-century date thanks to extensive archaeological use of metal detectors (Blackmore forthcoming). Four of these have a pseudo roman script inscription imitating the original Roman or Merovingian coin legend while another is similar to the Cloak Lane pseudo-Arabic inscription (Fig 9).

Once again we can see an aspiration to literacy on the part of both artisan and user: apparently illiterate artisans were copying the written word (royal or imperial) in order to display writing on the brooch. The object would presumably have been worn by a none too literate purchaser or commissioner given its rather illiterate text.



Fig 9. 9th to 10th-century coin-brooch with pseudo-inscription, perhaps imitating Arabic, from excavation at Bull Wharf (Museum of London Archaeology Service)

CONCLUSIONS

Script

The evidence of inscriptions on coins might suggest that runic literacy preceded roman script literacy since 7th and 8th-century coin legends tend to use the runic script whereas from the late 8th century the roman script is more normal. It does at least seem to be the case that the runic script conveyed enough ‘authority’ to support the coinage, in spite of the use of the roman script on all the Imperial and Merovingian models used by moneyers (Page 1997, 123). Since few London coins had runic script legends this may not particularly apply to London. The evidence of the three *Lundenwic* inscriptions (the Royal Opera House bone handle, the Exeter Street sea-urchin and the National Portrait Gallery vertebra) might suggest that there was a limited level of secular literacy in both the roman and runic scripts in 8th-century London. By the later Saxon period the roman script clearly predominated, perhaps thanks to increasing exposure of this script in manuscripts, coins and perhaps churches.

Language

Inscriptions often do not give much evidence of language in the sense that a few letters or a name could be in any language (see Okasha 1990). However the impression is that the limited stabs at literacy we see in the ‘casual’ *Lundenwic* inscriptions are more likely to have been conceived in English than Latin. The more formal later inscriptions on stone that do indicate language show a surprising degree of variety: Old Norse on the St Paul’s memorial slab, Old English on the All Hallows-by-the-Tower cross slab and Latin and Old English on the Orpington sun dial.

Social status

The archaeological context of many of the inscribed objects suggests a fairly ordinary social status for those who carried out the inscriptions or those who owned them. The findspots of the *Lundenwic* (and the later Guildhall Yard piece) suggest artisans and traders rather than high status individuals – in the case of the Exeter Street fossil the inscriber might possibly have

been one of the site’s butchers. The trial piece or practice inscriptions (the Guildhall Yard bone fragment and the Waltham Abbey lead inscription) provide clear evidence of a professional literacy where artisans are practising inscriptions, presumably for more luxury items such as metalwork. If we compare direct evidence of ‘literacy events’ it seems probable that our *Lundenwic* artisans who could scratch something approaching a name were more literate (in the sense of *writing*) than their king – Offa merely signed his † (as was standard practice) on a grant of land signed at Chelsea in 785 (see above and note 14). Later inscriptions such as the Orpington sun dial and the St Paul’s and All Hallows memorial stones might suggest that there was a reasonably extensive literate ‘readership’ for these public displays of writing.

Degree of literacy

The act of inscribing implies a certain level of literacy though one must be careful not to overstate the case – our Guildhall Yard artisan Ælfbeorht (or Ælfburh, see above) was clearly not sat at home in his (or her) timber building studying a copy of Donatus’s *Ars Minor*, the principal medieval work on writing and grammar (Reynolds 1996, 7–16). Furthermore, the evidence of illegible or pseudo-inscriptions on coin-brooches would suggest that there may more often have been an *aspiration* to literacy rather than an actual ability to read and write on the part of the owner.

In two articles Elisabeth Okasha has considered the process of carrying out inscriptions and what that implies about relative levels of literacy (1994 & 1995). She defined what could be a three stage process of commissioner, composer and maker of a stone inscription such as a memorial stone, or composer, maker and commissioner/owner of an inscribed object such as a ring. Up to three individuals might be responsible for an inscription and only one of these, the composer who laid out an inscription for the maker to carve, need be at all literate.

However in the case of informal inscriptions on small low value objects such as a handle or on trial pieces such as an animal bone, it might be considered more likely that the owner or user was the inscriber. The ‘literacy event’ (to use Barton’s term discussed in the introduction) of inscribing a fossil or a handle would therefore

suggest a degree of spontaneous and confident literacy on the part of the owner. In the case of the Exeter Street fossil inscription one imagines that the owner (possibly the finder?) of the object may have carried out the inscription in order to boost the talismanic value of this rare and curious object. The fact that the inscription does not seem to make much sense suggests that it was done by a person with limited literacy. One might speculate that in the case of the National Portrait Gallery inscription with two names in different hands, the literacy event was conscious experimentation or even a competition of literacy. With the Guildhall Yard and Waltham Abbey trial-pieces the literacy event may well have been the more technical and less spontaneous process of practising the text that a separate composer had prepared. It is however possible that the Guildhall Yard artisan was practising writing his or her own name rather than practising the name of a client for a commissioned inscription, though this is of course hard to demonstrate.

The evidence for coin legends suggests a variable but generally improving standard of literacy on the part of the moneyers and die cutters. As we saw earlier the Kentish moneyer Pada betrayed his lack of familiarity with roman script but also demonstrated his runic literacy by spelling his own name very clearly. Later coins have quite reasonable roman script legends, though these are apt to degrade as they are re-executed by successive die-cutters. This would imply a greater degree of literacy on the part of the moneyer than the more lowly die cutters (Page 1973, 121–2).

Relationship of monastic and secular literacy

Let us consider first the ‘literacy events’ that led to short texts being inscribed on scraps of bone and personal objects in the narrow streets and small houses of the 8th-century trading settlement of *Lundenwic*. The impression given by the inscriptions on the Royal Opera House handle, the Exeter Street fossil and the National Portrait Gallery vertebra is that they demonstrate a separate secular literacy on the part of artisans and traders, admittedly of a relatively crude standard compared to the monastic *scriptorium*.

In the case of the trial piece inscriptions, and the texts on luxury objects such as the Putney knife, it could be argued that though the artisan

carrying out the inscription is presumably secular, the composer of the inscription could have learned the skills of literacy in a church or monastic context. Elsewhere, inscriptions from monastic sites such as Lindisfarne may well demonstrate links between the monastic literacy of the *scriptorium* and secular literacy of inscriptions (Higgitt 1990). In London it is harder to make that link but it seems probable that the later memorial inscriptions such as the Anglo-Danish runic memorial stone from St Paul’s or the stones from All Hallows-by-the-Tower do have some such secular/Church link. In these cases, where the inscribed stone rests in church ground, it may be the case that the composer of the inscription was a member of the clergy and the carver of the inscription was in some way connected to or employed by the church.

Function of inscriptions

The limited nature of the function of inscriptions from Saxon London can be illustrated if we take two other examples from different times and places. The letters from the Roman frontier fort at Vindolanda from the end of the 1st century give us an important insight into a society where ‘literacy practices’ include keeping military inventories, organising specific trade transactions and even sending an invitation to a birthday party (Bowman & Thomas 1994, nos 184, 343 & 291). Similarly at Bergen in Norway in the 13th century, runic inscribed sticks or *rúnakefli* were used for equally varied purposes including commercial documents, owner’s marks, messages and charms (Page 1973, 98–102). The trade network of Saxon London is beginning to be better understood (see Vince 1990 and Malcolm *et al* forthcoming) but, according to current evidence at least, it seems that this network was not directly supported by a culture of literacy such as existed later in Bergen or earlier at Vindolanda.²⁶ Instead the evidence from Saxon London would suggest that, outside of the monastic or royal milieu, writing had a purpose more demonstrative than functional. With a number of inscriptions we have seen, from luxury objects such as the Thames Exchange ring to less valuable objects like the Royal Opera House handle, the writing seems intended to decorate or complement the object and perhaps provide associations of wealth, status or power that writing had come to symbolise.

Is London a special case?

For stone memorial inscriptions it can be argued that London is a special case in a negative sense – only three are known compared to many more from Lindisfarne or York for example. The area where London does seem to be a ‘special case’ is the number of low status inscriptions on small objects and trial pieces. This probably reflects the density of recent archaeological excavation more than any greater degree of secular literacy in Anglo-Saxon times.

However it might be reasonable to suggest that from about the 8th century London had a unique combination of monastic and other religious institutions such as St Paul’s, secular power centres such as Chelsea and Westminster, and thriving commercial zones such as *Lundenwic* and later the river port in the City. The evidence from extensive excavation in both the City and *Lundenwic* might suggest that this combination of factors resulted in increasing levels of secular literacy. Much of this literacy may have been of a very simple nature such as the attempt to carve one’s own or another’s name on a small bone fragment or a treasured amulet. By the later Anglo-Saxon period it seems that the inscriptions on memorial stones, rings, coins, imported swords and other weapons, together with other visible examples of writing in churches, might be aimed at a partly literate ‘readership’. This readership may not have been fully literate but perhaps could understand simple inscriptions such as names and would have associated writing with power and status and so aspired to use and own the written word.

NOTES

¹ The bibliography in Barton’s recent work on literacy (1994) numbers 13 dense pages.

² My figures gloss over problems of definition of what constitutes a memorial and what counts as an inscription.

³ Documentary references and architectural details confirm that the village and church of Orpington existed at least by the early 11th century and there are possible links with Christ Church, Canterbury and the court of Canute (Glover 1976; All Saints Orpington 1980).

⁴ Surrey County Council, Guildford, Sites and Monuments Record, 4km radius search based on TQ 4053. I am grateful to Dinah Saich of the county Archaeological Service for carrying out this search.

⁵ Raymond Page (Corpus Christi College, Cambridge) and Gary Brown (Pre-Construct Archaeology), pers comm.

⁶ See Page (1997) on the uses and cross-fertilisation of runic and roman scripts. Two runes, *wynn* and *thorn*, passed into the Anglo-Saxon roman script alphabet (Page 1997, 127–8).

⁷ Nick Bateman (supervisor of MoLAS Guildhall Yard excavations) pers comm.

⁸ Temple sword in British Museum: Davidson 1962, 45; Oakeshott 1951, 69–71. Kew sword in British Museum: Lang & Ager 1989, 106. The other sword is in the Museum of London, no. A2373. Though there is some doubt about the exact provenance, the two parts were found separately, probably by the Thames at Putney.

⁹ Battersea sword: Wilson 1965. The other sword is in the Tullie House Museum, Carlisle (no. OM 325) and is recorded as coming from ‘the Thames’. It was found by a Mr. Bonnett of Holborn in 1840 so it may well have a central London provenance (Tim Padley, Tullie House curator, pers. comm.). See also Cowen 1934, 170 & 181–2.

¹⁰ A British Museum sword from the Thames near Westminster has inscribed crosses and loops perhaps imitating ‘Ulfberht’ swords. Another British Museum sword from a former bed of the River Lea near Edmonton has a cross, loops and what might be the beginning of the ‘Ingelrii’ maker’s mark: Lang & Ager 1989, 103–6.

¹¹ e.g. British Library Cotton Augustus II.29 (c.686–8, altered in 8th century): *ChLA*, no.187 (see also Webster & Backhouse 1991, 44–5); Bodleian Library Bodley 155 (1974) (11th or 12th century): Ker 1990, no.303.

¹² e.g. British Library Cotton Augustus II 82 (late 8th century, probably St. Paul’s): *ChLA* no.188; Cambridge Corpus Christi College 383 (11th or 12th century): Ker 1990, no.65.

¹³ e.g. Oxford Bodleian Eng. hist. a. 2, no. XII (998, possibly original copy): Keynes 1991, no.14. The Ordnance Survey volumes of facsimiles known as *OSF* list several probable pre-Conquest Westminster manuscripts (perhaps as many as 18 though some may be later forgeries) beginning in the late 10th century. The British Library volumes of facsimiles known as *BMF* list five 11th century manuscripts. It should be noted however that the palaeographic notes (including dating and provenance) in these two 19th century editions are not as extensive or reliable as more recent works such as Keynes 1991 or *ChLA*.

¹⁴ Two manuscripts in particular may be originals of land grants dating to 785 and 788, both signed by King Offa of Mercia (with a probably autograph †), the Archbishop of Canterbury and various bishops: British Library Stowe Charter 5 (*ChLA* no.222) and Canterbury Cathedral Chapter Library, Charta Antiqua M.340 (Red or Chapter Book no.II) (*ChLA* no.235).

¹⁵ Bruckner describes the hand as a 'Chancery minuscule native to Canterbury', quite possibly the same scribe who wrote some extant Canterbury documents: *ChLA*, vol. 4, xviii.

¹⁶ Christopher Thomas (supervisor of MoLAS Westminster excavations), pers comm. See also Sullivan 1994 (56–63 and plate 5).

¹⁷ See Gneuss 1981 and the negative evidence in *CLA* (index of provenance in supplement, p.84), Alexander 1978 and Temple 1976 (index of provenance in respective appendices).

¹⁸ Oxford, Bodley, 155 (1974) (Gneuss 1981, no.554); Dublin, Trinity College 176 (E.5.28) (Gneuss 1981, no.216).

¹⁹ British Library Cotton Domitian IX, fol.11 (Gneuss 1981, no.330); Cambridge, Corpus Christi College 383 (Gneuss 1981, no.102).

²⁰ Cambridge, Trinity College O.7.37 (1365) (Gneuss 1981, no.197).

²¹ Westminster Abbey Muniment 67209 (Page 1996).

²² These are approximate figures based on the proportion of London manuscripts in relation to others of known provenance described in *ChLA*, *BMF*, *OSF*, Keynes 1991, Ker 1990 and Gneuss 1981.

²³ Museum Of London, nos. 1254 & 15193. Other Museum of London styli may be Saxon and not Roman: nos. 1300 and 73.52/4 (pers comm John Clark). Other bone pins with triangular heads could be interpreted as styli such as one illustrated in Smith (1923, 113, fig. 140).

²⁴ For example from Breamore (Hampshire), Dewsbury (West Yorkshire), St Nicholas' Ipswich (Suffolk): Okasha 1971, nos. 15, 31, 58.

²⁵ We might however be cautious in using such examples to infer literacy on the part of a 'readership' since it has been suggested that the intended audience might be divine rather than human (Okasha 1995, 71 and see Page 1997, 129).

²⁶ There are however several late 7th and 8th century charters which indicate that London's trade was being regulated by Royal authority (Vince 1990, 103–5).

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Fig 1 was drawn by Steven Cheshire and Figs 5 and 7 by Jane Sandoe (Museum of London Archaeology Service).

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EXCAVATIONS AT COLHAM MILL ROAD, WEST DRAYTON

H. Knight

With contributions by Anne Davis, Rob Scaife, Jane Sidell

SUMMARY

Excavations at Colham Mill Road, West Drayton revealed two pits with wattle linings which were linked to a line of stakes surrounded by wattle fragments. Two post holes and another line of wooden stakes were also recorded. All the features had been cut into the gravel at the bottom of a shallow pond or pool. The wood was then sealed by an organic silt deposit which had formed as a result of the pond drying up. The organic layer contained a fragment of cooking pot which is 10th or 11th century in date. A gravel trackway was laid on top of the organic material in order to consolidate the marshy ground and probably dates from the medieval period. This trackway was then sealed by a series of alluvial layers as the area became wetter and subject to flooding.

The importance of this site lies in the contribution it can make to our knowledge of late Saxon/early medieval activity in this area of West London, including the use of natural resources and the nature of the local environment. Of particular interest are the indications that 'retting', a process associated with the production of fibres from hemp, may have been conducted on this site.

INTRODUCTION

The Museum of London Archaeology Service undertook an excavation on the site of the former BASF buildings to the north of Colham Mill Road, West Drayton at OS grid reference TQ 0569 8006 (Fig 1). The site (Site Code CMR 96) is bounded to the south and east by the Fray's River. A fence and a line of trees to the rear of Fairway Avenue form the western limit of the

site and the northern limit is defined by the railway embankment.

The site was to be redeveloped as a residential scheme by Acton Housing Association which commissioned the evaluation and the subsequent excavation. The purpose of the excavation was to extend the test pits from the evaluation phase towards the east and west in order to excavate and record any significant surviving archaeological remains in the area that would be directly affected by construction.

The evaluation revealed a number of wood fragments lying on terrace gravel and sealed by dark brown organic silt. The primary aim of the excavation was to determine if the wood extended across the footprint of the proposed building and to determine its age and function.

The site lies to the east of the River Colne on the west bank of the Fray's River. The solid geology of this area is London Clay overlain by Thames terrace gravels beneath alluvial deposits.

During the medieval period the manor of West Drayton comprised most of the parish except for the land between Swan Road and Colham Mill Road. This area formed part of the manor of Colham which also included villages such as Uxbridge to the north (Cox 1983, 10).

Before 1066 the manor of Colham was owned by Wigot of Wallingford and was assessed at eight hides. By 1086 the manor became the property of Roger de Montgomery, Earl of Arundel and Shrewsbury, by which time consolidation of the estate had taken place when one hide in Harmondsworth, three hides in Dawley,

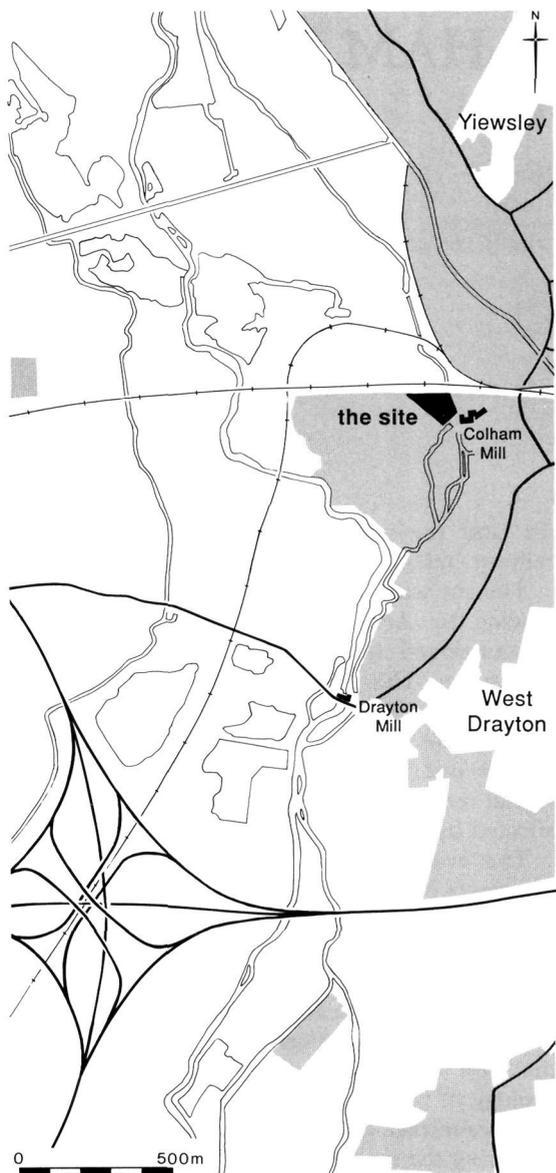


Fig 1. Site location

nine and a half hides at Tickeham and one and a half hides had become associated with Colham (VCH 1962, 84).

The Domesday survey describes West Drayton as having a mill that was valued at 13s 5d and a weir that was valued at 32d. The Domesday entry for the manor of Colham lists two and a half mills. The adjoining half mill was probably in a different manor. There is no record of this

mill in any other manor in Middlesex, and it is probable that it was located on the county border and included in the entries for Buckinghamshire. If so, this mill was likely to have been located on the banks of the River Colne which forms the county boundary in this area.

The Colham Mill that stands adjacent to the site today dates from the 18th century and maps from the 17th century indicate that there was a mill slightly to the south of the site, recorded as Drayton Mill. This may have been the location of the late Saxon/early medieval mill. Water mills of the 10th and 11th centuries were used almost exclusively for the milling of grain (Miller & Hatcher 1978) and the environmental samples (see below) do not include the high incidents of cereal remains that would be expected if a working mill was close to the site.

THE SEQUENCE

Below the demolition debris was a series of seven alluvial layers. These layers were very similar in colour, compaction and composition being very clayey and bluish grey in colour. The lower layers however were more brownish grey with a higher silt and organic content. The lowest layer was recorded at 24.75m OD.

The blue clay was removed to expose a gravel surface that was 1m in width and ran for 8.8m across the trench. This gravel appeared to be a path or trackway and was constructed of tightly packed flint pebbles on top of a dark brown organic layer.

The dark brown organic layer, which was recorded at 24.85m OD, was found to consist of a mixture of clay, silt and fibrous organic matter. It contained wood, animal bone and burnt flint fragments and one sherd of a late Saxon sandy ware sagging base cooking pot. This sherd has been dated to between 970–1000 AD. When the organic layer was removed it revealed terrace gravel with the finds concentrated at the interface.

The gravel was cut by two pits, three postholes, two lines of stakes and wattle fragments scattered across it (Fig 2). ¹⁴C determination (see Table 1) gave a very similar date range to that given to the pottery sherd.

The pits were fully excavated to reveal wattle linings. The larger of the two measured 2.3m in long and 1.1m in wide and was 0.35m deep. The lining found on the south-western edge was constructed from interwoven alder branches

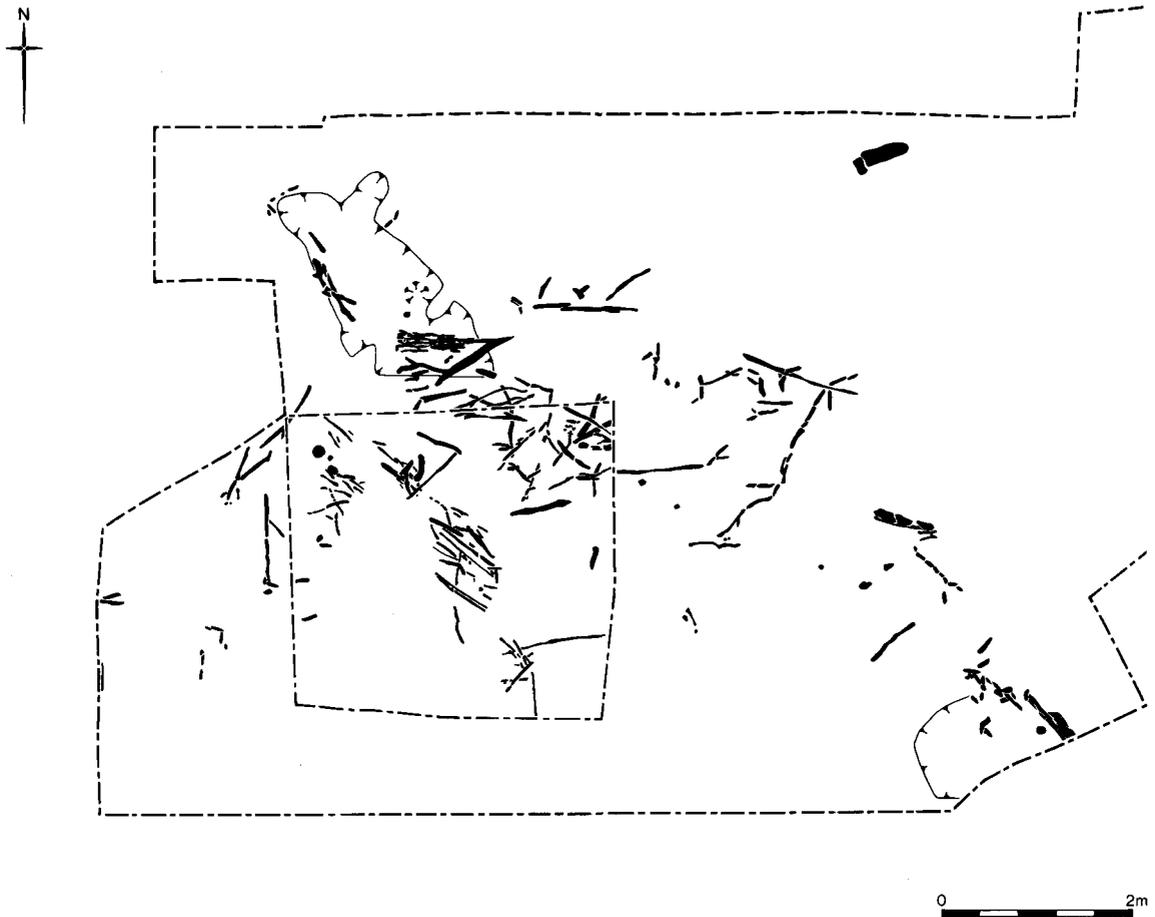


Fig 2. Features cut into natural gravel and wattle remains

which average 0.3m in length and 15mm in diameter.

The uprights, which were set into the gravel, were thicker than the rods. A line of upright stakes also set in the gravel ran between this pit and the smaller pit to the south east. The small pit, which extended beyond the limit of excavation, had a similar wattle construction on the south-eastern edge. This wattle hurdle consisted of five uprights with rods woven around them. The hurdle had probably been constructed *in situ* and was set in the edge of the cut at an

angle of 30° and was held in position by five stakes (Fig 3). The scattered alder branches appeared to have originally been woven around the line of uprights that connected the two pits and would have formed wattle hurdles.

To the south west of the larger pit a single oak stake was found set into the gravel. This stake measured 0.47m in length and 80mm in diameter and showed signs of axe or adze marks where it had been sharpened to a point.

At the eastern end of the trench was a line of broken alder stakes, which ran north-south across

Table 1. ¹⁴C determinations

Sample no.	Lab no.	Date (uncal)	Date (cal. AD)
CMR96/1	BETA 93671	1190 ± 60BP	680-970
CMR96/2	BETA 93672	1140 ± 60BP	880-1160

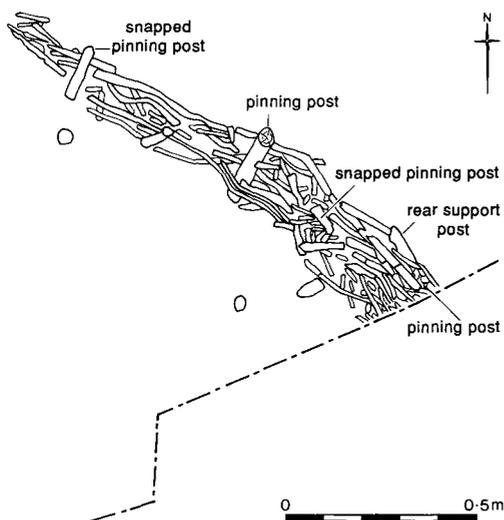


Fig 3. Detail of hurdle

the trench, from which the bark had been removed and the ends sharpened to a point. Two circular post holes, 0.35m in diameter, contained a number of these stakes but the postholes appear to have been reused and may relate to an earlier phase of activity on the site. Alder branches were also strewn across this part of the trench which, together with the stakes, seems to suggest that another line of wattle hurdles was set into the gravel and subsequently disintegrated.

Most of the wattle revetments and stakes from this site have been formed from alder which grows in wet areas by rivers and streams. The frequency of alder seeds found in the layer sealing the wood suggests that this species was growing on or very near the site when these deposits were formed.

There are four distinct phases represented in the archaeological sequence. The first is the wattle lined pits and hurdles. These were constructed *in situ* on the gravel which appeared to form the base of a large pool or pond. The two pits probably went out of use during the 11th century. The hurdles appear to have disintegrated and were then sealed below an organic layer which suggests the area became wetter.

It has been suggested that a possible use for these pits, standing in a shallow pool of water, was for the retting of hemp which was a primary process in the production of rope. First the hemp was 'rippled', the process that removed the seeds,

after which the stems were 'watered' or retted. The hemp was placed in shallow pits constructed in pools of water to soak the stems to soften and rot the woody material around the fibre. The fibre was then washed and dried and beaten with wooden tools with cylindrical heads and then scraped with wooden blades to remove the outer fibre. The fibres were then separated by being drawn through heckles, sets of teeth mounted vertically in a stand, and finally made into rope (Blair & Ramsay 1991).

The possible presence of hemp pollen could support the idea that this late Saxon pool of still or gently flowing water, with its wattle lined pits, was an area used for retting or could merely indicate that hemp was growing on or close to the site.

The gravel trackway, which was constructed in order to consolidate the soft boggy ground, would have allowed access across this area of marshy land. There is, however, no direct dating for the gravel path but it is likely to be medieval in date. This path may be associated with a bridge that stood in this area. We know from 16th and 17th-century records that a bridge called Oxney Bridge led to the moor north of Drayton mill. This trackway then became redundant as the area was once again submerged by floodwater. These periods of flooding saw the deposition of the alluvial layers the anaerobic properties of which preserved the organic material at the base of the sequence. It is clear that the site has been subject to a changing environment and, subsequently, to changing usage during the late Saxon and early medieval period. These changes were very much dependent on the presence and action of the Fray's River.

ENVIRONMENTAL

Samples were collected from the site in order to attempt to reconstruct the local environment and look at the use the local population were making of natural resources. The sedimentary sequence was examined and consisted of sand and gravel, overlain by silt clay with detrital organic fragments, grading into a purely minerogenic deposit. The sand and gravel is almost certainly the Pleistocene Taplow Terrace, although the boundary (with floodplain alluvium) as it appears on the British Geological Survey map (sheet 269) is slightly to the east. The overlying organic silt was initially considered to be prehistoric, in view

of the association with the gravel. Several fragments of wood from the wattle features were submitted for ^{14}C determination, the results of which placed the deposit firmly in the historic period.

This deposit is assumed to have been laid down along the margins of the course of the Fray's River. It was slightly mixed with the top of the gravel, but this is hardly surprising, given the likely scale of truncation of the gravel and pre-Saxon deposits by river scouring. The contemporary environment is likely to have been marshy; probably not constantly submerged, but with occasional flooding leading to the deposition and preservation of vegetation remains within the alluvium. These botanical remains may have been local and forming *in situ*, or transported in by the river and deposited with the alluvium. This interpretation is supported by the botanical studies. The organic deposit was sealed by a non-organic clay silt suggesting that there was an increase in the rate of water over the site and/or a reduction in the local vegetation. The presence of coarser particles suggest that the rate of water flow had increased, while there is a possibility that the upper levels have been oxidised, which could have eradicated traces of organic material. The top of the sequence was a similar waterlain clay-silt, containing a significant amount of iron staining, which is generally an indication of drying. Unfortunately the deposit was truncated and so it was not possible to confirm whether the unit dried and weathered leading to the development of a stable land surface.

Samples were collected from the sediments to establish the range of botanical remains present in order to try to reconstruct the communities growing on and around the site, and discover evidence for human activities. Both pollen and plant macro-fossils were recovered.

Although well preserved pollen has been recovered, the interpretation of such alluvial sediments is complicated by the taphonomy of the pollen assemblages. It appears that the lower organic sediments are most representative of the pollen flora since these sediments seem to have remained waterlogged and unoxidised. The overlying silt/clay may represent the same alluvial sediments which have been oxidised through fluctuation of the water table. This is, to some extent, indicated by the increasing values of *Dryopteris* and *Pteridium aquilinum* spores and pollen of *Lactuca* (Fig 4), both of which have robust pollen/spore walls and thus are more

readily preserved. The second factor is that of derivation via fluvial transport and over-bank deposition rather than the more normal airborne transport mechanism.

Given the age of these sediments and associated timber features, the substantial amount of tree pollen is of interest. Oak (*Quercus*) and hazel (*Corylus avellana*) appear the most important woodland elements, although small amounts of lime (*Tilia*) and beech (*Fagus*) are much under-represented in pollen spectra and may have been relatively more important than the number of pollen grains imply. This is due to entomophily (insect pollination) in the case of lime and large grains in the case of beech. Alder (*Alnus*) is not a dominant local element as this tree produces very substantial quantities of pollen. It is suggested that local occasional trees may have been growing along the stream/river bank or that the pollen is transported (fluvially or airborne) from areas of alder carr woodland. The single record of *Juglans* (walnut) is a valuable record of this Roman introduction. Its presence here implies continuity of this taxon in the post Roman period.

The herb flora is relatively diverse, representing arable cultivation and grassland/pasture. Given the potential proximity of a mill it is surprising that larger numbers of pollen grains of cereals and associated segetals are not present. This may again be a taphonomic factor, and indeed those cereal grains recorded may derive from crop processing rather than from areas of arable cultivation. As noted above, the expansion of *Lactuca* (dandelion, sow thistles, hawkbit, hawk's beard) may result from differential preservation in its favour with consequent skewing of the pollen assemblages. This phenomenon is, however, complicated by the consistent presence of less robust grasses and sedges.

From the marsh and marginal aquatic taxa recorded it would appear that the flood-plain environment was largely open grass and sedge fen (perhaps with occasional alder and willow trees). This area would have been subject to periodic flooding with over-bank flooding and deposition of alluvial sediments containing transported pollen grains. Freshwater algal *Pediastrum*, although not abundant, similarly attests to this.

Preservation of waterlogged plant macro-fossils was good in all samples, while charred remains were very rare. Seed assemblages from the samples were very similar, and came mainly from plants of wet environments. Taxa which

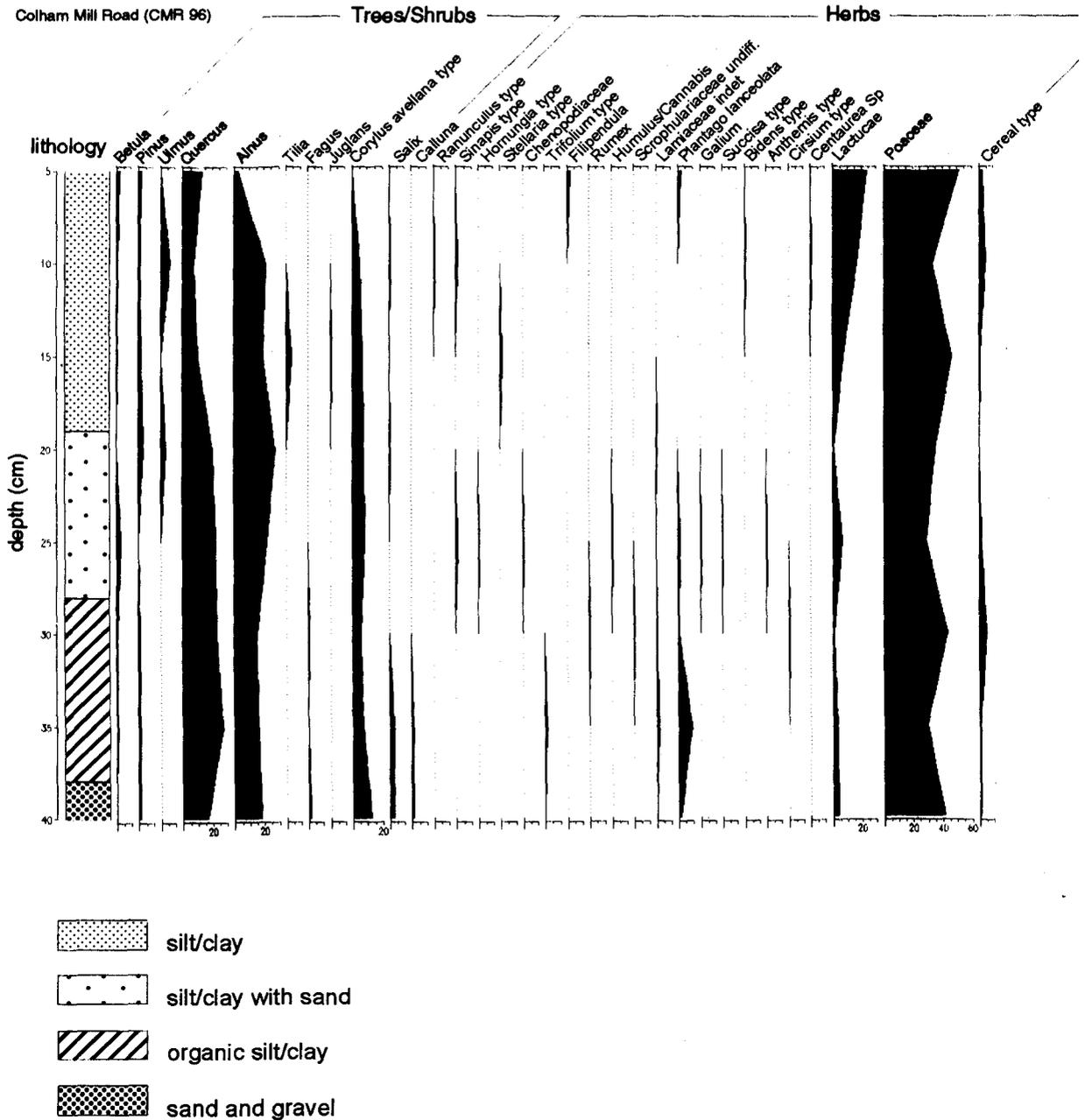
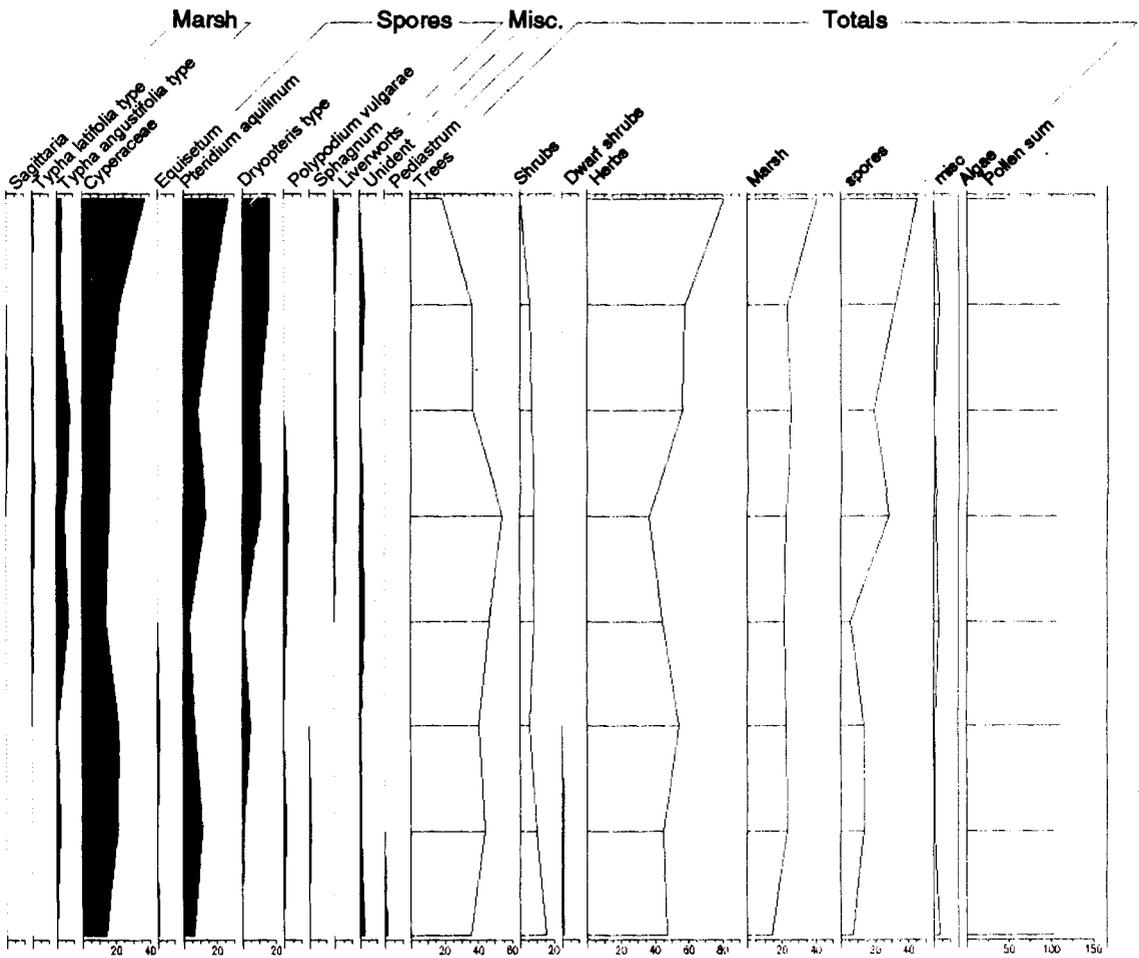


Fig 4. Pollen diagram

were common in most samples included celery-leaved crowfoot (*Ranunculus sceleratus*), lesser spearwort (*R. flammula*), fool's watercress (*Apium cf. nodiflorum*), water pepper (*Polygonum hydropper*), alder (*Alnus glutinosa*), gypsy-wort (*Lycopus euro-*

paeus), yellow flag (*Iris pseudacorus*), branched bur-reed (*Sparganium erectum*), rushes (*Juncus spp.*) and sedges (*Carex spp.*). All these plants grow in wet places, either in or beside water, most of them suggesting shallow, slow-moving ditches or



Rob Scaife 1996

streams. Pondweed (*Potamogeton sp.*) occurred in four samples, and horned pondweed (*Zannichellia palustris*) and oospores of stonewort (*Chara sp.*) in sample 1. These plants are fully aquatic, and can only live in water. A small number of seeds from dryer environments were also present. These

included stinging nettle (*Urtica dioica*), which was found in the majority of samples, as well as fat hen (*Chenopodium album*), parsley piert (*Aphanes arvensis*), black nightshade (*Solanum nigrum*), stinking mayweed (*Anthemis cotula*) and elder (*Sambucus nigra*), which were only found in one or two.

These seeds all come from plants of disturbed ground, such as arable fields or waste land, but made up only a small proportion of the assemblages. Single seeds of fig (*Ficus carica*), probable coriander (*Coriandrum sativum*), and hazelnut (*Corylus avellana*) were found in samples from contexts 11 and 14.

Fine charcoal fragments were noted in several samples, and a very small number of charred cereal remains were found. These consisted of single grains of wheat (*Triticum sp.*) and possible oats (*Avena sp.*), and several glume bases from spelt wheat (*T. spelta*). The finds of spelt wheat are interesting, as this has been found mainly from the Roman period and earlier in London. Previously, spelt glume bases have been found at nearby Harmondsworth, whereas only bread wheat (*T. aestivum* s.l.) has been found from mid Saxon *Lundenwic* sites.

The wood from the structures was identified and almost all fragments were alder (*Alnus glutinosa*), but a single piece from context 8 more closely resembled hazel (*Corylus avellana*). Some of the more poorly preserved pieces could not be identified with certainty. The single stake from context 36 was found to be oak (*Quercus robur*). The use of alder wood indicates exploitation of local resources, as alder grows in wet places by rivers and streams. Frequent finds of alder seeds in the samples from deposits overlying the wood, suggest that these trees were growing on or very near the site when the deposits were formed.

The dominance of seeds from aquatic and wet-ground plants reflects the nature of the local environment. These plants may have grown *in situ* or been washed in, but in either case are likely to have grown nearby, and thus confirm

the wet nature of the environment. A stream or drainage ditch containing water must have run through the site or very close by. Disturbed ground plants, which may indicate human activity nearby, very often dominate assemblages, but here they form only a very minor component. The only definite signs of activity were fig and coriander, and the charred cereal remains. Hazelnut could have been used as food, but could equally well have arrived on site by natural means.

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EXCAVATIONS AT THE FORMER ALLIED BREWERY, 148–180 ST JOHN STREET, LONDON EC1

Kieron Tyler

With contributions by Geoff Egan, John Giorgi, Richenda Goffin and Kevin Rielly

SUMMARY

During 1995 the Museum of London Archaeology Service undertook fieldwork at the site of the former Allied Brewery at 148–180 St John Street, London EC1. The work was funded by Allied Domecq plc. The river terrace gravel was overlain to the north-east of the site by brickearth. St John Street is known from 1170. The site is bisected by the former boundary between ‘The Nun’s Field’ and ‘Saint John’s Meadow’ (also known as ‘Whitewell Beach Meadow’). The former was under the ownership of the nunnery of St Mary Clerkenwell from at least 1197 until 1545, and was by 1603 known as Woods Close. Saint John’s Meadow is known from 1165–82. Between 1376 and 1377 the ownership of the field was conveyed to the newly-founded Carthusian monastery of Charterhouse. The Charterhouse estate passed to Edward North in 1545. Within Saint John’s Meadow features dating from the 14th century were recorded. In the Nun’s Field was a series of quarry pits, backfilled by the mid to late 14th century. To the west was the truncated base of the linear boundary ditch to the Nun’s Field. A timber barrel well within the Nun’s Field had been backfilled during the 16th century and subsequently sealed by a plough soil dated to 1500–1600. The boundary ditch between Saint John’s Meadow and the Nun’s Field and adjacent quarry pits were backfilled after the mid 16th century. The site had become fully built up by 1687. The fieldwork has confirmed documentary and other archaeological evidence that to the south-west of the site St John Street was formerly at a lower level (up to 5.50m below that of today) from at least the 14th century. Examination of the archaeological,

documentary, and cartographic record has demonstrated that the Black Death cemetery known as Pardon Churchyard (acquired by Charterhouse in 1370) was located to the south of the site.

INTRODUCTION

Between January and February 1995 the Museum of London Archaeology Service (MoLAS) undertook a field evaluation of the site at 148–180 St John Street, London EC1 in the London Borough of Islington. The site code was SJO95. The Ordnance Survey reference for the site is TQ 8220 3175. Seven test trenches (A–G) and two test pits (TPA, TPB) were excavated to assess the nature, date, extent and condition of any archaeological remains (Fig 1).

Features and stratified material dating from the 14th century were recorded. Further trenches and test pits were excavated in June 1995 (Trench H, Test Pits C, D, and E) to assess the level of archaeological survival in areas where excavation was proposed. Test Pit E revealed truncated natural gravels and no archaeological deposit. Trench H revealed plough soils which required no further investigation. Test Pits C and D revealed archaeological survival which required further investigation.

A third phase of archaeological excavation was proposed in the areas around Test Pits C and D. Subsequently Trenches K1, K2 and K3 were excavated in that area. Trench J was excavated

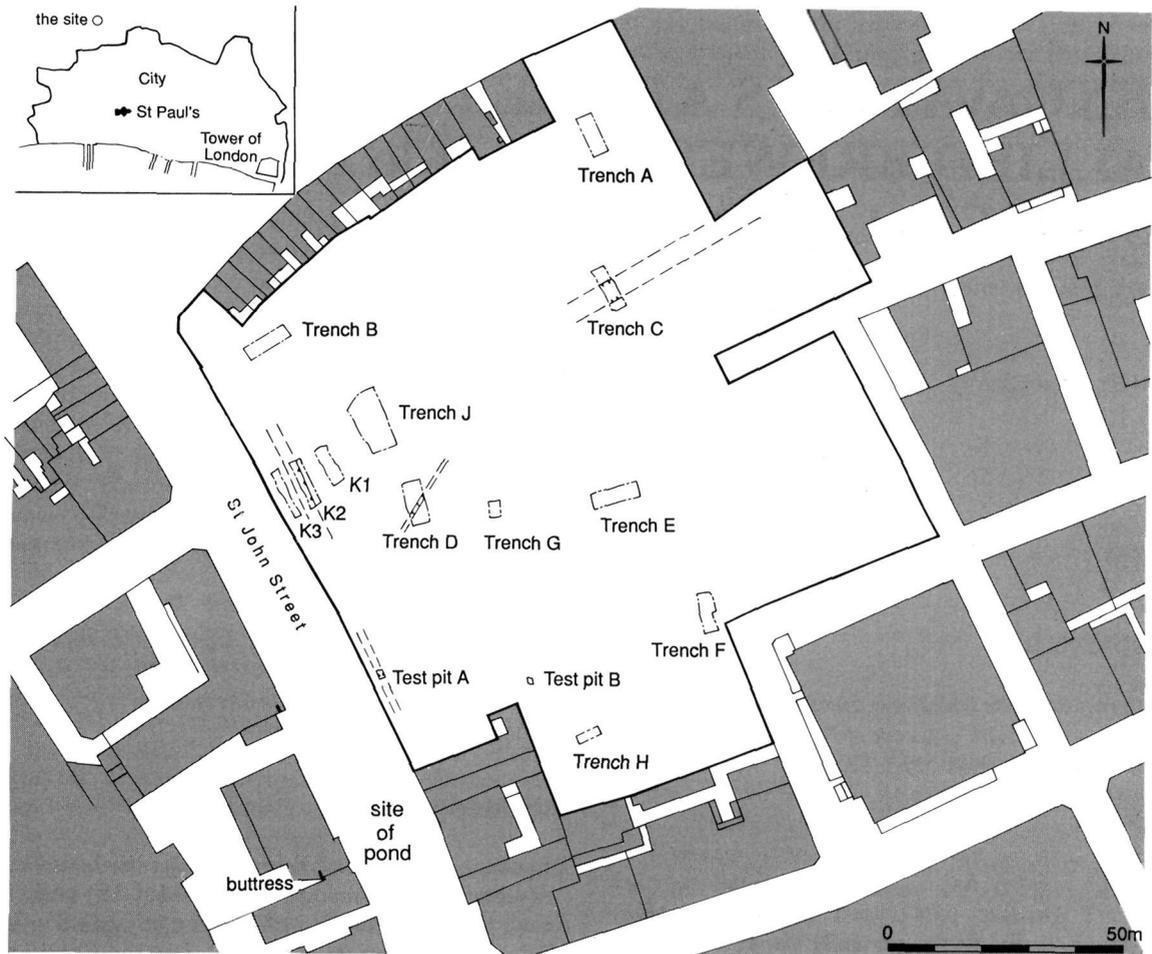


Fig 1. Site outline with inset of site location. Trench K2: truncated base of north-south field boundary to the Nun's Field; Trench C: a boundary ditch between Whitewell Beach Meadow and the Nun's Field, backfilled 1550–1650; Test Pit A: a boundary ditch at the west edge backfilled by the mid 14th century

to further investigate the extent of features recorded during the evaluation in Trench C. Excavation of Trenches J, K1, K2 and K3 took place during September and October 1995.

GEOLOGY, TOPOGRAPHY AND PREVIOUS ARCHAEOLOGICAL OBSERVATIONS

The site is located in the south of Islington on ground at *c.*2.0m OD which slopes down towards the south-east of the borough. The London Clay is capped by Pleistocene river terrace gravels (Waite & Archer 1992, 3). The site is located close to the western edge of the Corbets Tey

Gravel (Gibbard 1995, 41) which has a surface level of up to 18.50m OD (Tyler 1995, 6).

The gravel may be sealed by brickearth in some areas. This fine silt was laid as the ice melted at the end of the last glaciation. Although recorded at this site, it is not considered usual for brickearth to be present in this part of the borough (Waite & Archer 1992, 4). The surface of the brickearth was recorded at levels of up to 16.43m OD during an archaeological watching brief at 1–7 Dallington Street, some 100m to the east of the site, undertaken during April 1997 (Miles 1997, 13).

Gibbard has demonstrated that the surface of the Corbets Tey Gravel has been dissected by younger stream valleys and has indicated that

such a channel, aligned north-south, survives 350m directly to the south of the site, at the west side of the south end of St John Street (Gibbard 1995, 48 fig 19 boreholes 349/350). The east side of the channel marks the west edge of the Corbets Tey Gravel, and the west side of the channel is the edge of the Fleet Valley Gravel. The channel has a base level of *c.*10.40m OD, with a surviving top level of *c.*15.70m OD. The full east-west width of the channel is *c.*170m. The additional extent of the channel is not known.

In 1903 the widening of St John Street was archaeologically observed by E. Hudson as part of a programme of monitoring building works in the area of St John's Priory, Clerkenwell. These observations form part of the entries in notes of 1914 for an unpublished book, *St John's Priory, Architectural and General History*, by Hudson.¹

In these notes references are made to foundations and features recorded during the road widening.² The area of observation was at the south-east corner of 145–157 St John Street (*c.*32m south of Test Pit A, on the west side of St John Street). The foundation observed was part of a buttress along the eastern wall of the priory of St John. It was founded in clay at *c.*12.45m OD, with a truncated top level of *c.*13.77m OD. Ground level associated with the buttress was interpreted to be at *c.*13m OD, some 5.50m below current street level. A feature interpreted as a pond was recorded to the north of the foundation (see Fig 1).

This archaeological and geological evidence for the different ground level in antiquity is complemented by a reference to the water supply of St John's being piped along a 'valley' to the east of the priory in the 15th-century priory cartulary: 'And in AD 1424...the water descends through a valley opposite le Wrestlyngplace [Clerkenwell Green] along a stone gutter then not very well made...'.³ The valley to the east of the priory was close to the current route of St John Street.

Taken together, Gibbard's work on the geology of the area, Hudson's archaeological observations and the references in the cartulary indicate that the topography during the medieval period was dissimilar to that of today. There is a compelling argument that during the medieval period the area to the west of, and to the south of, the site was at a lower level to that of the surrounding land.

The topography will have impacted upon the alignment of St John Street, known to have been in use from at least 1170 (Pinks 1880, 293–4).

The early street may not have been aligned straight up the face of a slope with a sharp gradient. To make the gradient of the street less sharp it may have been aligned along the edge of the slope.

With the exception of Trench A the uppermost geological deposit in the area of the site was truncated orange river terrace gravel, with a maximum surface level of 16.83m OD. To the south-west of the site in Test Pit A, surface level was 14.60m OD. The latter was beneath archaeological deposits, and did not represent truncation by a basement.

The supposition regarding the differences between the current and historic topography to the south and west of the site is borne out by the difference between the surface level of the gravel in Test Pit A and the remainder of the site.

To the north-east of the site in Trench A brickearth (surface level 16.67m OD) overlay the gravel. The brickearth had built up on the surface of the slope down to the east in this area of the site.

Roman

Grimes has suggested that St John Street may be of Roman origin (Grimes 1968, 43). The road which originated at either Newgate or Aldersgate, continued through West Smithfield along St John Street, to Kings Cross, eventually reaching Highgate Hill. Although redeposited Roman finds were recovered from the site, no evidence was found to confirm this proposition.

Saxon

There is no evidence that the site was anything other than open land during this period and later (see Fig 2 which dates from the early/mid 1430s). No finds dating to this period were recovered from the site.

Medieval

Islington is mentioned, as both 'Isendone' and 'Iseldone', in Domesday Book of 1086 (Morris 1975, 128a, 129c, 130d).

To the west of the site was the priory of the Order of the Hospital of St John of Jerusalem, and to its north-west the nunnery of St Mary de

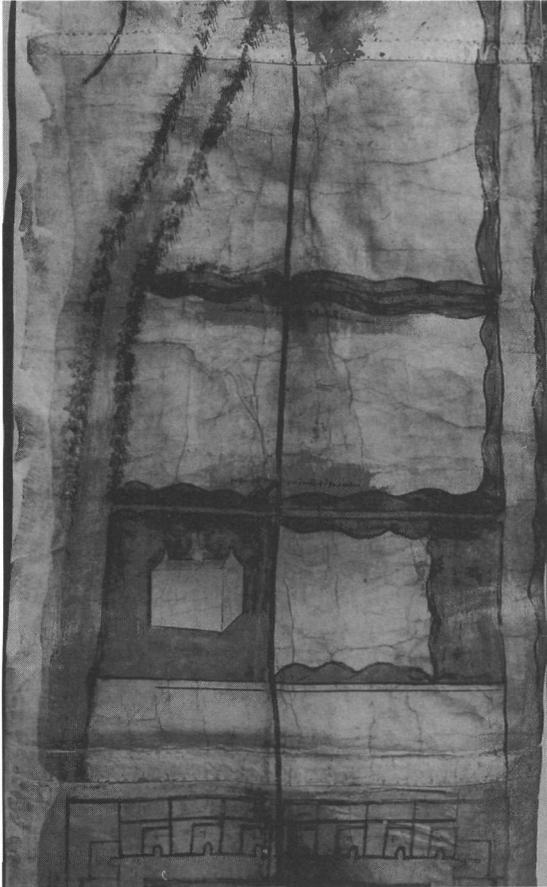


Fig 2. Plan of the water supply to Charterhouse, compiled during the early/mid 1430s, with final annotation dated to 1512

fonte clericorum, or Clerkenwell (Fig 3). They were both founded in about 1144 by Jordan de Bricet and his wife Muriel de Munteni. The River Fleet, or Holborn, lay to the west of these monastic houses, along the line of modern day Farringdon Road. To the east of the religious houses was St John Street, and east of that a road along the line of Goswell Road which left the City at Aldersgate.

St John Street was certainly formed by 1170 when it is referred to in a charter of confirmation as 'that street which goeth from the bar of Smithfield towards Yseldon' (Pinks 1880, 293–4). It was further referred to in 1364 and 1380 (*ibid*, 294).

THE NUN'S FIELD, 1197 TO AFTER 1687

Early maps of the area indicate that the site was bisected by a field boundary, with the northern

field named as 'The Nun's Field', clearly a reference to ownership by the nunnery of St Mary Clerkenwell. The field to the south of the boundary was named 'Whitewell Beach' or 'St John's Meadow'.

The principal donors of land to the nunnery were Emma de Munteni, her husband Reginald de Ginges and Lecia Munteni and her husband Henry Foliot, who between them granted land to the north and west of St John Street. The detail of these grants is drawn from a fine of 1197 when Lecia confirmed the holdings to the nunnery (see Dyson in Sloane (in prep) period M2). By 1197 the nunnery had ownership of a long field of up to 14.5 acres between 'Whitebeck' or 'Whitewellbeech' to the south, and 'Farncroft', or 'Farcroft', to the north. This lay on the eastern side of St John Street (*ibid*). Part of the long field is within the site area, annotated as 'The Nun's Field' to the north of the boundary ditch on the 1430s plan (Fig 2).

Subsequent to the dissolution in 1539 the great field of the late nunnery was sold to Lord Chancellor Wriothlesley in June 1545 (*ibid*, period P2). This corresponds to the 'Nun's (or Long) Field'.

In 1603 James I crossed 'Wood's Close' on the way to Charterhouse (Cromwell 1828, 269–270). This was the former Nun's Field, shown as 'Wood's Close Garden Ground' on Richard Dayne's map of 1654/5 (Fig 4).⁴ Fig 5 represents a transposition of Dayne's map onto the modern street plan. The William Mar plan of 1687 (Fig 6) depicts the southern part of Wood's Close within the site limits, with the remainder of the site built up.⁵

Quarry pits

In Trench K1 four successive phases of truncated quarry pits were recorded. They were truncated at levels between 14.99m OD and 15.26m OD. The excavation of these pits is illustrated in Fig 7.

The first phase consisted of two cuts. Pottery in the backfill included unabraded fragments of a London-type ware jug dated to 1240–1350. The backfilling must have taken place shortly after the breakage of this vessel. The backfill deposits of the three succeeding phases were dated overall to 1050–1300. The second phase (four cuts) included sherds of London Coarse

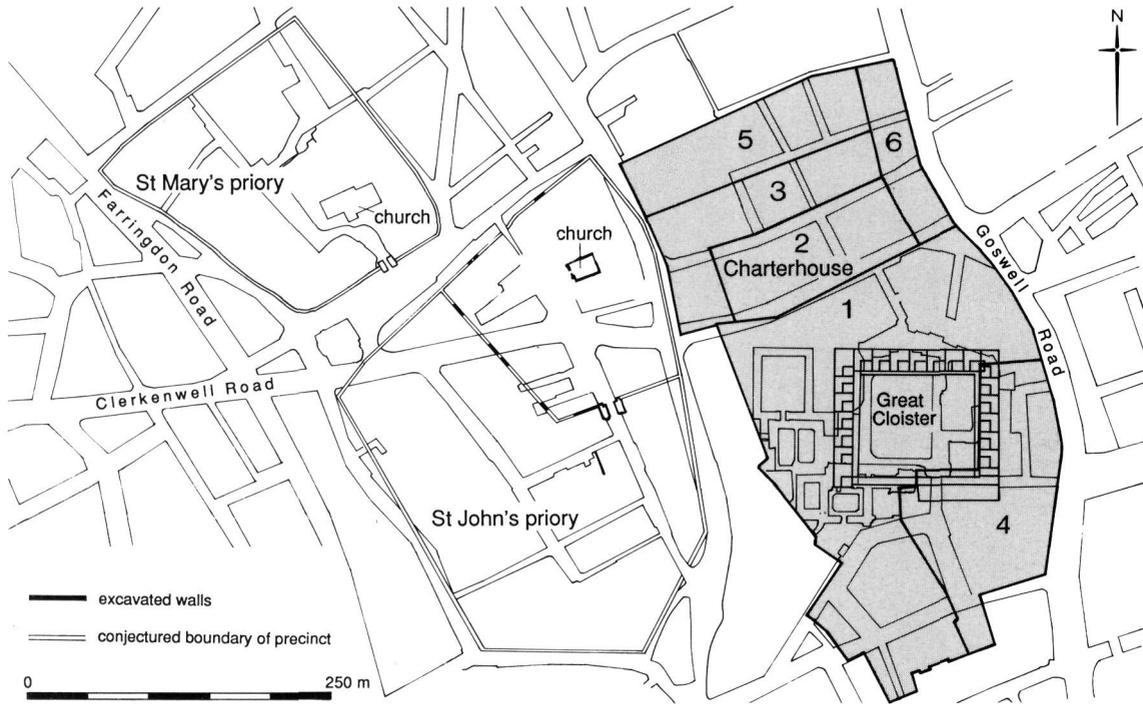


Fig 3. Monastic Clerkenwell in the medieval period with land acquired by Charterhouse numbered (based on Knowles and Grimes 1954, 19). 1. Spital Croft or New Church Haw. The 13 acres and rod of land used as graveyard. Acquired 15th November 1370; 2. The land identified as Pardon Churchyard. The three acre graveyard. Acquired 15th November 1370; 3. Land belonging to St John's Priory; Saint John's Meadow (Whitewell Beach). Acquired 1376; 4. Land belonging to St John's Priory; Saint John's Meadow (Whitewell Beach). Acquired 1377; 5. Land belonging to St John's Priory. Acquired 1384; 6. Land belonging to the Abbot of Westminster. Acquired 1391

ware jugs and abraded cooking pots and South Herts grey ware cooking pots. The third phase (four cuts) included Early Medieval sandy ware cooking pots, and Early Medieval shelly ware cooking pots. These sherds must have been residual. The fourth phase (four cuts) included a burnt fragment of Early Medieval chalky ware cooking pot, residual in the backfill material.

The first, third and fourth phase of quarry pits produced no environmental remains apart from poorly preserved bones, which suggested that these fills may have been redeposited. The pottery from the earliest phase was less abraded than that from the later phases, and was deposited at the time of backfilling with the remainder residual within the backfill material. A further undated backfilled quarry pit was recorded in Trench K2.

A large quarry pit was recorded in Trench J, with a north-south width of at least 3.50m. Base level was at 14.52m OD and it survived to a

level of 16.00m OD. The base level of this pit was c.0.50m higher than the base level of the quarry pits in Trench K1. This may reflect a higher ground level in this area of the site in antiquity.

This pit retained primary fills (surface level 15.00m OD) which had accumulated before backfilling during the period when the pit was open. There was no pottery in this primary fill. Invertebrate remains recovered from the primary fill indicated the presence of a standing, possibly temporary, body of water. Bones included the usual mammalian domesticates, a few fish bones and a single chicken bone from a male bird.

The quarry pit was subsequently backfilled. The backfill extended to the full surviving height of the cut, 16.00m OD. No pottery was found in the backfill. Fragments of pegtile with nail holes and glaze possibly dating before the late 15th century were recovered. Bones included cattle, sheep/goat, pig, horse, chicken and two owl



Fig 4. Dayne's map of the Clerkenwell estate of Charterhouse, 1654/5

bones (possibly tawny). Features which postdated this backfill were dated to 1380–1500.

To the south of the quarry pit a soil layer which directly overlay the floodplain gravel (top level 15.79m OD, base below 15.01m OD) was dated to 1240–1350. Pottery included fragments of London-type ware jugs and South Herts grey ware cooking pots.

Well

The backfill of the quarry pit in Trench J was cut through in preparation for the insertion of a well. This was lined with a reused cask 1m wide, made from radially cleft oak staves. The headpiece of the cask had been removed. Base level of the well was 14.29m OD, and the timber

survived to a level of 15.24m OD. Traces of the decayed roundwood hoops were apparent in the deposit surrounding the cask. Unfortunately the timber was not dendrochronologically datable. The cask itself was not datable by typology, as cooperage technology did not change until the advent of machine technology in early 19th century (Kilby 1971, 65).

The disuse of the well was marked by its backfilling. Pottery recovered from the backfill was dated overall to 1380–1500. This included London-type ware jug and cooking pots, South Herts grey ware cooking pots, Coarse Border ware cooking pots and jugs. Bones in the backfill were almost entirely those of the major mammalian domesticates with a few bird (probably chicken) and fish bone (including a dermal denticle of a thornback ray).

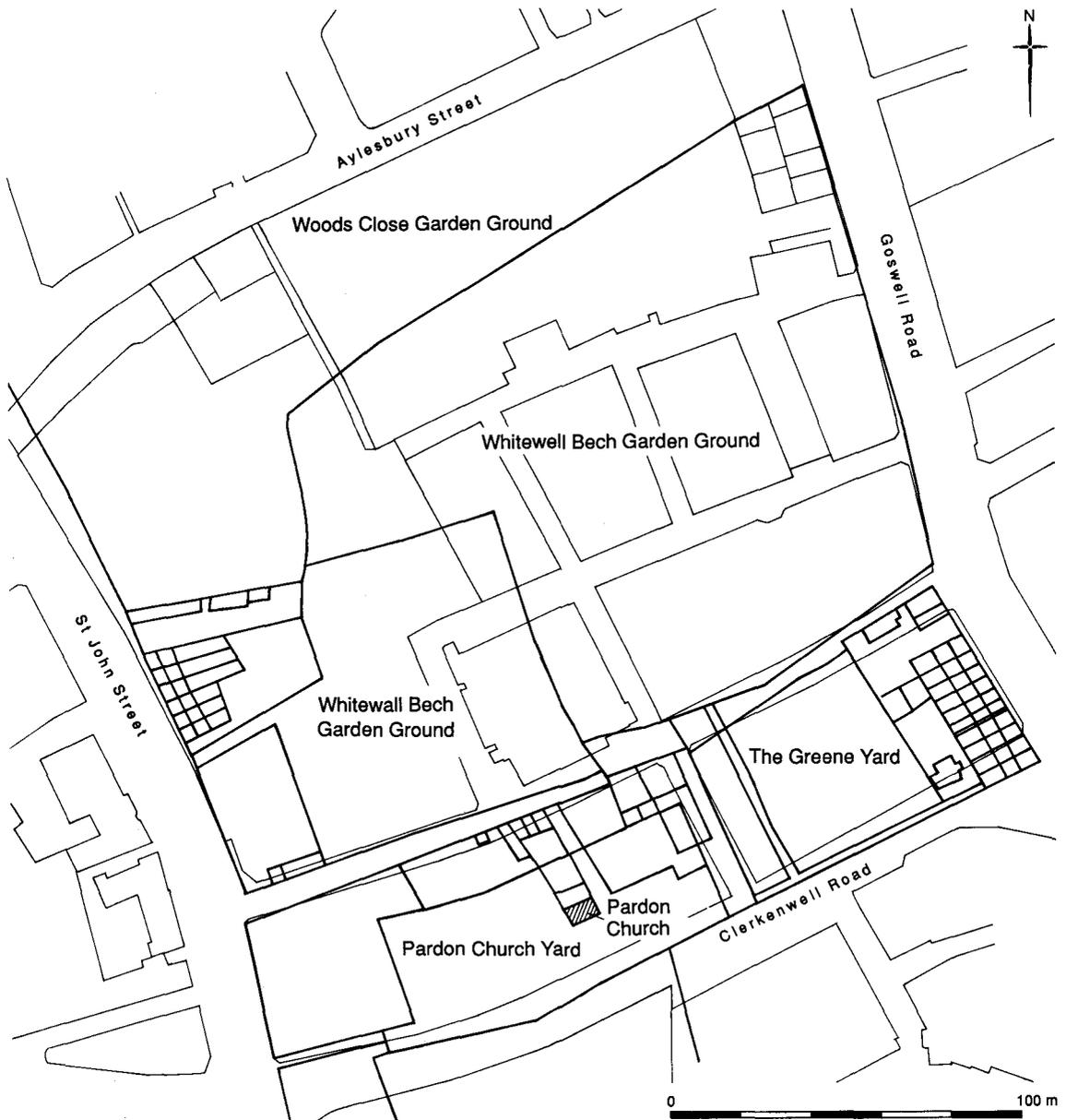


Fig 5. Dayne's map superimposed onto the modern street plan with field names annotated from Dayne's map

Boundary ditch

The truncated base of a north-south linear ditch or field boundary was recorded in Trench K2. This had been backfilled with a material similar to that of the quarry pits in Trench K1. Base level was 14.84m OD and it was truncated at 15.35m OD. The backfill included no finds or environmental evidence. This ditch would appear

to be close to, or on the alignment of, the western boundary to the Nun's Field (Fig 1).

Plough soil

Sealing the backfilled well and the sub-soil in Trench J was a plough soil dated to 1500–1600 (truncated top level 16.65m OD). As well as the

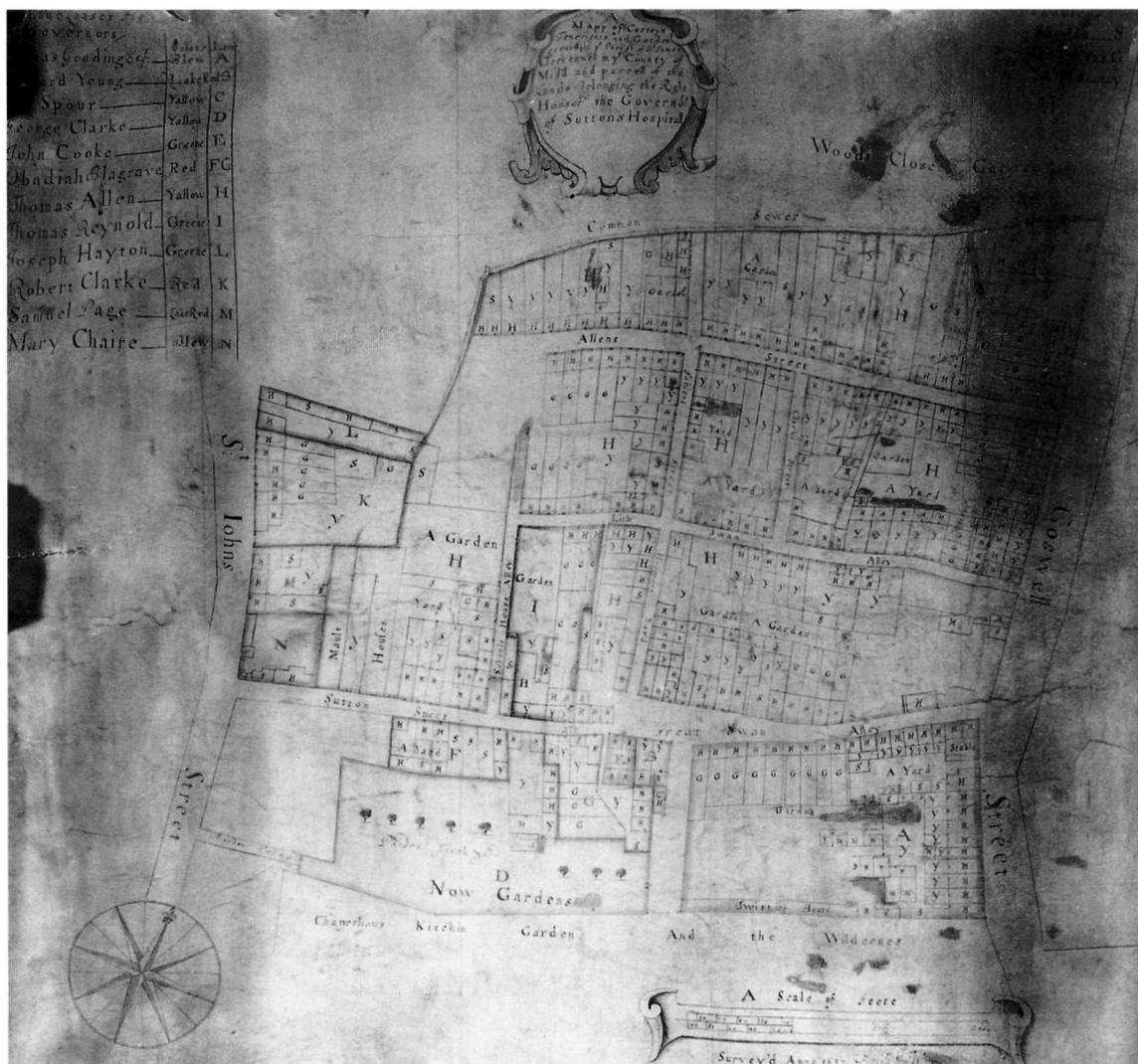


Fig 6. 'Plan of the Clerkenwell Estate' of Charterhouse by William Mar, 1687

usual domesticates (cattle, sheep/goat, pig) bones of dog and fallow deer were recovered.

The only deposition recorded in Trench A was a plough soil, dated by pottery to 1600–1700.⁶ Finds recovered from this included fragments of yellow glazed Border ware pipkin and bowl, red Border ware pipkin and bowl and English tinglazed ware charger and bowls.

Conclusion

The Nun's Field was held by the nunnery of St Mary by 1197. Quarry pits had been

excavated in the field, and eighteen were recorded during this excavation. Pottery dated their backfilling to 1240–1350. This had been undertaken to consolidate the ground surface. The most reasonable expectation is for the quarry pits in the field to have been dug during the period after the mid 12th century (the date of the foundation of the nunnery of St Mary), possibly for construction work, maybe on the nunnery or St John Street. The pits were then backfilled by the mid to late 14th century. The western boundary ditch of the Nun's Field had also been backfilled, probably during this period.



Fig 7. Excavation of quarry pits in Trench K1. Trench K2 in background

The backfilling of a well in the Nun's Field was dated 1380–1500 by pottery and subsequently sealed by plough soil dated to the 16th/17th centuries. A change in the style of land management would be expected in this area from the mid 16th century as an effect of the dissolution of the nunnery of St Mary in 1539. Backfilling was probably undertaken in relation to the sale of the field to Lord Chancellor Wriothesley in June 1545. By 1603 the field was known as Wood's Close. The field is shown as built up on the Ogilby and Morgan map of 1677.

ST JOHN'S MEADOW 1165/82–1654/1687

A portion of the site is located to the south of a field boundary, within 'Whitewell Beach' or 'St John's Meadow' (its location is shown on Fig 5).

'Whitewell Beach Meadow' is referred to in the late 12th century; by 1165–82, a lane led from Witewellebech through to the nuns' garden on the Holborn (River Fleet) (Sloane in prep,

section 4.6). It is known that Whitewell Beach Meadow was also known as St John's Meadow; 'Seynt John Medue... called White Welle Beche Medue'.⁷ This identifies the field as property of the priory of the Order of the Hospital of St John of Jerusalem which was founded in about 1144.

Between 1376 and 1377 the field passed into the ownership of the newly-founded Carthusian monastery of Charterhouse. Knowles and Grimes (1954, 19) detail the sequence and patterns of growth of the land owned by Charterhouse. This can be summarised with reference to their plan, the information from which is reproduced in Fig 3.⁸ This places the south part of the site within the outer precincts of Charterhouse monastery.

The Bishop of London, Michael de Northburg, had suggested to Sir Walter Manny that a Carthusian monastery be founded on the site of the Black Death cemetery at Spital Croft (Fig 3, 1). The Bishop left £2,000 in his will, made four months before his death in September 1361, to found the monastery (St John Hope 1925, 294).

Nine years later the arrangements were made by Manny and Prior Dom Luscombe of the Carthusian monastery at Hinton, Somerset.

In 1370 the General Chapter at La Grande Chartreuse confirmed the foundation, making Luscombe the Rector. The house was dedicated to the Salutation of the Mother of God and was a foundation for 24 Carthusian monks, although by the Dissolution it may have had as many as 30 (Davies 1921, 102–3). Stow quoted a charter dated 28th March 1371 which noted ‘we have acquired thirteen acres and a rood of land without the bar of West Smithfield...in a place called le Spittle Croft but now called le Newe Church Hawe...’ (Stow 1603, vol ii, 82).

After the Dissolution in 1537 the Charterhouse was sold in 1545 to Edward North who sold the estate on to the Duke of Northumberland in 1553. The Duke was subsequently executed and North regained the property before reselling it in 1565 to Thomas Howard the 4th Duke of Norfolk. Howard was executed in 1572 (Schofield 1995, 171–2). In 1611 the Charterhouse was bought by Thomas Sutton, who had previously provided for a charity with the purpose of establishing the hospital for poor brothers and the Charterhouse school. The charity dates from 1611, the year of Sutton’s death, and the governors first met in 1613.

The Clerkenwell estate of Charterhouse is depicted on Dayne’s map of 1654/5 (Fig 4) and can be seen on Fig 5. The map shows ‘Whitewell Beach Garden Ground’ as largely undeveloped, with only the frontage onto St John Street as built up. The Ogilby and Morgan map of 1676 shows the development as spreading back from St John Street across the field into ‘Gardners Gardens’ (a renaming of Whitewell Beach Meadow). In the 1687 plan by William Mar (Fig 6) the area is fully built up with the modern street plan recognisable. The late 17th-century development of formerly open land was a consequence of the Great Fire of 1666.

An archaeological watching brief undertaken by MoLAS in April 1997 at 1–7 Dallington Street, within the former Whitewell Beach Meadow, produced evidence for an agricultural soil horizon overlying the geological deposit (Miles 1997, 16). Fragments of medieval tile were recovered from this deposit.

Boundary ditch – reuse

In the south-west of the site in Test Pit A a linear cut feature aligned roughly north-south was

recorded (Figs 1, 8). Base level was 13.58m OD. Overall the backfill was dated to the mid 12th to late 13th centuries by finds which included South Herts greyware cooking pot and flanged roofing tile in fabric 2273, a distinctive sandy fabric dating from the mid 12th to late 12th/early 13th centuries.

The backfill was sealed by a horizontal gravel metalling with a surface level of 14.37m OD. This was dated to 1270–1350 by fragments of Mill Green ware jug. Water flea eggs were recovered from the metalling, an indication of the sporadic presence of water as these crustacea lay their eggs in water in the months leading up to winter. A deposit which partially extended across the east edge of the metalling was also dated overall to 1270–1350 by Mill Green and London-type ware jugs and sherds of Kingston-type ware which included cooking pots and jugs. The backfill, metalling and deposit overlying the metalling produced fragments of sheep/goat and cattle bone.

Plough soil (1300–1350)

Sealing the surface was a plough soil (truncated at 14.83m OD) which included pottery dated overall to 1300–1350 (Fig 8). Finds included fragments of a Kingston-type ware cooking pot, jug also a South Herts grey ware jug. The botanical remains recovered (occasional charred bread wheat and rye grains and fig seeds) did not add to the interpretation of the layer. Bones

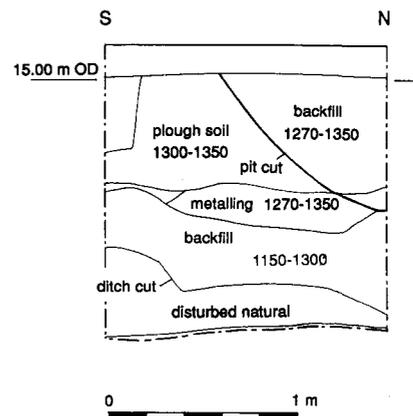


Fig 8. Test Pit A elevation through backfilled ditch at west edge of Whitewell Beach Meadow, with metalling dated 1270–1350

recovered included pig, horse, and a relatively large number of fish bones.

A pit cutting through the plough soil (base level 14.28m OD) was recorded with a backfill dated to 1270–1350 (Fig 8). Pottery included Mill Green and Kingston-type ware jugs, and a London-type ware baluster jug. Again, the botanical evidence (bread wheat and rye grain and grape seeds) did not add to the interpretation of the deposit.

Plough soil (1600–1750)

In other areas of St John's Meadow plough soil dated overall to 1600–1750 overlay the natural deposit.⁹ In Trench F a dump sealing the plough soil pottery included fragments of red border ware bowls and chamber pots. In Trench H the plough soil included fragments of Montelupo tin glazed *tazza* and a fragment of a German beaker made of clear glass, fluted, and with applied horizontal ribs, dated to 1600–50.

Conclusion

Whitewell Beach Meadow was established by the late 12th century, and was probably set out shortly after the mid 12th century-foundation of the Priory of St John Of Jerusalem, which held the land. A boundary ditch at the west edge of Whitewell Beach Meadow was infilled by the mid 14th century, with its alignment reused as a pathway, with a surface level some 4m below modern street level. The pathway fell out of use, and by a later date in the 14th century, plough soil extended across the former boundary, which was defunct. The recording of a rubbish pit in this area further demonstrates the loss of the boundary.

A change of land-management style would be expected in this field after 1370, when it came into the ownership of Charterhouse. The boundary ditch itself would date from the period when the field pattern was set out, at least 1165–82, probably at the time of the foundation of the Priory of St John, c.1144. Subsequent boundaries may have been cut into the newly lain soils, but were truncated when the modern standing buildings were constructed.

Towards the centre of Whitewell Beach Meadow, plough soil which dated to the 17th–18th centuries was recorded. These dates

indicate agricultural activity undertaken after the dissolution of Charterhouse in 1537 and the passing of the field into private ownership. The field then passed into the ownership of Charterhouse school from 1611. By the late 17th century the field area had become fully built up.

THE BOUNDARY BETWEEN THE NUN'S FIELD AND ST JOHN'S MEADOW

By the early 17th century Charterhouse had begun to manage the properties on the lands which had been acquired by the monastery at its foundation in the 14th century. The extent of these properties is depicted on 'Map of Whitewell Beach and Pardon Churchyard showing the property belonging to Charterhouse'.¹⁰ This is dated 10 March, 1654/5 and was drawn by Richard Dayne (Fig 4). The limit to the holding is shown as a curved boundary to the south from east to west across the area of the site. The information from this plan has been superimposed onto the modern street plan (Fig 5) which details the field systems in the area, and locates the property boundaries. A stone plaque set into the present east facing wall of Compton Passage defines the limit of the Charterhouse holding with the words; 'This Is The Property Of The Charterhouse'.

The field boundaries shown on Figs 4 and 5 are in different positions to those indicated by Knowles and Grimes (Fig 3). Fig 5 is based on historic maps, rather than documentary evidence, and the current street lines and property boundaries are congruent with those of Dayne's map of 1654/5.

The same property boundary lines are shown on the 1687 'Plan of Clerkenwell Estate' (of Charterhouse) by William Mar (Fig 6).¹¹ The curved boundary between the former Whitewell Beach Meadow and Woods Close is entitled 'common sewer', no doubt an open feature.

A further representation of the same property boundary is on the 1739 map 'Plan of property belonging to Charterhouse on the north side of Wilderness (Clerkenwell Road) formerly known as Pardon Churchyard, Cophall and Whitewell Beach' by William Wyeth (not illustrated).¹²

As the curved boundary line is perpetuated on at least four maps it is possible that the shape of Whitewell Beach Meadow is misrepresented on the 1430s plan, which may have focused on the

detail of the water supply, rather than the intricacies of property boundaries.

Boundary ditch

In Trench C an east-west ditch was recorded with a base level of 15.37m OD (Figs 1, 9). It was truncated at 16.83m OD. The north-south width of the ditch was 4.30m.

The deposit interpreted as the primary fill of the ditch (top level 16.03m OD) included seeds of plants of waste places and disturbed ground and several possible hedgerow plants. The presence of water flea eggs and seeds of the aquatic, celery-leaved crowfoot indicated a standing, possibly temporary, body of water. Beetle fragments were also recovered. No pottery was found in this deposit.

The backfill which sealed the primary fill (and which survived to the full level of the ditch at 16.83m OD) was dated to 1550–1650. Finds included multiple fragments of a Werra ware dish. Bone recovered included a few frog/toad bones amongst a number of cattle/sheep-size fragments.

The backfill of a quarry pit immediately adjacent to the south side of this ditch included pottery dated overall to 1550–1750. Base level was 16.16m OD.

Trench J was excavated to the west of Trench C to further explore the extent of the ditch. However, it was found that the feature had not continued along a straight line, and had missed Trench J entirely. Therefore the ditch was that known as the common sewer.

Conclusion

This ditch was the boundary between Whitewell Beach Meadow and the Nun's Field, and marked the northern limit of the land owned by Charterhouse. Excavation demonstrated that the ditch did not continue directly west from Trench C, and followed the alignment shown on the 17th-century map. It had clearly been open for some time, and the level of the ground surface was raised after backfilling, and subsequent truncation removed evidence of the boundary.

A property boundary in this location between the two fields was probably in place from the late 12th-century, though the earliest archaeological evidence is the backfilling of the ditch in 1550–1650.

PARDON CHURCHYARD 1348–1834

The site was close to two medieval parcels of land, within the fields to the north of St Bartholomew's priory, which in 1348/9 were set aside for the burial of victims from the Black Death (Knowles & Grimes 1954, 17–18). Knowles and Grimes have suggested the locations of each parcel of land (Fig 3, 1 and 2).

The first parcel of land, known as the Spital Croft, was leased from St Bartholomew's by Sir Walter Manny. This land lies approximately under present day Charterhouse Square and the Charterhouse itself (*ibid*, 5). Spital Croft means Hospital Field, a reference to its former ownership by St Bartholomews (Taylor 1912, 16).

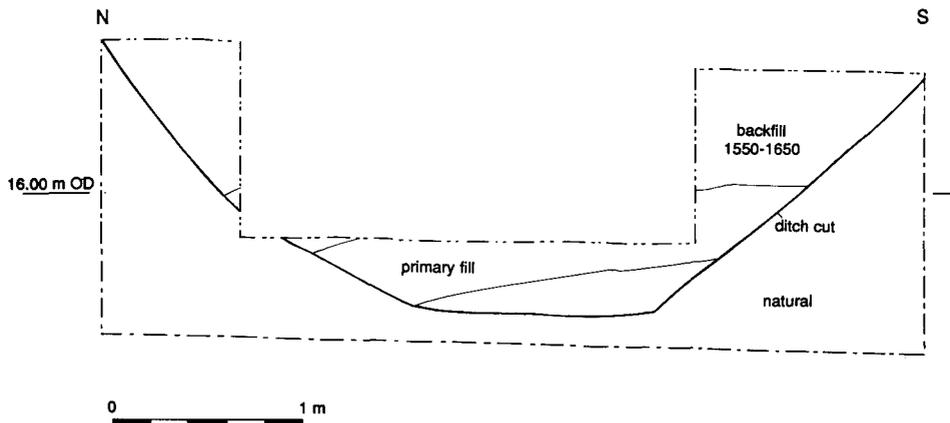


Fig 9. Trench C elevation through boundary ditch between Whitewell Beach Meadow and the Nun's Field, backfilled 1550–1650

The second plot was purchased by Ralph de Stratford, Bishop of London from 1340 to 1354, from the priory of St John. He purchased three acres of land which lay 'between the lands of the Abbot of Westminster and the lands of the priory of St John of Jerusalem' (Davies 1921, 4). The land was to the north of modern day Clerkenwell Road and to the east of St John Street (Fig 3, 2). Upon this was built the Pardon Chapel, constructed within the Pardon Churchyard which remained in use until after the Dissolution.

The location of Pardon Churchyard and Pardon Chapel is shown on the modern transposition (Fig 5) of Dayne's map of 1654/5. The 1687 William Mar plan also shows these features in the same position (Fig 6). Area no.2 on the Knowles and Grimes plan (Fig 3) is the same as that indicated as Pardon Churchyard on Figs 4, 5, 6.

Stow (1603, vol ii, 81) gives an account of the use of the Pardon Churchyard. A piece of ground called 'No Mans Land' was bought and '...enclosed with a wall of Brick and dedicated for the burial of the dead, builded thereupon a proper Chapel, which is now enlarged and made a dwelling house, and this burying plot is become a fair Garden, retaining the old name of Pardon Churchyard' (Stow vol ii, 81). 'Sir Walter Manny...purchased thirteen Acres and a rode of ground adjoining...No Man's Land ...in this plot of ground there was in that year (1349) more than 50,000 persons buried, as I have read in the charters of Edward the third ...and it is to be noted that above 100,000 bodies of Christian people had in that Churchyard been buried...' (Stow vol ii 81–2). It would appear that 50,000, or even 100,000, burials is something of an exaggeration as the population of the city of London was in the order of 100,000 in the period prior to the Black Death.¹³

Stow goes on to say 'the three acres of land (*ie* the land purchased by Ralph de Stratford) lying without the walls on the north part...remained till our time by, the name Pardon Churchyard, and served for burying of such as desperately ended their lives, or were executed for Felonies, who were fetched thither usually in a close cart...and this was called the Fraerie cart, which belonged to Saint Johns' (Stow 1603, ii, 82).

The three acre plot noted by Stow was the original Pardon Churchyard, located to the north of and outside the walls of Charterhouse, to the north of Clerkenwell Road. The northern limit of this land is marked by the present day

Compton Street (St John Hope 1925, 19). This corresponds with the location of Pardon Churchyard as defined by Knowles and Grimes (Fig 3, 2) and the Mar plan (Fig 6).

An archaeological watching brief undertaken by MoLAS during March 1995 at 44–49 Great Sutton Street did not provide evidence for the presence of Black Death burials to the north of the street (Thomas 1995, 11). This would appear to confirm that the Pardon Churchyard is the area indicated on the Dayne map (Fig 4), to the south of Great Sutton Street.

In 1739 Maitland (1739, 764) stated that the quoins of the chapel were still extant. Pinks (1880, 371) states that human bones were recovered in the area of the chapel during building works in 1820 and 1834. It therefore seems unlikely that the Black Death cemetery at Pardon Churchyard extended north of Great Sutton Street to encroach upon the site.

THE WHITE CONDUIT 1431–1654

The White Conduit, the medieval water supply to Charterhouse, is known to have traversed land between St John Street and Goswell Road. It was thought that this feature may have been present on the site, but no evidence was found during the archaeological work. A brief discussion of the nature and course of the water supply is presented here.

In 1431 a water supply was brought into the cloister of Charterhouse from springs to the north. The water flowed through lead and elmwood pipes (St John Hope 1902, 297). A copy of the map of the route (with final annotations dated to 1512) (Fig 2) shows the water brought to a conduit in the centre of the Great Cloister.

The springs which supplied the water were located at Overmead in the manor of Barnsbury (*ibid*, 296), to north-west of the present day Angel, Islington area. The map (Fig 2) depicts the route taken by the pipe across the land to the north of Charterhouse. In the area of the site the conduit traverses land owned by St John's Priory between two roads; St John Street to the west and Goswell Road to the east (*ibid*, 297). The route followed by the conduit is to the west of the centre line between St John Street and Goswell Road, possibly across the site.

The conduit runs through the 'Nun's field' and then crosses a ditch into 'Seynt John

Medue... called White Welle beche medue'. To the south of this meadow is a further ditch and a tank ('spurgell') to the west of the pipe. After this ditch the pipe crosses land shown as having a church or chapel within it. This is the Pardon Chapel. Apart from the chapel the land is not built up and can be assumed to have been undeveloped prior to the construction of the Pardon Churchyard and any attendant features. The ditches are depicted as linear, aligned roughly east-west. It must be noted that the emphasis of this plan was placed on the conduit rather than detail of the land.

In 1654 the White Conduit pipes were cleaned as the water supply proved so minimal (Tomlins 1858, 165). The governors of Charterhouse abandoned the conduit in favour of water from the New River in 1767. Construction of the New River had begun in 1607 and it was in use by 1613.

None of the trenches excavated on site revealed evidence for the conduit. It is unlikely that it would have been removed by truncation as features from similar date ranges did survive to be recorded. Possibly the route followed was to the east of the site, along the line of Malta Street and Berry Street.

POST MEDIEVAL: THE BUILD UP OF THE SITE

The plan of the water supply to Charterhouse (Fig 2; compiled in the 1430s) does not show development along St John Street in the area of the site implying that settlement during this period was to the south of the site (closer to Charterhouse). In 1525 117 contributors to a subsidy were listed as living along St John Street between Charterhouse and the priory of St John (Taylor 1912, 38). Eleven of those listed were servants of Charterhouse.

The Agas map of c.1559 (not illustrated) depicts the area in some detail. Unfortunately the map was drawn on separate sheets, and the site is located at the join (and gap) between two sheets. The east side of St John Street is built up and property boundaries in the area are clearly visible. Otherwise the site does not appear built up.

The former Nun's Field was known as 'Wood's Close' by 1603 and was presumably still open land (Cromwell 1828, 269–270). By the time of

Ogilby and Morgan's map in 1676 the site area within Wood's Close had become built up.

By 1677 development had spread back from St John Street into 'Gardners Gardens' (a renaming of Whitewell Beach Meadow). By 1687 the site area within the former St John's Meadow was fully built up. Later maps (beginning with the Mar plan of 1687) depict the site as built up with a street pattern virtually the same as that of today.

A brewery was founded on the site by 1739 (King 1951, 3), possibly during the 1720s (Poole 1984, 52), by Rivers Dickinson. The Rocque map of 1745 shows the Horseshoe Brewhouse within the site. In 1751 the building was renamed the Cannon Brewery (King 1951, 1), and Rivers Dickinson had moved to 192 St John Street (Faulkner 1988). Presently standing on the site are some of the buildings from the Cannon Brewery which was substantially rebuilt in 1893 (King 1951, 10). In 1929 the ownership of the brewery had passed to Taylor Walker, subsequently a member of the Allied Breweries Group (*ibid*, 22).

The results of the fieldwork

In Trench D a brick lined rectangular cesspit and its fills were recorded. The bricks used in the lining were of a post Great Fire type. The base level 15.66m OD was truncated at a level of 16.74m OD. The primary fill survived with a top level of 15.87m OD.

Fifteen very small fragments of apparently mineralised textile were recovered from the primary fill. These fragments were too small for useful analysis but appeared to have come from at least two different cloths, with one weave being much coarser than the other.

A complete flask-like glass bottle, 128mm high and pale green in colour, was recovered from the primary fill (Fig 10). This was examined by Geoff Egan who contributed the following analysis. It has a tall, narrow neck with a wide body slightly flattened to an oval shape and tapering towards the neck. The body has ribbing spiralling around it. The flask was apparently made in two pieces with the neck clumsily luted to the body. Flasks of this type are relatively common in the Netherlands where they are thought to have been made in Germany or the French/Belgian border region in the late 15th century and the first half of the 16th century. In

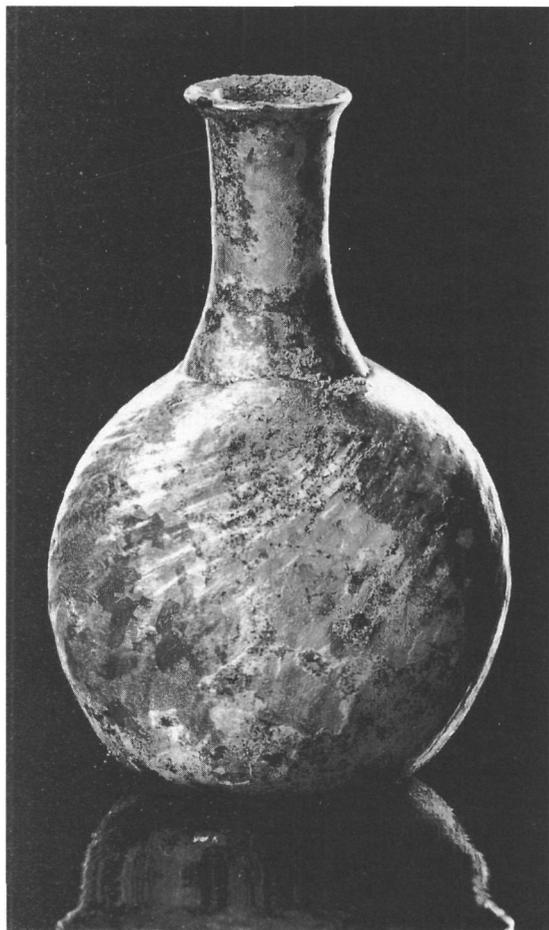


Fig 10. Flask, made in Germany or the French/Belgian border region in the late 15th century and the first half of the 16th century. Used in the Netherlands for perfume, medicine or holy water

the Netherlands these flasks are generally believed to have held perfume, medicines, or possibly holy water. Although their contents may have been valuable the flasks themselves seem to have been fairly disposable objects. In this country these flasks are much rarer, and no close parallels are known here for a flask constructed in quite this manner.

The primary fill of the cesspit also included the usual unidentifiable mammalian domesticated bones, a few small rodent fragments, a reasonable number of fish bones and a cat skull. A high number of mineralised remains, which consisted predominantly of fruit seeds were also recovered. The remainder of the botanical assemblage did not add to the interpretation of the feature, and

included mainly the seeds of weeds of waste places and disturbed ground.

Other areas of the site revealed post 17th-century activity at the top of the stratigraphic sequence. These features included post holes in Trench D, levelling layers and dumps Trenches E, F, and G. In Trench B, only modern demolition rubble was observed.

THE ENVIRONMENTAL EVIDENCE

John Giorgi

Introduction

During excavations at the site environmental soil samples were collected for the recovery of biological data, including plant, animal and invertebrate remains. This report is concerned with the analysis of the botanical material and the information that it may provide towards our understanding of the local environment of the different areas of the site and how this may have changed over time. Evidence for human/economic activities in the area is also considered.

A total of 18 samples were collected, 13 from Trenches D, J, K1 and K2 in the Nun's Field and four from Test Pit A in St John's Meadow. One sample was also collected from Trench C, on the boundary between the two fields. The samples were taken from the fills and backfills of quarry pits (10), ditches (3), other pits (3), and layers (2), with the features ranging in date from the 11th to the 17th century.

The size of individual samples was between 10 and 20 litres; these were processed in their entirety by a combination of flotation and wet-sieving in a Siraf tank, using sieve sizes of 0.25mm and 1mm for the recovery of the floating organic remains (flot) and residue respectively. The residues were dried and sorted for large and small mammal, amphibian, fish and bird bones, plus any botanical material which had not floated. The identification of the plant remains and any other biological material from the flots was carried out using a binocular microscope.

Plant remains were recovered from 14 of the 18 samples. Preservation of plant remains by waterlogging was generally good, with an abundance of waterlogged seeds in many samples and a moderate to high species diversity. These represented both wild plants and potential

economic species. Fragments of wood, stem, root, unidentifiable plant tissue and mosses were recovered from most samples. Charred remains consisted of low numbers of cereal grains in five samples, and small fragments and flecks of charcoal in all samples. Mineralised seeds were found in three samples although virtually all this material, mainly from fruits, was from the primary fill of a 16th-century cesspit in Trench D. The results are shown in Table 1 and will be discussed by area.

The Nun's Field

Twelve samples were collected from trenches in the Nun's Field from deposits contemporary with the ownership of the field by St Mary's.

Quarry pits

Three samples were collected from the large quarry pit in Trench J; from two primary fills which accumulated while it was left open and from the backfill of the quarry pit. The backfilling was dated to the 13th to 14th centuries.

All the samples produced a large number of seeds with similar plant assemblages with respect to the habitats that the species represented. The majority of the seeds were from plants of waste places and disturbed ground. For example, stinging nettle (*Urtica dioica*), white horehound (*Marrubium vulgare*) and goosefoots/oraches (*Chenopodium/Atriplex* spp.), were present throughout the sequence. Two other plants, fool's parsley (*Aethusa cynapium*) and sun spurge (*Euphorbia helioscopia*), typical weeds of cultivated ground, were also well represented in all four features. The presence of these and other characteristic arable weeds, eg corn spurrey (*Spergula arvensis*), might suggest that crops were being grown or cleaned nearby. A damp/wet environment is suggested by the presence of wetland plants throughout the sequence, eg celery-leaved crow-foot (*Ranunculus sceleratus*), 'buttercups' (*Ranunculus acris/repens/bulbosus*), sedges (*Carex* spp.), and rushes (*Juncus* spp.). Cladoceran (ephippia) resting eggs were found in the samples from the two primary fills of the large quarry pit in Trench J, which suggests standing bodies of water in the quarry pit; these crustacea lay their eggs in water in the months leading up to winter.

There was little evidence for food and other economic plants; occasional charred bread wheat (*Triticum aestivum* s.l.) and barley (*Hordeum sativum*) grains and waterlogged fig (*Ficus carica*) and grape (*Vitis vinifera*) seeds were recovered from the two primary fills of the large quarry pit in Trench J. Some of the elder (*Sambucus nigra*), blackberry/raspberry (*Rubus fruticosus/idaeus*) and strawberry (*Fragaria vesca*) seeds may also represent the residues of consumed food.

The backfills to seven other quarry pits were sampled in Trenches J, K1 and K2. Only three of these samples produced very small botanical assemblages, of which only one was from a datable feature, the backfill of the second of four successive phases of quarry pits in Trench K2 dated to 1240–1350. This sample contained a mineralised oat grain (*Avena* sp.), blackberry/raspberry and greater celadine (*Chelidonium majus*) seeds, the latter a plant of banks, hedgerows and walls. Little interpretation can be made on the basis of this small quantity of material.

Well

One sample was taken from the backfill of a well dug into the backfill of the large quarry pit in Trench J. The backfill of the well was dated to between 1380 and 1500. A mineralised oat grain and hemp (*Cannabis sativa*) seeds were found in the backfill of the well.

St John's Meadow

Four samples were analysed from Test Pit A; the first from the mid 12th to late 13th century backfill of a boundary ditch; the second from a late 13th to mid 14th century deposit overlying the metalling which sealed the ditch infill; the third from an early to mid 14th century plough soil; and the fourth from the late 13th to mid 14th century fill of a rubbish pit which truncated the plough soil.

A comparison of the different plant assemblages suggests no significant change in the character of the local environment over the time span of the samples. Thus, common plants of waste places and disturbed (including arable) ground were well represented throughout the sequence, with a similar range of species to those recovered in samples from the Nun's Field; eg stinging nettle, knotgrass (*Polygonum aviculare*), stinking mayweed

Table 1. (Cont.)

Species	Common name	Habitat context sample no.	1	2	2	3	3	4	5	6	34	119	7	8	120	9	111	136	11	120	14	157	16	163	17	170	18	
<i>Achusa cynapium</i> L.	fool's parsley	A	+																									
<i>Conium maculatum</i> L.	hemlock	CEG		+																				+	+			
<i>Torilis</i> spp.	hedge-parsley	ACD		+																								
cf. <i>Bryonia dioica</i> Jacq.	bryony	CG																										
<i>Euphorbia helioscopia</i> L.	sun spurge	AGI																										
<i>Polygonum aviculare</i> agg.	knotgrass	ABG		+																								
<i>Fallopia convolvulus</i> (L.) A. Love	black bindweed	ABF																										
<i>Polygonum</i> spp.	—	ABCDEF	+																									
<i>Rumex</i> spp.	docks	ABCDEF																										
<i>Urtica urens</i> L.	small nettle	AB																										
<i>Urtica</i> L.	stinging nettle	BCDEFGH		+																								
<i>Cannabis sativa</i> L.	hemp	BGHI																										
<i>Ficus carica</i> L.	fig	FGI																										
<i>Solanum</i> spp.	nighshade	BD																										
<i>Lycopus europaeus</i> L.	gipsy-wort	EH																										
<i>Lamium</i> spp.	dead-nettle	ABC																										
<i>Lamium purpureum</i>	red dead nettle	AB																										
<i>Nepeta cataria</i> L.	cat-mint	C																										
<i>Marrubium vulgare</i> L.	white horehound	BG																										
<i>Labiatae</i> indet.	—	—																										
<i>Sambucus nigra</i> L.	elder	BCFGH																										
<i>Anthemis cotula</i> L.	stinking mayweed	ABGH																										
<i>Arctium</i> spp.	burdock	BCD																										
<i>Carduus/Chrysium</i> spp.	thistles	ABDEG																										
<i>Lapsana communis</i> L.	nipplewort	BCF																										
<i>Sonchus oleraceus</i> L.	milk-/sow-thistle	AB																										
<i>Sonchus</i> spp.	milk-/sow-thistle	ABE																										
<i>Juncus</i> spp.	rush	ADEH																										
<i>Carex</i> spp.	sedges	CDEH																										
Gramineae indet.	—	ABCDEFHI																										
Indeterminate	—	—																										
Indeterminate	stems	—																										
Indeterminate	wood fragments	—																										
Bryophyta indet.	moss	—																										

KEY to habitat codes: A = Weeds of cultivated land; B = Ruderals — weeds of waste places and disturbed ground; C = Plants of woods, scrubs and hedgerows; D = Open environment (fairly undisturbed); E = Plants of damp/wet environments; F = Edible plants; G = Medicinal and poisonous plants; H = Commercial/industrial use; I = Cultivated plants. Frequency: + = 1–10; ++ = 11–50; +++ = 51–100; ++++ = 101–500; +++++ = 500 plus plant items.

(*Anthemis cotula*), white horehound,ampions/
stitchworts (*Silene/Stellaria* spp.), thistles (*Carduus/
Cirsium* spp.) and goosefoots/oraches.

Archaeobotanical evidence for small trees and shrubs included seeds of blackberry/raspberry, elder, and plum/bullace (*Prunus domestica* s.l.). These are all potential food plants and may simply represent the deposition of food waste rather than being a reflection of the local flora. A small range of other plants, characteristic of wetland habitats, was also represented in the samples, eg celery-leaved crowfoot, 'buttercups' and gipsy wort (*Lycopus europaeus*). Freshwater molluscs in the samples from the mid 12th to late 13th-century backfill of a boundary ditch and, together with cladoceran, in the late 13th to mid 14th-century fill of a pit, suggesting standing, or possibly slow-moving water in the ditch.

Evidence for food debris was represented by a few charred cereal grains of bread wheat and rye (*Secale cereale*) in the early to mid 14th-century plough soil, the mid 12th to late 13th-century ditch backfill, and the late 13th to mid 14th-century fill of a rubbish pit. Other food residues include fig and grape seeds (from the plough soil and rubbish pitfill respectively), and some of the seeds from the fruits listed above, eg plum/bullace, elder, and blackberry/raspberry.

Boundary ditch between the Nun's Field and St John's Meadow

A sample from the primary fill of the boundary ditch in Trench C (dated to before the mid 16th to mid 17th centuries) contained seeds from plants of waste places and disturbed ground, eg nettles, white horehound, chickweed and oraches, and also wetland habitats, eg 'buttercups' and celery-leaved crowfoot. There was little evidence to suggest the presence of a hedge except for seeds of elder and bryony (*Bryonia dioica*), the latter a plant of hedgerows, scrub and copses. Cladoceran indicate standing or slow moving water. The only definite food remains were fig seeds.

Post medieval: the build up of the site

One sample was recovered from the primary fill of the post 16th-century cesspit in Trench D. This sample contained a large number of

mineralised plant remains, which consisted predominantly of fruit seeds, although examples of calcified grains of oat were also recovered. The mineralised fruits included seeds of grape, fig, apple/pear (*Malus/Pyrus* spp.), elder and various berries, which could not be identified due to their poor state of preservation. Mineralised remains in cesspits provide strong evidence for the human consumption of foodstuffs (Green 1979). The remainder of the botanical assemblage consisted mainly of seeds of plants of waste places and disturbed ground, eg stinging nettle, goosefoots, and chickweed (*Stellaria media*). Occasional seeds of catmint (*Nepeta cataria*), a hedgerow plant, and sedges, were also identified.

Other biological evidence for the presence of faecal deposits included large numbers of mineralised puparia, although the feature also appears to have been used for the disposal of other food and domestic refuse, with the presence of large quantities of bone, and occasional brick/tile and glass/slag fragments.

Discussion

The environment

The plant remains from the different areas of the site do not show any significant variation in the range of habitats that are represented and suggest little change in the character of the local environment between the 12th and 16th centuries. Weed seeds of waste places and disturbed (including arable) ground are particularly numerous although many of these species are high seed-producing plants. Some of the weed seeds in the Nun's Field are characteristic arable weeds. This could suggest that either crops were being grown close by or that activities associated with crop-cleaning were taking place, with the features being used for disposing of the residues of such activities. Indeed, historical evidence corroborates the archaeobotanical evidence; in 1301 the monastery complained to the King (Edward I) of the damage to cereals by spectators attending wrestling and plays in the fields of Clerkenwell (Hassall 1949, 260N). The evidence for a small range of marshland and aquatic plants indicates damp conditions, while freshwater molluscs and cladoceran in some of the samples suggest standing or slow moving water in some features.

Diet

Archaeobotanical evidence for the use of plant foods is limited to occasional charred cereal grains, and mineralised and waterlogged fruit seeds.

The cereals

The cereals represented in the samples – bread wheat, barley, rye, and oat – are typical grains of both the medieval and post medieval period and are the most common species in samples from sites of both periods in London and throughout the country. In previous excavations in the precinct of St Mary de Fonte (Davis in prep a), and at St John's Priory (Davis in prep b), samples produced a similar range of cereal types. The grains in these samples may have become accidentally charred while being dried before storage or hardened in an oven prior to milling.

Cereal grains were used for bread, biscuit-making, cakes, pastry and in pottages, with bread wheat being the preferred grain for making good quality bread; for example, wheaten flour was mainly used for bread at Westminster Abbey (Harvey 1993, 59). Rye bread or maslin bread, made from a mix of rye and wheat flour, was eaten mainly by poorer people. Oats and barley were the main cereal grains for feeding livestock in the London area, while barley was the principal grain used for malting in the brewing industry. Bread and ale were the main staples in the medieval monastic diet. For example, at Westminster Abbey, bread and ale made up 60% of the daily consumption of foods, rising to 78% during Lent (*ibid.*, 56–7).

Fruits

The range of fruits identified in the samples was not particularly high with plum/bullace, fig, grape, elder, and blackberry/raspberry present in both monastic and post Dissolution samples. Most of the fruits were recovered from the post 16th-century cesspit.

The small seeded fruits – grape, fig, elder and blackberry/raspberry—are ubiquitous as archaeobotanical finds on medieval and post medieval sites in London because of the high number of excavated cesspits and rubbish pits.

Some of the fruits, for instance, the grapes, figs, and plums, may have been grown in the gardens attached to the two monastic institutions, while the fruit of elder, blackberry/raspberry and strawberry could have been collected from the wild. Figs and grapes were also imported as dried fruit from southern Europe; customs records for London between 1480 and 1481 show their import as dried fruits from Spain, Portugal and Italy (Cobb 1990).

All the fruits found in the samples were used in various ways as food and drink during the medieval and post medieval period (Wilson 1976). Fresh fruit was seldom consumed in the medieval and early post medieval period, as it was considered to be unhealthy (Weinsten 1990, 82); indeed, dried fruit (raisins, currants, figs and prunes) played a relatively important part in monastic diets during Lent (Harvey 1993, 56).

Leafy vegetables

The leaves of some of the wild plants, now considered to be weeds, and represented in a number of the samples from all periods of the site, may have been exploited for food from time to time, collected from gardens/wild habitats, and used in pottage or eaten as green vegetables. This includes the leaves of nettles, fat hen (*Chenopodium album*), goosefoots/oraches, docks (*Rumex* sp.), corn spurrey, mallows (*Malva* spp.), and some of the *Brassica/Sinapis* species. However, it is virtually impossible to establish whether or not these seeds represent the residues of such plants used as food.

Other possible food/economic plants

Several seeds of hemp were found in the backfill of the well in the Nun's Field. This plant was grown for its fibres as part of the textile industry, although it also grows as a weed of waste places. Some of the remaining plants represented in the samples may have been grown and used as flavourings, *eg* cat mint, or used as medicinal plants, *eg* white horehound and hemlock. The sedges and rushes may also have been collected and used as flooring or thatching materials. Again, however, these seeds may simply be the residues of the plants growing wild and never used.

Conclusions

The archaeobotanical remains from the site suggest little change in the environmental character of the area over time, with the presence of a range of wild plants and shrubs indicating a disturbed habitat, probably as a consequence of human activities nearby. The plant remains in the Nun's Field (and possibly in St John's Meadow) suggest that crops were being grown in the vicinity, corroborated by the historical evidence in the case of the former.

Plants with definite economic uses are poorly represented, in the form of a few cereal grains and a small number of fruits. This reflects the nature of the features from which the samples were collected, with the notable exception of the post 16th-century cesspit. Documentary records show a high consumption of food by the monastic order at St John's, with expenditure on cereals of wheat, barley and oats (Pinks 1880, 210), all of which were present in the monastic samples from both fields. It is not possible on the limited archaeobotanical evidence available to establish the relative importance of the different foodstuffs and certainly with regard to the historical evidence, it neither reveals the role of cereals relative to fruits, nor reflects an upper-class diet characteristic of monastic life during the medieval period (Harvey 1993, 34).

THE ANIMAL BONES

Kevin Rielly

Introduction

Bones were recovered from most areas of the site by a combination of hand retrieval and bulk sampling. The former method produced a grand total of 5 kg of bone (120 fragments), while a total of 10 samples (out of 18 samples taken) each provided less than 30 fragments, and five less than 10 fragments. Overall the condition of these bones is good, with the exception of those arising from the majority of the quarry pits.

All the bone-bearing contexts are relatively well dated (generally within one to two centuries) covering a period between the 12th and 18th centuries. A breakdown of these contexts, by period, is given in Table 2. These periods can essentially be divided into pre and post dissolution *ie* during and following the use of the nearby religious houses of St Mary and St John.

Table 2. Species representation – number of fragments

	Dating (centuries AD) +				
	12–14	14/15	16	17	17/18
Cattle	4	14	7	23	
Sheep/goat	*	4*	13	3	
Pig	*	3*	4	*	
Horse		1*		1	
Fallow deer			1	1	
Dog			1	1	
Cat					*
Chicken		*	2*	1*	
Owl (?Tawny)			2		
Frog/toad			*		
Small rodent					*
Fish	*	**		*	*
Cattle-size	1	15	14	3	
Sheep-size	*	1	9	4	
Cattle/ sheep-size	*	**	*	*	*

+ for contexts used within these date ranges see text.

* less than 10 fragments, ** 10 to 20 fragments.

The Nun's Field

Quarry pits

A large proportion of the pre Dissolution bone assemblage was recovered from the backfills of a series of quarry pits situated within the Nun's Field. In one of these pits (Trench J) there was found a series of primary fills dating between the 12th–14th centuries. Two samples were taken from these fills (see 12–14th-century sieved bones in Table 2). The small quantity of bones retrieved from these samples were largely contributed by the usual mammalian domesticates with a few fish bones and a single chicken bone from a male bird. A small proportion of this assemblage (sheep/goat and pig) could be aged, as shown in Table 3.

The quarry pit backfills provided 31 bone fragments, 23 of which arose from a single pit (in Trench J), with each of the remaining six pits producing between one to three fragments only. Poorly preserved bones were found in each of the latter pits, suggesting that these fills may have been redeposited. A single sample was taken from the Trench J pitfill, which provided a reasonable number of bones. The species identified from this pit (combining the hand recovered and sieved material) include all those shown in the 14th/15th-century assemblage in Table 2. Fish bones were relatively well represented in the sample, as were unidentifiable cattle/sheep-sized fragments. An unusual find

Table 3. *Age of cattle, sheep/goat and pig*

Species	Date*	Age
Cattle	14–15	2 >juvenile
	16	1 >juvenile, 1 mature
	17	2 mature, 1 adult
Sheep/goat	12–14	1 adult
	14–15	1 >juvenile, 1 mature, 1 adult
	16	1 juvenile, 4 >juvenile, 3 mature, 2 adult
	17	1 >juvenile, 1 immature
Pig	12–14	1 immature
	14–15	1 foetal/neonate, 1 immature
	16	2 >juvenile, 1 mature

* as Table 2

Age: *foetal/neonate*: earliest epiphyses unfused (*eg* proximal metapodial) and teeth unworn; *juvenile*: unfused early fusing epiphyses (*eg* distal humerus) and mandibular M2 unworn; *>juvenile*: fusion of latter epiphyses and M2 in wear; *immature*: unfused distal tibia and distal metapodials, and M3 unworn; *mature*: latter two epiphyses fused and M3 in early wear; *adult*: late fusing epiphyses (*eg* proximal femur) fused and M3 in advanced wear. For epiphysis and teeth age progression see Silver 1969.

are the two bones representing a middle-sized owl (possibly tawny owl). A chicken bone and a sheep/goat fragment were measurable (both from the Trench J pitfill). Both animals are clearly within the medieval size ranges for these species.

Each of the major species from the 14th/15th-century deposits is represented by a wide distribution of parts, looking either at the assemblage as a whole or at individual context assemblages. The presence of both processing and food waste suggests either a mixing of waste from various sources or from a single source which organised the butchery of whole animals (deadstock or livestock). There is certainly evidence of butchery, with examples, on cattle bones, of carcass (or carcass section) splitting and jointing. The ageing evidence from these pitfills and essentially from this period is rather poor (see Table 3), but it would appear that sheep/goat is represented by a variety of ages, indicating a mixed exploitation pattern (meat and secondary products). The presence of foetal/neonate pig bones (recovered from the pitfill sample) strongly suggests local breeding.

Well

A well shaft was cut through the previously described Trench J quarry pit backfill, and was itself subsequently backfilled. The well backfill

was dated to 1380–1500. A sample taken from the backfill revealed a reasonable assemblage composed almost entirely of the major mammalian domesticates (largely unidentifiable) with a few bird (probably chicken) and fish bones (including a dermal denticle of a thornback ray).

Plough soil (1500–1600)

The ploughsoil, sealing the backfilled well, provided the major part of the 16th-century assemblage shown in Table 2 (46 out of 54 bone fragments). As well as the ubiquitous mammalian and bird domesticates, this assemblage also produced dog and fallow deer. A wide distribution of skeletal parts is shown by each of the major domesticates. Several cattle and sheep/goat bones show butchery marks. The various chop and knife marks are probably the result of the following butchery events: dressing (cattle only), splitting (of the carcass), jointing and defleshing. In addition one of the fallow deer bones clearly displays a jointing mark. Age and size data are again very limited, although it would appear that sheep/goat is represented by a wide variety of ages and, where measurable, is within the size range of animals for this period.

St John's Meadow

Boundary ditch re-use

Bones were found in the backfill, metalling (forming a path) and partial covering of a ditch, which probably formed the western edge of St John's Meadow. The hand recovered bones from the three phases of this ditch amounted to four, two and two fragments respectively. A sample was taken from the layer which partially covered the metalling, dated to 1270–1350. Just two species were represented amongst the small number of hand recovered fragments *ie* cattle and sheep/goat, while the sample produced pig, horse and a relatively large number of fish bones. The single horse bone from this sample, a metatarsal, displays a cut mark which may have occurred during skinning.

Plough soil (1300–1350)

The fill of a pit was dated to the same period as the plough soil into which it cut. This pit was

found in Test Pit A with a fill dated to the late 13th to mid 14th centuries, and contained a small number of cattle and cattle-size fragments (the hand collected assemblage for this period in Table 2).

Plough Soil (1600–1750)

The 17th-century bones listed in Table 2 were derived from two extensive plough soils situated in Trench A (30 bones) and Trench F (seven bones). The former assemblage is dominated by cattle bones, all of which are either head or lower limb parts removed shortly after slaughter, rather than during butchery.

Species additional to the major mammalian domesticates include horse, fallow deer and dog, each of which are represented by single bones. In addition a few fishbones were found in the single sample taken. The horse and dog are represented by whole limb bones, allowing for the calculation of shoulder heights (using von den Driesch & Boessneck 1974 and Harcourt 1974 respectively). The horse stood at 1.38m or about thirteen and a half hands, while the dog was 0.40m at the shoulder. Both of these heights are well within the size ranges for these animals (based on MoLAS archive material, and in particular, for horse size, using Clark 1995, 170).

Boundary ditch between St John's Meadow and the Nun's Field

Small quantities of bones were also found in two features between St John's Meadow and the Nun's Field, these being the backfill of another boundary ditch and that of a gravel extraction pit. Each deposit provided just two bone fragments, with one identifiable piece (sheep/goat) and three unidentifiable (cattle/sheep-size). A sample from the ditch backfill produced a few frog/toad bones amongst a number of cattle/sheep-size fragments.

Post medieval: the build up of the site

The bones from the fill of the post 16th-century cesspit in Trench D were provided by a single sample. This produced the usual unidentifiable mammalian domesticate bones, a few small rodent fragments (all postcranial and therefore

unidentifiable to species), a reasonable number of fish bones and a cat skull.

Conclusions

The interpretation of this data must depend to a great extent on the depositional history of the bone bearing contexts. The very sparse distribution of the bones may suggest a certain level of disturbance. Most of the bones were found in backfilled features or ploughsoils *ie* context types which are either created from any available deposits (the backfills) or are open to some disturbance (the ploughsoils). It can be supposed that the bones are redeposited. Alternatively there is the possibility that some of the features, in particular the larger quarry pitfill in the Nun's Field, may have been used for minor dumping of waste materials (the primary and backfills). Conversely the other quarry backfill assemblages in this area are clearly very disturbed. A point worth mentioning is that the dating is generally concise, implying that, if disturbed, these assemblages were taken from roughly contemporary deposits.

With disturbance comes a series of unknown variables *eg* a possible bias towards the larger, less friable, bone fragments (note the good representation of cattle bones in the 17th-century ploughsoil horizons). These limit the overall worth of the site assemblage. Bones can, however, certainly be used to estimate the general importance, within the periods described, of certain animal groups *eg* the mammalian domesticates, and to suggest, to a limited extent, how these animals were used.

The majority of the pre Dissolution assemblage came from the Nun's Field, and it could perhaps be assumed that these bones represent waste from the nunnery of St Mary's. There are close similarities between this assemblage and the contemporary bone collection from St Mary's (Pipe 1996), with the dominance of the major mammalian domesticates. At both sites these were clearly represented by whole carcasses, suggesting the provision of deadstock (or possibly livestock) to the nunnery. Certain monastic houses would have had a slaughterman amongst their lay staff or otherwise dead stock could have been provided by the local butcher (Harvey 1993, 52). It may be that St Mary's, like Westminster Abbey (*ibid*), possessed its own pig farm, as indicated by the neonate bones found

in one of the quarry pit backfills. It is perhaps significant that such young animals were not found at the St Mary's site. There is no evidence for the skinning of these animals, but certainly there is abundant evidence for the dressing and jointing of their carcasses. Of interest here is the noted skinning cut to a horse lower limb bone found in the quarry pit sample. It could perhaps be envisaged that the horses used by the nunnery were fully exploited, even so far as removing and selling their skins.

A relatively small proportion of domestic birds are also present at both sites, as is a reasonable abundance of fish (for St Mary's see Sloane in prep). In the medieval diet, particularly in monastic life, fish formed a considerable part of the meat intake (*ibid*, 47, 52). Unfortunately, possibly due to the likely disturbance, very few of the fishbones at this site are identifiable to species. Somewhat different to the St Mary's assemblage, is the absence in the medieval levels of any high status animals. This may be related to the small size of the assemblage.

It would seem likely that the majority of the domestic animals present had been used for their meat. A proportion of these animals were clearly bred for this purpose while others were culled following the exploitation of some secondary product. This is shown by the presence of juvenile/immature and mature/adult animals

respectively (see above and Table 3). The larger domestic assemblages (particularly cattle and sheep/goat) from St Mary's display a similar age pattern.

The importance of the major domesticates continued into the later levels at this site. These bones may have been dumped from the nearby secular estates *eg* as existed at Charterhouse following the dissolution, and later (mid 17th-century onwards) by the extensive residences in this area. Throughout this period a proportion of the bone waste must have been deposited from high-status households, as shown by the presence of fallow deer. Of some interest is the good representation of cattle primary waste in one of the 17th-century ploughsoils. Clearly this waste must have derived from a local abattoir or butcher. As with the medieval domestic assemblages there is both a wealth of butchery (denoting the use of these animals for their meat) and a wide age distribution, indicating the use of mixed exploitation strategies.

In each period, the size of the domestic animals conforms to the size range of the typically small medieval stock. There is no evidence for the improved breeds which can be seen in Britain from the 18th century onwards (Henson 1982), clearly suggesting the continuing use in London of the old breeds/types well into the later post medieval period.

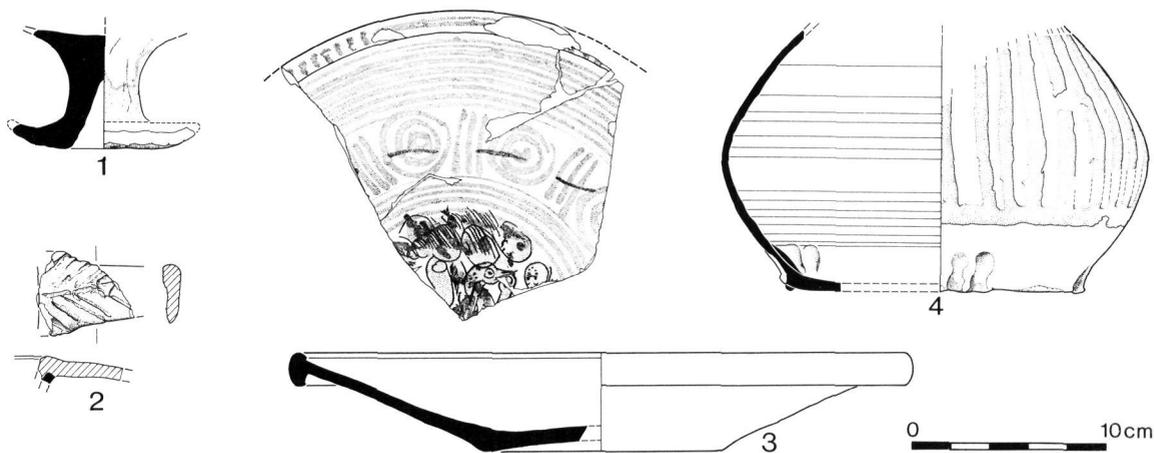


Fig 11. Pottery. 1. London-type ware, bottom of a squat jug, with thumbled base and white slipped decoration in North French style, dated 1240-1350; 2. Fragment of strap handle from a Saintonge jug with incised herringbone decoration and overall green glaze, dated 1280-1350; 3. Slipped Redware dish with zoomorphic decoration in pale green slip with splashes of green and yellow glaze made in Werra-type ware, dated 1550-1650; 4. Part of the bottom of a Whiteware pedestal dish with patchy copper glaze and off-white fabric, abraded in colour with buff margins. Source unknown, but not local. This was found with other pottery dated 1300-50

THE POTTERY

Richenda Goffin

The pottery from the site included a good example of London-type ware, consisting of the bottom of a squat jug, with thumbled base and white slipped decoration in North French style. The vessel which was recovered from a quarry pit backfill within the Nun's Field (Trench K1) is dated 1240–1350 (Fig 11 No.1).

Unusual items included a fragment from the strap handle of a Saintonge jug with incised herringbone decoration and overall green glaze, dated 1280–1350. This was residual within an agricultural soil in the Nun's Field, dated overall to 1500–1600 (Trench J). Whiteware jugs such as these were imported from south-west France after the acquisition of Gascony by the English and are associated with the development of the wine trade between the two countries from the 13th century (Fig 11 No.2).

Also recovered, from the backfill of the boundary ditch between the Nun's Field and St John's Meadow (Trench C), were fragments of a slipped Redware dish with zoomorphic decoration in pale green slip with splashes of green and yellow glaze made in Werra-type ware, dated 1550–1650. The vessel was imported from Germany and was produced in one of the kiln sites along the River Werra (Fig 11 No.3).

Part of the bottom of a Whiteware pedestal dish was recovered from a plough soil in St John's Meadow (Test Pit A). A patchy copper glaze survived both externally and on the inside of the dish (Fig 11 No.4). The fabric is abraded and off-white in colour with buff margins, source unknown, but not local. This was found with other pottery dated 1300–50.

NOTES

¹ Museum of the Order Of St John, Accession Number K40/1/2.

² 75.

³ Folio 8 [10], 22–24.

⁴ GLRO Acc 1876/MP1/169.

⁵ GLRO Acc 1876/MP1/170.

⁶ Truncated at 17.92m OD, base level 16.67m OD.

⁷ Annotation on 1512 Charterhouse water supply plan.

⁸ 1) Spitlecroft or New Church Haw. The 13 acres and rod of land used as graveyard. Acquired 15th November 1370; 2) The land identified as Pardon Churchyard. The three acre graveyard. Acquired

15th November 370; 3) Land belonging to St John's Priory; Saint John's Meadow (White Well Beach). Acquired 1376; 4) Land belonging to St John's Priory, Saint John's Meadow (White Well Beach). Acquired 1377; 5) Land belonging to St John's Priory. Acquired 1384; 6) Land belonging to the abbot of Westminster. Acquired 1391.

⁹ Trench F; truncated at 16.30m OD base level 15.65m OD, Trench H; truncated at 16.00m OD, base level 14.60m OD.

¹⁰ GLRO Acc 1876/MP1/169.

¹¹ GLRO Acc 1876/MP1/170.

¹² GLRO Acc 1876/MP1/173 A-B.

¹³ This estimate is for 1300 for the intra-mural city and its suburbs (see Schofield 1995, 26).

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ARCHAEOLOGICAL EVIDENCE FOR THE DEVELOPMENT OF MEDIEVAL HOMERTON: EXCAVATIONS AT LINK STREET, HACKNEY

Kieron Tyler

With contributions by Ian Betts, Terry Smith and Roy Stephenson

SUMMARY

Excavation took place at a site in Link Street, Hackney in 1997. The earliest features on the site included plough soils and furrows dated to between the late 11th and late 13th/early 14th centuries and evidence for construction in the form of a fragmentary chalk foundation, Structure 1, dated to the same period. The medieval chalk foundation constitutes the earliest recorded evidence for the built environment in Homerton, documented from the third quarter of the 14th century. Cultivation ceased before 1500 and Building 1 was constructed, probably during the mid 15th century when the Homerton ward was established as a sub-division of the parish of St John at Hackney. Building 1 was timber framed and included two phases of internal ovens. To the south of Building 1 was a series of drains, one of which incorporated a timber sluice. By 1540 the site was within the estate of Ralph Sadleir, resident at the recently built Sutton House. By the late 16th century the drains were replaced by a brick lined reservoir, Structure 2. The reservoir was built to respect the alignments of Building 1, which remained standing. Building 1 was demolished and the reservoir backfilled by 1746. At this date an external brickearth and metallated surface extended across the plot of Building 1. The surface was to the west of a building situated beyond the eastern limit of the site depicted on a plan dated 1792. This later building was pulled down to make way for Link Street, laid out by 1800.

INTRODUCTION

The Museum of London Archaeology Service (MoLAS) undertook an archaeological excavation

of the site at 12–14 Homerton High Street and 2–16 Link Street, London E9 (Fig 1) in the London Borough of Hackney (TQ 3534 8504). The site (LIK95) was bounded to the north by Homerton High Street and to the east by Link Street (Fig 2). The excavation was carried out between 7 April and 8 May 1997.

The work was commissioned by the New Islington and Hackney Housing Association subsequent to a field evaluation conducted by MoLAS between 20 February and 2 March 1995. During the evaluation two test trenches were excavated to assess the nature, date, extent and



Fig 1. Site location

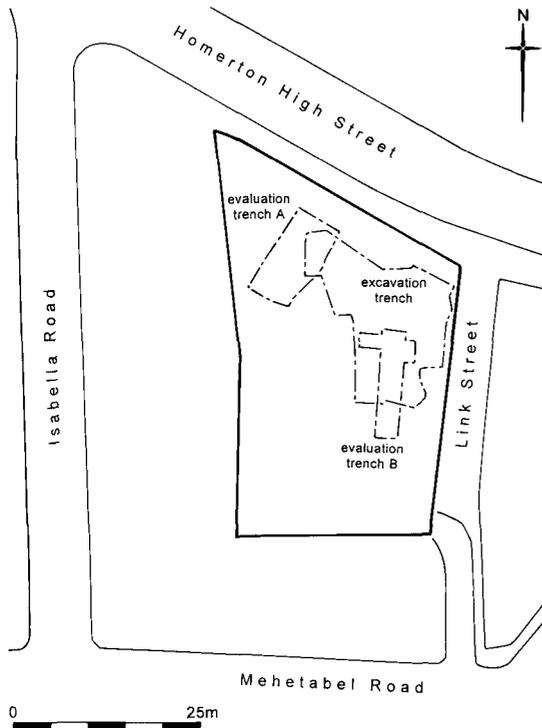


Fig 2. Location of excavation trenches

condition of any archaeological remains (Fig 2). It was demonstrated that archaeological features and stratified material were present at the site, and English Heritage recommended archaeological excavation as these materials were threatened with disturbance or destruction by the proposed redevelopment.

A BRIEF HISTORY OF HOMERTON

Background

The underlying geological deposit in the site area is the Taplow Gravel and it is not considered usual for it to be overlain by brickearth.¹ The site is located on the slope down east towards Hackney Marshes and the River Lea. Ground level also drops to the south, across the site, towards the line of the former Hackney Brook, 40m beyond the southern limit of the site.

The proximity of Hackney Brook will have affected the environment of the site in antiquity. The source of the river was on the slopes of Crouch Hill from where it flowed south-east across Seven Sisters Road, then east along the

line of Gillespie Road and Riversdale Road across Clissold Park to Brook Road (Trench & Hillman 1984, 52–3). The river then turned south to follow the west side of Hackney Downs, then flowed north-west/south-east along Amhurst Road and Morning Lane (immediately to the south of the site) and then east along Wick Road to meet the River Lea. Hackney Brook is represented on the Rocque map of 1746 between the site and Morning (Money) Lane (see Fig 4).

There is little evidence for prehistoric activity along Hackney Brook, although Hackney is the source of two of the largest assemblages of Palaeolithic material recovered in Britain (in Stoke Newington and Lower Clapton: Collins 1976, 6). Four Palaeolithic assemblages are known from areas around the site. Six hand axes and one unretouched flint flake were found in the area of Wick Road, some 500m to the south-east of the site, during the Victorian period.² A further handaxe was found during this period at Paragon Road, c.500m to the south-west of the site.³ At the former site of Clapton Priory near Gelnarm Road, about 700m to the north-east of the site, another handaxe has been recorded.⁴ In 1868 J Anscombe found a further handaxe at the east side of Dunlace Road, 750m to the north-east of the site.⁵

Evidence for Roman activity in the site area is sparse. Roman Ermine Street, which led north to Lincoln – and ultimately to York – was aligned north-south along the line of what is now Kingsland Road (1800m west of the site) and Kingsland High Street (Margary 1955, 169–70). It has been suggested that a Roman Road extended east from Ermine Street along the route of Homerton High Street towards a possible crossing of the River Lea near Temple Mills.⁶

The evidence for the Roman precursor to Homerton High Street has been examined for the present study and it is concluded that the presence of a such a Roman Road is somewhat unlikely. The Sites and Monuments Record (SMR) entry for this road is based on four sources. The first, a lecture to The Leyton and District Antiquarian Society, includes no references to the Roman period (Marks 1938). The second makes no reference to Homerton High Street (Margary 1955). The basis for the third entry in the bibliography is an unreferenced late 18th-century find of the remains of a Roman road and a number of Roman coins along Homerton High Street (Black, nd, 8). As this find is not mentioned in any of the standard

sources regarding the history of Hackney it must be discounted (*eg* Clarke 1986; Robinson 1824). The fourth bibliographic entry, the Inner London Archaeology Unit card index, no longer survives to be checked.⁷ Furthermore, the SMR entry indicates that the supposed Roman origin of Homerton High Street extended west along the line of Ridley Road, which is of Victorian origin and set out after the 1831 parish map.

Despite the fact that there is no evidence for a Roman precursor to Homerton High Street there are scattered Roman finds suggesting a presence in the general area of the site. In 1867 a white marble sarcophagus containing a male skeleton was found in natural gravels behind the London Orphan Asylum,⁸ at what is now 134 Rushmore Road, about 700m to the north of the site. Associated with the sarcophagus was a brass coin from the reign of emperor Gallienus (253–68 AD).⁹ About 100m to the east of this find a Neronian (AD 54–68) coin was found c.1843 during the digging of a wall at the rear of the London Orphan Asylum.¹⁰ Clarke has suggested that a Roman road, just to the south of the London Orphan Asylum and projecting east from Ermine Street, may have been aligned along the current Powerscroft and Blurton Roads leading down to Hackney Marshes, some 600m to the north of the site (Clarke 1986, 125–6, 247). This is conjecture, and may remain so.

The Saxon period brings some evidence for settlement in Hackney with possible Saxon origins for place names incorporated into the modern Borough of Hackney. The name, Hackney, is often suggested as deriving from the Anglo-Saxon 'Haccan' (to kill with a sword or axe) and 'ey' (river). This is incorrect as 'Haccan' means 'to hack'.¹¹ Another derivation may be 'Haca's well, watered land or marsh' (EPNS 1942, 105). Homerton, as one of the constituent hamlets within Hackney, may derive its name from Hunburh's Farm and have Saxon origins (EPNS 1942, 106).

By the medieval period there is firmer evidence for settlement in Hackney, with a rural economy known from the late 13th century. The Domesday Book of 1086 does not refer to Hackney but mentions Stepney, (Stoke) Newington and Haggerston. At this date Hackney was subsumed within the manor of Stepney. The earliest documented mention of Hackney is in 1198 as Hakeneia (EPNS 1942, 105). In 1294 Hackney was described as a part of the Manor of Stebunheath (Stepney) held 'from time immem-

orial' by the Bishops of London. The Lord of Stebunheath resided at Bishops Hall, Bethnal Green, south of the present centre of Hackney. Hackney was accounted for separately within the manor from the 14th century (VCH 1995, 75).

Medieval Hackney had developed along the route from Mile End to Stamford Hill with the village centre, still the core of Hackney, at Church Street (later Mare Street, now Narrow Way). The nucleus of medieval Hackney was the church of St Augustine, founded by the Knights Templar, known to have owned land in Hackney from at least 1232–3 (McDonnell 1978, 156), and possibly from the second half of the 12th century (VCH 1995, 77). The church tower still stands c.300m west of the site. After the suppression of the Templars the church and the land passed to the Order of the Hospital of St John of Jerusalem in 1311 (McDonnell 1978, 156). The church was then re-dedicated to St John.

Sheep were kept in Hackney from the late 13th century into the 14th century and cheese from Hackney was being sold in London in the late 14th century. This may have been made from ewes' milk as there is little evidence to suggest a significant presence of cattle in the area (McDonnell 1978, 59–60). During the 14th century there were meadows, pasture and two mills in Hackney (McDonnell 1978, 23). It is known that wheat, oats, barley and beans were being cultivated between the second half of the 14th century and the early 15th century (McDonnell 1978, 58). It has been estimated that the population of Stepney as a whole was c.2,500 in 1377, a 278% increase from 900 in 1086 (McDonnell 1978, 119–20).

The documentary evidence for medieval Hackney is supported by a sparse archaeological record in the general area of the site. Excavations undertaken by MoLAS in 1992 at 64–76 Wilton Way, 650m to the south-west of the site, revealed a domestic refuse pit with a backfill dated to the 12th–13th centuries (Pitt 1992). In 1978 excavations conducted by the Inner London Archaeological Unit at 18 Shore Road (1050m south of the site) uncovered walls dated to the early 14th century. These were probably remnants of the early 14th-century Grovehouse, owned by the Shoreditch family and demolished during the early 17th century (Blackmore & Schwab 1989).

The earliest reference to Hackney in the modern spelling dates from 1535 (EPNS, 105).

The manor of Hackney remained in episcopal hands until the dissolution of the monasteries. During this period, from 1539–40, it became known as the Kingshold Manor (VCH 1995, 77). Bishop Nicholas Ridley surrendered the manor to King Edward VI in 1549–50 and it was then granted to Thomas, first Lord Wentworth on 16 April 1550 (McDonnell 1978, 20). Parts of the Kingshold were subsequently divided into separate holdings: Grumbolds (by the mid 17th century) and Lordshold (from the early 18th century) (VCH 1995, 76, 79). In 1632 the manor of Hackney was mortgaged by the Wentworth family and subsequently passed through various hands until transferring to the Tyssen family from 1697 (VCH 1995, 75).

The origins and development of Homerton

Homerton was one of a number of scattered hamlets which made up medieval Hackney. Redeposited Saxon artefacts have been recovered from Homerton. During November 1993 MoLAS undertook fieldwork at the site of proposed EMI Nursing Home at Hackney Hospital, on the south side of Homerton High Street, some 550m east of the Link Street site (Barber 1993, 12–13). Residual Saxon and medieval pottery was recovered from the post-medieval plough soil recorded on this site. Barber has suggested that these finds may have either been mixed with manure dumped on the fields during the Saxon or medieval periods or brought up by deep ploughing undertaken in the post-medieval period.

Homerton is known from 1343 and was established as a hamlet by 1363 (VCH 1995, 51). Homerton may have developed along the route between the church of St Augustine and a watermill at Temple Mills, to the east, owned by The Knights Templar in 1307–8 (VCH 1995 51, 77). In the late 15th century the fraternity of the 'Blessed Mary of Humberton' ward, established by 1451 (Mander 1993, 9), maintained a ward-light at the church of St John at Hackney (McDonnell 1978, 146).

At the west end of Homerton High Street is the earliest surviving building in the area, now known as Sutton House, seen at the extreme right of Fig 3, and on maps. It was built on a ploughed field for the courtier and diplomat Sir Ralph Sadleir, to an H-shaped plan, shortly after 1535. The plough soil included artefacts dating from the 12th to 16th centuries, indicating

agricultural activity pre-dating the construction of the house (Phillpotts 1998, 207). The building was first known as 'Bryk Place', a name implying that construction from brick was notable (Blackburn & Gray 1992, 7). The road onto which the Bryk Place fronted was known as Humberton Street by 1551,¹² and is mentioned in 1563, 1567 and 1652.¹³

In 1550 Bryk Place was bought by John Machell, a wool merchant who later became the Sheriff of London. Machell died in 1558 and the house remained in the hands of his family until 1605 (Blackburn & Gray 1992, 13). At this date the adjacent building to the west, the Tan House, was bought by Thomas Sutton, the founder of the school at Charterhouse. It has been, incorrectly, suggested that Sutton had owned the Bryk Place, hence the later name Sutton House given to the old Bryk Place from 1953 (Blackburn & Gray 1992, 13, 15, 30). As Sutton House is the current designation of the building this name is used in this paper. By 1634 Captain John Milward, a City businessman, owned the Bryk Place.

By the mid 16th century the site area was within Sadleir's estate around Sutton House. It has been suggested that the estate was bounded to the north by Homerton High Street and extended east as far as the present Ponsford Street (Gray in prep). In 1540 the estate was described with just four buildings: Bryk Place, a house on the south side of Homerton High Street leased to Sadleir's father, another house behind that and a further house on the north side of the street (Blackburn & Gray 1992, 8). A description of the estate made at the time of its sale in 1550 to John Machell listed tenements, meadows, pastures, barns, stables, a dovehouse and gardens extending to Hackney Brook on the south (Blackburn & Gray 1992, 8). This implies that between 1540 and 1550 the estate was developed with tenements built between Homerton High Street and Hackney Brook (Gray in prep).

There is evidence for further Tudor development along Homerton High Street to the east of Sutton House. A range of timber framed buildings stood along the north side of the street between Furrow (formerly Plough) Lane and Bannister (formerly John) Street, opposite Ponsford (formerly Bridge) Street. These buildings are now demolished, with the west end of the range replaced by the Plough Inn, constructed in 1893 (DoE 1989, 57). This group of buildings appears on the Rocque map of 1746 (Fig 4) and



Fig 3. The excavations looking south-west

the buildings are depicted in a series of illustrations: watercolours of *c.*1830 (Mander 1996, 62), and *c.*1840 (Watson 1990, 13), and photographs of *c.*1870 (Mander 1996, 61), *c.*1886 (HWEA nd, 49), and *c.*1890 (HWEA nd, 4).

A date range for the construction of these buildings can be suggested as a result of examining their features. They had three storeys, although the number of storeys is no indicator of date (Schofield 1995, 146). The dormer windows are also of little use in ascertaining date of construction. The buildings are depicted with no side jetties, indicating a construction date after the mid 16th century (Schofield 1995, 147). The timber frame was filled, on the frontage, with plaster (over lath), not brick, a technique employed up to the early 17th century (Schofield 1995, 149). The Homerton buildings are very similar in construction to a house on the south side of Aldgate High Street (albeit with one less storey), constructed before the early 17th century (Schofield 1995, fig 180). Therefore this range of buildings was probably constructed after Sutton House, between the mid 16th century and the early 17th century.

It has been suggested that London saw a building boom during the period 1570–80 following on from the Dissolution, with a slump in the 1590s due to bad harvests, followed by another boom in the period 1620–40 (Schofield 1995, 26). It is probable that the Homerton buildings were built during the period 1570–80.

By the late 16th century Homerton had become one of the more prosperous of the Hackney villages. In 1594 the Parish of Hackney was assessed for equipping three soldiers, and a total of £6 11s 2d was contributed, with Homerton paying a 27.25% share of this; £1 18s (Heward 1948, 10). In 1605 there were 49 contributors to parish church rates in Homerton;¹⁴ these are listed by Heward as giving sums from 13s 4d to 3d (Heward 1948, 13–14). This contrasts with 33 rate payers in Dalston, another of the constituent hamlets of Hackney, located to the west of Narrow Way (Tyler 1996). Clearly, Homerton was both more affluent and populous than Dalston in the early years of the 17th century.

By 1655 expansion resulted in Homerton being divided into Upper Homerton – around the

modern Urswick Road – and Lower Homerton – along the High Street towards Hackney Wick (VCH 1995, 53). The name Upper Homerton is retained on the 1870 Ordnance Survey map. In 1672 a hearth tax was levied on 55 chargeable houses in Great (Upper) Homerton and 58 in Little (Lower) Homerton (VCH 1995, 53).

During the 18th century Homerton remained affluent. Daniel Defoe included Homerton in the section on Hackney in his *'A Tour Through London About the Year 1725'*: 'Hackney is of great extent containing no less than twelve hamlets of separate villages...(including)...Hummerton. All these, though some of them are very large villages, make up but one Parish of Hackney. The town is remarkable for the retreat of wealthy citizens, that there is at this time near a Hundred Coaches kept in...' (Defoe 1929 (Batsford ed), 81). By 1720 104 residents of Homerton had paid poor rates (VCH 1995, 54). During the early 18th century Homerton was still ahead of Dalston, where by 1733 there were only two inns (Tyler 1996), with eight known in Homerton in 1725 (VCH 1995, 54). From the early 18th century Homerton, which had been in the Kingshold manor, had become part of the Lordshold.

The 18th century also saw the compilation of the first map of Homerton (Fig 4). The Rocque map of 1746 shows continuous buildings on either side of Homerton High Street, with the development ceasing at the turn south into the current Kenworthy Road. Beyond the east end of Homerton High Street was the west edge of Hackney Marsh. The map shows the site area as open, cultivated ground to the rear of two buildings which fronted onto the High Street.

Remnants of 18th-century Homerton have survived, in the form of both standing buildings and archaeological remains. Two pairs of mid to late 18th-century buildings survive along Homerton High Street; numbers 140 and 142, and numbers 168 and 170 (DoE, 59–60). Excluding Sutton House, these are the earliest standing buildings along the High Street. During January and February 1993 MoLAS conducted a watching brief on the site of the Free and Parochial School, 70m to the west of the Link Street site. The earliest deposits recorded were rubbish pits dated to the late 17th to early 18th centuries (Sparey-Green 1993, 18).

There is also archaeological evidence for 17th/18th-century agricultural activity in Homerton. In December 1992 MoLAS undertook an archaeological evaluation at the site of 4–11

Fenn Street, some 170m to the north-east of the site. This site revealed evidence of 18th-century agricultural work (Pitt 1993, 10). Similar evidence was found at the site of the former St John's wing of Homerton Hospital, 500m to the north-east of the Link Street site, where MoLAS carried out an archaeological evaluation between March and June 1993. Further post-medieval plough soil was recorded at Hackney Hospital (Barber 1993, 12–13).

The late 18th century saw increasing development in the area. A lease between John Ball of Coleshill, Amersham (Bucks) and John Musgrove of Homerton of 31 January 1792 includes a plan which indicates the form and layout of some of the buildings on the south side of Homerton High Street (Fig 5).¹⁵ Demolition of these standing buildings (within and to the east of the site area) was undertaken in, or shortly after, 1792. An overlying of matching property boundaries and street alignments on both the 1831 parish of St John at Hackney map (Fig 6) and the 1792 lease plan indicates that the south-west corner of the westernmost two messuages 'A/A', highlighted on figure 5, was within the site limits. Also within the site area were sheds and yards. An amendment of 15 August 1792 attached to the lease allowed Musgrove to pull down these two houses and construct three or more houses on their plot. Presumably these are the houses depicted on the site on the 1831 map.

Thomas Milne's land use map of London and environs of 1800 shows buildings along the whole of the north frontage of the site and the area to their south described as market garden ground. This map is the first depiction of the newly constructed Link Street, later named 'New Cut' on both Greenwood's 1826 map and the 1831 parish map (Fig 6). By 1870 'New Cut' was 'Balls Buildings', and renamed Link Street in 1894. The range of houses which made up Balls Buildings were demolished in 1939–40.¹⁶

It is known that during the mid 19th century there were a series of cress beds along Hackney Brook in the area between the site and the old church of St John at Hackney. The brook also fed fish ponds and a brewery in Bridge (now Ponsford) Street and was probably exploited for similar purposes during earlier periods (Clarke 1986, 50).

In 1849 land to the south of the site was granted to the East and West India Docks and Birmingham Junction Railway, renamed the North London Railway in 1853 (Watson 1990,

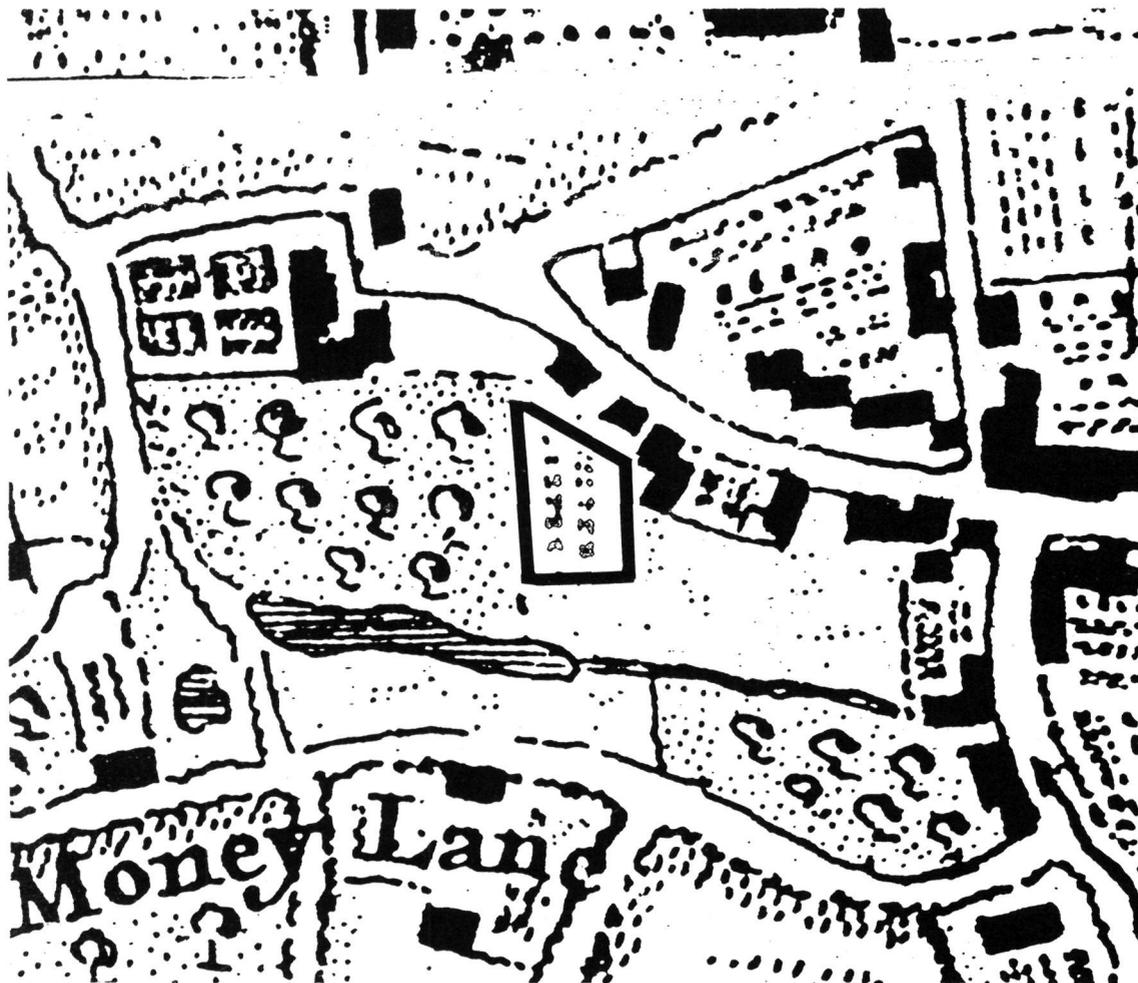


Fig 4. John Rocque's map of 1746

91). The railway was subsequently constructed on a viaduct across this land. Homerton station opened in 1868 (VCH 1995, 10). The arrival of the railway would hasten development, culminating with Homerton being fully subsumed into the surrounding urban environment. This development can be seen by comparing Figs 6 and 7, dating from 1831 and 1870 respectively.

Hackney Brook was culverted during the Victorian period and is represented in this area by the alignment of the Northern High Level Sewer, constructed between 1859 and 1865 (Trench & Hillman 1984, 71–2). The sewer diverges from the line of Hackney Brook to the east of the site around the junction of Morning Lane and Wick Street. This sewer was part of

the scheme proposed by the chief engineer of the Metropolitan Board of Works Joseph Bazalgette in response to what has been called 'the Great Stink' of 1858 (Barton 1962, 48).

The 1870 Ordnance Survey map (Fig 7) shows a similar layout of buildings as that on the parish map of 1831 (Fig 6), but by this stage Isabella Road and Mehetabel Road had been added with terraced housing along them.

After the 1914 Ordnance Survey map (Fig 8) the High Street was brought south, across the frontages of the building which formerly fronted onto the street. Fig 8 depicts the current south side of the High Street superimposed onto the buildings demolished as a result of the road widening. The widening is the reason that the

NORTH

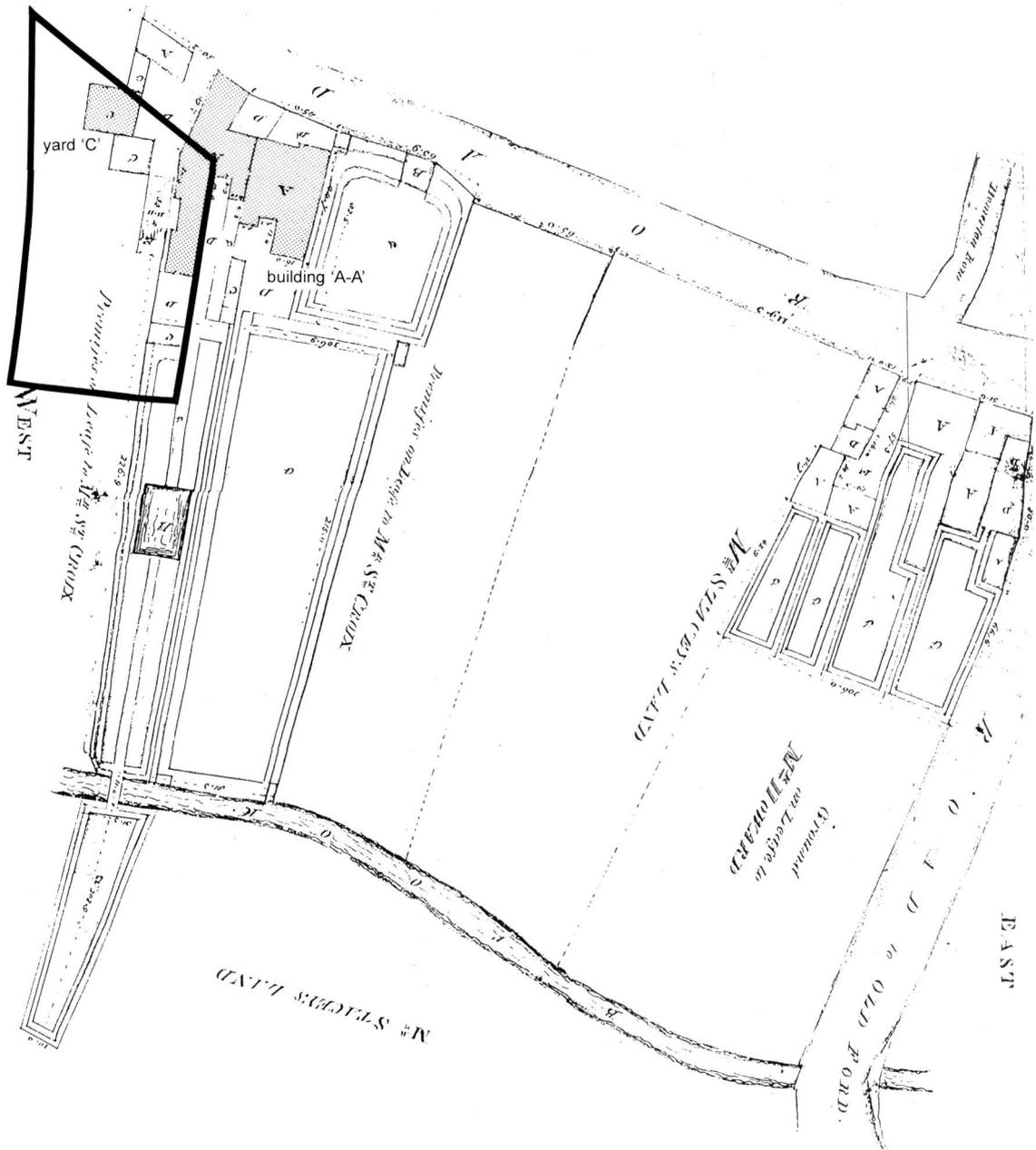


Fig 5. Plan of the site area, 1792 (courtesy of Hackney Archives Department)

current north frontage to the site is located behind former buildings which had fronted onto the narrower High Street. The High Street was renamed Homerton High Street in 1935 (Mander 1996, 57).

THE SITE SEQUENCE

Neither the pottery nor building material assemblages merited reporting in individual specialist sections and the results of the analyses

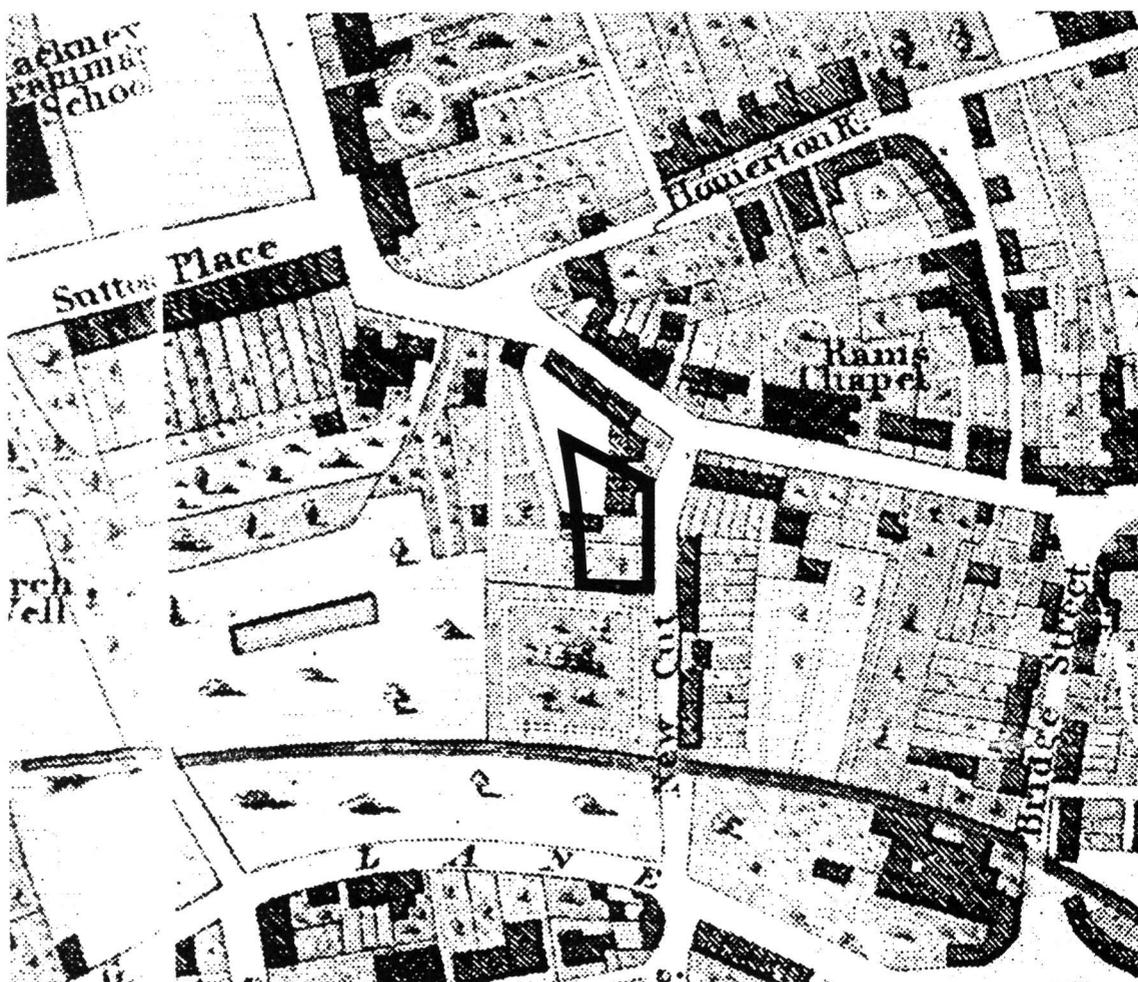


Fig 6. Map of the parish of St John Hackney, 1831 (courtesy of Hackney Archives Department)

of both assemblages are incorporated into this summary of the site sequence.

Period 1: Open Area 1 (geological deposit)

Open Area 1 represented the surface of the geological horizon before any cultural activity had taken place. Both alluvial gravels and brickearth were recorded at the site.

The surface of the alluvial gravels sloped down to the south across the excavation area from 10.24m OD to 8.75m OD. The gradient of *c.* 1 in 10 was a reflection of the slope from the Homerton High Street frontage down to Hackney Brook. At the north of the site the gravels were overlain by brickearth with a relatively level surface at *c.* 11.57m OD to 11.73m OD.

These observations indicate that the edge of the brickearth capping of the gravels crossed the site. There are two possible explanations for the lack of brickearth at the south of the site, from east to west. Firstly, the periodic flooding of Hackney Brook may have prevented the build up of this deposit. Secondly, and less likely, there may have been truncation, in the form of quarrying at the south of the site.

Period 2: agricultural activity and Structure 1 (1080/1200–1230/1400)

The earliest cultural activity at the site was represented by Period 2, including evidence for arable farming and the construction of an isolated

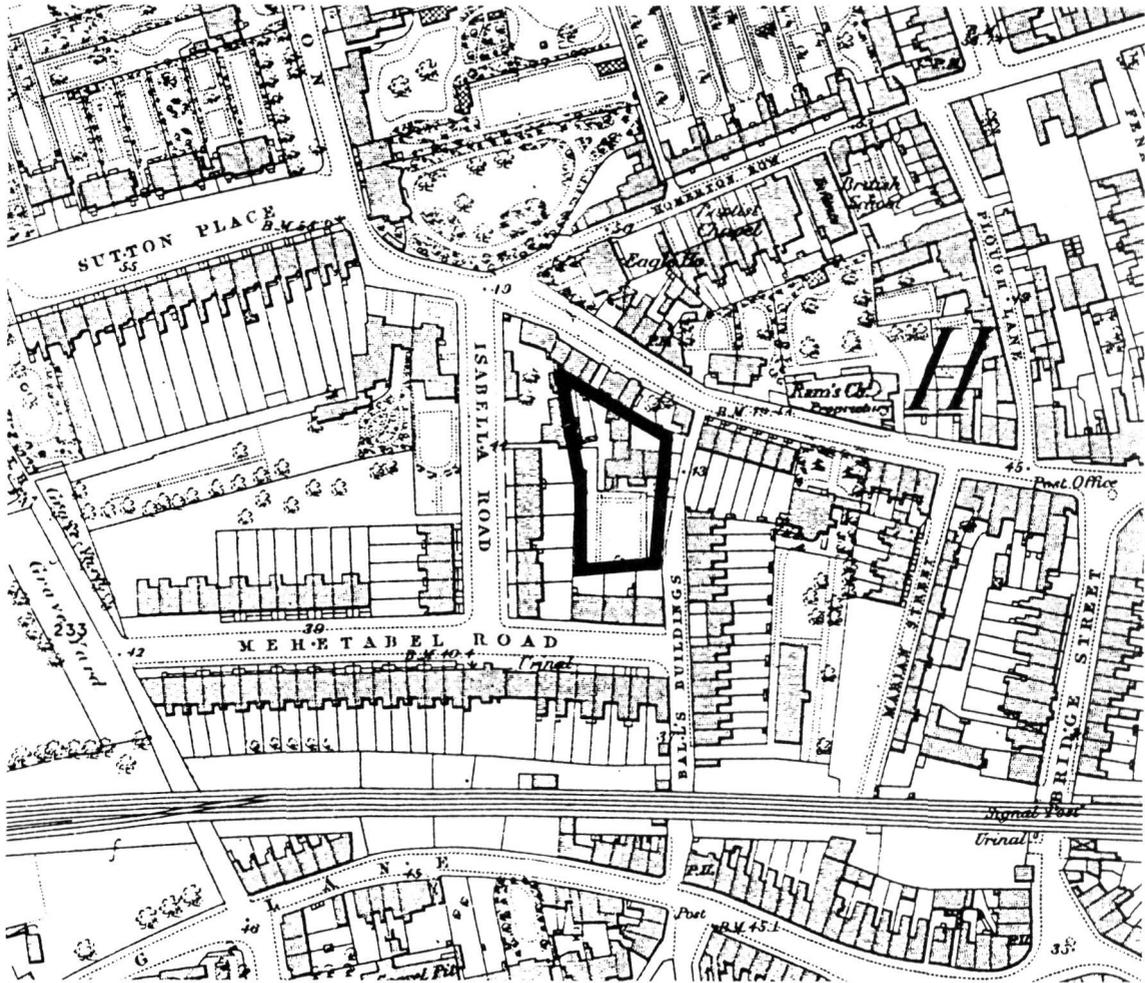


Fig 7. Ordnance Survey map, 1870

chalk foundation. The dating evidence for these features demonstrates that they pre-date the earliest reference to Homerton by at least 150 years.

Open Area 2: cut features made into Open Area 1 (1080–1200)

To the north of the site a series of successive cut features penetrated the surface of the brickearth. The three parallel cuts were probably remnants of successive north-south plough furrows, made into the face of the slope down to Hackney Brook in the 11th or 12th centuries (Fig 9).

The earliest cut had been backfilled with sandy silt (on the right of Fig 9). Although truncated, it was apparent that the cut was aligned north-south and had a minimum east-west width of 0.61m. Base level was 10.56m OD, and the cut was truncated at 10.89m OD. The east side of this cut had been truncated by a further cut backfilled with sandy silt. Again the cut appeared to be aligned north-south, with a minimum width of 0.90m. Base level was at 10.36m OD, and the cut was truncated at 10.79m OD. The latter cut had been truncated to the east by a third cut, also aligned north-south, again backfilled with sandy silt, this time dated 1080–1200 by the presence of coarse London-type ware pottery.

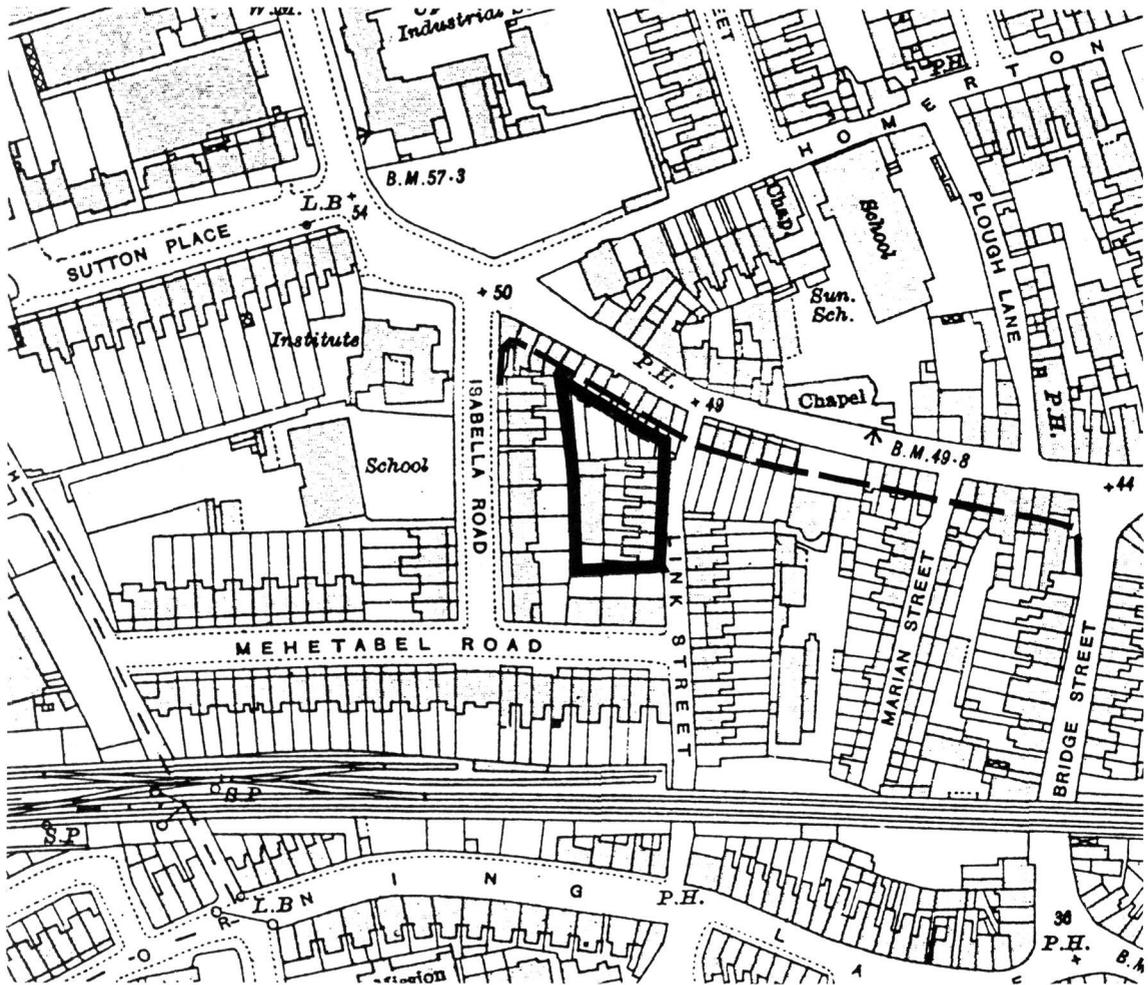


Fig 8. Ordnance Survey map, 1914

The cut edge extended beyond the limit of excavation, but the minimum east-west width was 0.20m. Base level was at 10.42m OD, with truncation at 10.70m OD.

North of the plough furrows was a pair of cuts with indeterminate purpose which were dated to the same period as the plough furrows. The first cut feature was sub-square with vertical sides and an irregular base. This had been backfilled with mottled brown green and orange yellow sandy clay. The fill was dated to 1000–1150 by early medieval sand and shell ware. The cut measured a minimum of 1.72m east-west \times 1.86m north-south with the east end beyond the limit of excavation. Base level was at 10.94m OD and the cut was truncated at 11.55m OD. An east-

west aligned cut was recorded to the north of the sub-square cut. Only the south edge was recorded, as the remainder was beyond the limit of excavation. The cut was backfilled with a mixture of clay and sand which included local grey ware dated to 1050–1150. The observed portion allowed for minimum measurements of 0.94m east-west \times 0.60m north-south. Base level was at 11.21m OD, with a truncated top level of 11.47m OD.

The two discrete cuts had not been made to as great a depth as the plough furrows and probably represent localised digging within the open area, perhaps as bedding trenches or maybe for the removal of obstructions such as tree bases or roots.

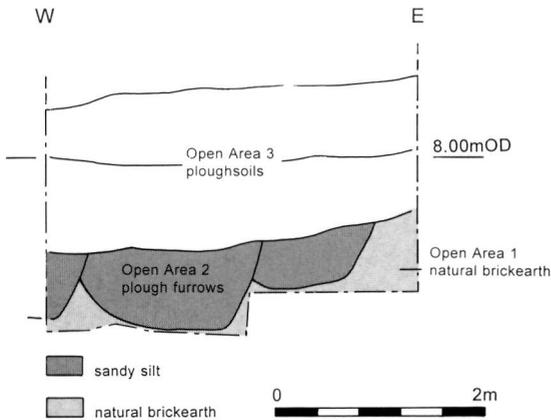


Fig 9. North facing section through the Open Area 2 plough furrows overlain by the Open Area 3 plough soil (located on Fig 10)

Structure 1 (1080–1200)

Structure 1 was an isolated stone foundation located near the southern limit of the excavation area (Figs 10, 11). This foundation did not relate to any building. It was constructed from uncoursed chalk blocks with some ragstone and flint bonded with pale grey sandy silt which made up no more than 20% of the whole foundation. The bonding material included

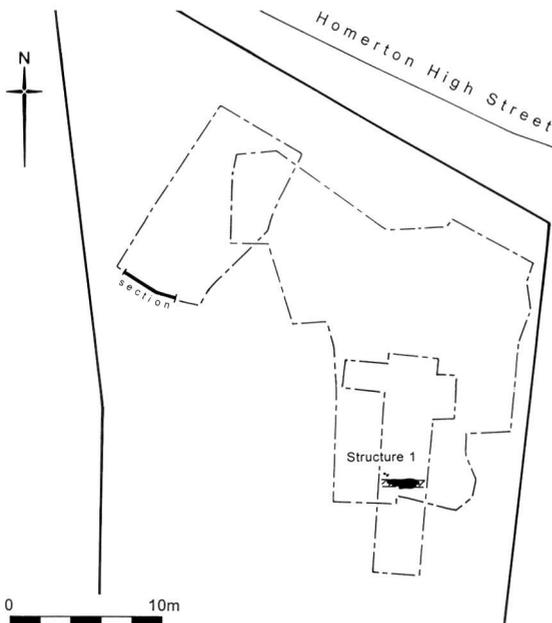


Fig 10. Location of the Structure 1 foundation

calcareous London-type ware dated to 1080–1200. The coursing can be seen on Fig 11. The base of the foundation was at c.9.60m OD, and it was truncated at 9.93m OD. The foundation measured 2.04m east-west \times 0.66m north-south. No superstructure survived. As the foundation survived in isolation, little interpretation as to the type of structure of which it was part is possible. The subsequent water related activities indicate that this area of the site was marginal ground, so Structure 1 is unlikely to be part of a building. It was more probably a lining, or part of a feature related to water management.

Open Area 3: plough soil (1080/1200–1230/1400)

A plough soil overlay the disused, backfilled Open Area 2 plough furrows and cut through features (Fig 9). The working of the ground marked by Open Area 3 indicated a separate, subsequent phase of activity, of the first three decades of the 13th century. The plough soil was a pale brown-grey fine sandy silt with a green tinge up to 0.42m thick (top level was 11.24m–11.35m OD, and base level was 10.93m OD). Base level marked the maximum penetrative depth of the agricultural activity. The plough soil was truncated, but contemporary ground level was higher than 11.35m OD. The dating of Open Area 3 is based on placing the plough soil between the preceding phase dated to 1080–1200 and the succeeding phase dated to 1230–1400.

Period 3: Open Area 4, Building 1, Ditches 1, 2, and 3, Open Area 5 (1230/1400–1500/1600)

Period 3 saw the construction of a building at the north of the site and a change in the type of agricultural activity from arable to cultivation which exploited the proximity of Hackney Brook through the excavation of a series of ditches (Figs 12, 13, 14, 15, 16, 17). The date range for Period 3 includes the period from which Homerton is first known: the mid 14th century.

The Open Area 3 plough soil was overlaid by a series of successive external surfaces, laid to consolidate the ground surface in preparation for the construction of Building 1 (see below). This demonstrated a change of land use with the cessation of agricultural activity datable to the 13th or 14th centuries.



Fig 11. Structure 1 viewed from the north. The foundation measured 2.04m east-west

The earliest deposit was an 0.08m thick layer of redeposited brickearth with a surface level of up to 11.32m OD. The surface was burnt. This was dated to 1230–1400 by the presence of pottery including early-medieval iron rich sandy ware, local grey ware and Kingston-type ware. Overlying this was an 0.08m thick layer of dark grey-green silty sand with an uneven surface level of up to 11.12m OD. This may have been a make up layer which in turn was overlaid by a c.10mm layer of dirty white mixed chalk and mortar. Surface level was 11.11m OD. This deposit was an external surface.

Building 1 (after 1230–1400)

Building 1 consisted of foundations constructed upon make up layers which sealed Open Area 4 (Fig 12, 13, 14). As stated above, the layers which comprised Open Area 4 may have been laid in preparation for the construction of Building 1. The dating of Building 1 is based on it being

later than the underlying surfaces (Open Area 4) which were dated to 1230–1400. The building was standing by 1400–1500, as evidenced by finds recovered from the foundation to an alteration to the building. Within the south-west corner of the building was an oven, the presence of which may suggest a use for the structure, perhaps as a cooking block.

Phase 1: make up layer

The foundations of Building 1 were constructed upon a mixed grey silt and brickearth make up layer which was up to 0.36m thick (surface level 11.31m OD, base level was 10.95m OD). This layer comprised Phase 1 of the construction of Building 1.

Phase 2: foundations

The second phase of Building 1 was the construction of its foundations between the 13th

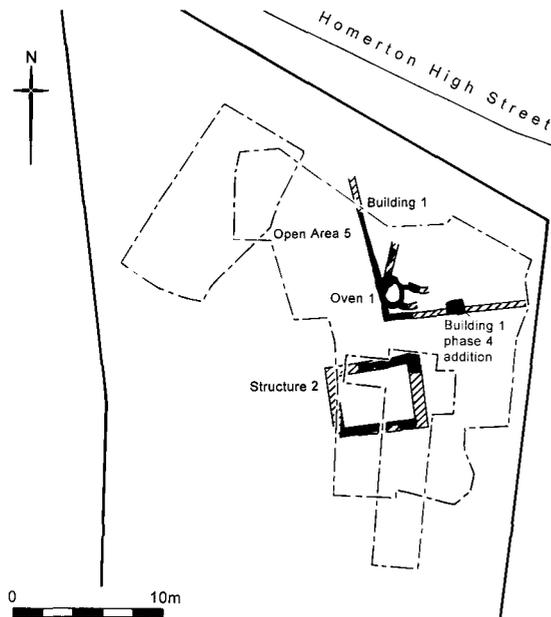


Fig 12. Building 1 with Open Area 5 to the west and Structure 2 (reservoir) to the south

and late 16th centuries. These shared certain characteristics: they were all constructed of chalk and flint, the bonding material was a similar grey mortar, they were all of a sleeper type (*ie* flat based) and they were of similar thickness (between 0.32m and 0.50m) (Fig 12, 13, 14).

The west side of Building 1 was marked by the most substantial foundation, a random coursed mixture of 80% chalk blocks (up to 360mm) and 20% flint nodules (up to 180mm) with occasional peg tile used as levelling courses (Fig 14). The bonding material was a light grey coarse mortar with flecks of charcoal and chalk. The west and east sides were fair faced. Traces of a mortar rendering survived on the east face. The maximum width of the foundation was 0.43m, with a surviving height of up to 0.52m. A length of 6.90m was recorded, and the foundation extended north beyond the limit of excavation. Base level was 11.20m OD, and the foundation was truncated at 11.62m OD. The south end curved eastwards respecting the outline of a feature within the building.

The south end of the north-south foundation was abutted by the L shaped foundation of the south-west corner of Building 1 (Figs 12, 13). The corner foundation was constructed from a random coursed mixture of 70% chalk blocks

(up to 230mm) and 30% flint nodules (up to 120mm) with occasional peg tile. The bonding material was a light grey coarse mortar with flecks of chalk and fine pebble. The west and south (external) sides were fair faced, with the east and north (internal) sides rough faced. Base level was 10.89m OD, and the foundation was truncated at 11.34m OD. The maximum width of the foundation was 0.44m, with a surviving height of 0.45m.

Both the foundations were of one build; their abutting relationship prevented interpretation as to which was the earlier construction.

The Building 1 foundations represent the south-west corner of a building at least 7.60m north-south by 5.50m east-west. The foundations would have supported the base plate of a timber framed building, a construction method which kept the wood stable, and free of damp. It is known that timber framed buildings were present in Homerton High Street from at least the late 16th century, a period when brick was also in use for construction in the Homerton area. These sleeper type foundations contained no brick and date from an earlier period – after 1230–1400 and before the late 16th century.

OVEN 1

Within Building 1 were three further abutting foundations which represented the bases of internal features (Fig 12). Each was constructed from a random coursed mixture of chalk blocks, flint nodules, ragstone and peg tile. They were bonded with a light grey coarse mortar with fine pebble and flecks of charcoal or chalk.

Taken together these foundations described an oval/circular feature within Building 1, most probably the base of an oven (internal diameter 1.30m) constructed integral to the building. The disuse of Oven 1 was marked by an internal fill of compacted brickearth deposit. Excavation of the backfill revealed no finds or debris from the use of the oven.

The location of Oven 1 at the south-west of the Building 1 was clearly to isolate fumes and any debris associated with its function and the use of Building 1 may have been defined by the presence of the oven; the building may have been an outhouse, perhaps a cooking block. Although this is perfectly likely the archaeological evidence alone is not enough to support this proposition.

Phase 3: make up deposit

Phase 3 of Building 1 consisted of layers lain against the Building 1, Phase 2 foundations, after



Fig 13. View south across Building 1 with Structures 1 and 2 visible in the background



Fig 14. View east of base of west wall of Building 1. Scale is 5 × 100mm units

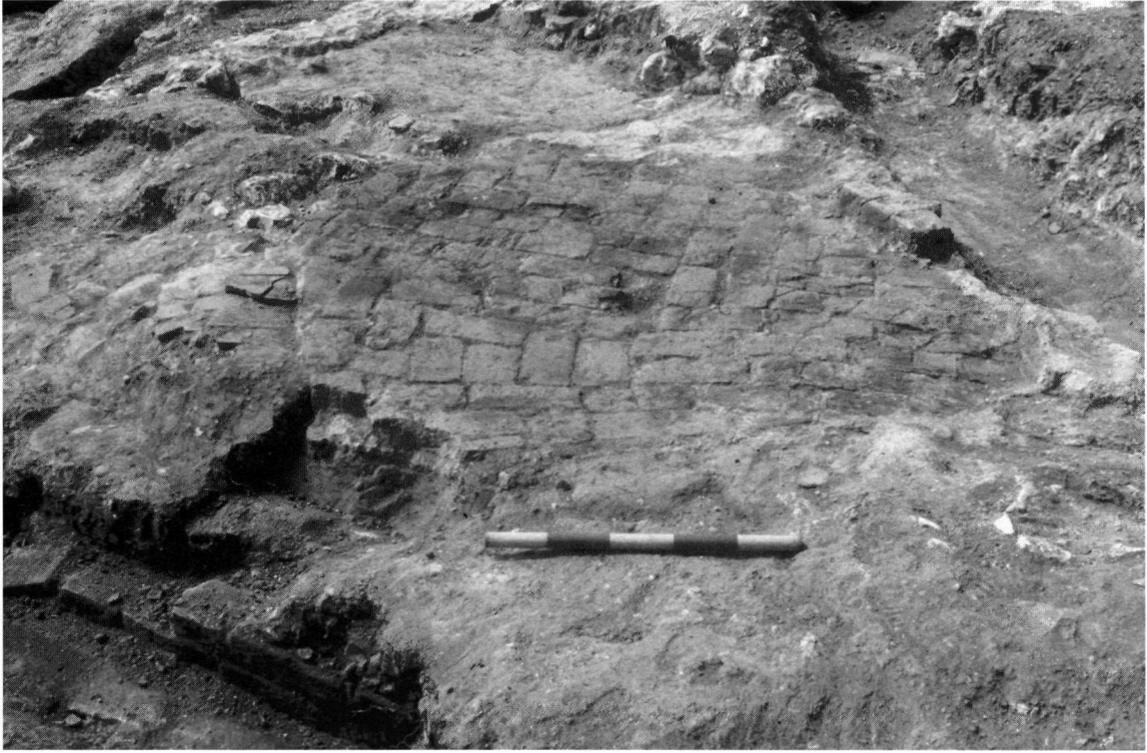


Fig 15. View west of brick base of Oven 2. Scale is 5 × 100mm units

the early 13th century, both within and without the building. These were make up deposits which preserved the foundations and protected them from external forces such as weather. After their construction, a protective dump was effectively deposited over the foundations.

A layer of grey brown silty-sand (surface level 11.31m–11.46m OD) with fragments of mortar, chalk and flint had been deposited within Building 1, and a further layer of crushed chalk (surface level 11.40m OD), had been deposited outside (to the west). These two layers were formed from the same types of material employed in the foundations of Building 1. They acted as a base for a compact layer (surface level of 11.37m–11.64m OD) of redeposited natural gravel (50% orange sand, 50% pebble) lain within and without Building 1.

After the deposition of the extensive make up layers further deposits were lain within Building 1 to bring up ground level to the level within the building. A chalk and mortar layer was deposited within the oval shape of Oven 1. The deposit was up to 5mm thick, with a surface level of 11.14m OD. This was overlain by a layer of

redeposited brickearth up to 300mm thick with a surface level of 11.37m OD.

No dating evidence was recovered from the make up deposit. The layer must however date from the same period as Building 1 – after 1230–1400.

Phase 4: alterations to Building 1 (1230/1400–1400/1500)

Phase 4 of Building 1 included changes made to the structure after it's completion. Oven 1 fell out of use during the deposition of the Phase 3 make up deposit and Oven 2 was constructed. A further alteration to Building 1 was the insertion of a foundation along the south side of the building during the period 1400–1500.

OVEN 2

Within Building 1 the truncated base of a second oven was recorded to the immediate north-east of Oven 1 (Fig 15). Oven 2 extended partially across the brickearth backfill of Oven 1.

The base of Oven 2 consisted of a layer of bricks (surface level 11.32m OD) set into a cut which truncated the foundations which surrounded Oven 1. Overall the bricks were set on a bed in an uneven pattern and bonded with an off-white compact mortar, which also underlay the bricks as a bedding layer up to 40mm thick. Up to 70% of the bricks were whole. Oven 2 was oval (long axis of 1.60m aligned north-west/south-east). The bricks were in a fairly soft orange to red type known to be in use before the Great Fire of 1666 and perhaps a little beyond. In this case the bricks appeared overfired, probably a result of use within the oven. The surface of the bricks were scorched in patches unconfined to one particular area of the feature. The bricks had a size range of 214–20mm × 99–104mm × 45–58mm. Bricks which showed a distinct curve along their stretcher faces were also used and these had a size range of 195–215mm × 92–104mm × 51–5mm. This type of distortion is sometimes caused by overfiring, however as they were within a curved oven feature, they may have been deliberately formed in this shape (Smith in Tyler, 1997 48–9).

Elements of the vertical side of the oven survived at the north-west, in the form of one brick course. To the south-east a layer of tile was set at the same level as the base.

This feature represents the survival of the truncated base to an oven. The walls of the oven were originally of vertically coursed brick. The base of a possible flue or firebox was recorded to the south-east of the base (the tile layer). The oven was located within Building 1, and as no waste products, such as misfired pottery, were recovered from this excavation the oven must be treated as domestic, probably for bread.

The brick base of Oven 2 was sealed by a layer of silty sand with mortar inclusions up to 120mm thick. Surface level was 11.32m OD. This deposit was retained within the limits of the oven. Two interpretations are possible: first the layer may have been deposited as make up to raise the base level of the oven, secondly the layer was deposited to infill the oven at its disuse.

ALTERATION TO THE SOUTH SIDE OF BUILDING 1 (1400–1500)

A foundation had been inserted along the length of the south wall of Building 1. The first stage of the alteration consisted of a cut made through the Building 1 Phase 2 foundation to a depth of 10.57m OD, and backfilled with a mixed loamy

deposit, which included a proportion of ceramic tile, Kingston-type ware and late London-type ware dated to 1400–1500.

The backfill was cut into by a foundation constructed from chalk, flint and broken brick (base level 10.49m OD). It was bonded with a compact light grey brown chalky mortar. Modern truncation meant that only a 1m east-west length of the foundation survived. The maximum north-south thickness was 1.50m. This contrasts with the Building 1 Phase 2 foundations which were between 0.32m and 0.50m thick.

The construction of this foundation was very similar to the foundation of Building 1 Phase 2 (chalk and flint, bonded with similar grey mortar and all of a sleeper type) but with the addition of brick. There may have been reuse of the fabric of an earlier foundation which had been removed.

An addition to the south of Building 1 at foundation level must have been a form of underpinning to strengthen the fabric of the building. Perhaps subsidence had occurred subsequent to the insertion of the reservoir, built into a construction cut which extended to the edge of Building 1. The finds from this alteration are significant as they demonstrate that Building 1 was standing by 1400–1500, and support the earlier surmise that Building 1 as a whole was constructed before the late 16th century.

Open Area 5: external surfaces associated with Building 1 (1230/1400–1500/1600)

Open Area 5 was a series of successive metallings and surfaces, recorded to the west of Building 1 (Fig 12). As with Building 1, the dating is based on it being later than the underlying surfaces (Open Area 4) dated to 1230–1400. A 20mm thick compact deposit (surface level was 11.40m OD) of mid grey and orange sand mixed with pebbles was overlaid by further metalling with less pebble content and an overall grey/green colour. This was 0.45m thick with a surface level of 11.72m. The east edge of the metalling was sealed by a rammed surface of crushed chalk (surface level 11.70m OD) which stretched to the edge of Building 1. The surface was up to 100mm thick, and extended 1.20m west from the west side of Building 1.

Pit (1500–1600)

To the west of Building 1 was a pit feature with backfill dated to 1500–1600 cut into Open Area 5. This would appear to be evidence of external activity contemporary with Building 1. The pit was approximately 6.5m to the west of Building 1 and sub-circular with shallow sides and a concave base (base level 11.13m OD). It was backfilled with light-mid brown grey sandy clay with frequent fine-medium pebbles and occasional charcoal flecks. The backfill included Tudor Brown ware dated to 1500–1600.

Ditches 1, 2, 3, and 4: water management (before 1480–1550)

To the south of Building 1 was a series of successive channels which had been, in turn, recut and backfilled (Fig 16). Disuse (backfilling) of the ditch features is dated to 1480–1550. These cuts and related features managed the flow of water in this area of the site and a suggestion can be made as to the purpose of the

water management. Cress beds were arranged along Hackney Brook during the 19th century, and although the ditches on the site were in use some 300–400 years earlier than this, it is not unlikely that Tudor or earlier Hackney Brook provided a source for the managed irrigation of a similar type of cultivation.

Ditch 1

Ditch 1 consisted of a cut aligned north-south which measured 1.60m east-west (Fig 16). The east side had largely been truncated. Base level was *c.*8.53m OD. The unevenness of the sides indicated that recuts had been undertaken. It had been backfilled with a pale brown-grey fine sand with coarse pebble from which no finds were recovered. The backfilling marked the disuse of Ditch 1 and a realignment of the water channel in this area.

Ditch 2: sluice (before 1480–1550)

Ditch 1 was replaced by a masonry-sided drain which incorporated a timber sluice (Fig 16, 17).

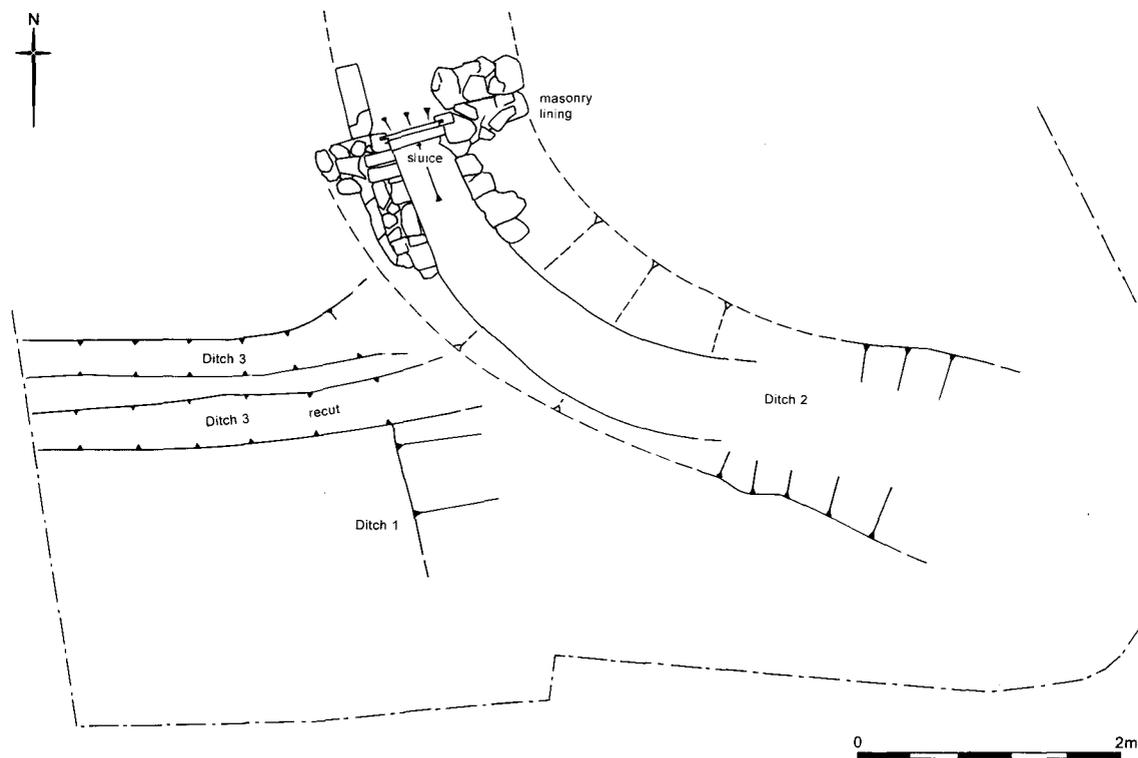


Fig 16. Plan of Ditches 1, 2 and 3. Ditch 2 with sluice



Fig 17. View north of sluice in Ditch 2

The dating of this feature is based on it being earlier than the backfill which marked its disuse (see below).

A cut had been made into the backfill of Ditch 1. This curved from a north-south alignment to an east-west alignment (Fig 16). Within the cut was a masonry lining, aligned north-south, constructed from a random coursed mixture of flint, Reigate stone, ragstone, chalk, brick and peg tile bonded with a yellow-brown sandy mortar with chalk. Later features had truncated the top of the drain and only the west and east sides were recorded. There was no constructed base.

The masonry lining housed a timber sluice which had been constructed across the north-south flow of the channel (Fig 16, 17). The sluice consisted of an oak base plate (1.31m east-west \times 0.17m north-south \times 0.14m top to bottom), into which two upright oak posts had been tenoned. The base plate extended under the masonry indicating that the sluice and the masonry were constructed together. The oak could not be dated by dendrochronology as it was fast grown with too few rings. An elm door

was retained within rebates cut along the inside faces of the posts and the upper face of the base plate. This was the element which regulated the flow of water through the sluice. In effect the sluice was constructed somewhat like a sliding window. Reuse of the timber was indicated by an unused mortise in the base plate and peg holes, irrelevant to the use under discussion here, in the upright posts. The elm door was apparently constructed solely for use in the sluice.

Ditch 2: disuse (1480–1550)

The channel to the south of the timber sluice was infilled with a mixture of materials (sandy silt) interpreted as waterlain build up during the use of the channel and backfill of the channel after its disuse and infilling. Included in the fill was Raeren stoneware and post-medieval redware dated to 1480–1550. A cut was made into the backfill of Ditch 2 near the eastern limit of excavation. This marked a recutting of Ditch 2. The recut was aligned roughly north-west/south-east with a maximum width of 0.90m. Base level

was 9.35m OD. The cut was truncated at 9.85m OD.

Ditch 3: re-alignment of Ditch 2 (1480–1550)

Ditch 3 was an east-west channel dug to the west of Ditch 2, cutting into the waterlain element of its infill (Fig 16). This had vertical sides and measured 0.35m north-south, with a base level of 9.45m OD. It appeared to drain into the east-west element of Ditch 2, implying the disuse of the north-south section of Ditch 2 which incorporated the timber sluice. Ditch 3 had been backfilled with a sandy silt.

Ditch 3 had been recut into the above backfill. The recut was also aligned east-west, with a base level of 9.22m OD, and measured 0.30m north-south. This recut also drained into the east-west element of Ditch 2. Disuse of Ditch 3 was marked by the deposition of infill which included post-medieval redware and Raeren stoneware.

The re-alignment of the water channel in this area of the site indicated that either there was a need for an overspill channel or that the area of the north-south element of the channel into which the sluice drained (*ie* the north-south element of Ditch 2) was subject to a change of land use. In view of subsequent activity the second explanation is preferred.

Period 4: Structure 2, reservoir and associated features (1480–1600)

In Period 4 the ditches to the south of Building 1 were replaced by a brick lined, rectangular reservoir (Figs 12, 18). This feature respected the alignments of Building 1, which remained standing. During Period 4 the site and the land surrounding came into the ownership of Ralph Sadleir from 1535–50. Some redevelopment would be expected during this period.

The reservoir was constructed after the backfilling and disuse of the ditch features and was concerned with the retention of water, rather than the control of its flow. The reservoir was dated to 1480–1600 by pottery recovered from the clay which lined the construction cut.

Foundation

The brick foundation of the south side of the reservoir blocked the Ditch 2 timber sluice and

encased the masonry which incorporated the sluice. The foundation appeared to have been constructed as one unit, and was not part of a larger structure. It is possible that it was constructed to restrict the flow of water preliminary to the remainder of the construction work represented by Structure 2.

The foundation was aligned east-west with a base level of c.9.22m OD. The foundation was truncated at a level of 9.57m OD, with a maximum of nine irregular English bond courses surviving. The mortar was pale brown and sandy. The north-south thickness of the foundation was 0.70m. The blocking was made with bricks of a fairly soft orange to red fabric in a type dating before c.1666 and slightly later. The bricks measured 220–222mm × 107–122mm × 57–8mm. Also present was a silty variant with a size of 219–20mm × 104–5mm × 54–6mm. One brick was particularly well-shaped, with sharp arrises (Smith in Tyler 1997, 48–9).

Subsequent to the construction of the foundation, a rectangular construction cut was made for the insertion of the brick lining noted below. The cut extended around the perimeter of the reservoir and survived to a maximum level of 10.82m OD, at which it cut into the Open Area 4 make up layer associated with Building 1. It is clear that the cut was made when Building 1 was standing.

Within the northern side of the cut was a chalk footing which consisted of roughly hewn blocks (up to 280mm) bonded with light brown sandy mortar. No coursing was apparent, and the footing was the base for subsequent construction, either as a levelling support for masonry, or as a working platform.

Tanking (1480–1600)

The construction cut of the reservoir was backfilled with a clay lining which acted as a seal to prevent the egress and ingress of water. The light brown/tan compact clay included occasional chalk and ragstone blocks with flint pebble and pieces of post-medieval redware and yellow glazed post-medieval slip-coated redware dated to 1480–1600.

Within the clay was an 800mm long north-south aligned oak plank set on edge, held vertical by stakes on either side at the north end and half-bats at the south. An elm plank also set



Fig 18. Structure 2, the reservoir, seen from the north-east

vertically on its edge (560mm long) projected east from the north end on the oak plank. These timbers were remnants of shuttering within the tanking.

Brick lining

The rectangular brick lining of the reservoir had been built against the clay lining. The internal dimensions were 3.60m north-south \times 4.70m east-west. The northern and southern east-west elements were observed. Additionally, the south end of the western north-south element was observed. The main body of the eastern north-south element had been cut away by later intrusions, but the corners where this side joined the east-west elements survived. This level of survival therefore allowed for a reconstruction of the whole extent of the feature.

Base level of the walls was at c.9.40m OD. The feature survived to a maximum level of 10.01m OD. The northern side of the feature employed tiles as a levelling course at the base

of the brickwork. The maximum north-south thickness of the east-west walls was 0.65m. The bricks were bonded with tan/pale brown sandy mortar, and set in English bond with regular coursing. The lining was constructed again from bricks with sunken margins which were in use up to the late 17th century. The size ranges were 215–16mm \times 107–8mm \times 52–8mm to 230–34mm \times 109–15mm \times 56–9mm. One brick showed a large and deep impression, perhaps of a cow's hoof. This had distorted the brick itself quite seriously and it is surprising it was fired by the brickmakers. It would have been of no use for facing work, although it was perfectly usable in this lining. Also present were a sandy variant, with sizes in the order of 218–25mm \times 106–12mm \times 55–7mm (Smith in Tyler 1997, 48–50).

The east-west and north-south alignments of brickwork were parallel to the foundations of Building 1. It would appear that the brickwork was constructed with a knowledge of the alignments of Building 1 which remained standing at the time of construction.

Backfill of construction cut (1480–1600)

Sealing the clay tanking and brickwork were successive backfills (dated to 1480–1600 by the presence of post-medieval redware and 1580–1700 by Cheam redware and post-medieval black glazed ware) of the construction cut. The later backfill may have been deposited as part of the repair.

Drain (1550–1650)

South of the reservoir were the fragmentary remains of a possible drain constructed upon the backfill of Ditch 2. All that remained was a brick base as truncation had removed any attendant features associated with the drain.

The drain was set upon a make up layer (dated by the presence of Dutch red earthenware, post-medieval redware and yellow-glazed post-medieval slip-coated redware to 1550–1650) which underlay horizontally lain bricks set on a bed and bonded with grey brown sandy mortar (surface level 9.90m OD). The drain base was constructed from bricks of a pre-Great Fire type with sunken margins measuring 223–4mm × 110mm × 55–9mm. The bricks had become misshaped during firing (Smith in Tyler 1997, 48–9). The bricks were constructed to respect the same north/west-south/east alignment of the Ditch 2 channel cut.

A narrow brick base such as this, constructed to the alignment of a former channel was most probably the base of a brick drain constructed to replace the earlier channels, possibly at the same time as the brick reservoir. The drain will have emptied to the south, into Hackney Brook.

Period 5; Open Area 6, disuse of Structure 2 (after 1500–1600, possibly 1650–1700)

Period 5 saw the backfilling and disuse of the reservoir and the laying of new external surfaces to the west of Building 1. It is known that development took place along Homerton High Street during the late 16th century and it is possible that both of these activities were undertaken during this period.

A series of successive external agricultural/garden soil type deposits sealed the Open Area 5 backfilled pit to the west of Building 1. These made up Open Area 6, the dating of which is

based on the fact that it is later than the backfill of the pit which it sealed, 1500–1600.

The earliest layer was a mid green grey silt/clay with occasional fine-medium pebbles (surface level 11.89m–12.37m OD) overlain by a dark grey brown silt/clay with frequent fine-medium pebbles, moderate brick and tile fragments, fine chalk fragments and occasional coarse pebbles (average surface level 12.24m OD). Sealing this was a layer of loose reddish brown clay/sand/silt with frequent fragments of brick and tile, lenses of buff mortar, fine-coarse pebbles and moderate charcoal fragments (average surface level 12.84m OD).

Open Area 5 had been characterised as a series of external surfaces. It was succeeded by Open Area 6 which used the area as a garden rather than open ground.

Backfill of Structure 2 (after 1500–1600)

The reservoir was backfilled with successive deposits which included demolition debris. This infilling marked the disuse of the reservoir. The lowest demolition/infill deposit was gravel (surface level up to 10.74m OD), itself overlaid by silty brown clay (surface level up to 10.90m OD). This was sealed by a deposit of clay with occasional chalk blocks interpreted as the remains of tanking which had collapsed inwards. This was overlain by successive layers which included a brick and mortar rubble, silty yellow clay and a mid-dark orange brown silty clay with frequent orange brown clay patches (further tanking), up to 50% made up from brick derived from the demolition of reservoir walls. This included Tudor Brown ware (dated 1480–1600) which may have been redeposited during the demolition process. The demolition layer was overlain by a mixture of dark brown silty sand and buff mortar with brick, tile and charcoal fragments (*ie* general demolition debris).

Post hole (1650–1700)

The brick drain base to the south of the reservoir was cut into by a post hole. This was backfilled with material dated overall to 1650–1700 by the presence of green-glazed post-medieval slip-coated redware, red Border ware, Staffordshire slipware and Staffordshire white salt-glazed stoneware.

The cutting of this feature marks the disuse of the drain and may also coincide with the demolition of the reservoir, and as such would date the disuse of the reservoir.

Period 6: Open Area 7, Structure 3 (well) (1500/1600–1792)

In Period 6 Building 1 had been demolished and then covered over by a new external surface. A brick-lined well replaced the disused reservoir. During the late 16th century a range of timber framed buildings had been constructed along Homerton High Street and, as with Period 5, it is possible that redevelopment was undertaken during this period. Building 1 was demolished and replaced by a building beyond the site limits. The new external surface served this building, probably Yard C depicted on the plan of 1792 (Fig 5).

Open Area 7 included extensive successive brickearth surfaces deposited across Open Area 6 and the plot of Building 1 after its demolition. Metallings and dumps had been deposited along the western edge of the surfaces. A linear gully marked the division between the metallings and the surfaces.

Phase 1

Building 1 had been truncated at a general level of up to c.11.54m OD. The truncation level applied equally to foundations and make up layers. After truncation make up layers and an overlying brickearth surface had been deposited, sealing the remains of Building 1.

A compact brickearth had been deposited over the truncated base of Building 1. This layer was between 20 and 60mm thick with a surface level of 11.60m OD. This layer may have been a surface. It acted as the base for gravel, deposited as a make up layer which was up to 80mm thick with a surface level of 11.69m OD. The make up was overlain by brickearth slab (surface level 11.83m OD), which was up to 130mm thick. The remains of a chalk surface adhered to the upper face of the slab and some scorching was visible. This represented the remains of an extensive surface, the west edge of which was beyond the limit of the demolished Building 1.

The foundation which delimited the west side of Building 1 was not parallel to the edge of the

brickearth surface. Apparently the alignment and limits of Building 1 were unknown at the time of the deposition of the surface.

As no foundations, robbing cuts, internal features (eg stake holes) or other indicators survived it is probable that the brickearth slab did not represent surfaces within a building. Such an external surface may have related to a building beyond the limits of the excavation area.

Phase 2

To the west of and overlying the Open Area 7 Phase 1 surfaces was a series of metallated surfaces which incorporated a shallow gully at the western edge of Open Area 7 Phase 1. The gully marked the limit of Open Area 7 Phase 1.

A demolition dump of chalk and peg tile dump overlay Open Area 7 Phase 1 at its western edge. This deposit was 80m thick with a surface level of 11.81m OD. The debris probably derived from the demolition of Building 1. To the west of this dump were successive metallings with surface levels of 11.62m OD and surface level 11.87m OD. These were deposited over surfaces contemporary with Building 1.

A shallow (base level 11.44m OD, depth 290mm at maximum) north-south gully overlay the metallings discussed above. The linear alignment of this gully was the same as that of the west edge to the Open Area 7 Phase 1 surfaces. The gully was 1.50m wide and acted as a water run-off for Open Area 7.

Phase 3: disuse (1792–1800)

The disuse of Open Area 7 was marked by the infilling of the gully which had been backfilled with a grey-brown silty clay which extended east to seal the Open Area 7 Phase 2 demolition debris dump. The backfill was dated overall to 1700–1800 by pottery which included Frechen stoneware, Nottingham stoneware, post-medieval black-glazed ware, post-medieval redware, red Border ware, Staffordshire butterpot and English tin-glazed ware. The deposition of this infill marked the disuse of the gully and related surfaces which had also been sealed. Open Area 7 was probably sealed over as part of the demolition known to have taken place of Building 'AA' on Fig 5 between 1792 and 1800.

Structure 3: well (before 1770–1900)

The backfill of the Structure 1, the brick-lined reservoir, had been cut through by a circular brick-lined well. The insertion of this feature implied foreknowledge of the water source which had been exploited earlier in this area of the site. The dating of the use of the well is based on it predating the backfill, which marked its disuse. The well survived to a level of 10.51m OD, and although not bottomed, its base level was below 9.32m OD.

The well been backfilled with successive deposits which included creamware and post-medieval redware dated overall to 1770–1900. It is probable that the backfilling took place at the time of the demolition of buildings depicted on the 1792 plan of the site area (Fig 5).

Period 7: disuse of Open Area 7 (1792–1800)

Period 7 saw excavation into the external surfaces which extended across the demolished Building 1. The building stood beyond the site limits of which Open Area 7 was part and was demolished in the period 1792–80. Period 7 is thus associated with this demolition.

Robbing cut (1792–1800)

A cut had been made into the surface of Open Area 7. This cut respected the alignment, depth and extent of the east-west aligned southern Building 1 foundation. Presumably the cut had been made as an exploratory cut to find out the extent of any underlying foundations. The cut had been backfilled with material which included post-medieval redware and Nottingham stoneware dated overall to 1600–1800. It is most likely that this was also associated with demolition known to have taken place between 1792 and 1800.

Stake hole group (1792–1800)

A group of two parallel rows of stake holes cut through Open Area 7 into the east-west aligned southern Building 1 foundation. Eight stake holes were recorded; two rows aligned north-south. The rows were 1.20m apart, with the north-

south distance between each stake hole 1.60m. Each stake hole was rectangular with rounded corners. Base levels were 10.35m OD–11.03m OD. The stake hole group was backfilled with a uniform dark grey-brown silt which included demolition rubble and pottery including post-medieval redware and English tin-glazed ware dated overall to 1600–1800.

The stake holes were made for a structure with a uniform construction. As they were cut through the Building 1 foundation to the east of surfaces Open Area 7 their association with demolition, or possibly construction would be apparent. They were possibly the base for scaffolding and were associated with demolition known to have taken place between 1792 and 1800.

Period 8: Building 2 (after 1792–1800)

In Period 8 a complex of brick foundations was constructed to the north of the site after the backfilling of the stakeholes discussed above (Figs 19, 20). The buildings represented by these foundation are depicted on maps of 1831 and 1870 (Figs 6 and 7). They were probably constructed shortly after the demolition known

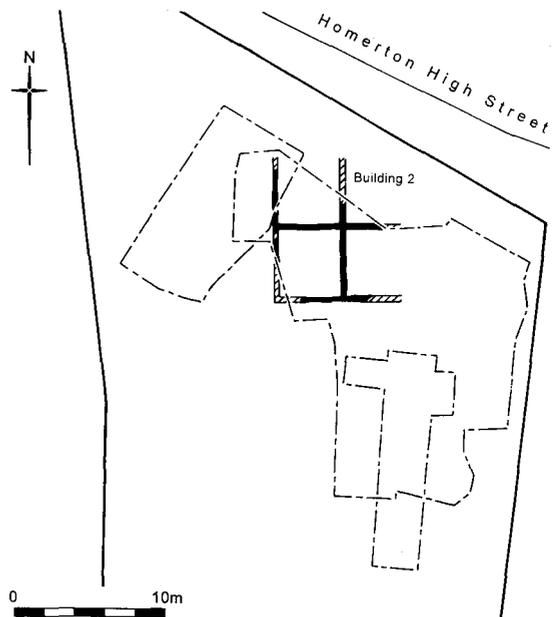


Fig 19. Plan of Building 2

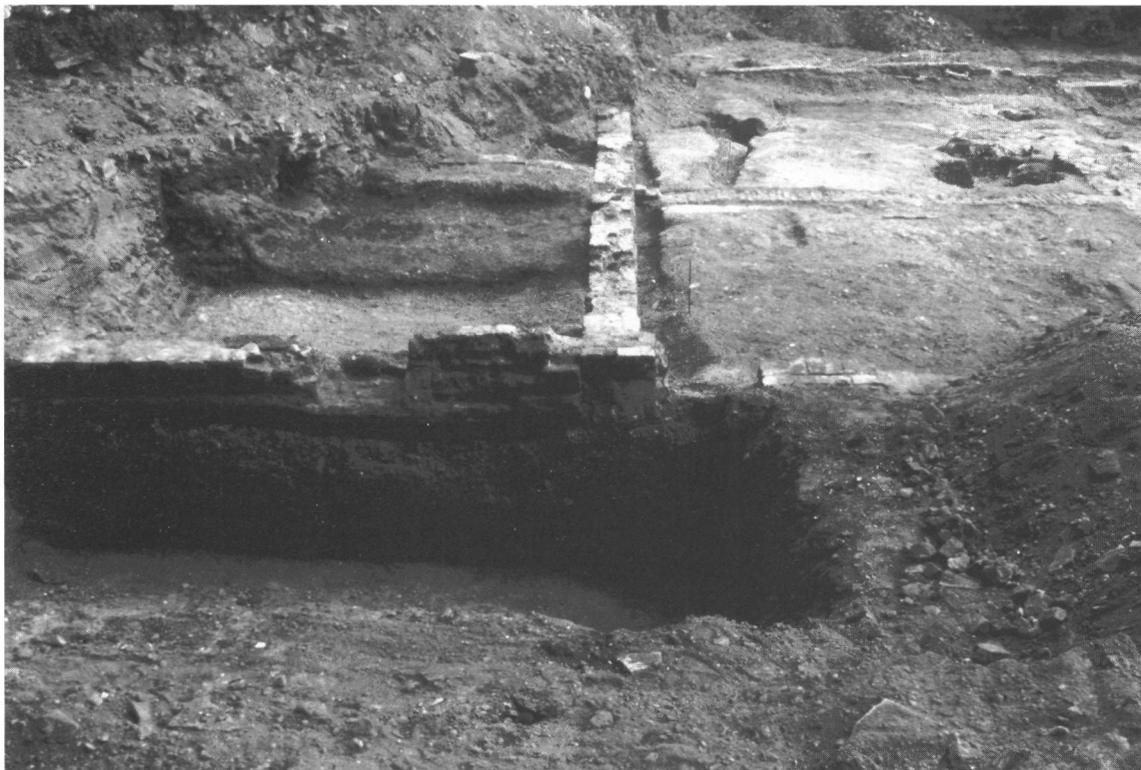


Fig 20. The foundations of Building 2 seen from the west. Scale is $5 \times 100\text{mm}$ units

to have been undertaken in preparation for the setting out of Link Street by 1800.

Building 2 represents the remains of the buildings constructed along the newly laid out Link Street after 1800 subsequent to the demolition of the buildings on the 1792 plan (Fig 5). Building 2 consisted of a series of brick foundations constructed at right angles and parallel to each other (Figs 19, 20). The relationships were mainly abutting and the foundations could be of one building, or a group of adjacent buildings constructed together. Map evidence would suggest the latter. No surfaces of internal features survived. The backfill of the construction cuts for these foundations included English tin-glazed ware, yellow glazed border ware, post-medieval redware and imported German Frechen stoneware dated overall to 1600–1800.

The bricks employed were of various types including both pre-Great Fire types and later types indicating reuse of demolition debris. Base level of the foundations was 11.44m OD–11.80m OD. They were truncated at up to 12.27m OD.

CONCLUSIONS

The excavation at the Link Street site has provided evidence for the nature and date of the earliest cultural activities in Homerton. Additionally, the presence of brickearth overlying the Taplow Gravel on the site adds to the geological knowledge of the area.

There was no evidence for prehistoric or Roman activity on the site, thus bearing out the theory that there was no Roman precursor to Homerton High Street. Furthermore, there was no indication of Saxon activity. As the earliest features on the site directly overlay the geological horizon it would appear that these represent the earliest cultural indicators in this part of Homerton. If Saxon, or earlier, development had taken place in Homerton evidence might have been expected in the site area due to its location between the road and Hackney Brook.

The excavation has provided evidence for agricultural activity in the early hamlet of Homerton. The earliest activities on the site included a series of plough furrows cut into the

surface of the brickearth and backfilled between the late 11th century and the late 13th/early 14th centuries (Open Area 2). The backfilled furrows were overlain by plough soil, further evidence for agricultural activity. During this period a chalk foundation (Structure 1) was constructed at the south of the site, near to Hackney Brook which flowed eastwards to drain into the River Lea. Structure 1, although fragmentary, constituted the earliest recorded evidence for the built environment in Homerton and possibly dated from the 11th or 12th centuries. Homerton was known as a hamlet by the third quarter of the 14th century.

There is evidence, supported by archaeology, that Homerton had begun to expand during the mid 1400s. By the late 15th/early 16th centuries the plough soil on the site had been sealed by external surfaces of brickearth, sand, chalk and mortar which acted as the base for Building 1. This was probably constructed during the period of Homerton's expansion. The Homerton ward was established as a sub division of the parish of St John at Hackney by the mid 1400s. The ward itself was primarily a unit for the assessment and collection of parish taxation. This suggests that Homerton had increased in prosperity to such degree that it had gained a greater profile in the parish as a whole. It would therefore be expected that Homerton had begun to flourish during this period and was being developed.

Building 1 would have been timber-framed with an oven, integral to its construction, within its south-west corner. There were external metalled and chalk surfaces to the west of the building, with a pit cut made into them.

A series of ditches had been cut to the south of the building, one of which incorporated a timber sluice. Water management was taking place behind Building 1, between the building and Hackney Brook. It is probable that as well as being a ready water supply for agricultural purposes, the brook may have been prone to seasonal flooding which required management.

By 1540 the site area had been incorporated into the estate of Ralph Sadleir, resident at the newly built Sutton House from shortly after 1535. This estate included a house on the south side of Homerton High Street, perhaps Building 1 which was standing during this period. Even if not this particular house, Building 1 must have changed hands when Sadleir's estate was formed. Sadleir's acquisition of the property may have seen changes made to the building or the area

surrounding it. Homerton overall would have undergone further changes when the Manor of Hackney was granted to Thomas, Lord Wentworth in 1550. Beyond the limits of Sadleir's estate it is known that a range of timber framed buildings were constructed on the north side of Homerton High Street between c.1570–80. It is clear that the second and third quarters of the 16th century saw major changes to Homerton.

The pit to the west of Building 1 had been backfilled during the 16th century after which a garden type soil was laid outside the building. The ditches to the south of the building were backfilled between the late 15th century and the mid 16th century. It is possible that these changes took place when the site passed into the ownership of Sadleir. After their backfilling the ditches were replaced by a brick-lined reservoir (Structure 2) which was constructed to the south of Building 1 by the late 16th century. The reservoir was built to respect the alignment of Building 1 which must have been standing at the time of its construction.

Although the excavation could not establish a date for the demolition of Building 1, it had been demolished by the time of the 1746 Rocque map, and the reservoir was backfilled after 1500–1600. An external brickearth and metalled surface extended across the truncated foundations of Building 1. This surface was depicted on a plan dated 1792, to the west of a building beyond the eastern limit of the site. The 1792 plan shows a reservoir to the south of this later building, probably a replacement for the one to the south of Building 1. This later building was pulled down to make way for Link Street, which was set out by 1800.

This excavation has demonstrated that meaningful archaeological evidence exists in this part of Hackney. It has shown there was an unbroken sequence of development from the 11th to the 19th century. Not only does this site show the potential for archaeological survival in this area, it also provides a bench mark against which any future archaeological investigation in Homerton should be measured.

NOTES

¹ British Geological Survey England and Wales sheet 256 North London 1994.

² Unitary Development Plan (UDP) 26 SMR 080018A.

³ UDP 29 SMR 080024.

⁴ UDP 40 SMR 080059.

- ⁵ UDP 43 SMR 080075.
⁶ UDP 85 SMR 080111.
⁷ Pete Mills pers comm.
⁸ which extended back from a frontage on Lower Clapton Road between the current Laura Place and Linscott Road.
⁹ UDP 48 SMR 080090/1.
¹⁰ UDP 50 SMR 080106.
¹¹ Hackney Archives Department (HAD) Topographical Index.
¹² HAD M820.
¹³ HAD M820, HAD M1045, EPNS, 108.
¹⁴ HAD D/F/TYS/1.
¹⁵ HAD M 1049.
¹⁶ HAD Topographical index.

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A NOTE ON A MEDIEVAL AND POST-MEDIEVAL SITE AT 170–174 BURY STREET, RUISLIP, MIDDLESEX

J. R. Hunn

SUMMARY

During the course of redevelopment at 170–174 Bury Street in Ruislip a medieval site and post-medieval structure were located. This has been interpreted as having belonged to an individual toft, one of many which were situated between Bury Street and the medieval hunting park known as Park Wood.

INTRODUCTION

This discovery came about due to a planning condition on the site that was within an *Archaeological Priority Area* (NGR:TQ 0870–8850). This required an evaluation and then a subsequent ‘mitigation’ of the development. This work was carried out by Archaeological Services & Consultancy in March 1998 on behalf of Matthew Homes Ltd. A further monitoring and recording phase demonstrated that damage to the archaeology would be minimal.

SETTING AND TOPOGRAPHY

The site (site code BRP98) comprises an area of 0.38 ha (0.938 acres) situated between Bury Street on the south-west side and Park Wood on its north-east side in the town of Ruislip. The terrain is flat to gently sloping (lying above 50m contour OD). The soils are derived from glacial drift over Tertiary clay (Soil Survey of England and Wales 1:250,000 Soil Map, Lawes Agricultural Trust; Jarvis *et al* 1984).

HISTORICAL SETTING

According to a mid 16th-century Terrier (Kings College Muniments R 36), the site appears to have lain within a linear arrangement of properties or messuages sandwiched between the ancient thoroughfare of Bury Street and Park Wood, mentioned in The Domesday Survey (Eileen Bowlt pers comm). One of these properties was in the possession of John Flye who held a messuage of 1.75 acres (0.708 ha): assuming that the reconstruction of the Terrier is broadly accurate then this property may be related to the evidence discovered in the evaluation.

According to an Inclosure map of 1806 in Ruislip Local Studies Centre, London Borough of Hillingdon, there was a building on the site in the early 19th century. However, the scale of the map is too small to be absolutely certain on this matter. On the First Series 25" Ordnance Survey map of 1866 the south-western end of no. 174 appears to show several features. One of these is a possible pond and two detached buildings of some description. The eastern side of the site (*ie* no.170) appears to have belonged to a single field (no.416). By 1935, nos 174 and 172 appear to have been sub-divided NW-SE while what is now no.170 was still shown as being part of a field (no.489). By 1961 numbers 174 and 172 are shown as having houses on them. Finally, on the 1998 1:1,250 scale map all the houses (prior to demolition) are shown as being present on the site.

ARCHAEOLOGICAL BACKGROUND

Apart from the usual scatter of historical structures and artefacts in the general vicinity of

170–174 Bury Street (*ie* within a 300m radius) it was thought that there was no direct evidence for the presence of archaeology on the site itself (GLAAS *Sites & Monuments Record*). The site lies about 1 kilometre to the north of the ancient parish church and falls within the general historic core of the medieval village, that is, on ground bordering the ‘*Kings’s Highway*’ between Rickmansworth and Northolt. The site extends back from Bury Street to the edge of an earthwork boundary. This earthwork is believed to mark the boundary of a medieval hunting park (SMR no.050491). Another boundary close by to the south east consists of a double bank and ditch which extends from Bury Street to Eastcote Road (SMR no.050493). These survivals should be seen as relicts from the medieval period which once formed elements in the contemporary landscape.

METHODOLOGY

Most of the footprint area of each of the proposed buildings was cleared by a mechanical excavator under archaeological supervision. A total of 610.5 sq. metres were exposed *ie* a 16% sample of the site. The only exception to this was the location of Trench 7, which was moved 8m to the north because of the considerable ground disturbance due to the removal of the previous foundations of no.170. The record sheets were supplemented by photographs (black & white and colour film). In Trench 2 it was deemed necessary to undertake further examination of the deposits by hand. During the course of the monitoring/recording phase (mitigation) a further 95 sq m was observed, and some 30m length, of a sewer trench.

THE RESULTS

Evidence for medieval occupation was limited to Trenches 1 and 2 (see Fig 1). In the case of Trench 1 (*ie* the trench closest to Park Wood) the evidence was limited to a dispersed collection of sherds located within the top-soil (see Finds below).

The principal body of evidence was derived from Trench/Plot 2 (see Fig 1 and Fig 2 inside Fig 1). On the north side of the trench (not illustrated) there were two distinct bands of deposit orientated NE-SW. The most northerly

consisted of a dark organic soil [2] approximately 1.5m wide. This appeared to overlie a parallel band of gravely clay [3]. About 5m from the edge of the trench was another band of greyish clay 0.4m wide [4] which appeared to fade out some 4m to the NW. On the SW edge of the trench (later expanded in order to obtain a wider view of the deposits) was an area of grey clay [5], which extended back under a later dark grey soil [7] (see Fig 2). The deposit of grey silty loam [5] was almost certainly the principal source of medieval pottery from the site, retrieved on the surface after machining had occurred and during manual cleaning. These medieval-rich deposits were covered by a dark organic layer [7] upon which was a linear feature [6 & 8] which in turn was overlaid by a dark grey topsoil [1] to a depth of approximately 0.3m. The linear feature consisted of a single course of hand-made bricks (see below) and a disturbed line of flints. It was at least 7m long and approximately 0.25 to 0.3m wide and orientated NW-SE. It lay parallel with the linear features on the north side of the trench. The archive for this site will be deposited with the Museum of London.

Finds

The pottery ranged in date from Saxo-Norman to late 17th/early 18th century. Virtually all the pottery was derived from cleaning deposits, though two pieces (the earliest sherds) came from the top fills of the medieval features. The remaining deposits had numerous sherds protruding from the surface. A floor tile was also recovered (see description below) and several clay pipe stems. All the pottery vessel forms have been previously published and are therefore not illustrated (see below).

DISCUSSION

Out of the seven areas that were examined, five were devoid of any significant archaeological features. The sixth area (Trench 6) revealed a feature which turned out to be a pond. This was confirmed by an examination of mid 19th and early 20th cartographic sources. Although one of the five trenches (Plot 1) yielded medieval pottery there were no features that could be distinguished. The south westernmost trench (Trench/Plot 6) almost certainly had the traces of a clay lined

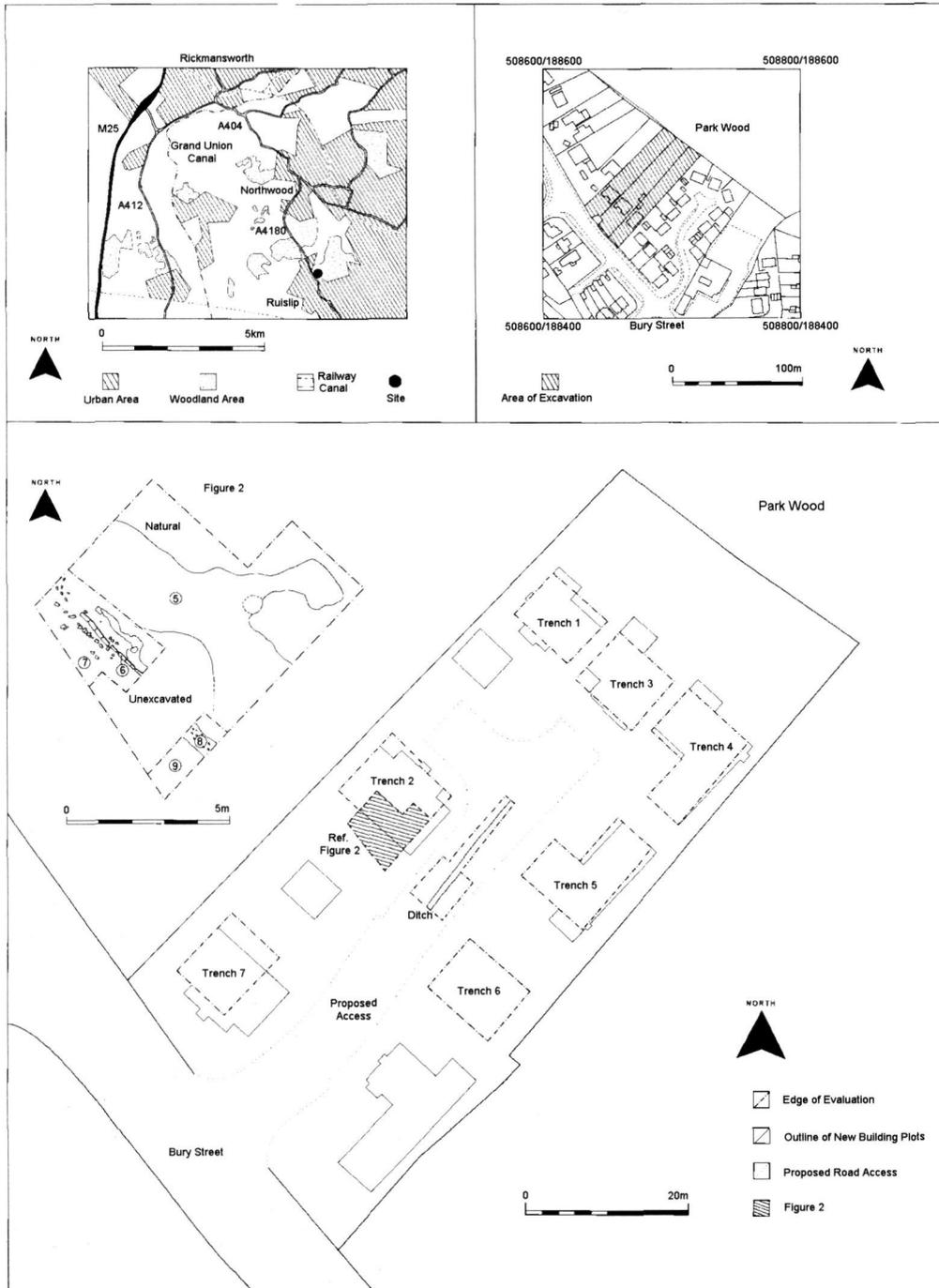


Fig 1. Site location and plan of evaluation/mitigation trenches

pond that was shown on the 1866 and 1935 Ordnance Survey maps. It was presumably in-filled prior to the development shown on the 1961 OS plan.

The most significant discoveries were two, and possibly more, medieval pits and a post-medieval foundation or sill that may have formed the base for a timber building of some description. To

judge from the occupation debris this looked more like a dwelling than a simple barn. The medieval features were almost certainly associated with occupation on the site. The evaluation was only able to establish its presence and approximate character. The mitigation phase located a boundary possibly associated with the site (see Fig 1c), and demonstrated that the impact of the development would be fairly limited. The pottery ranged in date from the early/mid 11th to the late 17th/early 18th century. This evidence appears to relate to the 16th-century Terrier, which mentions a John Flye as occupying one of the messuages (King College Muniments R 36). If so then we can be reasonably certain that occupation continued into the late post medieval period before the area was merged with a property lying to the north west.

CONCLUSION

The project has revealed a close relationship between the historical and archaeological evidence. 170–172, Bury Street were built on an old field (no.416/489 according to the Ordnance Survey) which, to judge from the soil depth and soil type, may never have been cultivated, let alone occupied. In contrast, 174, Bury Street, appears have been continuously occupied at one point or another since the 11th century.

THE CERAMIC FINDS

Lucy Whittingham

The 40 sherds (0.7kg) ranged in date from early/mid 11th century to post-medieval 16th and 17th century. All the contexts contained assemblages of a mixed date. The fabrics have been identified with reference to the fabric codes established by the Museum of London (Orton 1988 and Vince 1991).

Trench 1 contained large sherds of mid 13th to mid 14th-century Kingston-type ware (KING). Vessels include a large rounded jug or storage jar represented by a large strap handle with incised line and stabbed decoration and the flat rim of a bowl. One fragment of imported Saintonge jug (SAIM) with mottled copper green glaze dates from the mid 13th to mid 17th century. Two coarse quartz and occasional flint tempered sherds are probably mid 12th to early 13th-

century wares. One sherd of post-medieval fine red earthenware (PMFR) is of 16th or 17th-century date.

The pottery from Trench 2 contained a collection of early medieval coarsely gritted greywares and post-medieval red earthenwares (PMFR). One small globular cooking pot is a typical form in Early Medieval Flinty Ware (EMFL), (see Vince 1991, fig 2.51 no.127). Seven further early medieval greyware sherds have coarse quartz and flint temper, similar to 11th to early 12th century and mid 12th to early 13th-century Hertfordshire Greyware (SHER).

Trench 2 also contained six sherds with coarse quartz and flint temper, likely to be 11th or early 12th-century medieval wares. One coarse greyware and another oxidised ware with coarse quartz and occasional flint are probably sherds of mid 12th to early 13th-century Hertfordshire Greyware (SHER). One sherd from a mid 13th to mid 14th-century Kingston-type Ware (KING) jug has splashed copper green glaze. Post-medieval wares include a sherd of mid 16th to mid 18th-century Surrey Hampshire Border Ware (BORDG) and six sherds of 17th to early 18th-century post-medieval fine red earthenwares (PMFR).

BUILDING MATERIALS

J. R. Hunn

A single sample brick was recovered from the remains of the foundation sill discovered in Plot 2 of the proposed development. This consisted of a red (Munsel Colour Chart code: Mun 2.5 YR 5/8) hand-made brick 203mm (8.75 inches) long by 110mm (4 and 3/8 inches) wide by 47mm (1 and 7/8 inches) thick. Lime mortar was present on the brick. The brick is slightly smaller than the standard Tudor brick which measured 9 × 4.5 × 2 inches (Wight 1972, 28).

A single unstratified reddish brown (Mun 2.5 YR 5/4) floor tile was also recovered. This was 215mm × 215mm (8.5 inches sq) and 1 3/8 inches thick.

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DID CHARLES I DINE IN HILLINGDON IN 1646?

T. Harper Smith

The anecdote that Charles I on his attempted escape from Oxford in 1646 stopped for several hours at a tavern in Hillingdon was given wider circulation by Daniel Lysons in his *Environs of London* in 1800 and as a result has been quoted in many places.

First, let us look at what he says:

The manor of Colham has a court-leet and court-baron, with right of free warren. The courts are held annually at an ancient public house in Hillingdon called the Red Lion, which in the year 1646 was in the occupation of John Tisdale, as appears by the court-rolls, which confirm the following anecdote, printed in Peck's *Desiderata Curiosa*, from Dr Michael Hudson's examination before the committee of parliament (in the year above mentioned), relating to King Charles's escape from Oxford to the Scots at Southwell. '...After we had passed Uxbridge, at one Mr Tisdale's house, a tavern in Hillingdon, we alighted and we staid to refresh ourselves between ten and eleven of the clock, and there staid two or three hours, where the King was much perplexed what course to resolve upon, London or northward; about two of the clock we took a guide towards Barnet'.¹

Lysons was a great pioneer topographer, but his work was limited not only by his available sources and his period, but also sometimes by his own carelessness. For this particular 'anecdote' Lysons gives as his source 'Peck's *Desiderata Curiosa*'. In a footnote he says 'Vol ii, book 9, fol 2 (page 360 of 1779 edition)'.

Francis Peck (1690–1748), a Trinity man, was late in the field of Royalist writing. In these two volumes he put together documents from earlier collections. Some came from John Nalson's collection *From the Rebellious Scots 1639 to the Murder of Charles I 1649* (published 1682–3). Nalson was a strong Royalist and collected material he considered favourable to the cause. The extract used by Lysons comes from a report of a Parliamentary Committee at which Michael

Hudson, who accompanied Charles, related the events of their journey.

Obtaining a copy of Peck's edition of 1779 I did exactly what I expect Lysons did before me, looked at the excellent index for the word 'Hillingdon', and there was Lysons's extract, on the page and volume he noted. Unlike Lysons, perhaps, I then leafed through the volumes and found a few pages earlier that Hudson had made another report to a different committee under the Speaker. It was quite a different account of the same journey, and, within the same volumes there were documents of John Rushworth's *Historical Collection* which gave yet a third account.²

John Rushworth was from 1640 Clerk Assistant to the Commons and their Secretary to the Council of War. If not present at the interrogation of Michael Hudson, he would have seen all the documents.

There were also documents in Peck from the *Chronicon de Dunstable* (1733) of Thomas Hearne (1678–1735). He was yet another collector of historical documents and an antiquary. Some of these documents also refer to the journey.

Finally there was yet another account, not in the *Desiderata*, that of John Ashburnham.³ Ashburnham was the King's most loyal servant, from an aristocratic family, practical and very capable. He was technically Charles's Groom of the Bedchamber. In Oxford he kept the King's accounts (published in 1830) and organised his life. Charles relied on him during the journey from Oxford. He was also with the King on his second attempted escape from Hampton Court to the Isle of Wight. Because he was unjustly accused of betraying Charles then, he wrote

an account of both journeys in 1648 to justify his actions. He was imprisoned after the Isle of Wight and kept in custody, considered dangerous, for most of the Commonwealth period so his publication had only a limited circulation. Lysons does not appear to have known of it, and its eventual republication, along with other material, did not appear until 1830, too late for Lysons.

THE JOURNEY FROM OXFORD

Putting together Charles's journey from Oxford to the Scots at Newark may not be of the greatest historical importance, but it reveals an interesting human story.

It is Ashburnham alone who sets the scene and details the preliminaries. After Naseby the Civil War turned against Charles and in 1646 the Army was closing in on Oxford. The Governor of Woodstock (Capt Fawcett) warned the King that Woodstock could not hold out much longer and when it fell Oxford could not hold out long. Charles saw three possibilities: surrender to the Army; appear at Westminster and offer himself to Parliament in an effort to make peace; or to go to Ireland or France. M. Montreuil, Agent from the French King, was willing to attempt negotiations with the Scots Army in Newark. The Commissioner to the Scots Army in London had already agreed terms with the Queen and Cardinal Mazarin. Michael Hudson was sent on 2 April to make arrangements with the Scots at Newark.⁴ Ormonde, his commander in Ireland, was told of these plans on 13 April.⁵ The King did not tell the Privy Council, only Rupert and Richmond, all other negotiations having failed. Montreuil wrote to say all difficulties had been resolved. Oxford was told the King was off to London, and on 27 April (Monday) he set off with John Ashburnham. Hudson, who had been making various arrangements for the journey, met them on the way.

The legend that three people left from each of the Oxford gates is therefore unlikely since only two went out, although the story that all the gates were kept shut for five hours is likely.

What was Hudson's role in all this? Peck produced a summary of Hudson's life from Thomas Hearne⁶. Born in Westmoreland, he was a servitor at Queen's Oxford in 1621, when he was 16. He took his MA and Fellowship in 1630. He married the daughter of an Army captain, was ordained and held a benefice in Lincolnshire

until the Civil War when he joined the King's service. He knew the north and was appointed to the curious position of Scoutmaster General to the Army of the North under Newcastle. After Marston Moor, when the north was lost, he joined the King in Oxford and took his DD while there. Presumably his experience with the Army, of discovering the enemy's intentions and planning the way ahead, was the reason he was asked to help the King on his journey.

Hearne also says that Dr King and the Earl of Southampton left Oxford at this time. There is no further mention of them but Dr King was a parson and several accounts have Charles, wearing a cassock, riding behind Ashburnham as his master.⁷ As one reads and puts together the various accounts, it becomes clear that the whole affair is full of subterfuge and deception.

The first part of the journey is agreed by all the accounts. They left at 3pm on the 27th and took roads roughly parallel to the Thames for Dorchester, Henley and Maidenhead. Ashburnham's account confirms this in more detail. They had a pass from a captain in Oxford and met Parliamentary troops at Benson and Nettlefield, both of which are on the road to Maidenhead. They said they were on their way to the Commons.⁸

It is after Maidenhead that the accounts differ. Rushworth says they turned north from there for Wheathampsted (by St Albans) and lodged at at a common inn in a little village five miles from Newmarket. No one remembered where the first night was spent. They went from there to Harboro (Market Harborough), spent one night at Stamford, arriving at Downham (Market) on 30 April, where the King stayed until 4 May. This is quite straightforward and practical and we must remember that Rushworth was the one person who saw all the documents. This also squares with Ashburnham's account.

In one of Hudson's accounts, Charles was left at the White Swan in Downham while Hudson went to Southwell.⁹ In another account Hudson is based as Crimpleshaw, a village near Downham. On Saturday 2 May Hudson went from there to the 'Southrie' ferry (Southey?), a private way to the Isle of Ely and back.¹⁰ In yet another account he stays at Melton Mowbray on 30 April with a Mr Browne and on 1 May goes to Ely.¹¹ In another account Hudson appeared with Ashburnham and the King on 2 May at 10pm and stayed (it is not clear where) until 6pm on the Lord's Day (3 May),¹² then went to Stamford

to stay in the Falcon. In yet another account, on Saturday 2 May the King bought a new hat in Downham and went to Ely.¹³ All these accounts derive from Hudson and from witnesses who claim to have met him and gave evidence afterwards.

Hudson's accounts therefore differ. Of course he may have been deliberately sowing confusion by giving false information. According to yet another account the party in the early days appeared briefly on the London road looking in the London direction. A rumour spread that the King was in London which was believed sufficiently that an order to detain the King in London was issued on 4 May.

Hudson's actions too suggest that he was laying false trails. He discussed his business freely with passers-by, openly exchanged his horse, wore a scarlet coat at times, enquired at shops for the kind of hat Charles had been wearing on the first two days and made a great fuss of disappearing secretly in the fens. Had Browne's evidence been planted on him? What part

was played by Dr King and the Earl of Southampton?¹⁴

THE RED LION AT HILLINGDON

Let us now return to Lysons in the light of all this trickery. Lysons backed up his story by saying that in 1646 'the Red Lion was in the occupation of John Tisdale, as appears in the court rolls'. There is no mention of the Red Lion in Peck, only of a tavern in Mr Tisdale's house.

In 1646, as Lysons acknowledges, the manors of Uxbridge, Hillingdon and Colham had been united in one manor of Colham. Lysons says the courts were held annually in the Red Lion. Modern historians now take this to mean that the courts were held there in Lysons's time.¹⁵ None of the surviving 17th-century court records give this information. Indeed one court roll of 1646 still exists. It gives the date, acknowledges Charles I and gives a list of jurors. It does not mention a place of meeting, nor does it refer to



Fig 1. Hillingdon Church about 1740. Burles's school was in the house with the lug windows on the ground floor just by the house on the left

John or any other Tisdale.¹⁶ A John Tisdale does appear in the Hillingdon marriage register of 1656. We know that Lysons examined the parish registers, including the marriage register, since he gives extracts from them. Is this where he obtained the name John Tisdale? There are several Tisdales there but none in the baptismal registers.

A search of the Middlesex Sessions Records gives the first reference to the Red Lion at Hillingdon in 1692.¹⁷ There was one witness at Hillingdon at the time whose existence has only lately come to light. Edward Burles was the master of the grammar school there between 1642 and 1649. Having taken his MA, he was apparently tutor to the sons of Dr John Clarke, perhaps in Brentwood, who went to London and became Treasurer then President of the Royal College of Physicians. He remained Burles's patron. Burles then set up a grammar school in Bushey and in 1637 applied for his Bishop's licence as a schoolmaster in Acton.¹⁸ This was later taken as a licence to serve as a priest, so he must have been in orders by then. In 1642 he had a school in Hillingdon which obviously flourished since he had three assistants. They and their families can all be traced in the parish records.

For each of the places where he served he has a preface to his later Grammar *Grammatica Burlesia*, published in East Acton in 1652 which became very well known.¹⁹ In the Hillingdon preface in English (there is also one in Latin signed 'in my school in Hillingdon 1649') he relates how they dealt with the plague of 1642. He tells too of the despoiling of the parish church (St John Baptist) in the same year by the Parliamentary troops. He writes of 'driving an alehouse out of the church and the church house'. Fortunately the troops did not damage the monuments. He calls these soldiers 'limetwigs of disorder which might easily intangle spoon-feathered youth'. In another paragraph, in which he discusses the falling-off of Hillingdon in spiritual matters, he writes 'Sirs I may venture to say that some prized an Alehouse above the school-house for which this Grammar was prepared'. Was the tavern in fact above the school? Grammar schools were in the most curious places. In Bushey the school returned to a carpenter's shop. The first infants' school in Acton was a room over the town gaol; the Royal Grammar School in Colchester was at a house in Culver Street that looks like any other cottage

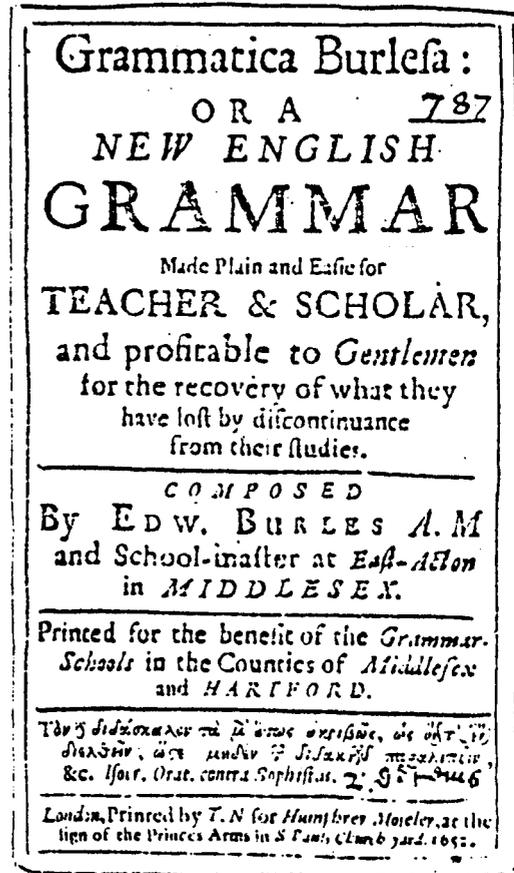


Fig 2. Title page of Burles's Grammar 1652

there. It spread down the garden in the rear and had a shopfront let in eventually to give light to the front classroom.

Burles's subsequent actions show he was a Royalist. He lived quietly in East Acton during the Commonwealth with his wife Mary until 1660 when, at the Restoration, he held benefices at Colchester and for a while was master at the Royal Grammar School at a time when Royalists and Anglicans were replacing former supporters of Parliament.

CONCLUSION

Apart from the lack of evidence in the published accounts, there are other reasons why a visit to Uxbridge and Hillingdon by Charles I appears unlikely. Uxbridge would surely be the one place where the King and Ashburnham would have

been recognised. Just over a year before, in January 1645, the King's Commissioners and those of Parliament met at Uxbridge to discuss a possible peace treaty. For a week there was much coming and going. Among the King's Commissioners was Mr John Ashburnham, who, no doubt, was continually with the King. In addition, Uxbridge was a garrison town for the Parliamentary army and troops were quartered in the area around it which included Hillingdon.

Finally, it seems odd that Ashburnham and Hudson would make this kind of dangerous detour if they were eager to get to Downham as quickly as possible to conceal Charles.

There is another curious matter. Among the 28 documents relating to the King's journey in Peck, almost everyone who met the party was interrogated afterwards, even the barber who cut the King's hair.²⁰ Only two people are missing: a Mr Spixworth from around Downham and Mr Tisdale. Spixworth takes part in Hudson's deceptions. What happened to Mr Tisdale?

ENVOI

The story ends with Charles's arrest by the Scots who took until February 1647 to hand him over to Parliament, and only then on condition that half the sum agreed for their services in England was handed over. Ashburnham had been given a pass to take him to Holland but was caught on 25 May. He soon found his way back to the King in Newcastle and was with him at Hampton Court for the abortive escape to the Isle of Wight. After that he was confined for most of the Commonwealth period. At the Restoration he returned to his old post as Groom of the Bedchamber to Charles II. According to Pepys he was to be found entertaining guests with his tale, when he was not saying how difficult it was to keep the new King in bedlinen since he had no money to pay his servants so they stole everything they could lay their hands on.

Michael Hudson had borrowed a pass from

his brother-in-law but was recognised and arrested at Sandwich waiting for a boat. After a number of interrogations he was released to Lord Dunfermline. Hudson's letter of thanks to Dunfermline is in the *Desiderata*. He kept out of sight until the Restoration, probably as incumbent at Witchling, Kent. Pepys met him and praised his sermon when he was Chaplain to Chatham Dockyard.

At the Restoration, John Rushworth became Clerk to the Council of State, then Treasurer Advocate. For many years he was MP for Berwick.

NOTES

¹ Daniel Lysons, *Environs of London* vol V, p152.

² Rushworth published these volumes between 1659 and 1701. They cover the period 1618–49.

³ John Ashburnham's Narrative of his attendance on King Charles I, 1830.

⁴ Nalson XIV, 118.

⁵ Letter to Ormonde, 13 April 1646 in John Ashburnham's Narrative 1830.

⁶ Hearne in *Chronicon Desiderata*, p347.

⁷ John Rushworth *Historical Collection* IV, i, 266–7.

⁸ Nalson XIV, 123.

⁹ John Ashburnham's Narrative 1830.

¹⁰ Enquiry at Lynn 11/5/1646 in Nalson XIV 118.

¹¹ Enquiry of Browne at Lynn 18/5/1646 in Nalson XIV 118. It is because these two enquiries were at Kings Lynn, while others were in London, that the contradictions were not seen at the time.

¹² Nalson XIV, 115.

¹³ Enquiry at Lynn 11/5/1646 in Nalson XIV 118.

¹⁴ Thomas Hearne *Chronicon Desiderata* p347.

¹⁵ VCH *Middlesex* IV, p183.

¹⁶ Court Records 1646, London Metropolitan Archives Acc 180/679.

¹⁷ Middlesex County Record Society, Middlesex County Records vols 3,4,5, 1635–1701; Hillingdon Parish Registers.

¹⁸ Guildhall Library 9583/1.

¹⁹ Burles's *Grammatica*, like most old textbooks is worn out. The copy at the British Library is unreadable, as is the photocopy. The photocopy at the Bodleian Library, however, can be read.

²⁰ The account here wrongly reads 'Newcastle' instead of 'Newark'.

REFURBISHING WESLEY'S HOUSE

Alison Bodley

SUMMARY

John Wesley (1703–91), the Founder of Methodism, had a major base in Islington for most of his life. For the last 12 years of his life this was at Wesley's Chapel on City Road. His manse, adjacent to the Chapel is now a historic house and in 1994 work began to refurbish it. Extensive research took place which is summarised in the following paper.

INTRODUCTION

Wesley's first contact with London had been through his school days at Charter House. Later in 1738, only a mile away in Aldersgate where the Museum of London now stands, Wesley had what is known as his 'conversion experience' and shortly afterwards began to preach in Moorfields. This area of park land north of the city wall, originally marshes, was used for disreputable activities such as fairs, the selling of second hand goods and archery. After his 'conversion' Wesley often preached there in the open air. North of the Moorfields stood an old cannon foundry in ruins. In 1739 Wesley bought the lease for £115 and spent a further £700 adapting the property for his own purposes, creating meeting rooms, a school, living accommodation and in 1746 what was probably the first free medical dispensary in London. Wesley would stay there during the winter months and spend the rest of the year travelling and preaching, forming new societies. After almost 40 years the lease was running out and in 1777, with financial support from the Methodist Societies, Wesley laid the foundation stone of his New Chapel in City Road, opening it in 1778 and building a house to act as his home in 1779. After his death the house was used by Wesley's preachers until 1898 when, partly due to the number of pilgrims calling to

see 'Wesley's Relics' or personal possessions, one floor was turned into a museum. Since this time remaining floors have been added to the museum and various rearrangements of furniture made.

By 1994, 13 years after the last refurbishment, the wear and tear caused by visitors meant that some work had to be done on the house. Objects were suffering due to lack of environmental control and support, whilst the overall impression to the visitor was a charming but shabby museum which did not at all look cared for. The interpretation of Wesley was severely misleading the public, being aimed at visitors who already had a Methodist background. Some visitors were even being misled into thinking that John Wesley was a Puritan or Dissenter which simply is not true. A new interpretation was needed.

In January 1993 Crispin Paine presented his report on John Wesley's House, *Proposals for Renewal* to the Trustees of Wesley's Chapel. It contained an overview of the house's history and first proposals as to how the house could be redisplayed. It was well received and led to the appointment of Drivers Jonas, a firm of Surveyors, as the main contractors of the scheme. They brought in Maryann Bowen, a private researcher, to look at the history of the house, and Ian Bristow to advise on the interior. The remaining research fell to Alison Taylor, the Curator (now Alison Bodley).

Architecturally the house is a fine example of a middle class 18th-century London town house. It is rare in that all other London houses of this period which are open to the public are somewhat grander and more luxurious.

ARCHAEOLOGICAL EVIDENCE

As the interior had apparently been little altered an archeological investigation was made. Despite



Fig 1. Wesley's house, 49 City Road

the fact that the original paint had been stripped off the panelling, Ian Bristow was able to find traces of an 18th-century paint of a stone white colour. Wall paper samples were also taken from areas where it is often left, around fireplaces, and in corners. This provided a wonderful array of 19th-century pea green papers and one red, but nothing as far back as Wesley's day. A report of the 1930's describes how wall paper was found behind the large bookcase in the study and tantalisingly adds that samples were attached. These, however, have long since been lost. Through the use of photographs dating back to the last century it was possible to trace the date of the removal of the paint to about the 1930's. Photographs also show that the existing glass doors to the cupboards were added in the 20th century. Originally doors may have been of solid wood if they existed at all. There was certainly a period when there were no doors but just open shelves. Floor boards have been changed and floors strengthened, whilst in the 1950's an

outside side wall was rebuilt. Despite the alterations most of the interior is intact.

DOCUMENTARY SOURCES

Over the years numerous guides to the house have been written but they all give the same information. Many authors have been overawed with Wesley the man and his work rather than the practicalities of his everyday life which is important when trying to understand the house. Only Stevenson's *History of City Road Chapel*, written sometime at the end of the 19th century, is more informative but still leaves a lot of questions unanswered and Stevenson doesn't reveal his sources. There is even reason to think that some of them have been lost or destroyed. Every original scrap of evidence needed to be collated and Wesley put back into the context of the 18th century.

THE RESEARCH

Development of the Wesley's Chapel Site

Wesley leased the land on which he built the Chapel from the Corporation of the City of London in 1778.¹ The original plan was to build a row of houses across the front with access through an arch, hiding the chapel completely. The Corporation however, asked for some land back with which to widen roads. The Trustees of the future chapel relinquished this on the condition that the row of houses was not built.

At this time George Dance, the Younger, was building Finsbury Square. It is thought he designed the Chapel and also Wesley's House. Wesley agreed the plans for the 'houses' with Dance's assistant, Peacock as shown in a letter to Samuel Tooth,² Methodist preacher and builder. There is evidence to suggest that Wesley himself was very involved in the design of the house as shown by a document recently discovered in the John Rylands Library, *An agreement 28th May 1779 between John Jenkins, John Wesley and Samuel Tooth*. This document lays down precise measurements and building requirements for the new house.

Wesley had always been interested in architecture and indeed his journal often shows him advising on plans for chapels. Methodism was administered by an annual Conference of the Methodist preachers. Wesley published the

minutes and at the 1786 Conference he was trying to achieve conformity between the new preaching houses, by basing all designs on Wesley's Chapel in London and the New Room in Bristol.

Other buildings appeared on the site including the Morning Chapel, which was to the left of the Chapel and used for the 5.30am services, and next to that a 'Book Room', probably on the site of the present Leysian Centre. By 1788 the printing presses which had been in the Foundry were transferred to the Chapel.³ A house on the other side of the courtyard, opposite Wesley's was built by the Steward, George Clark, probably by 1786 although details are vague.⁴ Water was provided by a well somewhere on the site.⁵

The block of small rooms on the back of Wesley's House may have been added after the house's completion: the doorways into the rooms are very thick cutting through the outer wall of the house whilst the odd shape of the rooms is due to the location of the window in the previous room. The Rylands document,⁶ however, indicates that they were planned from the beginning, even if not built immediately. An entry in the first Steward's Book⁷ records the payment of £29 15s 6d to Mess Scollick and Daniels for building against the wall of the new house in 1788. Whether this applies to the chapel, the steward's house or the addition of the small rooms at the back of Wesley's House is not clear. This style would have been a relatively old-fashioned feature at this time and why these rooms were added is not known; maybe Wesley just needed more room.

The use of the house

The planning of the rooms in Wesley's House follows the normal 18th-century pattern with the kitchen in the basement, the dining room on the ground floor, as shown by the alcove for a sideboard and the grandest room, the drawing room on the first floor (Fig 2).

Finally in 1779, one year after the Chapel had been opened, Wesley moved in but his comment does not reveal much about the house at all: 'This night I lodged in the new house in London. How many more nights have I to spend here?' 9th October 1779.

By tradition Wesley used the first floor as his own rooms, living as a bachelor as he had separated from his wife some years earlier. In

1781 there was a fire close to the Chapel and Wesley records this event in his journal:

January 30th 1781

Waking between one and two in the morning, I observed a bright light shine upon the Chapel. I easily concluded there was a fire near, probably in the adjoining timber yard (belonging to Samuel Tooth). If so, I knew it would soon lay in ashes. I first called all the family to prayer; then going out we found the fire about a hundred yards off, and had broke out while the wind is turned in a moment! So it did, to the west, while we were at prayer, and so drove the flame from us. We then thankfully returned, and rested well the residue of the night.

To have been made aware of the fire, presumably from his bedroom, Wesley's bedroom must have been at the back of the house.

Wesley never described the interior of his house or his furniture. To him, although they may have been of good quality, they were after all purely functional. Why should he mention them unless for some purpose? Some of the furniture has by tradition been preserved in the house since the time of Wesley, including the grandfather clock and Wesley's bureau. In a letter in 1781 Wesley asks Mr Atlay⁸ to take a copy of Primitive Physick out of his bureau, whilst in another in 1791⁹ he tells Sally Wesley to borrow his chamber horse from the dining room to help her exercise indoors. The chamber horse was in effect an exercise machine and simulated the effect of riding. This reflects his passion for health and fitness. In many letters he advises his friends to rise early and take lots of exercise.

The cupboards in Wesley's bedroom are adjustable and would be ideal for books. This is confirmed in Wesley's will¹⁰ when Wesley gave 'all the books in my study and bed chamber in London' to Thomas Coke, John Whitehead and Henry Moore. There was also probably a bookcase in the drawing room/study. Wesley had many books, not just because he liked to read but because he was running a publishing house from City Road. Books were part of his work and he had another collection in Bristol. The existing bookcase in the study/drawing room is placed where the bureau would normally stand meaning that the only wall available to place the bureau is where a sofa would normally have been. The bookcase is late 18th century and it is impossible to tell where it stood in Wesley's day as the wall it stands against was replaced in the 1950s. If it was where it is today it may indicate that Wesley had no sofa which would have been unusual at the time.

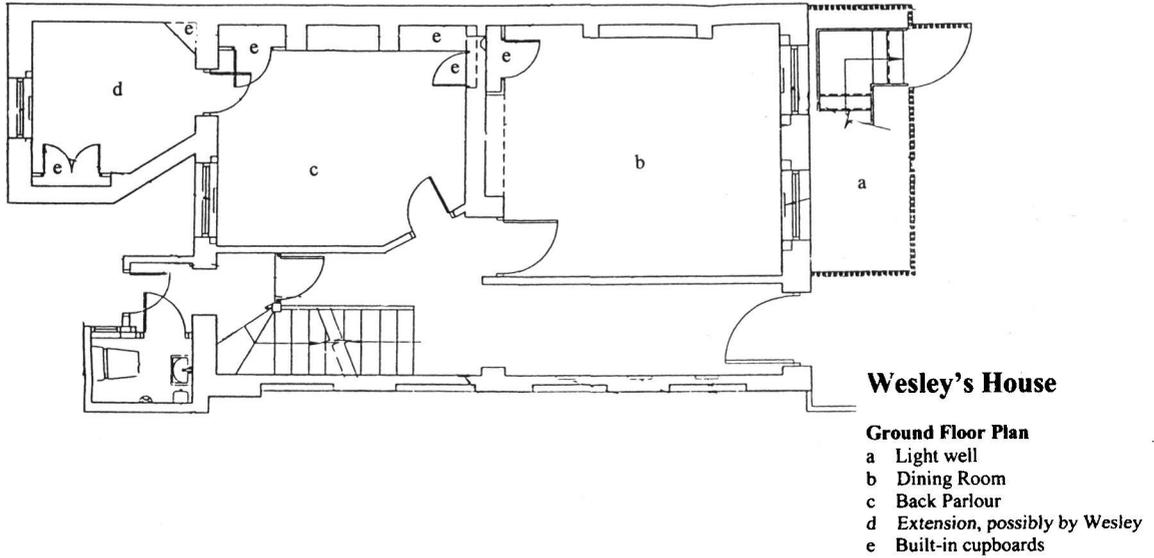


Fig 2. Ground floor plan of Wesley's house



Fig 3. The study in Wesley's house

Other evidence shows that preachers staying in the house may have brought some of their own furniture with them or had furniture assigned to them. In 1784 Wesley records a burglary in the house:

Saturday 20th November 1784

At three in the morning two or three men broke into our house through the kitchen window. Thence they came up into the parlour and broke open Mr Moore's bureau, where they found two or three pounds. The night before I had prevented his leaving there seventy pounds, which he had just received. They next broke open the cupboard, and took away some silver spoons. Just at this time the alarm, which Mr Moore, by mistake, had set for half past three (instead of four), went off, as it usually did, with a thundering noise. At this the thieves ran away with all speed, though their work was not half done, and the whole damage which we sustained scarce amounted to six pounds.

Stevenson hints that an inventory of the contents of the house was made shortly after Wesley's death in 1791, owing to a dispute over the right to raise rent from the house. Eventually the case was filed in the Chancery Court. The inventory, however, doesn't appear to have survived.

Domestic Arrangements

Wesley organised Methodism through his ministers and preachers. The latter, the majority, were unordained men who roamed the country as

itinerant preachers spreading the word of God. The former were Church of England ministers who had decided to get involved with Wesley's work. As was common with other houses used by Methodism, Wesley probably gave hospitality to his workers. The 1787 Minutes of Conference records the following:

'Q.21. Many of our people who have been travelling on business, have crowded into the Preacher's dwelling-houses, and taken up their lodgings there, to the great inconvenience of the Preachers and their families, and expense of the respective Societies. What can be done to remedy this evil?

A. Let none of our Friends that travel on business, expect to be entertained in the Preacher's Houses.'

In his journal Wesley's records that preachers regularly stayed in the house and that firm rules were imposed:

9th December 1787

I went down at half past five, but found no preacher in the chapel, though we had three or four in the house; so I preached myself. Afterwards, inquiring why none of my family attended the morning preaching, they said it was because they sat up too late. I resolved to put a stop to this; and therefore ordered that (1) everyone under my roof should go to bed at nine; that (2) everyone might attend the morning preaching.

It is difficult to tell exactly how many people lived in Wesley's House on a long term basis. According to Stevenson, in 1786 Peard Dickenson lived with the steward in the house opposite Wesley's in the courtyard of the Chapel. Thomas Coke lived with a member of the society near the canal at City Road, whilst letters show that Rankin, the supernumerary lived locally. Wesley often invited preachers to stay in the house: 1786 Samuel Bradburn,¹¹ Rev Mr Heath,¹² Robert Carr Brackenbury,¹³ James Creighton,¹⁴ When John Prickard was ill in 1782, he was cared for at Wesley's House.

Wesley's House needed a house keeper, the equivalent of the head servant. It was not a degrading position and often a member of the family might be asked to run the house. In a letter Charles Wesley asked his daughter Sally to keep house for him.¹⁵

When Wesley invited Samuel Bradburn to the Chapel he also invited his wife as house keeper. Two of Samuel's children by his first wife were to be 'kept abroad'.¹⁶ This was probably a similar situation to that of Bristol. In 1782 Pawson writes in a letter to Mr Benson '... Mr Wesley has consented that there shall be no more house-

keeper at the Room (New Room, Bristol), but that for the time to come, the Assistant's wife shall be Mrs of the family...'.¹⁷ Henry Moore's wife, Anne, may also have been carrying out the same function as the letters of Sally Wesley to Martha Hall, Wesley's sister who often stayed at City Road, are sent in Anne's care. Hester Anne Rogers stayed in the House with her husband James Rogers. With two children from James's first marriage at Kingswood School, the Rogers probably brought at least three young children with them. Hester became pregnant again and was unable to continue her duties so Wesley asked Elizabeth Ritchie to take over. It was Elizabeth that cared for Wesley in his dying weeks. Exactly how many of the preachers brought their families with them is unknown but it does reflect Methodism at this time. A preacher would either have to leave his wife and family behind or take them with him. It was certainly a life of regular upheaval for a minister would spend no longer than three years in any area.

There is a tradition that Charles Wesley, John's brother, stayed at Wesley's Chapel. In a letter written on 11th October 1777 he advised Sally that letters could be directed to him at the Foundry whilst there are other letters sent to him at the City Road Chapel.¹⁸ He certainly used it as a postal address and maybe even stayed there. Charles only lived three miles away in Marylebone and John when writing in 1786¹⁹ wrote that he could not spare the time to visit Charles and that his taking a house so far away was 'The first false step'. It would have been more convenient for Charles to stay. It is possible that Wesley's sister Martha lived in the house as in 1788 and 1789 Sally Wesley writes to Martha Hall at the City Road Chapel²⁰ and in 1790 Sarah Wesley was invited to stay.²¹

Servants would have been needed to run the House. Wesley certainly had a man servant. In 1784 in his Journal Wesley mentions his servant Richard as being ill whilst Charles Wesley was greatly inconvenienced when he borrowed John Wesley's chaise: Jesse the manservant who drove it had gone to visit friends.²² Charles also writes to Sally²³ saying that three servants is one too many. As Charles received a similar income to John it is possible that John may have had the same opinion but he was probably running a busier household than Charles. Apart from the house keeper there probably would have been a maid, a man servant and probably a cook who lived out. Maybe the preachers also brought their own servants.

At times Wesley's House was very crowded and it is likely that he allowed his rooms to be used in his absence as he did in Bristol. With a broken marriage behind him Wesley considered the household to be his 'family' and often describes it as such.²⁴ Despite this it is hardly surprising that Wesley sometimes went to stay with friends in Hoxton and Highbury.

It appears there were two early steward books, one detailed, which doesn't survive except for excerpts in Stevenson, and the other²⁵ which has little detail but records the accounts of West Street, Spitalfields and churches at other sites. Between them these books show Wesley drawing a wage of £60 a year. Wesley had the postage of his letters, the keeping of his horses, the mending of the carriage, and newspapers paid for by the Chapel whilst the preacher's shaving bills and the nursing of the preacher's children were also paid. Thus Wesley does not appear to have been the Puritan that some like to think he was.

As to Wesley's personal tastes not much is known. Wesley ate a plain and simple diet, wrote a tract against the drinking of tea but apparently drank a little alcohol for his health as he wrote to the Customs complaining they had confiscated his claret.²⁶ He was however, against strong liquor. It must be remembered that at this time drinking a certain amount of alcohol was part of daily life, often because alcohol was used in medicine.

The design of the house is small and functional but ultimately of good quality, it can be described in the same way Wesley described the Chapel: 'perfectly neat but not fine.'²⁷ The furniture which is said to have been owned by Wesley is comprised of quality pieces. Wesley's salary paid enough to enable him to live in comfort and be a gentleman, one of the reasons he was successful in his work. There was, not much spare cash available with Wesley living virtually hand to mouth. Through his publishing Wesley raised at least a thousand pounds a year and it is this money as well as probably some of his salary which he gave away and returned to Methodism. Wesley appears to have been very practical in his lifestyle, not stinting when quality was needed, being respectable but also looking after the poor.

THE REFURBISHED HOUSE

In refurbishing Wesley's House most of these themes have been taken into account. The

present refurbishment opens up the kitchen and basement area to the visitor, providing a new entrance way and an environmentally controlled room for fragile objects. This is the only room in which there are now show cases. Most of the remaining rooms are presented in 18th-century style focusing on the years when Wesley lived there. The wood work has been painted in stone white the colour discovered by Ian Bristow. This was confirmed by the recently discovered 'agreement' in the John Rylands Library. The rest of the interior has been prepared in typical 18th-century style, of course taking into account Wesley's taste for practicalities and quality. In the dining room there now stands a working reproduction of a chamber horse for the use of the public. Displays in the basement reflect Wesley the traveller, medical man, preacher and publisher. Another theme is the virtual veneration of Wesley as a saint by later generations as shown in the collecting of his 'relics'. The display in a show case questions the authenticity of some of the 'relics'. The audio guide, in which the visitor is shown around the house by the house keeper and a preacher, brings the place to life. Rather than a shrine to Wesley we have a busy London town house reflecting 18th-century London life as well as the life of a great religious leader. No previous knowledge of Wesley is needed to enjoy a tour of Wesley's House.

Chronology of House

1779	House built
1786	By this time a house on the other corner of the site opposite Wesley's own was built
1788	Back rooms (prayer room <i>etc</i>) of house added?
1891	Repairs to Wesley's House
1892	Repairs to Wesley's House—foundations made good
1898	Repairs and made habitable. House opens as a museum and also living accommodation
1934	Major refurbishment. More rooms added to the museum, basement flat and attic used as flats. The rooms were 'brought back to 18th-century style re furniture, fireplaces <i>etc</i> '. Paint was stripped off the pine panelling
1947	Stained glass window added

1956–8 Renovation and redecoration. External wall rebuilt
 1981 Refurbishment

²⁶ November 14 1790 Telford Vol VIII p248.

²⁷ November 1 1778 in Curnock vol VI p215.

NOTES

¹ Stevenson p64.

² Oct 1 1778 in Telford vol VI p321.

³ Baker p41.

⁴ Stevenson p506.

⁵ Document May 28 1779. John Rylands Library.

⁶ *ibid.*

⁷ In John Rylands Library.

⁸ May 26 1781 in Telford vol VII p63.

⁹ Aug 18 1790 in Telford vol VIII p234.

¹⁰ Wesley's will can be found in the Journal of John Wesley, A Selection. Edited and Introduction by Elizabeth Jay. Oxford University Press 1987. Also in Curnock.

¹¹ June 20 1786 in Telford vol VII p334.

¹² August 6 1787 in Telford vol VIII p6.

¹³ September 27 1779 in Telford vol VI p355.

¹⁴ September 29 1779 in Telford vol VI p20.

¹⁵ April 8 1773 in Charles Wesley Papers vol 2 7/39 p389.

¹⁶ June 20 1786 in Telford vol VII p334.

¹⁷ May 2nd 1782 in Bowmer & Vickers vol 1 no 16 p22.

¹⁸ September 22 1775 in Charles Wesley Papers vol 2 7/120 p84.

¹⁹ May 3rd 1786 in Telford vol VII p327.

²⁰ 28 August 1788 in Wesley Family Papers vol 3 6/11 p7.

²¹ October 27 1790 in Telford Vol VIII p243.

²² October 4 1777 in Charles Wesley Papers vol 2 7/33 p32.

²³ September 22 1782 in Wesley Family Papers vol 2 4/11 p70.

²⁴ January 30th 1781 Curnock vol 6 p302.

²⁵ John Rylands Library, Manchester.

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