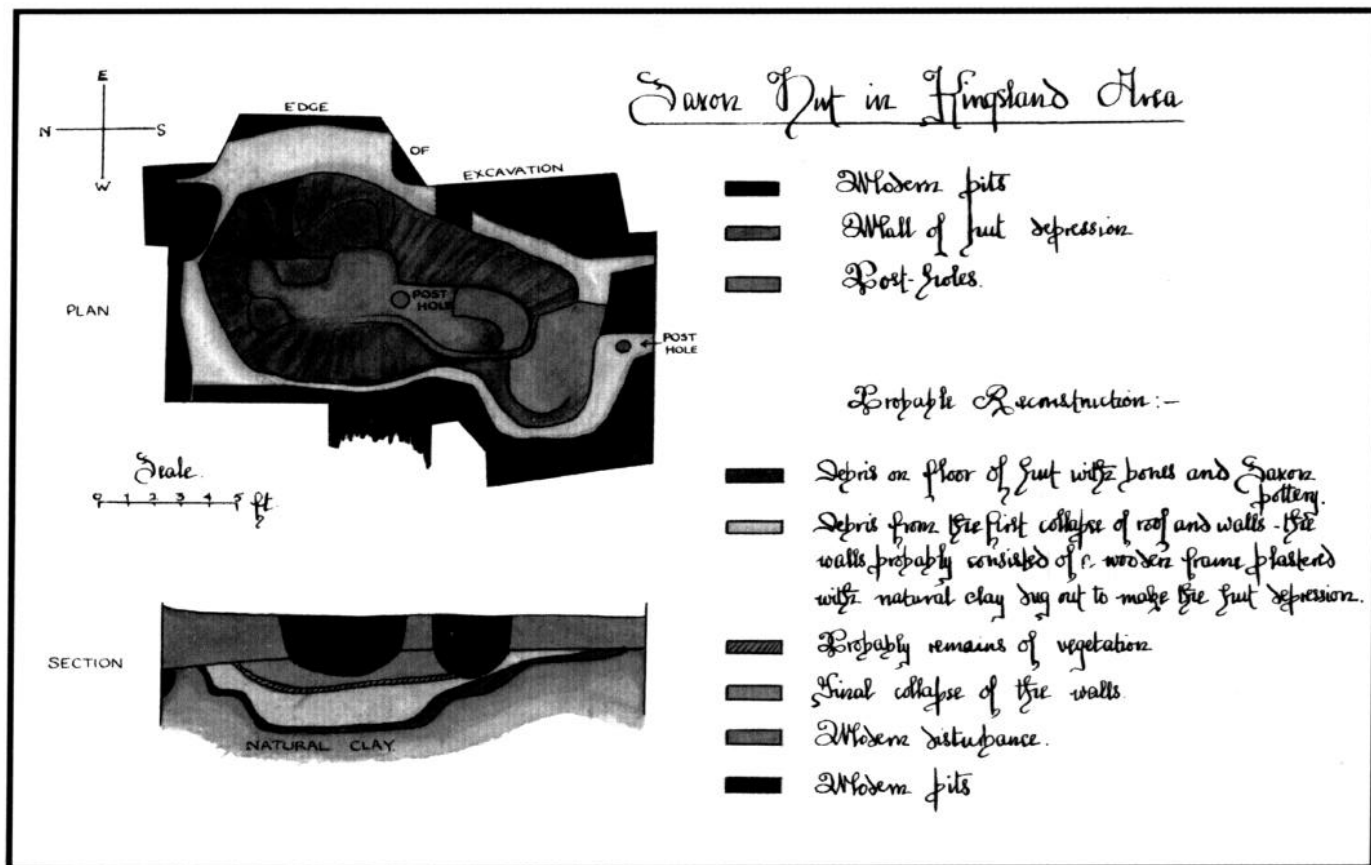


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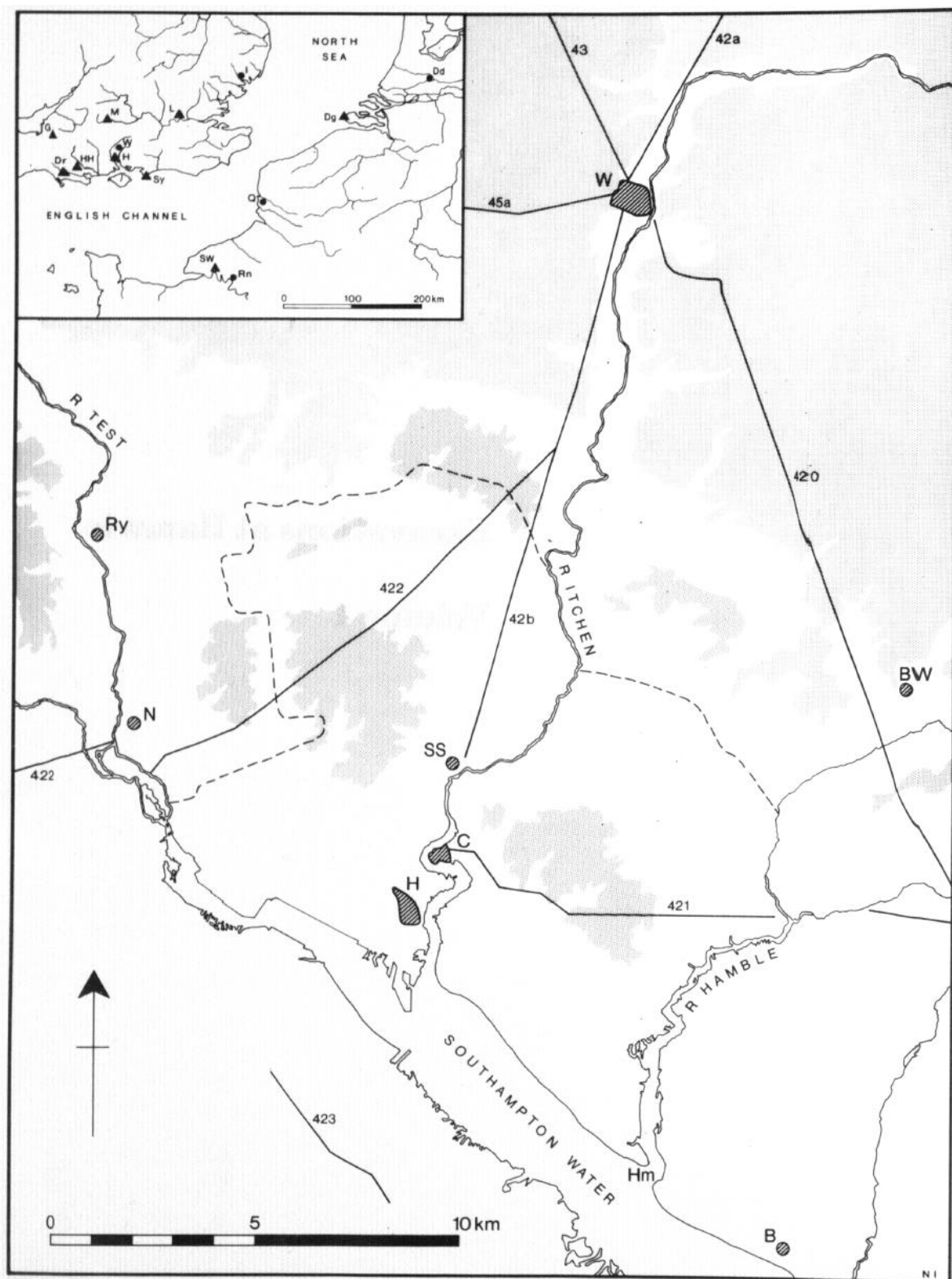
N o 84

EXCAVATIONS AT HAMWIC: Volume 1

edited by
A D Morton



1992



The location of Hamwic and other places mentioned in the text. Stippling represents land above 50m OD. Numbered lines are Roman roads (after Margary 1967). Broken lines approximate to the land boundary of the Mansbridge hundred. In the inset, triangles mark the find spots of Series H sceattas.

Key: **B** Brownwich, **BW** Bishop's Waltham, **C** Clausentum, **Dd** Dorestad, **Dg** Domburg, **Dr** Dorchester, **G** Glastonbury, **H** Hamwic, **HH** Hod Hill, **Hm** Hamblemouth, **I** Ipswich, **L** London, **M** Marlborough, **N** Nursling, **Q** Quentovic, **Rn** Rouen, **Ry** Romsey, **SS** South Stoneham, **SW** St Wandrille, **Sy** Selsey, **W** Winchester.

**Excavations at Hamwic
Volume 1: excavations 1946 83,
excluding Six Dials
and Melbourne Street**

Edited by A D Morton

containing contributions from
S Davies, S Gieve, F Green, B Grimley,
J Hawkes, J Mills, AD Morton, and ID Riddler

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CBA Research Report 84

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Preface

This is the fifth in a series of archaeological monographs, which was initiated by Southampton Archaeological Research Committee with the publication of a volume of disparate reports (Holdsworth 1980a) and a study of the pottery of Hamwic (Hodges 1981). The responsibility for maintaining an archaeological presence in Southampton has since passed to the Archaeology and Heritage Management Section (AHMS) of the Cultural Services department of Southampton City Council. The Section has published two other monographs; a report on the excavations at Southampton Castle (Oxley 1986) and a fresh study of the coins and pottery of Hamwic (Andrews 1988).

The volume contains reports on 73 sites investigated in and around the St Mary's area between 1946 and 1983: 37 of these having been archaeological excavations, and only one of them previously the subject of a detailed site report. It presents the first broad synthesis of the evidence to appear since the beginning of large and long-term excavations.

Two volumes of reports on excavations within Hamwic remain to appear. One is devoted to the excavations at Six Dials (1977-86) and one to those that have occurred elsewhere in the area since 1983. Several volumes, the first of which has already been published, will deal in detail with the finds of Hamwic and the evidence relating to its environment and economy.

Information about the finds has been excluded from this volume or only summarised whenever it reflects on the interpretation of a site or its features. With this fairly rigorous division of different types of report between different volumes, the opportunity has been taken to provide lengthier excavation reports than has previously been possible. However, because far more reports are now accommodated within a single volume, they have had to be dispersed between the main text and the supplement printed in microfiche. Reports selected for inclusion in the main text were chosen for the relatively greater 'importance' of a site, a value assessed according to the degree to which it possessed the following characteristics.

There was evidence of industrial activity on a site.

There was a cemetery.

There was a street.

The site exemplifies a general point to be made about the settlement.

The site was contiguous with an 'important' site.

The sequence of occupation is clear.

A sufficiently large record survives to enable more than a short note to be made of a site's existence.

In most cases, the division was easily made. However, no 'important' site displays all of the requisite virtues, many 'less important' sites share some of them, and it has sometimes proved necessary to segregate the information in a more complicated fashion; for instance to publish the principal site report in the main text, and subsidiary reports in the microfiche supplement.

The Melbourne Street sites (SOU 1, 4, 6, and 20) dispose of at least five of the seven criteria and might usefully have been reassessed in the light of the new evidence that has been accumulated since excavation reports were published in 1980. Further information about the street found at SOU 4 is included, and SOU 20's burials with grave goods are looked at again. However, there proves to be little value in describing more fully the nature of the layers infilling the pits or the dating evidence they contained: by and large, neither type of information is unusual, and the main dating evidence is anyway to be found in the volume just published on the coins and pottery of Hamwic. Whenever comments about the structural features uncovered at Melbourne Street are relevant to a wider discussion, they have been included in the introduction to the volume.

A further question was whether or not to take account of excavations completed since 1983. Work undertaken up to the time this preface was written does not deny any of the conclusions to be drawn, usually it confirms them, and occasionally it adds important information. However, there seemed no point in fattening the text with references to more recent work, except when arguments would be substantially furthered, and most excavations undertaken in 1984-7 have been ignored. Regardless of their importance, the results of any excavation taking place after 1987 will not be mentioned in this volume.

The reports included here are based on a study of the original site records and the finds, all of which are held by AHMS. Researchers wishing to gain access to the documentary or material archive should apply in writing to The Principal Officer, Archaeology and Heritage Management Section, Tower House, Town Quay, Southampton SO1 1LX, England.

AD Morton

Preliminary notes

Spellings

In all quotations, scribal abbreviations are silently expanded. The use of u and v has been modernised where necessary. Anglo-Saxon letters such as ash and thorn are nearly always transliterated in an accepted modern fashion. In proper names, ash is sometimes simplified further, according to common usage: the reader will find Ethelwulf but also Athelstan.

Hamwic and Hamtun

The settlement under study was variously known to its contemporaries, principally as *Hamwic* and *Hamtun*. Both names share the first element, *hamm*, which was applied originally to hemmed-in places. Presumably, it refers to the settlement's location on a peninsula between two rivers. The second elements were differently applied. Although *wic* might imply one of a number of functions, in this case it is probable that the element signifies a trading centre. The element *tun* was applied to the settlement in its administrative aspect, and perhaps to a place under royal control. The two names coexisted throughout most of the Anglo-Saxon period and probably represented the one place in its different aspects. *Hamwic* continued in use as a name, either in full or as the simplex *Wic*, until the first decades of the 11th century, after which time it appears only in copies of earlier records. *Hamtun* survived and evolved as a name form and is embodied in the name of the modern city of Southampton. The first written reference to *Suthhamtun* is to be found in an entry in the *Anglo-Saxon Chronicle* for 980 (in a copy made about the middle of the 11th century), but the name did not become common until the 12th century; and *Southampton* did not wholly oust *Hampton* as the name of the town until some point in the 17th century. (For a detailed study of the place-name traditions, see Rumble 1980, a work that has provided most of the interpretations given in this paragraph.)

Students of the Middle Saxon settlement have variously named it. The place has sometimes been called *Hamtun*, *Hamton*, or *Hampton*. It has also been called *Hamwic*, *Hamwih*, or *Hamwich*. Either group has the advantage that the name is short, but has the disadvantage that the name is misused. Favouring any one type of name brazenly disregards its apparent significance and can lead to confusion. At the very least, it is infelicitous (for instance) to cite a text that mentions *Hamtun* but apply that reference to a study of *Hamwic*. In an attempt to avoid the problems associated with the use of these names, the settlement

has sometimes been referred to only as Saxon Southampton.

Addyman and Hill made extensive use of that phrase, and Rumble later urged its use since it probably retains enough of the ambiguities of the onomastic evidence to serve as the least inaccurate designation for the place (*ibid.*, 15). On the contrary, however, the inadequacies of the phrase are a reason for rejecting it. The word 'Saxon' allows no distinction between the Middle Saxon settlement site and other Anglo-Saxon sites in the vicinity. A term like 'Middle Saxon Southampton' will just pass muster and can be found in this volume, but it is much too unwieldy to be used constantly.

If more accurate terms are to be avoided because they are lengthy circumlocutions, it follows that a simple and familiar name will be preferred, whether or not it is accurate. The choice has to lie between *Hamtun* and *Hamwic*. *Hamtun*, which forms a part of the modern city's name, has an in-built familiarity about it. Despite this advantage, almost everyone has shunned the name: only Crawford regularly used a form of it and wrote of 'Saxon Hampton'. Through disuse, the familiar name has become quaint, and there is little point in trying to revive it. (An exception to this is *Old Hampton*, which is the term Leland coined in the 16th century to distinguish the settlement from *New Hampton*, which later grew up at a different site. Although the terms are antiquarian curiosities now, they remain precise enough in their meaning and so are occasionally used in this volume.) *Hamwic*, in the form *Hamwih*, is the earliest recorded name of the settlement and for this reason it has often been used by a great majority of commentators during the last 40 years. The outlandishness of the name, which perhaps first attracted some of the writers, has diminished through a continual repetition and it may be said that a modern, archaeological naming tradition has been created and authorised. Accordingly, it is convenient to continue using the shorthand term, *Hamwic*. These words can be read as a formal warning of some of the difficulties involved.

Clausentum

A similar problem involves the name of the main Roman settlement at Southampton. It has been identified as the *Clausentum* of the Antonine Itinerary and the name has often been used to head excavation reports (see, for instance, Cotton and Gathercole 1958). The identification is far from secure, and recent practice has been to refer to the settlement only as 'Roman Bitterne' (Bitterne being a

district of Southampton). But that title is itself incorrect, and should be amended to 'Roman Bitterne Manor' (Bitterne Manor being the district that actually contains the settlement site). In this volume it is far more convenient and will do little harm to continue calling the place Clausentum.

Middle Saxon and Medieval

Hamwic's heyday spanned much of the 8th and 9th centuries. For present purposes, it is supposed that these centuries define the Middle Saxon period in southern England. The Archaeology and Heritage Management Section does not assign those centuries to a medieval period. The reader who is used to other systems of chronology is warned that an early medieval date here means a date after the middle of the 11th century.

A concordance of site numbers

All Southampton sites are referred to under their present code numbers. Before this system was adopted there have been four major numberings or encodings of the sites; as well as several short-lived numberings or encodings that are not listed here. The four sites opened in 1946 51 (column E) were allocated the name of the area in which they were dug, or the name of an adjacent street. These names,

which continued in use until 1969, were usually reduced to initial letters.

Sites opened in 1960 3 (column D) were usually given a letter code prefixed 'Site 'HAM, or 'Hamwih'. Observations were named from the place in which they were made.

One occasionally finds late references to the 1946 63 codes (for instance in Hodges 1981), but the codes devised in 1969 were generally accepted (column C). Every observation or excavation known to have been carried out in the St Mary's area between c 1840 and 1969 was renumbered by Addyman and Hill (1968). The numbering was ordered chronologically, so that the first known site was Site 1. Each number was prefixed with the word 'Site', here altered to 'AH'. These numbers continued in use until 1980.

Excavations undertaken between 1970 and 1980 (column B) were denoted by a Roman numeral up to site XXIV and by an Arabic numeral from site 25 onwards. The numeral was prefixed with 'SARC', or 'Site', or both words. Most numbers were given at the time of excavation and therefore preserve a chronological order. Earlier sites continued to be referred to by their AH numbers.

The present system (column A) was initiated in 1980. With only very minor exceptions, every excavation or observation known to have been undertaken since c 1750 has been renumbered with Arabic numerals, prefixed by the letters 'SOU'. There is no consistent chronological order in the numbering system.

A concordance of these systems is as follows:

A	B	C	D	E
1980	1970 80	1969 80	1960 8	1946 68
SOU 1 24	SARC I XXIV			
SOU 25 31	SARC 25 31			
SOU 32	Site 23	AH 23		
SOU 33	Site 24	AH 24		
SOU 34	Site 16	AH 16	HAM E	
SOU 35	Site 15	AH 15	HAM D	
SOU 36	Site 11	AH 11	KL	KL
SOU 37	Site 12	AH 12	GS (1)	GS (1)
SOU 38	Site 13	AH 13	GS (2)	GS (2)
SOU 39	Site 14	AH 14	CLS	CLS
SOU 40	Site 17	AH 17	HAM F	
SOU 41	Site 20	AH 20	HAM A	
SOU 42	Site 19	AH 19	HAM B	
SOU 43	Site 18	AH 18	HAM C	
SOU 44	Site 27	AH 27		
SOU 45	Site 28	AH 28		
SOU 46 55	Site 1 10	AH 1 10		
SOU 56	Site 21	AH21	CR	

A	B	C	D	E
1980	1970 80	1968 80	1960 8	1946 68
SOU 57	Site 26	AH 26		
SOU 58 84				
SOU 85	Site 22	AH 22	BPT	
SOU 86 89				
SOU 90 =SOU 37				
SOU 91	Site 25	AH 25		
SOU 92 onwards				

BPT Bevois Street Pipe Trench

CLS Clifford Street

CR Chapel Road

GS Grove Street

KL Kingsland

The rediscovery of the evidence

Before 1770

A great many of Hamwic's features have been disturbed, mainly by ploughing, and some of the artefacts contained in Middle Saxon rubbish pits have been dislodged and redeposited. A penny of Offa reportedly found in 1822 on the motte of Southampton's medieval castle (Davies 1883, 84) may have been upturned in an earlier century at the site of Hamwic and kept because it was a silver coin. However, before the middle of the 18th century, no record exists that any finds were made at the site of Hamwic. Leland, who was often careful to mention the existence elsewhere of antiquities found 'yn plouing', is silent about the discovery of ploughed-up artefacts in the fields that had succeeded Hamwic.

Writing in the second quarter of the 16th century, Leland was the first to record the somewhat garbled local tradition that a settlement had existed before the late medieval town, and had been abandoned in favour of it. According to this tradition, 'Old Hampton' had been situated

a quarter of a mile or ther aboute from New Hampton by north est and stretchyd to the haven syde. The plotte wheryn it stode . . . is namyd S. Maryfeld by the chirch of S. Mary stonding hard by it. . . . Sum thinke that the great suburbe standing yet with out the est gate of New Hampton and joyninge to S Marie Chirche is part of Old-Hamptoun (Leland, I, 275 6).

Leland's informants thought that the change of sites had been forced by the French raid of 1338. Had this been correct, the fact that 'Sum men yet alyve have seene dyvers houses (especially up into the lande of Old-Hampton) withyn the feld self now caulld S. Maryfeeld (*ibid*) would have provided important corroborating evidence. However, it now seems likely that the move had occurred perhaps seven centuries before Leland was writing: the buildings, or their remains, were very unlikely to have been of Middle Saxon origin; and their existence, although of interest to the student of medieval Southampton, may be ignored here.

The story was made public by Camden, who, presumably using Leland as his authority, mentioned the 14th-century shift in town-site as an historical fact, and its most common form of dissemination in following centuries must have been by way of the often reprinted *Britannia*. It is not clear to what extent the tale remained current among the townspeople of Southampton. Its survival into the middle of the 19th century is mentioned once (Keele and

Roach Smith 1857, 60) suspiciously only once, and the tradition may in fact have died out long before then.

1770-1945

Compiling his manuscript history of Southampton about 1770, which was not printed until early this century, Dr John Speed referred not to current tradition but to Leland's earlier record. Although this may represent the historian's appeal to the earliest available source or his prejudice in favour of the written word, it is more probable that Speed was ignorant of any tale then being told about the old town.

Whatever the explanation, Speed's was the first commentary on the tale. Lacking proof of 'Old Hampton's existence and possessed of documentary proof that 'New Hampton' had existed long before the French raid, he dismissed Leland's record as that of 'some idle tradition of the Inhabitants (Speed 1909, 9). The only finds known to have been made around 1770 were some human skeletal remains and a ring, all at a site now numbered SOU 303. (For a plan locating most of Hamwic's sites, see fig 1; and see fig 2 for a plan marking the order in which these sites were opened.) None of these finds was datable, and Speed's view may have continued to represent informed opinion if Leland's words had not been largely vindicated by the discoveries of the 19th century.

In common with a great many other towns, Southampton increased rapidly in size during the 19th century. Much of its expansion was into St Mary's parish, part of which constituted the area that had been occupied by Hamwic. In 1801 (according to the national census) the population of the entire parish west of the River Itchen numbered less than 2000; in 1851 it numbered 21,250; and more than twice that in 1901. Even before many houses had been built to accommodate these new parishioners, some areas of Hamwic were being uncovered by redevelopers (fig 3). Around 1800, part of the Southampton and Salisbury canal was dug through what is now supposed to have been the north of Hamwic and, in 1818-19, gasworks were constructed in the east of Hamwic. If the works for these projects led to the unearthing of Middle Saxon finds, nothing was reported in print. The only other record of early discoveries was of two coins found in a pit uncovered in 1825 as a result of brickearth digging. The site of that discovery is now numbered SOU 277.

Table 1 Site list

SOU	STATUS	GRID SQUARE	SOU	STATUS	GRID SQUARE
1	*E	SU 428119	61	O	SU 424124 425124
4	E	SU 428117	62	O	SU 426127 427127
5	E	SU 428117	63	O	SU 427129
6	E	SU 428117	64	O	SU 427126
7	E	SU 428115 428116	65	O	SU 425121
8	E	SU 428116	66	O	SU 423119
9	E	SU 427115	67	O	SU 424119
10	E	SU 429116	69	O	SU 425117 426117
11	E	SU 428116	70	O	SU 427116
12	E	SU 427116	71	O	SU 429115
13	E	SU 429117	72	O	SU 427115
14	E	SU 428115	73	E	SU 428114
15	E	SU 425121	74	E	SU 429112
16	E	SU 428114 429115	75	E	SU 429112
17	E	SU 426115427115	77	O	SU 430120
18	E	SU 429115	78	O	SU 422120 424121
19	E	SU 427122	79	O	SU 426125 427125
20	*E	SU 428119	81	O	SU 426122
21	E	SU 429114	82	O	SU 427122
22	E	SU 428114 429114	85	O	SU 425119 427119
23	*E	SU 424122	86	O	SU 425116 425121
24	*E	SU 424122	88	E	SU 422119 423119
26	*E	SU 424122 425122	89	O	SU 424119
27	E/O	SU 426121 428122	91	O	SU 428116
30	*E	SU 425122 428123	92	O	SU 428115 429115
31	*E	SU 424122 425122	94	O	SU 425123
32	E	SU 425121 426121	95	O	SU 423125 426125
33	E	SU 426116 427116	96	O	SU 421124 422125
34	E	SU 426118 427118	97	O	SU 423123
35	E	SU 427117 427118	98	O	SU 427125
36	E	SU 424119 424120	99	E	SU 424117 425117
37	E	SU 427118	167	O	SU 423125
38	E	SU 427116 427117	168	O	SU 424117 424118
39	E	SU 427120	169	*E	SU 424121 424122
40	E	SU 427116	170	O	SU 433124 434124
41	E	SU 427116	176	O	SU 427123 428124
42	E	SU 427117	184	*E	SU 426114 426115
43	E	SU 427117 427118	186	R	SU 424117 424118
44	E	SU 424115	241	*O	SU 425118
45	E	SU 423115	254	*E	SU 424116 425116
47	*O	SU 425120 426120	258	*E	SU 424122
48	*O	SU 427118	259	*O	SU 424123
52	*O	SU 424123	277	*O	SU 426117
53	*O	SU 428122	303	*O	SU 429115
56	O	SU 425115	389	*O	SU 425111
57	E	SU 427113			
58	O	SU 429127			
59	O	SU 429123 429124			
60	O	SU 426125			

Key: E Excavation
O Observation
R Resistivity survey
* Site not directly reported on in this volume

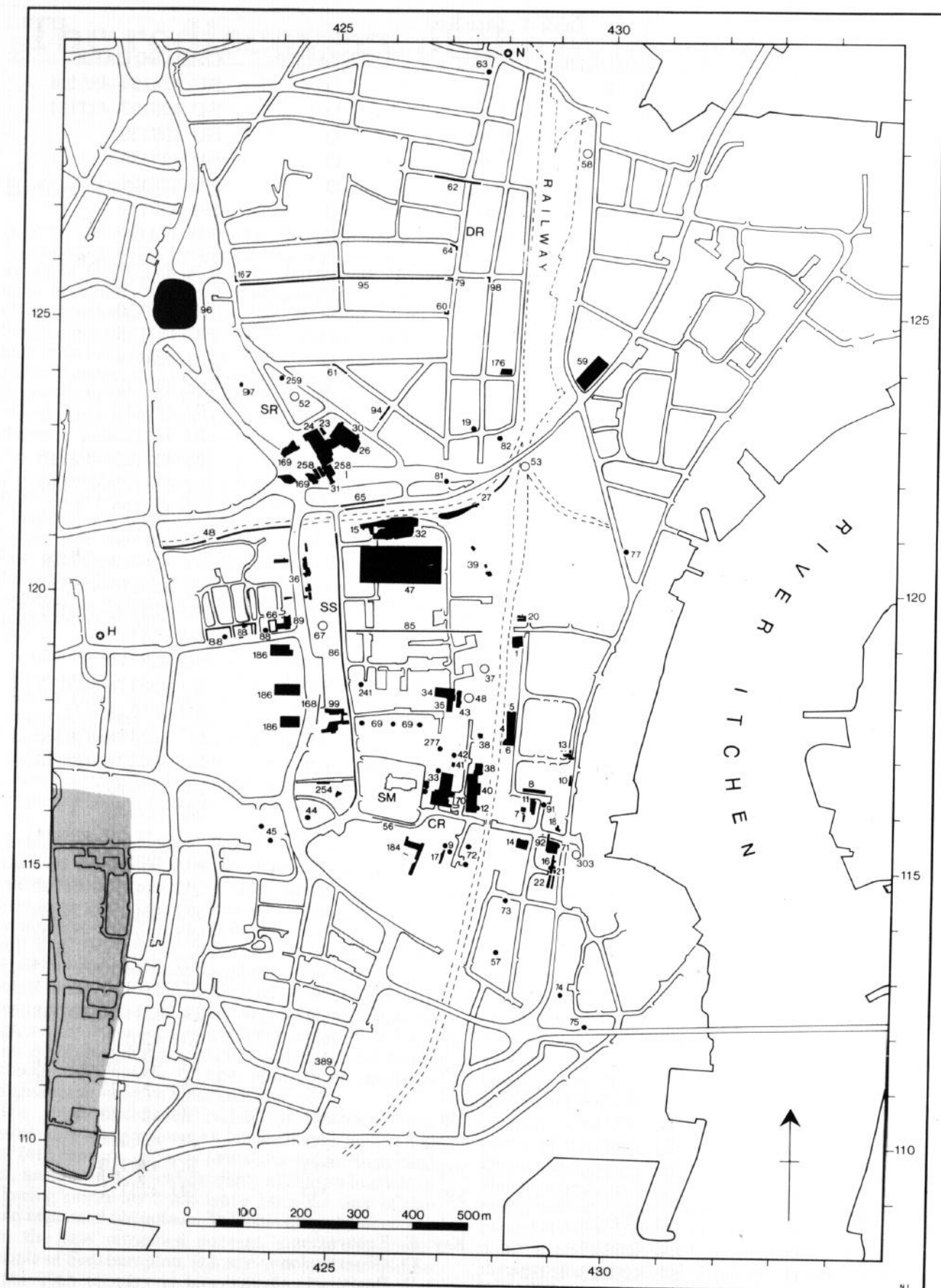


Figure 1 Sites and places mentioned in the text. 'SOU' prefixes are omitted from the site numbers and 'SU' prefixes from the outer grid numbers. Key: **CR** Chapel Road, **DR** Derby Road, **H** Houndwell, **N** Northam **SM** St Mary's Church, **SR** St Mary's Road, **SS** St Mary Street. The stippled area represents the western half of the later walled town (compare pl 3).

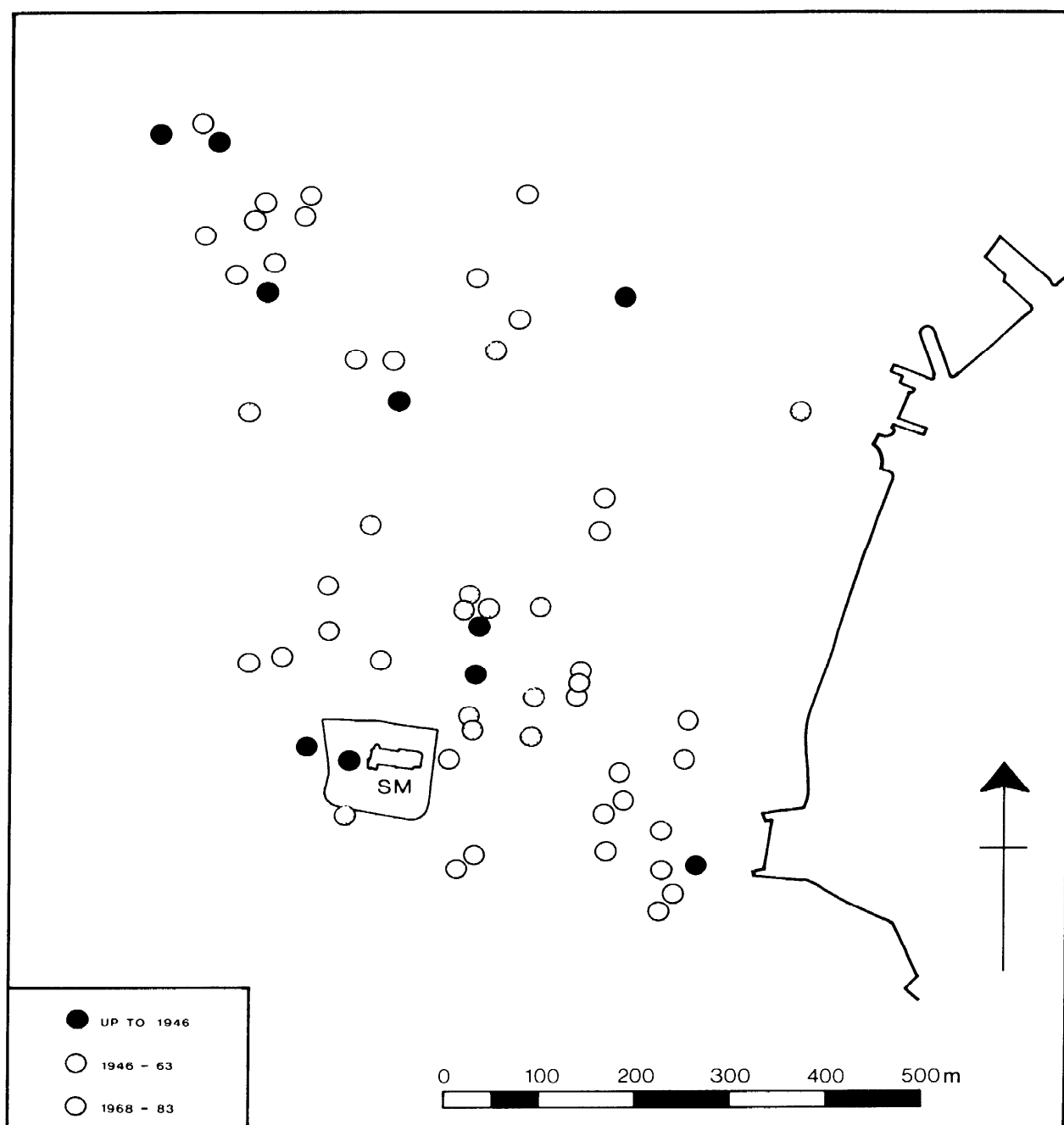


Figure 2 'Positive' excavations and observations in the St Mary's area from about 1750 to 1983. Key: *SM* St Mary's Church.



Figure 3 Modern development in the St Mary's area up to 1850 (but with today's riverline shown, for ease of cross-reference). Stippling indicates the main blocks of building. Solid circles mark the centres of extensive brickearth digging. Key: C canal, G gasworks, R railway, SM St Mary's Church.

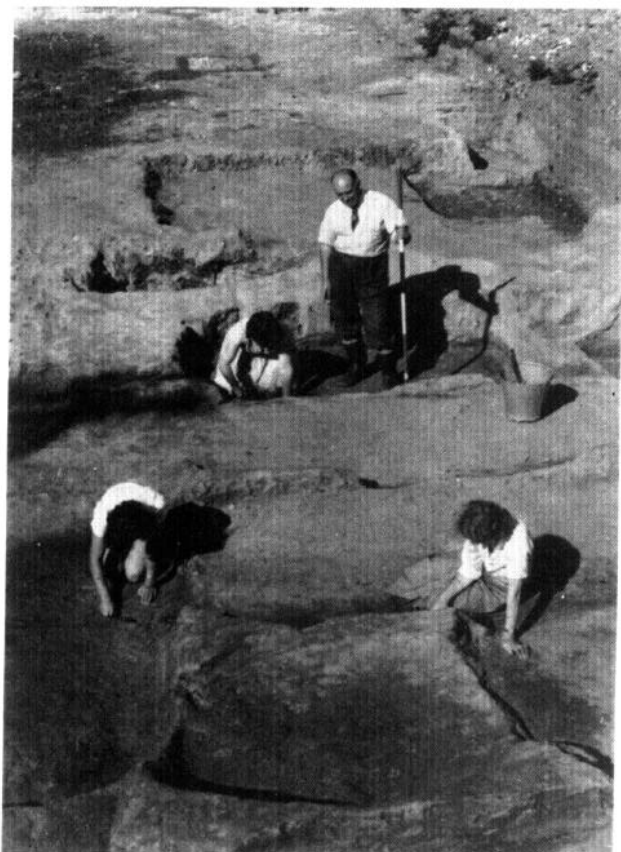


Plate 1 SOU 43, photographed from the south, and showing east-west brickearth-digging trenches fully excavated in the foreground. Scale in 1ft (0.3m) units. Compare fig 85.

The houses erected in this area were 'wretched abodes', more politely described as 'mechanics' habitations' (Ranger 1850, 34; Brannon nd, 28). Their foundations were shallow and their construction seldom disturbed the Anglo-Saxon layers to any great extent. However, the building of these houses did lead indirectly to the exposure and disturbance of many Anglo-Saxon features, for the natural soil found in much of St Mary's parish was used at times for making bricks. This brickearth was dug out in long trenches, good examples of which were found at SOU 43 (pl 1). Many pits were exposed and their contents removed, at least in certain northern areas, where the excavation of the pit fills became something of a minor industry. Objects of antiquarian interest were passed on to curious amateurs, presumably for a consideration; and bone was sold in large amounts for conversion into fertiliser.

George Atherley (a banker) and John Rushworth Keele (a surgeon) were two of the collectors attracted to the site of Hamwic. Acquiring some objects, inspecting others, and questioning the workmen,

they will have differed little from the other gentlemen amateurs except that, towards the end of their lives, they made some effort to publish their discoveries. Atherley (1850) communicated with the British Archaeological Association, and in 1855 Keele wrote to Charles Roach Smith about his discoveries, the letter eventually appearing in an abridged and edited form (Keele and Roach Smith 1857).

Recording was unmethodical, partial, and intermittent until it was taken up by the Rev Edmund Kell, who arrived in Southampton in 1853. By then, unfortunately, much of the Anglo-Saxon site had been built over (fig 3). Despite his pastoral work and a close and time-consuming involvement in a great many liberal campaigns (see, for instance, Walkowitz 1980, 167-70), Kell found time to devote to archaeological matters. Until shortly before his death in 1874, he regularly corresponded his findings to the British Archaeological Association and took pains that they were communicated more locally by way of the newspaper, *The Hampshire Independent*. (Such of his more important writings as are concerned with Hamwic are listed in the bibliography.) The first person to undertake the archaeological excavation of one of Hamwic's pits, he also published information ignored by Atherley and Keele. However, even someone as energetic and inquisitive as Kell could not hope to record every find made in the area. Much information was missed, and the places known to have produced Anglo-Saxon evidence were restricted to the west and north of what had been Hamwic.

Although many of the recorded finds were therefore made at some distance from St Mary's Church, it was inevitable that the antiquaries should recall Leland's words about 'S. Maryfeld'. The old tradition was further scrutinised by the Rev J S Davies in the late 1870s. Hoping to edit and lightly annotate Speed's history for print, he soon realised that it had become so outdated that it would require extensive annotation if it were to be turned into a serviceable history. Instead of doing this, he chose to write a fresh and fuller history of Southampton. In it he summarised the findings of his immediate predecessors and suggested, following Kell, that Leland's story was substantially correct, the memory of the French raid having become confused perhaps with memories of earlier Viking raids. Hamwic, he suggested, was a defended town that had removed to the site of 'New Hampton' early in the 11th century.

Nobody continued the fieldwork after Kell, and nobody produced a more detailed review of the evidence after Davies, until the interest of OGS Crawford and MR Maitland Muller was engaged in the 1940s: typical of the interregnum work are the comments of FJC Hearnshaw (1910, 25-33) which comprise misplaced guesses intermingled with an uncritical citation of *Anglo-Saxon Chronicle* references. This inactivity of some 70 years is surprising given the taste throughout much of the period for antiquarian excursions and *conversazioni*, activities that the Hampshire Field Club regularly promoted

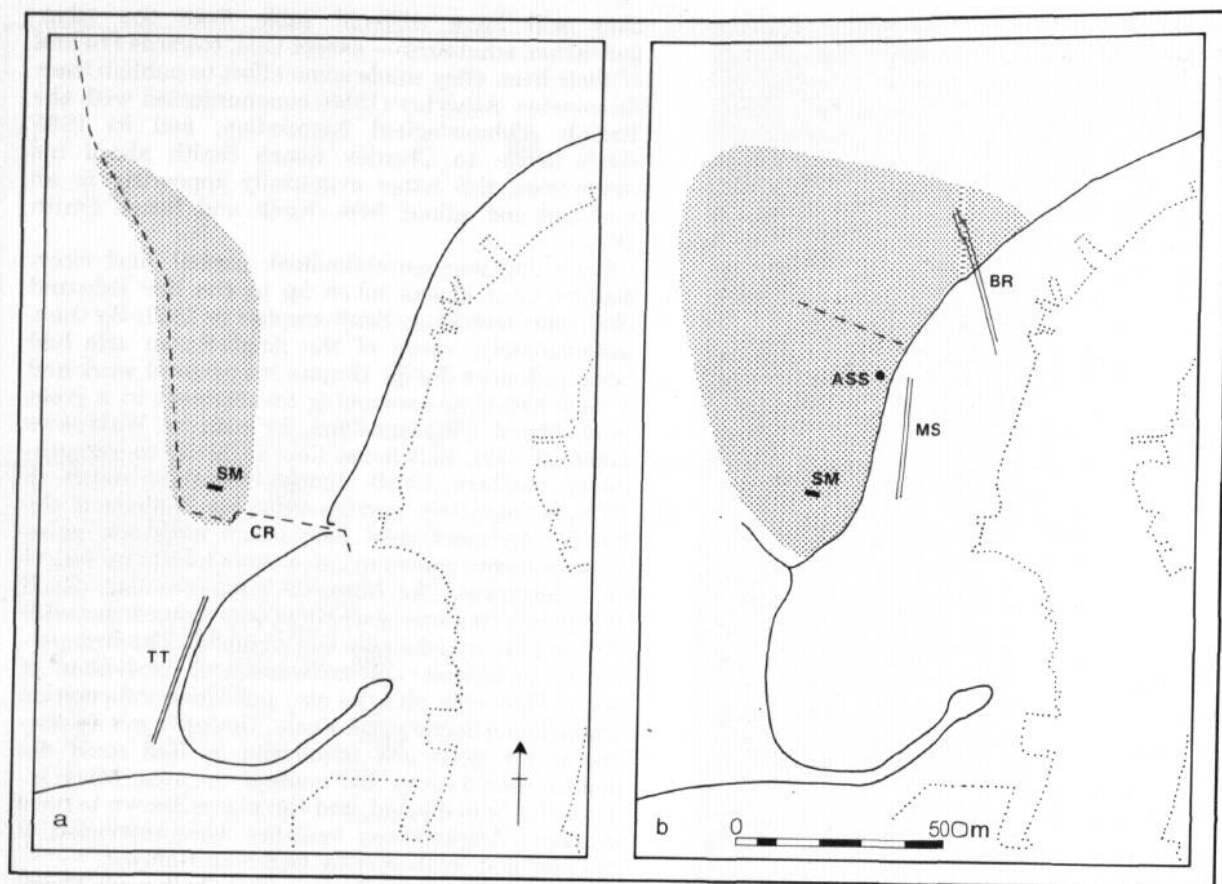


Figure 4 The extent of Hamwic, shown by the stippling, (a) according to Crawford in 1947 and (b) according to Addyman and Hill in 1968. The dotted line shows the modern edge of the River Itchen and the thick, solid lines show the supposed edges of the Anglo-Saxon river. Broken lines represent streets supposed to have existed in Hamwic. Double lines mark modern streets referred to in the text. Key: **ASS** Aberdeen Street School, **BR** Britannia Road, **CR** Chapel Road, **MS** Melbourne Street, **SM** St Mary's Church, **TT** Terminus Terrace. See the text for further details.

after 1885, but never with reference to Hamwic. However, little work could be done once the main period of development was over. The 'mechanics' habitations' had first to decline in habitability, bombs be dropped across the area, and a government be elected that was determined to clear the slums and redevelop the bomb sites.

1946-59

In the middle and late 1940s, Crawford and Maitland Muller were in no position to judge the value of the 19th-century discoveries, and for want of better information they had to rely on research that should have been outdated by 70 years of further observation.

Crawford's connection with Southampton dates from 1920, when he moved to the town to work for the Ordnance Survey as its archaeology officer, a position he held until his retirement in 1946. Between 1940 and 1945, he worked in a number of

towns, photographing buildings exposed or endangered by wartime bombing. He began by recording the older buildings of Southampton, a task he complemented by studying its medieval and post-medieval documentation. This led him to contemplate writing a book dealing with the topography of medieval Southampton (Crawford 1955, 148-277).

Perhaps in part because of a temporary dearth of other contributions, during the war years Crawford published articles on the archaeology and topography of Southampton in those periodicals with which he was involved (Crawford 1942; 1945a-c). These were mainly concerned with the Roman and medieval settlements, but also foreshadowed some of his later theories about the extent and layout of Hamwic.

Given as a talk in 1947, his speculations about Hamwic were published two years later. For direct evidence he had his own observations made during the Second World War of 'many excavations some of them violent' (Crawford 1942, 43) and the preliminary results of the archaeological excavations that

had just begun on a small scale, but his main source remained the reports published in the 19th century. Other evidence was culled from an assortment of documents. Not all of these were directly acknowledged, but they seem to have comprised the Late Saxon charters of South Stoneham, the medieval cartulary of St Denys' Priory, Leland, the Tudor and Stuart Court Leet records, and the so-called Elizabethan map of Southampton.

He suggested that the settlement was a long and narrow one: effectively it conformed in extent to the area of the main 19th-century discoveries. Its northern boundary included part of St Mary's Road. Its western boundary lay somewhere just to the west of St Mary Street, and its eastern boundary was a field boundary redeveloped in the 19th century as Derby Road and Golden Grove. To the west of the settlement lay the town fields and to the east the fields that belonged to the town's church (later known as glebe lands). This was the forerunner of the present-day St Mary's Church. To the south and southeast of the church, the land was low-lying and uninhabitable. Further to the south-east there was a lagoon that Anglo-Saxon mariners had used as a natural harbour (fig 4a). Hamwic had perhaps fallen 'waste and derelict [before] the Norman Conquest, and [became] therefore a sort of escheat of the Crown'. The lagoon eventually silted up and became salt marsh (Crawford 1949, 45-7).

Englefield (1805, 81) had suggested that the River Itchen had once been 'much wider, and his reasoning may have prompted Crawford's speculation about a lagoon. If so, Crawford improved on Englefield's ideas, and suggested a natural mechanism by which the lagoon could have been created and infilled. But Crawford's guarded and qualified dicta about this feature are sometimes difficult to unravel. He stated that it would quickly have silted up, but he did not speculate in print about its original size. He described Chapel Road (CR on fig 4a) as an 'artificial causeway'. The use of the adjective in this context seems to indicate that he thought the road had originally jutted into the river as a mole; but he did not make it clear whether this was his meaning or whether he understood a causeway to be no more than a metalled thoroughfare. Given the lack of excavated evidence available to Crawford, this was a praiseworthy evasion of detail. However, it is likely that he was less reticent in his speech, and any theories he voiced were probably later embodied without distortion in Lawrence Burgess's work.

Burgess explicitly and regularly claimed Crawford as his authority in this matter, and the lagoon shown on fig 4a conforms to his specifications. He described a lagoon that had stretched as far west of the present river edge as Terminus Terrace (TT on fig 4a), the hook of shingle that formed it surviving as Canute Road, and the northern edge being 'the line of Chapel Road which had been 'the quayside of the port of Hamwih (Burgess 1964a, 10; 1964b, 206). Some graphic evidence exists that Burgess thought that at least the eastern end of Chapel Road had

been built into the water (see for instance the map found as fig 55 in Pelham 1964, which also illustrates Burgess 1964b, 205; or the plans included as Burgess 1975, which represent a revised version of his earlier theories).

Crawford's deductions about the size and extent of Hamwic were the first coherent ones to appear in print. He had fitted almost all the facts then known into an attractive picture that was generally dominant until the early 1960s. Although many of his arguments now prove to be misplaced, taken as a whole they were a major and necessary first step after 70 years' silence. They provided both a spur to excavation and a wider context within which to view the evidence uncovered.

Deliberate modern excavation within Hamwic began in 1946, west of St Mary Street in the area called Kingsland (SOU 36). Shortly before the Second World War, parts of Clausentum, Southampton's Roman town, had been excavated by Dudley Waterman, who now offered Maitland Muller advice and help in this new venture, and who eventually was to take over responsibility for some areas of research into Hamwic. The dig at SOU 36, which was continued in increasingly ambitious projects until 1951, exposed an area totalling more than 845m². An unsuccessful search was also made for whatever remained of two cemeteries uncovered by brickearth diggers in the 19th century: in 1946 some trial holes were dug at SOU 37, incidentally to the east of the eastern limit of the town supposed by Crawford; and in 1950 and 1951 trenches were opened at SOUs 38 and 39, again to the supposed east of Hamwic. At all these predicted extra-urban sites evidence of Middle Saxon occupation was discovered. Although Crawford's theories thus stood in some need of amendment at the time of their inception, this fact seems not to have previously been stated in print. It was taken note of, however. Maitland Muller evidently thought that the settlement had been twice as wide as Crawford supposed, but his views were embodied only in small-scale plans that inevitably were far less persuasive than Crawford's reasoning (see, for instance, *Times* 1949; and Maitland Muller 1949, 66, fig 1).

The opportunity for excavation was provided by wartime destruction and a policy of large-scale redevelopment of the area; a policy that has survived essentially unchanged up to the present day. That the opportunity was taken, and 40 years of investigation thus set in train, is a testimony to the determination of a number of people, especially Maitland Muller, Waterman, and Crawford. The need for an organisation to co-ordinate and facilitate this early work was answered by the formation in 1947 of 'a small Excavation Committee' and in 1949 the Southampton Saxon Excavation Committee (Maitland Muller 1951, 125; 1955, 68). In many respects the aims of these bodies remain among the aims of today's archaeologists in Southampton. The chronological and physical relationships between 'Old' and 'New Hampton' were to be investigated.

The extent and plan of Hamwic and its dating were also to be clarified by the excavations.

A date range of about 650–900 was suggested for Hamwic, but it was also quite properly admitted that 'earlier and later evidences may lie in areas unexplored' (Maitland Muller 1955, 68). Although it appeared that part of the western limit had been exposed at SOU 36, no other edge was found. It is surprising in fact that so much was achieved by these first proper excavators. Because of the relative lack of trained personnel available, the period of excavation was limited to the Easter and Summer vacations so as to allow the recruitment of students. More crucially, the excavations were haphazardly funded and depended for their continuance on private donations and small grants. The trenches opened were relatively small.

In these circumstances, although the opening of further trenches was discussed, excavation in Hamwic came to a halt in 1951. Because of the need to dig elsewhere, and because there seemed 'little obvious knowledge to be gained by digging [Hamwic's] pits and adding in quantity to the substantial representative body of material collected' (*ibid.*, 69), it was formally decided that from 1953 onwards excavation in Hamwic would cease. It did not start again until 1960.

1960–7

Unlike the work of 1946–51, the excavations that began in 1960 had the advantage that they were undertaken at a period when much archaeological attention was turned at last to Anglo-Saxon settlement sites – stimulated and focused in part by the Society for Medieval Archaeology, which was founded in 1956. Also unlike that earlier work, which effectively had been the creation of a number of individuals and had forced the setting-up of co-ordinating bodies, the excavations of the early 1960s were devised by Southampton's Museums Department (under the curatorship of Philip Peberdy) as a response to the renewed threats posed by redevelopment, and were more securely funded. A director of excavations (first Alan Aberg and then John Pallister) was employed by the museums and a regular excavation team was recruited from members of Southampton Archaeological Society (SAS). This organisation, which as Southampton Archaeological Volunteer Group had been formed by interested individuals in 1953, became an unpaid body of the Museums in 1961. In 1962, in what has proved to be a rare foray into fieldwork within Hamwic, Southampton University Archaeological Society became largely responsible for the excavation of SOU 40.

The location of the trenches was predetermined by the imminence of redevelopment. Although more secure, the finances remained small and did not allow freedom to investigate Hamwic on a very large scale. Members of the SAS had to work for their living, or go to school, and could undertake archaeo-

logical work only in the evenings and at weekends. There was very little possibility of interrupting redevelopment programmes to allow the proper investigation of a threatened site. Perhaps because of these difficulties, trenches in Hamwic were conservatively located at places lying well within the previously established areas of Anglo-Saxon occupation, at SOUs 34, 35, and 40–3. With the exception of SOU 56, where the observation of four pits tended to cast doubt on Crawford's assertion that there had been no occupation south of St Mary's Church, the work of the early 1960s did not much alter knowledge about the settlement. It did substantially bolster and add to this knowledge, however, mainly because the excavations were more numerous and quickly revealed large areas (the largest, SOU 34, covered about 670m²), and also because they were the first of the century to expose Hamwic's structural features and part of a cemetery.

Excavations in Hamwic ended in 1963, and shortly thereafter in the medieval town. This has never been explained, but was probably a response to the difficulties encountered by the excavators in this period. Redevelopment continued and took in areas that might usefully have been investigated.

Further work was initiated in 1968. In the meantime, Burgess advanced the first major review of the evidence since Crawford's paper of 1947/9. In a number of essays (listed in the bibliography) he developed arguments about Anglo-Saxon Southampton that were radically different from anything suggested by his predecessors.

Pointing out that the pre-Conquest town was variously known as *Hamwic*, *Hamtun*, and *South-hamtun*, he surmised that these were the names of three different settlements. *Hamtun* was the earliest site and may have been founded early in the 6th century. It was a small, defended settlement on high ground alongside the River Test, in the west of the peninsula. In the 7th or 8th century it had developed a separate trading suburb by the River Itchen. This was *Hamwic*. Its size and shape were as Crawford supposed them to be (fig 4a). At some point in the 10th century, *Hamwic* declined and was replaced by a new trading suburb. This developed immediately to the south of *Hamtun* and was therefore known as *South-hamtun*. It eventually grew to be the medieval walled town (fig 1; pl 3).

These are intriguing ideas, most fully argued in *The Origins of Southampton*. Deservedly, that essay won the John Nichols prize for local historical writing and was praised by Hoskins (1967, 66) as 'a brilliant example of how to piece together a miscellaneous assortment of topographical and other facts into a coherent pattern.'

However, much of Burgess's argument depended on the assumption that every place has only one name. This is a matter of debate. It has been strongly argued elsewhere that *Hamwic* and *Hamtun* were two names for the same place. And it is probable that Southampton got its name to distinguish it from Northampton, not from a parent

settlement called *Hamtun*: locally, it long continued to be called both *Hampton* and *Southampton* (Rumble 1980, 12–13).

Burgess also cited archaeological evidence, but sparingly and with little discipline. He ignored contradicting evidence, or dismissed it as irrelevant; yet fragments of evidence without any bearing on the case he elevated to the status of proof. In fact, nothing so far uncovered supports his views.

Other researchers, when they came to reconsider the evidence, were largely unmoved by Burgess's arguments, which thus had little perceptible effect on the course of excavations. However, Burgess did provoke one important response: in the future, archaeologists would be careful to publish the main points of the evidence and would offer their own interpretations of it.

1968–71

The resumption of archaeological work in Hamwic was due in good measure to the efforts of Peter Addyman, who lectured in archaeology at Southampton University from 1967 until 1972, and David Hill, who arrived in Southampton in 1968 to research his doctoral thesis. Alerted through unofficial channels to the proposed redevelopment of a large area within Hamwic, they were quick to make the arrangements necessary for the rescue excavation of what was the largest site then opened by archaeologists in Southampton (at SOU 32, 2530m² in area). In a parallel development, late in 1968 Southampton City Museums appointed Robert Thomson as Archaeological Assistant to the Museums. Investigation of Hamwic did not cease upon the completion of SOU 32. Although the size of the later excavations had to be modest, trial trenches were opened at other areas about to be redeveloped, with the aim of testing certain theories: immediately to the east of St Mary's Church, an area first specifically mentioned by Crawford (SOU 33); close to East Street, the 'great suburb' that some of Leland's informants thought to have been part of 'Old Hampton', and which Crawford supposed instead to have been the link between 'New Hampton' and the road system of 'Old Hampton' (SOUs 44 and 45); and in two possible areas of the lagoon (SOUs 57 and 91).

Ultimately more important than all these excavations was the two-part review of the evidence written by Addyman and Hill (1968; 1969). In the early 1960s preliminary arrangements had been made for the publication of full reports on the excavations undertaken since 1946 and the artefacts recovered (CBSMD 1963, 2). In the continued absence of such a volume, the need for an interim and summary report on all site and artefactual evidence became pressing. Addyman and Hill chose to write it. Like the excavation of SOU 32, their review was broadly conceived and quickly executed, and perhaps suffers from being so speedily produced. Nevertheless, it superseded Crawford's essay of 1947/9 and has remained a

basically sound introduction to the archaeology of Hamwic.

Addyman and Hill indicated a date range of about 700 to 940 or 970 for occupation within Hamwic. Its boundaries were redrawn: it would have covered roughly three times the area supposed by Crawford. Some indication of how far Hamwic was thought to have spread inland is contained in the plan published as Addyman 1971, 12, clearly an early modification of Addyman's and Hill's theories: its land boundaries are reproduced in fig 4b. A lagoon, which had more the character of a bay, formed its eastern boundary.

Adopting Crawford's arguments about the prior existence of a lagoon, Addyman and Hill claimed that its silted fill had been uncovered at two small sites, SOUs 57 and 91. If, however, the soils exposed in the trench were lagoon silts, the edge of the lagoon must have lain further inland. It is clear from an unpublished plan that Addyman and Hill paid attention to the modern 3m contour, which roughly outlines the extent of the ancient Salt Marsh but also continues north of Chapel Road, well to the west of the River Itchen. Further evidence of this lagoonal declivity was 'a drop-away of the brickearth immediately east of the Aberdeen Street School [ASS on fig 4b]'. The lagoon's edge, it was suspected, would 'be found also in sites to be developed in the Britannia Road area [BR]' (Addyman and Hill 1968, 82).

If not a bay, certainly the lagoon as Addyman and Hill imagined it was far larger than anything proposed by either Crawford or Burgess. More radically, its supposed existence called into question previous notions about the layout of Hamwic. Finding evidence in the excavations of a regular layout of Hamwic's features, and thinking it 'not unlikely' that the streets had conformed in alignment to the landing shore of the lagoon, Addyman and Hill argued that the original street system had not survived into the modern day: St Mary's Road and St Mary Street nowhere preserved the line of Anglo-Saxon originals. Part of the lost pattern had been revealed at SOU 32, a street running off to the lagoon, perhaps across SOU 47, an area exposed in the 19th century.

Such assertions, embodying a major break with previous theories, are a measure of the progress made in urban archaeology during the 1960s and a sign of the increased confidence with which researchers were prepared to disregard received opinion and argue on the basis of the excavated evidence. Not surprisingly, the arguments expressed in the review of the evidence did much to stimulate and give coherence to the excavation policy of the 1970s. That Addyman and Hill were largely wrong in their arguments – and were largely proved wrong within a decade – is only a quibble. In fact, the speed of the disproof is to their credit, for they had stressed the overriding need to excavate further and across a wide area. The progress of this extra work during the early 1970s was to a considerable extent facilitated by Addyman, who with Thomson played a major role in the setting up of a body that could

accomplish a more thorough investigation of Southampton than had previously been possible.

Several potentially worthwhile sites were noted. What was thought to have been the western edge of Hamwic was investigated in 1971, at a small site, SOU 88, without unearthing any direct evidence of Anglo-Saxon occupation; but most attention was focused on the area supposed to contain the waterfront. In 1971, a series of small test holes was dug along Melbourne Street (*MS* on fig 4b), just inside the then supposed limits of the lagoon. Observing the soils exposed, Addyman and Thomson thought that all except the northernmost were derived from lagoonal silts. They therefore suggested excavation in the north of Melbourne Street, at a place where Anglo-Saxon occupation close to the waterfront might be found. Accordingly, SOU 1 was opened, and (much further south) SOU 4 later in the same year. No sign of waterfront activity was uncovered. Occupation evidence was found at both sites, however, including part of a street at SOU 4.

1971-87

It was clear that the *ad hoc* arrangements in force since 1968 had to be discontinued and an organisation established that could take advantage of the increased willingness of the central government to fund archaeological projects; a body able to co-ordinate responses to the many threats posed by redevelopment throughout Southampton. After due deliberation, in October 1971 such a body was formed under the title Southampton Research Committee (SRC) and largely under the protection of both Southampton University and Southampton City Council. A year later, the post of Unit Director was created and the unit changed its name to Southampton Archaeological Research Committee (SARC). Both committees were chaired by John Barr, whose unswerving support for Southampton's archaeology and whose important voice in the city council were invaluable.

Until its demise in 1981, SARC provided a more constant and a wider-ranging archaeological presence than previously had been known in Southampton. Its excavation policy was

to delimit the area of settlement more closely than [was] possible before, to ascertain more about the layout and character of the town, to establish a chronological framework for the occupation of the site, to explore in detail by whatever methods were possible the environmental material and to pursue a detailed programme of research into whatever range of artifacts might demonstrate most clearly the contacts of the settlement, at home and abroad.

Laurence Keen, the author of these words (Keen 1975, 171), was the first director. The search for Hamwic's eastern edge (therefore indirectly for its waterfront) proceeded southwards from Melbourne

Street, eastwards in the vicinity of Chapel Road, then northwards, just inland of what had been the river's edge in the 18th century (SOU 5-14). No edge was found; but, with the possible exception of SOU 12, the excavations provided valuable evidence of Middle Saxon occupation, including part of a street at SOU 10. Equally importantly, the excavations disproved Addyman's and Hill's theory about the prior existence of a large lagoon and, with the completion of work at SOUs 9 and 14, seemed finally to dispose of the suggestion that Chapel Road had been Hamwic's quayside. Work was carried out with the aim of providing more evidence about Hamwic's layout and the uses to which it was put. SOU 13 was opened in 1973 in the hope of exposing a junction of the streets found at SOUs 4 and 10. SOU 15 was opened to expose more of the street discovered at SOU 32; and at the same time excavations were begun at SOU 6, meant to augment the evidence of streetside occupation obtained from SOUs 4 and 5.

Philip Holdsworth took over the running of the unit in 1974 and largely continued the unit's policy. Excavation at SOUs 17 and 20 were meant to amplify the evidence already known; SOUs 19, 27, 58, and 59 were opened in a search for the north-eastern border of the settlement; SOUs 16, 18, 21, and 22 were meant to add more evidence about occupation in the south-eastern corner; and SOU 73 was a last attempt to find evidence of a lagoon. There was again no sign of a waterfront.

Both SRC and SARC were committed to a study and a publication of the evidence. In 1972, under the terms of a Leverhulme Trust grant, Iris Barry was appointed to prepare for publication material from all excavations undertaken in Hamwic from 1825 up to 1970. In 1973, with the aid of a grant from the British Academy, SARC funded three years of post-graduate work at Southampton University by Michael Monk on archaeobotanical remains and by Richard Hodges on Middle Saxon pottery. From 1974 onwards, researchers into the archaeozoology, archaeobotany, and iron objects of Southampton were directly employed by SARC. In 1975 there was initiated what has proved to be a very fruitful, close co-operation with the newly created Faunal Remains Project (now the Faunal Remains Unit), resident at Southampton University.

Much of the early work was summarised in annual reports (*SRC AR* and *SARC AR*), and especially in two reviews of the evidence. Keen (1975) provided a short critique of the major theories then current, indicated where further research was necessary, and summarised the evidence newly available. He suggested that Hamwic had been founded after Winchester's emergence as an ecclesiastical and royal centre, in the late 7th century, and had largely disappeared by the end of the 9th century or the beginning of the 10th. Holdsworth (1976) covered much the same ground but with a different emphasis. He reasoned further that 'a lagoon did not exist in the area supposed by Crawford (*ibid*, 29). The claim was

premature, perhaps, but it can be read as a statement of intent: future excavations were to be undertaken well away from Hamwic's supposed waterfront.

Drawing conclusions from the results of the large-scale but hurried excavation of SOU 32, Addyman and Hill (1968, 82) had argued that, second only to the search for the waterfront, it was

imperative that the tentative conclusions should be tested by excavation of another area, at least as large, under unhurried summer conditions which would allow the total evidence to be recovered; the various features to be excavated; and the sequence of features and structures to be established.

SARC's failure during the early years of its existence to excavate on such a scale within Hamwic is at first sight surprising, especially since the contemporaneous excavations within the medieval town were very large; and, as foreseen, the evidence recovered from small trenches was limited in its value and interpretability. However, such a large dig had proved impossible to accomplish within Hamwic, partly because of the difficulty of gaining long-term access to the places investigated in Hamwic, but mainly because expectations were centred on the Six Dials area, where it was hoped work could begin in 1975. To some extent, SARC's early excavations in Hamwic were training digs, intended to reveal the most efficient means of recovering information so that the lessons learned could be applied to this work at Six Dials.

This site became available at last in 1977, when the opening of a small trial trench (SOU 23) was quickly followed by bigger excavations at SOUs 24, 26, and 30. Unfortunately, SARC was embarking on this expensive work at a time when the function of small units was being reassessed. Affected by this determination to 'rationalise' archaeology, SARC was forced to lose three members of its post-excavation staff. By 1980, it was becoming increasingly difficult to maintain the excavations at their required level and, rather than continue to direct a unit the funds of which he felt to be insufficient for its continued success, Holdsworth chose to resign (Holdsworth 1980b, 4 8).

His resignation marked the effective end of SARC. Its functions were transferred in 1981 to Southampton City Museums, which became responsible for the continuation of excavations at Six Dials (SOUs 31 and 169). Thomson was the first director of this unit, until Mark Brisbane, who had been his assistant, took over the post in 1982. Excavations within Hamwic have taken place at a number of sites, one of which, SOU 99, is the subject of a report in this volume. (Unlike the other sites, SOU 99 was excavated under the aegis of the Wessex Archaeological Unit, now Wessex Archaeology.)

Contributions to the debate about Hamwic have been offered with increasing rapidity as more evidence has been amassed, and likely interpretations of that evidence have had to become more complicated. That the debate ends with the publication of this volume cannot be pretended for various reasons, some of which are expounded in the next chapter.

The nature of the evidence

Nearly a hectare of Hamwic has been exposed as a result of the excavations reported on in this volume nearly a hectare and a half if one includes the Melbourne Street and Six Dials excavations (MF1:A2). Since these figures represent samples of no more than 2% and 3%, inevitably one is cautious when interpreting the excavated evidence. Nevertheless, taken as a whole its general integrity is impressive and far outweighs its obvious weaknesses. What survives of the excavation archive is usually complete enough and clear enough to answer basic questions about a site. Usually, some likely interpretation of a site or group of sites is also possible. These points are stressed here since they will not be repeated in the following short critique of the gaps that occur in the archive.

First impressions of a site are often gained through its written records, drawings, and photographs in that order of importance. Examining these, one has some idea not only of what features were uncovered, but also of how and why they were dug. Then, it is time to look at the material archive, the small remaining proportion of a site. These matters are considered below in the same order.

Written records

It is commonly found that there is some disparity between what was written after a delay and what was recorded at the time of excavation, and site notes, usually a more detailed source of information, have been preferred. Unfortunately, there is not a complete series of site notes. The most serious gaps occur for SOUs 32, 34, 38, and 39. In the case of SOU 32, short notes were made in probably six exercise books. Only one can now be found. In the case of SOU 34, any detailed notes that may have been kept have not been seen by this writer. In the case of SOUs 38 and 39, short notes were probably written on the drawings, but these drawings are lost. Nor is every context described in the books that have survived.

Gaps have been repaired from other sources, mainly interim reports. These contain some important information about contexts, but must be read with caution. Contemporary published reports sometimes are informative and help to clarify uncertain points, but they are short and, by their very nature, often more interpretative than descriptive. The same is true of newspaper reports, with the added complication that, although a national newspaper's special correspondent will have been the excavator himself, whose meaning is clear, a local reporter's meaning is not always apparent or trustworthy.

This writer has seen very few letters that have much relevance to this volume, with the exception of half-a-dozen written in the early 1960s, mainly by Maitland Muller, and mainly on the subject of the excavations undertaken by him more than ten years earlier.

Drawings

The more numerous and more detailed drawings made during an excavation have been preferred to those prepared for publication.

Excavation drawings were occasionally coloured, and this is usually a great help to someone writing excavation reports up to 40 years later the exception being those few cases where an unnatural-colour coding was employed and the key to the code has not survived. The drawings from some sites barely show the outlines of contexts. Not every context has been drawn and some drawings are missing. Despite these lapses and losses, the shape and dimensions of most features, and the sequence of the infilling layers, are clear. In a number of cases, however, most or all of the site drawings have been lost. Depending on the coherence, clarity, and size of the remaining site archive, the loss can prove a major obstacle or a minor irritant. In two cases, the description and the interpretation of a site are greatly hampered. No section drawings or detailed plans of SOU 38's features can be found. This is a serious loss. Descriptions of the contexts had probably been written on the drawings; the extant written records are otherwise very sparse; and what writings there are point to the existence on this site of some very curious features. The problems associated with the drawings of SOU 34 are too convoluted to be set out here, and the reader is referred to the excavation report and the supplementary reports in microfiche (MF1:H2 I7).

Photographs

Photographs are often best prized for their record of incidental details, and in this respect their value is usually proportional to the number that were taken. Not enough were taken or have survived.

There are monochrome photographs of nearly all the sites opened since 1946, the only serious loss being the photographs of SOU 36, a site that contained some important features. Since 1961, colour transparencies have also been taken of most sites. At least two dozen transparencies of SOU 32 are

now missing; one cannot determine the extent of losses elsewhere.

Opening the site

It is often and wrongly stated that the site of Hamwic was abandoned until the *Victorian* redevelopment of the area; and this belief, doubtless reinforced by the general monotony of the post-Middle-Saxon layers, has usually led to the hasty removal of nearly everything that overlies the surviving natural brickearth. With very few exceptions, excavation has been initiated 'cost-effectively' with the mechanical stripping of these overlying soils. Information has been lost as a result.

The existence has regularly been noted of an intermediate stratum that gradates in colour and consistency between the undisturbed brickearth and its overlay of an essentially homogeneous ploughsoil. A similar phenomenon has been noted elsewhere and interpreted as colluvium (Reynolds and Barber 1984, 99). Within the area of Hamwic, the changes are probably mainly the result of ploughing. Although plough-marks have only rarely been noted within this soil, clearly preserved within it are parts of the upper layers of pits; layers that have been disturbed, intermingled with other soils, and spread outwards with increasing dilution. These spreads are clearly traceable for about 0.5m beyond the pit boundaries. The same has been observed in the case of gravel surfaces, the upper parts of which have been disturbed and outspread for at least half a metre. (Due to the very high standard to which the site plans were drawn, this is most clearly exemplified by SOU 4 s street: see fig 14.) The greater part of a context usually remains undisturbed, and the effects of this later disturbance are therefore clearly signalled; but other contexts such as middens, earthen floor layers, and thin spreads of gravel may have been wholly disturbed, and their existence would become apparent, if at all, only after a detailed analysis of the entire ploughsoil (compare Bradley 1984, *passim*).

This is not the place to argue for the employment of new and slower and necessarily more expensive methods of excavation. It must be pointed out, however, that, except where the brickearth diggers had already removed the ploughsoil, the practice of deep machine stripping has limited the amount of valuable information that might have been extracted from a site. Only rarely may one hazard an educated guess about the particular nature of what has been lost.

Interpreting the features

Certain excavation methods have tended to lessen the value of the information recovered. Because there are cross-fits or cross-matches between objects found in different layers of a pit, it has often been assumed that the pit can be treated as a basic unit.

Maitland Muller proposed that half a pit be removed as a unit, two or three main divisions be noted in the section, and these blocks be separately excavated. Something like this was practised by SARC, which was experimenting with different methods of excavation in the early years of its existence. At SOUs 11 and 14 for certain, and probably at other sites, pits were excavated by half-sectioning them as a unit and then providing enough of the feature still remained by removing what was left of the layers in a more normal fashion. Finds made during half-sectioning were provenanced to the pit, and those made during any further investigation were provenanced to the relevant pit layer.

People find what they are looking for. Assuming that pits and their fills were basically single units, previous archaeologists have unwittingly reduced the possibility that they would see that they were wrong. In fact, it is now clear, cross-fitting and cross-matching pieces found in different layers may have been displaced as layers accumulated: the fills of every pit were constantly being compressed, and the slumped hollows that developed in the top of the pits were infilled either deliberately or by natural processes. However intermittently, a pit existed as a negative feature for a considerable length of time.

Failure to recognise these facts has distorted the record in places. Very occasionally, where the excavator has been forced to this action by lack of time, or lack of money, or both, only the top layer of a pit has been investigated, in the mistaken belief that artefacts closely dating or representing the entire infilling of the feature would thus be unearthed. More commonly, although the other records allow one to recognise and describe the layers in a pit, the method of excavation has left one ignorant of which layer contained which recovered object. This is an obvious impediment to the interpretation of a feature or a site.

Such difficulties are compounded by the fact that contexts were not always described, or were sometimes ambiguously or contradictorily described. Also, until Holdsworth and Thomson introduced the use of the *Munsell Soil Color Charts* in 1976 and the *Soil Survey Field Handbook* in 1977, descriptions of a soil's colour and nature tended to be inconsistent and idiosyncratic. With experience of Hamwic's soils, and the very rare opportunity to inspect small samples of soil from the early sites and compare them with their descriptions, one soon realises that, for instance, the commonly mentioned 'orange clays' were probably yellowish brown brickearths. But, more importantly, it is difficult to decide what was meant by descriptions of uncommon soils, and sometimes impossible to gauge their importance. Other site notes are only interpretative. All components of the evidence considered, a layer described as a 'collapsed wall' proves to be, not a layer of burnt daub as might at first be thought, but probably nothing other than redeposited brickearth; but the available evidence does not usually permit such a certain re-evaluation of a description.

Together, these factors mean that certain identifications are rarely possible. For example, it is now realised that the remnants of what had once been above-ground surfaces are preserved within the slumped fills of many pits. Where ploughing has removed those parts that rested on solid earth, the recognition of these surfaces depends on a close comparison of sequences of layers within neighbouring pits. Such a comparison is not usually possible in this volume, often because it is difficult to compare idiosyncratically described layers.

The smallness of these sites is a further impediment: it makes hazardous the recognition of all but the most obvious of relationships between features. In some cases, the interpretation of structural evidence is akin to geomancy. It is not usually possible to check one's conclusions statistically: the methods outlined by Forrest (1976), Hodder and Orton (1976), and Fletcher and Lock (1984) are inappropriate. Where a proper recognition of the evidence is hampered in this way, the restricted size of many of the excavations can badly complicate inter-site comparisons. An example of this fact is provided by the problems in explaining the different densities of pits found at a variety of sites (see below, p 43).

Recovery rates

It is generally recognised that the accuracy and representativeness of what is recovered depends to some extent on the differing abilities of each excavator. The acrimonious and largely pointless debate about the value of amateur and professional archaeologists must be avoided, but there is some evidence that small fragments of glass are on average more likely to be recognised and recovered by today's diggers than they were by those employed in 1946–51 for instance (Heyworth and Hunter forthcoming), and one suspects that this is true of other materials. If so, the explanation may be that the early excavations were undertaken sporadically without the benefit of a tradition of investigating Anglo-Saxon towns, and with a labour force largely composed of a regularly changing group of inexperienced students; but more recent excavations have been carried out almost continuously by people who have worked for some time within the now-established discipline of urban archaeology and have stayed in Southampton long enough to form a coherent team, collectively familiar with the soils, features, and artefacts of Hamwic.

The layers of one pit at SOU 5 were fine-sieved in 1972–3. Between 1973 and 1975, some attempts were made to mitigate the loss of material. At most sites opened during this period, core samples were taken through every pit fill, and at SOUs 11, 14, and 15 all pit fills were coarse-sieved on site: dry at SOUs 11 and 14, and wet at SOU 15. So much animal bone was recovered from SOU 15 as a result that, for more than a decade, there was no chance of studying it in detail. Since 1977, samples have been taken from most contexts (Cottrell forthcoming).

Nevertheless, although differing rates of recovery may hinder a direct comparison between sites, there is no evidence that such a partial recovery otherwise biases the small-find record and leads to significantly different results. This is pointed up by the results of Sarah Colley's excavation of a single pit at Six Dials (Colley *et al* 1986). In brief, through a very slow and deliberate excavation of the pit fills, she noted the three-dimensional position and orientation of nearly every object recovered. Each object was provenanced to a layer, separately bagged, and labelled. As a further check, all soil removed was fine-sieved. From this pit of only 2.8m³ capacity, which contained some comparatively sterile layers, a staggeringly large number of objects was recovered. However, although the proportion of very small objects found was far greater than normal (a fact of most importance when studying faunal remains), in general the range of small-find types seems to have been what less stringent methods would also have indicated. Similar conclusions have been drawn from a different study by Levitan (1982, 27–31) and Ellison (1982, 31–2).

One hesitates to suggest that Colley's techniques should be used when digging every context: a small pit had taken 1120 excavator-hours or more than six excavator-months to dig (S Colley, pers comm). Yet the assumption made in this volume, that excavation since 1946 has not led to any great distortion of most of the material record, awaits checking by further, equally scrupulous excavations of pits.

The material archive

Objects and artefacts are mentioned in this volume only when they are relevant to an interpretation of a context or a site. Because of this bias, limited use has been made of the environmental evidence: there seems little point in citing it to suggest that Hamwic was low-lying and situated next to a river. However, as Cottrell (forthcoming) points out, small, organic material can be 'a major indicator of differences both between features and between their constituent layers [that are] frequently not apparent during normal excavation. Such distinctions cannot be made here, because fine-sieved material survives from an insufficiently large number of contexts.'

A cask from SOU 7 was allowed to moulder away, though not before it had been studied; large quantities of wood fragments from SOU 11 were deliberately thrown away some years after their recovery; wood from SOUs 36 and 38, if it is not still being stored somewhere, must by now be dust; certain parts of the copper-alloy-working evidence from SOU 8, some of the same from SOU 15, and most of the iron-working evidence from SOU 16 were (one supposes) placed with excommunicate specialists and are effectively lost; a coin from SOU 11 and another from SOU 43 have never been studied and are certainly lost; human skeletons from SOUs 34 and 36, and much of the same from SOUs 14, 32, and 43,

cannot be found; and, following a muddling of the glass from SOU 14, 30 fragments disappeared. These are the most serious losses.

With material overlooked or lost after excavation, one cannot be sure of the representativeness of what survives. A pragmatic approach has therefore been adopted: the problem has been ignored. Wholly representative or not, half-a-dozen copper-alloy-working crucibles remain evidence of copper-alloy working. Depending on how fully it has been recorded, material that is now lost can also be used. It must be admitted that most of the original finds records are of little use for this purpose, with the barest of descriptions and some mistakes of identification, but much faith has been placed in many of the notes kept by Kathy Kilmurry in 1973 4. Their detail and accuracy later enabled the SOU 14 glass-jumble to be sorted out; and all these factors give confidence that objects now missing can be described from her

records. The lost pieces of copper-alloy-working evidence from SOU 8 have been described in this volume partly from their published appearance, partly from Kilmurry's notes, and partly through a comparison with the few pieces obviously thought unworthy of a specialist's attention.

These are some of the unpleasant facts that any researcher into Hamwic must face. Nearly all the evidence is archaeological. Only a small percentage of the buried data has been recovered so far. A regular comparison of those data is impeded, most often because of the failures of recording and sometimes because of the failures of storage. Yet a living dog is better than a dead lion. No matter how disputable the interpretations, the debate about Hamwic is now based on much more evidence than any previous researcher has had access to. The following chapter embodies certain aspects of that debate.

A synthesis of the evidence

The excavations undertaken at Six Dials provide the most complete parallels to many of the features revealed at the smaller sites reported on in this volume. They usually display unambiguously those relationships between features that are often obscured at a small site, and they elucidate physical processes that previously had been unguessed at or only improperly understood. This volume could not have been written without regular reference to that body of evidence. If all the proprieties were being observed, each mention of Six Dials or one of its constituent sites (SOU 23, 24, 26, 30, 31, 169, and 258) should have been followed by a reference to 'Andrews forthcoming'. Constant repetition of that formula would soon prove tiresome, and the words have been omitted, to be replaced by this prefatory note.

Natural topography

Location of Hamwic

Much of central Hampshire consists of chalk downs. Regularly rising to at least 200m OD along their northern perimeter, they slope southwards to the land in which Southampton is located. This is an area of low elevation that rarely exceeds a height of 50m OD (*frontis*). The main deposits here are interlayered sands, gravels, and clays, and the characteristic vegetation is heathland and woods. However, a richer alluvium is to be encountered in the valleys of the rivers that drain the downs.

Hamwic was located on a narrow tongue of land between two of these rivers, the Test and the Itchen. Both rivers are tidal for their last 6km or so. They flow together into Southampton Water, which connects with the Solent about 12km to the south-east of Hamwic, immediately to the north of the Isle of Wight (fig 5). The Solent joins the English Channel at the eastern and western extremes of the Isle of Wight.

The presence of this island, impeding a straight-forward rise and fall of the tides of the Channel, is usually thought to be partly responsible for the double tide (or augmented tide) enjoyed by Southampton, although its explanation is probably far more complex (see, for instance, Macmillan 1964, 56-60; Webber 1980, 29). Whatever the explanation, the result is to guarantee Southampton a prolonged period of high water, where the ebb constitutes less than four hours out of every twelve (fig 6).

The land on which Hamwic was built sloped gently to the south-south-east, from a height of 5.65m OD

at Six Dials (SU 4254 1229) to 1.50m OD at SOU 21 (SU 4291 1151), an average slope of less than a degree. About 450m to the west, at SOU 184 (SU 4264 1154), the height was 2.05m OD.

Underlying the topsoil is a fine sandy silt known as brickearth. Its texture has been analysed only twice in detail: by Shackley (1980) and by Mills whose report on the soils of SOU 99 is published here (MF2:F4-G2). Shackley interprets the brickearth she analysed as redeposited loess, a conclusion also reached by Campling (forthcoming). The data presented by Mills are not incompatible with such an interpretation.

The brickearth reduces in thickness to the south-south-east, being on average about 2m thick at Six Dials, 1.1m thick at SOU 184, and less than 0.1m thick at SOU 21. It overlies gravel, in which is to be found the present-day water table.

Riverline

The earliest map to show the line of the River Itchen with any comprehensible accuracy (pl 2) was published in 1771 (Mazell 1771). Its details are confirmed by a study of later maps, through which one may trace the modern development of the Itchen waterfront and its progressive encroachment into the river.

Excavations in Hamwic have approached to within perhaps 10m of Mazell's riverline. They have all exposed evidence of occupation, most of it certainly datable to the Middle Saxon period. The river cannot have been significantly higher in the Middle Saxon period than it was in the late 18th century. No check has been made on whether the river was lower, but the present view is that 'little or no change has occurred in the coastline' of this area since a rise in sea levels about 2000 years ago (Stagg 1980, 19). One may also make the point that, given a tidal range of about 4m — something that has 'probably only marginally changed' over the centuries (Webber 1980, 29) — any slight change in the land's elevation would effectively have been masked. Accordingly, it has been assumed throughout this volume that the river was equally high in the Middle Saxon and modern periods. (Ancient riverlines shown on figs 9b, 10d, 13a, and 13b are based on those shown on 18th- and 19th-century maps.)

If the river were equally high at both periods, the salt marshes shown on early maps probably also existed when Hamwic did: they are represented on fig 9b. It has been suggested, however, that at least part of the southern marsh appeared at a later date, as a lagoon silted.

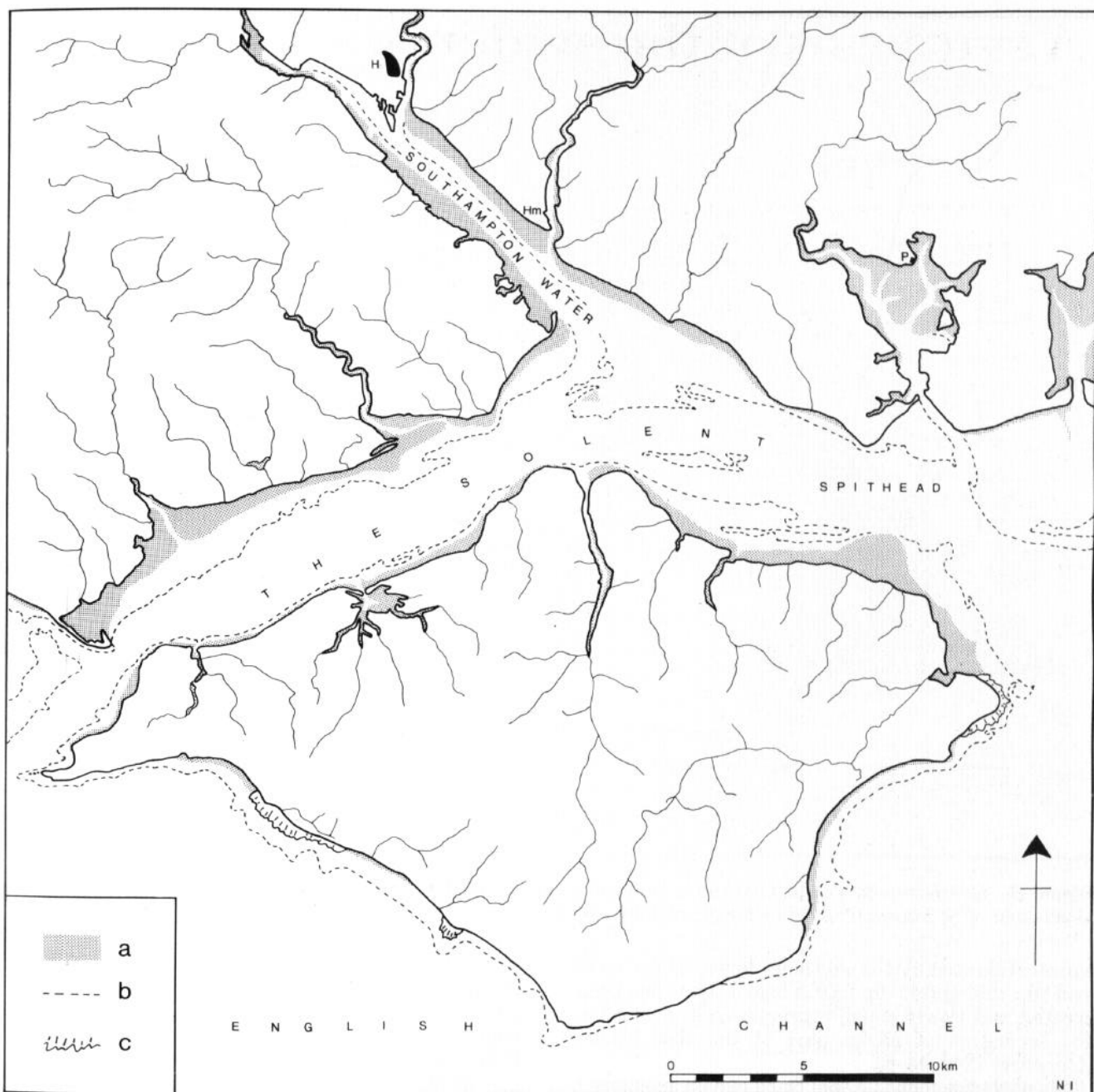


Figure 5 Southern Hampshire and the Isle of Wight, Southampton Water and the Solent. Key: **a** modern intertidal areas, **b** the modern boundary between shallows and the deep channel (5m below Chart Datum), **c** rocks, **H** Hamwic, **Hm** Hamblemouth, **P** Portchester.

Lagoon and salt marsh

Crawford was the first to suggest that Hamwic had been established alongside a lagoon. The evidence he used was primarily documentary, modern maps and those sources listed above. Two large mill ponds had lain at the south-eastern extreme of the peninsula, formed by enclosing a part of the river with gravel bulwarks. Inland, to the west, was the Salt Marsh, which was subject to occasional flooding. So low-lying was this land that the marsh had to be prot-

ected from the river by the erection of bulwarks, the maintenance of which was a regular concern of the Court Leet from the 16th century at the latest. Chapel Road, some 125m north of the marsh, was originally known as a causeway. A ditch dug by its side in 1603 had filled with sufficient water to float a boat.

Crawford argued from this evidence that much of the seawall protecting the marsh and enclosing the ponds had originated naturally as a gravel spit that developed eastwards to a point where deposition was

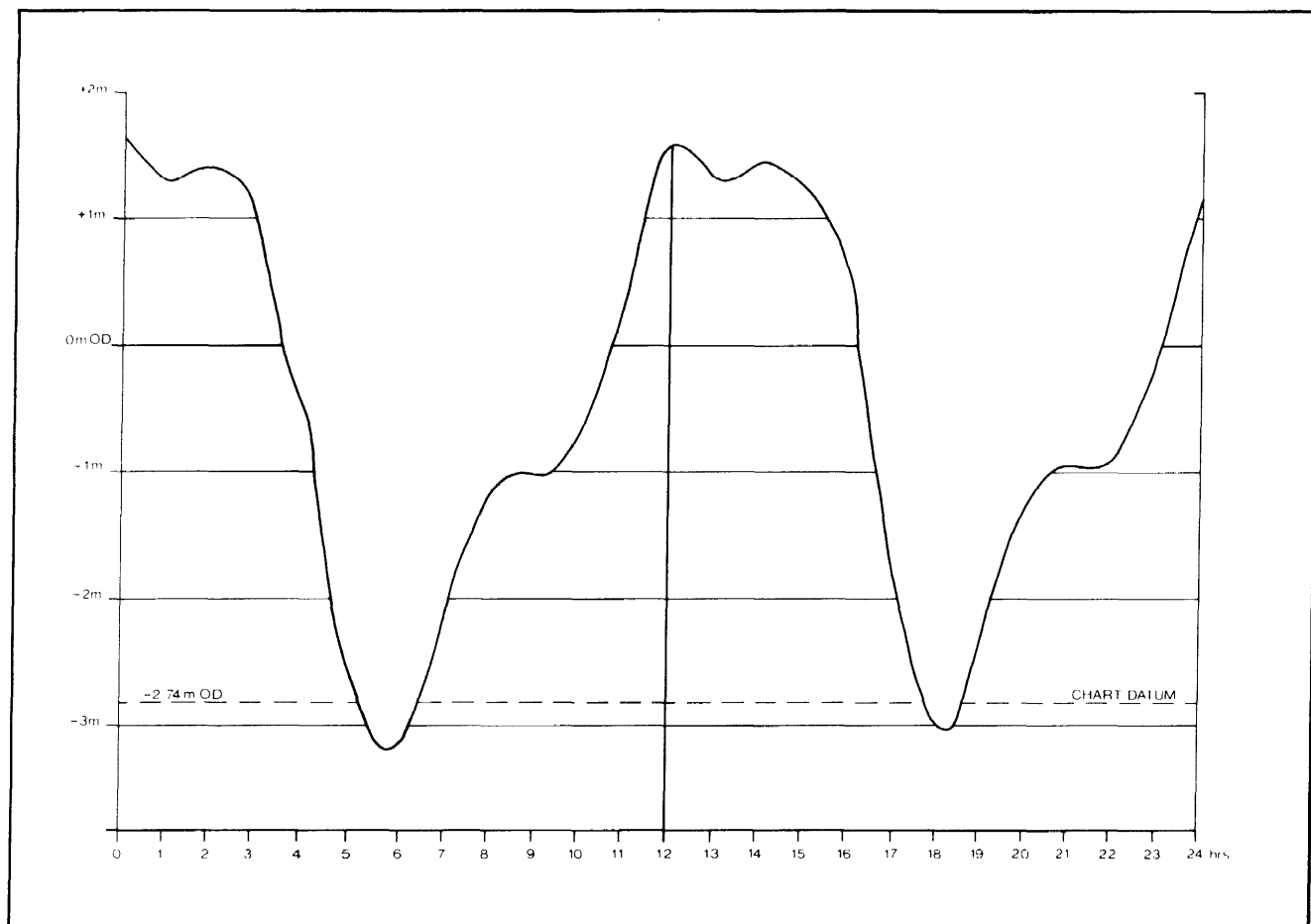


Figure 6 Southampton's tidal curve as measured on 5 October 1948 at Town Quay, about 1km to the south-west of St Mary's Church (after Macmillan 1964).

counterbalanced by the erosional forces of the river and the ebbing tide (fig 2a). A lagoon had thus been created and slowly silted, a process that resulted in the formation of all or part of the Salt Marsh (Crawford 1949, 45-6).

His evidence about Chapel Road can be questioned or disregarded. Crawford mistook his text when he read that Chapel Road was a *calcetum* or causeway. It was not called by either of these names (MF2:D2-3). He may have misinterpreted the evidence about the ditch alongside Chapel Road. It was 'a great channell of the sea water', dug sufficiently deep along its length to float 'a boate of good burthen' (Hearnshaw and Hearnshaw 1906-8, III, 382). It must have been quite deep: nothing indicates that water bubbled up directly a spade was trodden into the earth.

Direct evidence of a lagoon has scarcely been sought, except in the vicinity of Chapel Road (and, of course, except for wild-goose chases in what have proved to be the middle of Hamwic). The origins of the marsh have been investigated neither through

extensive sampling nor through a detailed analysis of the soils that constitute it, and the little evidence we possess is of very little worth. 'Lagoonal silts' were identified by Addyman at three places (Addyman and Hill 1968, 75; Addyman and Thomson 1971, 3). Two of these samples were natural soils taken from areas over which Hamwic had been built. Therefore, we must receive very cautiously his statement that the soil exposed in the Salt Marsh (SOU 57) was also 'silts, presumably lagoonal silts'. Excavations at SOUs 73 and 74 do not clarify the picture. 'Nothing' was found at SOU 73, and only 'brickearth' at SOU 74: neither term is further explained. Excavation at SOU 75 revealed the modern infills of those ponds shown on 18th- and 19th-century maps.

To doubt the evidence is not to imply that 'a lagoon did not exist in the area supposed by Crawford', as Holdsworth argued (Holdsworth 1976, 29), but only to set narrower limits to that feature. The later existence of ponds strongly suggests that there had been a lagoon here: the simplest explanation of the

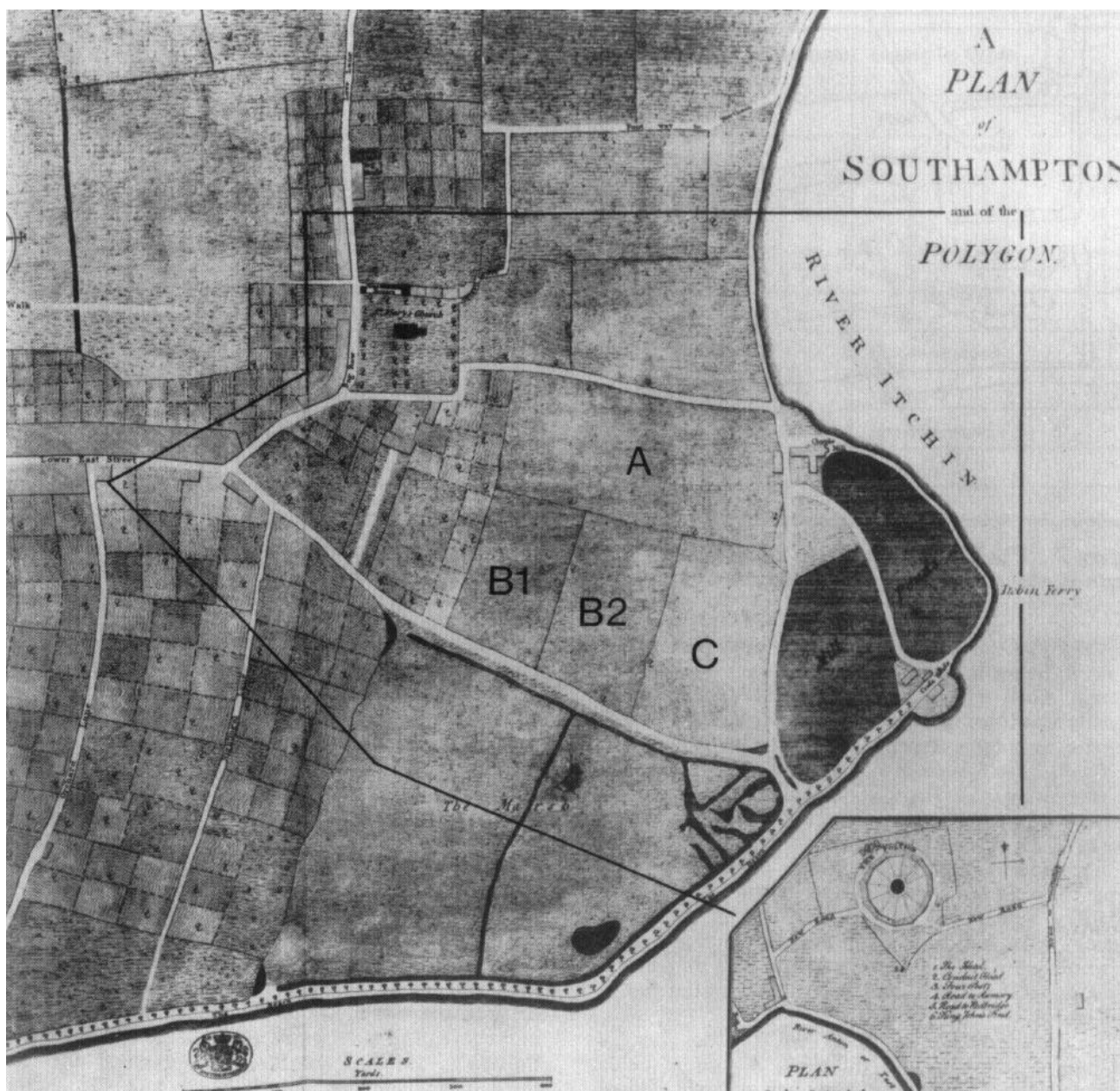


Plate 2 The St Mary's area in 1771: a detail from Mazell 1771. Letters A-C are modern additions. The superimposed, irregular box marks the area probably depicted in fig 7.

creation of the ponds is that the decision would have been prompted and the labour less irksome if a great part of the feature were already in existence, formed by natural processes. The lagoon may also have encompassed some part of the Salt Marsh, at least the adjacent area to the south-west where there had been a third pond perhaps. Pelham (1963, 35-7) suggests that this was used by a 16th-century fulling mill. The supposed site of the pond appears on later maps as an attenuated stretch of water (pl 2).

The argument can be bolstered only by reference to the 'Elizabethan' map of Southampton, mention of which should necessitate a fairly lengthy digression to establish its validity as evidence. Instead, the argu-

ment will proceed here mainly through bald statement, the reasons behind which can be found in the supplement, MF2:J3-7. The map was painted by a local in the late 16th or early 17th century, but was extensively overpainted in later times. It proves very difficult to reproduce clearly, except as a tracing, the form in which it appears as fig 7. The figure shows only a small part of the map; that area of the peninsula corresponding roughly to the irregularly shaped portion marked on pl 2 - the 'Elizabethan' cartographer distorts the space depicted. (Letters have been added to some of the fields shown in fig 7 and pl 2 with the aim of clarifying the discussion that follows.)

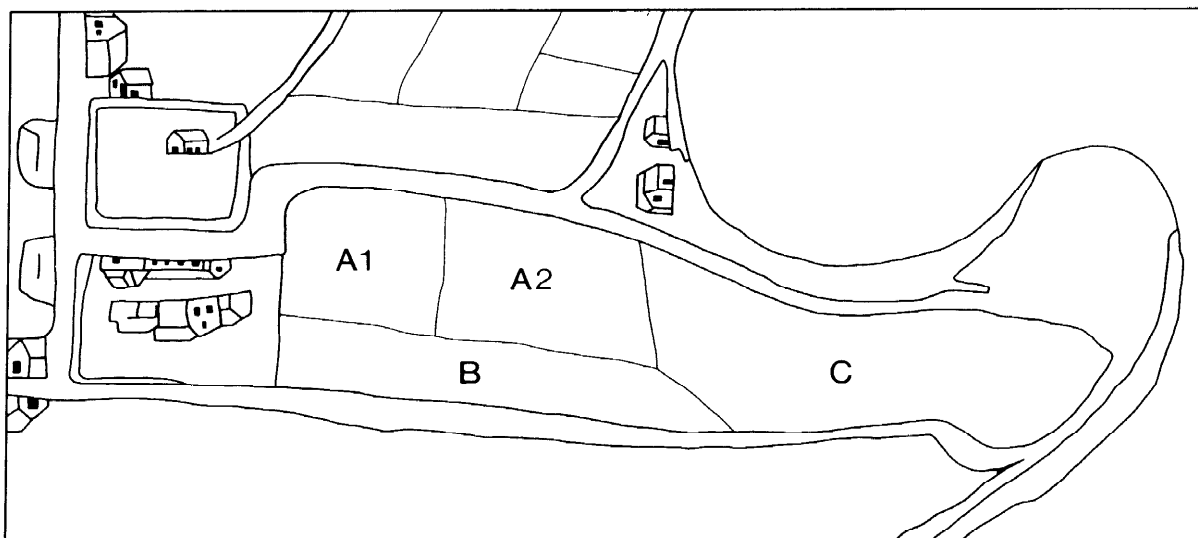


Figure 7 The 'Elizabethan' map of Southampton: a traced and enlarged detail showing the St Mary's area. North is at the top of the sheet. Letters A-C are modern additions. See also pl 2.

St Mary's Church appears near the upper left corner of fig 7. Below it lies the Chantry, divided from it by Chapel Road which runs eastwards to a building usually identified as Trinity Chapel. East of the chapel lies the river (an overpainting) and below it the pond or ponds (also overpainted), which have been shifted eastwards by the cartographer, doubtless as a result of a distorted spatial image. Running directly between points south of the Chantry and south of the ponds is a thoroughfare now called Marsh Lane. Much the same features are shown on later maps, although the Chantry, which had been demolished in the intervening years, had been given over to fields and plots in which were built a parsonage and a barn, and the remains of the chapel had been incorporated into a mill house.

The configuration of fields within the roughly triangular limits is also different. A pair of fields shown on the 'Elizabethan' map, just south of Chapel Road and set parallel to it (fields A1 and A2), probably equal a single field shown on the 18th-century map (field A). In both cases, the location is the same and the southern boundary runs between the same points. Two land holdings had existed here, in 1278 for instance (Blake 1981, 166-8). The date when they became one is unknown. South of these fields and north of Marsh Lane, two fields are shown on the 'Elizabethan' map and three on later maps. The overall dimensions of both groups must have been the same at both periods, and it is highly likely that the single, western field shown on the 'Elizabethan' map (field B) enclosed the Little Salt Marsh, a northern spur of the Salt Marsh (see *ibid*, lxxxvii). This, one presumes, was divided into two at a later date (fields B1 and B2).

If all these deductions are correct, the maps of both periods show the same south-easternmost field (field

C), but with one important difference. In the earlier map, Marsh Lane follows a more or less direct route to the south of the ponds, except past its point of junction with field C, where it loops to the south. This diversion perhaps corresponds to a slight turning of the thoroughfare shown on later maps, but more probably it does not appear on later maps. It may have been forced by the presence of a large body of water that survived, in a less impedimental form, into the 18th and 19th centuries.

At the very least, the lagoon presumably encompassed all the area of the mill ponds. It may also have included some part of the Salt Marsh. This extra area need not have been very large. It is likely that the marsh had reached its maximum extent prior to the rise in sea levels about 2000 years ago, and thereafter had been receding - except when the bulwarks were deliberately maintained for its protection (compare Tubbs 1980, 1-2). In other words, it is likely that the marsh already existed in the Middle Saxon period.

Roman and Early Saxon occupation

Southampton's Roman town, called Clausentum in this volume, was situated on the east bank of the River Itchen, about 1.4km north-east of the eventual site of Hamwic. Among the various functions that it may have fulfilled, the settlement probably served as an outpost for Venta Belgarum (Winchester), the cantonal capital some 15km to the north and connected with it by a road (*frontis*). Perhaps a Claudian foundation, and certainly dating to the Flavian period, Clausentum was defended by a wall on its landward side at least. Only very limited

Table 2 C14 dates

HAR	SOU	Context	BP	Calibrated age range (1 sd)	Sample type
328	5	F16, -	1140 ± 60	cal AD 703-1025	wood
569	11	F46, -	1240 ± 70	cal AD 629-978	wood
570	11	F47, -	1100 ± 80	cal AD 690-1152	wood
572	11	F90, -	1170 ± 80	cal AD 647-1041	twigs
573	11	F46, -	1060 ± 90	cal AD 886-1035	wood
728	11	F62, -	1120 ± 80	cal AD 679-1102	twigs
1164	15	F75, 2	1270 ± 60	cal AD 625-936	charcoal/wood
1165	16	F55, 2	1020 ± 70	cal AD 825-1215	charcoal
1166	15	F81, 3	1440 ± 70	cal AD 415-741	charred wood
1167	6	F31, -	1510 ± 70	cal AD 365-679	charcoal
1486	20	F131, -	1260 ± 80	cal AD 596-981	charcoal
1673	22	F114, 4	1370 ± 70	cal AD 504-852	charcoal
1853	22	F114, 4	1370 ± 80	cal AD 456-871	charcoal
3291	24	13604	1060 ± 60	cal AD 802-1135	charred thatch
3390	24	8337	1180 ± 70	cal AD 658-1016	wood

archaeological investigations of the site have been made, reports on most of which are to be found as Waterman 1941 and 1947, Maitland Muller 1949b, 66-7, and Cotton and Gathercole 1958. The presence of a small outlying settlement is implied by the location of a Roman cemetery on the high ground on the west bank of the Itchen, overlooking Clausentum (Crawford 1942, 37; 1945c, 251, n10). Service trenches dug in its vicinity since the late 1970s have been observed in the hope of discovering more evidence, but the search has proved unsuccessful. Other evidence of outlying occupation comprises two coin hoards (one found at Weston, about 3km to the south of Clausentum, the other found near Swaythling, some 2.5km north of Clausentum) and a Roman building, the foundations of which were discovered just north of Swaythling (Crawford 1942, 37).

It might be expected that the brickearth was ploughed over in the Iron Age and the Roman period; and, indeed, excavations at the site of Hamwic have regularly uncovered pointers to this agricultural use. Most of the evidence has been summarised by Cooper (in Smith *et al* 1984, 45-7). The few fresh interpretations offered in this volume - an Iron Age field enclosure at SOU 8, the possible redeposition of the contents of a Roman pit at SOU 11, and a possibly Roman building at SOU 99 - do not change the picture.

Clausentum's earthworks were still easily discernible early in this century (Cotton and Gathercole 1958, 33-5), and presumably some of the stone walls

survived into the 16th century, when there were 'tokens and ruins of a castelle' to be seen (Leland, IV, 21). There is no difficulty in supposing that the Roman defences were largely intact during the Anglo-Saxon period and might have been made use of at any time then. However, there is a marked absence of Anglo-Saxon finds, with the exception of a 6th-century disc brooch, a few coins, and perhaps some skeletons. Only the brooch, found in an insecure context, is some evidence of Early Saxon occupation at Clausentum (Cotton and Gathercole 1958, 29). It represents the totality of the Early Saxon evidence found in Southampton; found, that is, at the sites of the Roman, Middle Saxon, and medieval towns, which effectively are the only areas to have been investigated in any detail.

The Roman site might have been occupied in the Middle Saxon period; but the evidence is scanty and can be variously interpreted. Three sceattas or so have been found in or near Clausentum (*ibid*; Pagan 1988a, 62). These could have been chance losses made by Middle Saxon visitors to a deserted site. A cemetery found at Clausentum, which might be dated to any century between the 7th and the 12th (Cotton and Gathercole 1958, 30), could be a better sign of Middle Saxon occupation there.

In fact, almost all of Southampton's Middle Saxon evidence is concentrated at the site of Hamwic, and it is clear that Middle Saxon occupation centred on this new settlement, established downstream of Clausentum and on the other bank of the Itchen.

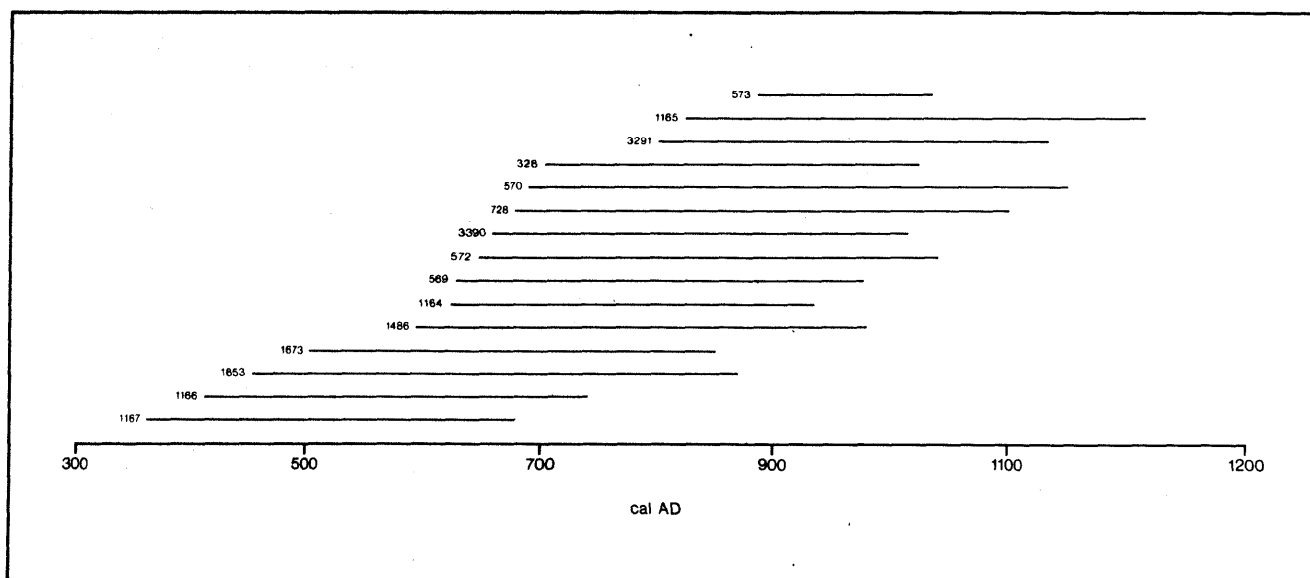


Figure 8 The calibrated radiocarbon dates from table 2, arranged chronologically. See the text for further details

Dating the origins of Hamwic

Most modern commentators have followed Loyn (1962, 138) and supposed Hamwic to have been a foundation of King Ine (688-726). During his impressively long reign, we are often told, the kingdom was expanded, and settled enough to justify the establishment of a *mercimonium* on the banks of the Itchen. The argument is far from proved; and one suspects that its real attraction lies in the fact that Ine reigned for nearly 40 years, a period long enough to accommodate most modern estimates of the date when Hamwic was founded.

Radiocarbon dates and dendrochronology

Fifteen radiocarbon dates have been obtained. Following the recommendations of Scott *et al* (1983, 38), the quoted errors, shown in table 2, have all been multiplied by a factor of 2.6, with the exception of HAR 573 which has been multiplied by a factor of 1.0. The radiocarbon ages have then been calibrated using a curve given by Stuiver and Pearson (1986, fig 2). At 1 sd, the samples potentially span a period lasting from the 5th century to the 13th. Only two (HAR 1673 and 1853) are a true replicate. Two others (HAR 569 and 573) might be so interpreted, but there is some uncertainty about their exact provenance.

The calibrated dates are ranged in chronological order in fig 8. An origination in the 7th or the 8th century would not appear to be contradicted by the radiocarbon evidence.

The dendrochronological evidence tends to indicate the early 8th century as the period when Hamwic came into existence. About that time (soon after 704), wood used in a plank from SOU 7 was felled. Wood

found at Six Dials was felled in the period 695 x 733. A slightly later date has been suggested for wood from SOU 36 or 37: after much recalculation (MF1:J5), it has been dated to about 758.

Documentary references

There are a few documentary references to the Middle Saxon settlement under either of its names, *Hamwic* or *Hamtun*. In 721 at the latest, Willibald took ship at Hamblemouth 'near the *mercimonium* called Hamwic' (*iuxta illa* [sic] *mercimonio que dicitur Ham-wih*) (Holder-Egger 1887, 91). It is possible that the phrase is an explanatory interpolation, added when the author Huneberc or Hugeburc took down the story in 778 (*ibid*, 81) or when her manuscript was copied. The earliest surviving manuscript was written no later than the beginning of the 9th century, however (*ibid*, 86). Thus, to take the most conservative view of this evidence, we possess a reference to Hamwic and its commercial aspect that dates from the early 800s. In fact, the reference makes best sense only if we assume that in 721 there already was a *mercimonium* at Hamwic (see below).

It is recorded in the *Anglo-Saxon Chronicle* (correcting here and throughout this volume the one-to-three-year dislocation of dates that sometimes occurs) that in 757 Sigeberht was deprived of his kingdom, 'except for Hamtun-shire' (*buton Hamtun-scire*) (Bately 1986, 36; ASC, 46). As is explained below, such references can be dated to the early 10th century at the latest. However, this particular entry has attracted much attention, for the bare narrative of Sigeberht's misfortunes serves to introduce and set the scene for an unusually long narrative of King Cynewulf's heroic death in 786. It has been

suggested that that part of the entry was 'an interpolated piece of prose remembered and copied down from oral tradition' (Wrenn 1967, 204), and it is just possible that the explanatory introduction also dates from the same period.

Several important towns were destroyed by fire in 764, it is recorded elsewhere (Arnold 1885, 42; Whitelock 1955, 242). Among these was a place called *Homwic*. Discussion of this record is reserved until later. Briefly, one may note here that it exists as a late-12th-century copy of a late-10th-century compilation that was based on an earlier chronicle or set of annals.

A short reference exists to a visit by King Egbert to *Omtune* in 825. The record of is a late one, linked with the text of two forged charters, but it contains details of fact more accurate than those found in the *Anglo-Saxon Chronicle* entry for that year and it may be basically correct (B389; S273; Whitelock 1955, 171, nl, and 342).

The *Anglo-Saxon Chronicle* contains a reference to a battle with the Vikings that occurred in 840 *aet Hamtune* (Bately 1986, 43; ASC, 62). The oldest surviving copy of this entry is contained in the Parker Chronicle. The entries up to 891 are written in a late-9th- or early-10th-century hand.

Finally, a charter of Ethelwulf appears to have been written in 840 'in the royal villa called Hamtun' (*in villa regali . . . quae appellatur Hamptone*) (B431; S288). The charter survives as a 14th-century copy, a fact that explains the clearly late form of the name, but it is held to be probably genuine.

If they are to be taken at their face value, these six texts show that, in its different guises as *Hamwic* and *Hamtun*, the place was or possessed a *mercimonium* in 721, headed a 'shire' of some sort in 757, was one of a number of important towns burned in 764, was threatened by the Vikings in 840, and in the same year was or possessed a royal villa. If a cautious approach is adopted, however, they show that at the latest the place name *Hamwic* dates from the early 800s, and the place name *Hamtun* from the early 900s. In themselves, the documentary references do not resolve any debate about the dating of Hamwic's origins; although, taken in combination with the evidence already presented, they indicate that there was settlement at Hamwic for some time during the 8th and 9th centuries.

Cemeteries

The cemetery data as a whole point to a Christian period of burials - ostensibly after 635, when the Christianisation of Wessex began (Bede III, vii) and very probably no earlier than the late 7th century. All of the eight Anglo-Saxon cemeteries found so far might be dated to no earlier than the early 8th century. Several irregularities in the data (considered below) could indicate that these eight cemeteries are not wholly representative of Hamwic's burial grounds. Therefore, it is not impossible that earlier cemeteries still await discovery.

Artefactual evidence

With very few exceptions, the sites opened in Hamwic have been denuded of their above-ground stratified deposits. Negative features may be relatively dated wherever they have been cut through or cut by other features. Otherwise, the establishment of a relative chronology depends on a study of the objects they contain.

Hodges (1981, 5-14 and 51-7) established a rudimentary relative chronology for the local pottery and suggested periods when this had been made. Timby (1988), who has since refined and vastly extended his classification of the local pottery, tends to confirm the correctness of Hodges's relative chronology. In this respect, the present writer has been impressed by the fact that, where the writer has decided after studying the site records that a pit had been partially recut, Timby has arrived at the same conclusion solely through her study of the pottery contained in the feature.

Translating this relative chronology into absolute dates or date ranges presents a number of difficulties. The most serious of these is the circularity of the arguments for absolutely dating the early pottery: that found at Hamwic is dated by analogy with similar wares found at Portchester, 21km to the south-east (fig 5); but that found at Portchester has been dated by analogy with the pottery found at Hamwic (Cunliffe 1976, 191; Hodges 1981, 46; Timby 1988, 111-12). Also, this dating is open-ended. It indicates only that pottery found at Hamwic was being manufactured around the 720s, before 750; and such dates derive ultimately from the coins found in association. In other words, although pottery is the best guide to relative dating, the main burden of absolutely dating Hamwic's origins is carried by the coin evidence.

This is unsatisfactory. Including a coin hoard, at least 173 Middle Saxon coins have been found at Hamwic since 1946, almost all of them having been losses into pits. Of these, perhaps eleven (6.4%) are primary or intermediary sceattas, and perhaps 129 (74.6%) are secondary sceattas or are usually thought to be so. A complication is the argument that BMC Type 49 sceattas were not a secondary but a tertiary issue in the third quarter of the 8th century (Andrews and Metcalf 1984, *passim*). The argument, although attractive in many respects, threatens to provoke a lengthy debate, for its central tenet is that sceattas were being struck in Hamwic after mints in Kent and Mercia had begun to issue pennies. Nevertheless, Type 49 sceattas must also be excluded from this count: therefore, perhaps 72 coins (41.6%) are in fact secondary sceattas.

The precise dating of these sceattas varies according to the authority one favours, although the differences are not large. The favour is granted here to a recent study by Blackburn (1984). According to his provisional chronology, the primary and intermediary sceattas that have been found in Hamwic were being struck in the years 680-710; and the secondary

sceattas between 710 and 745 (*ibid.*, 171-4). But only two of the coins were probably issued before 700: a Series A sceat (680-700) and a coin struck by King Aldfrith of Northumbria (685-705). The coin evidence tends to suggest, therefore, that Hamwic was not an established settlement until the 8th century. A date fairly early in that century is strongly indicated by the heavy presence of Series H sceattas in the assemblage: these were probably struck in Hamwic itself, 'presumably in the 720s, if not a little earlier' (Metcalfe 1988, 22).

Most of the chronological evidence can be reconciled with such a dating of the origins of Hamwic. Some might indicate an earlier date, although one should not place overmuch reliance on the dates obtained from the fifteen radiocarbon samples. Timby (1988, 112) points to parallels between some of the imported pottery found in Hamwic and pottery found in Belgian cemeteries dated no later than the 7th century. Found at Six Dials was a bone plaque, perhaps from a casket or book cover, decorated with a central panel of two interlaced quadrupeds. David Hinton (*pers comm*) states that parallels can be found on such objects as the larger 'dragons' on the Sutton Hoo great gold buckle, the Crundale pommel, and the earliest Hiberno-Saxon decorated manuscript, the Book of Durrow. The plaque may be dated to some point in the 7th century. Ian Riddler (*pers comm*) comments that some of the bone combs recovered from Hamwic's pits could be dated to the second half of the 7th century, but that it is equally likely that none is earlier than about 700. All this evidence might betoken occupation in Hamwic in the 7th century, but it is scanty and does not easily support an argument that the settlement existed at such an early date.

Villa regalis

The origins of Hamwic present a number of difficulties beside that of locating them in time. It is often assumed that the place quickly grew from nothing to become a large trading settlement and administrative centre; but no good reason is offered as to why one stretch of riverline should be favoured above another. Hamwic's role as an administrative centre, it has been argued, might be traced back to an original royal *villa* of *Hamton*, in existence by the middle of the 7th century (Yorke 1982, 80). Such an interpretation would also go a considerable way to explain the trading function of a settlement that grew from a *villa regalis*. If Hamwic grew up in the 8th century at the site of an earlier, non-urban settlement, or close to one, evidence for a 7th-century origin would exist in only small quantities and could be difficult to recognise.

Debate about the continuity of occupation from the end of the Roman period has rekindled. In opposition to the argument that Roman *civitates* survived to become the towns of the Middle Ages

while lesser settlements tended to disappear, it has been discovered or inferred that many of the important towns of the Low Countries grew up very close to small Roman settlements of various type; and it has been suggested that a continuous occupation of these early centres led directly to the regrowth of towns nearby, as early as the 7th century in some cases (compare, for instance Verhulst 1977, *passim*). A case in point is Dorestad, the origins of which might be traced to a Roman frontier fortification. Later occupation might comprise a nearby *castrum* of the second half of the 7th century - perhaps the centre of a royal domain and the seat of a mint - and then a new settlement that quickly became a major commercial centre (Lebecqz 1983, I, 332-9). Equipped with such elastic definitions of continuity of occupation and place, one could look to Clausentum as the first centre of Anglo-Saxon occupation in the Southampton area. The general dearth of evidence for such an occupation is a drawback, but it does not deny the possibility. Again, such evidence would be slight: it might not have been recovered as a result of the small-scale excavations undertaken at Clausentum.

Nor is it impossible that the actual site of Hamwic contains a non-urban nucleus. If the larger settlement expanded from a royal base, for instance, much as Northampton seems to have done at a later date (Williams *et al* 1985, 37-44), the archaeological evidence might be difficult to recover and interpret. Almost nothing has been found to suggest that a Yeavinger or a Cheddar had been established here, but about 97% of the settlement awaits modern investigation and the absence of good evidence proves nothing. One possible location of a *villa regalis* is SOU 47, a large area exposed by brickearth diggers in the 19th century. There is some reason to suppose that occupation there continued for a time after the general abandonment of the rest of Hamwic (see below), and this would be explained if that occupation was not essentially urban. Among the finds made at SOU 47 were several of a type that have never been repeated, most notably bronze spoons and forks and a 'combination of . . . fork and spoon' (Keele and Roach Smith 1857, 62 and pl XVI). An original and different phase of development there might be indicated by some of the early graves located nearby; principally those at SOUs 20 and 32. Two graves, part of a larger cemetery, were discovered at SOU 20. Each contained a spear and one also contained a long scramasax. With the debatable exception of knives and two arrow heads, these are the only weapons so far recovered from Hamwic. Part of a possibly elite cemetery was excavated, immediately to the north of SOU 47, at SOU 32. However, the SOU 20 evidence cannot be properly assessed yet and the evidence from SOU 32 is not inevitably to be interpreted as that of elite burials (see below).

Although it was written in 840, the charter signed *in villa regali quae appellatur Hamptone* could be pertinent to this discussion. In the absence of other clues, *villa* is a difficult word to interpret. Keen

(1975, 185-6) saw in the phrase a reference to a villa reglis within Hamwic, and he has since been followed by Holdsworth (1976, 30) and Hodges (1982, 55). This seems a perverse reading, however, and Rumble (1980, 19, n50) has protested that 'the implication of the clause . . . is no more than that Southampton as a whole was a royal vill'.

The status of the settlement must be investigated further. This can be done only after one has considered the evidence for its size, economy, and layout; matters that take up most of the rest of this chapter.

Extent of Hamwic

The late Victorian geological map of the region (OS Drift sheet 345) shows a tripartite division of the surface geology, with brickearth to the north and south of the site of Hamwic, but valley gravel in the central area. Yet we know that Hamwic was also built on brickearth, overlying gravel (see above). The mistake is explained if we suppose that geological surveyors took borings that went through the fill of Hamwic's pits; in which case they probably would have recognised gravel as the first natural deposit. Had this occurred, the map they produced could be taken as a rough guide to the extent of Hamwic. Alas for this fine theory, the original field slips held at Exeter in the archives of the British Geological Survey show that the identification of this central band was based on very little evidence, all of it derived from surface observations, although perhaps including the inspection of the spoil cast up from the townspeople's diggings.

A large-scale programme of phosphate analysis of the soils in and around the area of Hamwic might be a way of roughly marking its extent, but no such programme has been attempted. Most evidence has been accumulated, therefore, solely through the archaeological investigation of sites during the past century and a half.

Interpreting the available evidence, Crawford thought that the place had covered an area of about 17ha. Some 25 years later, Addyman proposed the existence of a settlement of at least 30ha; and, as their views are represented in fig 4b, Addyman and Hill seem to have thought that it spread over around 48ha. It is now believed that the settlement was at least 42ha in area. However, as fig 9a demonstrates, observation and excavation have been biased towards 'positive' (Middle Saxon, non-rural) evidence. The 'negative' evidence is relatively small in quantity and has been derived mainly from observations. Areas of potential dispute remain, and the present estimate may need amending should the chance ever be taken to excavate in places supposed to lie immediately outside the occupied area.

The northernmost extent of Hamwic has not been fully clarified. The most northerly site where evidence of occupation has been found in the last 40 years is SOU 259. Probably in the same area, at

SOU 52, other evidence was uncovered in the 19th century. The exact location of this site is unknown, and arguments for supposing it was at or near the place marked on fig 1 are to be found in the supplement (MF1:L6-M1). No such northerly spread has been found elsewhere, and it is conceivable that there was a spur of occupation alongside what is now St Mary's Road. To the east of those sites, the town may have been halted by marshland. It is not known if there was any occupation in the area north of SOU 13. Most of the observations roughly in the vicinity have provided 'negative' evidence, but disarticulated human bone was discovered in 1954 at SOU 77. One supposes that there was a cemetery in the area, connected with Hamwic, but it seems wisest not to add several hectares to the estimate of area simply to encompass a supposed cemetery of indeterminate date.

The eastern boundary was presumably the River Itchen, which is taken to have been about as high as it was in the late 18th century.

The southern extent of occupation has not been established. It may have been halted by marshland. Addyman and Hill (1968, 75 and 81) claimed that a watercourse found at SOU 44 marked the south-western limit. There is no reason to believe that this is correct, although on the present evidence it is as likely as not that the limit of occupation was located thereabouts (Young *et al* 1987, 136).

Excavation, large-scale observation, and a resistivity survey have provided much evidence about Hamwic's western extent. The major elements in this pattern are described in the reports on SOUs 36, 78, 89, and 186: the entire pattern has been exposed only at Six Dials. It seems that the line of a ditch or perhaps a series of ditches coincides with the approximate western edge of the settlement, for it marks the limit of dense occupation. The discrepancy between the 19th-century record of 'bone-pits' in Hoglands Park (Kell and Bergne 1864, 69) and Crawford's remarks that he had found no such evidence in the same area (Crawford 1942, 44) is resolved if we suppose that Kell's informants had found occupation evidence in the eastern parts of Hoglands, and Crawford had searched fruitlessly for it elsewhere.

The supposed extent of Hamwic is shown as fig 9b. The stippled area contains the points of clearly positive evidence. It represents an area of 42ha. If weaker evidence such as the supposed cemetery at SOU 77 and a coin found at SOU 53 be taken as indicators of a more dispersed, suburban occupation, a looser boundary (marked here by a broken line) must be drawn. It surrounds an area of 52ha.

Until the early Victorian expansion of Southampton, Hamwic had been the largest town in the locality: it was about twice as big as the medieval town and about four times bigger than Clausentum. There is little value in these comparisons. In the case of Clausentum, we do not know quite what we are comparing Hamwic with. As for medieval Southampton, we may not argue that, being twice as big, Hamwic housed twice as many people.

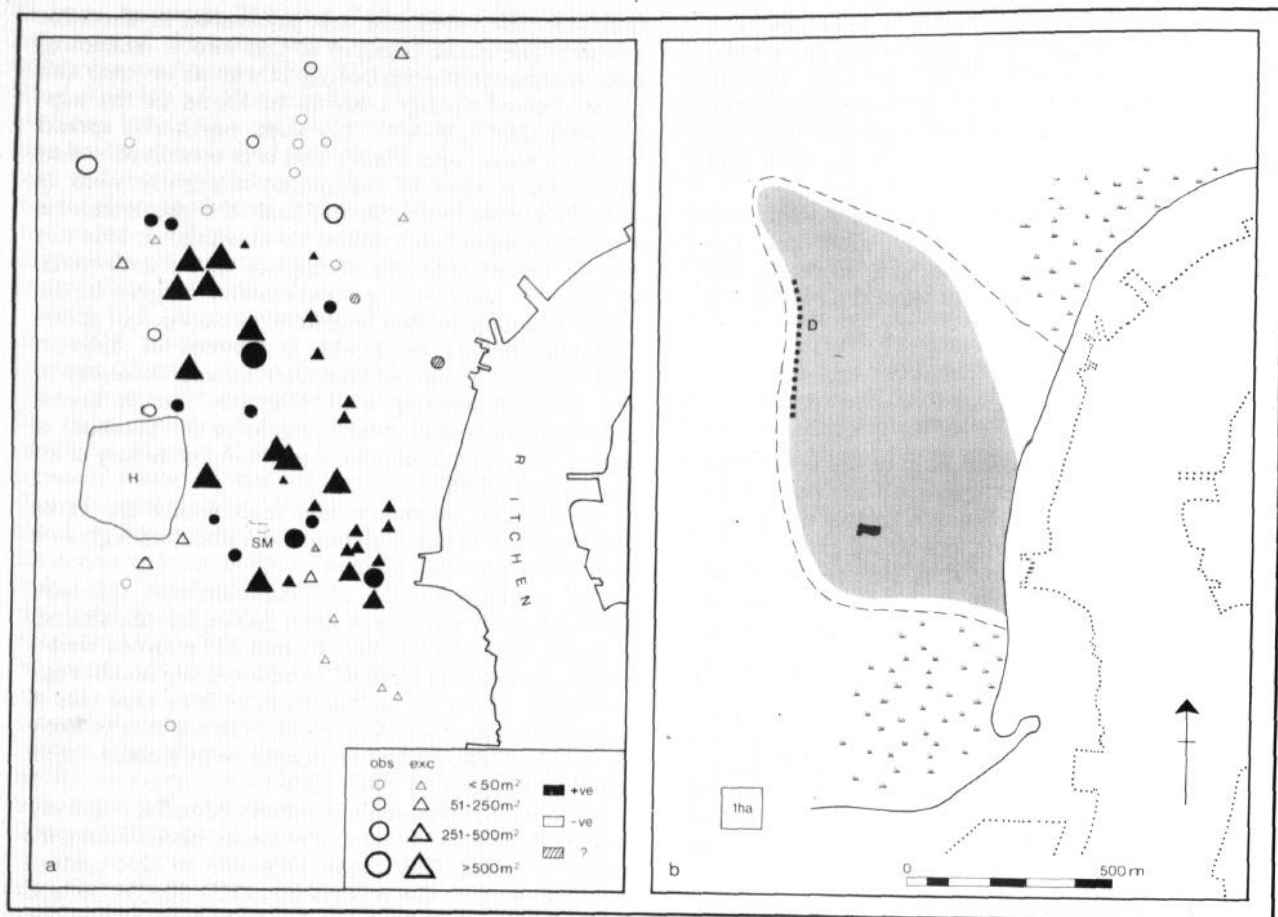


Figure 9 Middle Saxon occupation in the St Mary's area. Fig 9a shows the main positive and negative sites (small adjacent sites are often represented in total by only one symbol) and fig 9b shows the suggested size and shape of Hamwic. Key: D the ditch from SOU 89 to SOU 169, H Hoglands Park, SM St Mary's Church. See the text for further details.

Other comparisons are possible, for instance that Hamwic was equal in size to the generality of towns in Roman Britain (Frere 1978, 292-3), but the value of comparisons with an average is also limited. Perhaps the most important point to make here is that Hamwic, and towns of a similar size, represented a major undertaking for the time:

these Dark Age sites may not seem unduly large, but we have to compare their size with the ... villages and hamlets ... in existence at this time [that did not exceed] 2-4 hectares anywhere in north-western Europe (Hodges and Whitehouse 1983, 96).

Layout of Hamwic

The western ditch

Parts of a ditch or a series of ditches have been found at SOU 89 and 250m to the north at Six Dials (SOU 169). It is still too soon to assess the finds properly. There was no sign of a bank surviving in situ; but, on the basis of the present evidence, it

would be rash to state that no such feature had ever existed. It is not clear if parts of one ditch or of separate ditches were discovered at the two sites. The segments were different in profile but roughly similar in dimensions. At SOU 89, the ditch which was U-shaped in section, was 3.35m wide and 0.95m deep. At SOU 169, where it was V-shaped it was 3.0m wide and 1.5m deep. Both may have been associated with a major street that lay to the east. This is almost indisputably the case at SOU 169 where the ditch and St Mary's Road (discussed in the following section) were early Middle Saxon features, and where they ran almost in parallel-taking OS grid north as 0°, the ditch was aligned at 341° and the street at 331°. The two features were therefore converging towards the north although there were some signs that the ditch was turning further to the north-west, more exactly to parallel the street. A difference of 10° may not appear to warrant talk of parallels; but virtually every feature or group of features found in Hamwic was aligned north-south or east-west, and it seems more than a coincidence that the ditch and the street the alignment of both of which strongly differs from this

prevailing trend, should have been found in the one area. The ditch at SOU 89 was aligned north-south, roughly parallel to St Mary Street, but its exact alignment cannot be calculated. No dating evidence was recovered, but it can probably be dated to the Middle Saxon period.

The line of the ditch marks a western boundary to dense occupation at both sites. A produced line between the two parts of the ditch runs almost precisely north-south (fig 9b). To the west of this line, at SOU 78, predictably outside Hamwic, no occupation evidence was observed. The trenches of SOU 36 lay either side of this line. In three of them, to the east of the line, large numbers of pits and wells were discovered. In at least two others, to the west of the line, virtually nothing was found:

The discovery of only three small Saxon pits [in the westernmost trenches], and the insignificant scatter of Saxon debris, implies that the western limit of the town of Hamwih has been located (Maitland Muller and Waterman 1950a, 142).

At Six Dials, some pits were found to the west of the ditch, although the majority lay to the east; and it is probable that the 'three small Saxon pits' found in isolation at SOU 36 also lay to the west of the main boundary.

Here, the narrative is complicated by the fact that Maitland Muller and Waterman failed to find a western ditch:

a bank running north and south which pre-dates building in the last century was thought possibly to mark the western boundary of the town, and was examined accordingly. No trace of a ditch was found however, and the bank itself appears to be merely a ridge of natural clay left by the brick-earth diggers in the 19th century, at which time a contemporary map marks a field hedge on this line (*ibid*).

One of two possible field divisions was investigated. It is not clear which was looked at, but neither coincides with what this author has proposed as the western boundary. The closest lay about 25m away. It is no great surprise that the search was unsuccessful.

The evidence outlined in the two previous paragraphs lets one argue that the ditch was a continuous feature for about 250m southwards from Six Dials. The most important part of this evidence is the fact that Hamwic's western boundary generally coincides with what is supposed to have been the line of the ditch. Although not essential to this argument, it would be reassuring to discover signs that the feature continued north of SOU 169 and south of SOU 89. Very little of the area north of Six Dials has been excavated. No trace of a ditch has been found there. A geophysical survey in Hoglands Park (SOU 186, immediately to the south of SOU 89) has produced evidence of a western

boundary perhaps marked by a ditch. In that case, one might trace a length of at least 300m south of Six Dials. An early ditch, apparently marking the western boundary of occupation, has been uncovered at sites dug since 1983 in the south-western corner of Hamwic (Garner 1987, 18). The south-western ditch was a far less substantial feature than the lengths exposed 300m to the north at SOU 89, 550m to the north at SOU 169; and it may not have been a continuation of the one ditch. Of course, a boundary can be largely notional. What is puzzling, however, is not that sections of the one boundary ditch were comparatively narrow and shallow but that other sections were dug unnecessarily wide and deep.

The wider, deeper ditch may have been a defensive feature; more exactly, an occasional defence, since, even with an adjacent bank, it would not have confounded a determined assault. If this ditch has been uncovered in the south-west of Hamwic, clearly it was never meant to defend anything. If it has not been found there, one must try and indicate where its continuation lies. An early ditch need not have coincided with every, final boundary point of a fully developed settlement. It is suggested below that the earliest occupation in Hamwic was centred in what became its northern half, and a defensive ditch may have returned to the east, well short of the sites opened in the south-western corner. However, the fact that no east-west-aligned ditch has yet been discovered somewhat hampers this argument.

Instead, the ditch perhaps served a less basic function. It may have separated Hamwic from the fields not only in fact but also symbolically, a ditch and bank having been meant to emphasise Hamwic's status: they may even have been modelled on the earthworks still visible at the Roman settlement of Clausentum, upriver from Hamwic. Then, since travellers overland to Hamwic would have entered the place from the north, the greatest labour was expended on digging out the northern parts of the ditch, and the work in the south was progressively skimped.

However, according to the evidence from SOU 169, the ditch was backfilled at an early date. If the ditch as a whole proves to have been soon redundant, each of the interpretations offered above must be discarded or severely modified. If the settlement was constrained by the presence of the ditch, why was there virtually no expansion westwards once it had been backfilled? If the ditch was meant to defend the place, what test of war did it fail, or what period of benign peace rendered it an encumbrance? And why was the experiment not repeated in the following century when Vikings were raiding towns along the Channel coast? If it was a symbol, comparable in some ways with a medieval town's walls, why did it not continue to be one?

We cannot answer these questions until more evidence is forthcoming. We cannot even be sure yet that they are the right questions to ask.

Streets and alleys

Noting the linear regularity of structural features and pit groups, and comparing this with the alignment of the street found at SOU 32, Addyman and Hill (1968, 74 and 82) came to the conclusion that the street was the primary feature in Hamwic. Twenty years later, such, in general terms, is the contention of this writer. Much more evidence has been gathered during this period, which supports and yet complicates the argument, the main points of which are set out below.

Classification

The first of Hamwic's gravel surfaces to be rediscovered and recorded were noted in the middle of the 19th century, at SOU 47 (Kell and Bergne 1864, 69). Here, as a result of brickearth digging, were found

as many as six or eight streets from ten to twenty feet [3.0m-6.1m] wide, several of which crossed each other. The gravel on the surface was from four to six inches [0.1m-0.15m] thick, and the clay under the streets had never been in any way disturbed.

During the past 40 years, *in situ* gravel surfaces have been found at SOUs 4, 10, 13, 24, 26, perhaps 27, 31, 32, 92, 99, 169, 241, and 259; and the remains of other gravel surfaces, sunk into the tops of pits, at SOUs 8, 11, 13-15, 17, 24, 26, 31, 36, and 169. There are difficulties in assessing the evidence. In the first place, gravelled features have most often been found where there has been most excavation - at opposite extremes of Hamwic (fig 10a).

Furthermore, unless we admit evidence from sites of limited information (figs 10b and 10c), we must turn to the large-scale excavations at Six Dials for the only wholly trustworthy evidence about Hamwic's streets.

Immediately one admits that fact, one encounters two more problems, only one of which need be mentioned at this stage. Excavations at Six Dials have uncovered part of a Middle Saxon precursor to St Mary's Road, perhaps 15m wide. Its width and its alignment are at variance from those of the other streets found at Six Dials. Although these factors are considered below, detailing them now will lead to endless complications, and the facts outlined here are the evidence for Six Dials's other streets. According to that evidence, streets were established before the buildings that fronted them. They were effectively straight and ran for considerable distances (the longest stretch so far exposed was at least 90m long). They were metalled with gravel of a fairly regular consistency and size. Resurfacings comprised more gravel laid the length and width of the street. The maximum number of metallings so far uncovered is five. Some of the streets were originally unmetalled - this phase being recognised only when the streets had been delimited by fences. The width of the streets may have varied according

to their function, but seems not to have varied within a single street. The streets were usually about 5m wide. They were long-lasting and, with some minor exceptions, were not cut through by later Middle Saxon features.

Alleys, which may have functioned also as areas of hard standing, served to link existing buildings with the streets, and were secondary or tertiary features therefore. As the pattern of occupation changed, they were sometimes laid down over infilled pits. (In places, the gravel layer has survived only where it had sunk into these pits, the metalling on the ground surface having been lost to later disturbance.) They were shorter in length than the streets, against which they were set, and they were often dog-legged. Their width varied from 2m to 5m; and varied not only between different alleys but also between different sections of the one alley. The metalling could be no more than thin scatters of gravel, or it could be a fine cobbled surface, and some surfaces were very similar to those of the streets. The greatest number of metallings was four. There is some evidence for the existence of unmetalled alleys, although this is difficult to recognise. Alleys were far more ephemeral expedients than streets, and, probably as the pattern of occupation continued to change, some of them were extensively cut through by later Middle Saxon features.

Concentrating on the Six Dials evidence brings two problems, one of which was noted above. The second problem is that streets may have existed that were not straight, or were never metalled, or were extremely narrow, or ran for short lengths, or were eventually 'decommissioned'. Such a medley of types is quite conceivable, and one cannot say that it did not exist: one may say only that there is no sign of this variety at Six Dials and it has not been recognised with certainty at other sites. Possible examples of other forms of street have been found at SOUs 16 and 21, 34, and 99. At SOUs 16 and 21, there was a narrow, unmetalled cartway, which eventually fell out of use, to be built over in later Middle Saxon occupation. This was perhaps a street of an unusual type. It is likely that excavation at SOU 34 exposed a broad swathe devoid of features, an area that may have been an unmetalled street. And the variously metalled surfaces of irregular width uncovered at SOU 99 have been described in the excavation report on that site as possibly part of a street. Considered in isolation, each of the three features might be interpreted as an example of a non-Six-Dials-type street; but, given the limited amount of information available (information limited in the case of SOUs 16, 21, and 99 because of the narrowness of the trenches, and in the case of SOU 34 because of the paucity of the surviving records), one may safely interpret them only in the context of what is known. Such interpretations are perfectly easy: the cartway found at SOUs 16 and 21 and the SOU 99 surfaces were species of alley, similar to those

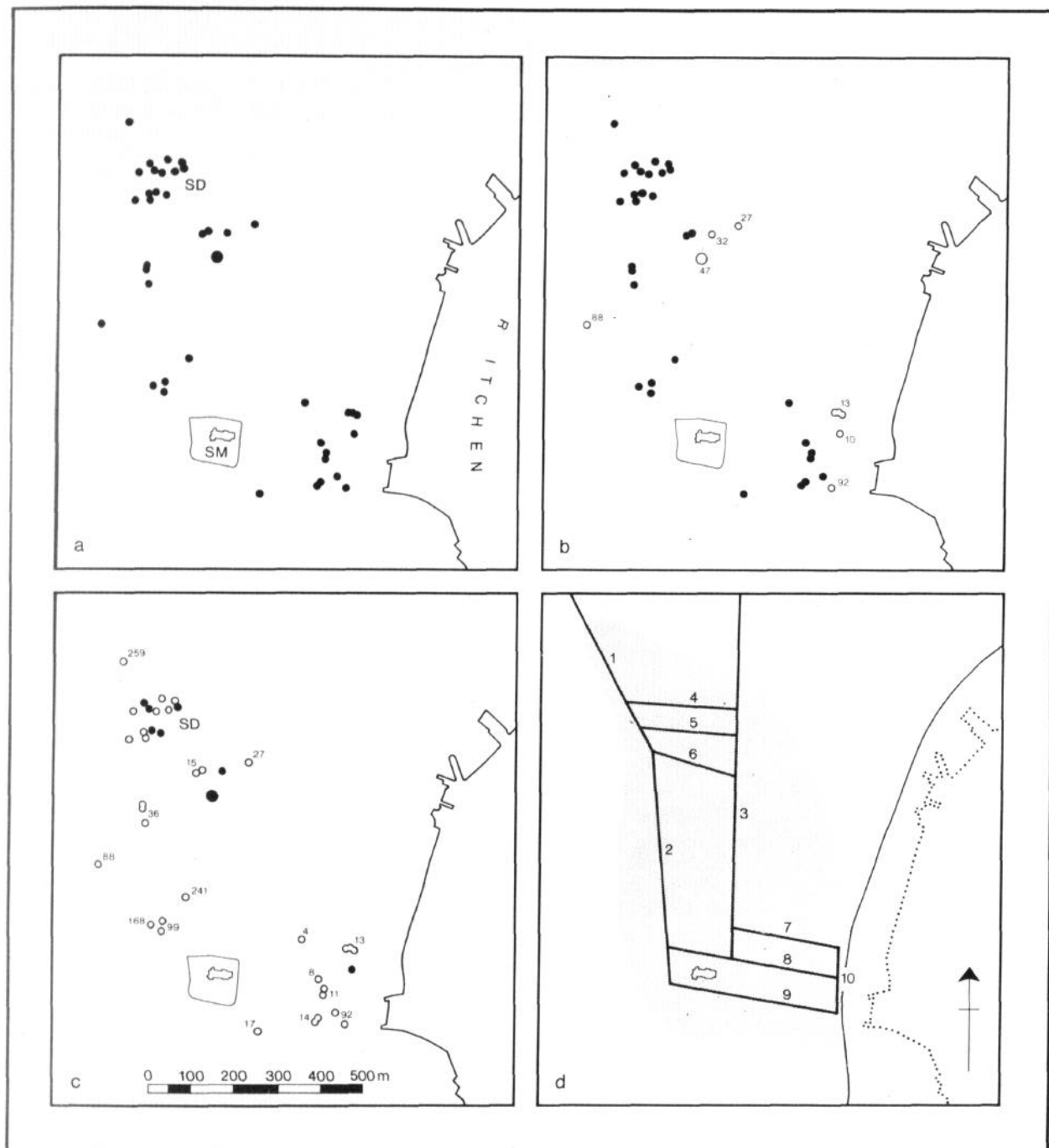


Figure 10 Gravel surfaces. Fig 10a shows all sites where these surfaces have been found. Open circles mark poorly recorded sites (10b) or places where only short lengths of gravel were found (10c). Site numbers are given without the 'SOU' prefix. Fig 10d is a suggested reconstruction of much of the street pattern. Streets 1-10 are referred to in the text. Stippling indicates the extent of the town (as in Fig 9b), and the Middle Saxon shoreline is shown by a solid line. Key **SD** the Six Dials sites, **SM** St Mary's Church

found at Six Dials; and the SOU 34 street (if it ever existed) was a gravel spread stripped away by brickearth diggers, exactly like the 'six or eight streets' of SOU 47.

Nevertheless, the point must be repeated that, in seeking to understand the nature of Hamwic's streets, we may be fixing our attention on only the most obvious type.

Fortunately, one glimpses a roughly similar distinction in the gravel surfaces exposed by trenches opened elsewhere in Hamwic, with primary surfaces (sometimes perhaps originally unmetalled) describable as streets; and secondary, narrow, or unusually metalled surfaces describable as alleys.

This contention must first be supported before any comparison with the Six Dials surfaces can be attempted. In practice, and as the short discussion of the routes at SOUs 16, 21, 34, and 99 shows, for present purposes it is most useful to concentrate attention on only a small number of probable streets, and to ignore those surfaces that were probably alleys or were not certainly streets.

At least some of the 'six or eight streets' uncovered at SOU 47 may actually have been streets, simply because it is unlikely that they were all a network of alleys or otherwise nondescript gravel surfaces. However, one may also suppose that eight streets had not been crammed into an area measuring about 140m by 60m.

Of the surfaces excavated since 1946, there is good reason to believe that streets have been exposed at SOUs 4, 10, 13, and 32. The gravel surface at SOU 4 seems to have remained in use throughout the period of Middle Saxon occupation, and to have been fronted by a number of buildings (Cottrell 1980, 25-8). Had it been part of an alley, one might have expected the focus of occupation and therefore the gravel surfaces to have shifted in time; something that did not happen. At SOUs 10 and 13, the absence of buildings in the immediate vicinity of the gravel surface is surprising, but at least seems to indicate that these surfaces were not alleys serving buildings. Assuming that portions of the one gravel strip were exposed at the two sites, a continuous and straight surface at least 56m long had existed here; probably too long to have been an alley. At both sites, the gravel surface had demonstrably been used by regular and heavy traffic. The gravel surface at SOU 32 was straight and at least 40m long.

How do these streets compare with those found at Six Dials? A comparison is most conveniently made attribute-by-attribute and not street-by-street. Kell's statement that the 'streets' of SOU 47 were laid directly onto the brickearth must be believed but does not preclude the possibility that they were cut by some pits. His silence on this point cannot be taken as an implicit denial of the possibility, for he was recording someone else's recollections, and that person was relying on a memory about 20 years old. With only one clear exception, all of the streets found in modern excavations were laid directly onto

the brickearth. (The exception was found at SOU 13, and was a street laid over part of a Middle Saxon graveyard.)

It has been argued that the street at SOU 4 was laid over a pit (*ibid*, 25), but a reassessment of the evidence in the light of our present knowledge suggests that the later feature was in fact the pit. The street also pre-dated the adjacent buildings and may be taken therefore as a primary feature. It is not unknown for pits to have been cut through street surfaces. Several examples were found at Six Dials, although none of those was as clearly intrusive as the SOU 4 pit. Pits found at SOU 32 may also have been dug through the street surface there. Of the three shallow pits found at SOU 10, two were partly overlain by the street, and one had been cut into it.

Stake-holes and linear features found at SOUs 4 and 32 probably indicate an initial, unmetalled phase; but the SOU 4 structural features form no coherent groups, and it is conceivable (if implausible) that the SOU 32 structural features were additions to a gravelled street. The gravel surfaces at SOUs 10 and 13 were not stripped off to expose the underlying archaeology, although three sections were cut through the gravel at SOU 10. These exposed what may have been weathered wheel-ruts sealed by the gravel.

There were probably three metallings at SOU 10 and perhaps one at SOU 13. The gravel at SOU 4 had been heavily disturbed by ploughing, and the gravel at SOU 32 was removed without close investigation by the excavators. The gravel used at SOUs 4 and 13 was similar in quality to that used at Six Dials. So too were two of the metallings uncovered at SOU 10: the third comprised 'small gravel', a type of metalling apparently not encountered in the other streets. Perhaps this was taken from the adjacent shoreline.

If Kell's informant was correct, the widths of the streets uncovered at SOU 47 were somewhat greater than most of the Six Dials street widths. But it is possible that plough-disturbed gravel had been included in the estimate and the original widths were less than was supposed. This explanation probably applies also to the SOU 32 street, said by Addyman and Hill (1968, 72) to have been 'some 25 feet [7.6m] wide', but calculated by this writer to have been about 5m wide: comparable therefore with much of the Six Dials evidence. The width of the street at SOU 4 was 5.6m, also comparable with that evidence. The full width of the SOU 10/13 street cannot be estimated. As far as is known, each street was of a constant width.

The differences between the streets found at Six Dials and those recognised elsewhere are not necessarily as extreme as they first appear to be. The apparent absence of associated buildings at SOUs 10 and 13 may have been a local arrangement, perhaps connected with the need for open spaces at the waterfront. The secondary nature of the street at SOU 13 may represent a northern

extension of the SOU 10 street: later additions to the street system are to be found elsewhere in Hamwic, as will be explained below. And the pits of SOUs 4, 10, and 32 were either shallow or dug at the edge of a street and would scarcely have interfered with traffic, especially if their compacting fills had been regularly augmented. When the differences are minimised, the similarities gain greater prominence.

Preparation

How were these similar features created? The apparent standardisation of measurement within the street if not within the system implies that some sort of measuring device was used, perhaps only the ability to walk a consistent number of paces. The use of a surveying implement would better account for the relative straightness of the streets. On the other hand, differences in alignment between the streets (discussed below) might imply that surveying implements were not used, not even the simple cross staves. Again, the instrument may have been human capability and memory. However they were measured, the streets were presumably marked and checked in some manner. What Taylor (1979, 61) supposes to have been the Roman method of marking a road — the driving into the ground of markers at intervals along the intended route — may have been used. If it were, the dispersed stake-holes that would constitute the only surviving evidence have not been exposed, or perhaps not identified; for they may have been subsumed into the fence lines that have been found beneath several of the gravel surfaces.

Alleys show most clearly (often from metalling to remetalling) that different grades of surface might be created. One encounters thin scatters of small stones, cobbling of larger flints, and mixtures of large and small flints. This last is the most common form of metalling found, and its source might easily have been the source of the other two. For instance, larger flints could have been deliberately chosen for a metalling — or have been picked out for other purposes, leaving the residue of smaller stones to be disposed of by throwing them across a muddy section of an alley.

Except where it has apparently been selected or discarded, the gravel is much the same mixture as that underlying the brickearth. Presumably, some of the alley surfaces were laid down opportunistically when gravel was available after the digging of a well or a deep pit in a particular property. But nearby pit digging cannot have produced sufficient stone to make or to remetal a street, even in the unlikely event that a great series of pits was dug in concert. Each street seems to have been metalled in one process, and the gravel must have been taken in large quantities from somewhere other than under the inhabitants' feet, most often perhaps from the gravel plateau less than 1km to the south-west of Hamwic, where there is at most a thin capping of brickearth.

The elements of the street system

The existence of other streets is inferred below from map and documentary evidence, but much potentially useful evidence has to be discarded as untrustworthy. For example, although one might have expected the lines of the gravelled streets to have been places of lower agricultural yield and thus to have become the edges of fields, none of the excavated streets coincides with a field boundary, except where that boundary was also a lane or way, and many show signs of having been ploughed over.

If it is difficult to formulate a street type out of the variously well excavated and recorded evidence, the combination of this evidence to delineate the street system is a far more difficult task. Few streets have been recognised, and it is conceivable that they are not wholly typical examples. Basing the argument on what is known (or strongly suspected) of the pattern as it existed over perhaps two centuries, one might claim that the system was entirely adaptive; on the contrary that the place was a *bastide*, created largely in a piece; or that the original elements of the street system were not laid out in conformity to a pattern that later emerged. The exposition of these different views is not easily arranged, and it is unsurprising that previous commentators have avoided enmeshing themselves in detailed argument. But enough evidence has been gathered to necessitate a reconsideration of the data, however discursively. The component parts of the system will be described first before an attempt is made to interpret them.

Three major parts of the system can be recognised: two north-south streets; a number of east-west streets that ran between the north-south pair like the rungs of a ladder; and several streets that stretched eastwards to the river, where a north-south shore street had been laid down.

The North-South streets

The two streets in this system have survived after a fashion up to the present day, and their approximate positions are represented by St Mary's Road and St Mary Street (streets 1 and 2 in fig 10d), and by Derby Road and Golden Grove (together, street 3).

The first record of the existence of St Mary's Road dates from 1250 x 1252, when it was known as Broadway (Blake 1981, 30). Excavations at SOUs 31 and 258 (Six Dials) uncovered the early Middle Saxon precursor of St Mary's Road, a thoroughfare perhaps 15m wide. It pre-dated the other, east-west streets in the area. The observation of a pipe trench, SOU 167, situated over 300m to the north-west of Six Dials, failed to find any continuation of the street; but this may indicate only that the street lay elsewhere, or possibly that it continued out of the settlement as an unmetalled road.

St Mary Street was first mentioned in 1233 x 1252, and was also called Broadway (ibid, 85 and 206-8). Running through the western third of Hamwic and

bounded in the Middle Ages only by fields and a few houses, this southern continuation of St Mary's Road seems more likely to have been a Middle Saxon than a medieval creation. Gravel layers, which could not properly be distinguished from modern make-up, were observed when a 500m-length of pipe trench was dug along St Mary Street (SOU 86). No other possibly early features were noted, but at least the sophisticated argument may be advanced that this absence of features is itself a sign of the existence of a primary street through which no pits were cut.

The entire route may have functioned both as a major street within the settlement and as a thoroughfare out of Hamwic. Crawford (1949, 48) plausibly suggested that it survived into the Middle Ages as part of an original route into the medieval town (compare pl 3; figs 1 and 13b). Its continued existence thereafter may have been due to its convenience as a minor way or country lane.

The Derby-Road-Golden-Grove route was probably first mentioned in 1252 as the way running from St Mary's Church to the *grangia* at Northam (Blake 1981, 167). It appears on the 'Elizabethan' map as a slightly sinuous route, presumably a lane, connecting the church with Northam farm (fig 147). Little credit should be given to the correctness of line on this map, though the cartographer always depicts with some accuracy the end points of a line. He or she has drawn a curious turn at the bottom of the route (fig 7), which is probably correct, for virtually the same pattern is shown on maps drawn in the 18th and 19th centuries (pl 2). Speed's map of 1611 (pl 3) shows the route running down the side of St Mary's churchyard to join Chapel Road: seemingly an obvious arrangement to make. There is evidence from SOU 33 that a narrow and unmetalled lane existed here, but it is unlikely to have been a Middle Saxon route.

A north-south featureless area on SOU 34, coinciding with the line of street 3, is interpreted as the only remaining sign of a Middle Saxon street, the gravel of which had been removed by brickearth diggers. The route may also have appeared as one of the 'streets' exposed in the 19th century at SOU 47. At SOU 27 a short length of gravelling, aligned north-south and 5.4m wide, was observed. Although perhaps a natural outcrop of valley gravel, intriguingly it coincides with the supposed position of street 3. Pipe trenches dug to the north of SOU 27, probably to the north of Hamwic (SOU 60, 62, 64, and 79), exposed only a scatter of gravel above the brickearth. This is interpreted, however, as the remains of the lane shown on 18th- and 19th-century maps. Again, the Middle Saxon street may have become an unmetalled road once it had left Hamwic.

Despite the poverty of the archaeological evidence, one can argue that, like streets 1 and 2, street 3 makes best sense as a medieval way only if it was a survivor of Hamwic's street system. If it were Middle Saxon in origin, the street would have run through the centre of Hamwic, and presumably

served to connect the place with Northam and perhaps with routes further inland. Its later survival as a country lane seems to have been due to the fact that its termini were a church and a farm, and perhaps also to its eventual function as a major field division.

The East-West 'rung' streets

The existence of these streets is known only from excavation, and far more must have existed than have been found. Three have been found towards the north end of Hamwic; two at Six Dials and one at SOU 32 (respectively streets 4-6). Another may have existed at SOU 34: an apparently featureless east-west stretch may have been part of a street disturbed by brickearth diggers. Thick gravel spreads, aligned east-west, have been observed elsewhere, at SOUs 168, 241, and 259. These may have been streets, but no strong opinion can be formed on the basis of the evidence, which solely consists of layers exposed in the sides of small, non-archaeological trenches.

The streets would appear to have run, generally in straight lines, between the north-south streets. Those found at Six Dials were laid out later than St Mary's Road (street 1). They seem to have followed one alignment for most of their course, but turned at their end about 6x to the south to meet St Mary's Road at a less acute angle.

None of these streets seems to have survived the demise of Hamwic, and they probably served no useful function once the settlement had gone.

The streets to the river

There were perhaps three such streets, only one of which has survived up to the present day.

The northernmost of this trio (street 7) was partially exposed at SOU 4, where it was a primary feature dated to the early Middle Saxon period. Its eastern extremity may have been exposed at SOU 13, but the evidence probably indicates otherwise. Despite the seemingly contrary evidence, it remains possible that the street stretched that far, for with only a slight deviation in alignment it would have passed to the north or south of SOU 13. It may originally have existed independently of SOU 13's north-south street (street 10), which was probably a later feature. Again, we can assume that its usefulness ended with Hamwic, for it was later ploughed over.

The southernmost of the three streets may have survived as Chapel Road (street 9). During observation of a pipe trench cut across this road, at SOU 92, at least five layers of an east-west-aligned gravel surface were noted. This was at most 6.4m wide. None of the layers is closely datable. However, from 1217 onwards, the latest possible date of the route's first documented mention (*ibid*, 65), most documents imply that Chapel Road was an unmetalled *via* or way. One may argue that all or some of these gravel surfaces antedate by many years the unmetalled way of 1217 (MF2:D1-3). Circumstantial evidence

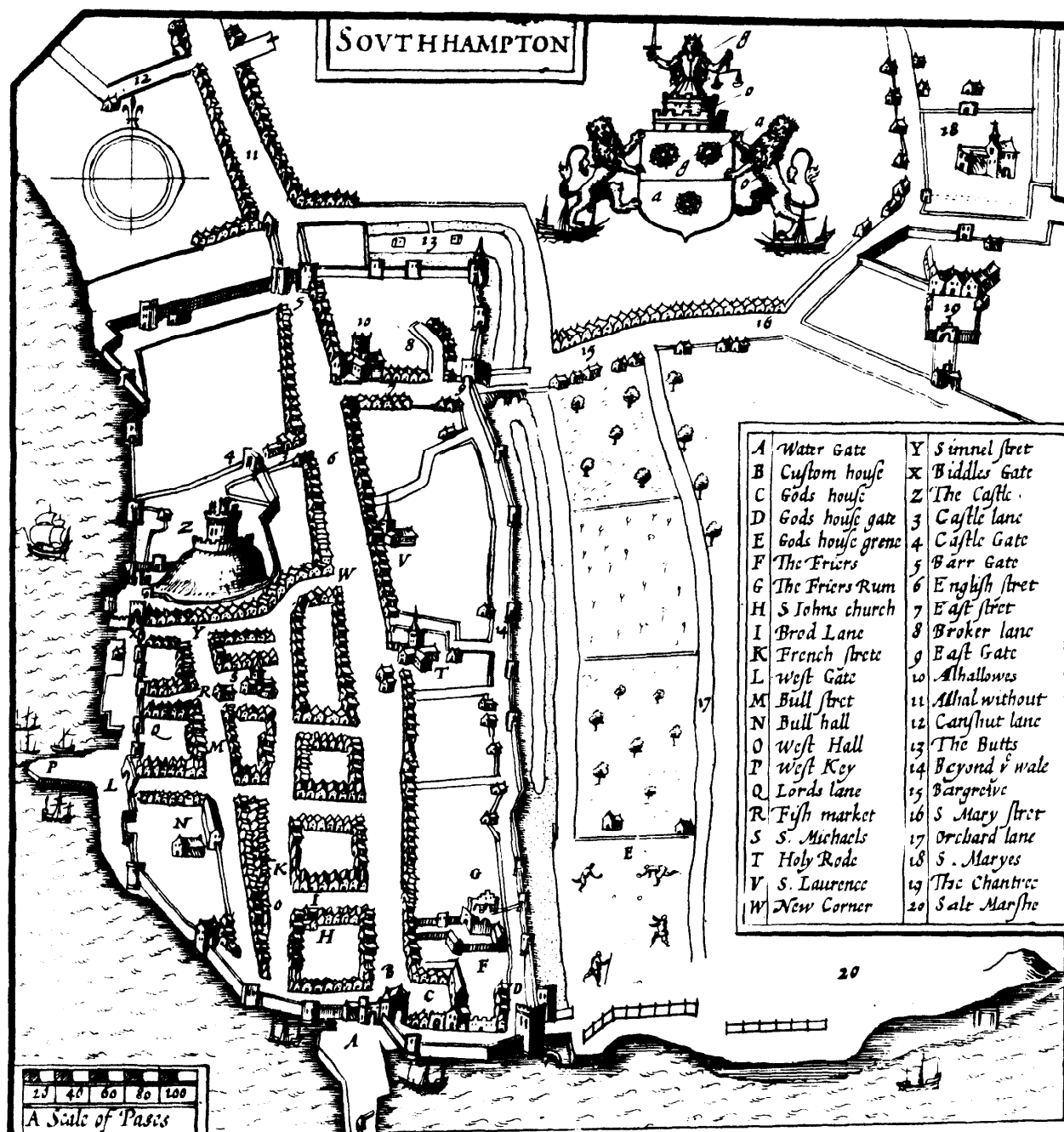


Plate 3 Southampton in 1611, according to Speed. The main subject is the medieval walled town. St Mary's Church appears in the upper right corner.

supports this interpretation: Chapel Road very nearly parallels street 7.

It is possible that the present diversion of Chapel Road around St Mary's Church was a comparatively late development. A service trench dug 5m to the south of the churchyard (SOU 56) exposed four undatable pits, but no metalled surface. One suspects in the first place that the presence of the pits shows that no street originally ran here, and secondly that the diversion of the street occurred when it no longer needed to be metalled. The diversion appears on the first maps of the area (fig 7 and pl 3). Speed shows a large entrance in the western wall of the churchyard, a little to the north of the south-western corner. (This corresponds in position to the modern gateway.) A path is shown, running east from the entrance. Path and entrance continue the line of Chapel Road, and may preserve the original, undiverted line of the street. If there had been a detour, presumably it was forced by a medieval expansion of the cemetery, perhaps when room had to be found to bury the victims of the Black Death.

Chapel Road may have survived up to the Conquest as a final link with what had been Hamwic's waterfront (see below, p 72). It seems to have been used early in the Middle Ages as part of a route from the later town to Holy Trinity Chapel, and as a major field division. It also functioned as a route to the mill or mills that were established to the south of the chapel, perhaps before 1220 (Pelham 1963, 9; Kaye 1976, I, lxxvi).

A third east-west street may have existed, equidistant between, and roughly parallel to, the other two streets (street 8). It would have run immediately to the north of St Mary's churchyard and eastwards to the river. The curious turn at the southern end of street 3, mentioned above, perhaps preserved a short length of this east-west street. No archaeological proof of its existence can be offered, for its projected line partly coincides with an area of brickearth digging and otherwise has somehow been missed by all the trenches ever opened in the area.

The streets would have met and been linked by a north-south street, parts of which were uncovered at SOUs 10 and 13 (street 10). This lay alongside or parallel to the river. Since the section of street found at SOU 13 was not an original feature of the site, it is possible that the entire system was not laid out as a single unit. A strand road or path, shown on the 'Elizabethan' map and on 18th-century maps (in the latter case, at least, slightly to the east of the SOU 10/13 street), may have succeeded the street and in turn been succeeded by today's Marine Parade.

The growth of the street system

Hamwic's roughly pear-shaped appearance (fig 9b) is most easily explained as the result of adaptive growth. But there are signs that individual features had been laid out parallel to each other. A useful comparison can be made, for instance, between the streets, notable for their general regularity and high

state of maintenance, and the alleys serving individual properties, not notable for these qualities. Accordingly, it can be argued that Hamwic was a *bastide*. Some of the evidence presented in fig 10d might be interpreted in this way: measured from a starting point on St Mary's Road (street 1), streets 4-6 are roughly equal distances apart. However, if one chooses any other point of measurement than the junction with St Mary's Road, streets 4-6 are not equally spaced, for they differ in their alignments, a matter that is considered in the next paragraphs. Mention may also be made of streets 7-9. If street 8 is not wholly an invention of this writer, it is probable that they were equal distances apart. Supposing that to have been the case, one notes that streets 4-6 are smaller distances apart than are streets 7-9: if there had been a deliberate spacing of the streets at repeated intervals, it must have been subject to local variations.

Even a quick survey of the available data convinces one that Hamwic did not contain a tight grid pattern of streets (table 3). Most obviously anomalous is the alignment of St Mary's Road (street 1). The alignment may embody its function as a route out of Hamwic, but such an interpretation leaves a number of questions unanswered. It still remains easiest to leave St Mary's Road aside as perhaps a special case to be considered later, and concentrate instead on the other streets.

Even so, there is a considerable difference in alignment to be explained: a matter of some 15°. The alignments of the two groups of east-west streets (streets 4-6 and 7-9) may have been determined by their relationship to different major features. Streets 7-9 ran down to the river, and may have been set out square to that feature, and streets 4-6, which lay inland, may have been set out roughly square to the north-south streets. Also, these two groups lay at opposite ends of the settlement, and were perhaps the extremes of a pattern that progressively distorted as it evolved and expanded. The difference between the alignments of streets 6 and 9 is 9°, a difference of a degree every 30m and perhaps an acceptable level of error if surveying implements were not used.

Some support for that attitude is given by the fact that, clearly, the streets were not all laid down in a single process. Direct evidence of this appears at Six Dials, where the east-west streets were constructed after St Mary's Road; and at SOU 13, where the street postdated a Middle Saxon cemetery, and may have been a late extension of the SOU 10 street. One might infer that Chapel Road was laid out in a similar manner, over part of an earlier cemetery. A few, debatable facts prompt this view: the evidence comes from two sites opposite each other on either side of Chapel Road, SOUs 7 and 14. Found at SOU 14 were signs that a cemetery had existed prior to the early Middle Saxon occupation of the site. Found at SOU 7, 34m north of SOU 14, was another grave. If all the bodies had been buried at the one cemetery, that cemetery coincided with Chapel Road. Given the early dating of this putative

Table 3 Street alignments**N-S streets**

St Mary's Road at Six Dials	331° (61°)
St Mary Street (main alignment)	335° (85°)
Derby Road/Golden Grove (main alignment)	1° (91°)
SOU 10/13	1° (91°)

E-W streets

Six Dials (main alignment)	94°
SOU 32	109°
SOU 4	101°
Chapel Road	100°

cemetery, it seems likely that Chapel Road would have been the later feature.

An important complication has so far been avoided, therefore. One has to admit the possibility that there was a nucleus that pre-dated or at least was contemporary with certain streets. Three cemeteries, dotted about the heart of Hamwic at SOUs 20, 32, and 34, seem to have been early Middle Saxon features that antedate domestic occupation in their vicinity. Sonia Hawkes (in Meaney and Hawkes 1970, 51) has suggested that 'it was not till the middle of the 8th century that Christian burial began to take place regularly in new graveyards in the towns and villages themselves.' If her argument holds true for Hamwic — and this writer later suggests that it does — the three cemeteries probably mark areas not originally surrounded by habitations. Dense occupation may have progressed in stages, therefore, as Hamwic grew from a nucleus. Unfortunately, we cannot yet give relative dates to features found in different quarters, or not with any precision. We cannot sketch a map of these changes and we are reduced to speculation about the location of a nucleus.

Timby (1988, 116-8) produces evidence of a diffusion of early Middle Saxon pottery across Hamwic. That does not necessarily indicate that much of the place was densely occupied in a piece. It is certainly true, for instance, that the system at Six Dials was modified, once at least, or was completed in stages, over a length of time. Initial occupation of the entire Six Dials area may have been less intense, perhaps scattered. And the fence lines that demarked the unmetalled originals of some of Hamwic's streets might be interpreted also as the boundaries or subdivisions of large, relatively open properties: there would seem to have been little use for continuous fencing if a street was edged with buildings. Early Middle Saxon pottery forms a greater percentage of a site's assemblage in an area close to the River Itchen (*ibid*). The greater incidence of this pottery in the waterside area might support the common view that Hamwic grew from a nucleus located there. Crawford (1949, 46-7) articulated that

view. Hamwic was a trading town and St Mary's was probably its mother church: where else to look for original features except between the river and the church? The question invites agreement, but the argument need not be correct. If it did exist early in the 8th century, St Mary's was one of a number of churches in Hamwic, and its importance was probably far less than it later became (see below). Hamwic probably was a *mercimonium* by 721, and the early existence of sea-borne commerce will account for the concentration of occupation near the river's edge. This is probably reflected in the large concentrations of early pottery in the area; but the pottery was discarded over perhaps 50 years and the large quantities found might easily mask the slighter evidence of an earlier occupation elsewhere. The SOU 7/14 cemetery evidence suggests (in a Hawkesian interpretation) that Hamwic's riverside was originally bounded by open areas no more than 65m from the river. It also suggests that building streets to the river was not a concern of Hamwic's first inhabitants. Quite conceivably, the settlement's first buildings stood elsewhere and were erected in a period before the need grew to occupy the waterfront.

A more pressing concern may have been to exploit the brickearth, to use it for making daub and pots (Timby 1988, 110). It seems that, in the 19th century, brickearth was not regularly dug in the vicinity of the river (fig 3) — the thinner brickearth found there was probably less well suited to exploitation. If the same constraints applied in the Middle Saxon period, one might search for Hamwic's original settlement almost anywhere inland of the waterfront. The possibility that this nucleus was located at SOU 47 has already been floated. Six Dials, a little further to the north, is another candidate. Excavations there have shown that St Mary's Road was a very early feature seemingly associated with an early ditch that virtually paralleled it and ran some 30m-35m to the west of it. The street was unusually wide, and became a major focus of occupation. None of these facts proves the street's antecedence, although they demonstrate that a number of curious anomalies appeared early in Middle Saxon Southampton, and that St Mary's Road was probably a feature of the *mercimonium* that supposedly was huddled on the shoreline. If correct, this identification of an inland nucleus would explain the curious fact that Hamwic, unlike other *mercimonia*, was not laid out as a function of the river.

It did not grow back from the river, as is usually assumed, but grew outwards to the river. Marshes restricted the places where the riverside could be used (fig 9b), and the L-shaped street system was developed to link a north-western nucleus with a south-eastern waterfront.

Such an identification obviates the need to explain the greater width or the eccentric alignment of St Mary's Road as a deviation from the norm, since what has been identified as a norm would have been a later feature.

In sum, the available evidence is that Hamwic's street system grew in stages with the infilling of open areas, perhaps the open areas between the two north-south streets. There is some cause for supposing that the laying out of these streets was controlled, and an attempt at conformity made. The evidence does not allow one to speak with any confidence of a rectilinear layout, but at least it denotes a considerable interest in establishing an economical layout of the streets. The argument gains in strength once we relinquish our god-like overview of the system: by concentrating on the discrepancies between the streets and seeking to explain them as the result of chronological or topographical differences, we have run the risk of misreading the evidence as the component parts of a survey map — a map that probably did not exist before archaeologists started to draw it — and have also risked confusing cause and effect. What we interpret as a failed attempt to achieve parallelism may have been nothing of the kind. If the intention had been to dispose the east-west streets most economically, they would have been laid out roughly square to the diverging north-south streets. In such a case, the near-parallelism would have been an accidental and unintended by-product. Even had the parallelism been desired and sought, this method of laying out the streets would probably have been necessary in a place that grew by stages, where the houses in between would have masked a sight on the other east-west streets. Either way, what appear as blatant differences in co-extension become instead more readily understandable errors in estimating a right angle.

A regular layout could have facilitated the movement of traffic, established fire breaks, and perhaps aided social control. However, even if those advantages did result, it seems unlikely that they were intended when the place was built. Those who formed Hamwic must have known little about life in towns. Why then should they have planned this settlement as a way of relieving problems that lay outside their experience? What archaeological evidence there is tends to discredit these practical explanations anyway. It seems that there was no industrial zoning of Hamwic (fig 12). This intermingling of industries, and this spread of fire-using industries, are at odds with suggestions that the streets were intended as fire breaks or to segregate the population.

Another interpretation may be sought by broadening the argument and considering why Hamwic's streets were metalled in the first place. The problem is perhaps an illusory one: hard surfaces are superior to muddy ones, gravel was available in large quantities, and even individual householders saw fit to equip their properties with metalled alleys. Yet some of Hamwic's streets came into existence as unmetalled surfaces, and it has been suggested that the roads out of the settlement were not metalled. It is by no means certain, therefore, that the practical superiority of gravel thorough-

fares was uppermost in the street-makers' minds. In their inexperience of urban matters, they were perhaps grateful to follow the example of their predecessors. A model for the streets might have been found at nearby Clausentum: what has been interpreted as the Roman settlement's main street was metalled with 'heavy gravel' (Waterman 1941, 109).

If the metalling of streets was not self-evidently desirable for its practical value, but was suggested by earlier examples, perhaps the same can be said about the disposition of the streets. Whatever material advantages there would have been in laying out a roughly rectilinear system of streets, the design may have been suggested, however indistinctly, by earlier examples such as Roman planned towns. Perhaps Winchester was the model.

It has been implied that, left to themselves, the inhabitants were incapable of shaping more than their immediate surroundings. They created an irregular and mutable maze of alleys that adequately served their needs by linking their properties with the streets: they did not devise, create, and choose to maintain a roughly rectilinear pattern of streets. Previous researchers have made the same arguments, though in more guarded language — they have supposed that the only begetter of the system was some figure of central authority. The evidence acquired in the last ten years tends to reinforce this view. The creation and maintenance of the streets seems to have been conceived of on a wide scale. The gravel used was largely standardised and remetallings were extensive. Despite a constant and pressing need to dispose of rubbish (considered further below), the streets were generally unpitted and uncumbered with filth. We may infer that, no matter who provided the labour, the ordering of the streets was not an accumulation of individual actions, nor depended on a decision taken regularly at a folk moot; and we may suspect that Hamwic's cleanliness was an official concern, as it was in certain medieval towns (compare Sabine 1937, 21-33).

However, the existence of cluttered properties points to some degree of self-government; or to a limitation of an authoritarian involvement in the lives of the inhabitants. Industries were scattered without pattern throughout Hamwic. This may indicate no more than that the king or his deputy could not draw directly on the experience of Roman town-makers, or had not accumulated the experience of later, medieval town-shapers, but it may also indicate that nobody's interest in the layout of Hamwic extended beyond the setting down and maintenance of the streets.

Buildings, pits, and properties

Buildings

The evidence for Hamwic's buildings mainly consists of negative structural features. The degree to which the evidence may have been biased by the

destruction of positive features cannot be precisely assessed; but so many negative features exist that they must reflect the preferred method of construction, an enterprise of earth and wood.

A wide variety of such features is usually evident. The posts around which a building was constructed might have been whole or split timbers; embedded in single, double, or occasionally triple post-holes, or in post-settings within a trench. There appears to have been no relative chronology in the use of these features.

Because of the large areas that have been exposed, the excavations undertaken at Six Dials reveal the clearest picture of Hamwic's buildings. Two of the building types identified there can be recognised at other sites. The most common of these is a rectangular structure identified as a house or, more properly, a house-type building. Less frequently occurring is a smaller rectangular structure thought to have been an outbuilding or shed.

The surviving features of the larger rectangular structures are paralleled by those excavated at the rural settlement of Maxey, Northamptonshire (compare Addyman 1964, 23-30; and 1972b, 289). Typically, the larger buildings of Six Dials were between 10m and 12m long, and 4m-5m wide. Posts were set into any combination of the features listed above. Where the 'house' had been built against a street (a common practice), the structural features were often considerably deeper on the streetside of a building than they were at the rear. It can prove difficult to recognise rear-wall lines that consist of a few shallow stains overlain by ploughsoil. Ploughing may have removed or truncated many of the shallow post-holes in the rear wall, thus giving a 'house' the appearance of having been jerry-built. Because of this supposed destruction, in most cases it is impossible to observe directly whether or not the long walls were formed around opposing pairs of posts; but the balance of the evidence is that they were not.

Streetside features were sometimes 'overshot' — extended beyond the line of the side walls. They may have accommodated a façade, or, as was suggested of a Maxey house, have met some structural need for revetments. The usual wall was of wattle, covered with daub. The main ingredient of this daub seems to have been natural brickearth. There is no sign that the buildings were taller than a single storey. The wattle-impressed burnt daub that has been a common find probably derived from the walls, therefore, and not from the floors of upper storeys, as Bankoff and Winter (1979, 13-14) proposed, albeit in a different context. Single doorways in the long walls can be recognised, but usually only in the sides marked by deep structural features. At least one building contained a second doorway in the opposing wall. Because of the somewhat irregular arrangement of posts in these 'houses', it must be assumed that the roof timbers rested on a wall plate. A small amount of burnt thatch recovered from one pit is the only direct evidence for roof

coverings. The hearths found within many of these buildings point to their use as houses.

The smaller rectangular buildings discovered at Six Dials seem often to have been associated with industrial features. They have been interpreted as sheds, roofed structures often with one or more sides left open to the elements. The walls were presumably constructed from wattle, perhaps covered with daub.

At the smaller sites described in this volume, it is not always possible to discern the layout of the structural features exposed in the excavations. Where brickearth digging has not totally removed them, many of the shallower features will have been destroyed by ploughing and the digging of other holes, including Middle Saxon pits. All that survives is sometimes an apparently random scatter of disparate structural features. Nevertheless, the wall lines and corners of rectangular buildings can often be recognised. In the vast majority of cases, one cannot readily distinguish these fragments as the remains of 'houses' or sheds, for the evidence has generally been recovered from narrow sites. However, where a comparison of sizes can be made, similarities are usually found with the 'houses' of Six Dials. For instance, at SOU 7 there stood a building 4.4m wide, the posts of which had been set into a variety of structural features. Evidence of at least one building with 'overshot' walls is provided by the excavations at SOU 14. And at SOU 4 the structural features were regularly deeper on the streetside of a building than they were at the rear (Cottrell 1980, 26, fig 6.1). Although the number of 'houses' that can be recognised outside Six Dials is small, it is considerably larger than the number of recognisable sheds or outbuildings (one may have stood at SOU 22 as an adjunct to a 'house').

A few other types of building have been found elsewhere in Hamwic. At SOU 22, one 'house' in what was perhaps a semi-rural property contained a doorway in its short wall. Certain pits may have been the remains of sunken-featured buildings. The most probable of these identifications concerns a shallow pit found at SOU 36. This was associated with a centre line of post-holes, and may have been floored within the pit. Its function is unknown. At its latest, it seems to have been an early Middle Saxon feature. A shallow, rectangular pit found at SOU 16 contained four corner post-holes and had been lined. It is interpreted as a roofed storage pit, therefore a sunken-featured building. It may have been early Middle Saxon in date.

A building associated with a cemetery at SOU 13 was probably a bicameral church, at least 12.9m long by 4.2m wide. Of post-in-trench construction, it may have had glazed windows. The tentative suggestion has been made that there had been another church at SOU 32, also bicameral, but only 8m long by 5.2m wide (Addyman 1973, 224). This remains a possibility.

Despite these additions to the canon, the buildings erected at Six Dials seem in the main to have been

characteristic of those erected throughout Hamwic,. Because they are closely similar to those found at the probably Middle Saxon village of Maxey, one presumes that they were not characteristically urban houses. However, with the one possible exception of the 'house' at SOU 22, they cannot be identified as farm buildings.

Pits

Rubbish disposal

Much of the rubbish generated in Hamwic might usefully have been spread on adjoining fields rather than thrown away into pits. Cess is the most obvious example, if only because it survives and is recognised in plentiful quantities, but we may also suspect that vegetation was regularly thrown away. To judge from the evidence of a few pits, the contents of which were both anaerobically preserved and analysed after sieving, it seems that just as commonly deposited were layers similar to garden rubbish (Buckland et al 1976, 64-5).

Apart from a few rubbish pits, apparently kept open for some time, no depositories of trash seem to have been deliberately emptied. Pits were often cut through the fills of earlier pits, but the inter-cutting is usually slight and does not indicate that earlier rubbish was deliberately sought: if the diggers aimed to empty these features, they were extremely inefficient and expended more than half their labour hacking into natural brickearth. The intercutting must be taken as a sign that new pits had to be dug in which to dispose of garbage; that specific areas were long set aside for that purpose; and that the rubbish removed when another pit was dug could be thrown into the bottom of the new pit or spread around the surface of what would anyway have been a dirty zone.

However, the probability, mentioned below, that some lucky people threw most of their rubbish into the river leads one to suppose that, to avoid the trouble of digging pits, the inhabitants of Hamwic would have sought to use other methods of rubbish disposal. It is possible, therefore, that a proportion of filth was heaped into middens and later transported away as manure. Definite evidence for or against the use of middens cannot be found where only the settlement site has been looked at in detail and any heaps once surviving *in situ* will have long been removed. The morphology of midden bases is an unstudied subject: one excavator interpreted a shallow feature found at SOU 14 as such a base, and excavators of other sites have interpreted similar features as areas of trample. Although likely midden material was not inevitably used, but ended in pits, we cannot be certain that there were no rough distinctions of filth. Animal dung may have been composted in mounds, human cess 'decently' hidden below ground; straw added to the heap, twigs thrown away as useless cuttings, or burnt. But, if at any time the contents of middens were shovelled into pits, certain distinctions of rubbish type would have been further obscured.

Arguments for and against the existence of middens remain nicely balanced. The faunal evidence is unambiguously that the bone recovered from Hamwic's pits had not lain around in heaps of rubbish, exposed to the weather or to dogs: very few bones show signs of extensive weathering or chewing (Colley forthcoming a). On the basis of that evidence, it can be asserted both that the contents of middens were not regularly thrown into pits and that piles of filth did not accumulate around and over these pits.

Yet there is other evidence that the rubbish had been dispersed before it had been thrown away, or at least in the act of throwing it away, and this might imply the existence of an intermediary stage in rubbish disposal: the existence, perhaps, of middens. Timby (1988, 75) has remarked that on average no more than about 10% of any pot was found in a pit fill. Although she declined the probably endless task of searching for crossfits between sherds of locally produced pottery, she did indicate that crossfitting sherds of more distinctive fabrics have been recovered from pits up to 35m apart (*ibid*, 118); and Hodges (1981, 91, fig 8,3) demonstrated that fragments of one type of pot had been deposited in five pits that formed a line nearly 20m long. Such discoveries are rare, but the dispersal of human bone across considerable areas suggests that other rubbish might also have been shifted similar distances. At SOU 32, for instance, human remains have been recovered from pits dug up to 18m from the nearest known grave. Robably the best evidence is provided by the smithing slag that is found virtually everywhere. Excavations at SOU 15, for instance, exposed two small areas that contained substantial quantities of slag, surrounded by larger areas of about 12m radius that contained only small quantities.

Where the excavation site was a small one, these dispersals may account for what prove to be curious shortages of industrial debris at places where it is known that bone was worked or iron was smithed. However, where a larger area was exposed, it becomes increasingly unlikely that considerable amounts of debris originated at a nearby place not exposed by the excavations or had been thrown so far that they cannot now be found. Another possible explanation of the shortages is that the industries did not produce as much debris as we expect: either the work was seasonal or it was so specialised that only a small range of rubbish was produced at any one place. Such an explanation is not without difficulties (see below) and perhaps a more reasonable interpretation would be that much of the rubbish had been carted away — out of the archaeological record. In such a case, it would also be reasonable to assume that the material had been stored in heaps until its final disposal.

Relative numbers of different pit types

Listed in the excavation reports of this volume are 465 pits that were not structural features or graves. Some 235 of these (50.5%) are not properly classifiable

because important information is missing. For instance, the pit was not excavated or there is no description of the fills. Concentrating on the remaining half, one finds that, of the 230 pits listed in the excavation reports, 164 (71.3%) probably were deep rubbish pits; sixteen (7.0%) probably were wells; fourteen (6.1%) probably were deep storage pits; and 36 (15.7%) were other types. (These categories are discussed in more detail below.)

There are differences in the relative numbers of such features found at sites throughout Hamwic; but no clear pattern emerges and it has not been thought necessary to include a plan to illustrate what is in fact a jumble. Many of the differences can be ascribed to the smallness of certain sites (for instance SOU 19, some 5m square, where only one of the three pits found was a deep rubbish pit), or to the accidents of trench placement (SOU 36, for instance, where a line of wells was uncovered), or to the inadequacies of the surviving record (for instance SOU 38, where only four of the 23 pits are properly identifiable, none as a rubbish pit), or to a combination of these factors.

Different densities of pits (regardless of type or period) have been exposed at various places. Where the evidence is coherent and plentiful, the differences can be evaluated and interpreted. The best example is provided by a sudden decrease in the number of pits to be found outside what is thought to have been the western edge of Hamwic — an interpretation confirmed by the existence of an early ditch.

Where the evidence is coherent but insufficient, it is not easily interpreted. Three sites in the south-eastern corner of Hamwic (SOU 16, 21, and 22) are an example. It is reasonably certain that the very few pits found at those sites truly represent the pit density in the area. Most probably, there was little need for wells and rubbish pits, since the nearby River Itchen would have supplied the inhabitants with water and removed their rubbish (compare Sabine 1933, 343; 1937, 39-40). Other factors may have been involved. The area had only a thin covering of brickearth and it might not have been possible to dig many pits. Also, the area was low-lying and perhaps it was only intermittently habitable during the period of Hamwic's existence: the lack of pits would also be explained if people only rarely lived there. Lacking any wide-scale excavation, one cannot know which factors or which combination of factors were important here.

Where the evidence is incoherent (as at SOU 34, plans of which are mostly not to be found; or as at SOU 10, a small site almost wholly taken up with a street surface), inevitably even less can be written.

Since the totality of the evidence is of disputed value, no overall plan of pit densities is included here. Another reason for excluding such a plan is the fact that pit density is anyway too crude a gauge. We should be comparing pit volumes, and the comparisons should be distinguished chronologically. No overall plan of pit volumes has been included because

such a plan cannot be drawn. The volume of too many pits is unknown. One might roughly correct for this gap in our knowledge by preparing a figure showing the ratio of the thickness of the brickearth at a site to the number of pits exposed there or to their total area. However, the thickness of the brickearth has not always been recorded.

No attempt has been made to map the distribution of pits at different periods of time. The available evidence permits overall arguments about the time of occupation, but it never supports a close dating of any particular context. Furthermore, because of the continuous slumping of its fills, a pit might have existed as a negative feature for considerable periods of time: a pit dug in 750 might have still been used in 800. If Hamwic lasted for less than two centuries, as is argued elsewhere in this volume, a time-lag of 50 years or more would seriously distort any plan of the chronological distribution of the pits.

Wells

(Most of the wells discovered at Hamwic are published in this volume, usually with section drawings. These drawings comprise figs 17, 20, 55, 75, and 79. For related drawings, see figs 30-3 and 78.)

The inhabitants probably made use of the spring that emerged at Houndwell, some 330m to the west of Hamwic (fig 1). Those who lived on its banks might have drawn water from the River Itchen. For most people, though, the only readily available source of water would have been a well.

Features equipped with lined shafts have been a constant find on most excavations undertaken since 1946. Nearly all had been constructed by first digging a pit through the brickearth and down to or into the gravel; digging further at its base into the gravel; inserting a lining that reached up at least as far as ground level; and backfilling the pit with the excavated brickearth and gravel, to leave only a lined shaft open. The shafts were usually cylindrical. Most of the linings have survived as no more than a dark stain. Three, whose remains were slightly better preserved (at SOUs 7 and 36), were based on re-used casks. The eventual collapse of many of the shafts suggests that less substantial linings, like wickerwork, were also used.

Throughout Hamwic, no significant differences in plan are apparent. In section, four main types can be recognised. Apart from a few cases of arguable identity, the pits were either V-shaped or sub-rectangular, and dug either nearly to the bottom of the shaft or about half-way down. The thicker the brickearth, the deeper the shaft. One might expect that, to economise on effort, less substantial pits would have been dug where a great deal of brickearth had to be excavated. However, there is no such obvious pattern to the distribution and incidence of the different forms (a figure has not been included here to illustrate the fact that the four types are considerably mixed).

Maitland Muller found no evidence that these features had contained water, and was disinclined to interpret them as wells. He suggested instead that they had been cess pits or tanning pits (see, for instance, Maitland Muller and Waterman 1950a, 142). It is improbable that the tall, narrow shafts could ever have functioned as tanning pits. Their shape does resemble that of later cess pits, known both from archaeology and from literature, but the shafts contain little or no cessy material. Since it would have proved difficult to clean out the shafts, this absence of evidence must indicate that the features were not cess pits. Maitland Muller ultimately favoured a third interpretation, that these were cold stores or 'refrigerators' (Maitland Muller 1958, 22). It is possible that perishable goods were sometimes stored in these features, but it is unlikely that they were designed to be put to this use. The features bear a slight resemblance to the shafts of ice houses (Ellis 1982, 4-5), but it must be stated that they far more closely resemble wells. The matter can be put even more crudely, in a way basic to most archaeological reasoning. These features are found regularly in Hamwic: if they were all 'refrigerators', where were the wells?

Later archaeologists have not scrupled to interpret the features as wells, although a clear description of their function had to wait until Addyman and Hill (1968, 83) reviewed the evidence (see also Addyman and Biddle 1965, 86-8). The evidence that has now accrued allows one to embellish that earlier work.

The shafts were small in diameter. If buckets were drawn from them by other than purely human effort, the mechanism need have been no more than a counterweighted plunger or a simple windlass. Any of the solitary post-holes sometimes found in the vicinity of the wells might have been the remains of such a device. Addyman and Hill (1968, 83) suggested that some large stones found in the backfill of shafts had once been used as counterweights. This is as likely as not, although more recent excavations, for instance at SOU 11, have disclosed similarly sized stones tumbled into features that had not been well shafts.

Because of their narrowness, the shafts would have proved almost impossible to maintain. It is clear that most fell into disuse as the result of silting or as the linings buckled and split under the pressure of the soil that filled the pit, or through a combination of both factors.

In a few cases, where there had been no silting or serious distortion of the shaft, which nevertheless had been filled with rubbish, wells seem to have been abandoned for other reasons. The infilled features were almost certainly located out of doors, and the rubbish that first choked a shaft may have been scuffed in by accident. This seems unlikely: it would have been a simple matter to protect the wells by furnishing them with a removable cover or by extending the shaft lining above ground level. Instead, the wells may have been deliberately

abandoned, either because they were found to be unnecessary (a possibility that will be considered later) or because they were unreliable. The reason for digging into the valley gravel was clearly to tap the water that flows more readily there than it does through the overlying brickearth. However, the water table rises when the season is wet: a well dug in an unpropitious area, but in a rainy time, might have failed in drier months.

There is evidence from a number of sites (most clearly those of Six Dials, but also SOU 36, and perhaps also SOU 14) that a succession of wells was dug roughly in a line. A similar picture has emerged at Dorestad, where wells have been found clustered in small groups. That evidence has been interpreted as a sign that wells were open in pairs, one to supply humans with water and one to supply livestock (van Es 1969, 196). Such an interpretation cannot be made of the Hamwic wells, for nothing suggests that they were segregated into two contemporary groups. Rather, the Hamwic clustering is most easily explained as a response to the need to dig a succession of wells in a restricted area (see below).

It is just possible that they were sited in a line to continue to tap a more freely flowing source of water — or, in the case of the SOU 36 wells, to find such a source. One of the wells in the latter sequence had been backfilled with rubbish before it silted or collapsed, and two were never finished. In profile, these two features resembled wells that had been abandoned at different stages of completion. Each had a shaft, or the beginnings of a shaft, that had never been lined. Their initial fill, brickearth and gravel, was some of the material that had just been dug out. What remained of each feature was used as a rubbish pit. The wells were left unfinished presumably because they proved unsuitable or promised to be dry. There is no evidence that disasters loomed, forcing their abandonment.

Unfinished wells can be recognised only by their uncompleted shafts, and only if the initial backfill was not rubbish. Other wells may have been abandoned before their shafts were dug. It is possible that a few rubbish pits of the type described in the following section were originally intended for use as wells. These might be uncertainly identified from the redeposited brickearth and gravel that constitute their lower fills. One such rubbish pit with these characteristics was uncovered at SOU 11. Another may have existed at SOU 20 (Barrett and Holdsworth 1980, 39). Other examples are rare. The reverse possibility, that some features were converted into wells, is considered further below.

Where the brickearth was much thinner, wells did not need to be dug for such great distances down to the gravel, and perhaps different forms of well could be constructed. None has been recognised for certain. Two features found at SOU 11 may have taken the form of depressions into which one stepped to reach a lined shaft. A bucket found in the fill of one shaft might indicate their function as wells.

Rubbish pits

(Section drawings of rubbish pits are published in this volume as figs 20, 23, 28, 29, 34-7, 39, 56-8, 64, 66, 79, 83, 89, 90, 92-4, 104, 108, 109, and 136.)

Whatever their original function may have been, most deep holes were eventually filled with rubbish. Certain features seem to have been intended for use as rubbish pits, however. These were large and deep pits, usually rounded in both plan and section, and apparently not lined. They are the type of deep hole most commonly found in Hamwic. The pits were rarely dug for more than about 0.2m into the gravel, and were sometimes confined to the brickearth. Such restrictions are found less often at sites in the south-eastern corner, where the brickearth is thinner; but they are still found. Most rubbish pits there were dug to a shallower depth than they were in places of thicker brickearth. As if to compensate for this reduced depth and to increase their volume, the pits were often lengthened, so that they appear more oval in plan than rounded. Some of the features might be seen, therefore, as holes dug to extract brickearth for mixing into daub or making into pots; holes that were then filled up with rubbish. Others, it has been suggested, were perhaps unsuccessful wells. Nevertheless, so many of these features were dug, often through the fills of earlier pits, that they cannot all be interpreted as the consequences of potting and house building, or as a series of would-be wells. Some had been maintained empty for a considerable time, it is clear, but the deliberate infilling of most seems to have begun as soon as they were dug. To judge from their preliminary fills, these were rubbish pits. The faunal evidence is that the rubbish was thrown quickly away; nevertheless, the overall rate of infill may have been a slow one if the liquid contents seeped into the gravel.

The excavators of many of the rubbish pits described in this volume often identified lower fills as principally cess. Despite the freedom with which 'cess' has sometimes been identified, and despite the absence of a proper analysis of most of the contexts (important not only to check on the excavators' identifications but also to decide whether the apparent lack of cess in upper layers was real or was the result of different preservational conditions in a pit), one is inclined to accept the opinion of so many witnesses. It may be that many of the features were first used as cess pits, then sealed (usually with a layer of brickearth) before being filled with other rubbish. Such a change of use would largely explain why there were so many pits dug at some sites, where one might have thought that fewer pits would have accommodated the rubbish generated: as the old ones filled, there was a regular need for new cess pits. It would also be one explanation for the very thick layers of redeposited brickearth found in some features: the inhabitants had been digging a specialised feature such as a new cess pit and had disposed of some of the spoil into nearby rubbish pits, which were more common.

If there were superstructures, perhaps screens around cess pits, later disturbance has probably erased the evidence. What are sometimes interpreted as stake-holes around the edge of such features may have been the marks of weathering: this writer has seen a considerable number of 'stake-holes' appear around the perimeter of empty pits after only a short period of rain.

Storage pits

(The best-recorded examples of storage pits have been found at Six Dials or are published elsewhere: see Barrett and Holdsworth 1980, 36-7, figs 8,1 and 8,3)

Most of the rubbish pits seem to have been dug only to be backfilled, and display no great care in their finishing. Certain types of pit, which were dug and furnished with care, may have been designed to be kept open. The wells are an example. Other, equally common pits were large, deep, and rectangular in both plan and section. Their walls were nearly vertical and their floors relatively flat. Even if backfilling had begun as soon as they were dug, these steep-sided features would have been in danger of collapse, and, to prevent this, probably they were revetted in some manner. Direct evidence of a lining is rare, perhaps in part because it has not been expected and the sides of these pits no more delicately probed than is usual during the removal of a pit fill. Occasionally, as at SOU 34, the impressions of vertical timbers have survived in the walls of a pit. Two 'square topped pits' discovered at SOU 36 contained 'a horizontal slot cut in the pit wall, in which, in one instance, were spaced a number of iron nails' (Maitland Muller and Waterman 1949, 50). Uniformly made and probably lined, in general these pits seem not to have been created just to accommodate rubbish. One, found at SOU 20, had a step cut into its side, presumably an aid to access (Barrett and Holdsworth 1980, 36, fig 8.1). Access to other pits may have been gained by ladders.

These features are usually interpreted as cess pits, largely on account of the green staining noted sometimes on their sides (Addyman and Hill 1968, 83; Barrett and Holdsworth 1980, 37-9). Layers of cess have been found in some. However, although eventually these features were often filled with all sorts of rubbish, such stains and such apparently significant layers have been noted more often in what are here termed rubbish pits. If one is to determine a function for the lined pits, presumably one should pay more heed to their apparently regular finishing and the likelihood that they were dug with the intention of keeping them open. It is difficult to interpret the deepest of these regular features except as storage pits.

Wherever the evidence is unambiguous on this matter, the pits are seen to have been dug outside buildings. Presumably, therefore, they were covered against the elements. The coverings may have been no more than lightweight, thatched A-frame roofs,

resting on the ground or the top of the wall linings. There is no definite sign of internal supports, such as might have been needed to support a heavier roof.

Maitland Muller and Waterman (1951a, 134) discovered three posts in rectangular pits at SOU 38, and suggested that originally they may have supported superstructures or floors. The timbers and almost all of the site records have not survived, and this argument is difficult to pursue. However, two posts were found in irregularly shaped pits at SOU 11, and these were perhaps similar devices. Each was formed from a branch, roughly shaped and sharpened, and driven into the base of its pit. The upper parts were slender and could not have borne much weight, and it must be doubted whether they had extended out of the pits. They seem to have served no comprehensible structural purpose. Had the pits been kept empty (an uncertain point), the posts may have been places against which to lodge the bottom of a ladder. The discovery of more such posts will perhaps clarify what is at present a doubtful matter.

Although probably covered, the pits may yet have been in danger of flooding. Quite possibly, people meaning to dig storage pits would sometimes have struck water, and some of these features may have been converted into wells; shafts dug and lined, and the pits backfilled. (This serendipitous sequence of events perhaps accounts for the occurrence of those wells whose pits were sub-rectangular and dug nearly to the bottom of the shaft.) However, there is no reason to suppose that water was often encountered — it has been suggested that water was not invariably encountered even when it was sought. None of the storage pits was deeper than the brickearth into which it was dug. Such a feature was in no immediate danger of flooding.

It must still have been damp. If the storage pits had been floored, and if goods liable to spoil had been preserved and packed in containers like casks, a wide variety of goods may have been cellared — though not salt and other soluble matter. Nothing found so far indicates what exactly had been kept in the pits. It seems that stores were removed before the features were infilled, as one might expect. Evidently, no catastrophic change had triggered the abandonment of the storage pits. This fact is exemplified by the layers of rubbish found in the backfill of these pits: occupation had continued in their vicinity for a long time after they had been emptied of their stores.

Examples of at least one other type of storage pit have been found at Six Dials, and are similar to internal pits found at Dorestad (van Es 1969, 194-6). Small and shallow, they were dug within 'houses'. As such, they would have required no elaborate lining or covering, except perhaps the simplest safeguards against contamination. Dug to serve a household, they would have survived only as long as the building that contained them. The recognition of such features elsewhere in Hamwic is handicapped

by the fact that usually one cannot distinguish the outside of a building from the inside; but an internal storage pit was probably uncovered at SOU 14.

Other pits

Not surprisingly, wells, rubbish pits, and storage pits together form the great majority of non-structural features found in Hamwic. Many of the remaining pits were shallow things that cannot be simply categorised. Shallow storage pits have already been mentioned, as well as possible shallow wells. Some, perhaps, were small excavations of brickearth, backfilled with rubbish. Some appear to have been created accidentally — holes worn in the brickearth. Presumably, some were industrial features, but very few are easily recognisable as such (see below).

One other pit has already been described as the remains of a sunken-featured building. Despite some difficulties in this interpretation — difficulties mentioned in the SOU 16 excavation report — it seems most likely that the feature was a much modified version of the storage pits found in other areas. To imitate the necessary practice of confining such features to the brickearth cover, brickearth had been added to the sides, and perhaps also to the floor. Because any pit dug at SOU 16 would have provided only a little dry-storage space, its capaciousness had been increased by building a superstructure around the four corner posts.

Properties

At both SOU 7 and SOU 22, a main building stood in an area demarked by fences. Each building probably was a house, set at one end of its property. At SOU 7, a series of pits and a well was dug against the fence at the farthest remove from the 'house', apparently at one end of a yard. At SOU 22, a shed stood alongside the 'house'. The property may have been laid out with buildings at its southern extreme, a cartway at its northern extreme, and a small yard between the two. Few pits were found: the nearby river probably served as a depository for rubbish and a source of water.

These are exceptions. Most of the fence lines so far uncovered marked the boundaries of unmetalled streets, and (it was suggested above) perhaps were associated only with early, large, and open properties. The stake-holes had been sealed beneath succeeding layers of gravel and thus were protected from most forms of later disturbance. Other fence lines, of the type found at SOUs 7 and 22, associated with later and smaller properties, may have been ploughed away. There is evidence that earthen baulks were used as boundary markers at SOUs 7 and 32, perhaps in conjunction with fences: similar evidence elsewhere may have disappeared from the archaeological record. These considerations aside, it still appears that fences and baulks were rarely used to delineate properties. If clear evidence of

such features has survived on some sites that had been ploughed over, we might expect it to have survived at other places too.

That there were divisions into discrete areas has long been recognised. Interpreting the plan of SOU 32, and thinking also of the plan of SOU 36, Addyman and Hill (1968, 82-3) referred to the long lines of pits that had been uncovered, all aligned roughly parallel to each other. These pits, they were inclined to argue, had been dug within separate properties. Where the site has proved large enough, such lines of pits have been recognised at a great many places excavated since 1946; and a very good example in this volume is provided by SOU 11 (fig 26). This more recent evidence (particularly that from Six Dials) necessitates a revision of Addyman's and Hill's interpretation, for it seems that the lines of pits were usually dug over a long period of time at the boundaries between properties, and only occasionally — as at SOU 7 — within a property. Once established, a line of pits would have proved an unmistakable boundary marker.

Most of the features found in the lines were rubbish pits. Wells and storage pits were usually dug elsewhere in a property, presumably to avoid their accidental use as rubbish pits or to try and prevent their contamination with various forms of disquieting effluvia. This practice may partly explain the digging of a succession of wells in a row: they were not scattered wholesale across a property because they might be dug only within those open areas that lay some distance from the rubbish pits.

As was mentioned above, distinctive types of rubbish were spread across wide areas within what may be called 'spheres of garbage'. (The distinction is noted effectively only in industrial evidence.) Wherever two of the malodorous 'spheres' happened to overlap at Six Dials, they overlapped along a line of rubbish pits. It is reasonable to suppose that, in these cases, the pit lines marked boundaries between properties. One may thus surmise that the rubbish pits were filled in common, but that wells and storage pits were used by only one household.

Many lines exposed elsewhere in Hamwic do not contain such distinct groups of rubbish. Little can be made of this fact. The pits may have been used only by members of a single household, or by members of different households throwing away similar garbage. The Six Dials evidence supports the second interpretation. Strictly speaking, however, one must note that, in the smaller-scale excavations forming the subject of this volume, it is often impossible to decide from internal evidence how many households filled the pits.

Also because of the restricted size of most excavations in Hamwic, it is very difficult to assess the dimension of a 'typical' property. One cannot identify a 'typical' early property at all, although one can infer that early occupation was dispersed and associated with the fences that delimited unmetalled streets. The most one can say about late properties

is that they were probably larger than during the period of densest occupation.

Our best evidence derives from this middle period, and it is also limited. The four main pit lines at SOU 32, running back from the street, were between 11m and 12m apart from each other. Two pit lines on SOU 36 may have been 12m apart. (All measurements are made between the features' centres.) If these few data suggest that properties were laid out to a fairly constant width, they are contradicted by the data from SOU 14. At that site, a line of pits can be seen only along the eastern edge of the site. Since the evidence is that the whole area had been given over to a single property, any other boundary probably lay to the west of the excavated area, at least 20m away. SOU 14 was in the south of Hamwic and SOUs 32 and 36 in the north, and the discrepancy in the data may reflect this fact. It may prove that, in order to equalise the exploitation of the brickearth, properties were wider in areas of thinner brickearth. The suggestion has been made that streets in the south-eastern quarter of Hamwic were set further apart from each other than they were in the north, and such an arrangement may have been needed to accommodate groups of larger-sized properties. But it is equally likely that there was no typical property width. The length of a property is even harder to assess. Assuming that each property fronted onto a street, and therefore that its length corresponded to half the distance between a pair of streets, at Six Dials that length was 25m. Less convincingly, a distance of 30m can be measured from the SOU 4 street northwards to several short lengths of fence line on SOU 5 (see Holdsworth 1980a, 20, fig 4,1). Multiplying measurements of this sort together, we might guess that properties often covered an area of around 300m². However, it is only an inference that property lengths were half the distance between streets: one finds no lines of pits marking out the rear of a property. If settlement was completed in several stages, as has already been argued, all sorts of local shapes and distances might have evolved. The evidence from SOU 32 can be interpreted as showing that there were some single properties fronting onto one street and backing onto another. Quite possibly, then, there were properties measuring 600m² or more.

In either eventuality, the area was smaller than the size of plots awarded in many early medieval new towns (Poole 1955, 65). But this is to compare Hamwic at its most populous with settlements that were newly established: more relevantly, perhaps, the street frontages found at SOU 32 were about twice as wide as those of Southampton's late medieval tenements (compare Platt 1973, 46-7). These fairly ample widths are a clear indication that Hamwic's population density was less than that of a town like medieval Southampton, perhaps because the Middle Saxon households were dispersed across the brickearth, which they were equally exploiting. A lesser population density will help explain the fact that Hamwic covered an area nearly twice as large

as that covered by its medieval successor. It can also be inferred that there was no pressure to huddle closely together along Hamwic's streets, which probably were not put to the same amount of commercial use as the main streets of a medieval town.

Cemeteries

Regular and irregular burial grounds known from excavation will be considered here, also cemeteries uncovered as a result of building work and cemeteries known mainly from written references to them. Very little can be said for certain about these places, except for the cemeteries at SOUs 13, 20, and 32, about which one can say a little. The reader who is inclined to accept this proposition may avoid reading the next two sections.

Cemeteries to be ignored

Eleven places of regular burial have been discovered within and around Hamwic (fig 11). Two should be disposed of at once. Well to the south of Hamwic, SOU 389 was a cemetery disturbed at least twice in the 19th century. Coffined bodies were buried there on an east-west alignment (HA 1850; Shore 1911, 114-5). Nothing suggests that this was one of Hamwic's cemeteries. Perhaps it was medieval. The second burial site, at SOU 303, is unlikely to have existed before the Middle Ages. Some bones unearthed in the 18th century probably derived from a small cemetery attached to Holy Trinity Chapel (TGM 1802, 993; Englefield 1805, 77). Very little is known of the history of the chapel, which stood within the parish of St Mary's, and even less of its cemetery. The chapel was first documented in 1217, and two late-13th-century deeds contain a reference to the *cimiterium* of Holy Trinity (Blake 1981, 65 and 82-3). Given the jealous regard for their church's burial rights shown by the medieval rectors and chanters of St Mary's, it is inconceivable that another church in the parish could have acquired a regular cemetery, although limited burial rights might have been allowed. The cemetery at Holy Trinity may have accommodated only the corpses of its chaplains: for instance John de Pudele who, in his will of 1341, expressed a wish to be buried at the chapel (*ibid*, xxxviii-xxxix and 175, n6). Until the matter is resolved through excavation, it is pointless to speculate further.

For most purposes, a third site can be ignored. There may have been a graveyard just to the north-east of Hamwic, at SOU 77, where some human skeletal material was uprooted. Perhaps it was Middle Saxon.

Cemeteries known from excavation

The eight remaining burial grounds (listing them in a rough geographical order) are a cemetery excavated in the north of Hamwic at SOU 31; a cemetery at SOU 32, another part of which was uncovered in the 19th century at SOU 47; a possible cemetery at

SOU 36; a cemetery at SOU 20, with some redeposited human bone found just to the south at SOU 1; another cemetery discovered in the 19th century at SOU 48, other parts of which were excavated in the 1960s as SOUs 34 and 43; a cemetery at SOU 254; another at SOU 13; and perhaps a cemetery that stretched between SOUs 7 and 14.

In three cases, almost nothing can be said. The evidence for the SOU 7/14 cemetery is minute. It consists of a single grave in the southern end of SOU 7, perhaps another grave at SOU 14, 47m to the south, and the redeposited bones of at least two individuals found in later features at SOU 14. One supposes that the graveyard fell into disuse at some point in the early Middle Saxon period, the time when the first of SOU 14's pits were being infilled. We possess very little information about the cemeteries at SOUs 34/43/48 and 36, which were extensively dug over in the 19th century. Both were Middle Saxon features, perhaps early Middle Saxon.

In two other cases, a cold assessment of the site has still to be made and the findings will be presented elsewhere. One site, the cemetery at SOU 31, is unusual for being a late feature, a fact that will be worth repeating further below. The other site, SOU 254, was a test excavation where a small fraction of a so-far undated cemetery has been uncovered; too recently to permit its inclusion in this volume. The discovery is a reminder that graveyards were established across a wide area.

Only three of these sites will repay much study: the cemeteries at SOUs 13, 20, and 32.

Similarities between cemeteries

Where the information survives, a number of similarities between all the cemeteries is evident; or at least there is no evidence of dissimilarity. Most notably, all corpses were disposed of by inhumation. Graves were shallow, and probably had been at most 0.6m deep. They were oriented. The bodies they contained were extended, supine, and buried with the heads to the west.

It is likely that bodies were usually buried in coffins. Sometimes, perhaps, they were buried in narrow roofed chambers that had been built into the grave; but the observable differences between the remains of the two features are very small. The existence of either type of feature can be inferred principally from stains in the grave or the tightly bent attitude of the skeleton (MF1:C4-6). By these criteria, perhaps as many as 64% of the bodies buried at SOU 13 had been encased, and perhaps as many as 88% of the bodies at SOU 32. One of the three intact burials at SOU 34 (the only one sufficiently well recorded to allow an estimate to be made) had probably been so buried. A wood stain appeared in the better-preserved of the two graves at SOU 20.

The coffins seem to have been made of wood and probably were pegged together, although some nails, rivets, and washers were found at SOU 13 — which might be because the timber used to make coffins

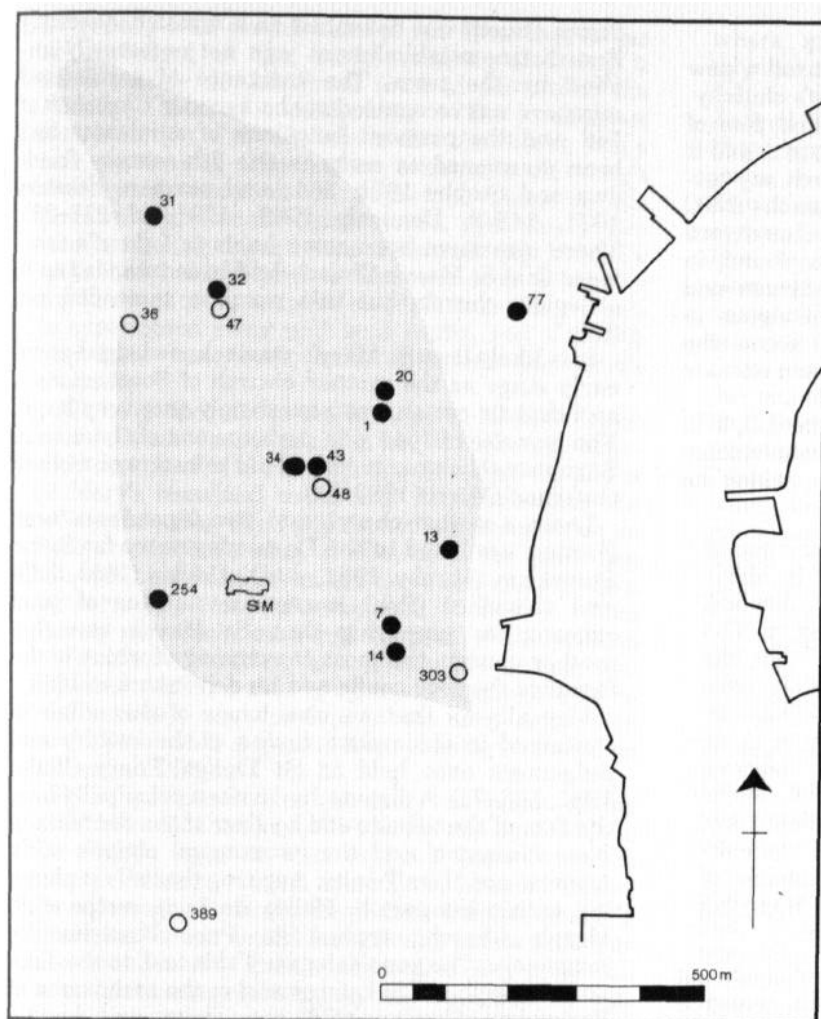


Figure 11 Cemeteries in and around Hamwic. Those not precisely located are shown by open circles. Site numbers are given without the 'SOU' prefix. Stippling indicates the extent of the town (as in Fig 9b). Key: SM St Mary's Church

had been reused (compare Rodwell and Rodwell 1982, 301). Besides tending to decrease in width from head to foot, the SOU 32 coffins may have been constructed to a standard size. A similar study cannot be made of the coffins from the other sites. Any conclusions to be drawn from these similarities can be postponed for the moment. The facts listed below have a greater curiosity value.

The cemeteries were small. At SOU 13, the most populous of all the places found so far, the remains of 81 individuals were found, and the entire graveyard may have contained about 100 corpses. Taking all the known discoveries of cemeteries into account, many of them poorly recorded, one guesses that no more than 150 burials have ever been found in Hamwic, grouped in cemeteries that had held no more than 200 bodies.

The population of the SOU 13 cemetery was drawn from 'a wide gene pool' (Thomson forthcoming), something that suggests that a great many households buried their dead in the one place. If so, the small number of burials must indicate that the cemetery was of short duration, not that it was reserved for a small number of households: graves were positioned in rows and, the cemetery had

been in sporadic use for any great length of time, burial in rows probably would have been an impossibility. At a burial rate of ten corpses a year, the cemetery would have received its full complement in a decade. There can be no investigation of the 'gene pools' of the other graveyard groups, but it may be remarked that most graves were early features and there scarcely seems time for the cemeteries to have filled slowly. Another reason for supposing that they were used for only short periods is the fact that graves were dug in rows at SOU 32, and perhaps at SOU 34. (It is not impossible that such rows also existed at the other sites.) As at SOU 13, the maintenance of grave-rows probably would have occurred only when the graves were dug over a short space of time.

These facts are a cause of some puzzlement. It is odd that, after a century and a half of recorded discoveries, the bodies of only 150 or 200 inhabitants have been accounted for; and that each cemetery was briefly used. As well as many small cemeteries, it has often been suggested, there must have been one major burial ground, for instance in St Mary's churchyard. Some of the background arguments are introduced in the following section.

St Mary's Church

For most of its documented existence, until a new cemetery was prepared in 1846, St Mary's churchyard was Southampton's main burial ground. Few of its earliest features will have survived *in situ* and it is doubtful if archaeologists would unearth any better evidence of the cemetery's origins than the BMC Type 49 sceat found somewhere in the churchyard in 1838 or the early medieval lead cross found, in association with a burial, in 1884 (Addyman and Hill 1968, 67; Dale 1903-4, 168-9; Baigent in Hearnshaw 1904, 53-5). Arguments about the church are principally historical, based on a number of written records.

In the first half of the 16th century, Leland (I, 276) had located 'Old Hampton' in the immediate vicinity of this church and its appurtenances, which he described in the following terms.

Ther is a chapel of S. Nicolas a poore and smaull thing yet standing at the est ende of S. Marie Chirch in the great cemeterie, wher constant fame is that the old parochie chirch of Old Hampton stode. One told me there that the litleness of this chirch was the cause of the erection of the great chirch of our Lady [perhaps by Queen Matilda who] had thought to have made this a collegiate chirch; but this purpose succedid not fully. Yet nevertheless S. Marie Chirch at thys day in token of the auncientnes of Old-Hampton is mother chirch to all the churches in New-Hampton. And yn testimonie of thys the commune sepulture of New Hampton ys in the cemeterie of S. Marie Chyrche.

The 'poor and small' chapel was demolished soon after Leland recorded its existence. His record is therefore the only basis for suspecting that that building was an early church; and was not, for instance, a subsidiary chapel built in an existing churchyard. Although early churches might be dedicated to Mary at this period (Levison 1946, 263-4), it is tempting to see the patron saint of seafarers as a more apposite guardian than the Queen of Heaven, and his church as the first to be erected at this place.

The building may have been old when it was noticed by someone like Matilda (d 1118; compare Davies 1883, 337). In the third quarter of the 10th century, a church at *Ham tuna* was granted by King Edgar to the novice Wulfhilda as partial recompense for his attempted seduction of her (Esposito 1913, 17). Its location is not further specified, however. According to a charter of 1045, the grant was made of a church at *Wic*. It is clear from the context, which is discussed later, that *Hamwic* was meant and that the name was applied in the 11th century to an area next to the River Itchen (K776; S1012; Crawford 1945a, 148-9; and see below, p 63). This church was probably a precursor to St Mary's Church.

In the Middle Ages, St Mary's stood virtually alone in the area of 'Old Hampton', and quite possibly it was as rare a building in 1045. This Late

Saxon church was described as a *mynster*. A strictly Benedictine establishment was not necessarily implied by the term. The existence of secularised minsters was recognised at the synod of *Clofeshoh* of 746 and the pastoral functions of a minster had been mentioned as early as the 7th century (Haddan and Stubbs 1871, 364; and compare Stenton 1971, 148-9; Deanesly 1963, 129 and 217-23). There may have been some basis to Leland's comment that St Mary's Church had been intended as 'a collegiate church; but this purpose succeeded not fully.'

It is likely that St Mary's was acknowledged at an early stage as the mother church of Southampton, and that its parish was accordingly once very large. The *mynster* of 1045 was perhaps one of those Late Saxon establishments 'called old minsters or mother churches' (Morris 1983, 64).

Later, a mother church and two dependents 'near Hanton' are listed in the Domesday entry for South Stoneham (Munby 1982, 41d). Davies (1883, 329) and Crawford (*ibid*) muster a number of good reasons for supposing that St Mary's was this mother church, the most convincing of which is the fact that the pope confirmed its dominance in 1225.

Virtually all that we now know of that affair is contained in incomplete copies of the inquiry and judgement once held at St Denys' Priory (Blake 1981, 168-71). A dispute had arisen principally over the fate of the tithes owed by four of the churches of 'New Hampton' and the extramural chapels of St Andrew and Holy Trinity. Arguing that all six places lay within his parish, Philip de Lucy, rector of St Mary's Church, applied to Pope Honorius for judgement. The pope delegated this task to the dean and chancellor of Salisbury and to the archdeacon of Berkshire. They upheld the claim and largely confirmed the church's right to tithes, bequests, inheritances, burial fees, and other dues.

A letter written about 1528 by the chanter of St Mary's to the prior of St Denys' could be further evidence that St Mary's parish was once the entire district of Southampton (*ibid*, 173-4). Referring to the chapels of St Andrew and Holy Trinity, which lay within his parish, the chanter reveals that he had found

in the blake boke of the Chaunterschipec . . . a composicion reall, wherby it well apperyd that the sayd ii Chappellys stode wythin myr parsch in lik maner . . . as the other foure that stonde within the wallys.

It is a pity that the Black Book of the Chantership exists no longer and that the 'royal composition' cannot be read now. If that document placed Southampton's intramural churches in St Mary's parish, either it was a forgery or it was of considerable antiquity.

There are good reasons, therefore, for supposing that a church at St Mary's had been the dominant church since the Late Saxon period. Any argument that it had also been a Middle Saxon church depends

principally on a combination of two facts: that it was acknowledged as the mother church; and that it stood outside the medieval town at the site of the Middle Saxon settlement. The simplest interpretation of these facts is that the church was a rare survivor of that earlier settlement. St Mary's churchyard occupied an important place at the junction of the north-south streets with one or two streets running down to the waterfront (fig 10d). If a reeve had been settled in Hamwic, such a location would seem to have been an ideal base from which to superintend river and land traffic, and a church may have been built in or alongside the reeve's enclosure.

Allowing that it probably was a Middle Saxon church, what was its position in the scheme of Hamwic's churches? One must know first that the site of St Mary's remained important: it lay alongside the route connecting the Late Saxon settlement with an Itchen waterfront that continued to be used (see below). The dominance of St Mary's could have been a comparatively late development therefore. That church may have survived because of its position while other churches, less fortunately placed, disappeared with the rest of Hamwic. Regardless of its true ancestry, any survivor of the early settlement would have stood a good chance of being regarded as the mother church.

These quibbles are a necessary corrective to the usual view that because St Mary's was dominant in the Middle Ages it had to have been Hamwic's principal church. At the same time, however flawed the argument, one must admit the attraction of such a conclusion, which would explain why so few skeletons have been found to date at other sites. Any proof will be an archaeological one. As has been pointed out, direct investigation of St Mary's churchyard would probably fail to clear the matter up; but the question might be answered indirectly. For instance, if elsewhere in Hamwic one were to uncover a 'common sepulture', a large Middle Saxon cemetery that had been intensively used for a considerable length of time, such a find would minimise the likely role of St Mary's Church. This indirect approach is still at an early stage, after 40 years of investigation: only some 3% of the settlement has been archaeologically investigated and there is no reason yet to come to any firm conclusions; once far more of the settlement has been excavated, if no large cemetery has been found, one might even begin to suppose that there never was a dominant church in Hamwic. The other burial places that have been found provide some evidence, which is now considered in greater detail.

Other churches

Archaeological evidence for the existence of other churches is necessarily far from complete. Churches have been identified at excavated sites only because they were surrounded by Christian graves. In fact, only two churches are claimed, at SOUs 13 and 32, and one of these might be discounted. (Although a building seems to have stood in a part of SOU 32

where graves were dug, it is quite uncertain whether the building coexisted with the cemetery.)

It is more profitable to consider the burials. Judged by their similar elements, listed above, these appear to have been Christian. Digging a grave on an east-west alignment is not a uniquely Christian act; nor is the burial of an extended corpse, laid on its back, with its head to the west. But, in the absence of any indisputably pagan elements to the graveyards found so far, it is reasonable to suppose that they had been established after the conversion to Christianity.

The absence of churches from all but one or two of the cemeteries can be explained in a number of ways. Most obviously, the sites were small and were sometimes excavated and recorded indifferently. Perhaps churches did exist but have not been exposed or recognised. On the other hand, the graveyards were small and may never have contained a structure as large as a church. There is some reason to suppose that the church at SOU 13 had replaced a free-standing cross. If single crosses had stood at the smaller and earlier cemeteries of Hamwic, the surviving post-holes would provide little distinctive evidence.

Grave goods

Grave goods are found in many of Hamwic's cemeteries, if only in small quantities. In certain cases, they are everyday objects, worn by the corpse: a simple necklace adorning a child in her grave at SOU 32, knives sported by two adult male corpses at SOU 13 (fragments of two other knives recovered from later contexts having perhaps been redeposited with their owners), and a copper-alloy ornament or clasp worn on the shoulder of another adult male at that cemetery. Some of these might have had a symbolic function, with the knives for instance 'interpreted as symbols of a state of freedom' (Picard 1986, 11); but they can all be viewed principally as the trappings of clothed burial rather than as grave goods.

Other objects are more clearly grave goods. At SOU 47, in the 19th century, there was found a 'glass tumbler . . . by the side of a skeleton'. A similar find, also in the 19th century, was a 'curious vase of green glass . . . lying over the face of a skull' at SOU 48, which was probably a part of the SOU 34 cemetery (Atherley 1850, 162; Keele and Roach Smith 1857, 61). A body had been buried at SOU 32 with a sceat by its head. The SOU 32 grave is dated by the coin to after 700, and the grave at SOU 47 was probably a part of the same cemetery.

Two oriented graves were found at SOU 20, probably the earliest Anglo-Saxon features on the site. It is likely that only part of the western edge of the cemetery was exposed. Some human bone, recovered from the pits of SOU 1, further to the south, had probably been displaced from at least one other burial at that cemetery. Most of the grave contents had disintegrated at SOU 20, but enough survived to show that the bodies had been extended

and supine, and had been laid with their heads to the west. Among the objects recovered from the graves were two spear heads (one in each grave) and a long seax. These constitute the only certain weapons recovered from any of Hamwic's features.

One interpretation of the evidence is that the burials were pagan: weapons were not often placed in graves dug after the conversion to Christianity and 'the presence of the spears would normally be an argument for a date before the mid 7th century' (Barrett and Holdsworth 1980, 39). However, Prof V I Evison (pers comm), who has recently examined new radiographs of the object, remarks that they

show a band of pattern-welding along the blade. The back of the blade is defective near the point, but an earlier radiograph (published as Holdsworth 1976, pl VI C) seems to show that it was curved, not angled. It is therefore a Continental type and must belong to the 8th century,

If the seax is so late, the grave that contained it was dug long after the conversion to Christianity.

Other methods of disposal

By way of contrast with the cemetery at SOU 20, and also for the record, one must note that not all of the burials were made into cemeteries, or even into specially prepared graves. The apparently articulated skeletons of two infants have been found in rubbish pits, one at SOU 31 and one at SOU 36; sites where the remains of cemeteries were also found. Despite the limited evidence available about SOU 36's graveyard, neither burial seems to have been associated with the nearby cemetery or is likely to have been redeposited from a grave. Although the proportion of child burials is as high as we might expect it to be, with a fifth of all the bodies from SOU 13, for instance, having died in the first ten years of life (Thomson forthcoming), few child skeletons have been found and the sample is small. Insofar as this evidence can be interpreted, it may be argued that no mortuary distinction was practised against children of any age. They were not excluded from burial within the cemeteries, nor were their graves segregated into special areas. The disposal of two bodies into pits is therefore difficult to explain. It may have been the concomitant of infanticide, a practice seemingly known in Anglo-Saxon England. A well known testimony to this fact is found in a letter written around 746 by St Boniface to King Ethelbald of Mercia, in which he complained about the unchastity of nuns and laywomen, adding that 'when these harlots . . . bring forth in sin offspring conceived in evil, they for the most part kill them' (Haddan and Stubbs 1871, 354; Whitelock 1955, 754). Nevertheless, other explanations may be advanced. For instance, if the usual burial places had all been *loci sacri* — a plausible assumption — the infants may have been denied burial in consecrated ground because they had not been baptised. In short, it is unclear why they were disposed of into pits.

Differences between cemeteries

Burial into the graves of SOU 20 and burial into pits at SOUs 31 and 36 define the range of options available to the inhabitants when they sought to dispose of their dead. However, because they are particular extremes in burial practice, they are abnormalities and cannot easily be compared. Roughly similar interments also display differences from each other, and a comparison of these middle groups is more profitable. A comparison should be made principally between the cemeteries at SOUs 13 and 32.

The graves at both sites had been disposed into rows, but the graves at SOU 13 were marked, if at all, by a short-term mound of earth. The rows there had been deliberately reworked at least five times; and the result, which must have been plain to the gravediggers at least, was that a third of all bodies buried at SOU 13 had been completely redeposited, and many others had lost some bones to later grave cuts. When two rubbish pits could be dug at SOU 13 during a lull in burial, with the consequent disturbance of at least four bodies, one readily discerns a different attitude towards the sanctity of the dead from that displayed at SOU 32 where the cemetery consisted of rigorously separated graves. The graves at SOU 32 had often been quite elaborately marked. One had been overlain by a plank, or a slab of some other material; another had been surrounded by a low, roofless structure; and a third had lain beneath a small barrow, or been encircled by a ditch and low parapet.

Any wholly religious interpretation of these differences is almost bound to fail: quite simply, both practices exemplify a Christian norm. Examples are provided by St Augustine of Hippo and various Church councils. Augustine (XXII, xii-xx) had considered the many and varied threats that a body faced in the expected interval after death, before its corporeal resurrection on Judgement Day; and had argued that it was of no importance at all if in the meantime the body were to be eaten by beasts, or eaten by Christian cannibals, or in any way had its members dismembered and scattered. Notwithstanding Augustine's high reputation and authority, the desire to prevent the disturbance of bodies remained strong: a century and a half later, for instance, at the Council of Mâcon in 585, it was decided that normally no bodies were to be thrown out of their graves or tombs to make way for fresh burials (Conc Gall, 246).

Since one finds theological support for the burial practices at both sites, the differences could be explained as the Church's toleration of social attitudes. The differences in practice could embody differences in the perceived status of the corpses: an elite cemetery had perhaps existed at SOU 32. In support of these arguments, one may point out that if there was a church at SOU 32 a body had been buried within it. Long before it was officially sanctioned by the Council of Mainz (in 813), the burial of noble or holy corpses inside a church was countenanced, even welcomed, and by implication

common folk were to be denied such an honour (see below, p 134). The fact of interment in a church would strongly imply that the other burial practices could be interpreted as evidence of a high social status.

However, it is not certain that a church existed at SOU 32. One must not ignore the possibility that the other differences were changes that occurred with time. An exact dating of any of the graveyards is impossible; but there are sufficient reasons for supposing that one group of cemeteries was relatively early and shared certain characteristics, and another group that shared different characteristics was relatively late.

The early group comprises the cemeteries at SOUs 7/14, 20, 32/47, and 34/43/48. Each cemetery was the first Anglo-Saxon feature of the area. The evidence tends to date the cemeteries to around the first decades of the 8th century. The more ostentatious grave goods were all recovered from these early sites: the weapons from SOU 20, and the glass vessels from SOUs 47 and 48. As far as the evidence survives, it seems that very few bodies were redeposited as a result of new graves being dug. The only definite sign of disturbance while an early cemetery was in use is found at SOU 34, where one of the three intact graves also contained a dislodged skull. It is likely that another of these three graves was deliberately marked by a horizontal slab, much as one of the graves at SOU 32 was.

A different picture is provided by the relatively late cemeteries at SOUs 13 and 31, neither of which was the first feature of the site. At SOU 13, the graveyard succeeded a pit filled in the early Middle Saxon period, also a building that may have been Anglo-Saxon. At SOU 31, the graveyard was established only after a very lengthy sequence of Middle Saxon domestic occupation, and was possibly the last Anglo-Saxon feature in the area. Both sites are characterised by the absence of grave goods, except for the trappings of clothed burial, by an absence of elaborate grave markers, and by the redeposition of bodies — this last factor being most obvious at the more crowded SOU 13 graveyard.

It could be that the status of the inhabitants changed markedly in the early and the later periods of the settlement's existence, as (for instance) a villa *regalis* developed into a town, and that the change is reflected in Hamwic's burial practices. Except in the case of the armed corpses of SOU 20, an argument along those lines can be sustained only while the cemeteries are considered in isolation. By reason of its extreme smallness, the graveyard at SOU 32 might be interpreted as an élite cemetery, a special place reserved for the use of a noble household. However, the burial practices observable there were repeated on much larger scales elsewhere in the country; most clearly at St Peter's in Kent, where at least 388 bodies had been buried (Hogarth 1973, *passim*).

On balance, then, one prefers to argue that the differences between the two groups of cemeteries

represent only a change in time. A pointer to this is the different fates of the graves at SOUs 13 and 32. One reason for the use of coffins (or narrow, roofed chambers) might have been the desire to preserve the intactness of the buried corpse. If such was the case, these features did their job at SOU 32 while the cemetery was open; but they conspicuously failed at SOU 13. It has been argued that graves were dug in rows so as to prevent the accidental disturbance of earlier bodies (James 1980, 43-4); but row graves must have existed at SOU 13 for some other reason. Possibly, old traditions that still had meaning when SOU 32 was a place of burial were being followed haphazardly at SOU 13. Also, whatever care there may have been at the early cemeteries to prevent the intercutting of graves, this counted for nothing once the sites had been given over to domestic occupation. At that later stage, pits and wells were regularly dug through the graves and human remains scattered or intermingled with rubbish. If the large-scale redeposition of bones at SOU 13 finds no parallel in the burial practices of the earlier cemeteries, it is exactly paralleled by the carefree digging of later rubbish pits at all the cemeteries.

In fact, the scale of redeposition noted at SOU 13 might convince one that it was a later medieval urban graveyard, if it were not securely dated to the Middle Saxon period. This jumbling of bodies together may be a sign that space was becoming limited as Hamwic expanded and as burials were constricted to fewer cemeteries.

Changes in the cemeteries

The changes embodied in the different burial practices at SOUs 13 and 32 are not to be confused with an earlier supposed change from pagan to Christian cemeteries, associated with new burial practices (Hyslop 1964, 189-94). The evidence for that change is a matter of considerable debate (compare Morris 1983, 53-62), but it is of no concern here since Hamwic's cemeteries were probably all Christian places. Rather, the change is the replacement of early Christian cemeteries, located outside settlements, by Christian cemeteries located inside them. The change at Hamwic is masked by the fact that, as Hamwic expanded, it incorporated the earlier cemeteries that had once stood outside — although the putative cemetery at SOU 77, to the north-east of Hamwic, had perhaps been one of the early graveyards that was never built over, and other, similar graveyards may await discovery. Regardless of whether her arguments have a general application to the English kingdoms, Hawkes's date of around 750 for the change to burial within a settlement would reasonably fit the Hamwic evidence (Meaney and Hawkes 1970, 50-5). She attributes this change to the building of churches within settlements and their subsequent attraction of cemeteries. Although the true interpretation is probably far more complex (Morris, *ibid*), it may prove relevant that the only church

definitely identified through excavation at Hamwic was uncovered at a late cemetery, SOU 13.

The regular digging of graves within a settlement marked a strong change from earlier practices. Related changes are perhaps the eventual decline in the provision of grave goods, a practice that may have survived the conversion to Christianity for a considerable length of time, and the failure to preserve burials from disturbance. The corpse had become little more than a species of trash; figuratively perhaps, but also literally at all the cemeteries where bone unearched when pits were dug was treated as any other debris. SOU 13, with its reworked lines of graves, marks a readiness to continue burying long after the apparent capacity of the cemetery was exhausted. One might characterise this as the urbanisation of attitudes towards the burial of the dead, in that the problems of disposal would have been most acute in large agglomerations, and the solutions most extreme. Where numbers were greatest, the living were cheek-by-jowl with the dead and it became a question of which group was to dominate. One does not overstate the case when talking of 'a quite new attitude to the dead' and the initial need for People to be convinced 'that it was safe and right that the dead should be buried in their midst' (Meaney and Hawkes 1970, 51). Not for the last time, a large population in England had to come to terms with the pollution it was generating.

Changes in the layout

Around the middle of the 8th century, open areas and places first used as cemeteries had been given over to streets and the properties that fronted them. These later features embody a controlled but rapid expansion of the settlement, Perhaps connected with the establishment of links with the waterfront. The changes may have involved the infilling of open areas, with the subdivision of larger properties and the metalling of the thoroughfares that had divided them. Later changes to the layout of properties are also evident, with alleys, buildings, pits, and wells established and abandoned in a seemingly haphazard sequence.

Such are the main arguments about Hamwic's layout that have been presented so far. If some parts of the evidence indicate that occupation expanded into a particular area, other parts indicate that there was eventually a diminution in the population of that area. The backfilling of wells and storage pits probably began when it became inexpedient to maintain them in their original function. Perhaps the features were inefficient: the wells produced insufficient water and the storage pits eventually began to fill with water. On the other hand, if an area had been occupied by fewer people, such features would have become surplus to their original requirements and may have been used as rubbish pits. A similar picture is provided by the fate of some of the 'houses'. Occasionally, one finds evidence that

one 'house' was succeeded by another (evidence of this appearing most clearly, of courses at the Six Dials sites), but an equally strong impression is of buildings abandoned and the spaces they had occupied annexed to neighbouring properties for use as rubbish-disposal areas. The enlargement of surviving properties in response to a diminishing population may also provide an explanation of the rubbish pits that were dug through alleyways. One must be cautious in suggesting this, however: it is not fully certain that every alley fell into disuse once it had been cut through. For example, a gravelled surface at six vials was cut by a pit, yet seems to have continued in use, however difficult and dangerous that may have proved, for it was eventually remetalled with gravel once the pit had been infilled.

Referring to her seriation of the pottery, Timby (1988, 116) points out that 'most sites contain a few early and a few markedly late deposits but in general terms the bulk of the material falls into the less well defined "middle" period'. One might argue from this that occupation expanded fairly rapidly, stabilised, then declined fairly rapidly. It is Possible, however, that these generalisations hide a great deal of local fluctuation in land use and population size. Although one can identify different periods of intense occupation at different sites, the evidence is either too generalised or too limited to justify the conclusion that these changes were wide-scale, contemporary events, or that they occurred sporadically in smaller locales. The one certain conclusion is that the changes were seemingly not precipitated by sudden catastrophes. This is something of a surprise, for one of the only documents to mention occurrences within the place contains a reference to just such a disaster,

An historical work, surviving as a late-12th-century copy and falsely ascribed to Simeon of Durham, was compiled by Byrhtferth of Ramsey around the end of the 10th century. One of Byrhtferth's sources, for the years 732-802, was a northern chronicle or a set of annals that is now lost and is superior in certain respects to the surviving versions of the Anglo-Saxon Chronicle (for the ascription to Byrhtferth, see Hart 1982, *passim*, and Lapidge 1982, *passim*; for discussions of the value of the text, see Gransden 1974, 31-2 and 149, and Harrison 1976, 101-17). Byrhtferth records that in 764 many areas of England had suddenly been devastated by fire among them the towns of Stretburg, Winchester, Homwic London, York, and Doncaster (Arnold 1885, 42; Whitelock 1955, 242). Despite the curious fact that this national holocaust finds no mention in the Anglo-Saxon Chronicle, it is quite possible that a disastrous fire had occurred in Hamwic in 764.

There is no difficulty in supposing that such an event may have occurred. Wooden towns are an obvious prey to fire; and the risk was probably increased at Hamwic, where fire-using industries were scattered throughout the area (see the following section). Virtually every site excavated in the last 40

years has provided evidence of destruction by fire in the form of wattle-impressed burnt daub thrown into rubbish pits. Some of this material might be relatively dated to a point about the middle of the 8th century, but the majority either cannot be dated or is certainly unconnected with a fire in 764. Furthermore, one finds no widespread destruction layer. It is true that in certain circumstances ash will leave no visible trace after only a short passage of time (Hume 1982, 250); it is probable that Hamwic's wattle-and-daub structures would not have been wholly consumed (compare Bankoff and Winter 1979, 13-14), so that only a fraction of the settlement may have been destroyed; and it is possible that a great deal of the debris was sporadically cleared away at later stages. Bearing these qualifications in mind, one may not state that Byrhtferth was wrong, but there is no proof that he was correct.

Important events in Hamwic's development have been ascribed to a point about the middle of the 8th century: the general abandonment of small cemeteries in favour of a centralised burial ground, and the general completion of Hamwic's expansion. These seem not to have resulted from the putative fire of 764, an event that scarcely would have forced the abandonment of open cemeteries and would have hindered rather than facilitated the increase in the number of buildings. On the basis of the evidence available, one must conclude that Hamwic's rise, although subject to local variations and perhaps amended by local destruction, appears to have been a controlled process unaffected by internal catastrophe. Its decline, which probably first manifested itself as a reduction in population numbers rather than a shrinkage in the area of settlement, cannot be attributed to a fire in 764.

Population

Many of the features of the layout described in previous sections can be viewed as early attempts to organise a fairly large population; but an organisation that was less specialised and less recognisably urban than later appeared. In recent years, estimates of Hamwic's population size ranging from 4000 to 10,000 have been published. What have not been published, however, are the means by which the figures have been obtained, and all the estimates should be treated with suspicion.

It will have become clear that very few demographic conclusions may be drawn from the existing cemetery data, and one cannot expect to calculate the size of Hamwic's population from the numbers of skeletons found.

Another method of calculation would be to compare likely numbers with the likely population of medieval Southampton. The figures are necessarily inexact. As has been pointed out already, Hamwic was roughly twice the size of the medieval town, but there is no reason to suppose that it housed twice as many people. Its property units were larger (exactly

how much larger remains a matter for argument) and its houses were only single-storeyed. One should perhaps argue that the populations of the two settlements were roughly similar in size, the later population being twice as crowded as Hamwic's. The next problem is the assessment of the medieval population. Comprehensive figures for the population of Southampton's walled area were first produced in 1801, when nearly 6000 people were crammed into what had become an increasingly subdivided space, and it is improbable that the medieval settlement was ever that full. According to the poll-tax returns, there were 1152 taxable people in the borough in 1377 and 1051 in 1381. Allowance must be made for those people not listed because they were members of the clergy, or aged under 14, or successful tax evaders. Platt (1973, 262) suggests reasonably enough that about 1600 people lived in the borough in 1377. He argues backwards from that figure that, in the first half of the 14th century, before the arrival of the Black Death, when the population was probably at its greatest, it would 'have been nearer 2,500, and may have been two or three hundred more'. On that basis, and only very roughly, one can suggest that Hamwic sheltered at most 2000-3000 people.

Industries

Much of the industrial evidence must have disappeared. Certain features will have stood wholly above ground, or intruded to no great depth into the soil, or left remains indistinguishable from those of domestic features. Examples are the loom and the small clamp kiln. Implements made of wood, such as weaving swords and tournettes, probably have not survived. Many of the metal tools necessary for the carrying on of particular crafts have never been found, or survive in the archaeological record only as single finds. Once Hamwic's iron objects have been properly studied, this low rate of recovery may partly prove to have been a low rate of recognition; but it is also possible that tools were sufficiently valuable to warrant their maintenance or repair, and their removal when the craft workers finally decamped. It seems likely that certain by-products of the industrial processes have been overlooked: the excavations at Six Dials have taught us that hammerscale, for instance, is not found unless it is deliberately sought. And, since every object supposed to have been a whetstone has been washed as a matter of course, evidence for the use of touchstones has probably been destroyed.

Some industries are very indistinctly represented because the material worked tends to decay quickly. The slender evidence for woodworking and carpentry, which has scarcely been augmented since it was summarised by Addyman and Hill (1969, 721), is not yet worth another review. Similarly, although there are signs that horn was being worked, leaden objects cast, leather manufactured, and glass remelted, the

evidence from the sites described in this volume does not warrant a longer mention here. Although it is likely that Hamwic was the minting place of BMC Type 49 sceattas, and perhaps also other Series H coins, and that pottery was being manufactured in the settlement, there is little point in drawing further attention here to those crafts. No minting site has been found, and the claimed identification of a waster pit at SOU 16 is disputed by this writer (MF1:D6-7). Evidence about other industries is quickly reviewed below, in partial summary of what will appear in other volumes.

Smithing

'All excavated sites at Southampton have produced at least some iron slags.' This remark is as true now as it was some twenty years ago, when it was first made by Addyman and Hill (1969, 63). Virtually all of the material proves to be smithing slag. It seems that iron ore was being smelted elsewhere and the bloom transferred to Hamwic for further working. Anomalously high quantities of iron slag have been found at SOUs 4 and 5 (Cottrell 1980, 28-30), 15, 17, 34, and 99, and it is likely that smithies stood at or near these points. Most of the evidence from SOU 16 has disappeared and it is uncertain if this site disclosed higher than usual quantities of slag. If it did, there may have been a smithing pit near there—though not the panoply of industrial features previously claimed by Holdsworth (1976, 423). No iron-working features have certainly been found other than at Six Dials, where a far wider range of evidence points to the existence of two smithies. The iron-working features prove to have survived there as shallow negative features of a type that may have been missed elsewhere in Hamwic either through an unlucky siting of small trenches or because the last vestiges have been destroyed by later disturbance.

The iron objects most commonly found at Hamwic are knives, nails, rivets in bone combs, and keys. There seems no reason to suppose other than that most of these objects were locally made.

Copper-alloy working

Direct evidence of copper-alloy working in Hamwic primarily consists of moulds, crucibles, and unfinished objects. These have been found in small concentrations throughout the area.

Four tiles were recovered from SOU 8, each equipped with a central channel and used as small ingot moulds. Slightly larger ingots were cast in two limestone moulds found at that site. Addyman and Hill (1969, 68) record the discovery, at SOU 32, of half a ring mould made of marl. However, they doubt this interpretation of the object on the grounds that the stone 'could not have withstood the heat from bronze casting.' The objection was not accepted by Wilson (1976a, 268), and there is some evidence to suggest that even softer stones were sometimes used as moulds. A piece of chalk, apparently intended as a

casting mould, was found at Dorestad; and what seem to be several chalk moulds at Thetford Wars and Broekman 1981, 437; Bayley 1984, 111).

It is likely that small pieces of copper alloy were cut from an ingot and remelted in crucibles before being worked into finished objects. The crucibles that have been found were small, crudely formed thumb pots made from clay or brickearth and equipped with a slightly everted lip to aid pouring. These have been found at SOUs 8, 14, 15, 17, 34, and 99, as well as at Six Dials.

Besides the crucibles, the existence of some small ingot moulds is evidence that copper alloy was being melted in the settlement. The best evidence of a direct link between the working of copper alloy and the finished objects is provided by the assemblage recovered from SOU 8. There, two rubbish pits contained the copper-alloy-working debris listed above; also two pieces that apparently had been partly hammered into wire; and nearly all the finished copper-alloy objects found at that site. Hammered wire may have been connected with the manufacture of pin shafts: Parsons (1985, 36-7) finds no evidence that pins were cast and suggests that they 'were produced by hammering and cutting processes'.

The source of Hamwic's copper alloy has not been identified. It is not impossible that much was obtained by remelting other finished objects. The copper-alloy objects found at Hamwic are mainly pins, with smaller numbers of strap ends, tweezers, and a miscellany of other items (D Hinton, pers comm).

Bone and antler working

The debris from the working of bone and antler is a fairly common find in Hamwic, and concentrations have been found in pits at SOUs 14, 15, 32, and 34, as well as at Six Dials. The evidence usually and mainly comprises the sawn-off ends of the metapodial bones of cattle and the sawn-off burrs and tips of mostly red-deer antler. However, the remains found at SOU 14 pronouncedly depart from this norm. Very little antler is represented at that site; a wider choice of animal species was made (for instance, horse was regularly used); and there was a wider choice of bone type (cattle mandible, for instance). Also found at SOU 14 was a whale's vertebra that had been used as a sawing block (pl 6).

The finished objects most commonly found are combs, spindle whorls, pin beaters, and awls. Much of the larger debris can be related to the manufacture of such objects (compare, for instance, Addyman and Hill 1969, 75-6).

Textile manufacture

Almost all of the evidence relating to textile manufacture in Hamwic points to the preparation and weaving of wool. Studies of the animal bone recovered from Hamwic's rubbish pits (see, for instance, Bourdillon 1983, 159-63) show that in general, the sheep whose bones are found there

were not being slaughtered at an early age, and presumably, therefore, had been kept for their wool. The artefactual evidence mainly consists of spindle whorls, pin beaters, and loomweights. The surviving examples of the first two types of object are usually in bone although some stone and baked-clay spindle whorls have also been found. Most of the loomweights are bun-shaped and formed from 'clay'. They have been fired, presumably in domestic hearths or in bonfires. Some unpierced stones found at SOU 36 are thought by this writer also to have been used as loomweights, and it may be that other stones used as such have not yet been recognised. The remains of two wool combs have been found, one at SOU 16 and one at Six Dials. Once the many objects thought to have been iron nails have been more closely studied, it is possible that the teeth of other combs will be identified. Likewise, some of what have been identified as hair combs made of bone may prove to have been used as weft-beating combs: however, one must admit that nowhere in Europe have such objects been certainly recognised from this period. Other equipment may be represented by some of the copper-alloy tweezers (nippers?) and small iron shears that have occasionally been found.

It is assumed that weaving was done on a two-beam vertical loom. The exact location of these looms cannot be pinpointed, for the loomweights that are found have usually been disposed of into pits.

There is no evidence that cloth was finished by fulling or dyeing, although it is conceivable that one or both processes were being carried out. The one piece of cloth so far discovered cannot be taken as a typical product of what was a town-wide industry, always assuming that it had been woven in Hamwic. It is described below, p 109.

Interpretation

Objects may have been produced in large numbers in Hamwic for external trade or distribution, but so far there is no comparative evidence to that effect. The reasons for the organisation of Hamwic's industries remain obscure, and attention must be concentrated here on other matters, principally the size of the industries.

It is clear from the evidence provided by the Six Dials excavations that industries were each being pursued within separate properties. These activities seem to have been zoned by the household unit rather than agglomerated into larger units devoted to a single industry. Elsewhere in Hamwic, the evidence is less complete but seems to be the same: the scatter of industries (fig 12) is best interpreted if we suppose that the small sites afford but a glimpse of the wider picture displayed at Six Dials.

It was argued above that Hamwic's streets were not usually put to the same economic use as were streets in medieval Southampton. This is predict-

able: one would expect that goods produced in the Middle Saxon settlement were sold or exchanged at local market places rather than at shops. Such place's will have left evidence that awaits discovery or recognition — perhaps in St Mary's churchyard; or just inland of SOUs 10 and 13, where part of an apparently open area beside a street has been found, next to the river; or in the north, at Six Dials, where an anomalously wide street lined with buildings has been found. In this latter case, however, one must report that, although a search has been made, nothing in the animal-bone data strongly suggests that a market place had been located at Six Dials (Bourdillon 1987, 9).

Hamwic's industries, even those that are well represented in the archaeological record, are difficult to assess. An example is provided by the bone-working evidence from SOU 14. Although large amounts of waste were discarded at that site, the mean may have been no more than 150 fragments a year, or three a week. Other industries are likewise associated with comparatively small amounts of waste, and it is possible that they were seasonal occupations. If such was the case, a parallel might be drawn with the situation at Hedeby, where the antler worker 'did not work for the entire year, producing artefacts' (Ulbricht 1978, 120; and compare Schietzel 1981, 71).

However, the SOU 14 property was perhaps one of a number of properties alongside Chapel Road, in each of which a different part of an animal was exploited. Such a degree of specialisation would not exist where industries were seasonal occupations. It is anyway most unlikely that Hamwic was abandoned for much of the year: its large size, its regulated growth, and the maintenance of its streets and properties can be explained only if the population was generally a fixed one. In that case, it is difficult to guess what the inhabitants were doing with their time. The evidence given in the following section is that they formed a group outside rural society, and there is no cause to suppose (for instance) that they worked on the land for most of the year and devoted themselves to the production of objects only in the winter months.

Therefore it is just as possible that the quantification is wrong. Industrial debris is found most often in the late, upper layers of pits (examples are the SOU 15 assemblages); and yet it is clear that industrial activity was not only a late feature of Hamwic's occupation. Much debris must have disappeared from the record. To return to the example provided by SOU 14, several oddities in the assemblage make it very likely that only a small fraction of the bone-working waste was found, and one may assume that much was put on middens and later removed. If such events were occurring throughout the settlement, more data will have to be obtained before they can be interpreted with any confidence of accuracy.

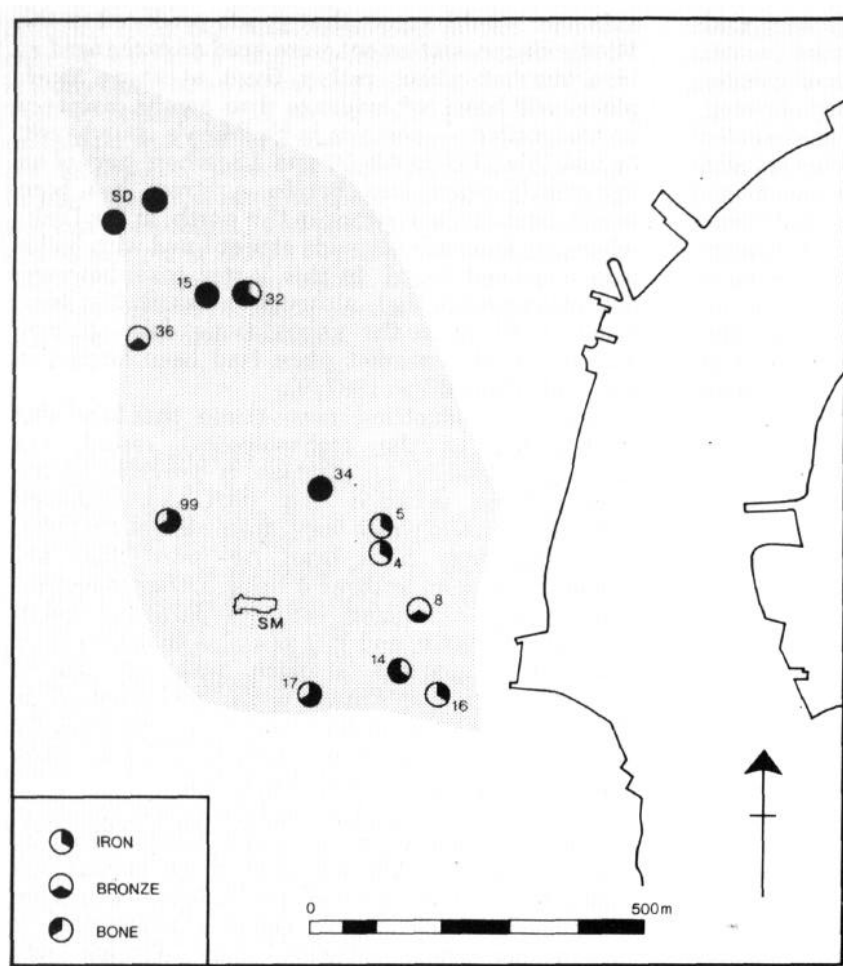


Figure 12
A distribution map of three of Hamwic's industries. For 'bronze' read 'copper alloy'. Site numbers are given without the 'SOU' prefix. Stippling indicates the extent of the town (as in fig 9b). Key: SD the Six Dials sites, **SM** St Mary's Church.

Husbandry, agriculture, and fishing

Although the soils south of the chalk downs are often poor (grades 4-5), in many places in the vicinity of Southampton

the countryside is diversified by the alluvial valleys of the Test, the Itchen and the Meon. Densities [of people and plough teams] here were generally higher . . . The villages of the lower Test and lower Itchen contained a good deal of meadow and some mills (Darby and Campbell 1971, 359).

Such is the picture derived from a study of Domesday, which also mentions the existence of salt pans and fisheries at various places along the shores of Southampton Water and the Solent.

Direct evidence of the composition and economy of the nearby countryside some three or four centuries earlier than Domesday has neither been sought nor been found by archaeological means. The large amounts of rubbish contained in Hamwic's pits perhaps testify to the slight regard the townspeople held for their garbage, but as yet the assumption that the inhabitants threw little of their rubbish

onto adjacent fields cannot be checked. Indirect evidence of a relationship between Hamwic and its hinterland is provided by, for instance, the numerous remains of food animals recovered from the rubbish pits. Bourdillon (1983, 70, 121, and 127) finds in the relatively 'uniform and distinctive' faunal assemblage evidence of an 'outstanding animal husbandry' dependent on 'an efficient rural base'. With the possible exception of an early property, parts of which were uncovered at SOUs 16, 21, and 22, nothing suggests that Hamwic's outskirts were given over to farms, as may have been the case at Dorestad (van Es 1969, 194-7; 1973, 212-6). That the rural hinterland remained to a large extent independent of this major settlement seems also to be indicated by the fact that the townspeople generally fed on the meat of old cattle, working animals that had been slaughtered when they were well past their prime (Bourdillon 1983, 137-8 and 178). It is clear that the economy of the countryside was not being modified unduly to serve the needs of a town. This divorce of the two areas is shown also by the fact that the inhabitants ate very little meat from wild birds and mammals (Coy forthcoming).

The first thing Leland mentioned about 'Old Hampton' was its fame on account of its 'fisschar

men, and sum merchaunts' (Leland, I, 275). The relative numbers thought to have been engaged in the two occupations is revealing, but probably only of the sorry state to which Southampton had come in the middle of the 16th century. 'Old Hampton' was wrongly supposed to have survived into the 14th century, and Leland's informants were probably thinking wistfully of a fairly recent golden age when the town's commerce was widespread. If so, the 'fishermen' that are mentioned had probably been born long after Hamwic disappeared.

Direct evidence of fishing appears only as the remains of the animals caught. The majority of this evidence, which is perhaps biased by the inevitable failure to recover many small bones except through fine-sieving, suggests that fishing at Hamwic was a coastal and riverbank activity; with eel, bass, salmon, and trout taken from the shore; and mackerel, sea bream, and herrings taken from a small boat working fairly closely inshore (Colley forthcoming b). The small amounts of whale bone found so far might have derived from the accidental stranding of a few animals. At all events, they can no more be taken as evidence that people in Hamwic ventured into deep sea than can the hypoplastron of a North African Green Turtle found at SOU 54 (Crawford 1942, 43; Maitland Muller and Waterman 1951a, 134).

Trade

Advantages of position

If Hamwic's main purpose had been defensive, it would have been built elsewhere, perhaps at Clausentum. If it had grown up at a fording place on the River Itchen, it would have been sited well to the north of its actual location. A large settlement established on a peninsula and at the mouth of a tidal river would seem to have been intended for trade.

McGrail (1985, 16) argues that Southampton's interfluvial region is a fine example of the site of a port of trade, roughly balancing the seaman's preference for sheltered landing places, the merchant's desire for easy access to an emporium, and the politician's anxiety to locate that port as nearly as possible at an outer point of the realm. Another advantage of position is the fact that Hamwic's coast faced the Continent, probably within direct sailing distance of the opposite shores. The settlement lay almost due north of the mouth of the Seine, a river that had been a tradeway in Roman Gaul and retained some importance in the subsequent centuries (see, for instance, Latouche 1967, 134-7; Devroey 1984, 580-1; Lafaurie and Morrisson 1987, 53-4). Any cross-Channel trade in the Solent area, such as is described further below, might be interpreted as an extension of commerce along the Seine (compare Peacock 1978, 51, for comments on Roman trade extending from the Rhine towards Britain).

Hamwic was approached by way of a sheltered waterway, the Solent and Southampton Water — the latter being described in the following terms late in the 17th century.

'tis Reckoned from Calshot Castle to the Town eight Miles [13km] distance of good and even soundings and sufficiently deep for any ship. The Flat Ouze on each side of large Dimention Even and of small declivity soft and safe for any body to rest on, in short whatever hazard or inconvenience is to be feared of rocky and stony passages and shoars and sandy shoals these offer no Danger (Welch 1964, 5).

Access was facilitated by augmented tides, and the landing shore was probably a gently sloping beach. Hamwic's proximity to Winchester may have secured it a number of land routes based on the Roman roads that radiated from that city (*frontis* and fig 5). These many virtues are no guarantee that the port was destined to be founded and thrive. However, they do mean that Hamwic was not disqualified from becoming a *mercimonium*.

The following pages are largely taken up with a further and more formal consideration of some of these points.

Documentary evidence

We possess one reference to Hamwic as a *mercimonium*. It is perhaps significant that the name by which it was called in this document and in another Continental reference (mentioned later) is based on the name-form *Hamwic*, for *wic* may be taken as an element signifying the trading aspect of a settlement. Addyman and Hill (1968, 64-5) argued along these lines when they suggested that this name 'may have been but the local and merchants' name for the harbour area of the settlement *Hamtun*.' Rumble (1980, 11-12) suggested more exactly that the two name-forms 'reflect . . . the mercantile and administrative aspects of the town'.

Huneberc's *Hodoeporicon*, which contains that reference to a *mercimonium*, has at times been cited as proof of contacts between Hamwic and Rouen. She tells how, at the age of five, Willibald was entered into the monastery of Waltham, some 14km to the north-east of Hamwic (later renamed as Bishop's Waltham: see *frontis*). Grown to young manhood, he prevailed upon his father and a brother to accompany him on a pilgrimage to Rome. In the late summer of perhaps 721, the would-be travellers went to Hamblemouth, about 13km to the south of Waltham.

Shortly afterwards they embarked on a ship. When the captain of the swift-sailing ship had taken their fares, they sailed, with the [north]-west wind blowing and a high sea running, amidst the shouting of sailors and the creaking of oars. When they had braved the dangers at sea and the perils of the mountainous waves, a swift course brought them with full sails and fol-

lowing winds, safely to dry land. At once they gave thanks and disembarked and, pitching their tents on the banks of the river Seine, they encamped near the city which is called Rouen, where there is a market (Talbot 1954, 157).

Huneberc was transcribing the story from Willibald's lips, and it is unlikely that the tale is substantially incorrect. Her description begins and ends with references to the marts of Hamwic and Rouen (*iuxta illa mercimonio que dicitur Hamwih . . . iuxta urbe que vocatur Rotum. Ibi fuit mercimonia*). Discounting the possibility that these references are only a stylistic device — for elsewhere the author displays little penchant for formally balanced periods — we may assume that they explain part of the journey. This explanation is geographical perhaps: in 778, when Huneberc was writing, Hamblemouth was unknown to her audience, but was easily located through reference to an internationally known mart. Equally possibly, Hamwic and Rouen were mentioned to explain the route taken by the ship: the clumsiness of Huneberc's afterthought, 'a mart was there', seems to embody this fact. The *Hodoeporicon* is evidence, therefore, of a traffic between Hamwic and Rouen in and around 721.

If we conclude that ships crossed the Channel between Hamwic and Rouen, we must admit that there were intermediary stages on that route, at least in Southampton Water and the Seine: the travellers embarked near Hamwic and disembarked near Rouen. Reasons of convenience might have influenced the choice of embarkation point. People travelling to the east of Hamwic, perhaps stopping first at the monastery of Waltham, would have found any journey to Hamwic more tedious than the comparatively simple journey along a river valley to Hamblemouth. If this is an explanation, it is an incomplete one, for Hamblemouth must have been chosen in the reasonable expectation of boarding a ship there; and it is possible that goods intended for the monastery, situated upstream on the Hamble, may have been more conveniently landed there. That Hamblemouth was practicable as a landing stage in later centuries is indicated by the authorities' efforts to prevent smuggling there (Morley 1983, 43); and Edwin Gifford (pers comm) suggests that Hamblemouth, although it would have been more exposed than Hamwic to the prevailing winds, would also have been free of the navigational constraints of Southampton Water (compare fig 5). The text prompts no suggestion that cross-Channel traffic was frequent or regular, but it tends to indicate its dependability.

If ships put in at intervening points along the coast, it is yet possible that their route between Hamwic and Rouen was a fairly direct one. Certainly, the ship possessed a sail (the phrase used is *velata navis*, translatable without undue strain as 'the sailing ship'), and would, one presumes, have been capable of running before a fair wind across the Channel. This was a north-west wind, a *Circius*:

unless the ship was heading eastwards, it could not have been coasting, but would have been blown into the Channel. More probably, the wind was awaited for precisely that reason, to enable the ship to reach the Seine.

There are a few hints that Hamwic also had direct contacts with Quentovic. Grierson (1941, 76) points out that in 688 King Cadwalla of Wessex gave 30 solidi to St Wulmer for his abbey of Samer, and interprets this event as a possible indication that the king landed at Boulogne on his way to Rome. The same facts could indicate instead that the West Saxon king had landed at Quentovic; but we do not know where he sailed from. A translation of relics from St Josse to Winchester (*ibid*, 78) might have been effected most conveniently by way of the nearby settlements of Quentovic and Hamwic; except that there is no good reason to suppose that Hamwic (or Quentovic perhaps) still existed in 901 — see below. In fact, a reading of the best documentary evidence suggests that Hamwic's direct contacts across the Channel were principally those with Rouen, early in the 8th century at least. Five years and less before Willibald began his journeying, Boniface twice took ship for the Continent — for Dorestad and Quentovic (Pertz 1829, 338 and 340; Talbot 1954, 35 and 38). On both occasions he boarded his ship at London; yet each time (it is specifically stated) he had had first to undertake a lengthy and difficult journey overland to London. It is probable that, on at least one occasion, he set off from his monastery at Nursling. Supposing that Hamwic was in existence and that some secret design did not force a journey to London, one presumes that the reason Boniface did not sail from the *mercimonium* located conveniently nearby was the unlikelihood of finding a ship there bound for Dorestad or Quentovic. Physical reasons for this are suggested by Gifford (1986, 129):

the route to Rouen gives a broad reach across the SW and NE winds. In stable weather conditions . . . the Rouen trip could be readily undertaken by a vessel with only moderate ability to windward. . . . [W]ith an average speed of 4 knots . . . the voyage would take just 24 hours, so the effect of ebb and flow of the tide in the Channel would be balanced, a further simplification of navigation.

Finally, [one notes] how similar are the approaches of the Seine to those of Spit Head [shown on fig 5 in this volume] — in both cases a wide estuary narrowing steadily to give good shelter, fringed by sand or mud banks. All these are conditions helpful to the crew of a shallow boat so that this crossing would present few problems to a hardy, competent crew in a sound vessel.

[A journey to] Dorestad would have been more of an undertaking than the straight Channel crossing. Not only is it half as far again (in the direct line) but much more of it is likely to have had to be made against the wind as it is unlikely

that both winds would have been favourable for both directions of the journey. With a small crew it would have been impossible to row against strong headwinds and it would probably be unwise to shelter in strange rivers.

If Hamwic's direct contacts across the Channel were limited at any time to a small portion of the French coast, the restriction may not have been too burdensome. Indeed, it may have worked to Hamwic's advantage. For example, a route to the important fair of St Denis (transferred to Paris before 710 as the result of a fire) would have been by way of Rouen and the River Seine, and the easiest cross-Channel route for Rouen may have been by way of the Solent. Evidence for the early existence of the fair mainly consists of three charters, one issued by Childebert III in 709, in confirmation of earlier privileges; one issued by Pepin the Short in 753, and one that is a forgery, written probably in the last half of the 9th century or early in the 10th. The details differ somewhat between the texts, but deliberate reference is made in each to 'Saxon' traders (*negociantes*) who seem to have been important to the economy of the fair; and the forged charter mentions overseas traders reaching the fair by way of Rouen (Pertz 1872, 68 and 141; and see also Levison 1946, 8 n1). The fair was held in October; for four weeks according to the forged charter. Just possibly, Willibald's ship, which sailed in late Summer, may have been headed for the St Denis Fair.

Origins

Somewhat tardily, one must reveal that Huneberc is credited with writing another narrative of the crossing from the Solent to the Seine; in the *Life* of Wynnebald, who was Willibald's brother and travelling companion. (The relevant passage can be found in the supplement, MF2:K1.) There is an important difference between the two versions, which could not be considered before without risking total confusion. Conclusions already drawn will not be overturned; but a consideration of the *Life* can provoke a different emphasis of the facts. It remains likely that the travellers took ship at Hamblemouth: why else should Huneberc mention it in the *Hodoeporicon*? However, according to the *Life*, they embarked at an unnamed *mercimonium*. Do we take this to mean that Hamblemouth was a *mercimonium*? There are arguments for and against the notion.

If Hamblemouth was a *mercimonium*, it is odd that Huneberc should have been careful, in the *Hodoeporicon*, to locate the place 'next to the mart called Hamwic'. She could have written more simply that 'they left from the mart called Hamblemouth'. So it is possible that Huneberc misled her readers when she wrote, in the *Life*, that the travellers embarked at a *mercimonium*. A reason for this deception might lie in the nature and purpose of the

two texts. The *Hodoeporicon* is in many respects an itinerary, in which it becomes relevant to name the embarkation point and give an accurate location; but the *Life* is more properly hagiography, in which no great harm is done if most details of place are simplified. One finds, for instance, that Rouen is not mentioned in the *Life* either.

Nevertheless, it is still possible that Huneberc had to insert the reference to 'the mart called Hamwic' only because her audience late in the 8th century would not have recognised the name of Hamblemouth. The reference would then carry no implication about the status of Hamblemouth in 721. Reading the texts in this manner, one might infer that both Hamwic and Hamblemouth functioned as *mercimonia* early in the 8th century. As has been shown, there are no physical barriers to the use of Hamblemouth as a landing place; and it seems that the travellers expected to find at least one ship there. Furthermore, the *Life* gives reason to suppose that there were sailors to be questioned at the place of embarkation, a building where they could be found, and a place of shipping to be visited (MF2:K1-2).

In the *Life*, Huneberc defines a *mercimonium* as 'a place of buying and selling' (*loca venalia, quod est mercimonium*) (Holder-Egger 1887, 107). That definition could be applied to a small market place as much as to a great emporium. In a similar way, Grierson (1959, 125-8) has demonstrated that *mercator*, another word derived from *merx*, gives no clue to the volume of trade, the nature of the goods traded, or the distances over which they were carried. It is therefore possible that somewhere with no more than a few buildings, and visited by no more than a few ships, might have been called a *mercimonium*. On that sort of scale, several *mercimonia* might have lined Southampton Water and the Solent, early in the 8th century.

By the end of the 7th century, there had been established a number of important religious centres close to the South Coast and situated on or near rivers that flowed into Southampton Water. Examples are the monasteries at Nursling and Waltham, and Winchester, the centre of a West Saxon see (*frontis*). It may be, too, that a villa regalis was in existence at the site of Hamwic, near to a seasonally visited beach market. No such feature has been recognised, but, given the nature of the excavations in the south-eastern corner, it is unlikely that a beach market superseded by more permanent occupation would have left much recognisable evidence. A flow of goods to these places could be interpreted, not as trade, but as gift-exchange; but King Cadwalla's conquest of the Isle of Wight in 686 and his attempt to exterminate the islanders (Bede, IV, xvi) perhaps indicates that more was at stake. Studying the records of Anglo-Saxon graves discovered on that island in the 19th century, Arnold perceived a similarity with Early Saxon Kentish evidence and suggested that a Kentish-dominated trading station had been established on the island, which 'may be

seen as the predecessor of the middle Saxon port of *Hamwih*' (Arnold 1979, 286). Perhaps Kentish links with the Seine basin were more conveniently maintained by way of the Isle of Wight, located north of the mouth of the Seine (*frontis*).

If Hamwic's rise followed Cadwalla's conquest of the Isle of Wight late in the 7th century, presumably that rise was complete by the time the *Hodeporicon* was written, when (it has been suggested) a place like Hamblemouth could be located only through reference to the neighbouring mercimonium. Where few records exist, there is little value in mentioning an absence of evidence: nevertheless, it could be worth noting that no other reference to a Middle Saxon Hamblemouth has survived. And it may also be relevant that the Roman road from Winchester to Chichester, which passes by Bishop's Waltham (*frontis*), fell into isuse and disappeared (compare Taylor 1979,100). Writing of an event that occurred in 721, Huneberc perhaps recorded a late survival of scattered commerce in the Solent area.

Ships

In the initial discussion of the *Hodeporicon*, it was stated that the craft that carried Willibald across the Channel was a sailing ship. Although Huneberc refers to the *velata navis*, she also indicates that the travellers went aboard 'amidst the creaking of oars' (*remigiis crepitantis . . . ascenderunt*). The use of oars on a sailing ship is quite natural in difficult situations such as shoaling water or narrow seas, or when pushing off from a mooring.

Hodges (1982, 95-9) proposes instead that trade was carried on in vessels that were usually rowed. If he is correct, the large crew needed would have necessitated a reduction in cargo space, and a far less adventurous navigation would have been possible. Since the only local evidence consists of a few sentences in the *Hodeporicon*, this is not the place to argue the matter. The principal points will be found in the supplement, however, where it is argued both that Hodges has misinterpreted a great deal of the evidence (MF2:K6) and that cross-channel traffic in the 8th and 9th centuries was principally sailed.

When the evidence of the fish bones was summarised, it was stated that most of the fish could have been caught close inshore. This fact might contradict the evidence for longer-distance sailing. One should perhaps interpret fishing and the carrying of goods as occupations carried out by separate groups of people. Once the waterfront has been located and investigated thoroughly, it may be possible to write further about these supposedly different groups.

Waterfront

All the ships mentioned in the supplementary report probably were clinker-built. Hornell (1948, 243) states that such ships are comparatively light and can

be drawn ashore relatively easily. The ships that arrived at Hamwic beached on the shore, one presumes, and were unloaded there. Before attention is turned to the goods that were unloaded, the location of the landing shore must be considered.

Certain late documents seem to contain references to that place. In 962, King Edgar made over to Abingdon Abbey his rent or toll at Southampton (*censum quoque regale . . . aet Suthhamtune*) (K1239; S701). It is possible to read the following sections of that charter as an explanation of the grant; a fishing toll and the royal toll at *Hwitan Clife*, and the same at *Portmonna hythe*. That, effectively, was the reading of Addyman and Hill (1969, 89), who proposed that *Portmonna hythe* was Hamwic's landing shore. More probably, however, the charter details a number of disparate grants: a vineyard at Watchet in Somerset; the royal rent or toll at Southampton; certain dues at *Hwitan Clife* (a place unlikely to have been associated with Southampton, which boasts no white cliffs); similar dues at *Portmonna hythe*, wherever that was exactly; and some grants at *Brunwic wer*, which perhaps was Brownwich, located at the southern extremity of Southampton Water (*frontis*). With such a reading, there is no cause to suppose that any of the other places mentioned was part of Anglo-Saxon Southampton.

If it was not known as the Portmonna hithe, the landing shore may have been known as the wic-hithe. Two Late Saxon charters mention the existence of such a place. The first (of Ethelred, 990 x 992) grants the land holding of South Stoneham to an unknown person, and the second (of Edward, 1045) grants it to Winchester Cathedral. The charters (K713 and K776; S944 and S1012) both survive only as 12th-century copies but are held to be authentic. The later of the two, which is cited below, generally repeats the bounds of the earlier one but adds more detail and separately mentions a few extra grants.

The greater amplification is of no help when the landmarks mentioned are such unrecognisable points as 'Wadda's stake' or 'Bicca's post'. Apart from the fact that the first area specified lay south of South Stoneham (*frontis*) and on the east bank of the River Itchen, the boundaries are generally unclear. Consequently, there is little point in considering the charters in any great detail here. The southernmost limit of the east-bank territory ran 'from the white stone along the baulk to the wic-hithe at midstream'. The directions continue: 'along the stream upstream to the creek' (*lace*). The land area defined in all subsequent entries lies on the west bank of the river, and we may presume that this creek was also situated there. As Burgess points out, the 'traditional Portswood boundary actually starts at such a creek' (Burgess 1960, 11); to which one might add that there are anyway no other likely candidates for this landmark, which was probably a point on the west bank of the river, due west of Clausentum (fig 13b).

The wic-hithe lay downriver of the creek on a bank of the Itchen. We may deduce that it lay some distance downriver of that point, in the first place because the

charter locates it at or opposite the southern extreme of the land holding; and secondly because, if the creek had been visible from the wic-hithe, the directions would probably have been only something like '... to the wic-hithe at mid-stream; to the creek'. Crawford (1949, 46) used similar arguments and also drew attention to the similarity of the names *Hamwic* and the *wic-hithe*. Since we know that the names of other towns were similarly shortened — for example, in the Kentish laws of Hlothhere and Eadric, where London is referred to both as *Lundenwic* and as *wic* (Attenborough 1922, 22-3); and on certain coins of Quentovic, the legends of which are *Wic in Pontio* (Dhondt 1962, 185) — there is no especial difficulty in supposing that Hamwic's landing shore was the place referred to. But where, more precisely, was it located?

It is suggested above that the lagoon was a fairly small feature, surrounded on its landward side by salt marsh. The presence of this marsh, divorcing the water's edge from the settlement, makes it unlikely that the lagoon was regularly used as a natural harbour. Although we may assume that the landing shore was equipped with hards laid down to prevent the sinking into the mud of the carts drawn up alongside ships (compare Ellmers 1985, 27-8), perhaps a more economical disposition of these hards would have been alongside the Itchen. According to the evidence of the streets, Hamwic's waterfront lay to the east of St Mary's Church, not to the south-east.

Because of the concentration of SRC's excavations in the vicinity of Chapel Road, which is thought to have been one of these streets, a fair degree of evidence has been acquired that that area at least was connected with the business of the waterfront. The best of this evidence is provided by the pottery and glass found near Chapel Road. Continental pottery of various periods is found in all areas of Hamwic, but forms a much higher percentage of the site assemblage in the vicinity of Chapel Road. The nearer the site to the river, in general the higher is the percentage of imported pottery. This rises dramatically in some features, for instance to 80% in a pit excavated at SOU 7. If glass vessels were imports, certain concentrations of that material on the south-eastern sites (especially SOU 14, where 147 fragments were recovered) are also noteworthy.

Some of the evidence might be interpreted as showing that the street links with the waterfront were not original features of the settlement (see above). Even so, at least one route — Chapel Road — seems an early feature, associated with early Middle Saxon occupation on either side of it. This fact, together with the high percentage of imported material, strongly suggests that the wic-hithe was functioning at an early stage in Hamwic's development, and it does not preclude the possibility that the hithe itself was a primary feature.

Archaeological evidence

Limitations of the evidence

Turning aside for the moment from one small spot alongside the River Itchen, it is unfortunate that any study of local trade through or within the hinterland is handicapped by the general lack of excavated evidence. Yet there is no reason to suppose that it did not form a major part of Hamwic's commerce. It has been argued that late medieval roads out of Southampton were in a far better state of repair than is usually admitted (Turner 1945, 174) and one might suppose further that Middle Saxon routes were in no worse a condition — were probably in better repair if we accept the argument that two Roman roads had been made over into a new, Anglo-Saxon route between Winchester and Southampton (Taylor 1979, 100). However, no archaeological investigation of the probable land routes out of Hamwic has ever been undertaken. And, despite Hoskins's championship of rivers as routes of commerce, no search has yet been made for such things as intermediate landing places along the River Itchen.

There is virtually no evidence that anything made in Hamwic was exported, perhaps because few likely sites have been extensively investigated. But the only distinctively Hamwician objects are Series H sceattas and the lack of evidence is anyway hardly surprising. Moderately well provenanced coins have been recovered singly at four sites in the western half of Wessex and at the ruined abbey of St Wandrille, downstream of Rouen. Less certainly provenanced are occasional finds scattered in England as far as London and the Thames valley; and on the Continent at Domburg (Rigold and Metcalf 1984, 252-61; op den Velde *et al* 1984, 141 and 145; Metcalf 1988, 44). These few coins are spread roughly through the main areas of contact indicated by the imported goods found in Hamwic's rubbish pits (*frontis*), although they do not necessarily indicate direct trading links: St Wandrille's, for instance, was an immensely rich abbey which acquired much of its wealth through gifts of land and precious metal. More might be said about the evidence from Domburg, where the two Hamwic-issue sceattas recovered represent only 0.2% of the coin finds: the smallness of this percentage could reflect the tenuousness of the connections between Hamwic and the Low Countries.

Imports provide much fuller evidence of the range of Hamwic's external contacts. Usually excluded from the reckoning are objects transported over only a little distance. This avoids the problem of distinguishing an object likely to have been made in Hamwic from one likely to have been made closely nearby, and it further simplifies the issues by emphasising the existence in the place of widely disseminated objects.

For these reasons of convenience, a similar approach has been adopted here even though one risks creating a hierarchy of goods that probably

does not reflect the true volumes of their traffic. We know, for instance, that in Late Saxon London tolls were being levied not only on such things as wine and leather, brought in from continental Europe, but also on butter, cheese, chickens, and eggs (Robertson 1925, 72-3); goods presumably produced locally and brought to a local market. While Hamwic was in existence, the objects most commonly and most regularly transported into the settlement may have been foodstuffs.

Any decision to exclude such things from the reckoning is bedevilled by the present impossibility of defining the extent of Hamwic's locality. One might define it in a topographical sense, meaning a certain area adjacent to the settlement or quickly accessible from the settlement; or define it in a political sense, either meaning the district administered from Hamwic or meaning the kingdom that included Hamwic. Each of these definitions has been endorsed by at least one recent commentator on the evidence. According to the particular definition favoured, Hamwic's locality might be measured in several square kilometres or several thousand square kilometres. And it is conceivable that the boundary of this region changed with time, as Hamwic's fortunes also changed. Since the excavated evidence has provided no means of resolving these problems, the need to establish an arbitrary limit is clear. The inexactitude of a single limit is shown up if one remembers that market areas will differ in size according to the nature of the goods being traded (compare Everitt 1967, 497-501, for post-medieval examples). However, it seems best to pluck just one figure out of the air rather than decree a graduated scale of arbitrary distances. Hodder and Hassall (1971, 404) proposed that in Roman Britain 'the approximate distance along the main roads from the major unwallled settlements to the edge of their tributary areas' was usually about 13km. Although, of course, one cannot precisely apply their conclusions to a study of Middle Saxon Wessex, their analysis will serve as a reminder that there is no obligation to define Hamwic's locality in very ample terms. An exclusion zone of 10km radius about Hamwic is imposed here. This is confined to the area south of the chalk downs and effectively includes all the neighbouring estates that were gathered by the time of Domesday into the Mansbridge hundred (*frontis*).

It is not clear whether certain things were produced within a 10km radius. Since the animal seems not to have been bred in pre-Conquest England, one can take the rabbit's scapula found in a well at SOU 7 as probably the remains of imported meat and 'an indication of some contact with foreign customs or tastes' (Bourdillon 1983, 95); but other remains must be even more cautiously interpreted. One does not know exactly where domestic animals were reared. Nevertheless, the 10km radius effortlessly encompasses all the estates that clustered around Late Saxon Southampton and it is likely that the immediately surrounding area was a major con-

tributor of food. Human beings are also domestic animals of uncertain provenance. Wherever they came from, death will have stripped them of their nationality. Doubts remain too about the traffic in wild creatures. Few post-cranial bones are included in the remains of red deer found in Hamwic. Most of the remains are associated with an industrial use, and their appearance in Hamwic is a sign of a deliberate traffic in the material; but we have no way of knowing where the shed antlers were picked up, or where the deer were hunted and cut up. In the Late Saxon list of tolls just cited, reference is made to the 'men of Rouen' bringing some sort of whale or porpoise into London. Their predecessors could have been plying a similar trade with Hamwic, but the whale bones found in the settlement are no proof of this.

Inevitably, little attention can be given to things that have disappeared. Two casks, recovered from SOUs 7 and 11, have been interpreted as originally the containers of wet goods such as wine or fish and of dry goods such as salt (Morris forthcoming). Useful as this information is, it will gain a wider relevance only when considerably more casks have been found and studied. This is unlikely to occur: most of the casks that remained in Hamwic will have disappeared, either because they were burnt as firewood or reworked into other objects, or because they have mouldered away over the centuries. Other objects will have been rendered unrecognisable through similar processes of change and decay. Examples are drinks and foodstuffs that were wholly consumed (oil and honey perhaps) and coins that had been melted and restruck in Hamwic.

Some evidence cannot be considered here because it does not exist yet. The iron objects are greatly in need of detailed study. They have not properly been typified, for instance; locally made objects have not been distinguished from imports; potential exports have not been identified; none of these groups has been quantified; and distributions have not been mapped.

In short, evidence relating to Hamwic's commerce cannot be sought where it has disappeared or has not appeared; nor easily sought among goods likely to have been produced within a 10km radius; nor usually sought among the place's exports. The remaining evidence, which it is time to consider, represents therefore a fraction of the goods that moved into and out of the settlement.

Surviving evidence

Excluding coin hoards from the reckoning, about half of the sceattas found in Hamwic certainly were minted elsewhere or are imitations of coins minted elsewhere. Most of the Continental sceattas appear to have been produced in the Low Countries or Frisia (25 Series D, E, or X sceattas have been recovered). Some of these are imitations; and it has been suggested that Hamwic's nine Series X (Wodan/monster) sceattas were struck in Denmark, not in north Frisia as is generally assumed (Metcalf 1984b, 161-4). In contrast

with this North-Sea-coast distribution, only two Merovingian sceattas have been recovered. About a quarter of Hamwic's English sceattas were minted outside Wessex. They originated mainly in Kent (perhaps twelve examples), the upper Thames valley, and London (together, perhaps eleven examples) (Metcalf 1988, 18-20). Although one must not argue from this evidence that Hamwic therefore had direct links with every place where these coins were struck, it is nevertheless clear that it was not a place entire unto itself.

The provenance of the glass found throughout Hamwic has yet to be established, but it seems not to have been the same as that of Scandinavian glass. Despite slight signs that it was manufactured in Hamwic, the more attractive interpretation remains that it was imported from the Continent (Heworth and Hunter forthcoming).

That certain goods flowed into Hamwic is indisputable. About 18% (by weight) of the pottery found there had been imported from the Continent (Timby 1988, 90). Some of the pottery regularly found in Hamwic has been provenanced to production centres in the Seine valley, perhaps near Rouen. The most common of these, Hodges's class 11, Timby's fabric 127, is 'well represented on Hamwic sites' (Hodges 1981, 19; Timby 1988, 91). Northern French pottery is also found, and might have arrived by way of a place like Quentovic. However, it appears from unambiguous documentary sources that Quentovic's English contacts were sited far to the east and north-east of Hamwic, and the link may have been an indirect one.

Some kind of a link with the southern Low Countries is suggested by various pieces of evidence, most obviously the fairly common occurrence in Hamwic of greywares provenanced to eastern Belgium or Holland west of Aachen (Hodges 1981, 21). Furthermore, often found at Hamwic are the remains of quernstones, usually cut from lava that can be provenanced to the Eifel region. From approximately the same area may have come the Badorf and Mayen Wares occasionally found in Hamwic (*ibid.*, 18-19 and 83-4). One presumes that any contact between Hamwic and this one area of the Rhineland was channelled through the Scheldt—Rhine estuary. Another intermediary point may have been Kent: the method of burial evident in one grave at SOU 32 is influenced by that noted in many graves in the southern Low Countries, but the effects of that influence can also be seen in a number of Kentish cemeteries.

Contacts with other parts of England are suggested by the pottery found in Hamwic as well as the coins and the configuration of a grave. The most obviously foreign of the pottery is tempered with igneous rock (Timby 1988, 89-90). More local contacts are presumably represented by the chalk found. This material was probably imported from one of the many places where it occurs on the downs — from very nearly anywhere inland and more than 13km away. Despite the importation of this stone into Hamwic, it is doubtful whether the chalk-tem-

pered wares that form 15% (by weight) of the pottery assemblage were manufactured in the settlement.

It was suggested above that Hamwic imported the bloom from iron-ore-smelting centres located outside. The point of origin of this material has not been identified, although presumably it was somewhere close to Hamwic, perhaps at Romsey, 14km to the north-west, where evidence of smelting is being uncovered (Russel 1987, 18).

Other stone, besides the lava and chalk mentioned above, must have come from places outside Hamwic. One awaits a study of this material comparable with, for instance, the work of Kars and others on Dorestad's stone. Nevertheless, some initial points can be made.

Ellis (1969, 147-82) considered seventeen honestones found in Hamwic between 1946 and 1963. Seven he provenanced to Brittany or western Normandy; seven to the Purbeck Beds of Dorset; perhaps one to Kent; and two to points in the West Country. It is interesting that a later study of honestones (Moore 1978), which included no objects found closer than Winchester, identified very few stones similar to those recovered from Hamwic — the only recurrence being of the sandy limestones that constituted 'seven out of seventeen of the Hamwih hones' (Ellis 1969, 182). But one may not certainly state that the sandy limestone (a material found relatively frequently in Hamwic as undressed blocks) formed part of Anglo-Saxon ballast or cargoes from Dorset, for this material might have been taken from the nearby Roman settlement of Clausentum.

The evidence suffices to indicate that, perhaps sometimes indirectly and in their most limited form, Hamwic's contacts ranged over much of southern England and across the Channel mainly to Neustria: to what became Normandy and northern France, and to the southern Low Countries. But how is one to characterise these contacts?

Interpretation

Greater arguments about Dark Age traffic have to be mentioned, but can only be sketched in a volume of this sort. To put the matter bluntly, modern opinion has been divided usually between those who tend to accept the thesis of the Carolingian 'economy of no trade' and those who do not. Before the end of the Second World War, English archaeology could add very little to the debate: few settlement sites of the period had been identified and investigated, and the data from the many burial sites that were known were inadequate to the testing of the hypothesis. In the last 40 years, however, evidence of a sort and quantity previously unavailable has been gathered as Hamwic and other occupation sites attracted the attention of archaeologists.

Premature claims that evidence of trade was being unearthed at these sites were contested by Grierson. Citing the diplomatic evidence, he argued that the movement of goods in the Dark Ages, even

sometimes the most commonplace of goods, is no evidence of trade: it may be explained as the results of war, gift, and exchange. If necessities had to be brought in from outside the group, they were bartered for at local markets. Fairs, supplied by chapmen, were of less importance. In these conditions, there was very little need for coinage as a medium of exchange. Coins were minted in only a few areas and were often limited in their distribution, and accordingly their existence is no sure sign of trade. There is no documentary evidence that coins were being minted in large quantities before the 9th century, and 7th- and 8th-century coins probably served a social purpose (Grierson 1959, *passim*; 1961, *passim*).

Hamwic's traffic might be interpreted in this way. As has already been stated, Hamwic was not laid out as a function of the shoreline. This in itself could suggest that it did not principally depend on the importation of goods from overseas. However inexact, a comparison of artefacts indicates that public life was by no means entirely taken up with mercantile business. Although imported goods were distributed widely in Hamwic, it seems that local industries were fulfilling most of the inhabitants' needs. The presence of a king or his deputy at what may have been an administrative centre (see below) and the possible existence of a *monasterium* may have been sufficient attractions for many of the foreign goods that arrived in Hamwic.

The apparent disparity between the historical and the archaeological evidence still has not been resolved. Both evidences are flawed and one cannot clearly identify the motivation behind the movement of goods into Hamwic. The problem of assessing the nature of Hamwic's trade is akin to that of calculating the population of an early town when the records are scant and one does not know what the rates of immigration and emigration were. It is clear that some allowance must be made for unrecorded items, but it is uncertain how much allowance should be made.

An example is provided by the lava recovered. It has often been pointed out that Charlemagne may have been referring to such lava when he wrote of Offa's interest in importing 'black stones' (Haddan and Stubbs 1871, 497). If so, Charlemagne's letter probably shows that the querns supposed to have existed in Hamwic were valued objects, and it might suggest that the importation of the lava was exclusively a royal concern. Since reworking does not disguise its place of origin, and since we can assume that its bulk prevented it from being a constant chance loss, the amounts found in Hamwic should enable us to quantify with some hope of accuracy the amounts of that stone that remained. Unfortunately, this is not the case.

At two of the large Six Dials sites, roughly equal in area and excavated in the same manner, the quantities of lava recovered differed by a factor of 3.6: 4.4kg from SOU 24 and 15.8kg from SOU 26. A similar picture emerges from the smaller excava-

tions undertaken elsewhere in Hamwic. The clearest example is provided by SOU 8, where 2.7kg of lava were recovered. Area-for-area or pit-for-pit, this is a larger amount than was found at SOU 26. We might choose to relate this comparative wealth of stone to the fact that SOU 8 was a site that lay far closer to the waterfront than SOU 26, but such a conclusion would be a hasty one. All the lava from SOU 8 was recovered from a single pit: had the site been 7m shorter to the west, none would have been found. When quantification can be so considerably altered by the accidents of trench placement, almost the only reasonable guess is that more lava than has been found was brought into the settlement. That far more was imported is indicated by the fact that lava was turned into quernstones, and whole querns were not thrown away. Presumably, therefore, they were removed by the departing inhabitants. And, because fragments have been found at most sites opened in Hamwic, presumably querns were in general use there.

The diplomatic and literary evidence prepares us for a ring-giver's distribution of certain goods or lands among his followers, a traditional action of reward, policy, or spontaneous generosity; but it fails to explain the spread of this stone throughout a comparatively large settlement. One may reasonably suppose, therefore, that the inhabitants of Hamwic acquired their querns for themselves by trade. The evidence does not allow one to characterise that trade more closely. Whether the lava was an important object of trade or was principally brought over as ballast; whether it was regularly discharged at Hamwic (and if so what heavy materials replaced it in the ships); and whether most of the lava brought over was retained by the inhabitants for their use, or immediately passed through the place to other centres: these are some of the problems that await a solution.

Similar, contrary arguments can also be made about objects that were perhaps the concomitants of trade, for instance the coins found throughout Hamwic. In contrast with the querns, however, their place of origin can be disguised by reworking and they seem often to have been chance losses. The problems of interpretation are accordingly different.

The foreign coins that have been found since 1946 are fewer than the alms of 120 *sicli* sent on a single occasion by Charlemagne and others to two religious communities in England or Britain (Dümmler 1895, 33; Whitelock 1955, 774). The foreign sceattas found in Hamwic would have been sufficient, according to the laws of Ine, to requite the damage to only five or six ox horns (Attenborough 1922, 57; Whitelock 1955, 370); and all the Dark Age coins would have been a payment for only twenty ox horns. Furthermore, the distribution of BMC Type 49 (Hamwic-issue) sceattas, according to the examples found, was generally limited to their place of issue.

Grierson's interpretation of such evidence has already been given: Hamwic's coins are a proof or a

result of very little commerce. However, the 'unambiguously regional localization' of certain types of secondary-issue sceat, including Series H sceattas, can be differently interpreted. Together with the evidence that 'until a date well into the secondary sceatta phase, non-West-Saxon English coins were permitted to circulate in Hamwic', it is 'a text-book example of the introduction of a money economy into regions where it was previously lacking' (Metcalf 1984a, 34; 1988, 20).

Contrary arguments of this sort depend on a generous allowance for missing evidence being made. Most of the coins found at Hamwic were chance losses, recovered from rubbish pits. Since it is reasonable to suppose that people did not willingly lose these social or monetary tokens, one may assume that the coins found represent only a small fraction of those minted. That large numbers of coins might have been circulating is suggested by Metcalf (1988, 18-19), who reckons their cumulative numbers in millions. This figure is the product of the multiplication of the number of dies calculated to have been in existence by the number of coins capable of being struck from them. Metcalf supposes that 10,000 coins might be struck, and derives this figure partly from late medieval records and partly from the results of experiments in coin striking. Responding to earlier versions of this argument, Grierson (1967, *passim*) agreed that 10,000 coins is a reasonable estimate, but felt that such an output was rarely attained in practice: he suggested that a lack of bullion may have limited the amounts struck. Further, he denied the relevance of estimating the number of dies through a statistical analysis of coins largely found in hoards. That last objection is now redundant, for coins found in a town's rubbish pits are more likely to represent a random sample. Hodges (1982, 115) did not question the validity of Metcalf's die estimates, but followed Grierson in suggesting that it is 'as likely that only one sceatta was minted from [a] die as that 10,000 were.' Metcalf (*ibid*) denies this:

something of the order of 170 to 260 obverse dies, and of the order of 400 reverse dies, were used to produce BMC Type 49, the most plentiful Hamwic type. . . . When so many dies were cut, each with essentially the same design, there is no positive reason to suppose that they were much underused. . . : why should the workmen have been so unthrifty? We have reasonably secure evidence, then, of the minting at Hamwic, over a period of a few decades, of something of the order of five million [Series H] coins, on a conservative estimate.

The debate is unresolved. Even so, even if Metcalf's estimate of 10,000 coins from a single die is arbitrarily reduced, it still seems likely that very large numbers of coins were produced in Hamwic. The scatter of find-spots, with no obvious concentration or dearth in any area, probably indicates that these coins were widely circulated and in monetary use.

Such a pattern scarcely fits Grierson's model of social function.

One more example will be chosen. As already explained, Continental pottery is concentrated in the immediate vicinity of the waterfront. It is possible that the pottery was broken in transit and disposed of when the ships were unloaded. But this probably did not happen very often. Although some quantity of broken pottery may have been thrown overboard, it seems unlikely that potsherds were carried up to 120m inland before they were dutifully rejected. It is more probable, therefore, that what has been found represents whole vessels thrown away only after they were broken in use.

To what use were they put? Fragments of relief-band amphorae, probably the containers of wine, have been found in Hamwic, but in very small quantities (Timby 1988, 91). The complicated shifts to which Alcuin was put, when on a diplomatic mission to Offa, to procure two *carrata* of wine from the Continent (Dümmler 1895, 34) might be further evidence that wine was a rarity in England; and it seems generally that Continental pottery was brought into Hamwic for its intrinsic worth. Yet very little attempt was made to produce local copies of the Continental types, and

It may have been the case that the average Hamwic household did not perceive the imported wares as better or more desirable commodities than their traditional types, and therefore there was little demand for imitation of them (Timby 1988, 110).

Balancing these different interpretations, it is difficult to escape the conclusion that Continental pottery was imported to serve the needs of a small group. According to the arguments of Grierson, this group might have comprised a lay or ecclesiastical élite, the recipient of gifts from abroad (people like Alcuin and his hosts); but other evidence suggests that this was not the case. Granted that the remains of halls would not easily be recognised in the small trenches opened around Chapel Road, nevertheless there is no sign that more ample buildings were erected in the Middle Saxon period in the area where most Continental pottery has been found. The very least one can say is that these remains seem consistent with those found throughout the settlement. It was suggested above (p 51) that in its original form St Mary's churchyard, situated at the western end of Chapel Road, was perhaps the seat of a reeve. Supposing for the sake of argument that such was the case, it is worth remarking that the incidence of imported pottery increases in an easterly direction, away from the churchyard. The evidence so far available tends to indicate that the Continental pottery imported into Hamwic was not associated with what might be termed élite structures.

Seeking to discover the small group of people that did not cause to be built larger residences; congregated near the waterfront; and displayed a taste

for foreign goods, almost inevitably one must decide that that group was made up of traders — perhaps foreign traders, lodging in English houses. Such a conclusion has been put with a great deal less circumspection by Hodges (1982, 57-8), who states

The traders were evidently bringing their own cooking-pots and wine-pitchers so that their cuisine could be effectively made without using the crude native, Middle Saxon, wares.

And the supposed presence of a foreign enclave within that part of Hamwic adjacent to the river implies that trade was a speciality of the place.

Nevertheless, it is instructive that the area supposed to have been occupied by traders is now distinguished from the rest of Hamwic by little more than the fact that Continental pottery is found there in greater quantities. By comparison, the mercantile quarter of medieval Southampton has left far more for the archaeologist to recognise — very substantial buildings, for instance, and wealthy men's rubbish (Platt 1973, 17-191). Hamwic's trade seems never to have approached the volume, resilience, and refinement of medieval Southampton's trade. It is argued below that Hamwic had largely disappeared some 150 years after its foundation: unlike its medieval successor, clearly it was not enabled by its prime trading position to survive whatever pressure might have led to its abandonment.

Status

There is little direct evidence that Hamwic succumbed to an overwhelming catastrophe. But if it gradually withered away, only a few generations after it first appeared, it cannot long have been a thriving town. A way of resolving this conundrum is provided by Dhondt (1962, 246-8), who implies that the first question to be answered is not whether the places thrived but whether they were towns. He suggests that a great many trading settlements of the period gave shelter to itinerant traders. They were rootless agglomerations, *villes champignons*. Although they might prosper for centuries, they were liable to disappear in times of great adversity, to be replaced by agglomerations located elsewhere and better suited to the needs of the moment. Was Hamwic such a *ville champignon*?

It possessed a number of rural and non-urban features that characterise it as a village rather than a town. Its streets seem not usually to have been devoted to commercial purposes, and the house-plots cannot be distinguished as urban tenements. The buildings found within those plots might be defined as rural types. However, when the absence of evidence has been admitted as evidence, one can justly point out that the settlement also possessed non-rural features. The people of Hamwic were not engaged in agriculture or husbandry to any recognisable extent. Almost without exception, the house-plots are not rural in form. One early, poss-

ibly semi-rural property was found at SOUs 16, 21, and 22; but nothing so far uncovered suggests that Hamwic was fringed with farms and shaded imperceptibly into the countryside. Indeed, one of the interpretations that has been offered of the early ditch along the settlement's western edge is that it was a formal division from the countryside. The rural form of the buildings is explained, therefore, if we suppose that, almost inevitably in an early settlement like Hamwic, the houses would have been similar to those being built elsewhere, in non-urban settlements. We should expect adaptations of the rural form only when they were forced by circumstances. Thus, it has been argued above that in certain respects Hamwic's later graveyards prefigured later urban cemeteries. They departed from the rural norm in response to the increased crowding of the settlement.

Similar points can be made about many of Hamwic's industries. Coining, it has been argued, was an activity connected with trade, and can often be interpreted as an urban activity, but other industries are less clearly characterised. In scale, they are no different from what might be expected of rural industries, or what has been found at the 9th-century palace of Cheddar (Biek 1979, *passim*; Rahtz 1979, 381-2), but they are more numerous. Again, the difference is mainly one of context and number: a visitor from the countryside would have had no difficulty in recognising Hamwic's buildings and crafts, but could well have been nonplussed by their multiplicity.

Similarly, we may recall that, within its context, Hamwic was a very large settlement. One presumes that it therefore also possessed a comparatively large population — perhaps the 2000-3000 suggested above.

Besides these basically archaeological definitions of a settlement-type, one might profitably consider whether or not Hamwic was an autonomous settlement. Definitions of a town can be as much legalistic as they are economic, and sometimes are wholly legalistic. For example, in the 16th century it was said of Bosccastle in Cornwall that it

is the meanest and poorest that can bear the name of town, for it consisteth of two or three houses. It hath been of more importance as appeareth by the ruins (John Norden, quoted in Beresford 1967, 290).

Any autonomy enjoyed by Hamwic would probably have existed rather in fact than in law. Either way, a consideration of this question is more usually an historical one; but some conclusions can be drawn through looking at the archaeological evidence.

One must first note that the modern county of Hampshire derives by stages from Anglo-Saxon *Ham-tunscir*, which unambiguously means the district administered from *Ham-tun*, the place described in this volume under its other name of Hamwic. The earliest written record of the shire name is an entry in the *Anglo-Saxon Chronicle* for

the year 757. This has already been discussed, and it has been suggested that the wording of the text was in existence soon after 757 (see above). The division of Wessex into shires is alluded to in the laws of Ine, which probably date to the end of the 7th century, and it is possible that a *Hamtunscir* was in existence by then. Seeking to explain how Winchester became the seat of a West Saxon see without also becoming a lay administrative centre, Yorke (1982, 80-1) points out that sceattas were minted in *Hamtun* rather than in Winchester, and that *Hamtun* was described in 840 as a *villa regalis*. She therefore proposes that the ecclesiastical elevation of Winchester in the middle of the 7th century postdated the investment of royal interest in *Hamtun*:

Hamtun may already have been operating as a local centre of royal authority when the Old Minster was founded in Winchester and the closeness of Winchester to *Hamtun* could have been a factor in the selection of the former as the new site of the West Saxon see.

In a similar way, this writer has suggested that the emergence of Hamwic as a *mercimonium* is explained if one supposes the prior existence of royal buildings — although of course one must remember the virtual absence of archaeological evidence of occupation in Hamwic before the first decades of the 8th century.

The charter of 840 that Yorke cites as evidence was issued when King Ethelwulf was resident in *Hamtun*. Perhaps he had moved there in response to the Viking threat of that year, but he seems not to have been present when the Vikings landed at Hamwic: the army that met them was commanded by Ealdorman Wulfheard (Bately 1986, 43; ASC, 62). In 825, King Egbert may have been in the settlement, *Omtune* (B389; S273). As has already been explained, the authenticity of the record is questionable, but it remains possible that Egbert was in the settlement that year. If so, military necessity cannot have been the reason for Egbert's residence at Hamwic. His business that year lay along and beyond Wessex's borders; and, anyway, he is said to have been in Hamwic in late December, outside the campaigning season. Two references, one of them suspect, both differently interpreted, are scarcely proof that Hamwic was regularly visited by the king. However, very little is known of royal itineraries at this period and it is likely that other visits have gone unrecorded.

Ealdorman Wulfheard's presence in or near Hamwic in 840 can be explained by supposing that the settlement was the administrative centre of Hampshire, for the command of shires was granted to ealdormen (Whitelock 1955, 63-5). He may also have been Hamwic's reeve: Whitelock (*ibid*) draws evidence together that reeves had not always been of lower status than ealdormen. Any Hamwic reeve must have concerned himself with the regulation of trade in the area. Such an official (resident in

Dorchester) was the king's *exactor*, Beaduheard, whose duties are recorded solely because of an accident: he was the first West Saxon of note to get himself killed by Viking raiders, and his story would be told for centuries to come. He had met his death after riding out with his retinue to intercept three Viking ships, in the mistaken belief that they contained merchants who were to be ordered to the *regia villa* (Bately 1986, 39; ASC, 54; Campbell 1962, 26-7; Dumville and Lapidge 1985, 39; and compare Whitelock 1955, 166, n6). One imagines that roughly similar activities were being undertaken at Hamwic, that merchants landing along Southampton Water were redirected to the royal vill.

Hamwic perhaps brought other advantages to the king than material ones. Reference has already been made to the possibility that the boundary ditch and the street system were attempted copies of the defences and the layout of Roman planned towns, and it has been argued that the practical value of such features was limited or was not intended. A parallel might be drawn with the writing down of Germanic laws. Wormald points out that these laws would often have proved unusable, and suggests that they came into existence principally as imitations (however poor) of Roman law: the writing down of laws 'was not so much practical as ideological in its inspiration' (Wormald 1977, 135). It may be no coincidence that Ine and Alfred, the first kings of Wessex to issue written laws, have both been associated with the building of towns. Ine has often been identified as the founder of Hamwic. The creation of towns was one of the facts of Alfred's life that Asser (xci) found praiseworthy, late in the 9th century. There is no reason to suppose that the earlier foundation of Hamwic would have been any less impressive. One suggests, therefore, that Roman features were copied as an embodiment of the king's *imperium* (compare Hunter 1974, 47-8) and that the very existence of the place reflected the royal status of its creator.

Such arguments lead one to the conclusion that Hamwic was in many ways an artificial creation. This is the impression one gets anyway when contemplating its apparently sudden emergence and spreading, whether or not it emerged out of an earlier royal settlement. Also, Hamwic seems to have expanded in a number of controlled stages. A regular development presumably would have required the occasional immigration of further batches of people. Cadwalla's attempt at re peopling the Isle of Wight late in the 7th century (Bede, IV, xvi) is a sign that Middle Saxon kings of Wessex could seek to further their policy by directing the movement of their subjects.

To judge from the fauna¹ remains recovered, the townspeople lacked the power to obtain for themselves a succulent and varied diet — unlike, for instance, many inhabitants of medieval Southampton, who had the freedom and the money to procure young flesh and the meat of wild animals.

Hamwic's inhabitants were sure of an adequate nutrition, but a limited one, largely the tough meat of animals that had been worked for most of their life in the countryside. Bourdillon (1983, 179) suggests, therefore, that Hamwic was being treated by the king as another of his estates; one might add, as a royal vill that brought him certain advantages not possible elsewhere but which had to be provisioned from his rural estates.

It therefore seems that Hamwic can be roughly likened to the later *bastides* created in England; places that brought their founders a steady-enough income for little expense, although this income was only a small fraction of the total revenue from the lord's rural estates (compare Beresford 1967, 55-97). Bearing the similarity in mind, one can argue that had Hamwic succeeded, had it continued to be densely occupied, its inhabitants would have accumulated increasingly greater measures of independence. Like the inhabitants of 'New Hampton', they would have eventually become *burgenses* and been granted the fee farm of their town. But these things did not occur. As a result of Hamwic's dramatic decline, the artificiality of the place stands out clearly and is not obscured by a later history, and it is manifest that the place was directly ruled by the king or by his deputy.

How the place is now to be called provokes some difficulties. In many ways, the best and most wieldy term is vill, the word that was used in the charter of 840. But this fails to characterise Hamwic as the large, non-rural agglomeration that it swiftly became. It is clear that attempts were made to cope with the problems of a large population, although many of the chosen solutions were not those adopted in later medieval towns. One might therefore say that Hamwic was a proto-town, except that this unwieldy term takes no notice of contemporary intentions or perceptions. In effect, it defines the settlement by default. *Ville champignon* is a more neutral description, being neither a too generalised term nor the product of hindsight, but again the words are scarcely adaptable to everyday English use. It may prove expedient to continue calling Hamwic a town.

The disappearance of Hamwic

When the disappearance of Hamwic is discussed here, the disappearance of a large settlement is meant. Strictly speaking, it is unlikely that there ever was a complete and lengthy interruption of building in the area of Hamwic. However, until the expansion of Southampton in the 19th century, most of this building was on a very small scale. Taking the form of a suburb of the nearby walled town for much of the period, it is irrelevant to the present discussion.

Even so, any attempt to ascertain the fate of Hamwic must conclude either with a disheartening avowal of the virtues of doubt or with the pious expectation of future research. The archaeological evidence indicates that Hamwic had largely

disappeared in the middle of the 9th century, but offers no explanation of this disappearance. Historical reasons can be adduced for the end of Hamwic, but these tend to suggest that the main settlement disappeared later than the middle of the 9th century. For the present, there is no good evidence that Hamwic's functions were transferred elsewhere in the locality, although it is very unlikely that they persisted at the old site. The continuation there of some form of occupation can be inferred, but the archaeological evidence is inadequate to the task of delineating that occupation.

Chronology

Until the 16th century, when Leland coined the terms 'Old Hampton' and 'New Hampton', no distinction had been made between Hamwic and the later settlement that grew up to the south-west of it. The continuance of the name in documents misled certain early commentators into supposing that Hamwic had disappeared as late as the 11th century (see especially Davies 1883, 18; Crawford 1949, 47).

The radiocarbon dates give reason to suppose that occupation of some form persisted into the 10th century (see above), but Hamwic appears not to have been a trading centre in that century: for example, only eleven fragments of 'forest' glass (thought to have first appeared in Winchester about the end of the 9th century) have been found so far in Hamwic (Heyworth and Hunter forthcoming). The absence from the pottery assemblage of wares similar to Winchester Ware or Portchester Ware seems to indicate a wholesale decline before some point in the 10th century (Timby 1988, 114). On the other hand, the presence of Beauvais Ware, probably introduced in the 9th or the 10th century (Hodges 1981, 62), might be a sign that pottery was still being imported into Hamwic in the 9th century.

These chronological limits are indistinctly drawn, however, and again one turns to the numismatic evidence in an attempt to refine the dates. To a large extent, one turns in vain. As is found to be the case at a great many settlement sites, comparatively few pennies seem to have been lost. The evidence from the excavations of the last 40 years in Hamwic is small in quantity and not easily reconciled with that evidence accumulated in the 19th century. Of the 151 Dark Age coins found since 1946 (excluding hoards), only eighteen (11.9%) were pennies, all issued before 900. Also found were an imitation of a gold solidus of Louis the Pious (814-40), perhaps struck in the 820s or 830s (Pagan 1988b, 71); and a denarius of Charles the Bald (843-77), struck before 864 (Dolley *nd*, 27). Five of these twenty coins were issued after about 840.

We know that 24 pennies struck before 900 were found in the 19th century, along with 44 other pennies in hoards probably deposited in about 850 and about 870. Two pre-reform coins of Charlemagne (774-c790) were also found in Hamwic

(Metcalf 1988, 54). On the other hand, the 19th-century finds are of a different character from those made more recently and it is doubtful if they can be used as evidence for a continued, widespread occupation of Hamwic.

The fact that the coins found in the 19th century were unearthed by building workers and brickearth diggers is probably of little importance. These men recognised, and knew the rewards of digging out, rubbish pits and wells (see, for instance, Kell and Bergne 1864, 69). It is conceivable that some of the coins they recovered were found in ploughsoil, but more likely that most had been dug out of Anglo-Saxon features, if only from their top fills. Nevertheless, three reasons prompt the need for caution: few sceattas were found; an inordinately large number of pennies was found; and these pennies include some 10th-century examples. To deal with the first reason first, and excluding coins found in hoards and coins struck after 900, of the 151 Dark Age coins found since 1946, 130 (86.1%) are sceattas. However, of the 46 recorded 19th-century finds of sceattas and pennies, only 22 (47.8%) are sceattas. Since there is such a clear imbalance in percentages, it has sometimes been implied, the 19th-century record is untrustworthy.

The sceattas may very well be underrepresented in the early record, for these coins, being smaller objects than pennies and usually appearing as valueless blobs of copper before cleaning proves them to be of silver, might easily have been overlooked or disregarded by the rapacious brickearth diggers. Even so, excluding hoards, 24 pennies were found and cannot be ignored. And it is still possible that the sceattas are not badly underrepresented — or, to rephrase this in a more useful way, that the pennies are not heavily overrepresented. In absolute numbers, more pre-900 pennies were recovered in the 19th century than the 21 coins that have since been found by supposedly more painstaking archaeologists. Furthermore, between four and fourteen 10th-century pennies were recovered, the last of which was struck in the reign of Edgar (959-75) (Pagan 1988a, 70). The relatively high percentage of pennies found might reflect therefore a more robust survival of some parts of Hamwic; but this is to anticipate later arguments and avoid the main point that the 19th-century discoveries are not easily interpreted as evidence of the wholesale survival of Hamwic; for the majority of these finds was probably concentrated at SOU 47.

One can take a benign view of all this evidence and suggest, like Addyman and Hill (1968, 77), that Hamwic was in decline in the 10th century and had largely disappeared some time between 940 and 970; or interpret the evidence cautiously, as does Hodges (1982, 156), and suggest that Hamwic came generally to an end by about 840. The admittedly slight evidence, although properly speaking it may relate only to Hamwic's function as a centre for trade, seems to indicate that the settlement had

disappeared about the time suggested by Hodges, or perhaps slightly later, about the middle of the 9th century. According to this interpretation, the place that in 840 witnessed a battle with the Vikings and was the *villa* where King Ethelwulf signed a charter can be equated with Middle Saxon Hamwic. But the *burh* of Hamtun mentioned perhaps in 886 x 890, perhaps after 914 (Davis 1982, 807-9), was not located at Hamwic. (If we knew where the Vikings landed in 860, before pushing on to raid Winchester, we might find significance in the absence of Hamwic's name from contemporary records — but we do not and cannot.)

Prima facie these are reasonable assumptions. The involvement of the Vikings in the disappearance of Hamwic has remained a popular theme since it was first formulated by Kell (Kell and Bergne 1864, 70). According to one version, which has evolved out of the theories and arguments contributed by a number of antiquaries, historians, and archaeologists, the Vikings raided Hamwic twice in quick succession, in 840 and 842. Defeated at first, at their second attempt they devastated the town and its neighbourhood. Had something like this occurred, it is conceivable that the settlement would then have been resited at a far more defensible place than that occupied by Hamwic. But such an interpretation begs questions. A more methodical consideration of the evidence is called for. To achieve this, one must first present the evidence for some limited survival of occupation at the original site, then proceed to consider the evidence that new centres were established nearby.

These considerations should be prefaced with the remark that other places besides Southampton were witnessing the creation of new settlements in the years around the end of the 9th century. An example is Ghent, which was a Carolingian *portus* on the River Scheldt. It is probable that occupation had been interrupted by Viking activity in 879 but that the place been repopled in the opening decades of the 10th century. At some point before its first mention in the middle of that century, a new *portus* had been established just to the west, alongside the River Leie. This was wholly or partly fortified and was described as a *novum castellum* in a document of the second half of the 10th century (Verhulst 1986, 200-4). In roughly the same way, it appears that some form of occupation persisted at Hamwic, up to the time of the Norman Conquest at least; but that the main focus of occupation shifted to a new site, the town that grew up alongside the River Itchen (pl 3).

Later occupation at Hamwic

Hamwic's late functions are very imperfectly represented in the archaeological record, partly no doubt because much of the evidence lies in the ploughsoil that is often quickly removed from an excavated site. The basic rarity of the coins creates another problem. Dolley (1970, *passim*) tentatively

identifies a small group of West Saxon pennies as Southampton issues, the minting place of which 'was closed very early indeed in the reign of Æthelwulf who came to the throne in 839.'

Only one part of Hamwic, SOU 47, has provided reasonably clear evidence of continued occupation into the late 9th century and onwards: unfortunately, it was exposed by brickearth diggers and we know very little about what else was found there. We may guess that Hamwic continued with some vigour in this one small area, but the guess is largely ungrounded in fact. It is not necessarily the case that the rest of Hamwic was wholly deserted: if the homes of its last occupants were scattered across the area, or if the hithe were used at this period mainly by a few fishermen, one would not expect to be able to recognise the true lineaments of residual occupation through an enumeration of such objects as late coins; especially since it is possible that late coins were less often lost than earlier ones (compare Hinton 1986, 17-19). A more characteristic find would be locally produced pottery, but this material is chronologically indistinct, sherds of a fabric 'which seems to continue with little modification' being found quite often in Hamwic's Middle Saxon rubbish pits and the pits of the Late Saxon settlement that grew up to the south-west (Timby 1988, 84 and 114). Probably, then, the best pointer to any continued occupation in Hamwic cannot yet be identified. This must be borne in mind during the discussion that follows.

As was explained above, the later field boundaries rarely coincide with the lines of Hamwic's streets. An explanation of this phenomenon would be that a considerable period of time elapsed between the end of major occupation and the ploughing up of the site, time enough for the area to have become overgrown and the streets to have disappeared beneath an accumulation of soil. At the same time, three of Hamwic's routes survived into the Middle Ages as ways that met at the St Mary's churchyard (fig 13b). One may reasonably suppose, therefore, that Hamwic did not become immediately and totally derelict.

An early stage of its diminution might have been the aggrandisement and amalgamation of properties, events that have been traced in Hamwic's archaeological record, although they cannot be relatively dated. It is also possible that, at a later stage, occupation in however scattered a form would have tended to concentrate around certain key areas. The survival of the three routes might suggest that, at its most limited, residual occupation comprised a *monasterium* of some sort, and perhaps a few associated secular buildings. But their survival may have been due, initially at least, to the continuance of denser occupation alongside them. The survival of 'Broadway' (St Mary's Road and St Mary Street: streets 1 and 2) was ascribed to its later function as part of the route into 'New Hampton'. However, it seems that Hamwic's general disappearance occurred about 850 and occupation to the south-west became firmly established only from about 950 (see below). Unless 'Broadway' continued in use during the intervening

century or so, it is entirely conceivable that it would have disappeared before 'New Hampton' grew to any significant extent. Its first use, once Hamwic had disappeared, may have been as a route to and from the *monasterium*, or as a connecting route to whatever properties still existed in the area.

A similar argument can be made about Chapel Road (street 9). Perhaps it was initially a link only between the *monasterium* and the River Itchen, or perhaps properties still existed in that area. Here one supposes that the River Itchen and its waterfront continued to be put to some use, something that cannot be proved. As has already been pointed out, this place was mentioned in two Late Saxon charters, the later of which was written in 1045. There can be no complete certainty that the landing shore survived as anything more than a name form into the 11th century. However, supposing it to have been in use at such a late date, and linked with 'New Hampton' by Chapel Road and East Street (fig 13b; pl 3), what form might it have taken? According to Addyman and Hill (1968, 77), the abandonment of Hamwic was forced by

the change in character of international trading vessels, in particular their deeper draught, [which] made the lagoon unsuitable and necessitated the opening of new wharves on the Test side of the Southampton peninsula.

One need not suppose that the wic-hithe was so equipped. Not to engage in a fruitless discussion about the relevance of the archaeological evidence for deeper-draughted ships at this time (see the supplement for that, MF2:L2-5), there is documentary evidence that English ships were still being dragged out of the water late in the 10th century. So apparently predictable was this event that in 991 King Ethelred, in his treaty with the Viking army, specified what was to happen if it occurred; *Gyf he his scyp upp getogen haebbe* (Robertson 1925, 56; Whitelock 1955, 401).

Such is the most optimistic interpretation that can be made of the diplomatic evidence. But the support of recognisable archaeological evidence is generally lacking. Unusually clear archaeological evidence of two buildings (one succeeding the other) was found at SOU 16, to the south of Chapel Road and close to what one takes to have been the edge of the Late Saxon river. Constructed probably in the 11th century, these buildings may be a sign that the wic-hithe was in existence in the Late Saxon period, but they cannot be cited as proof of continuous occupation in that area from about 850 onwards.

Relevant dating evidence from the site of Hamwic comprises no more than fourteen coins probably struck after 840 and definitely provenanced to sites; two coin hoards; and eleven fragments of 'forest' glass. The location of the sites listed below is shown on fig 13b. Six coins found in Hamwic since 1946 were probably struck after 840. These are a penny of Ethelwulf issued in the period 839-c 843 and found at SOU 24 (Six Dials); two pennies of

Berhtwulf (840-52) found at SOUs 36 and 37; a penny of Archbishop Ceolnoth struck in the 850s or early 860s and found at SOU 30 (Six Dials); and a penny of Alfred probably struck after the battle of Edington (878) and almost certainly before the death of Ceolwulf II (in 883?). Very probably, the latter coin was found at SOU 36. The slender corpus is completed with a denarius of Charles the Bald (843-77), struck before 864 and found at SOU 34 (see Metcalf 1988, 53-5 for the pennies; and Dolley *nd*, 27 for the denarius).

One knows for certain the provenance of only eight out of at least twenty post-840 coins found at Southampton in the 19th century. Found at SOU 47 were a penny of Ethelwulf (839-55); a penny of Burgred (852-74); two pennies of Ethelbert (860-6); a penny of Athelstan (925-39); and another penny issued by one 10th-century king or another. Two other pennies of Burgred were found at SOUs 51 and 277. (The information about the 19th-century discoveries has been abstracted from Pagan 1988a, 63-4 and 70.)

One piece of 'forest' glass was found at SOU 36, two pieces at SOU 99, and eight at SOU 169 (Six Dials).

The find spots lie close to the north-south routes, but not significantly so: some 90% of Hamwic had lain equally close. If, in default of other evidence, one is forced to argue from the archaeological evidence alone, the least one can say is that this fact fails to indicate that there had been a withering away of the settlement until only certain streets were still bounded by properties. At best one might suppose that surviving properties were extensive units, perhaps semi-rural. In that event, although the north-south streets might still have been used, there would have been no further need to line the major thoroughfares with properties. A similar set of arguments can be advanced about Chapel Road. It could be that discussion of two Late Saxon charters was pointless: even if the hithe had been used again in the 11th century, it had served no purpose in the second half of the 9th century. Timby (1988, 117) discerns in the distribution of the later pottery 'a shift in emphasis' towards the north of the settlement, and the northern provenance of most of the finds detailed here (especially, perhaps, those made in the 19th century at SOU 47) may reflect a later stage in this movement. Hamwic was no longer a trading settlement, and no purpose was served by the waterfront, which was therefore abandoned, or perhaps used only by fishermen.

Yet it has already been pointed out that we are obliged to rely on possibly atypical dating evidence, and we can conclude very little about the nature of late occupation at the site of Hamwic. Some rubbish was still being thrown away, but no associated buildings have been recognised. (The two buildings at SOU 16 must be excluded from consideration here.) Exactly how much rubbish was being generated, how it was being disposed of, and what buildings still stood in the area, are questions that

will not be answered until considerably more fieldwork has been undertaken. These objections to the unrepresentative nature of the evidence should not however be taken as an argument that Hamwic remained largely in existence after its trade had gone. The evidence considered below tends to indicate that Hamwic's immediate successors in the area were small and were not closely involved in trade.

Other occupation in the area

Since the early 1950s, archaeologists have acknowledged the need to investigate the links between Hamwic and 'New Hampton'. But the task has rarely been allotted a high priority: excavators have concentrated their attention on particular, important features in the medieval town. Partly for this reason, most excavations have been sited within the walled circuit, and what were Southampton's medieval suburbs have gone virtually unrecorded. These are clear limits to our knowledge of any Anglo-Saxon occupation alongside the River Test. Furthermore, because the site of 'New Hampton' has been continuously occupied for about a millennium, early features usually prove to be more fragmentary, more isolated, and therefore more difficult of interpretation than similar features found in Hamwic. On the positive side, however, is the fact that several of the excavations have exposed large areas of the town, something that has rarely been possible in Hamwic.

According to this evidence, 'New Hampton' originated in the early 10th century, on the higher ground by the Test (Oxley *in prep*). When the problems of dating both sites have been taken into account it is just possible that the foundation of the new settlement was contemporary with the disappearance of Hamwic. The new settlement was probably enclosed by a ditch and a bank, at least on its landward sides, and perhaps as a precaution against Viking raiders. Because of these defences it has been hinted that the settlement was the *burh* of Hamtun mentioned in the Burghal Hidage (Holdsworth 1984, 341-2; and compare Addyman and Hill 1968, 77). This is far from certain. The defences to the new settlement would have been about 540m long on the landside, and perhaps nearly as long on the waterside; but the Burghal Hidage makes allowance for defences at Hamtun only 188m in length (Hill 1967, 59-61). The discrepancy is a large one. Explaining it by invoking a scribal error is an unhappy solution that cannot be independently verified. Nor may one suppose that the allowance was only a very rough approximation: the disparity in the figures shows this, and, where they can be checked, other allowances noted in the document are seen to be reasonably accurate. It seems that the ditches found in the south-west corner of the peninsula are not the defences allowed for in the Burghal Hidage.

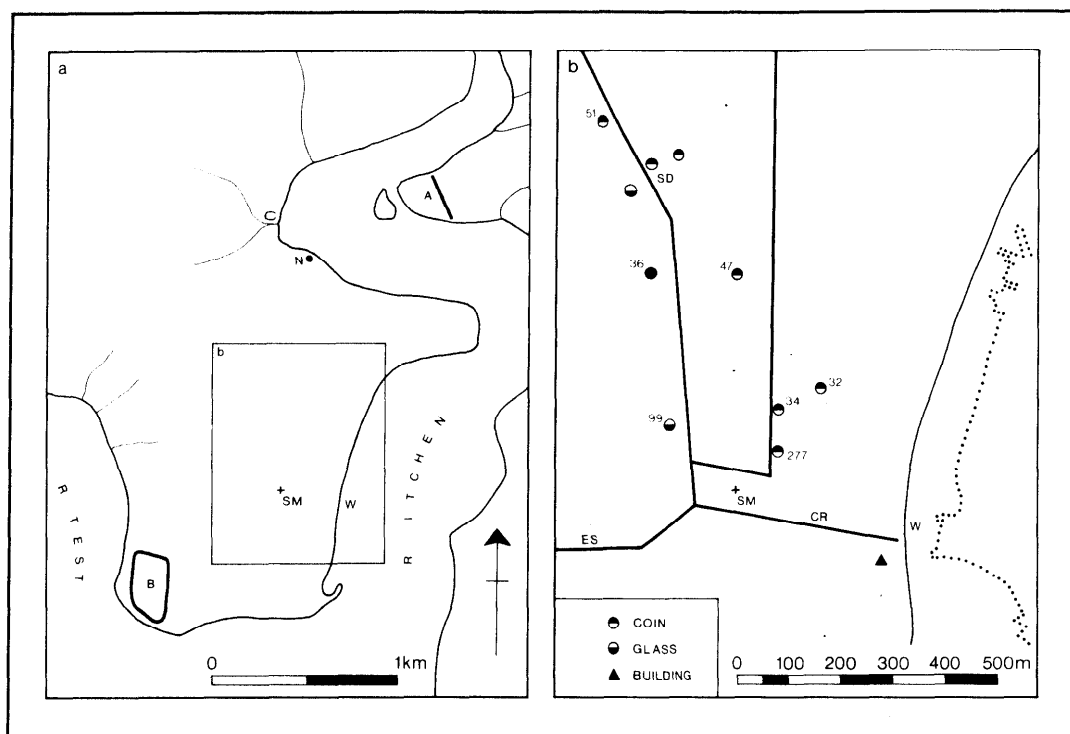


Figure 13 Suggested areas of Late Saxon occupation, showing the supposed riverlines. 'SOU' prefixes to site numbers are omitted. Key: A the Burghal Hidage fort, B the new, ditched settlement, C the creek, CR Chapel Road, ES East Street, N Northam, SD the Six Dials sites, SM St Ma&Church, W the wic-hithe.

It is worth repeating Hill's argument of 1967, that the burh was sited at Clausentum, the Roman town upriver of Hamwic on the Bitterne peninsula (frontis and fig 13a). Excavations there have been very limited and very little evidence relating to this possible reuse has been found, although parts of a cemetery were found and have been assigned 'a Christian Saxon or an Early Norman date' (Cotton and Gathercole 1958, 30). Two or three factors favour an identification of Clausentum as the site of the burh. In the first place, parts of its defences survived into the 18th and 19th centuries (ibid, 33-5 and 41-2) and presumably far more was extant and available for use in the Late Saxon period. Secondly, Clausentum's innermost fosse was at most 220m long. Because the Bitterne peninsula narrows sharply to the west, any bank or stockade set behind this fosse, on the western tip of the peninsula, might have measured about 200m. Lastly, a burh located at this bend in the river would have functioned as a fort downstream of Winchester, a town that gained in prominence from the late 9th century onwards (Hill 1967, 59-61).

Around the beginning of the 10th century, then, there may have been three occupied sites in the area. There was probably some residual occupation of Hamwic, especially in the vicinity of SOU 47. There was a new settlement, probably enclosed by ditches, alongside the Test, but perhaps still using the wic-hithe on the Itchen. There may also have been a burh at Clausentum. What does this signify?

That a place called Hamtun was intended to possess some economic function early in the 10th century is indicated by one of Athelstan's Grately Decrees, which probably repeats earlier provisions issued by Edward (Edward reigned 899-924, and Athelstan 924-39). The decree assigns Hamtun two moneys. Whichever one of the three potential Hamtuns this was (possibly it was two of the three Hamtuns), on a scale of moneys it was far inferior to Winchester, which had six; but was equal to other regional ports such as Lewes; and was superior to places like Hastings and Chichester, both of which were allotted one moneyer (Attenborough 1922, 134-5; and compare Metcalf 1986, 140-2). However, if this place was intended to continue one of Hamwic's functions, it seems that Hamwic's troubles also persisted. Metcalf (1988, 24) suggests that the Southampton mint 'may have fallen into abeyance around the middle of the 10th century [and been] reopened or reactivated immediately following Eadgar's reform of the coinage in c 973'. Oxley (in prep) finds evidence that the new settlement against the Test became established and expanded, but he dates the origin of this success only to some point in the second half of the 10th century. And, if it existed, the *burh* at Clausentum led to nothing, possibly because of its small size (compare Hill 1981, 143).

At the beginning of the 10th century, all three sites were small. The enclosed area alongside the Test covered some 6ha, the western tip of Claus-

entum some 2ha, and what remained of Hamwic perhaps 3ha. Together, they would have been a quarter the size of Hamwic at its largest. Although the evidence on this further point is very limited, nothing suggests that the population density within the three places was as great as it had been in Hamwic. As has already been remarked, the site of Hamwic was not immediately given over to agriculture. People were reluctant, no doubt, to jar their ploughs against the stumps of derelict buildings; yet the fertility of the site would soon have become apparent — in Leland's time it was noted for its 'good corn and grass' — and it is also possible that large areas of Hamwic were not turned into fields because there was no need to do so: there was no large, displaced population in the area that needed to be fed.

Where, then, had the inhabitants gone? The question may be a misleading one. Hamwic, one presumes, did not differ from medieval towns in its dependence on immigration to maintain its population size. If, for whatever reason, it was discounted as the place to which one emigrated, in the long run the effect would have been the same as if the existing population had removed itself: Hamwic would have withered away. Alternatively, or in addition, it is possible that residents of Hamwic did leave the area, to settle in the newly emerging town at Winchester.

The coincidence between Hamwic's disappearance and Winchester's reappearance as a town has often been remarked upon. Addyman and Hill (1968, 77), supposing that Hamwic had finally disappeared in the 10th century, suggested that Winchester must have stifled many of Southampton's former industries, turning it into an *entrepôt*.⁷ If Hamwic virtually disappeared in the middle of the 9th century, this explanation should be amended a little; but the rough coincidence of its demise and Winchester's urban renewal (at the latest towards the end of that century) becomes even more remarkable. Biddle (1983, 122-3) relates the rise of Winchester to the fall of Hamwic, and suggests that artisans moved from Hamwic to Winchester in 'a continuous process' of emigration. To rephrase this possibility in the terms favoured here, one of Hamwic's functions may have been transferred to Winchester. Judging from the assignment of six moneyers to Winchester, in one of the Grately Decrees, another function may largely have been transferred. Yorke (1984, 66) goes further and argues that, after the middle of the 9th century, Winchester took over from Hamwic as an administrative centre. These are plausible suggestions, but it remains unclear whether the sequence of events was a cause or a consequence of Hamwic's decline, or was perhaps a combination of both.

If the evidence has been correctly interpreted, Hamwic was not immediately refounded as a nearby large settlement that continued its functions. Having flourished as a large settlement and a *mercimonium*, having been the administrative centre of Hampshire perhaps, and having stood perhaps as a tangible expression of royal status,

effectively it disappeared within a century and a half of its foundation. It left to its eventual successors little more than a name, a few streets, and a church. This was a thorough disruption of Hamwic's success. Its causes must now be examined.

Causes

The possibility that many of Hamwic's functions were withdrawn upriver to Winchester and the fact that Hamwic's successors in the area were initially very small are pointers to the comparative insignificance of the area by the early 10th century at the latest. There is virtually no evidence that goods were traded into what remained of Hamwic or at first into 'New Hampton' (Oxley in prep). One suspects, therefore, that Hamwic's disappearance can be linked to its decline as a *mercimonium*.

As Dhondt (1962, 244) points out, certain important settlements, the *villes champignons*, did not survive into the 10th century; other settlements, which did survive, had been Roman *civitates*. 'And that is not all: many towns began in the 9th century. We may mention Deventer and Tiel, Bruges, Antwerp, and Ghent.' Much the same course of events is discernible in southern England, with Hamwic disappearing, Winchester surviving or re-emerging, and new ports eventually rising to prominence along the Channel coast. A general slackening in trade during the 9th century might be one explanation of these widespread similarities.

Hodges (1982, 156-7) suggests that the emporia were all declining in the 830s and 840s, partly as a result of the interference with trade occasioned by the civil wars between Charlemagne's heirs. Although it is likely that Hamwic was suffering such a decline, and despite the striking evidence of 'a decrease in Dorestad's prosperity and a waning of its trade relations' after about 830 (van Es and Verwers 1980, 297), this cannot be the whole picture. It seems to be contradicted, at least in part, by the diplomatic evidence that certain important West Frankish towns — including Quentovic and Rouen — still existed in 864 and were still resilient enough to maintain mints (Boretius and Krause 1847, 315); and by the fact that Dorestad, for instance, retained a considerable allure for Viking raiders, perhaps until 863.

Since the civil wars continued at least until the accession of Louis the Pious in 834, one must take care not to underestimate their effect, but the fact remains that they seem not to have caused the extinction of other trading centres. It is possible, however, that Hamwic became more vulnerable than places like Quentovic and Dorestad to pressures on trade. After all, one must hesitate to equate the scale of Hamwic's trade with that of those two major emporia, and a 'decrease in Dorestad's prosperity' could have been paralleled by a total disappearance of Hamwic's.

The destructive effect of the Vikings, who emerged properly as raiders of trading centres and coastal settlements in the 9th century, cannot be ignored. The similar events, mentioned above, that were occurring in north-western Europe were not only the replacement of *villes champignons* and the survival of towns that had been *civitates*: they were also the extinction of many undefended towns, and the eventual emergence of new towns behind defences. It is not illogical (or original) to suppose that the threats posed by the Vikings were largely responsible for the disappearance of places like Hamwic.

Certain periods in the 9th century witnessed a breakdown of social cohesion that must have been inimical to the pursuit of trade. One thinks immediately of the apparent reduction in size of Wessex in 878, when Alfred mustered troops only in Somerset, Wiltshire, and some fragment of Hampshire; or thinks of the anarchy in the Empire that was resolved after a fashion only after the deposition of Charles the Fat in 887. Earlier events, too, can be called to mind: in 852-3, the Vikings overwintered on the Seine, which it has been argued was a major trading link for Hamwic, and groups remained there until 866 (Dehaisnes 1871, 80-107; and compare Latouche 1967, 217-8). When they were dislodged from the Seine in that year, they probably shifted their attention to England. However, the archaeological evidence points to an effective end of Hamwic at an even earlier point in the century, and it is far from clear that the events sketched above had any major influence on its fate. Did earlier Viking activity lead to its extinction?

Davies (1883, 17-18) suggested that, in their traditional tale of a move of town site forced by the French raid of 1338, Leland's informants preserved a memory of Viking raids that necessitated the establishment of a defensible town. In reckoning the raids on *Hamtun*, presumably one can ignore those that occurred in the 10th and 11th centuries. This leaves the raids of 840 and 842 and the landing of 860 to be considered.

It is simplest to consider this last event first, The *Anglo-Saxon Chronicle* mentions only a Viking raid on Winchester in 860, launched from the sea (Bately 1986, 46; ASC, 68). Those who follow some copy of the *Chronicle*—for instance Asser (xviii) - give the same details. Only William of Malmesbury (II, cxviii), writing in the first half of the 12th century, states that the Vikings had first landed here (*appulsa Hamtunam*). William had access to sources that are now lost and the extra detail may be correct. However, according to the *Chronicle*, the raiders were intercepted on their return from Winchester by the men of Hampshire and of Berkshire - which suggests that the Vikings had landed to the north of Hampshire in the Thames valley. It is likely, therefore, that William has expanded the earlier references to a sea-borne invasion in a way that seemed logical to him: a piratical host of the 12th century would most easily have followed the traders' route and pushed on

to Winchester by way of Southampton and the Itchen valley. William's testimony is best set aside as of uncertain worth.

Nor is it certain that the raid of 842 ever occurred. Two texts are pertinent to this discussion, the *Anglo-Saxon Chronicle* and *Nithard's History of the Sons of Louis the Pious*. The *Chronicle* records a fight with 33 ships' companies 'at Hamtun' in 840, when the Vikings were defeated by Ealdorman Wulfheard; and two years later a great devastation of a number of towns including Quentovic (Bately 1986, 43; ASC, 62-4). Nithard (42) refers to the raid of 842 on Quentovic, adding that 'the Northmen then crossed the sea from there and likewise laid waste Hamwic and North-hamwic' (*Nortmanni . . . inibique mare traiecto Hamwig et Nordhunnwig similiter depopulati sunt*). Since the *Chronicle* correctly refers to the raid on Quentovic without mentioning a subsequent raid on Hamwic, and since the supposed raids occurred so closely in time that their chronology might later be confused, there is no difficulty in supposing that Nithard confounded two unconnected events. Hamwic probably suffered no raid in 842. However, the disparity in detail between the two versions is not so easily explained.

The basic detail is the same: the Vikings landed at Hamtun or Hamwic. Nithard was a contemporary of the events and perhaps had access to local sources (if, that is, we suppose that by *Nordhunnwig* he meant Northam, a minor settlement just to the north of Hamwic; see figs 1 and 13a), and it is possible that the story he tells is true. It does not necessarily contradict the version found in the *Chronicle*, which might disguise the fact that Hamwic was plundered before Wulfheard was able to organise its defence.

On the other hand, as a rule the compilers of the *Chronicle* do not wholly minimise the success of Viking arms, and there is no reason to suppose that they misrepresent the events in this case. Nithard may have been wrong: he may have been guessing about what happened in Hamwic; projecting Quentovic's destruction onto Hamwic. This possibility is enhanced if the *depopulatio* of Hamwic about which he writes is rather daringly translated as 'depopulation' and not more correctly as 'pillaging' or 'devastation', for it appears that Quentovic was depopulated by the raid of 842. Another contemporary, Prudentius of Troyes, records that, in their raid on Quentovic, the Vikings worked so thoroughly that when they went they left nothing behind except the richly ransomed buildings (*ut nihil in eo praeter aedificia pretio redempta relinquerent*) (Dehaisnes 1871, 52).

However one translates the word, there is no recognisable archaeological evidence that the place was either devastated or depopulated in a trice. Taking all these points into consideration, it is probable that Nithard was wrong. Even if he were right, and Hamwic had been *depopulatus*, it might yet have survived, as Quentovic, for instance, seems to have done; as, indeed, Southampton did, in different circumstances, after the French raid of 1338.

If the disappearance of Hamwic cannot be ascribed to its destruction by Vikings, it is yet possible that the raids of this period so depressed trade that Hamwic was unable to survive: from the mid 830s onwards, successful raids were launched against what one supposes to have been Hamwic's trading partners and their trading partners. To mention only a few of these rich pickings, Dorestad was raided for the first time in 834, Rouen in 841, and Quentovic in 842; and during this period great destruction was done in East Anglia and Kent. This explanation seems most consistent with the interpretation of the dating evidence offered here, but again one cannot easily reconcile an effective disappearance in about 850 with the apparent survival of trading centres such as Rouen and Quentovic. Perhaps, as has already been suggested, Hamwic was more sensitive to these disruptions of trade.

One local effect that must be considered is the apparent limitation of Hamwic as a cross-Channel port. It was suggested above that Hamwic's direct trade with the Continent was directed through Rouen and the River Seine. Such a limitation might have had little effect when connections with that area of France were assured and important (for instance, in the 11th century and afterwards, when close links with the Duchy of Normandy were

sought). However, as has been pointed out already, Viking activity on the Seine in the years 852-66 might have spelled an end to Hamwic as a *mercimonium*, if the settlement lasted into the 850s. Similarly, Hamwic's apparent incapacity to trade directly with the Rhineland area may have proved no more than a difficulty for as long as the West Saxon kings had no control over the ports of Kent. However, from 825 onwards the West Saxon monarchy had domination of those ports, and Hamwic might have declined sooner than other *mercimonia* largely because regal interest in trade was shifted to the south-east of England.

Hamwic's population declined in numbers, perhaps because immigration slowed, perhaps because many of the inhabitants moved to other, defensible settlements. The people may have responded individually and grudgingly to these impersonal factors: they may have chosen to rebuild their lives in a new place. But there is no evidence that the settlement was recognised as a legally distinct entity, or its populace as a socially distinct group. Accordingly, it remains equally likely that the decision to move did not rest with its inhabitants. The power that called Hamwic into existence may also have condemned it to ruin.

Excavation reports: introduction

In the following reports, the person in charge of an excavation is called the director or the excavator, regardless of the title accorded at the time. In cases of uncertain identity, this person is taken to have been whoever compiled the written site records.

All unacknowledged quotations have been taken from the original records, or from another source specifically mentioned in the introduction to a report.

Again, much use has been made of Andrews's forthcoming report on the excavations at Six Dials (see above). All unacknowledged statements about the pottery, including its relative dating, have been

based on notes made available by Jane Timby to the writers. The rationale behind these comments has been published as Timby 1988.

As already explained, full reports on the objects recovered are being published in other volumes. It is impossible to cross-reference with those volumes that have not yet appeared, but discrete item numbers are given, which will be found in later reports on the finds. In the case of the coins, however, a number prefaced with M is also given. The number is that of the catalogue entry in Metcalf 1988, 37-57.

The location of the sites is shown on fig 1.

SOU 4 (SRC IV)

A report on the excavations at SOU 4 has already been published (Cottrell 1980, 25-8). The following is a supplementary report that reassesses the evidence for a street at SOU 4 in the light of more recent evidence.

Metalled surface

Gravel in a matrix of greyish brown soil was spread across the southern area of the site (fig 14). It comprised between 10% and 80% of the layer, generally being less dense towards the outer limits. The area of lesser density seems to represent a later dislodgement of the gravel and its mixing with soil. A similar phenomenon has been noted at other sites, most definitely at Six Dials, but probably also at SOU 13 and perhaps at SOU 32. In every case, one may assume that the cause of disturbance was ploughing.

If the less gravelly areas are ignored, it will be seen that the metalling had been confined to a 56m-wide strip between two sets of structural features; and was probably a surface associated with those features.

It has previously been assumed that the gravel dispersed over the top of the pit, F55, was an undisturbed part of the metalling. However, this gravel is far from dense and seems to have been dislodged. It is irrelevant to any argument about the primacy or otherwise of the pit. Surfaces spread over the top of an infilled pit would eventually have sunk into that pit as its fills settled. (This did not happen in the case of the disturbed gravel, presumably because the layers in F55 had settled long before the area was ploughed over.) The section drawings of F55 show no sunken layer of gravel: therefore one must conclude that the pit had been cut through the original gravel surface.

F55 was one of a number of pits cut through the structural features either side of the gravel (some of

these are shown on fig 14: see *ibid*, 26, fig 6.1 for a more complete plan). A chronological link between the infilling of F55 and probably the infilling of the well shaft, F50 (not illustrated here; it lay some 12m to the north of F55), may be indicated by the recovery, from unknown layers of these features, of two halves of an animal bone that 'could be fitted together as convincingly as though they had just been cut' (Bourdillon and Coy 1980, 79). It appears that all the later pits were dug after the dereliction of the buildings alongside the thoroughfare and were associated with buildings not exposed by the excavations. Only one of these pits was cut into the gravel, so probably there was a deliberate effort to maintain the gravel in use. The digging of F55 must be seen as an anomaly to some extent, but one that can be reconciled with the other evidence: obtruding 2m into the gravel spread, it would not seriously have impeded traffic, especially if any hollow that appeared after its infilling had been quickly topped up.

The continued, relative intactness of the gravel surface is one reason for believing that a portion of a street had been exposed at SOU 4.

Unmetalled surface

Found in the area of the street were 138 stake-holes (fig 15). Forty-two of these wholly or partly underlay the undisturbed gravel. Some of the others, underlying the ploughsoil, may have been modern: three large stake-holes or small post-holes (not illustrated) contained modern artefacts in their fill. Nevertheless, the restriction of the stake-holes to the area of gravelling suggests that most formed part of a number of fence lines variously delimiting an earlier, unmetalled street. A similar arrangement has been noted most clearly at Six Dials. The east-west alignment of F104A may be further evidence of this fact.

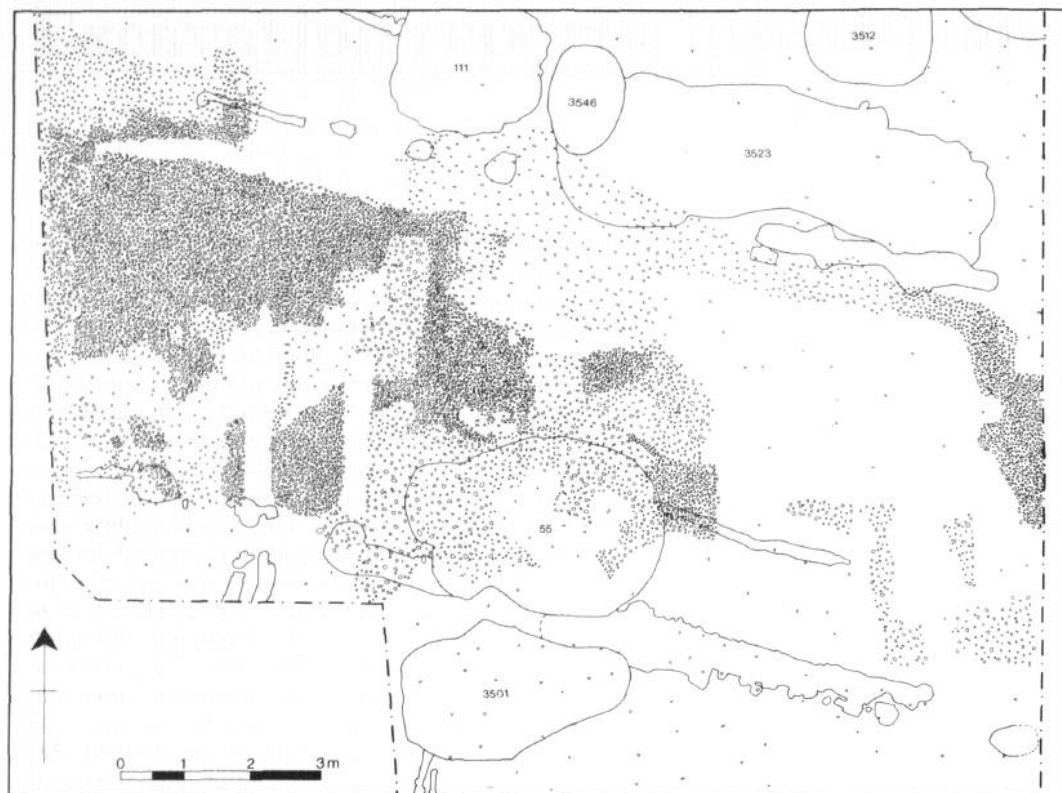


Figure 14 SOU 4: the gravel spread and other features in the south Of the site. 'F' prefixes to the feature numbers are omitted

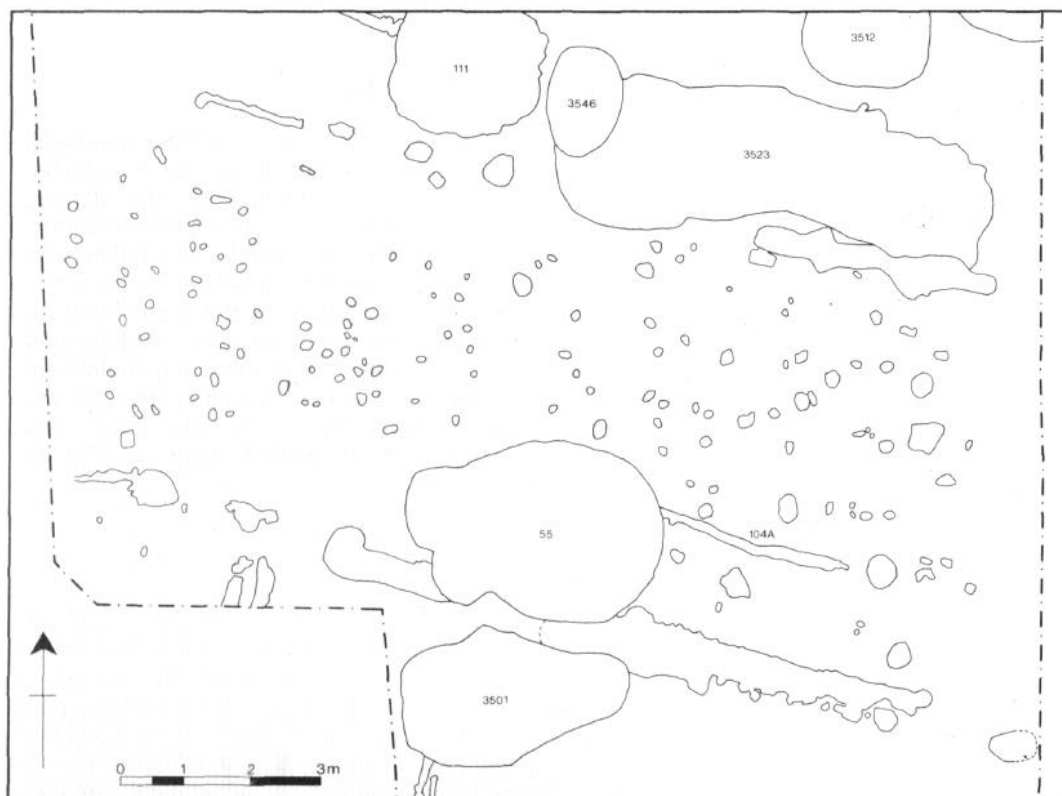


Figure 15 SOW 4: structural features (unnumbered) in the south of the site. 'F' prefixes to the feature numbers are omitted.

SOU 7 (SARC VII)

Introduction

SOU 7 was excavated in three phases (fig 16). In October 1972, PE Holdsworth directed the excavation of two trenches (A and B) in the area between Chapel Road and Standford Street. In January 1973, he directed the excavation of trench C, opened just to the east of trench B. Finally, in March 1974, R Mills directed the excavation of trench D, to the north of trenches B and C. The total area exposed was 117m².

In every case, the modern topsoil was removed by machine and the site excavated by the trowelling away of successive levels. These were 100mm thick, except in trench D where they were 50mm thick. A plan was drawn of the surface of each level. Features were excavated once their outlines became clear. These were originally numbered F1-F45 in trenches A-C (known since 1974 as F57-F101) and F1-F56 in trench D.

The natural soil, described as a 'brownish grey' brickearth was encountered at 1.53m OD. The mechanical removal of the overlying soil may have masked any original slope in the stratum: certainly, none was noted once excavation began. It seems likely that the brickearth was about 0.55m thick and overlay gravel, but such details are only darkly intimated by the records. A shallow spread of dark soil, F20 (not illustrated), lay over the pits, FF52-5. Containing a mixture of 'modern and Saxon material', it may have derived from ploughing in the area, and can be related, perhaps, to the 0.3m-thick layer of greyish brown soil brickearth that overlay and merged into the natural brickearth, otherwise removed when the topsoil was stripped away by a mechanical digger. A sub-rectangular feature, F10, at most 0.22m deep and filled with 'mid black stony soil', was cut by the pit for an Anderson shelter. Its date of digging may be ascribed, therefore, only to some period before 1940. Although its contents ('charcoal; animal and fish bone') might be thought typical of a Hamwic pit's, in its form it more closely resembles a brickearth-digging pit. A similar feature, F51, may also have been a brickearth-digging pit. Clearer evidence of modern disturbance comprised six pipe trenches, three rubbish pits, and the Anderson-shelter pit mentioned above. All these features may be ascribed to the domestic and industrial occupation of this area, established around 1840.

Early features

Pits

FF10 and 51 have been described in the previous paragraph.

F12 was a small, saucer-shaped depression. Containing a similar fill to those of FF10 and 51, its dating remains uncertain. One might see it, however, not as a deliberately created feature but as a depression that evolved in structure 4's back yard.

F21, which resembled a well pit in its form, was sub-rectangular in plan, a rounded V-shape in section, and 0.85m deep. Its bottom layer, 'gravel in dark stained brickearth', may have been redeposited natural. This was at most 0.3m thick. The rest of the pit had been filled with four layers derived from domestic refuse.

F52 was oval in plan, bowl-shaped in section, and 0.8m deep. It had perhaps been cut through F55. The initial fills, at most 0.35m thick, seem to have comprised five layers of redeposited brickearth, intermixed with varying amounts of charcoal and a small quantity of domestic refuse. Separating these layers were thin dark spreads, described as 'timber staining'. That interpretation cannot now be checked. The main fill of the pit was an uncertain number of rubbish layers, all of 'mid black earth' and all containing considerable amounts of 'shell fragments, animal bone, charcoal, and [burnt] daub'.

F53 (fig 17) was a well, cut through FF54-60. It consisted of a conical pit at least 1.4m deep and a shaft 1.89m deep. The well pit had been backfilled with layers of redeposited gravel (layers 5a-c). The shaft, which had originally been cylindrical, had been lined with a large cask (described below). Flooding of the lowermost 0.23m of the shaft during excavation leaves this point uncertain, but it seems that the well had not silted up before it was backfilled with rubbish. Layers 4a-c were all 'dark brown earth'. Layers 4a and 4c contained 'shell and animal bone', and layer 4b very large quantities of 'fragmented oyster and mussel shell'. Over these was a layer of 'oyster shell in black earth' (layer 3). This underlay 'black stony earth containing animal and fish bone, shell, [burnt] daub, and charcoal' (layer 2). Layer 1 was a 19th-century deposit: diagnostic finds were 'modern brick and china'. It is not clear whether layer 1 had slumped into a still-discrete shaft or was the infill of a partial plundering of the upper part of the shaft fill. The cask used to form the lining had been built from seventeen staves, 10mm thick. A groove had been cut into each to hold a caskhead. The wood survived to a maximum height of 0.58m, although a continuous stain (S on

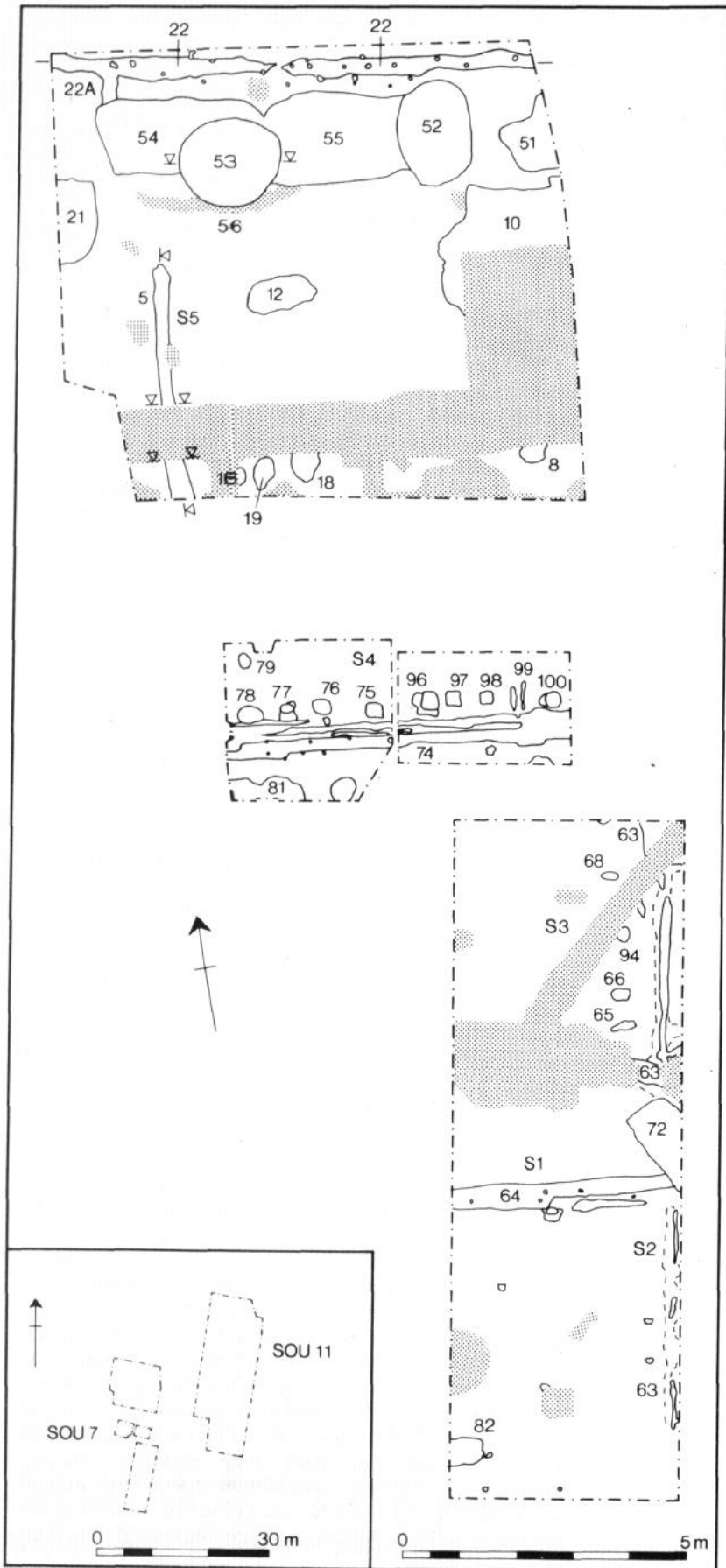


Figure 16 SOU 7: site plan. Only features referred to in the text are numbered here. 'F' prefixes to the feature numbers are omitted. 'S' indicates structure.

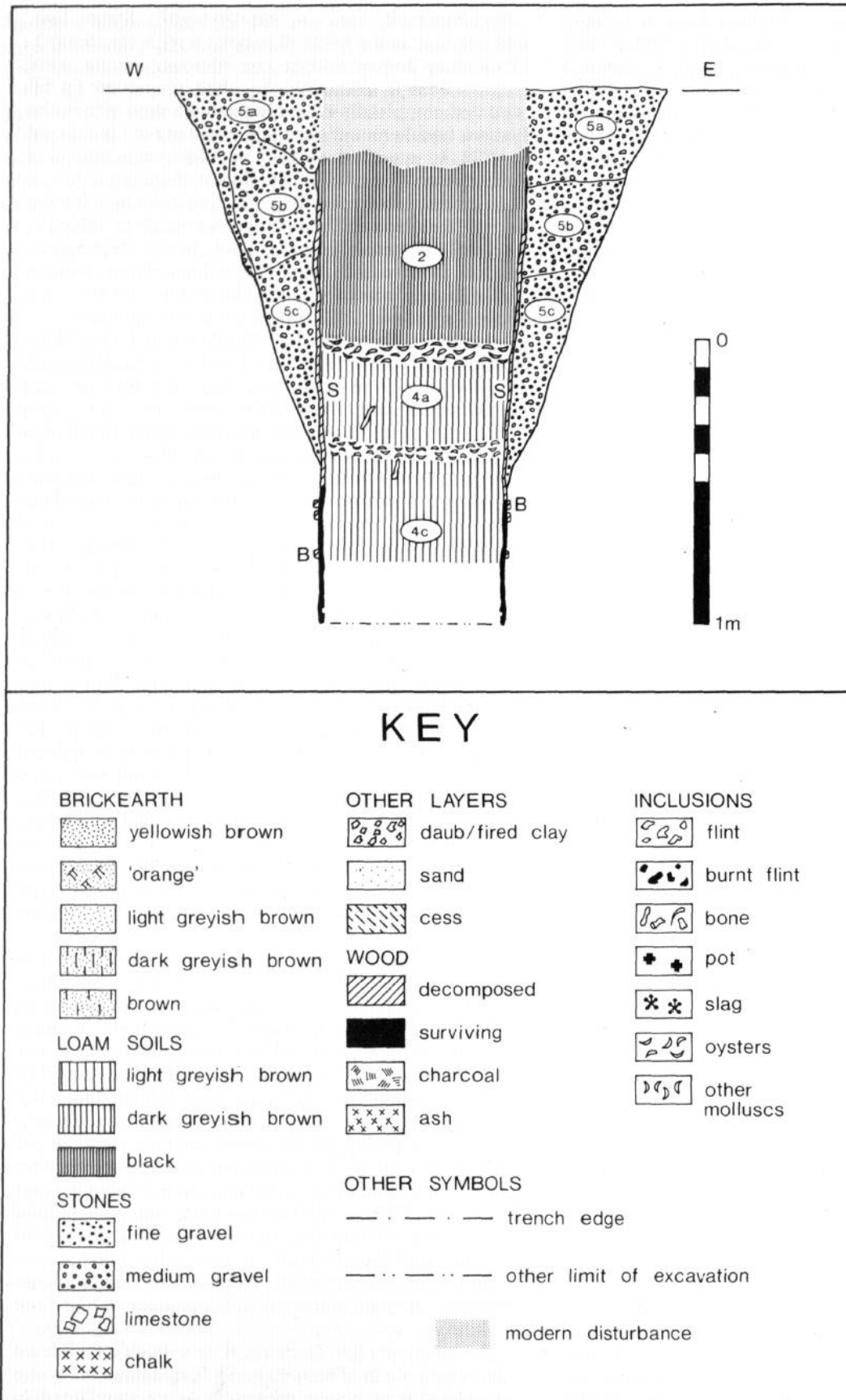


Figure 17 Top: SOU 7, F53. Key: B binding stain, S timber stain. Bottom: the basic key to all sections.

fig 17) probably indicates that it had been at least 1.47m tall. It had originally measured 0.7m in diameter (the section reproduced here had not been cut through its centre). Where the wood survived, 'stains of a timber binding' (B on fig 17) were noted outside it. Estimating its capacity at 566dm³, Morris (forthcoming) remarks that it is the largest Anglo-Saxon cask yet discovered, and suggests that it had been intended to hold either a liquid or a mixture of liquid and solid matter such as fish.

FF54 and 55 were both sub-rectangular in plan and section. F54 was at most 0.35m deep, and F55 0.5m deep. Both had been cut by F53, and F55 perhaps by F52 also. They had been largely filled with two similar layers. These were a thin layer of 'light grey stained brickearth' sealed by a main fill of 'mid black earth containing oyster and mussel shell, animal bone, [burnt] daub, and charcoal'. Despite the apparent homogeneity of these layers, it is clear from the pottery evidence, summarised below, that the pits had been filled under different conditions and probably at different periods. Exactly the same point can be made about the superficially similar upper fills of FF52 and 55.

F72, which had been cut through structures 1 and 2, was sub-rectangular in plan and bowl-shaped in section. It was 0.55m deep. Two layers comprised its fill, both of them about 90% gravel in a matrix of 'brownish grey sandy clay' (perhaps brickearth). The lower layer, some 0.14m thick, contained larger flints. Recovered from somewhere in this pit were one sherd of Middle Saxon pottery, one piece of bone, and one piece of 'burnt daub'. 'Little material was recovered; this making interpretation hazardous'. One might suppose that the feature had been dug and used as a soakaway, perhaps in the 19th century. However, a Middle Saxon pit of a very similar fill (SOU 18 F14) was found about 35m to the east of F72, and another (SOU 8 F88) about 50m to the north.

F81 was a shallow amorphous depression, filled with a mixture of 'gravel, clay, and silty brickearth'. When seeking to interpret this feature, one should not overlook Reynolds's description of chickens' dust-baths (Reynolds 1982, 176).

Structural evidence

Structure 1 is represented by the east-west trench, F64. This had been cut by the pit, F72. No more than 50mm deep, it contained five irregularly spaced stake-holes. All components of the feature seem to have been filled with the same 'medium brown' soil — perhaps brickearth. F64 may be interpreted as the remains of a boundary, even if it is not obvious what form that boundary took. The trench, which had been truncated perhaps by later disturbance, may have been dug out and the soil used to form a small adjacent baulk. Alternatively, a fence had been embedded into the hollow. Arguments about its relationships with nearby features will be found below.

Structure 2 was a north-south fence line, interrupted at its point of junction with structure 1. (This may indicate that the two structures were contemporary; alternatively, that structure 1's fill was not completely recognised in an area where the feature had been cut through structure 2.) It was cut by F72. It appeared as F63, a 0.18m-wide spread of 'light brown gravel'. Not investigated in any detail, it first appeared as a continuous linear feature (shown on fig 16 with a broken line), was resolved after the removal of some 50mm of soil as an intermittent feature, and was at least 0.1m deep. There is some sign (largely obscured by a later pipe trench) of a return to the east. F63 is further discussed below.

Structure 3 is marked by the five post-holes, FF65, 66, 68, 94, and 95. The first of these contained a 'dark fill', the rest a 'medium fill'. The features were not described in any detail. They were at least 50mm deep. The post-holes seem to have formed part of a building not otherwise exposed at SOU 7.

Structure 4 is marked by three wall lines, together defining a building some 4.4m wide by at least 5.6m long.

FF75-8 and 96-100 mark the southern wall line. With the exception of F99, 'two very shallow depressions of silty brickearth', all were rectangular or oval. F75-8, 96, 100, and perhaps 97 consisted of post-pipes set into post-pits. The pits had been backfilled with brickearth. The post-holes contained 'grey' or 'dark grey' soils. One piece of 'burnt daub' was recovered from F75's post-hole, a larger quantity from F98's and F100's, and even more from F96's. (Although these quantities were not specified, it appears that about 20% of F96's post-fill had comprised burnt daub.) The sectional shapes and depths of only FF75-8 are recorded: each was U-shaped in section. Depths varied between 0.12m and 0.21m.

A return to the north is marked by F79. This was a post-hole, V-shaped in section and filled with a 'grey soil' that contained at least three lumps of 'burnt daub'.

The northern wall line probably was marked by four post-holes, FF8, 16, 18, and 19. Although the supposed line was heavily cut about by modern features and lay close to three scaffolding post-holes, nothing suggests that F8, 16, 18, or 19 was a modern feature. FF8 and 16 were V-shaped in section, FF18 and 19 U-shaped. F16 was only 0.09m deep, the other three between 0.21m and 0.25m deep. F8 consisted of a post-pipe set inside a post-pit. The pit was backfilled with brickearth, the pipe with 'medium black soil'. F16 was filled with 'gravelly mid black soil'. FF18 and 19 both contained 'grey stained brickearth'. All contexts included a small amount of charcoal and 'burnt daub'.

Structure 5 appears as three fence lines, together defining an area within which structure 4 had been built.

The southern line is marked by a double trench set just to the south of structure 4. This feature, F74, was at most 25mm deep. Where it was investigated in detail, in trench B, it proved to contain or be bounded

by eight stake-holes. Its fill was not described but appears from a plan of trench C to have been dark grey soil intermixed with a small amount of gravel.

F5 (fig 18) ran to the west and north-west of structure 4. Although its shape in section appears as stake-settings within a wider, shallower scoop, there was 'no evidence of post- or stake-holes in section or on plan'. At most 0.16m deep, it had been filled with a 'black gravelly earth' which may have been similar to the fill of F74. The petering out of F5 to the north may be a sign that it had been dug into rising brickearth that had been stripped away at some later date.

A northern fence line, F22 (fig 18), may be seen just to the north of the pits, FF52-5. A southern spur, F22A, had been intended perhaps to continue southwards towards F5. Its relationship with 54 is unknown. F22 was at most 90mm deep and F22A 60mm deep. It seems that both were shallow scoops deepened in the centre into a channel U-shaped in section. Both had been filled with 'grey stained brickearth'. Set into and around F22 were at least 22 stake-holes, none of which is numbered on fig 16. These had all been filled with discrete 'black stony earth'. As shown on the section drawing, most of the stones had accumulated in the bottom of the features. The function of these fence lines is considered below.

Grave

In the south of trench A was found a grave, F82, half of which lay outside the excavated area. Exposed within it were the lower legs of what was probably an extended west-east burial. The grave survived to a depth of 0.19m and had been filled with 'dark grey clayey brickearth containing some charcoal flecks and much burned flints'. If there is any greater significance to these inclusions, it remains obscure. Attention was drawn by the excavator to the location of a small post-hole immediately to the east of the grave. More evidence would have to be available before one chose to suggest a connection between the two features,

Dating and interpretation

Pottery was recovered in large quantities only from four features, FF21, 52, 53, and 55. The pottery in the bottom half of F52 (together weighing 385g) all proved to have been imported from the Continent. Of the 256g recovered from the rubbishy upper half, a quarter was organic-tempered pottery. This fact probably indicates that the pit was being filled early in the Middle Saxon period. If so, the cut line through F55, which the excavator hesitantly marked with a broken line, probably did not exist, for the pottery found in that feature tends to indicate that it was filled later than F52. One may ascribe a mid Middle Saxon date to these fills on the basis of the pottery they contained. Curiously, although a 'reasonable' 451g of pottery was recovered from these layers, it included no imported pottery. The shaft of F53 also seems to have been infilled during the mid Middle Saxon period; pres-

umably much later in that period since the well pit had been cut through the fills of F55. Layers 2-4 together contained 510g of largely mid Middle Saxon pottery. Pottery from the upper and lower layers of F21 (a total weight of 340g) date the infilling of that pit also to the mid Middle Saxon period. In addition, F20, the late layer over FF52-5, contained 527g of Middle Saxon pottery, of which 80% was imported. A sherd of imported pottery was recovered from F64, and a very small sherd of imported pottery from F72. The latter was probably residual.

A preliminary dendrochronological date was obtained, from one of the timbers of F53's cask, by the late Dr J Fletcher of Oxford University's Research Laboratory for Archaeology. This indicated that the oak used had been felled soon after 704. Unfortunately, the timbers have now all disintegrated and a further examination of the cask is impossible. Assuming, however, that the object had been constructed early in the 8th century, and bearing in mind the stratigraphical and pot-dating evidence, one might conclude that the cask had continued in use for several decades before finally it was used to line a well.

It appears that structure 5 marked the limits or a sub-division of a property in which structure 4 had been set.

One might perceive a similarity between this layout and one inferred from the evidence disclosed at SOUs 16, 21, and 22. There, a main building and its yard were closely bounded by fences: here, one finds apparently the same layout except that at least three pits and a well had been dug at the farthest end of the yard. Geographical factors probably explain this difference. Living further inland, the inhabitants of the SOU 7 property could not dispose of their rubbish into the river or draw their water from it.

It is argued below that a main building and an associated yard did not comprise the entirety of the SOU 16/21/22 property: there were in addition an outbuilding and an open area supposed to have functioned as a paddock. No such outbuilding can be recognised at SOU 7. If one did exist, it was located, one may guess, outside the area excavated. The continuation of F22 (structure 5) eastwards and beyond the area excavated may be a sign that the SCU 7 property was considerably larger than appeared at the site. However, there is no reason to suppose that the property also included a paddock.

The relatively open area to the south of structures 4 and 5 can be variously explained. That it was an open area is by no mean certain, of course. Only a small segment of the southern area was exposed in SOU 7, and that contained the remains of an apparently substantial building, structure 3. The relationship between this building and structure 4 can only be guessed. Much the same is true of the other features located in the trench.

Structure 1 may have been cut through structure 2, the relationship being obscured because F64 had been infilled with redeposited brickearth. According to another interpretation, F63, although it lay either side of

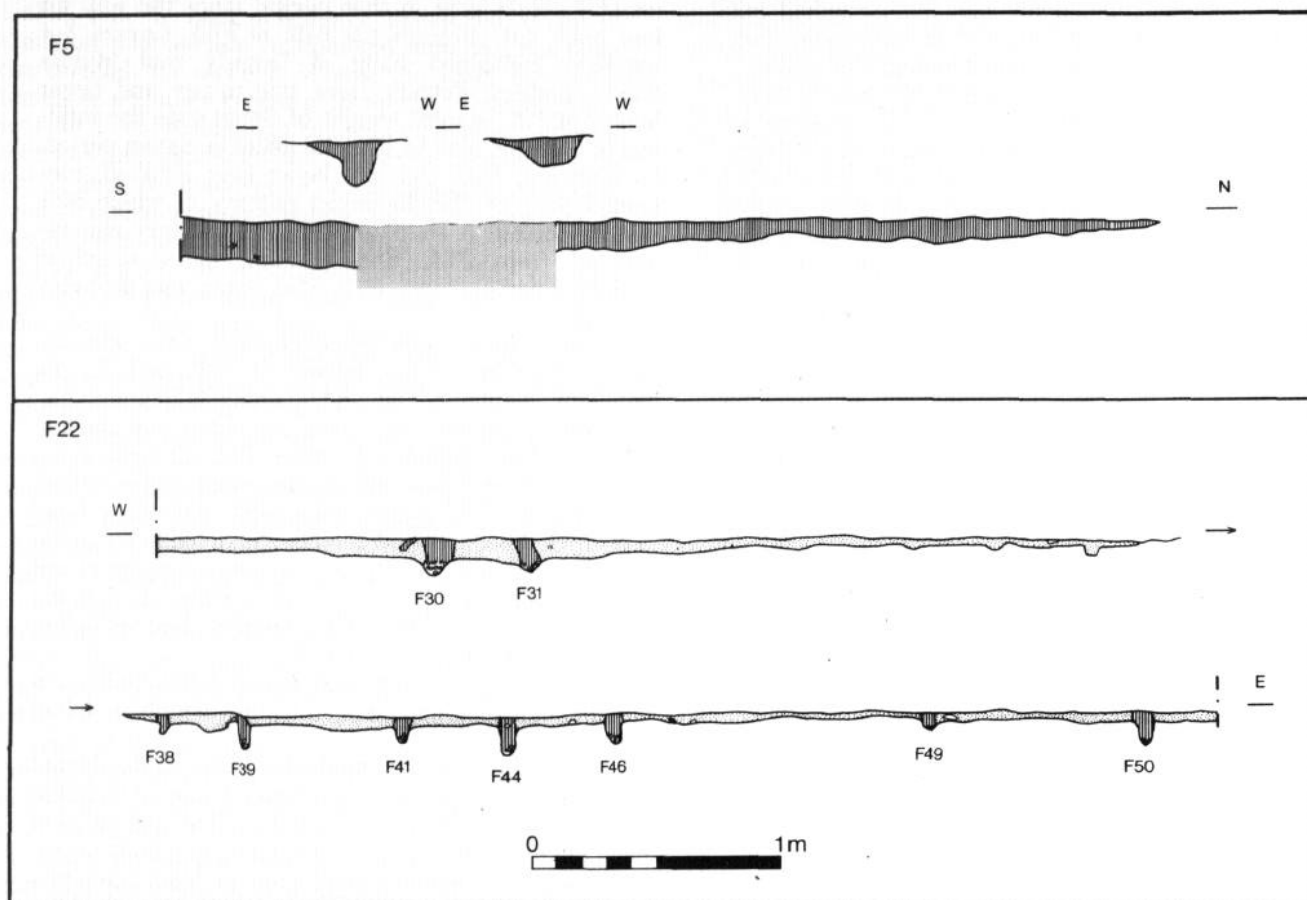


Figure 18 SOU 7, FF5 and 22 with associated stake-holes. See fig 17 for the key

F64, had been interrupted near its point of junction with F64. By the first interpretation, structure 1 was later than structure 2, and we may suppose that it served to mark a boundary between other features in the area. It was perhaps the northern boundary to a cemetery, or a southern boundary to a domestic property, or functioned as a boundary to both. If, however, structures 1 and 2 were contemporary features, it is impossible to state what they may have divided.

The property denoted as structures 4 and 5 was in existence, one presumes, during the lengthy period in which FF52-5 were dug and filled; throughout much of the 8th century, that is to say, and perhaps part of the 9th. None of the other features can be closely dated. If F82 were a Christian burial, as its alignment hints, the most likely period in which the body would have been buried in a shallow grave is during the existence of Hamwic, at a time before St Mary's churchyard became 'the common sepulture of Southampton'. Certainly, if structure 1 had separated a cemetery from a single property to the north, this grave can be dated to the early Middle Saxon period when that property seems to have been in existence.

An association between this grave and those supposed to have existed in the early Middle Saxon period at or near SOU 14 is a possibility

In all these matters, it is clear that the various uses made of the area north of Chapel Road will become clear only after the completion of a great deal more fieldwork. Apart from disclosing more of a putative cemetery and rationalising the presently confusing network of features that have been found, such work might provide more evidence that imported material was concentrated in the area of Chapel Road. Noteworthy in this respect are F20, with its 80% imported-pot assemblage; and F52 with its 4% of imported pottery from all layers, or 100% from the three bottom layers. Despite these high proportions, it is curious that only six pieces of glass were recovered here — one from F52, one from F54, two from F55, and two from uncertain contexts. If such small quantities mark a functional difference between SOU 7 and the nearby SOUs 11 and 14, where much larger quantities of glass were found, that difference has been obscured by the smallness of the relevant excavations.

Sou 8 (SARC VIII)

Introduction

In January 1973, a long rectangular trench measuring 39.4m east-west by 5m north-south was opened just to the north of Standford Street, 26m from SOU 7 and 12m from SOU 11 (fig 19). Including four small extensions, the trench eventually exposed 198m² of the underlying archaeology. Directing the excavation were PE Holdsworth and JP Cockerill. The topsoil was removed with the aid of a mechanical digger, thereby exposing the surviving top of the natural soil. This surface was cleaned by hand, a plan drawn, and the features excavated. In general, it seems, half or a quarter of a pit was excavated quickly, a section drawn, and the remaining half or an adjacent quarter then removed. Since most finds have been provenanced to layers, it is likely that this method of excavation was not as rigorously pursued as it was on SOUs 11 and 14. Features were numbered F1-F31 and F39-F102; the break in sequence being related, probably, to the change in directorship from Holdsworth to Cockerill. This writer has added FF32-8.

The natural soil was called 'dirty brickearth' by the excavators. It is shown on plans as yellow in colour and was perhaps a yellowish brown. The structural features found at SOU 8 seem to have been truncated by later disturbance, and one guesses that the surface of the brickearth had once been about 0.2m higher than was exposed in 1973. Some of this lost horizon may have disappeared in the machine-stripping, for, to judge from the section drawing of F1, in the westernmost part of the trench, about 0.1m of this brickearth was mechanically removed (see also the descriptions below of FF25 and 28). The surviving top of the brickearth was encountered at 1.70m OD in the western half of the trench, and 1.80m OD in the eastern half. Overlying gravel, the brickearth was of unrecorded thickness. F88, in the eastern half of the trench, was 0.64m deep and exposed 'natural, hard-packed gravel' at an unknown depth. References to circular areas in the eastern half that were points 'at which a gravel spread surfaced' may be taken as indicating that the brickearth was considerably thinner than 0.64m.

Nineteenth-century disturbance, connected with the houses built in this area in the 1850s, mainly comprised two sewer trenches and nine scaffolding post-holes. A spread of dark soil and gravel immediately to the east of the easternmost sewer trench was taken to have been 'upcast material formed when the trench was inserted'. If such it was, it had

been thrown onto a brickearth surface that had already been truncated.

This truncation of the brickearth and the negative features was perhaps the result of ploughing. No plough-marks were noted, but certain areas of greyish soil (numbered F32a-f by this writer and outlined with a dotted line on fig 19) may, in part at least, have been the bottom of the ploughsoil.

Early features

Pits

The central sewer trench may have been dug through an earlier pit, for found within the 'upcast material' mentioned above were 'much bone' as well as 'shell and one bronze pin'. (None of this material can be identified now.) Listed below are those pits that were recorded in 1973.

F1 was rounded in plan and excavated to a depth of 0.54m. 'The pit was not bottomed to natural' and its shape in section is unknown. Probably less than half of the pit was exposed in the trench. Three layers were excavated, the lowermost one 'dirty brickearth' and the other two dark soils. All contained oyster shells, which were especially concentrated in the top of the uppermost layer, and all contained significant quantities of animal bone. These layers were probably derived from domestic refuse.

F6 seems to have been cut through F11. It was excavated only in a north-western segment. Its somewhat amorphous appearance in plan may have resulted from the fact that 'the edges were difficult to prove due to dirty, fine gravels being interbedded with the [natural] brickearth; and for this reason the sides were overcut.' Roughly bowl-shaped in section, it was at most 0.34m deep - or 0.29m if the lower three layers are discounted. These three consisted of 'medium grey brickearth', 'dirty brickearth' (both of which contained much small gravel), and a small inclusion of 'light grey silty brickearth'. Containing no finds, the layers appear to have been natural soils, either redeposited or exposed by overdigging. Above them were two layers containing moderate amounts of animal bone and filling most, if not all, of the pit. The lower one was 'dark grey' in colour, and the upper one - apparently a slump fill - was 'black, humic' soil which also contained some oyster shell. The two layers were probably separate dumps of domestic rubbish.

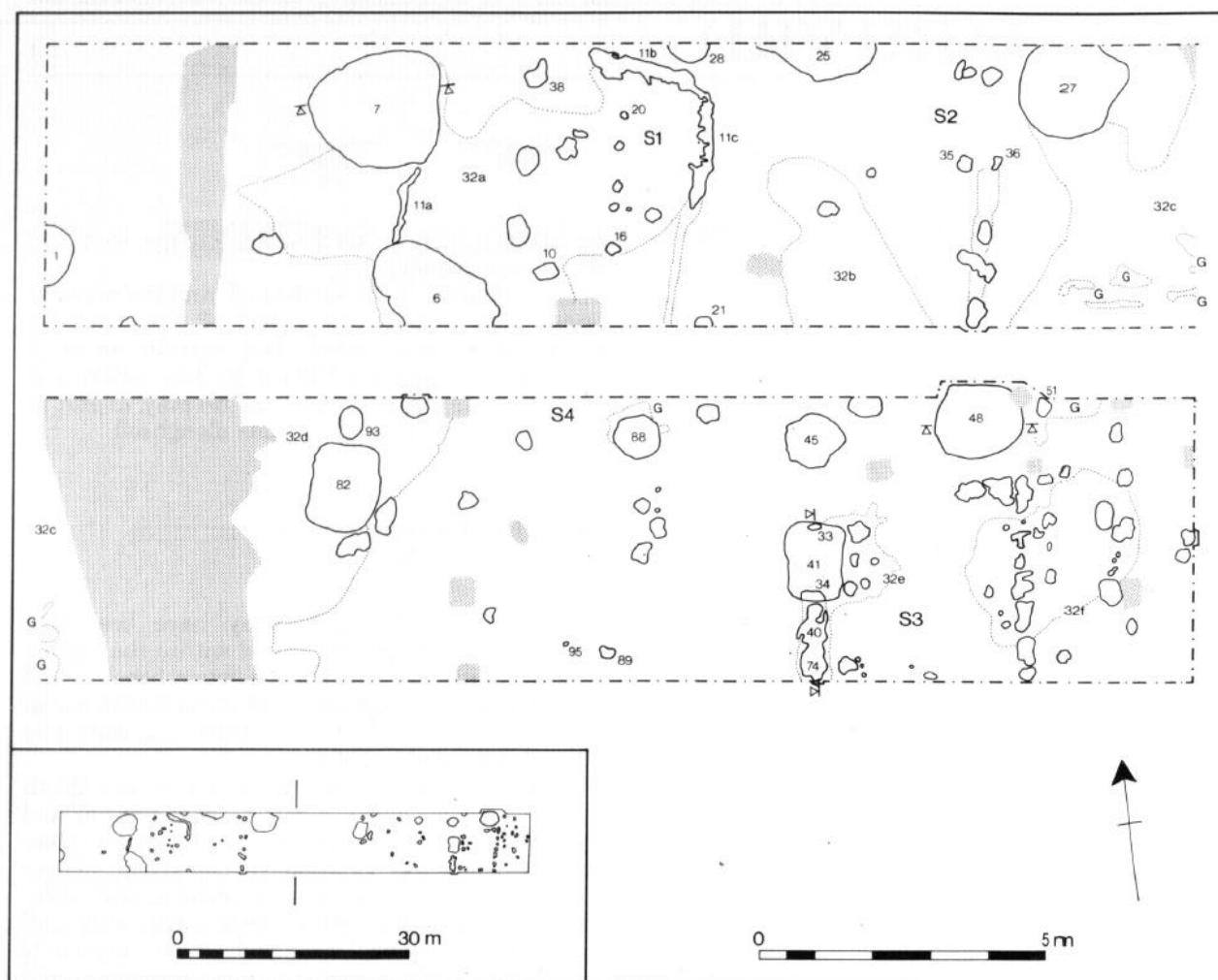


Figure 19 SOU 8. The site plan is drawn in halves to fit it more easily onto the page. Refer to the inset plan for the correct relative positioning of the features. Features not mentioned directly in the text are not numbered here. 'F' prefixes to the feature numbers are omitted. Key: **G** gravel, **S** structure.

F7 (fig 20) was a well. Ploughing across its top may have contributed to the appearance of F32a. Its shape in plan may originally have been sub-rectangular. The well pit was sub-rectangular in section and at most about 0.9m deep. The shaft was 0.55m deeper. Perhaps originally rectangular, or circular with a diameter of some 0.9m, it was slightly offset to the north of the feature's centre, and seems to have been lined. This lining survived only as 'two distinct vertical stains within the well'. They are not shown on the original section drawing.

Not all of the layers drawn were numbered or clearly identified in the site records. These are called here layers a-h, all but the last two of which can be identified on the section drawing. The well pit was initially backfilled with brickearth (layer d; and perhaps layer e, if it and layer f had not been natural brickearth exposed by overcutting). Over this were thrown two rubbish layers (layers 3 and c), and the final fill was 'very dirty brickearth with flint' (layer 2). These two rubbish layers may have

been created during or after the lifetime of the well and after an earlier slumping of layer d, for four pieces of various limestones and three pieces of ferruginous sandstone, all found in layer 3, may have been deposited at about the same time as similar material present in unusually high quantities within the well shaft. Layer a, 'a mixture of layers 1, 2, and 3', containing some shell, and layer b, 'black to dark grey clay with some flint', probably accumulated at a later date after a gap appeared between the shaft and the fills of the well pit.

The shaft contained seven layers. The lowest one, layer 9, was 'small gravel flint' in a matrix of 'grey to very light brown clay'. It contained some charcoal and four fragments of animal bone. Layer h, above it, was 'medium to dark brown clay with much charcoal'. If it equals layer 6, it also contained two fragments of ferruginous sandstone, some animal bone, and four pieces of burnt clay, two of which were probably parts of a loomweight. Above this was

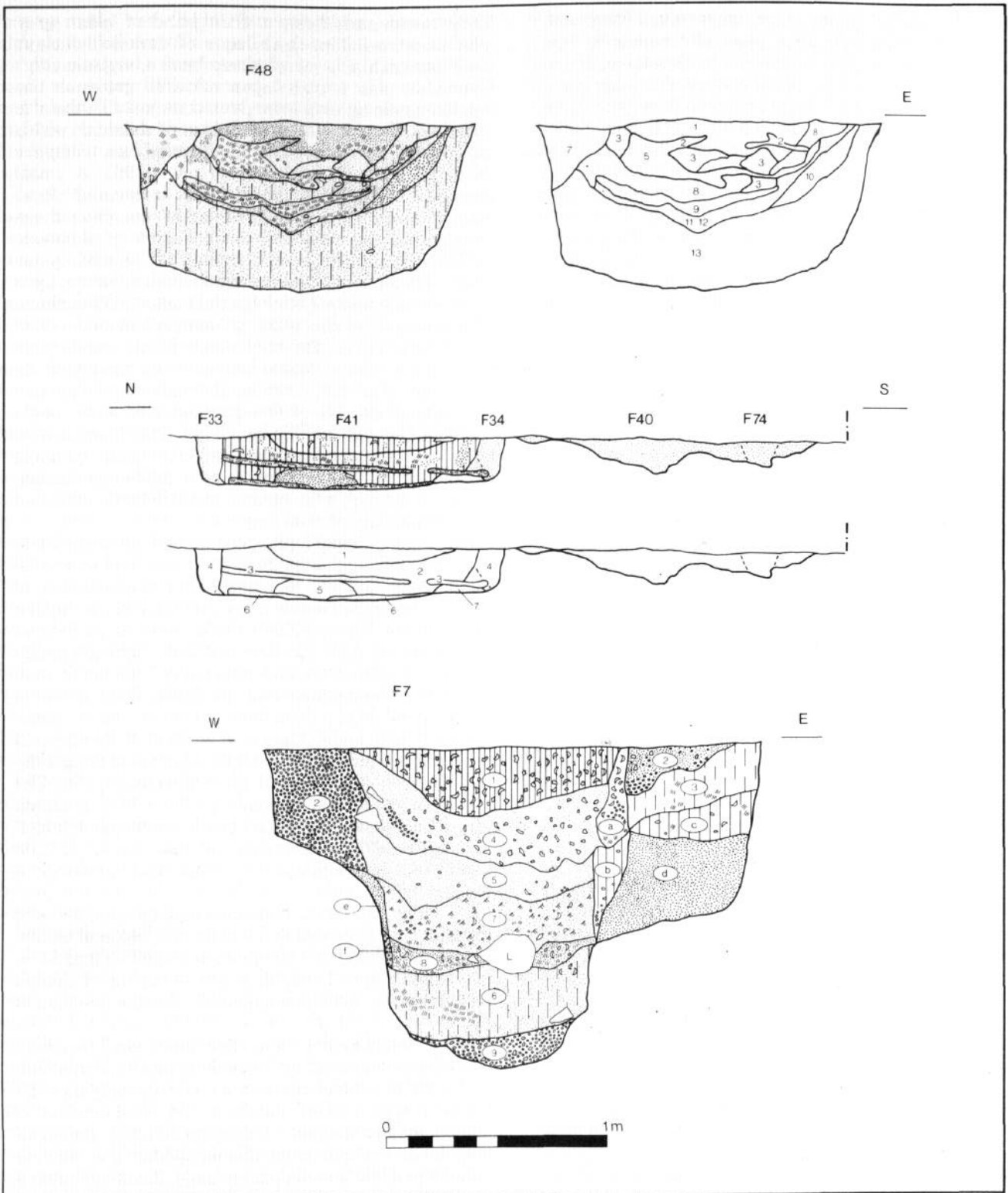


Figure 20 SOU 8: FF7, 33, 34, 40, 41, and 48. Key: L limestone. See also fig 17.

layer g, 'dirty yellow clay with much charcoal, oyster, and flint'. A large piece of undressed, fine sandy limestone was embedded in this layer. If the layer equalled layer 8, it also contained a large piece of tertiary limestone, fragments of a lava quern and a whetstone, and a small amount of animal bone. Layer 7 was 'yellow-brown clay with charcoal, little fragments of oyster,' and a small amount of animal bone. It underlay layer 5, 'variegated brown clay with little oyster'. Found within this layer were six fragments of various limestones, two of them large and one of them burnt; and three fragments of ferruginous sandstone, one of them large and all of them burnt. A small amount of animal bone and burnt clay was also found, along with a fragment of what appears to have been a Roman brick (item 3). Layer 4, 'light brown clay with flint' and a lens of small gravel, contained four fragments of limestone, one of them large and two burnt; nine fragments of a lava quern; some slag (items 96 and 99); and a small amount of animal bone and burnt clay. The uppermost layer, layer 1, was 'very black clay with much oyster' and some animal bone.

Layer 9 was comparatively sterile and may represent primary silting, or even secondary silting if the rounded bottom of the shaft is a sign that the well had been cleaned out during the period of its use, perhaps below the bottom of its shaft. The five layers above this were presumably dumped after the well was abandoned, although there is no evidence that the shaft had collapsed. The scatter of sandstone and limestone throughout these layers may indicate that the layers were all thrown into the shaft over a comparatively short period of time, or derived in part from the one pile of rubbish. Layer 1 clearly filled a late slump in the top of the feature.

F25 was of unknown shape in plan and was probably bowl-shaped in section. Perhaps a quarter of it was exposed in SOU 8. It was excavated to a depth of 0.71m (0.11m of which had been removed by the mechanical digger), and contained ten layers, only five of which are shown on the section drawing. Judging from the section drawing, the initial fill was cess mixed with some domestic rubbish. It was sealed by a thick layer of redeposited brickearth intermixed with some domestic rubbish. Above this were two slump fills in the top of the pit. The lowermost of these was a thin and discontinuous layer of 'dark brown clay with [burnt] daub' and some animal bone. It lay beneath a rubbish layer. The bottom layer, layer 4, contained a fragment of what seems to have been a Roman brick. Layer 6, the position of which is not known, contained some animal bone and a piece of slag (item 97).

F27 was a large, circular pit, only the western half of which was excavated. Ploughing across the top of it may have led in part to the accumulation of F32c. Of initially vertical sides and with a sloping bottom, it was excavated to a depth of 1.45m. The lowermost 0.52m of the pit was filled with five layers, which were removed as a single unit of 'humic deposits'.

They comprised, first, a thin band of 'clean grey silts' under a 0.35m-thick layer of 'dark brown clay'; itself beneath a layer of 'deep brown, organic clay'. Over this was a thin layer coloured green on the section drawing and interpreted as 'cess' in the site notebook. It was sealed by 0.02m of charcoal, which may have been a sealing layer over cess (compare SOU 17 FF4, 9, and 14, below, p 96). A small amount of animal bone was recovered from somewhere within this group of layers. Over these presumed cess deposits were layers of domestic rubbish containing much animal bone and oyster shell. These were separated into two halves by a layer of redeposited brickearth, at most 0.25m thick. The evidence of the pottery, assessed below, is that the layers above the brickearth were considerably later than those below it. It may therefore be supposed that the brickearth had originally been the uppermost fill of the pit, but had sunk about 0.5m as the earlier fills subsided. This layer can be variously interpreted; as a floor layer perhaps connected with structure 2, as a deliberate sealing layer, or as part of a spread of brickearth produced when a nearby pit was dug.

F28 was a small pit, about half of which was exposed in the excavations. Rounded in plan and U-shaped in section, it was 0.55m deep, 0.16m of which had been removed by the mechanical digger. The bottom layer, 0.06m thick, may in part have been natural soil, for it comprised 'light grey silty clay grading downwards into dirty brickearth with much flint' and contained no finds. Over it was a 'dark grey' layer containing animal bone, some charcoal and burnt clay, and a piece of ferruginous sandstone which may link this layer chronologically with certain of the fills of the adjacent pit, F25. The upper layer, which appears to have been a slump fill, was 'black clay with much oyster and lamelibrach shells' and much animal bone. It also contained a fragment of what was probably a Roman brick.

F41 (fig 20) was sub-rectangular in plan and section, and survived to a maximum depth of 0.25m. Its relationship with the post-holes, FF33 and 34, is discussed below. Ploughing across the top of this pit was probably partly responsible for the creation of F32e.

The bottom layers were 'fine greensand' (layer 7), containing charcoal and small pieces of burnt clay, and a thin, intermittent layer of charcoal (layer 6). Layer 7 was a small patch in the southern half of the pit and contained no diagnostic finds. Its colour may have derived from staining from the cuprous objects present in this pit in large quantity. Layer 6 was generally confined to the centre of the pit. It contained a small amount of burnt clay and twenty fragments of animal bone. It may represent the bottom of a burning layer, but there is no record that the natural soil into which F41 was cut was heat-discoloured. In view of its inclusions, the layer is perhaps best interpreted as a secondary, mixed deposit. Immediately over layer 6 was layer 5,

'orange clay' or 'light brown/yellow clay with charcoal'. This was also confined to the centre of the pit. It contained a fragment of grey sandy limestone, some slag (item 98), a small amount of burnt clay, and about 70 fragments of animal bone. Its origins appear to have been threefold: as redeposited brickearth, as domestic refuse, and as industrial waste.

Layer 2, which covered all these, appears to have been two layers separated from each other by a 'charcoal lens with some bone' (layer 3). The finds records indicate that more than 70 bone fragments were recovered from layer 3, a few of which had been stained green through contact with cuprous objects. Also found was fuel-ash slag with traces of copper (item 16). It seems, therefore, that layers 3 and 6 represent repeated actions, perhaps the dumping of mixed deposits, and that the two parts of layer 2 were also connected with the charcoal layers. Layer 2 was described as 'black [or grey] clay with much charcoal'. The charcoal seems generally to have been concentrated in the upper half, where small inclusions of 'clean orange clay' or 'yellow clay' were also found. These inclusions, scattered throughout the layer, were probably comparable with layer 5. In its entirety, the layer contained 'several small bronze fragments' (item 32) and the shaft of a pin (item 34), the rim sherd of a copper-alloy-working crucible (item 14), and three tile fragments (item 89), all of which are considered below; about 60 fragments of animal bone, some of which had been stained green; and a small amount of burnt clay and oyster shell. Like layers 3 and 6, layer 2 appears to have been a mixture of domestic rubbish and industrial waste.

Layer 1, 'black clay with much charcoal' or 'with some dirty brown clay and a few oyster shells', was similar to layer 2, though it was perceived to be darker. It (or perhaps layer 2) contained a complete copper-alloy-working crucible (item 18), discussed below, a small amount of burnt clay, and animal bone, some of which was stained green.

Layers 1-3 and 5-7 can be interpreted as a series of dumps of domestic and industrial waste. Layer 4 is less easy to interpret. It is shown on plans as a continuous deposit of yellow 'brickearth'. But on the section drawing it is divided into the parts shown in fig 20 and is described as 'silty brown clay (post-holes?)', which scarcely touches the bottom of the pit. Drawn on the overall site plan are several stains within F32e, two of which have been interpreted by this writer as post-holes and numbered FF33 and 34. These putative post-holes are not shown on the layer plans of F41, which, however, do not show the entire length of the excavated feature. 'Two large stake-holes on either (north-south) edge of the pit' are mentioned in the site notebook. All this contradictory evidence might be taken as showing, first that the pit was lined along its sides with redeposited brickearth, and secondly that it was later cut by two post-holes, or perhaps combined a lining with post-holes: compare

SOU 16 F54, discussed below, p 160. Against this interpretation must be set the fact that a great many finds are provenanced to layer 4; some stone, including a piece of sandy limestone (perhaps comparable with that found in layer 5), a complete copper-alloy-working crucible (item 17), three grooved tile fragments (items 90-2), and about 115 fragments of animal bone. It is possible that the crucible, stones, and tiles were all redeposited into the fill of FF33 and 34, but at least the majority of animal bone must have been recovered from layer 4. This seems a strange inclusion to find in a deliberate lining, and it is probable that layer 4, like layer 6, was a dump of brickearth, domestic rubbish, and industrial waste. It is likely that, shown on the section drawing, are two post-holes and a small remnant of layer 4. The relationships of these post-holes are considered below.

F45 was described as a 'small circular pit'. The edges shown in plan may have been distorted by erosion. Bowl-shaped in section, it survived to a depth of 0.22m. It contained two main layers, separated in the western quarter by a third layer. All were 'brown clay' of varying shades of darkness, and all contained animal bone, which was concentrated in the top layer. These were all probably rubbish deposits in a pit of unknown original function.

F48 (fig 20) was oval in plan and sub-rectangular in section, though with an eastern side that deviated from the vertical by some 230. It survived to a depth of 0.78m.

The depositional history of the pit is not easy to unravel, especially since the original records contradict one another or are otherwise incomplete. Thirteen layers were numbered in the site notebook; fourteen in the finds cards; and in the quadrant plans the highest-numbered was layer 13. The layers were not numbered on the section drawing. Descriptions of the layers in the site notebooks, the section drawing, and the plans are all at variance. With two minor exceptions there is no strong guide to the order of the layers. That they were not necessarily numbered in stratigraphic order is proved by the statement in the site notebook that 'under layer 5 was layer 3'. It is likely that separate, but similar, layers were given one number. The confusion may have been compounded by the method of excavation, which consisted in the serial removal of adjacent quadrants.

The writer has sorted out this muddle to his own satisfaction only insofar as he can certainly identify layers 1, 7, and 13. The location of layers 2-6 and 8-12 are perhaps as shown on the published version of the section. The existence of a fourteenth layer cannot be proved: it was probably listed on the finds cards after an error in transcription. (Note that these given numbers are an attempt to reconstruct the excavator's view of the infilling: they do not exactly represent the writer's view.) Because of all these doubts, and despite the importance of understanding the depositional history of this pit,

there is little point in describing each layer in its variously described detail.

There seem to have been three main phases in the infilling of this pit. In the first phase, it was filled with 'darkish green-brown clay with much bone, charcoal, and small gravels' (layer 13). This was thought to have been a rubbish fill. Later, perhaps after the layer had subsided, a complex series of layers had been thrown into the pit. These, which comprise the second phase of filling, are interpreted below. Finally, after they in turn had subsided away from the edge of the pit, there was a final fill of 'very dirty brown clay' which contained some charcoal, a piece of burnt daub, and one piece of animal bone. This layer probably resulted in part from a natural weathering of the earlier layers.

It is the second phase of infilling that is of most importance here; a phase where, unfortunately, only one of the ten numbered layers can be identified with any great confidence.

There were three or four layers of charcoal. The lowermost one was an intermittent spread that may not have been numbered, or been numbered layer 12 ('medium brown clay with many charcoal flecks - flint pebbles'). Higher in the pit was a thick charcoal layer, underlying and in part containing a spread of burnt clay. This was perhaps layer 9 ('very black clay with charcoal'). Even higher was a thick bifurcated dump of charcoal, intermixed with 'yellow clay'. The lower branch may have been layer 5 ('charcoal, dense to the bottom') and layer 6 ('deep brown silty clay with charcoal - within layer 5'); and the upper branch may have been layer 2 ('charcoal with patches of yellow clay').

Over the intermittent spread of charcoal (layer 12) were layers described on the section drawing as 'clean, light brown clay' (brickearth?) and 'grey brown clay with compact round pebbles'. The first of these was probably layer 10 ('light brown clay mixed with charcoal') which was 'clean' in that it contained no finds. The second may have been layer 11 ('dark brown clay with many charcoal flecks - flint pebbles').

Over the charcoal layer supposed to have been layer 9 was a small patch of 'charcoal staining', perhaps taken by the excavator as part of layer 3 (described in the following paragraph), and a 'dark brown clay' layer. This was probably layer 8, which was similarly described in the site book; the main difference being the addition of the epithet 'dirty' - a word probably explained by the inclusions of charcoal within the layer, shown on the section drawing. Other inclusions, as shown on the drawing, were burnt clay, 'yellow clay', and green-stained bones. None of these is mentioned elsewhere. The 'clays' may have been removed as part of the higher layers, and the green-stained bones, none of which is listed in the finds records for layer 9, may similarly have been included with material from layers 4 or 5.

The depositional history of the upper 0.3m of the layers in the pit is most difficult to unravel. Over,

under, and among the forked layer of charcoal are shown patches of 'yellow clay'. (Some of these, it is suggested above, were numbered as layer 5, and others mentioned only as 'patches of yellow clay'.) An intermittent spread of 'charcoal staining' appears between the bifurcations, below the lower branch of charcoal, and apparently as a western continuation of the charcoal layer. (It was perhaps all numbered as layer 3, 'green-brown clay with charcoal flecks'.) Interspersed with the 'charcoal staining' appear patches of 'dark brown clay' and 'medium brown clay with fine gravel'. The former was removed perhaps as layer 8 (described in the previous paragraph), and the latter perhaps as layer 4 ('light brown clay').

The mixture seems to have extended into the top layer, layer 1 (described in the site notebook as 'orangey brown clay' and on the section drawing as 'hard dry brickearth'), for the upper branch of charcoal as well as charcoal lenses intrude into this layer and into lower layers. Some of this may have resulted from later, natural disturbance: even so, at least the final part of the second phase of infilling appears to have been a mixture that accumulated within a short space of time. The layers comprising the earlier part of the phase may have been layers of *in situ* burning, but those comprising the final part were probably secondary deposits, deriving perhaps from the stratified layers in another pit, and confused in the process of clearing them out. If such an interpretation is allowed, these layers may be compared with those in F41, especially layer 5, supposed to have been of threefold origin (see above).

A domestic origin for much of the material dumped during the second phase of infilling may be inferred from the comparatively large amounts of animal bone recovered. Some 240 fragments are recorded in the finds cards, a third of which (79) came from layer 3, a quarter of which (58) from layer 4, and large fractions of which came from layers 1 (20), 2 (39), and 11 (35). Two points are apparent. In the first place, the majority of the fragments came from what has been interpreted as the later part of the infilling: 81.7% or 196 fragments from layers 14. The contrary fact, that few bones were recovered from the lower layers, may support the argument that the earlier part comprised *in situ* burnt layers. The small amount of animal bone from layer 5 (six fragments) may be an indication that at least part of this layer was itself part of the burning. Secondly, the animal bone from the upper layers (layers 1-4) was found in a large variety of deposits; brickearth, charcoal, and brown clays. This fact may be further evidence that the later part of the infilling comprised mixed, secondary deposits.

Much of the bone found in layers 1, 2, 4, and 5 (or 8, according to the section drawing) had been stained green through its nearness to cuprous objects. Evidence for copper-alloy working principally comprised the rim sherds from two

crucibles (item 15), found in layer 1; a 'heating tray' (item 13), found in an unknown layer; an ingot mould of lias limestone (item 94), found in layer 8; and two fragments of tile in layer 3. These latter fragments may have no more significance than the pieces of Roman brick found in the western half of the trench (in FF7, 25, and 28), but it seems more likely that they too had been parts of a mould such as were recovered from F41. Found almost exclusively in layers 2-5 (the exception is item 26 from layer 11), and especially in layer 2, were 32 copper-alloy items that might have been directly connected with the nearby copper-alloy working (further details are given below). It is of interest that 88.9% of the copper-alloy items found at SOU 8 were recovered from F48.

The heating of copper alloy in crucibles may have been done in this pit, early in its second phase of use. The 'compact round pebbles' (layer 11?) may have been used to form a hard base to a hearth, and the burnt clay overlying the supposed layer 9 may have been the remains of another lining. However, there were no indisputable signs of *in situ* burning - most notably no sign of heat-discolouration of the underlying layers. One might conclude therefore that the heating of copper alloy occurred close to F48, but probably not inside it.

F82 was sub-rectangular in plan and section, and survived to a depth of 0.63m. About two-thirds of the pit were excavated; the remaining, northern portion was left in section. Ploughing across the top of this pit may have been partially responsible for the existence of F32d. There were five main layers in the pit. The lowermost was 'orangey gravelly clay with many flints'. Containing only five fragments of bone, it seems to have been redeposited natural. Over this were two layers of 'brown clay' separated by a layer of oyster shell. Both 'clay' layers contained large amounts of animal bone and some burnt clay. In the top of the pit was a 'chocolate brown soil' which contained a significant amount of animal bone. F82 seems generally to have been filled with domestic refuse.

F88 was circular in plan, sub-rectangular in section, and survived to a depth of 0.64m. The gravel visible to the north of the pit probably had been dislodged from the fill by ploughing, but may have been one of the outcrops of natural gravel mentioned elsewhere (see above). The pit was filled with two layers, both 'brown clay with much gravel'. No finds were recovered. The excavator's suggestion that 'immediately after having been dug it was backfilled' is probably correct. A similar pit, equally a puzzle, was found nearby (see SOU 7 F72; p 84 above).

Structural evidence

The narrowness of the site prevents a full and certain identification of all the buildings that have left remains on SOU 8. In addition, many of the post-holes and stake-holes excavated were very

shallow and had clearly been truncated by ploughing; probably by the initial mechanical removal of overburden as well. It is likely, therefore, that other structural remains had been lost before excavation. For all these reasons, only the most obvious building lines are discussed below.

Structure 1 is represented primarily by the linear features FF11a, 11b, and 11c. The excavator did not distinguish between the three units, and the letter suffixes have been added by this writer for ease of identification.

F11a appears to have been a shallow and slightly sinuous linear feature. It was not described by the excavator, and its numerical linking with F11b and F11c seems to have been an afterthought. It was perhaps a natural feature linking the pits, FF6 and 7, and was possibly an animal run. FF11b and 11c together formed a linear feature, L-shaped in plan, typically U-shaped in cross-section and 0.06m deep, and containing many stake-holes. Near either end of F11b were V-shaped post-holes which survived to a depth of 0.25m. A third, apparently shallower, post-hole marked the western extremity of F11b. There was no sign of a continuation of this feature to the east or the west, but a possible southern continuation of F11c appeared as a faint and very shallow stain in the natural brickearth. This has been marked with a broken line on fig 19. The exact coincidence of FF11b and 11c with the north-eastern edges of F32a may indicate that at least part of this spread had originated as an internal surface.

Two basically similar interpretations of structure 1 have been published (Holdsworth 1975b, 11; 1976, 32-4). In both versions, F11a was seen as a western wall line cut by pits, and the eastern wall line as a north-south linear group of post-holes (separately discussed below: see structure 2). F11c was taken to be a central wall. This writer prefers to see F11a as a natural feature. If the line of F11b were projected eastwards, it would connect with FF35 and 36; but these post-holes, it is argued below, form part of a separate structure. Accordingly, F11c must be interpreted as the only eastern wall line of structure 1. The interpretation of the post-holes in F11b is complicated by the absence of more detailed descriptions. In one published version, one post-hole is shown apparently cutting another. If this was the case, that post-hole has to be viewed as a later feature perhaps unconnected with F11b.

Instead, the western edge can be sought in other nearby features: either in a confusion of post-holes and shallow stains (from F10 northwards to F38); or in what seems to have been a line of stake-holes (from F16 northwards to F20); or in both. The post-holes are a likelier candidate, for they provide a western and a southern wall line built with structural elements similar to those found in FF11b and 11c. In that case, structure 1 would have measured 2.3m north-south by 1.4m east-west. The overshoot of F11b, and the southern stain that extends F11c might be interpreted as lines of an extra-mural fence. Structure 1 would then represent

a small enclosure in the north-eastern corner of a larger enclosure. It may have been unroofed - or stake-holes may have held supports for the central ridge of a roof

Structure 2 is represented by a north-south group of post-holes running across the excavated area. A slight stain in the brickearth extending from F36 southwards to F31 is perhaps a sign that the post-holes had been dug into a linear feature. The line seems to have comprised double post-holes set at regular distances apart and with some intervening single post-holes. It can be variously interpreted. As already indicated, Holdsworth sought to link it with structure 1, to the west. The surviving evidence, including the dating evidence, considered below, makes this unlikely. It seems, therefore, that any parallel wall lay to the east; and that the building occupied all or part of the comparatively 'empty' area in the eastern half of the site: this appears most clearly on the inset to fig 19. (The gravel patches found within F32c and discussed below may have been the remains of an internal surface.) An eastern wall might have lain about 5m away, and been destroyed when a pipe trench was dug. On the other hand, the 'empty' area ran for at least 14.8m and was at least 5m wide; and the eastern wall might be sought further to the east. If a north wall to structure 2 is marked by the post-holes here assigned to structure 4, the building could have been some 20m long. These are larger dimensions than are usually encountered in Hamwic; but the evidence from a narrow trench is far too weak to allow any confident argument along those lines.

Structure 3 was clearly the northern portion of a rectangular building aligned north-south and measuring 3.3m east-west. Typical of the construction method used was F40 (fig 20). This was a discontinuous linear feature varying in depth between 0.02m and 0.22m, and U-shaped in cross section. Found at irregular intervals within the feature were stake-holes and post-holes, including F74, a V-shaped post-hole 0.12m deep, which may have been intrusive. The fill was a fairly homogeneous 'grey silty' soil. If the line continued northwards as FF33 and 34, F40 must have postdated the digging of F41. If, however, these two post-holes did not exist, F41 must have been dug after the removal of structure 3.

Structure 4 may be recognised among the five or more post-holes that ran east from F93 to F51, along the northern edge of the site. Supposing that these had formed a wall line, it remains unclear whether they formed the northern or the southern edge of a building.

Surfaces

FF32a-f were not described by the excavators, although they were simply recorded only on plans drawn during excavation. As a result, they cannot be interpreted with any good hope of accuracy. It

has already been suggested that ploughing was largely responsible for their existence. Part of F32a may have been a surface within structure 1, although it must be suspected that later disturbance would have obscured what otherwise appears to have been a neat coincidence. The occurrence of gravel patches throughout the site has been marked on fig 19. That which lies to the north of F88 has been interpreted as part of the fill of that pit. Others may have been those points 'at which a gravel spread surfaced'. The gravel noted within F32c, most notably in its eastern half, probably survived as part of the ploughsoil. But it may represent the disturbed remains of an earlier gravel spread, perhaps a floor surface connected with structure 2. Such speculation is of limited value, however, since these spreads appear not to have been closely investigated and were not described.

Dating and interpretation

A small amount of Iron Age and Roman pottery was found in features on this site (for instance, one sherd in the fill of F74). Generally this has been ignored as dating evidence. However, found within F11 were ten sherds of Iron Age pottery without any other dating evidence. Since the only original description of F11 was that of 'an L-shaped feature', it is here assumed that F11a was not at first distinguished as part of F11, and all this pottery was found in F11b or F11c or both. Structure 1 was therefore perhaps part of an Iron Age field enclosure.

Middle Saxon pottery was recovered in meaningful quantities from FF6, 7, 25, 27, 45, and 82. The relative dating of this material suggests that FF27 and 45 were infilled early in the Middle Saxon period, and FF6 and 82 at a slightly later date. F25 and the slumped upper part of F27 were infilled in the middle of the Middle Saxon period. The well, F7, seems to have been infilled at about the same time or perhaps slightly later in the Middle Saxon period. The pottery recovered from the slump fill in F7 may certainly be ascribed to the late Middle Saxon period.

Small quantities of Middle Saxon pottery were found in the fills of FF1, 28, and 48. Four fragments of what appear to be Middle Saxon combs were recovered from F48 (items 66 and 67). In the absence of contradictory evidence, it is assumed that these three pits were Middle Saxon in date. The general similarity in the fills of the adjacent pits, F41 and F48, probably indicates that they were contemporary features.

One coin (item 78; M15) was found, probably in the ploughsoil F32b or 32c. It was a secondary 'Porcupine' sceat.

Occupation of this area of Hamwic seems to have commenced in the 8th century, probably early in that century, and to have ended at some point in the 9th century. A feature of this occupation was the industrial use of copper alloy, an activity seemingly

confined to the easternmost part of the site. Direct evidence of this industry is provided by the objects recovered mainly from FF41 and 48.

F41 contained four tiles in fragments, into each of which a shallow groove had been cut. That in item 89 is 4mm deep, and had originally been more than 17mm long and 6mm wide. That in item 92 is also 4mm deep, and had originally been more than 51mm long and 3mm wide. Unfortunately, the two most complete examples (items 90 and 91) cannot now be found. Judging from the description on the finds card, however, and the published drawing of the object (Keen 1975, 179, fig 15.5), the groove in item 91 had been 4mm deep, 11mm wide, and at least 75mm long. Item 91 was described on the finds card as 'one clay tile fragment with a groove on one surface'. If, as seems likely, it was the other tile illustrated (*ibid*, fig 15.4), its groove was 4mm deep, 11mm wide, and at least 92mm long. The similarity of the dimensions, where they can be compared, suggests that all four grooves had been cut to a standard size. Signs of burning and charcoal smears survive around the grooves of items 89 and 92, and according to the finds records had also been found around the grooves of items 90 and 91. That the tiles had been reused is indicated by the traces of mortar seen or reported to be adhering to the opposite surfaces of items 89 and 90. The recovery of other, probably Roman, ceramic building material from FF7, 25, 28, and 48 may be a sign that a nearby Roman building had been plundered. The tile found in F48 (item 93) had been scored for keying. If it too had been meant as a mould (and the two fragments contain no sign of a groove or secondary burning), clearly it had been reused. Other, possible building material comprised the fragments of limestone and sandstone found in FF7, 28, and 41. Some of this stone may have been meant for use as moulds.

Two stone moulds were recovered. Neither of these can be found and both are described here from the finds cards and their illustrated appearance (*ibid*, figs 15.1 and 15.2). Recovered from F48 was item 94, a roughly rectangular block of lias limestone into which had been cut two grooves. The most complete of these was 115mm long, 15mm wide, and 11mm deep. Apart from the fact that it was about 20mm wide, the other groove seems to have been cut to similar dimensions. Charcoal adhered to the edges of at least one of the grooves. The other mould, item 95, was found in F46, a post-hole 0.8m to the west of F48 and 2m to the north of F41. Bearing some resemblance to the mould found at Whitby (Foote and Wilson 1970, pl 1b), this was a

roughly hexagonal block of lias limestone into which had been cut a groove 125mm long, 15mm wide, and 12mm deep.

Also found were fragments of ten crucibles, four (items 14, 17, 18, and 70) from the upper layers of F41, and six from the upper layers of F48 (items 15, 69, 81, 82, and 83). Scrap metal seems to be represented by items 79 and 80, recovered from F48; a pit that also contained a fragment of a heating tray (item 13).

Three copper-alloy objects (items 21, 24, and 29), between 32mm and 33mm long, and between 4mm and 5mm wide, were recovered from F48 (two from layer 3 and one from layer 4). WA Oddy (pers comm) briefly examined them and suggested that

they might have been debris from the manufacture of wire by the process known as folding. The technique dates back to the Bronze Age in the Middle East, but there is some evidence that it was used as late as the 5th century in Sweden. The scarcity of evidence reflects the lack of work on the metallurgical study of fragments of wire from the medieval period rather than any implication that the technique was unusual at a later period.

It has been pointed out already that, of the 36 itemised copper-alloy objects, or groups of small fragments, the vast majority was recovered from F48: 30 (83.3%) from layers 2-5, one (2.8%) from layer 11, and one from an unspecified layer. Twenty-three of these items can be recognised as finished objects, mainly pins. Again, the majority was found in F48: nineteen objects (82.6%), all recovered from layers 2-5. However roughly, this preponderance of copper-alloy objects in the upper layers of F48 points to a connection with the copper-alloy-working evidence largely recovered from the same contexts. It is curious, therefore, that no more than 'several, small bronze fragments' were recovered from F41. Although admittedly it was considerably smaller than F48, F41 may have been filled at the same time as F48 and otherwise seems to have been filled in a similar manner. It is possible that some distinction was preserved in the use of these two pits - a distinction perhaps indicated by the fact that all the grooved tiles were found in F41 and all the grooved stone either in or near to F48, which also contained all the objects thought to have been evidence of the manufacture of wire. However, the narrowness of the site precludes any spatial analysis; and it is scarcely possible to argue for instance that, of the two pits, one approaches a norm and one deviates from it.

SOU 9 (SARC IX) and SOU 17 (SARC XVII)

Introduction

In February 1973, under the direction of P Cottrell, three 4m-square trenches were dug by hand down to the underlying brickearth (SOU 9, trenches A-C). Trench C was extended in March 1975 as a north-south trench at most 27m long by some 5m wide. This was SOU 17, directed by M Blades. Here, the topsoil was removed by mechanical digger and the site excavated by the removal of 50mm levels until features were adequately well defined to be investigated more normally. The surface of each level was drawn on plan. Features uncovered at SOU 17 were numbered F1-F14 (fig 21). A more complicated numbering system was used on SOU 9, in that each of the trenches had a discrete numbering system. In this report, features uncovered at SOU 9 have been renumbered consecutively F15-F18. The area exposed by the two sites totalled 147m².

A yellowish sandy silt ('brickearth') was encountered at about 1.70m OD at SOU 17. Varying in thickness between 0.35m and 0.43m, it overlay gravel, which was at least 0.7m thick. Significant 19th-century disturbance consisted of a coal store, which effectively limited any further extension of SOU 17 to the south; a shallow rectangular feature in the north-east corner of SOU 17, perhaps the remains of an Anderson-shelter pit or a brickearth-digging pit; and F18, a double linear feature running across the middle of SOU 9 trench A (fig 22).

Early features

Pits

Five pits were discovered at SOU 17. FF4 and 9, and probably F14 were similar in their shape and in their sequence of fills. All three were sub-rectangular in section, although F14 had a sloping northern edge. FF4 and 9 were sub-rectangular in plan. The shape in plan of F14 could not be properly ascertained. F4 was 0.9m deep, F9 0.52m, and F14 at least 1.1m deep.

The three bottom layers in F4 (fig 23) seem to have been cess and general rubbish layers. Layer 9 was 'light grey clayey earth, green-stained'. Layer 8 was 'brown organic material' containing some animal bone. And layer 7 was 'dark grey clayey brickearth containing a few potsherds and some

fragments of bone'. It was difficult to distinguish from, and probably was part of, layer 10. This was a 'light grey clayey earth' containing the same sort of inclusions as did layer 7.

Above these was layer 6, 'grey soil and charcoal, "packed" with pot, bone, and some [iron] slag'. This was sealed by a thick layer of 'yellow-orange sand, gravel, and large stones' (layer 5). Above it, and filling the rest of the pit, was layer 4, a 'grey-brown' rubbish layer containing 'pot, bone, and much iron slag'. (Layers 1-3 were later, above-ground layers unrelated to the deliberate infilling of the pit.)

In a similar sequence, the bottom layers of F9 (altogether 0.1m thick) were 'cess-stained' or 'grey, clayey' brickearths that contained some animal bone. Over these was a layer of charcoal, at most 0.15m thick, which contained mainly animal bone and iron slag. The layers had all slumped, and the upper fill, generally 0.43m thick, was a rubbish layer of 'grey black earth containing bone and pot'.

The bottom layer of F14, at most 0.12m thick, was 'sandy brickearth with green staining'. Containing only one piece of bone and one piece of pot, it had probably been redeposited. The green stains might indicate the presence of cess. Over the brickearth was a layer of 'dark grey clayey earth with much charcoal'. In the southern half of the pit, this was sealed by a layer of 'dark brown organic soil and cess' containing pot and bone. Towards the centre, there was an inclusion of 'yellowish-green clay and cess staining'. Together, all these layers were at most 0.3m thick. The bulk of the pit was filled with two 'clayey' rubbish layers, the lower one containing 'cess and bone', and the upper one '[burnt] daub, bone, pot, iron slag', and other finds detailed below.

The two other pits, FF5 and 6, also resembled each other. Both were roughly bowl-shaped in section and shallow (F5 was 0.47m deep, F6 0.35m deep). F5 was irregular in plan, but vaguely rectangular, and F6 was oval.

F5 (fig 23) and F6 contained the same sequence of fills. In both, the lowest layer was a 'greyish brickearth'. Containing only a few flecks of charcoal and small fragments of bone, this may represent a silted infill of the pits. Over it was a 'dark grey earth, containing some charcoal and fragments of [burnt] daub, and much bone and [iron] slag'. In F5, this layer (layer 2) also contained an iron-smithing hearth bottom. The top layer was 'light brown brickearth, containing some bone and iron slag'.

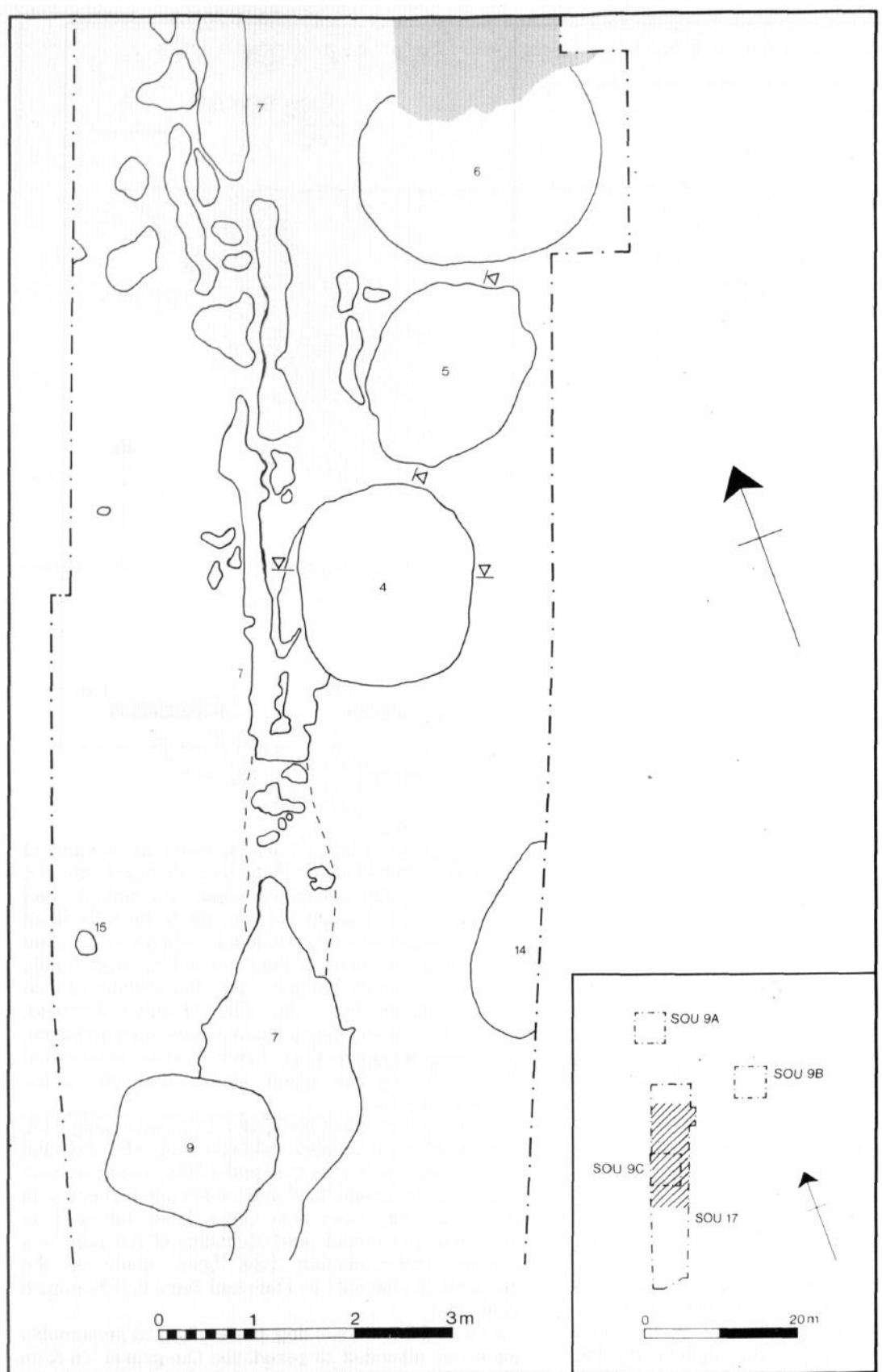


Figure 21 SOUs 9 and 17: a plan of the main features. 'F' prefixes to the feature numbers are omitted.

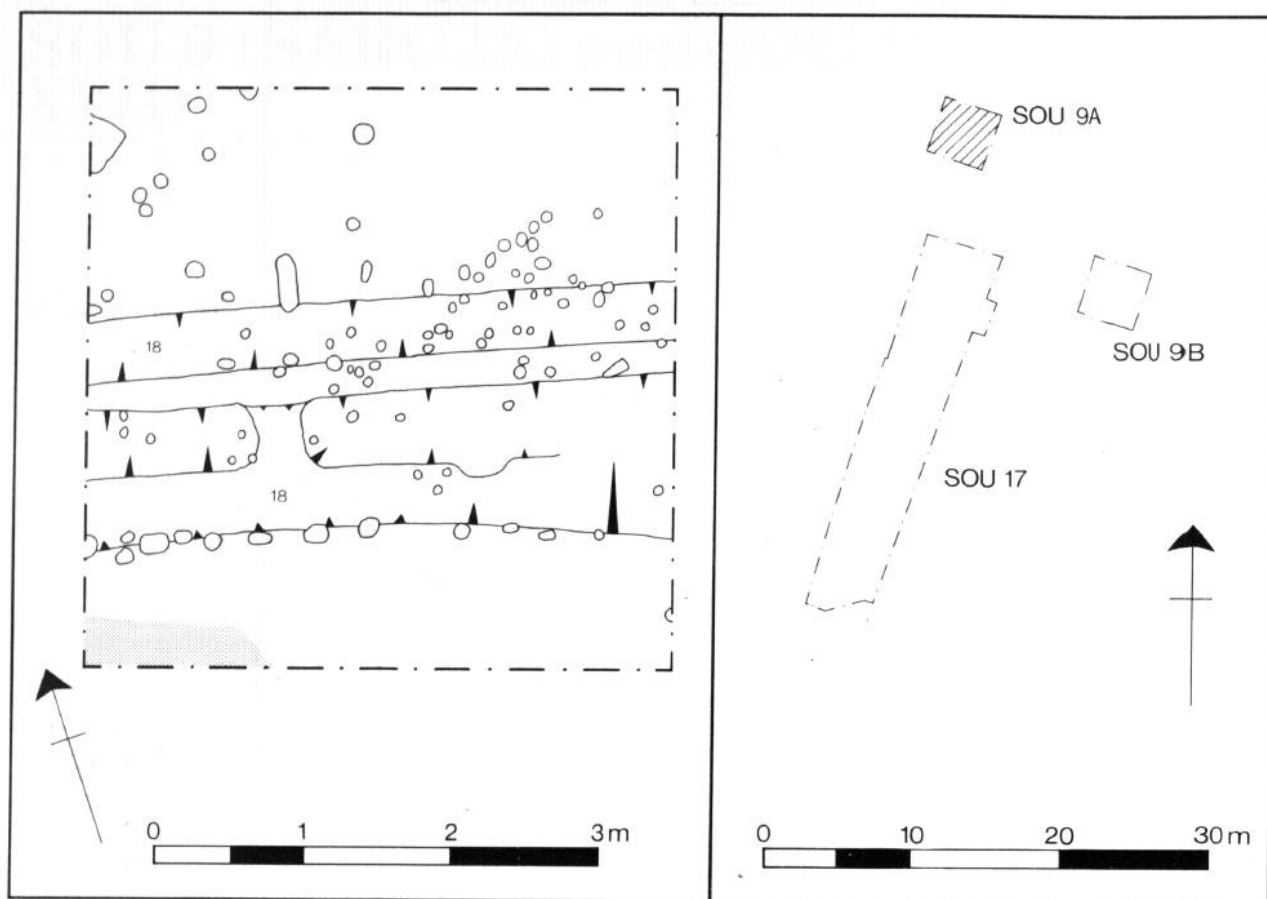


Figure 22 SOU 9: trench A. 'F' prefixes to the feature numbers are omitted.

Dating and interpretation

Pottery was recovered from most layers in the five pits. All may be dated to the mid Middle Saxon period. Three coins were found, two in the upper fill of F9 and one in the upper fill of F14. Of the two coins in F9, one (item 2; M99) is a Series L sceat, issued probably in the decades following 730 (Blackburn 1984,171). The other (item 26; M129) is a cut fragment of what appears to have been a silver sceat. The coin in F14 (item 1; M170) is late Roman.

The common discovery in all five pits of iron slag, and the similarities between the pits strongly imply that all had been dug and were being infilled in much the same period. All one may say is that this mid Middle Saxon period (as indicated by the types of pottery recovered) did not coincide with the early 8th century and probably should not be placed late in the 9th century.

Nor is it clear what length of occupation is represented by these pits. On the one hand, the layers in the bottom of FF4, 9, and 14 underlay large accumulations of domestic rubbish: on the other hand, if the cessy fills of these pits had been draining away into the natural gravel, their period of slumping may have been comparatively short.

If the gravelly layer 5 in F4 were the remains of an above-ground layer that had slumped into the pit, one might suppose that occupation had persisted long enough for the pit to be fully filled (this represented by the rubbish of layer 6), overlain by an alley or area of hard standing, and finally infilled with more rubbish. But the absence of that gravelly layer from the fills of other features, although it does not disprove this interpretation, may indicate only that layer 5 was redeposited gravel thrown out when some other pit in the vicinity was dug.

There seems little difficulty in interpreting FF4, 9, and 14 as cess and rubbish pits. The charcoal that generally sealed the early fills seems to have been the by-product of iron-working processes in the area that may also have been intended to minimise the stench and liquidity of the cess - a similar interpretation has been made of the function of charcoal in charcoal burials (Shoosmith 1980, 49).

FF5 and 6 were not dug so deeply, and presumably were not intended to penetrate the gravel. In form they are not unlike some sunken-featured buildings; but no other evidence supports this interpretation. Apparently open and infilled at the same time, they

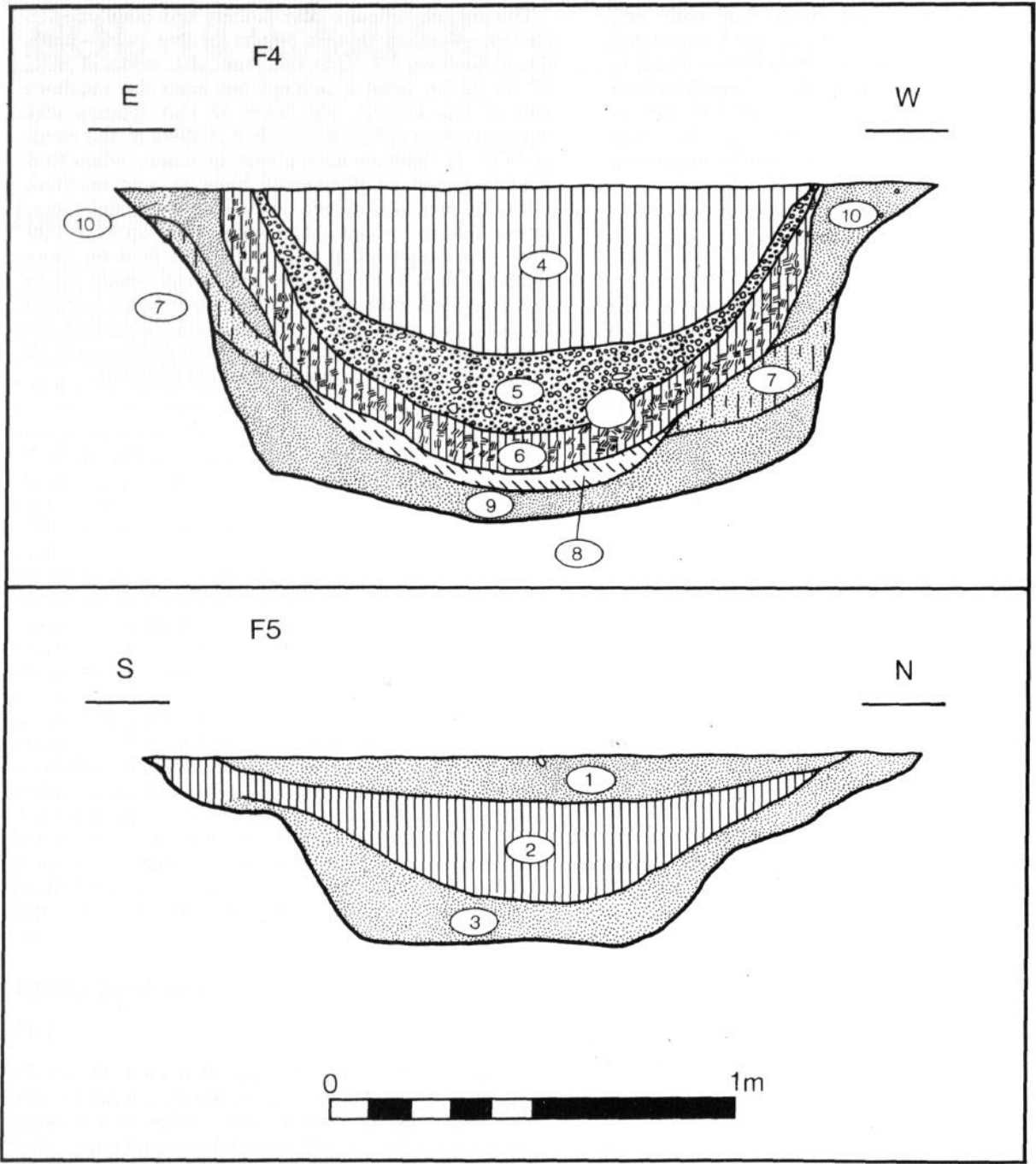


Figure 23 SOUs 9C and 17: FF4 and 5. See fig 17 for the key.

seem nevertheless to have been dug with one purpose in mind. This may have been connected with iron working, for the smithing debris found in the backfill of the pits - especially a hearth bottom in F4, which cannot have been shifted far - presumably had been generated in the near neighbourhood. But there is no reason for supposing that the pits were once used for smithing.

Other features

Running along the eastern side of SOU 9 trench B was a host of stake-holes, the remains of a much renewed fence line. This is undatable. It is not illustrated here.

The only significant later feature not mentioned in the introduction to this report is the north-south linear feature, F7. This ran from the north of SOU 17 for 22.1m until it petered out near the southern end of the trench. No trace of the feature was encountered at SOU 9 trench A, 5.25m to the north of SOU 17. Rather amorphous in shape when first observed, and as illustrated here, it was resolved, after the removal of two spits, into a discontinuous linear feature about 0.2m wide and up to 0.15m deep. Its relationship with FF4 and 9 is far from clear, for its fill of 'dark grey brickearth' could not be distinguished with any certainty from the upper fills of those two pits. The linear feature contained one piece of pottery, a sherd of a medieval cooking pot. F7 may have been the remains of a field division.

SOU 10 (SARC X)

Introduction

In March 1973, under the direction of J Cockerill, a north-south trench some 19m long by some 4.5m wide was opened just to the west of Marine Parade. It exposed an area of 86m² (fig 24). The topsoil was removed mechanically. Underlying surfaces were cleaned by hand and a site plan drawn. This was a hurried excavation and little else could be done except identify and record the features (numbered F1-F16). Three east-west sections were dug at staggered points, however, together comprising an area of 4m².

The natural soil was described as 'dirty brick-earth' on the site plan, and shown as basically yellow in colour. One supposes that it was yellowish brown or brownish yellow brickearth. Generally appearing at 1.90m OD, it may have originally sloped down to the south and east. Modern disturbance comprised at least two sewer trenches in the south-eastern and south-western corners of the site, associated with the redevelopment of the area for houses in the 1850s, and some activity that had truncated the early features in the north of the trench. Possibly, this damage was caused in 1973 when the topsoil was being removed. It is suggested below that F12 derived from plough disturbance. Two north-south linear features were described as modern by the excavator and are shown as such on figs 24 and 25. They are discussed below.

Early features

Pits

F1 (fig 25) was a shallow, rounded pit, 0.43m deep and 1.75m in diameter. It contained two fills, the lower one of which was 'very dark grey clay with much gravel and some bone'. It also contained twelve small fragments of smithing slag. Above it was 'black clay with much shell'. The pit antedated the gravel surfaces described below. It was cut by F7.

F7 remained unexcavated. Described as a 'dark brown gravelly intrusion cutting F1', it seems to have underlain the gravel surfaces.

F8 was a shallow feature 'with a dark brown fill, containing shell, [burnt] daub, charcoal, and bone'. It had been cut through the gravel surface, F9.

Gravel surfaces

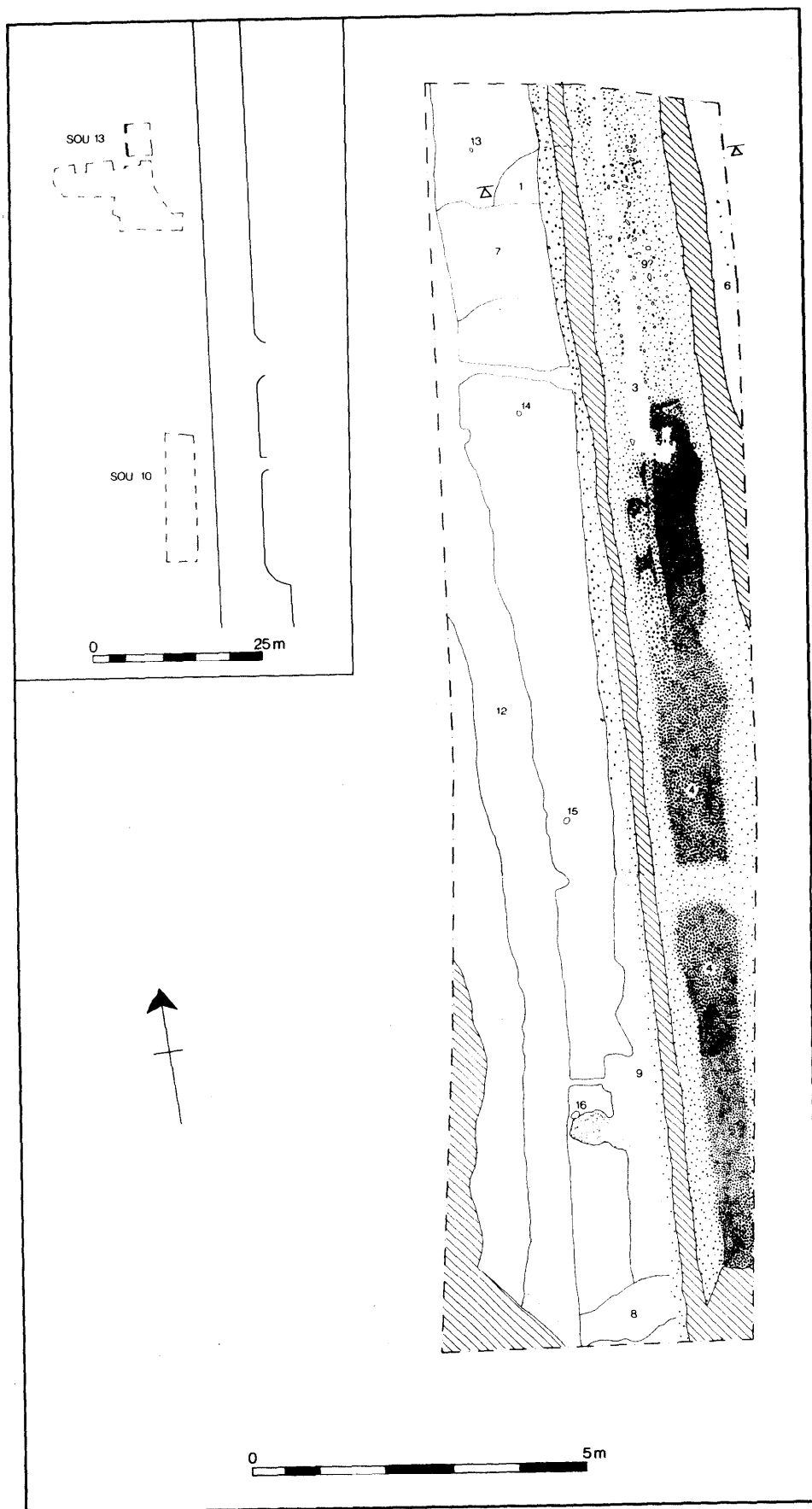
Information about the gravel surfaces and the brick-earth onto which the earliest was laid is restricted.

To judge from the three section drawings (one of which has been copied here), the underlying brickearth was marked with a number of shallow, north-south linear features, rounded in section. These appear not to have been natural formations, and they may have been the remnants of wheel-ruts associated with the use of the area before the gravel surfaces were laid down. The gravel had been laid directly onto the brickearth, and was thicker where it filled the depressions.

The gravel spreads may be divided into two main surfaces, FF4 and 9, the former overlying the latter. On the original site plan (which has been somewhat simplified for reproduction here), both layers are shown to have had a north-south alignment and to have run more or less the length of the trench. Due to later disturbance, only one surface survived in the north end of the trench. To judge from the site plan, this could have been F9, F4 having been stripped away. The excavator named the surviving layer F4; but he may have done so before he realised that elsewhere there were two layers: some records of this site were not later revised in the light of further evidence.

F9 appeared in the southern portions of the trench as 'small gravel' which seems to have made up about 70% of the layer. Its matrix, according to the excavator, was 'black brown' or 'black clay'; and according to the planner was 'mid-brown soil'. It was 'of a very hard and dense nature', at least 0.09m thick (perhaps as much as 0.24m thick in certain areas, where it filled depressions), and laid directly onto the natural brickearth. If it had been exposed in the northern part of the trench, it was there 'an area of cobbles and gravel loosely bedded in a brown clay; with obvious surface disturbance in the form of brick.' This later activity may have contributed to the 'loosely bedded' nature of the stones. Quite what was meant by 'cobbles and gravel' is unclear, but reference to the site plan and other descriptions in the site notebook tends to suggest that this was a mixture of medium-sized flints and pea gravel.

F4, as exposed in the central section, comprised another mixture of 'small gravel and some large pebbles' in a matrix of 'grey brown clay'. Judging from the site plan, at least 70% of this layer was made up of variously sized stones. The layer was relatively thick, 0.34m thick at its greatest extent; a fact that might indicate it had been composed of more than one layer. A distinction was actually drawn between the upper and lower halves, the latter of which 'contained larger stones'. (If the excavator was right, and F4 was exposed in the



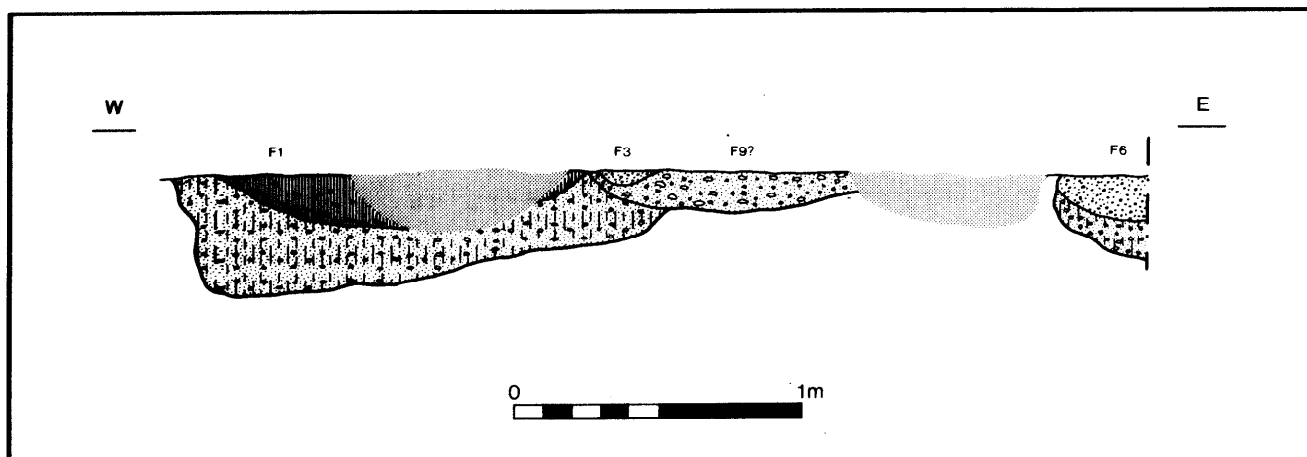


Figure 25 SOU 10: the northern section through the gravel layers. See fig 17 for the key.

northern part of SOU 10, perhaps it was this lower layer of F4; a larger-stoned spread exposed by modern disturbance.)

A similar distinction appeared in the southern section, with one layer of 'small gravel' overlying another of 'black-brown, iron-stained gravel', the layers presenting a combined maximum thickness of 0.35m. In neither case, however, is it absolutely clear that F4 was in fact two layers, for the possibility remains that the lower half of F4 has been confused in the descriptions with F9.

If one possessed only the relevant section drawing, with its somewhat formalised representation of the gravel surface, one would suspect that the gravel surface, F4 or F9, had spread over F1 and formed its bottom layer. However, the excavator stated that 'the roadway has cut F1'. Presumably, therefore, the distinction between the 'very dark grey clay' of F1's bottom layer and the 'brown clay' of F4 or F9 was sufficiently clear to allow an unambiguous line to be drawn between the two contexts.

A similar difficulty affects one's ability to interpret F6 (fig 25). Only partly exposed on SOU 10, this may have been a north-south linear feature. It was filled with two layers. The upper of these was 'a very dense, sandy gravel; uniformly small in size'. (In this respect, the site plan seems to have been more accurate than the section drawing.) The bottom layer comprised 'a less dense larger gravel set in brown clay'.

The excavator suggested two interpretations of this feature, one being that it was a drainage channel 'central to the road'. In the less disturbed central and southern sections, the upper surface of F4 sloped towards the east at an angle of at most 7°. If such a slope had been deliberately created, it may have led to a central channel. However, one suspects that the slope followed that of the underlying brickearth and did not terminate at F6. The second interpretation is more likely, that F6 was a wheel-rut, and formed a pair with F3, which 'had much the same fill'. Allowing the possibility that the gravel spread in the northern section had also sloped downwards 7° to the east, one

finds that the difference in depths between the two reconstructed linear features was a matter of only some 0.05m.

The excavator's interpretation of F3 as a wheel-rut is probably correct. Later than at least one gravel surface (F4 or 9) it seems too narrow and shallow to have been a modern feature. If it had been a wheel-rut, however, its apparent disappearance from the southern half of the trench is difficult to explain, for one would have expected it to have survived more completely there than in the northern half. It may be that this rut lay in F9, but was sealed by F4, and was exposed only where F4 had been removed by later disturbance. A search of the three section drawings reveals many undulations in the boundaries between the gravel layers, any one of which might represent a continuation of F3; but the matter cannot be decided on the basis of so little evidence. Other, related interpretations of the features are possible. For instance, F6 may have been a wheel-rut that predated the metalling. The suggestion has been made that the irregular profile of the underlying brickearth had been created by wheeled traffic using an originally unmetalled route. It is not impossible that F6 was another early feature, and that the gravel layers within it were the sunken remains of gravel surfaces generally removed in the northern area as a result of modern disturbance. One might relate its lower fill of larger gravel set in brown clay' to the surviving layer of 'brown clay with large and small gravel' (numbered F4, but here thought to have been F9); and relate its upper fill of 'dense sandy gravel' to F4's 'small gravel and some large pebbles'. But only further excavation, to the east of SOU 10, will show if this interpretation is correct.

Further excavation may also be necessary to identify certain features said by the excavator to have been modern; principally the two north-south features that were cut along the gravel surfaces. It is not clear what these features were. The excavator once described them in passing as pipe trenches, but the majority of the evidence suggests other

interpretations. One is shown on the original section drawings as a feature up to 0.25m deep, with a rounded profile, and filled with two layers. The lower layer was 'light brown clay with gravel' (much gravel is shown), and the upper layer was 'dark brown/grey clay with some blue clay', sometimes said to have contained 'small flint pebbles'. No pipe is shown. According to the section drawings, the other feature was similar, rounded in profile, up to 0.24m deep, and filled with two layers. Both layers were 'dark grey clay', the lower being mixed with much gravel, and the upper being 'sandy textured'. Again, no pipe is shown. These two features, which roughly paralleled each other, can therefore be described as a pair. Their gravelly double fills are reminiscent of those of FF3 and 6. If they were not pipe trenches, it is highly likely that they evolved out of a multiplicity of wheel-ruts.

Other features

F12 was an 'area of brown gravelly soil'. To judge from the site plan, the gravel was small in size and concentrated in the southern 5.4m of the spread. Apparently 'joined up with F9 towards the south when first discovered and 'intruding into the brick-earth', F12 most closely resembles a plough-disturbed spread of gravel.

FF13-16 were four unexcavated stake-holes cut into the brickearth. They appear to have been set parallel to the gravel surfaces.

Dating and interpretation

The main features may be relatively dated. F1 probably was cut by F7. Both these pits probably underlay F9. This gravel surface was cut by F8, a shallow feature of unknown relationship with F4. F4 was one or two gravel surfaces laid over F9.

An unknown layer of F1 contained three sherds of Middle Saxon imported pottery. F7 was uninvestigated. F9 was 'first thought of as a modern overlay to the brickearth and as such any finds, which included some pottery, were classed as unstratified.' The surviving collection of SOU 10's unstratified pottery comprises a small amount of Middle Saxon and medieval pottery. Which pieces were found in F9 is a matter of faith. F8 contained no dating evidence. Between FF4 and 9 were found two joining sherds of sandy-tempered Middle Saxon ware. Some medieval and post-medieval sherds were recovered from the disturbed northern surface of F4 or F9.

Notice must also be taken of the so-called pipe trenches that are reinterpreted here as deriving from wheel-ruts. If they were modern features, the gravel surface was being used in recent centuries: it would have to have been the strand road shown on 18th- and 19th-century maps (pl 2). However, it seems that the road shown on those maps lay to the east of SOU 10, under the western half of Marine Parade. Something has to be wrong. Generations of cartographers are unlikely to have been all mistaken in their measurements. The error may be the dating of the two linear features. It seems that neither contained any clearly diagnostic finds. On the basis of the available evidence, one is free to suggest an earlier date for them.

The small amount of pottery found probably indicates that the gravel surfaces formed part of a Middle Saxon street. Its first existence seems to have been as an unmetalled route (although distantly spaced, FF13-16 may have been the remains of a fence line associated with this phase). Thereafter, two or three gravel surfaces were laid down in the same area. These had been scored by at least one wheel-rut, probably by more. With the fairly innocuous exception of a shallow feature, F8, nothing interrupted the course of the gravel. The evident length of use, the renewal of metallings, and the continued integrity of the gravel are usually accounted the marks of Hamwic's streets (see above, p 32). So, perhaps, are the dimensions of this feature. If another portion of the street was discovered at SOU 13, that street had been at least 54m long. However, certain differences must also be noted. Unlike the other Hamwic streets the constituency of which is known, the surfaces at SOU 10 seem generally to have been formed from 'small gravel'; but this may reflect only the opportunistic use of a nearby source of such stone, perhaps the shore of the River Itchen. Another difference is the apparent lack of abutting buildings. There had been occupation nearby, and there continued to be occupation: the scale of this may be under-represented by SOU 10's two or three small rubbish pits, if most rubbish had been thrown away into the river (see above, p43). A similar disposition seems to have occurred at SOU 13, where the street followed, and perhaps was contemporary with, Middle Saxon occupation, but where there was no sign of the erection of buildings next to the street. Although the evidence is far too limited to permit any certainty in this matter, one may suspect that the pattern glimpsed at SOUs 10 and 13 was repeated throughout the interjacent area.

SOU 11 (SARC XI)

Introduction

In March 1973, under the direction of JP Cockerill, a roughly rectangular trench was opened at the corner of Granville Street and Standford Street, just over 6m to the east of SOU 7 and 12m south of SOU 8. The trench measured at most 28m north-south and 9m east-west (fig 26). An area of 227m² was available for investigation. The topsoil was removed by a mechanical digger and the exposed surface cleaned by hand. Soil was then removed in 50mm spits. There were eight of these, the surface of each of which was planned. Features were excavated as soon as they became clear. The method of excavation used was to half-section a pit without regard to its layers and then, if anything substantial remained within the trench, to excavate the exposed layers in stratigraphical order. Features were numbered F1-F95. FF96 and 97 and are numbers added by the writer. All pit fills were dry-sieved through a quarter-inch (6.4mm) mesh, and 0.2m-wide core samples were also taken. Analyses based on the recovered material have been published elsewhere (Buckland *et al* 1976; Monk 1977, 205-13 and 312).

The overlying natural soil was called brickearth by the excavator and its colour stated to have been yellow. Some nine years after excavation, this writer inspected a small amount of perhaps natural soil removed from the base of F66 and found it to be a moderately gravelly, reddish brown (2.5YR 5/4), medium sandy silt. However it was constituted, the 'brickearth' was at most a metre thick and overlay gravel.

The earliest post-Middle-Saxon disturbance survived as narrow linear features, running for short lengths, generally parallel to each other and aligned east-west. They seem to have been plough-marks, which can be dated only to some point before the 1840s. Except for the largest ones, they have not been shown on plan. Later disturbance was associated with the foundry built in this area by 1838, and the houses built in the 1840s. It comprised ten scaffolding post-holes in the north of the site; a cess pit, a brick-lined sewer, and structural features in the south; and a 1940s-period rubbish pit in the centre, along the western edge.

Early features

Structural evidence

A large number of post- and stake-holes was evident. Within the comparatively small confines of the

site, these features cannot convincingly be resolved into building lines.

Three linear features were exposed.

F9 first appeared 'as a grey stain'; as a continuous feature cut by the pit F49. Its outline at this stage is shown as a broken line on fig 26. After two spits had reduced its depth by about 0.1m, it was excavated and its remains drawn (fig 27). The bottom was irregular and contained many seeming stake-holes as well as a larger feature, F40. The depth of F9 before the removal of spits probably varied between 0.06m and 0.26m. It contained a uniform fill of 'grey/brown silty brickearth', in which were found 'charcoal flecks, [burnt] daub, and some stones'. These inclusions may have been intrusive. F9 probably formed part of a fence line.

F20 was cut by modern features which obscured its relationship with the pit, F47. U-shaped in profile, it deepened gradually to the south, from 0.14m to 0.25m (a slope of less than 2°, however). It was filled with 'dark grey brickearth' containing 'many charcoal flecks, much stone, crushed bone, and some [burnt] daub flecks'. No stake-holes were observed in the bottom of the feature, the function of which remains unclear.

F79 lay 1.34m to the west of F20, and parallel to it. It too was cut by modern features. If its course continued as isolated stake-holes, that course had been disrupted by the digging of F17. At most 0.04m deep, it was removed in a spit before it could be properly investigated. It may have been the remains of a fence line.

If it was not a modern feature, one post-hole, F50, is noteworthy for its contents. Cut through the top fill of F48, it was V-shaped in section, probably 0.33m deep before being reduced by spitting, and filled with a thin layer of 'light grey silting' over which was 'the main fill of fibrous decayed vegetable matter', presumably wood. Within this were what the excavator called 'five wooden pegs'. These pieces are lost.

Pits

F8 was circular in plan, sub-rectangular in section, and 0.86m deep. The lowest layers were generally 'yellow sandy clay', overlain by 'yellow-green clay'. These may have been cess and sealing layers. This upper fill comprised three layers of brown soils containing domestic refuse.

F12 (fig 28) was cut by F72. It was of unusual shape in section, more easily illustrated than described. The bottom layers, layers 3 and 4, were described as

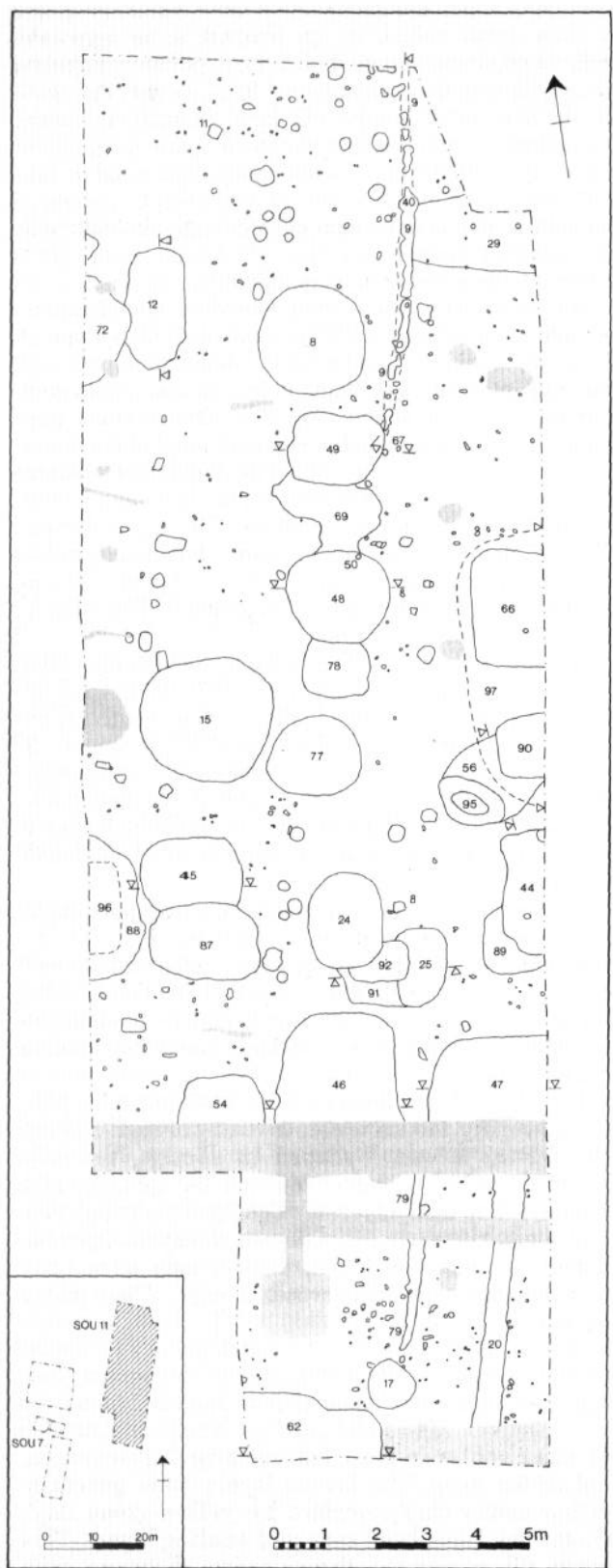


Figure 26 SOU 11: site plan. 'F' prefixes to the feature numbers are omitted.

'dirty orange sandy clay with flecks of charcoal' and 'grey-brown sandy clay with charcoal flecks and stones'. Both were probably redeposited brickearth. Over these was a dump of gravel (layers 2b-d) in a matrix of 'orange' or 'mid grey clay'. This lay below 'grey clay with charcoal lenses' (layer 2a), which was sealed by, or was itself part of, a similarly constituted upper layer, layer 1. It seems that the fills had subsided at some point and the sides had weathered, leaving a final fill of 'brickearth' (layer 5) around the edges. Within this layer, at its point of junction with layer 3, were found five 4th-century Roman coins (items 117-21). Very little domestic refuse was found in this feature, and it appears not to have been used as a rubbish pit. Its shape in section is strongly reminiscent of that of a sunken-featured building. However, it would be difficult to interpret F12 in this manner, given its small size and the apparent lack of associated post-holes.

F15 was rounded in plan, U-shaped in section, and 1.7m deep. Its relationship with the post-hole, F74 (not numbered on fig 26), is unclear. The bottom layers comprised interleaved blocks of gravel and 'silty clay', all perhaps collapsed from the sides of the pit. Within these layers, which filled the bottom 0.3m of the pit, were found many fragments of wood. 'Much of the wood was twigs', but there were also 'small roughly shaped sections' and 'a pin of wood with a shaped head'. None of this material can now be found. The majority of the pit was filled with twenty layers of 'clay' which contained much animal bone. The process of filling the pit had evidently been a long if intermittent one, for, besides the evidence that the pit had stayed open long enough for some collapse of the sides to have occurred, there were unmistakable signs throughout the upper 1.5m that layers had progressively slumped and been covered.

F24 was cut through the fills of F91 and cut by F92. Roughly U-shaped in section, it was 1.27m deep. The bottom layer consisted of 'off-white gravel' which the excavator suspected (probably correctly) of being natural. If it is ignored, the pit was U-shaped in section and 1.04m deep. Above the gravel lay about 0.1m of 'wood and compressed compost - vegetable matter'. What little of this material was recovered and saved has since been lost. The seven layers about the 'compost' layer were domestic rubbish deposits,

F25 (fig 29) was cut by F92 and cut through F91. Some 0.8m deep, 0.35m of which had been removed in spits, it was filled with two main layers (layers 4 and 5). The lowermost was 'clean brown silty clay', and the other 'medium brown-grey clay with flints and brickearth'. The presence of 'cess' in and around these layers was also noted. Whether or not the feature was a cess pit, it had certainly been used for the disposal of household rubbish.

F29 is described below, with F69.

F44 was cut through the pit, F89, and cut by two post-holes. Perhaps half of the feature was available

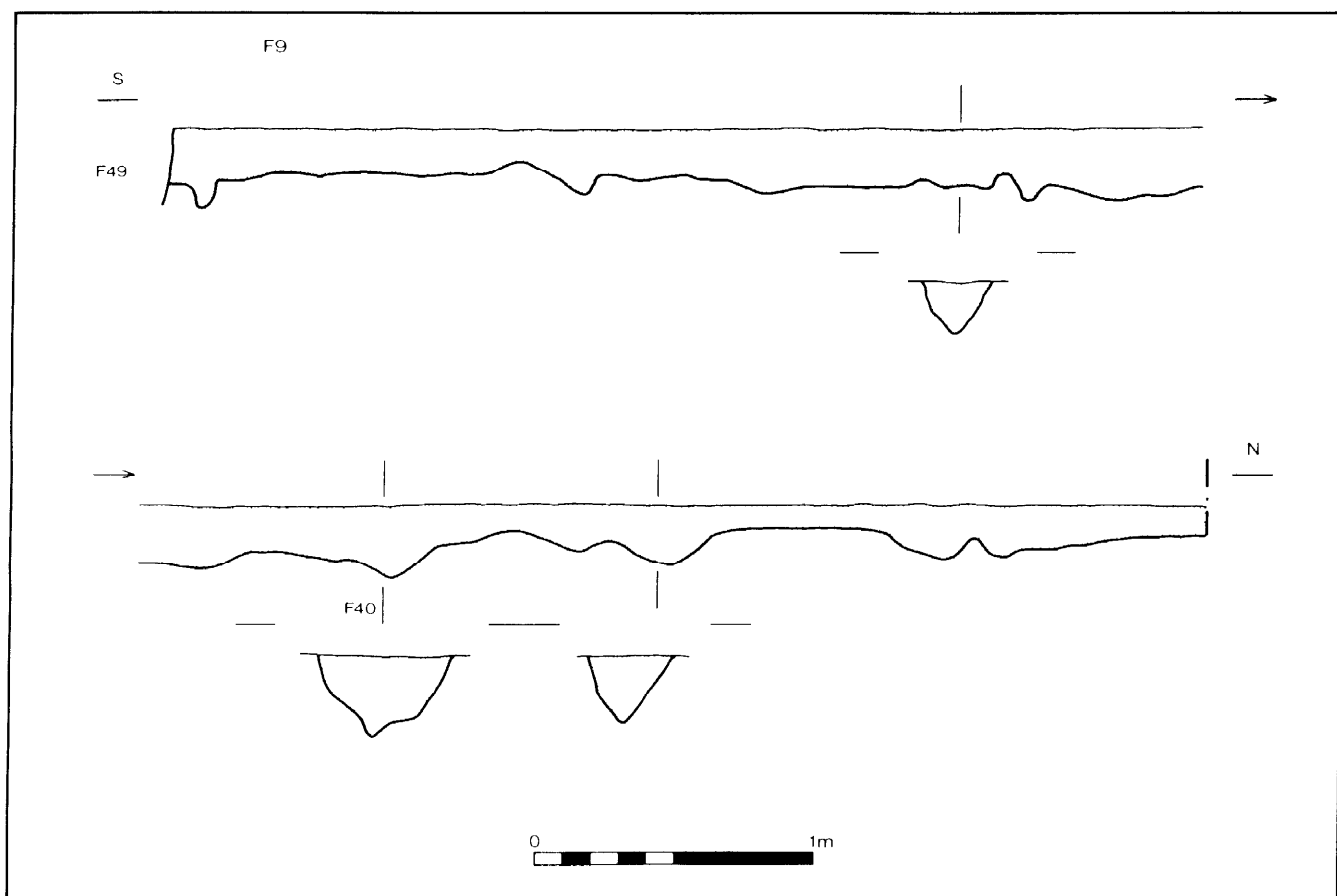


Figure 27 SOU 11: FF9 and 40. The upper 100mm of the features had been removed in spits, and are reconstructed in this drawing. See fig 17 for the key.

for excavation, and its shape and dimensions in plan are not clear. In section, it was 1.48m deep and generally sub-rectangular, but with a slight dip in the centre of the base. The lower 0.6m of the pit were filled with a large inclusion of brown, decomposed wood in a matrix of 'rich brown clay'. Studying a sample of this matrix some nine years after excavation, the writer found it to be a brown (7.5YR 3/2, tending to 10YR 3/2) fine sandy silt.

The wood was notably more intact towards the bottom of the pit. Found within this material was a large upright, pointed at its base, and perhaps originally cigar-shaped. It had been driven into the natural gravel of the pit bottom. At least 0.4m appeared in the pit fill, and apparently a greater length survived within the gravel. The original finds records indicate that it was about 1.2m long. Somewhat negligently stored, and then forgotten, this piece of wood was rediscovered in February 1982 by P Andrews and the writer. About 1m survived, of which only 0.78m were in a fit condition to study. At its point of maximum surviving thickness, it had a circumference of 0.58m and a greatest width of 0.20m. Comparing the upright

with a sketch section drawn during the excavation, it was clear that this 0.78m-length represented the lower part of the upright. It was of oak, and, in its surviving fragment, comprised two unbifurcated branches. It was roughly shaped into perhaps eight sub-rounded facets and pointed. The blade used for this shaping had left nick marks at right angles to the line of the cut.

The upper layers of the pit were clearly derived from domestic rubbish. Between them and the lower layers of 'clay' and decomposed wood (which contained a very small amount of animal bone) was a layer of 'dirty orange, sandy silty clay'. Presumably redeposited brickearth, its dumping may represent a discontinuity in function of the pit.

F45 (fig 30) was cut by F87. It was 1.16m deep, of which 0.1m had been removed in spits before excavation. The original fills consisted of a 'brown organic layer' (layer 3/9), over and around which subsequent layers had been dumped, and the shape of which had become distorted as the pit fills slumped and settled. The otherwise unprovenanced (and now lost) fragments of wood and 'wood and compressed organic matter' recorded as recovered

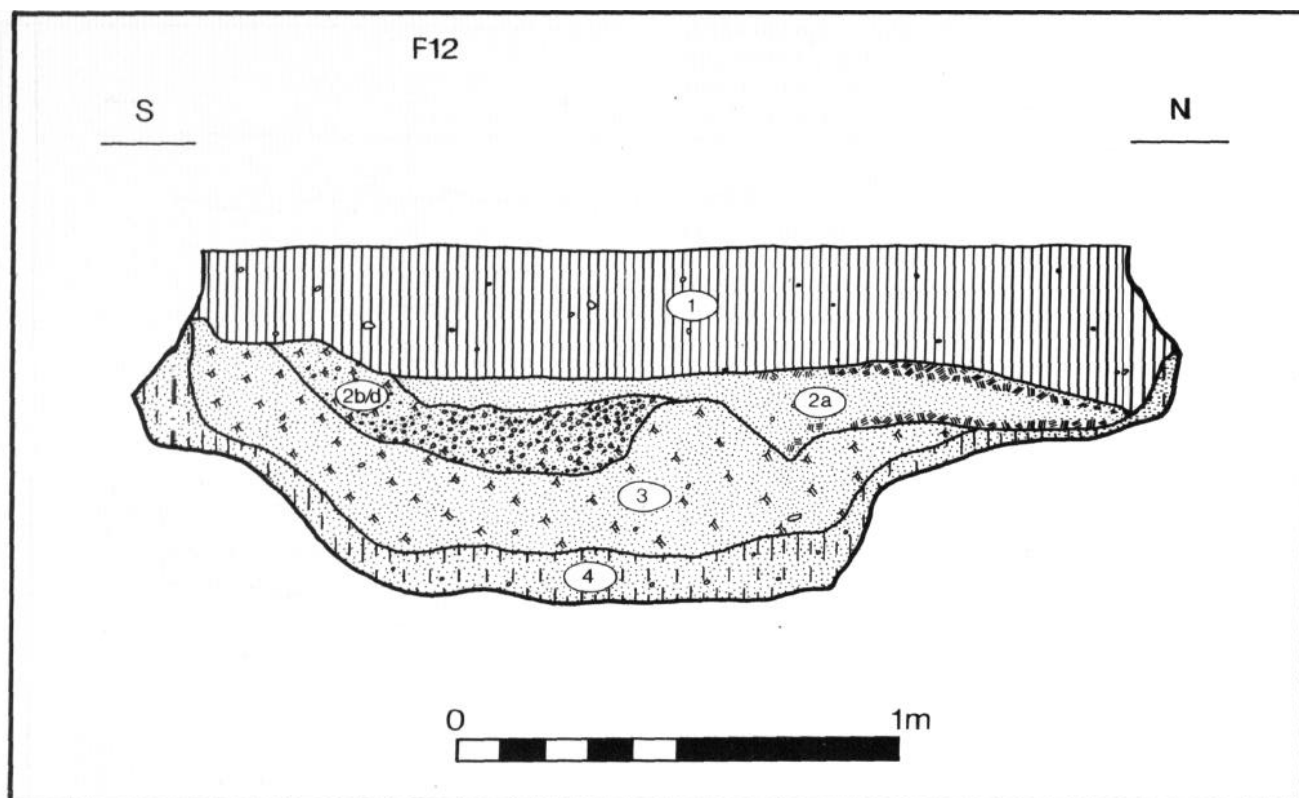


Figure 28 SOU 11: F12. The upper 150mm of the feature had been removed in spits, and are reconstructed in this drawing. See fig 17 for the key.

from F45 may have formed part of this layer. Around this were thrown layers of 'orange brown damp clay' (layer 8/14), perhaps brickearth collapsed from the top of the pit; light brown silty clay (layer 7); 'grey silt/cess and charcoal' (layer 6/11); 'grey silty brickearth with some charcoal' (layer 5/10); and 'clean light brown brickearth' (layer 4).

All of these similar layers may have been redeposited brickearth intermixed with a small amount of rubbish. The upper three layers may have filled a recut or a hollow formed by the slumping of the pit's contents. They were notably different from the earlier fills and comprised a 'heavy charcoal layer of damp clay with a small amount of bone and little shell' (layer 2b); 'dark brown clay with much charcoal and some bone, grading into layer 2b' (layer 2a); and 'dark brown clay with charcoal flecks, little shell, and much bone' (layer 1). These all appear to have been domestic rubbish layers.

F46 (fig 31) was cut by a modern pipe trench. Sub-rectangular in plan and probably so in section (although on average the sides deviated from the vertical by 22° and the upper 0.4m were eroded), it was 1.46m deep, of which 0.1m had been removed in two spits. As with F45, the original fill seems to have been wood that had collapsed over later fills as they subsided.

Recovered from the pit, presumably from the unnumbered layer of wood and layers 6-8, which

were essentially one mass of 'decomposed wood', were 'possibly worked pieces', 'two pieces joined at an angle with a hard, pitch-like substance', many small fragments, and twigs. Within the unnumbered layer were observed 'a plank and a branch'. This layer was roughly rectangular in plan, and the 'plank' was aligned near and parallel to its eastern side. (None of the above-mentioned material now survives.) Surrounded by gravel (layer 11) and 'light grey clay', perhaps brickearth (layer 10), this sub-feature may originally have been a rectangular shaft. Besides the wood, its fill comprised 'dung', 'black clay', and 'cess'.

Above the 'decomposed wood' (layers 6-8) were 'grey silty clay' (layer 5); 'dark grey brown clay with bones and much charcoal' (layer 4); 'grey clay with cess stains and charcoal flecks' (layer 3); 'very dark grey brown brickearth with charcoal, [burnt] daub flecks' and some animal bone (layer 2); 'grey brown clay' (layer 1b); a thin 'dark blue/green spill line' (not numbered); and 'grey brown clay with many stones and some bone' (layer 1a). These layers seem to indicate a late use of this feature as a rubbish pit, perhaps also as a cess pit.

F47 (fig 32) was cut by a modern sewer trench. Only the north-western quadrant was available for excavation. Some 1.5m deep, of which 0.3m was removed in spits, it contained in its bottom a thin layer of 'red brown earth with gravel and iron panning' (layer 5; compare the description given in

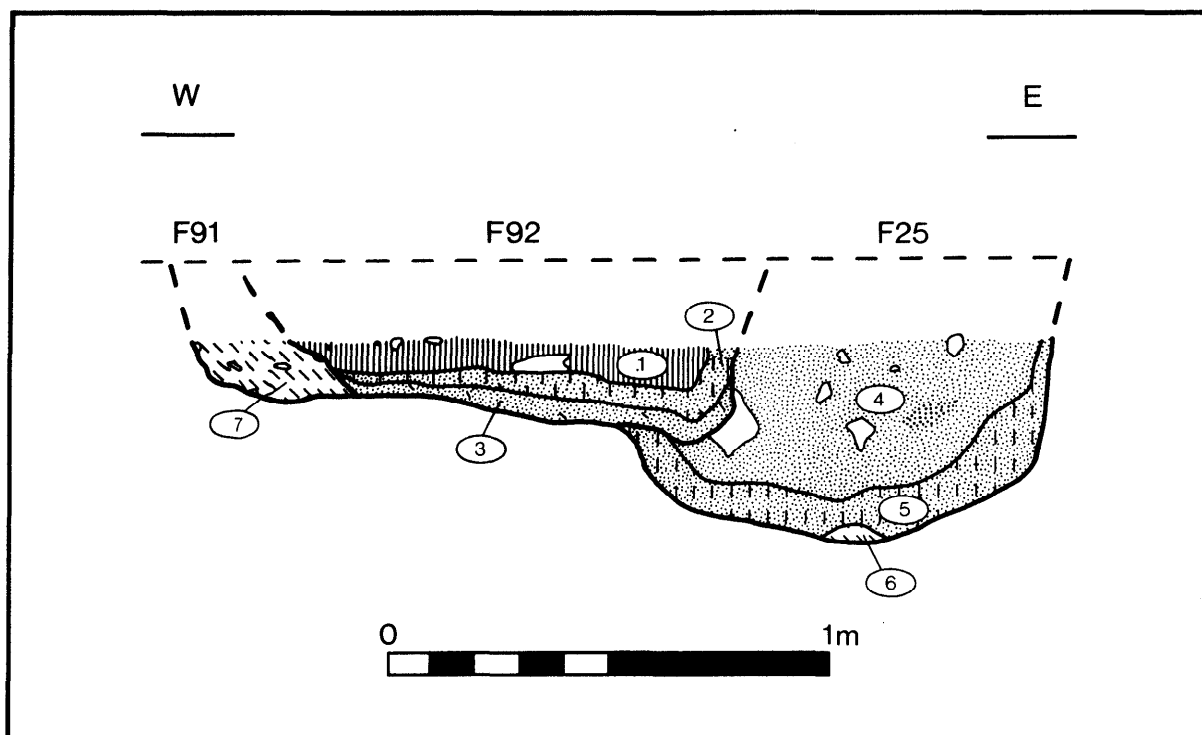


Figure 29 SOU 11: FF25, 91, and 92. The broken line shows the reconstructed profile of the features, before they were reduced by trowelling. See fig 17 for the key.

the introduction to this report of soil from the base of F66) and another large, unnumbered mass of 'wood'. Recovered from this layer, which was 'in fact a deposit of rotting fibres of various vegetable matter (twigs, leaves, and grass)' or was 'a moderate brown (Munsell no. 5YR 3/4), fibrous, "peaty" material, which appeared to be herbivore dung' (Buckland et al 1976, 63), were a piece of woven cloth, timbers (the largest measuring 1.35m by 0.10m by 0.07m), unspecified 'worked pieces' of wood, a 'tree stump' or 'tree trunk', a complete bucket, and various other small pieces of wood. Only the cloth (now in two pieces and numbered as items 88 and 89) and the bucket (item 137) survive, and are briefly described in the next paragraph but one.

Around this deposit were two layers (layers 4 and 4a) of 'light grey-brown silty clay', the lower of which had a slight green tinge and contained the greater number of flints. One surmises that these were layers of redeposited brickearth. The wood and layer 4 were sealed beneath layer 3, blackish clay with much charcoal and decomposing wood'. Above this was layer 2, 'mid grey-green clay with some charcoal', with 'grey clay cess stains at the bottom'; layer 1a 'dark grey brown clayey brickearth with a little crushed bone'; and layer 1, 'dark grey clayey brickearth with bone'. As with F46, one is inclined to interpret the lower layers as the surroundings of a shaft and its infill with rubbish. The upper layers appear to have been rubbish or cess fills,

The fabric mentioned above was woven in wool; in a plain weave, 20/Z x 12/S (Hedges 1980, 351). The

bucket had been made by fitting a separate bottom into a groove cut in a single piece of oak, irregularly hollowed out and undressed. A double strand of hazel binding had been plaited together and wound around the base, presumably to tighten it (Morris forthcoming).

F48 (fig 33) was cut through F78, and was of an unknown relationship with F69. It was 1.92m deep, but 0.15m had been removed in spits before the feature was excavated. A hollow in the base was filled with a layer of 'blue clay' (layer 10). Above this were layers of 'clay', respectively 'dark grey/black' (layer 9), 'grey' (layer 8), light brown/orange with many stones' (layer 7), and 'red brown' (layer 6). The latter may have been stained by layer 5, which was a 'fibrous deep red brown layer'. This contained fragments of wood that have not survived. Above it was a 'light orange silty clay' (layer 4), probably brickearth, interpreted by the excavator as a result of silting. The upper layers, in which were found animal bone, were a 'light grey clay' (layer 3), a 'darker grey clay containing small stones' (layer 2), and a 'light grey silty clay with many stones, charcoal, and flecks of [burnt] daub' (layer 1).

Noting that the pit reached the water table, the excavator hesitantly suggested that it had been a well. Pits of similar shape, dimensions, and fill have been found at SOU 36, and are interpreted here as unfinished wells. In the case of F48, it is possible that, the well pit having been dug and the digging of the shaft begun, the feature was abandoned for an unknown reason, and initially backfilled with the

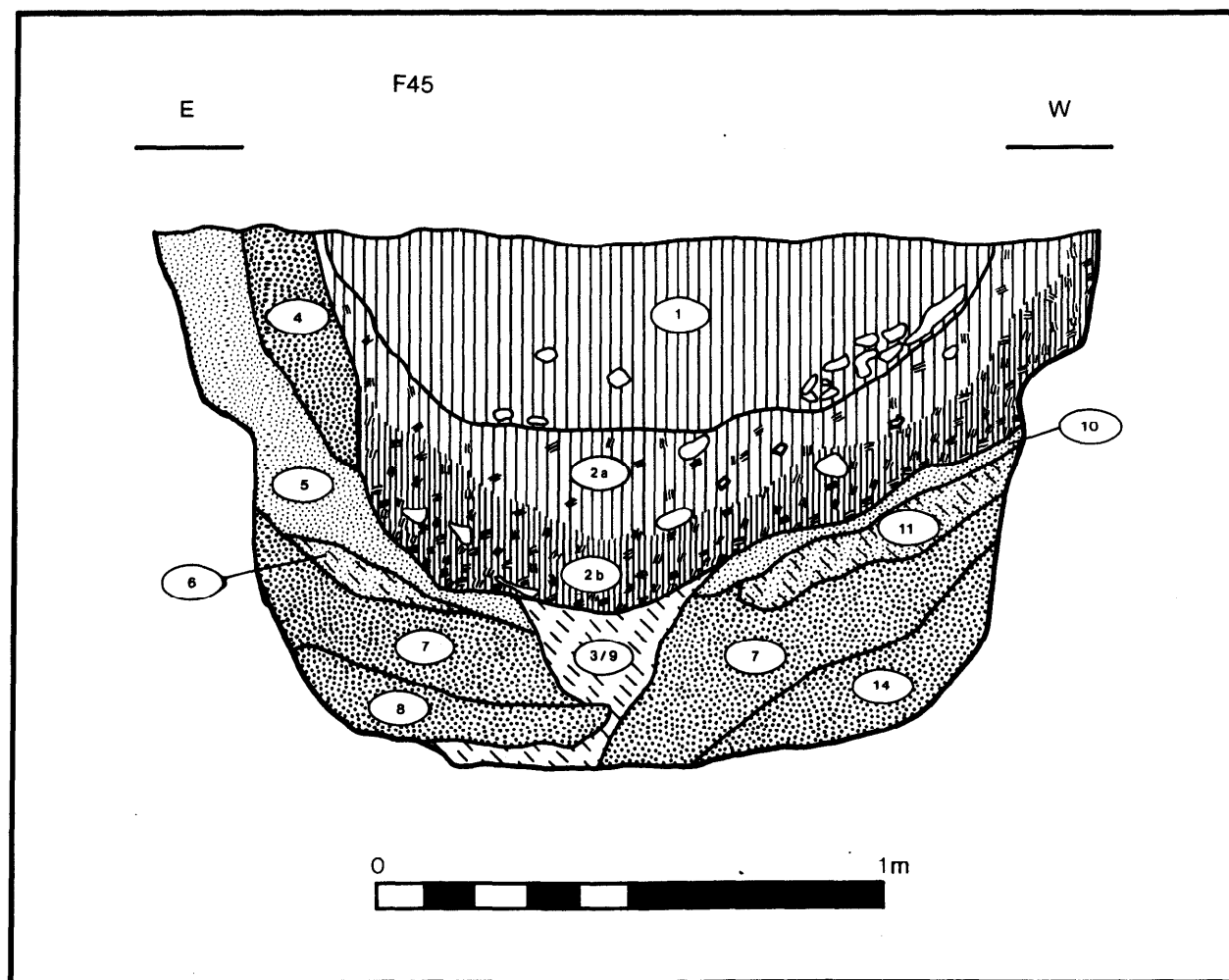


Figure 30 SOU 21: F45. See fig 17 for the key.

excavated natural (layers 4, 6-10) and some debris (layer 3); and, at a later stage, the hollow in the top of the feature was used as a rubbish pit.

F49 (fig 34) was very roughly sub-rectangular in plan. Flat-bottomed, with sloping sides, it survived to a depth of 0.6m. It had perhaps been 0.7m deep before spits were dug. The primary fill was a layer of 'very dirty orange clay with charcoal flecks' (layer 5) — principally redeposited brickearth, one supposes. Sealing this was 'dark brown clay with charcoal' (layer 4), in which was a lens of 'yellow sandy silting' — again, presumably brickearth. The profiles of the layers above layer 4 are somewhat confused, perhaps because they filled a number of recuts. Layer 3 consisted in the main of 'orange clay' (brickearth?) containing a few stones, including some lying in what appears to have been a stake- or post-hole. The upper part of this layer was a 'concentration of gravel'. Over these constituents were a thin layer of charcoal (layer 1b) and a 'grey-brown stony fill' (layer 2). These, in turn, underlay 'mid brown, friable soil' (layer 1) which contained some stones and a 'faint charcoal lens' (layer 1a).

It is difficult to interpret this pit and the layers that fill it. Its shape in profile is reminiscent of a sunken-featured building (see the discussion of F12, above), but, although a post-hole lay immediately to the east along its axis, and another 0.13m to the east (F67), no post-holes were noted to the immediate west of this feature or in its western side. It may have been recut on up to three occasions; these being represented by the bottom-lines of layers 1, 3 (excluding the gravel), and 4. All layers contained varying quantities of domestic refuse, including burnt fragments of animal bone, yet — although only five main layers are shown on the section drawing — this bone is provenanced in the finds records to six layers. It seems likely that the great number of bone fragments recovered from layer 5 (according to the finds records) in fact came from the 'dark brown clay' of layer 4, and the few fragments from layer 6 in fact came from the redeposited brickearth of layer 5; but this anomaly cannot now be resolved. In short, this feature of unknown function displays a complex sequence of deposition in which the disposal of

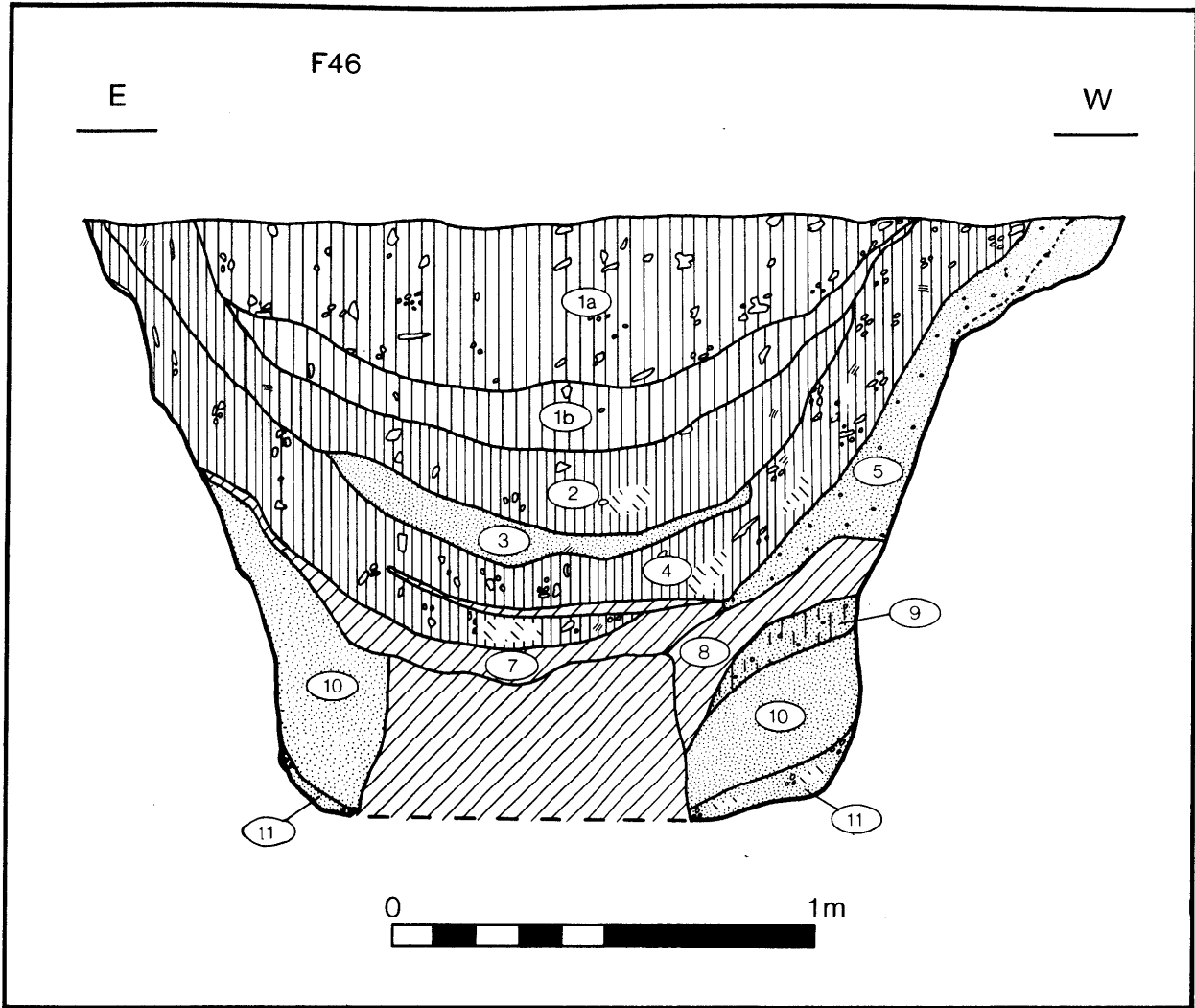


Figure 31 SOU 11: F46. See fig 17 for the key.

rubbish and the redeposition of natural soils are a constant strain.

F54 was cut by a modern pipe trench. Bowl-shaped in section, it was at least 0.3m deep (perhaps a further 0.2m had been removed in spits) and contained four layers. The lowermost was redeposited brickearth ('orange sand clay') and gravel. Above it was 'filthy orange clay (greenish brown) with charcoal flecks' which may have derived in part from cess. This lay beneath a 'very dark grey clay with charcoal' and a lens of shell. The uppermost layer was 'very dark grey brown silty clay'. Both these two upper layers contained animal bone and probably represent domestic-refuse layers. The intended function of this pit is unclear.

F56 (fig 35) was cut by F90 and possibly pre-dated F95. Up to 0.3m of the pit had been removed in spits. Its remaining depth was 0.65m. What appears to have been a shallow shelf or step-down to the north of the main cut (and probably the west) may have been 0.43m deep before it was lowered by spits. An integral part of the feature, its function is

unknown. The depression in its top fill was the result of the removal by the excavators of 'an oval patch of stones'. No such grouping appears on any of the pre-excavation level plans, and it, is not clear whether these stones filled an intrusive feature or formed an upper layer of the pit. In fact, they may have formed part of F97, layer 5 or 6 (see below).

Two other layers were noted. The lower one (layer 2) was 'greeny yellow clay with patches of orange brickearth' and was interpreted, perhaps only because of its colour, as cess. Over this was 'dark brown silty clay' (layer 1) which contained much stone and some bone and charcoal, and was 'clayey near the bottom'. The only finds provenanced to F56 were recovered from the spits. If this material had been part of layer 1, it points to an interpretation of that layer as a rubbish layer.

F62 (fig 36) was a large pit of irregular shape in plan and section. The irregularity may have been the result of much recutting, but no clear evidence for this is furnished by the section drawing. Only about a quarter of the pit was exposed in the

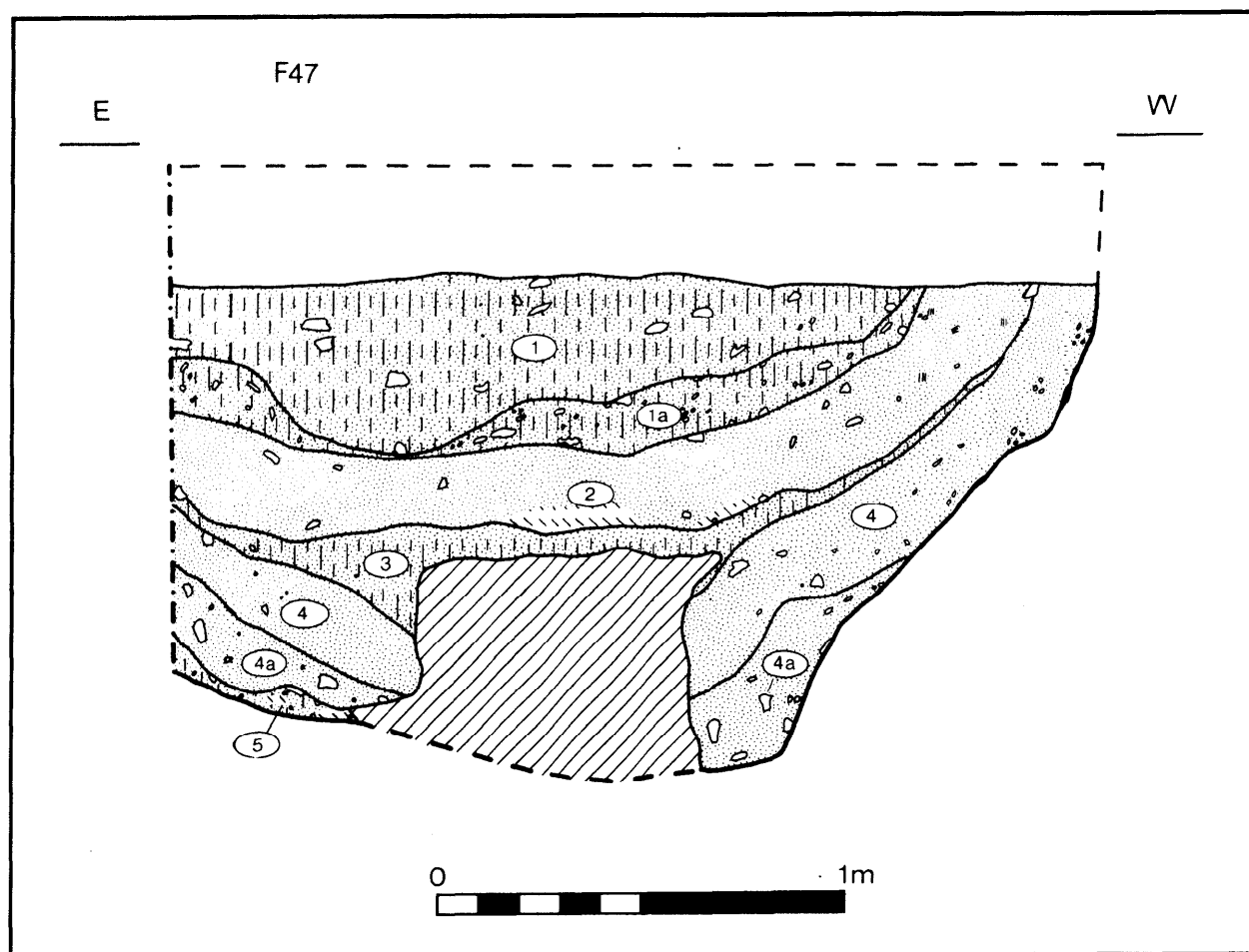


Figure 32 SOU 11: F47. The broken line shows the reconstructed profile of the feature, before it was reduced by trowelling. See fig 17 for the key.

excavated area. Some 1.5m deep, its bottom fill was 'sandy grey clay with some gravel' (layer 13), iron-panned in its western half. Found at the base of this layer was a collapsed wooden cask and a turned waste core (both are numbered item 137). These are described below. Layer 12 was a 'blue-grey clay' in its eastern half, and 'sandy grey clay with some gravel' or 'dark brown sandy clay' in its western half. The excavator's suggestion that this latter part may have comprised an 'amalgam of sea sand [from layer 8] and burning [from layer 7]' is difficult to understand, but probably indicates that the sandy fraction was medium or coarse. Some fragments of wood were found, sandwiched between layer 12 and the upper layers. These have not survived.

Above layer 12 was a small 'stony lens' (layer 11), sealed by layer 8, 'sea sand with a few iron and cess stains'. Over this was layer 7, variously described as an 'area of burning' and 'a streaky layer of decomposing wood, grey clay, charcoal, and bone'. This may have been essentially the same as layer 9, 'very mixed clay — grey with tan and brown patches'. Both lay beneath 'sandy grey clay with much cess' (layer 6), over which was a 'charcoal

streak' (layer 5). Layer 4 was 'grey black soil, slightly sandy, with much charcoal, some bone, a few daub flecks, and yellow brickearth patches'. It may have comprised two indistinguishable layers, most of which perhaps filled a recut of the pit. Over layer 4 were two small layers of 'yellow brickearth' (layers 3 and 3a), and a small 'stony grey lens' (layer 2a). The uppermost layers, which seem to have filled a slump in the pit (or perhaps a shallow recut), were 'slightly silty, dark grey brickearth with bone' (layer 2) and 'brown-grey brickearth with stones, gravel, and brickearth' (layer 1). There is some evidence that the disappearance of stones in the drawing of the eastern half was the result of site-draughtsman's fatigue.

As with many of the pits excavated at SOU 11, there seems to have been a dichotomy between the lower layers of 'clay' which contained few finds except wood, and may in part have been cess, and the upper layers which contained much domestic refuse.

Morris (forthcoming) describes the cask found in the bottom of the pit as having been made out of probably eleven oak staves, nine of which survive, and two caskheads, one of which (of oak) survives.

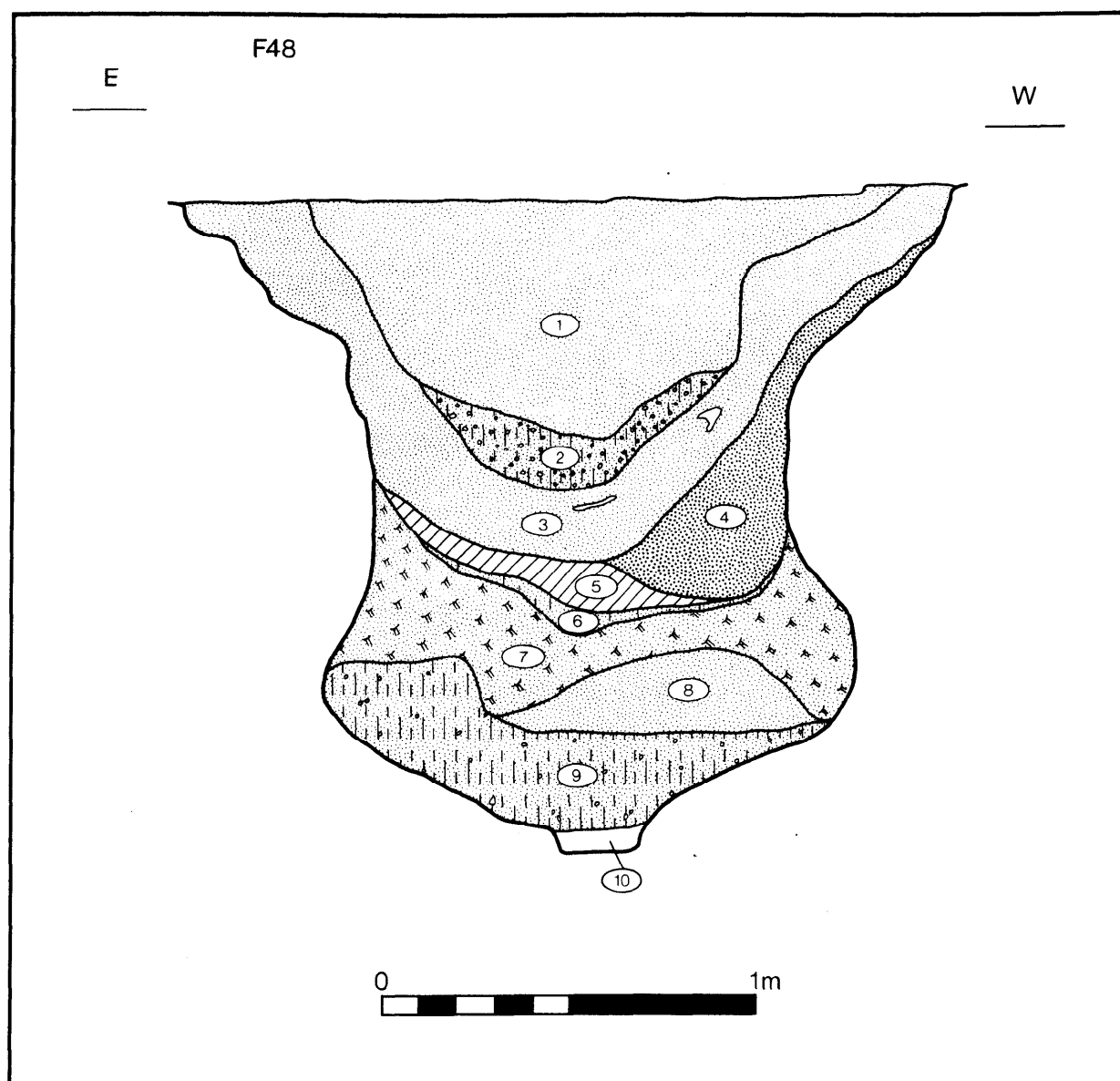


Figure 33 SOU 11: F48. See fig 17 for the key.

The head fitted into roughly cut grooves in the staves, which were held together by a single band of hazel. The cask was small, with a capacity of only about 8.5dm^3 . Morris suggests that it had probably been designed as a container for dry goods such as salt. The wooden object found with it was a waste core from a lathe-turned object. If its association in the pit with the cask was not accidental, it may have been used as a bung in the missing caskhead.

F66 (fig 37) may have been cut by F90. Layers 1-6 have been assigned here to a newly numbered context, F97, which overlay F66. The pit was 1.52m deep. Rammed into the natural gravel at the base of the pit was an upright formed from a generally straight, but sinuous, oak branch. The post-excavation history of this wood is the same as that of the

upright found in F44 (see above). In 1973, its surviving length was 1.25m; in 1982 1.24m. What is taken to have been the lower portion had been shaped, much like F44's upright, by cutting perhaps seven sub-rounded facets along the grain and bringing them to what is now a blunt point at the presumed base. This upright was far less substantial, however, having a maximum circumference of 0.39m at its thickest point near the presumed base (a diameter of some 0.12m) and circumferences of only 0.19m and 0.17m towards its other end. The site records indicate that it was first recognised as an upright about 0.5m above the bottom; which suggests that it had been rammed about 0.75m into the natural gravel and only the thinnest part of the upright remained visible. The upright was seen in layers 7 and 9.

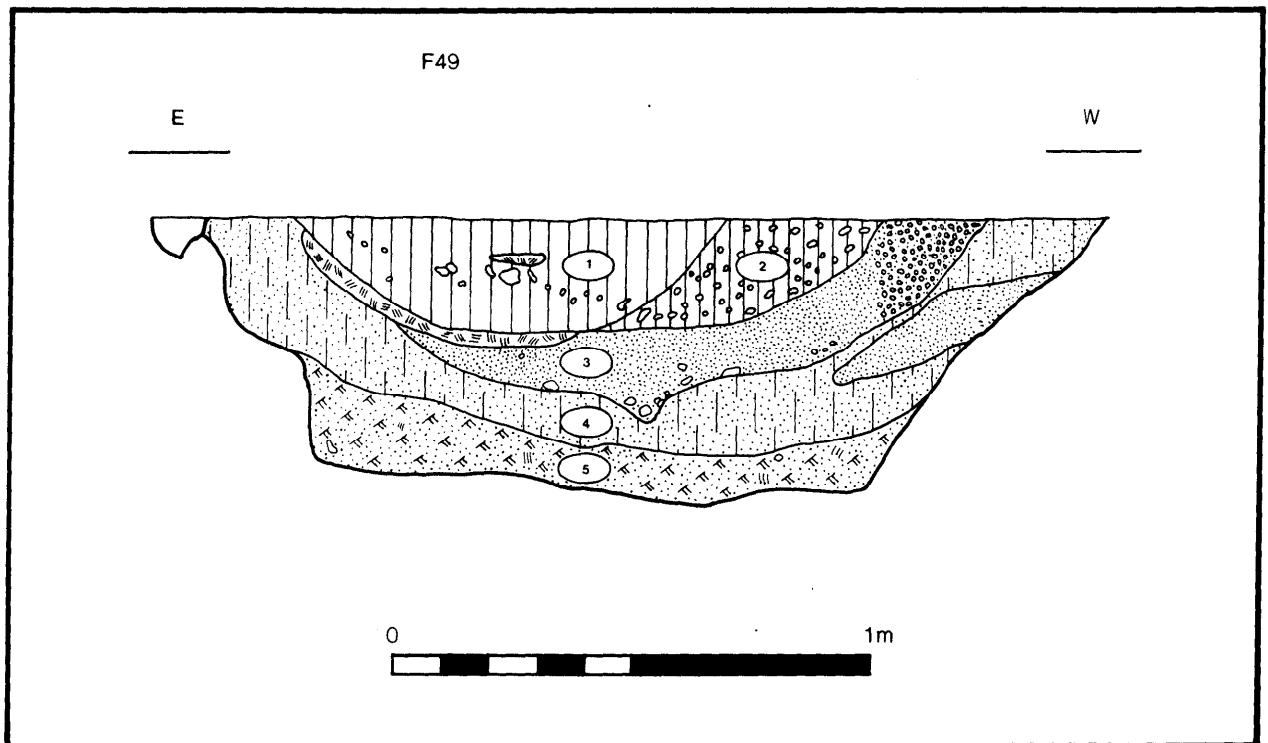


Figure 34 SOU 11: F49. See fig 17 for the key.

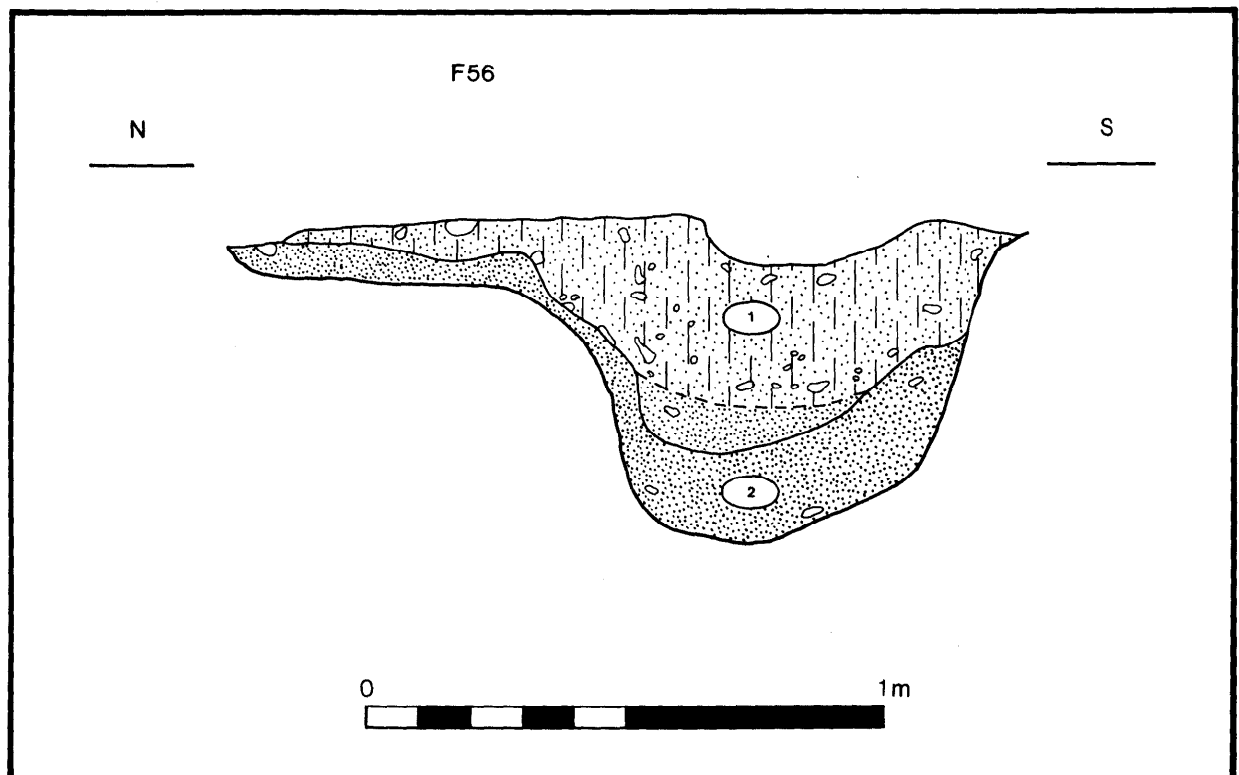


Figure 35 SOU 11: F56. See fig 17 for the key.

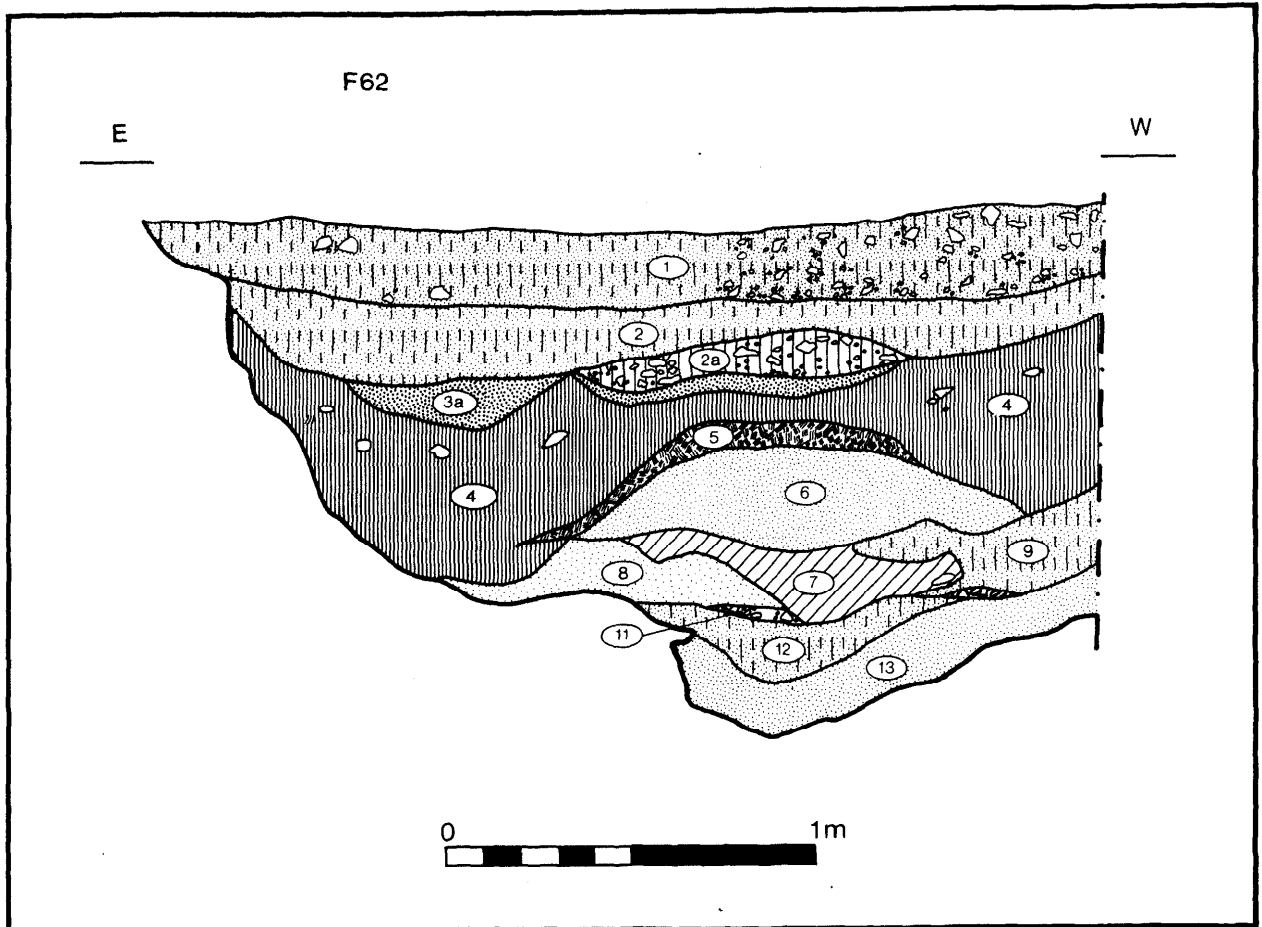


Figure 36 SOU 11: F62. See fig 17 for the key.

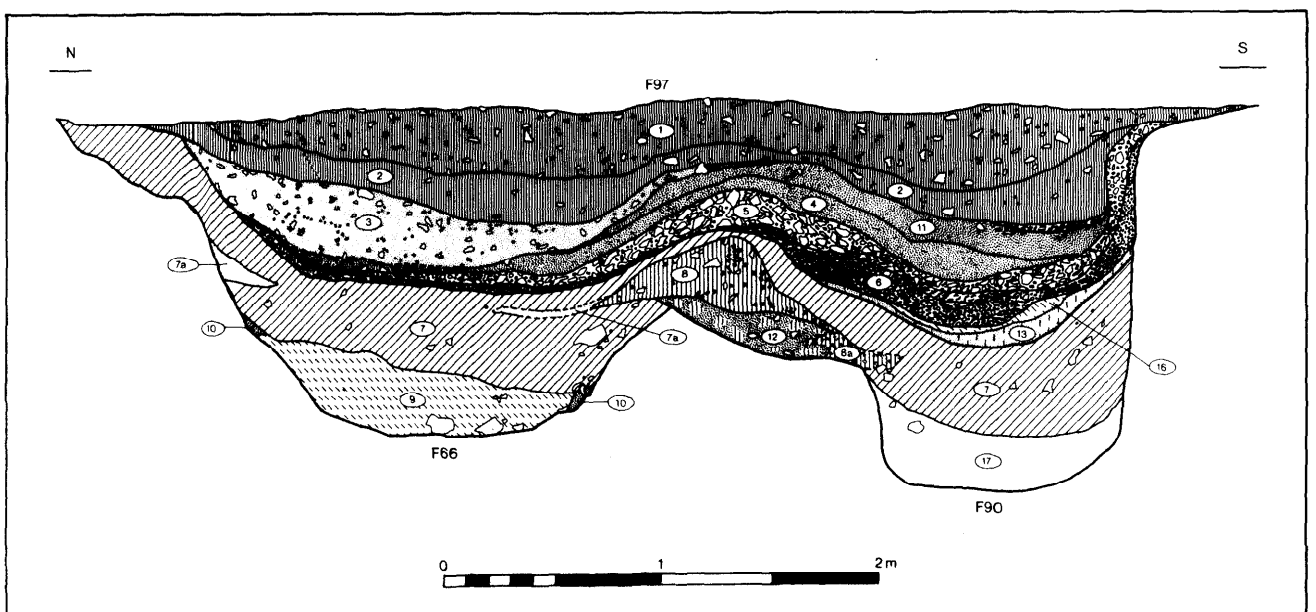


Figure 37 SOU 11: FF66, 90, and 97. See fig 17 for the key.

According to the excavator, employing hindsight, it was first 'evident [in the top of F97] as a brown stain'; but, since there was no apparent link between the two, it is doubtful that the 'stain' and the upright were one and the same.

Apart from small patches of 'orange silt and gravel (layer 10), the primary fill consisted of 'grey-green moist clay with chocolate brown streaks' (layer 9). This was perhaps cess, although the excavator does not so interpret it. Over this was layer 7, 'decomposing wood and other vegetal matter'. Striated - many-coloured areas varying from tan to dark chocolate brown'. The wood included 'small and medium-sized pieces [some of them] appearing worked' and a 'large woodpiece'. None of this survives. It seems likely that this 'striated' layer was at least two, a major division of which was intermittently marked by layers 7a, 8, 8a, and 12. Thus interpreted, the lower three-quarters of layer 8 had been thrown into F66, and the upper quarter was a spread of soil overlying both F66 and F90.

The position of the intervening layers, layers 7a etc, is unclear in this scheme. It is convenient to describe them here. Layer 7a was a 'cream sand lens' overlapping layer 8. This was a 'grey earth with patches of charcoal and cess' and containing some animal bone. It overlay layer 12, 'orange brown silty clay with patches of gravel, grey clay, wood traces, and charcoal'. Some 'dry wood fragments' mentioned in the finds record may have been recovered from this layer. They have not survived. The layer seems to have spread southwards as layer 8a (the two layers are coloured in exactly the same way on the original section drawing), but the excavator describes the latter as a 'mixture of grey earth and orange/brown silty clay'.

F69 proved to be an 'irregular, shallow stain' of unrecorded depth. Its base was 'irregular in profile containing many depressions'. The fill comprised 'dark grey brickearth with charcoal, small stones, and crushed animal bone'. A similar feature (SOU 14, F31) was thought to represent the base of a midden. This excavator's guess that F69 'may be tread', a trampled area adjacent to pits, is equally valid. Much the same might be said of F29, an ill-defined spread of 'grey stained brickearth' about 0.1m deep.

F72 was cut through F12. Less than half of it was exposed on site, but it seems to have been sub-rectangular in plan. Generally sub-rectangular in section, it had a northern edge that, in the upper 0.8m, sloped outwards at an angle of 43E. It was 2.08m deep. The lower 1.2m were filled mainly with 'orange clay and gravel', there being 'few stones' at the top and 'much gravel' at the bottom. This was probably a large redeposition of natural brickearth and gravel. Over it was 'orangey sandy gritty clay', perhaps more of the same. Most of the upper fills seem to have been derived from domestic refuse, and typically were dark soil containing animal bones, charcoal, and burnt daub. It is recorded that there was 'much [burnt] daub in the upper fill'. The

topmost layer, 'silty grey brickearth with many stones', seems to have been impressed into the rubbish layers beneath, and was perhaps the remains of an above-ground gravel surface. An association with gravel layers in nearby pits cannot be ruled out.

F77 was vaguely oval in plan and bowl-shaped in section. It survived to a depth of 0.98m, 0.2m of which was removed in spits. All layers in the pit were described as 'silty fills' with gravel, and most seem to have been brickearth intermixed with some rubbish. Inclusions, scattered fairly evenly through the fill, were charcoal, 'flecks of [burnt] daub', and some animal bone.

F78 was cut by F48. Squarish in plan, but with rounded corners, it was bowl-shaped in section and survived to a depth of at least 0.58m. It had been perhaps originally 0.85m deep before excavation of the site and had lost its upper 0.27m to spits. The bottom layer, generally 0.06m thick, was 'cess-stained yellow brickearth'. Over this was a 0.16m-thick layer of 'brown clay with some charcoal and stone' and a small amount of 'daub' and animal bone. This may have been essentially a sealing layer of brickearth among which had been thrown some rubbish. The upper three layers above it were derived from domestic refuse and contained charcoal and animal bone in large quantities.

F87 was cut through F45. Bowl-shaped in section, it had survived to a depth of 0.91m before the removal of the upper 0.24m in spits. It was filled with rubbish layers, the uppermost one of which, after lowering by spits, was 0.47m deep. The occasional presence of 'cess' in the layers filling the bottom 0.2m was noted, and a thin layer, limited in extent, described as 'brown (cow dung) clay' lay on the western side of the pit. It is not known if the parenthetic description referred to the layer's colour or nature, or to both.

F88 was cut by F96. Probably originally sub-rectangular in plan and section, its shape seems to have been distorted by weathering of the upper 0.43m. About half of it was exposed by the excavations. It was 1.2m deep. The majority of the fill comprised layers of 'orange clay' and 'light beige brown silty clay'. These contained a few flecks of charcoal and sometimes a small amount of 'daub'. The presence of 'cess' was at times noted. It is likely that all these fills were deposited in the pit over a short period of time. They may represent cess and sealing layers. The uppermost part of the pit contained a similar fill, mixed with some gravel. Although a moderately large amount of animal bone was provenanced to F88, it is likely that this material had been part of the rubbish layers that are now ascribed to F96.

F89 was cut by F44. Its dimensions, shape, and the nature of the two layers that reportedly filled it are unknown.

F90 (fig 37) was cut through F56 and underlay F97. Sub-rectangular in plan and section, it was 1.8m deep. The bottom fill, layer 17, was variously

described as 'heavy blue-black clay' and 'a mixture of bluish clay and gravel - very hard to remove and with no residual material whatever'. Over this was layer 7, already described as F66, layer 7: see above, where descriptions will also be found of layers 8, 8a, and 12, which covered a 'platform' between the two pits. The 'platform' may have been the remains of the bottom of a third pit, its fills having been cut by, and subsequently having subsided into the fills of, FF66 and 90; but it is just possible that it had been a ledge cut, for some unknown reason, between contemporary pits. A similar phenomenon has been observed at Six Dials.

F91 (fig 29) was cut by FF24, 25, and 92. It may have been sub-rectangular in plan and section. Once nearly 0.5m deep, virtually nothing remained of the feature after the removal of several spits. What survived was filled with layer 7, 'orange clay with pebbles', probably redeposited natural.

F92 (fig 29) was cut through FF24, 25, and 91. Originally nearly 0.6m deep, like F91 it had been severely truncated by spits. Filling the bottom was layer 3, variously described as 'black occupation clay' and 'mixed brown clay with greening patches of brickearth and charcoal; stony at the western edge'. This was sealed by 'crushed shell in dark brown clay' (layer 2), which itself was overlain by 'brown-black clay with stone and bone' (layer 1). The pit seems to have been filled with rubbish.

F95 is shown on fig 26 as two concentric rings. The inner ring marks the line of what the excavator thought to be the pit; a shallow feature 'lined with flints', of unrecorded depth and otherwise unrecorded fill. The outer ring, drawn here from an original sketch plan, seems a more likely edge. The fill within this area was not described and was possibly of the same appearance as F56, layer 1; a commonly encountered 'dark brown silty clay'. The relationship of F56 and F95 is far from clear. It is possible that the shallow shelf in F56 was in fact part of F95, or connected with it. If so, the two features were open at the same time. If not, F95 was a later feature.

F96 is a recent numbering. Sub-rectangular in section, its shape in plan was not recorded: the sub-rectangular outline shown as a broken line on fig 26 is this writer's guess. It had been cut through F88 and was 0.73m deep. The fill was numbered as F88, layers 1-6. In the bottom were thin layers of 'rich red brown silty clay' and 'medium grey clay with some stones'. Over these were two layers of 'dark grey clay' containing charcoal, animal bone, and 'flecks of [burnt] daub'. A similar rubbish layer formed the top fill: it was separated from the lower ones by a 'layer of dense, small gravel' which on average was 0.04m thick.

F97 (fig 37) is also a recent numbering, its layers having been previously numbered as F66 (and perhaps F90), layers 1-6, 11, and 14-16. Rather than a separate pit, it represents an overall grouping of layers that had been spread across the infilled top of FF66 and 90, or had been dumped in hollows formed

as the fill settled; each layer in turn eventually sinking and being overspread by further layers. Its outline is shown on fig 26 as a broken line.

Perhaps layer 7a and probably the top part of layer 7 were the first soils to fill the slumped tops of the two pits. They have been described above as F66, layers 7a and 7. Over layer 7 was dumped layer 13, a 'clean grey clay'. This lay beneath 'cess, yellow clay, and gravel similar to layer 6' (layer 16). Across both pits, and presumably beyond them, were spread two gravel surfaces separated in part by layer 15, 'shell in black clay'. The earlier of the gravel spreads, layer 6, was 'yellow brickearth with gravel', and the later one, layer 5, was 'dark grey brickearth and gravel, including several large stones'. These presumably were the remains of two above-ground gravel surfaces. Spread over them were layer 4, 'light yellow-brown silt with some charcoal and [burnt] daub'; layer 3a, a soil 'lighter brown than layer 3 with some stone, silty, and similar to layer 11'; layer 11, 'a yellow-brown silt (more yellow than layer 4), stony in its highest fill'; and layer 3, 'brown to orange/brown brickearth with many small stones and some bone'. Despite the differences in colour, and apparently the differences in texture, these layers may have accumulated at much the same time. All brickearth, it seems, and with few inclusions, they were presumably soils thrown out from the digging of a nearby pit; but there is no evidence to indicate whether or not they were deliberately laid surfaces. Above these, layer 14 comprised 'shell in grey clay with some charcoal and daub'. One supposes that it was a dump of rubbish, like the two uppermost layers. These were both 'brown-black earth', the upper one (layer 1) containing more stone and less animal bone than the lower one (layer 2), which also contained 'daub'. It is probable that at least one piece of glass provenanced to F90, and described as having been recovered 'from the grey-black soil under the blacky brown mixed earth' was in fact found in F97, layer 2.

Dating and interpretation

Radiocarbon dates were obtained from wood samples from four pits; presumably from the wood found in their lower layers (table 2). Amended and calibrated in the manner already described, and at 1 sd, these indicated dates of 629-978 and 886-1035 for two samples from F46 (HAR 569 and HAR 573); 647-1041 for a sample from F90 (HAR 572); 679-1102 for a sample from F62 (HAR 728); and 690-1152 for a sample from F47 (HAR 570). They might be taken to indicate that the pits were infilled in the 8th century or later. It is not clear whether or not the two samples of wood from F46 were contemporary. It is argued below that there had been a wood-lined shaft in this feature, into which debris, including wood, was eventually thrown. The two samples may have been of the shaft lining and its later infilling. The apparently late date of HAR 573 may be due to the fact that, alone of all the

radiocarbon dates obtained from Hamwic, its quoted error was not increased (see above). Given the wide extent of the other dates, there seemed little value in presenting calibrations at 2 sd. In this case, however, if the calibrations were to be read at 2 sd, that of HAR 573 would be 767-1165.

The dating of occupation of SOU 11 is otherwise handicapped by the fact that, due to the methods of excavation employed, most artefacts have been provenanced only to a pit and not to the layer in which it was found. Where a deep pit contained many datable artefacts (for instance F44, the date-range of the pottery from which spreads between the early Middle Saxon period and the mid Middle Saxon period or later), one guesses that the oldest artefacts were found in the earliest layers. Taken overall, the pottery indicates that most of the pits were being filled during the early and mid Middle Saxon periods. FF25 and 72 were filled probably at a later point, and also F92 which was cut through F25 but contained no relevant finds.

A study of the rim forms of the glass recovered from this site yields similar results. There are eleven fragments of the early folded rim with cavity and one early form of a funnel-beaker base, and five fragments of the late, rounded rim. In general, these data accord with those provided by the pottery, but must be treated with the same caution: found in unknown layers of F62 were three fragments of the early form of rim, and two fragments of the late (Heyworth and Hunter forthcoming).

Thirteen coins were recovered. One of these has been lost (it was probably a much corroded sceat) and five were Roman (M155-9). A *BMC* Type 39 sceat (item 6; M28) was found in a sewer trench and had perhaps been redeposited from F46, 47, or 54. A *BMC* Type 45 sceat (item 10; M102) was recovered from somewhere in F62. Four *BMC* Type 49 sceattas were found: one in F46, perhaps in layer 1 (item 8; M39); one in F54, perhaps in layer 2 (item 9; M52); and two, 'fused together', in an unknown layer of F66 (items 7 and 11; M84 and 54). During the machine-stripping of the topsoil, a rare form of a penny of Egbert, struck c 825-8, was also found (item 5; M144).

In summary, the dating evidence suggests that there was intense occupation here from the early 8th century onwards. This occupation probably ended at some point in the 9th century.

Although little sense can be made of the structural features, it is evident that a sequence of buildings stood at and around SOU 11. The clearest evidence for this sequence is the varying relationship of the post-holes and the pits (some cut through, some cut by the pits), but it is hinted at by the laying down of gravel surfaces (F97, layers 5 and 6) in an area previously occupied by at least two pits. There is no certain sign, however, that the pattern of occupation found to the west at SOU 7 continued onto SOU 11. The east-west linear features uncovered there are not found here, unless (which seems unlikely) a return of one of them to

the north is marked by F40. The east-west line of pits evident on SOU 7 may have continued on SOU 11 as FF88/96-44/89.

Most of the pits were filled with rubbish, and many had perhaps been used as cess pits. In the favourable conditions for anaerobic preservation existing at this site, a great deal more of the constituents of the pit fill was recovered in an identifiable condition. The presence of 'twigs' and foliage was regularly recorded in the site notebooks, and one may guess that similar material in the tops of the pits had disappeared before excavation. The eventual collapse of such material under the weight of succeeding layers was probably largely responsible for the slumping of the layers, most dramatically embodied here in the fills of FF66, 90, and 97. It is unfortunate that the great majority of this material was eventually discarded (some time after the excavation), since it would probably have been a good pointer to the immediate environment of the buildings in this area, and may have included evidence of their construction.

The possible existence of two sunken-featured buildings has been mentioned. Although there are certain features of the pits that might support this interpretation, it cannot be affirmed that either F12 or F49 was such a building. But it may be of interest to note that the fills of both contained much early Middle Saxon pottery; and an early form of a funnel-beaker base (item 154) was found in F12.

Equally difficult to interpret are the original intended functions of FF44, 46-8, 62, 66, 72 and 88. By analogy with the evidence from SOU 36 (see below), F48 has been interpreted as a feature dug, but never used, as a well. It is possible that FF62, 72, and 88 underwent a similar metamorphosis. There may have been the beginning of a cut for a shaft in the base of F62 (fig 36), and its lower fills perhaps represent a backfilling, together with some rubbish, of some of the natural brickearth that had been excavated. There was no such aborted shaft in the base of FF72 and 88, but in both cases the major part of the fill was redeposited brickearth and gravel. In form, the pits are strongly reminiscent of well pits, but neither are they unusual as rubbish pits.

There may have been lined shafts in FF46 and 47 (figs 31 and 32). Both contained columns of decayed wood in the bottom of the pit, surrounded by what was probably redeposited brickearth. In neither case was the actual bottom of the pit, under these columns, certainly found: the section drawer marked these points with a broken line and labelled them as the 'projected bottom' and the 'approximate bottom'. It is possible that the columns extended below the main line of the pit bottom. Very little was recorded of the shapes in plan of the columns, and whether or not they were lined.

Judging from a sketch plan in the site notebook, the column in F46 was sub-rectangular in plan and contained (perhaps by accident) a 'plank' set on edge parallel to one side. It is highly improbable that

these columns were inserted into a fill of brickearth, and more likely that the brickearth had been thrown in around them. The claim made by earlier commentators (Buckland *et al* 1976, 64) that the column in F47 represented material

collected together in a large bucket and dumped into the pit. The material had been sufficiently cohesive when deposited to retain the approximate shape of the containers when the pit was filled in

is inherently implausible. The weight of this material would have made the manoeuvring and upturning of a 'large bucket' almost impossible. If it was cohesive enough to retain its shape for some time after deposition, it may have been too cohesive to have dropped readily out of a bucket. Granted that human behaviour often displays eccentricities, why someone wishing to depose of this mass of material should not have simply shovelled it into the pit remains an important question.

One must assume, therefore, that the columns were lined; and assume also that hypotheses about large buckets-full of material were prompted by the fact that no lining was observed. Certainly, none was recorded. However, if there had been wicker linings, they may have been chopped through when the excavators removed one half of each pit as a single context. Surviving fragments of a lining might have been confused with the wood - or may have been the wood - found in this material. Since the other halves remain unexcavated, the opportunity exists eventually to check the supposition.

In neither case did the columns reach high into the pit. There is no evidence that they had been truncated by recuts of the pits, and one must suppose further that, if there were lined shafts, they were reached by stepping into the pit.

Their function remains a matter for debate. They may have been wells, of a previously unsuspected type: the bucket found in the column of F47 could have been used in such a feature. On the other hand, 'cess' and 'dung' were recorded as present in the column of F46, and much of the material forming the column in F47 was interpreted as animal dung (*ibid*, 63-6). These latter data can be reinterpreted to show that the material was mainly rotting vegetation, for 'the insect fauna is dominated by species frequently associated with wet, rotting plant debris' (*ibid*, 64); and very probably some was human cess, for 'most of the seeds of edible plants, particularly the grape. . . , could have been introduced in human faeces' (*ibid*, 65). If such was the case, the features may have been cess pits. Indeed, since anyone putting them to this purpose would have disappeared from view below ground level, they could more accurately be termed privies.

A similar problem of interpretation concerns FF44 and 66. The upright found in F44 was surrounded by decomposing wood, and that in F66 by a layer that may have been cess. In neither case was there any sign of a shaft. Both uprights had been sharp-

ened to a point and driven into the pit bottom. Perhaps 0.8m of F44's upright, and probably 0.75m of F66's, had been so embedded, and in both cases these comprised the most substantial parts of the upright. It is possible that, in different conditions of preservation, the exposed parts of the wood had been somewhat reduced, but it is also clear that the surviving upper part of F66's upright always was thin and sinuous. A sketch included in the site notebook seems to show that the upper part of F44's upright (a portion that had disappeared by 1982) was of a similar form. Since both were formed from branches, it is unlikely that they were long enough to extend upwards, out of the pits.

Discussing probably similar uprights found at SOU 39, Maitland Muller and Waterman (1951a, 318) suggested that 'these could have supported the roof of the pit or been part of stairs or some sort of storage structure'. Had they been preserved, the many pieces of wood found in FF44 and 66 might have proved to be the collapsed remains of a flooring or superstructure. However, even if the SOU 11 uprights had projected from the pits, it seems that they would have been too insubstantial to support more than the flimsiest of superstructures. Possibly, they had been used as firm bases against which to anchor ladders set down into the pits. If someone went to all the trouble of shaping uprights and driving them into the pits, presumably the pits were meant to be left open, and some form of access would have been needed if they had been used as, for instance, storage pits. However, these uprights were of considerably greater diameter, and had been driven far too deeply into the pit bases, than might be thought necessary if they were no more than ladder-stops. Too substantial to be minor structures, and too insubstantial to be major ones, the uprights remain a conundrum.

Apart from the roughly shaped uprights, pieces of 'worked' wood were recovered from many of the pits. These pieces have since been lost and the descriptions written on the finds record cards or in the site notebooks cannot be checked or amplified. The material may be evidence that carpentry was practised at SOU 11.

Special mention must be made of five Roman coins found in F12. Metcalf (1988, 25) seeks to interpret them as having been deposited from a Roman feature into the pit. Such an interpretation is not impossible. An unusually large amount of Roman pottery was found at this site (2% by weight of the total assemblage), though none in F12. On the other hand, the coins were tightly clustered together, which suggests that they had not been severally redeposited, and they may have been placed in a small cavity scooped in the side of F12. It seems more likely that this was a hoard in someone's keeping in the early Middle Saxon period, when F12 was being infilled. This is not necessarily an argument that they had circulated as coins at that late date.

Some 21% (by weight) of all the pottery found was imported from the Continent. The percentage is not

much greater than the Hamwic average (18%), and is far less than was found for the nearby SOU 7; but still represents a considerable presence of imported material. This can be connected perhaps with the comparatively large assemblage of glass from SOU 11. Again, although more of this material was found at a nearby site (in this case SOU 14), 86 pieces of glass were recovered from SOU 11. Of these, eight pieces have been lost. Small amounts were found in FF8, 12, 15, 19, 25, 45-9, 72, 78, and 90 or 87; 23 pieces (26.7%) in F62; and 16 pieces (18.6%) prov-

enanced to F66 but just possibly recovered from F97. Although some of this material may have been redeposited - for instance, the two fragments found in F48 perhaps derived from the fillings of F78, where four fragments were found - it remains clear that the glass was spread both spatially and chronologically across the site with no single point of focus. Especially because the layer-provenance of all but ten pieces was not noted, it is difficult to explain the relative abundance of glass on SOU 11.

SOU 13 (SARC XIII)

Introduction

In June 1973, under the direction of G Dempsey, a trench (A) some 5m by 3.5m was opened west of Marine Parade, at the supposed point of junction of the Anglo-Saxon streets exposed at SOUs 4 and 10. When many burials were found instead, two small trial trenches (B) were excavated by machine 4.4m to the west in an unsuccessful attempt to discover the limits of the graveyard. (Two rounded pits, FF148 and 149, were exposed but not excavated.)

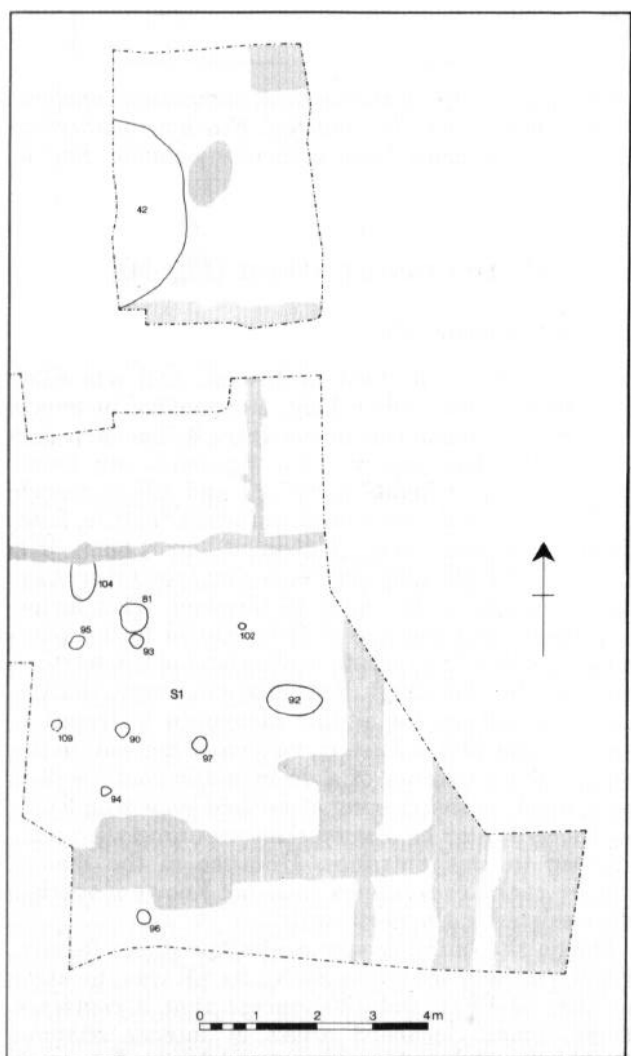


Figure 38 SOU 13: period 1 occupation. To simplify this plan, much of the period 2 disturbance shown in fig 40 has been omitted. 'F' prefixes to the feature numbers are omitted. S indicates structure.

Later, a large and irregularly shaped trench (C) was opened, in two stages by Marine Parade 1m south of trench A (fig 40). The total area exposed was 144m².

The modern topsoil was removed by machine. In trenches A and C, the site was excavated by the trowelling away of successive 50mm levels. The surface of each level was planned, and features were more usually excavated as soon as they became clear. Except in trench B, all features were fully excavated within the limits of the site. Features were numbered F1-F108 and F120-46, putative graves G1-G78, and human skeletal material HB1-HB182. (FF109-19 and 147-9 have been numbered by this writer.) In the following report, only F numbers are used to describe the graves, their fill, and the skeletons within them. Although this practice leads to some inelegancies of phrasing, it seems preferable to refer (for an example chosen at random) to all aspects of a burial as F74 rather than separately by the original numbers of F74, G60, and HB140.

The surface geology of this area consists of sandy silt ('brickearth') overlying gravel. With small local variations in depth, these two layers sloped gently to the east. The brickearth was between 0.2m and 0.22m thick, and appeared at 1.69m OD in the west and 1.65m OD in the east. The slope may originally have been greater, and been removed by Victorian levelling (see below).

There was evidence that the upper levels had been disturbed by ploughing from at least the 18th century onwards (see below). Other large and significant disturbance was encountered only in trench C, the southern part of which was crossed by four pipe trenches. One of these was itself cut by a Victorian pit. The construction of a railway branch had also removed perhaps 0.2m of the layers in the north of the trench.

Period one occupation

Included in the first period are all the features that clearly antedate evidence of later occupation (fig 38). There can be no suggestion that every feature is contemporary.

Structure 1 was a building in trench C aligned north-east-south-west, and 2.6m wide by at least 5.5m long. It comprised three roughly parallel sets of post-holes set in triplets but not at right angles to the ridge-line. These post-holes were heavily cut by the graves of period two, and it is assumed that some had been completely removed. Where the post-holes were relatively undisturbed (though

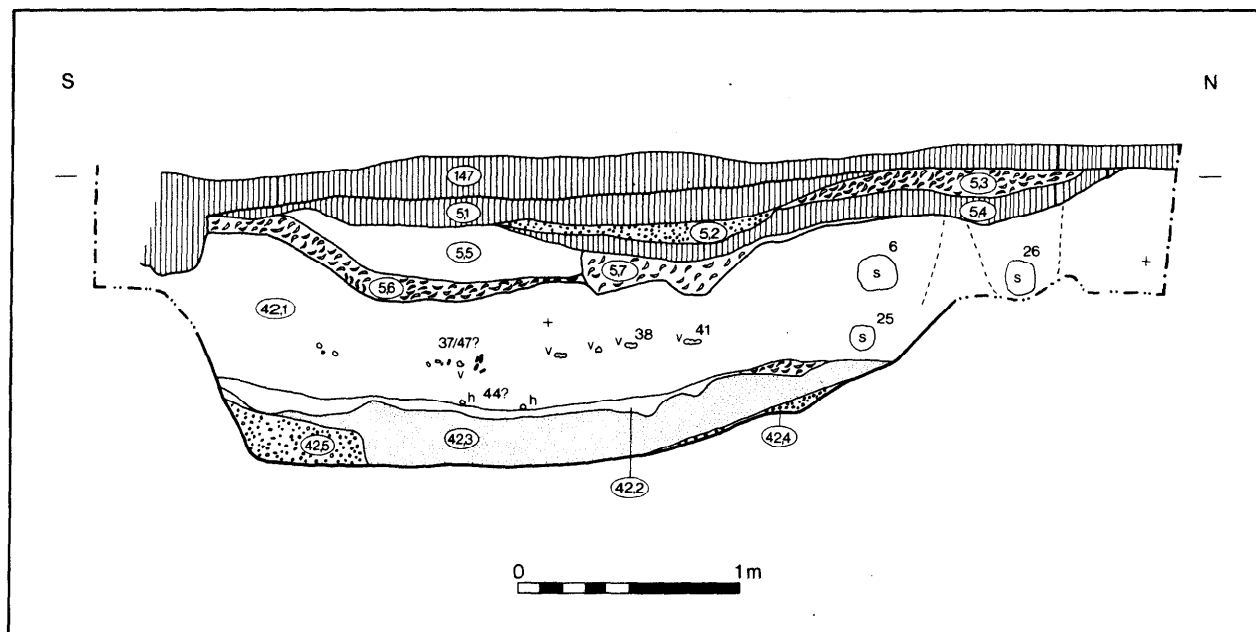


Figure 39 SOU 13: FF5 and 42 and burials within F42. The upper 1.1m of the section, comprising modern overburden, have been omitted here. 'F' prefixes to the feature numbers are also omitted. Feature numbers of the skeletons were not noted on the original drawing and are reconstructed here, wherever possible. Key: h humerus, s skull, v vertebra. See also fig 17.

probably truncated by later ploughing), typically they were found to be irregular in plan, up to 0.28m wide, at least 0.17m deep, and U- or V-shaped in section. They were bottomed on the underlying gravel. (See also FF81 and 104 below.) One sherd of Iron Age pottery was found in F94. This, the only dating evidence for the structure, was perhaps residual: F120, although clearly part of a building of the Christian era, also contained some Iron Age pottery. Structure 1 could be dated on morphological grounds to virtually any period from the Bronze Age onwards (Barrett et al 1981, 223, 225 fig 13; Green 1982, 92-6).

Probably associated with the destruction of structure 1 was the small oval pit, F92, which was cut by period 2 graves, and which survived to a maximum depth of only 0.34m. Nearly half of this pit's fill comprised burnt daub mixed with charcoal. However, this represented only 82g of material recovered.

F42 in trench A (fig 39) was a large pit, rounded in plan and irregular in section. The lowermost layers (layers 3-5) were redeposited gravel and brickearth, perhaps thrown back soon after the excavation of the pit. Above these was layer 2, the nature of which is largely unknown. Sealing layer 2 was the main fill (layer 1), a thick layer of rubbish that contained eight sherds of organic-tempered pottery. The pit was presumably infilled at some time in the early Middle Saxon period. However, cut into layer 1 were at least seven graves. The upcast from these graves had spilled out of the pit to the south - in all directions, one suspects. Layer 1, therefore, largely dates to the later period when a cemetery postdated the pit.

Period two occupation (fig 40)

Structural evidence

Structure 2 was aligned east-west, and was 4.2m wide by at least 12.94m long. It appeared in trench A as F11, a linear feature at least 0.16m deep and cut by F35. This was not investigated in any detail but may have resembled FF120 and 126 in trench C. These were a, trench-and-post-hole feature. Both linear features were bottomed at 1.65m OD, although FF120 and 126 were far less substantial due to Victorian levelling of the area. This factor, combined with the rise of the natural to the west, made it difficult to locate and excavate the western end of the building. Nevertheless, very shallow stains noted on the initial clearance of trench C seem to indicate a western return of the wall to the north. The existence of a door in the south wall is suggested by the spacing of post-holes within F120, and it will later be argued that an unmetalled path ran up to this entrance. Because of the limited nature of the excavations, it is not known if another door existed in the north wall.

Inside the building was a shallow linear feature, F139, running square to F120. Its fill was the same as that of FF11 and 120, except that it contained three, small, localised areas of intense charcoal flecking, and elsewhere occasional flecks of charcoal. It is not known whether FF11 and 120 contained any charcoal, although this is a common inclusion in the fill of Hamwic's structural features, and both features contained small amounts of burnt daub.

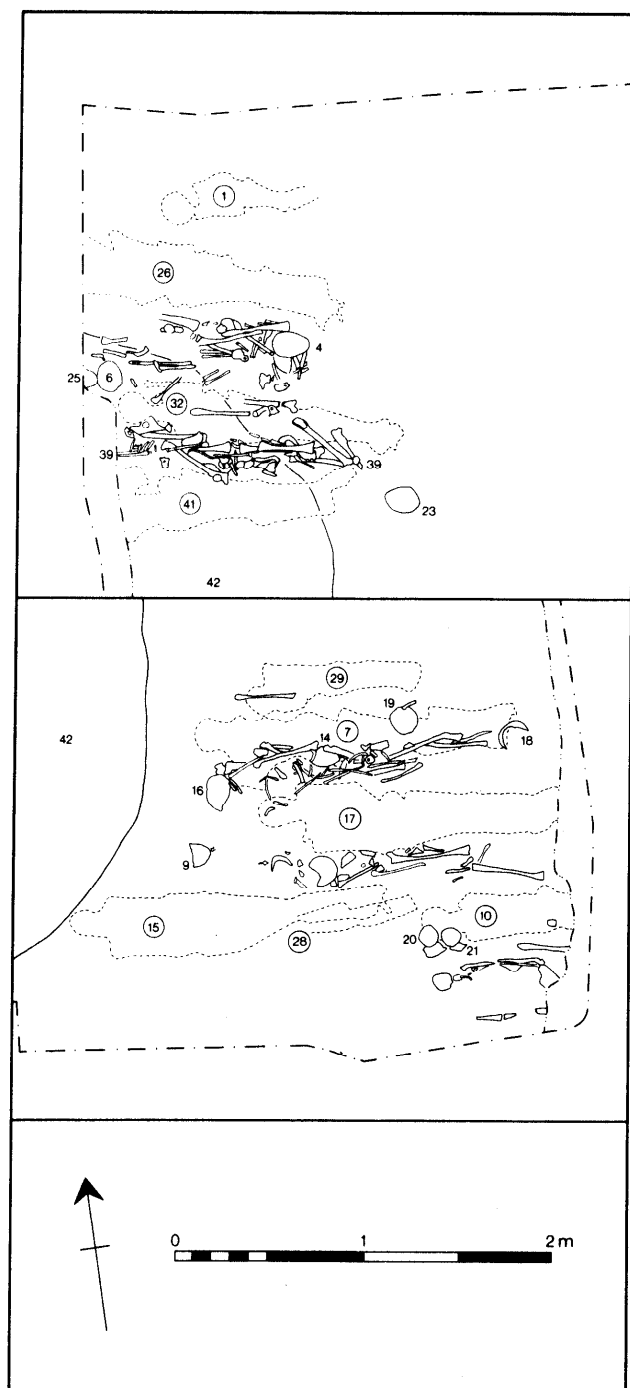


Figure 41 SOU 13: group I burials. See fig 40 for their location within trench A. Skeletons shown in broken outline are group II-IV burials. Their feature numbers have been put in circles. 'F' prefixes to all feature numbers are omitted.

also be seen as a double-cell church. Two fragments of the one piece of window glass (items 66 and 67) were recovered, ostensibly from F11, but perhaps from the later feature, F35. They may be evidence that the building had at least one glazed window.

The graveyard

Few grave-cuts were distinguishable, especially when they were intercut or resulted in the redeposition of dark soil like the upper fill of F42. Many of the skeletons had themselves been redeposited as a result of later grave-digging, and survived only in secondary or tertiary contexts. This disturbed material is dealt with more fully elsewhere (Thomson forthcoming), and its description here is necessarily cursory.

Trench A: Group I burials (fig 41)

Virtually all of the redeposited skeletal material is grouped here for the sake of convenience. No suggestion is intended that all these burials are contemporary or antedate those of group II.

F3, F8, F22. This material was poorly recorded, and cannot be illustrated. Apparently disturbed by the digging of other graves and a pit, F34, and ultimately redeposited when a sewer trench was dug across the north-east corner of the site (this is not illustrated), they represent the disturbed remains of at least three adults (two female, one indeterminate) and two children. FF4, 6, 23, 25, 39. Again, the skeletal material was arbitrarily separated by the excavator, and is here treated as one. Excluding bones probably from FF32, 43, and 46 (all group II), this sub-group represents a minimum of two adults and two children. The disturbance was caused in at least three phases by FF26, 32, and 41, and probably by F40. Some of the material may have derived from a group II burial totally redeposited by F26 (group IV).

F9, F13, F14, F16, F18, F19, F20, F21. Although arbitrarily distinguished by the excavator into the contexts listed here, the skeletal material was so jumbled that it should be treated as one group. Excluding skeletal fragments probably from FF7 and 28 (groups II and III), this subgroup represents a minimum of eight adults (six male, two female). The disturbance was caused in at least two phases by FF10, 15, 17, 28, and 29, and perhaps by F7. Some of the material may derive from the earliest burials in the area. However, apart from the disturbance perhaps caused by F7, the skeletal material was redeposited by the digging of group III and group IV graves, and may have derived therefore from both group II and group III burials.

FF20 and 21 partly overlay F11, presumably because the bones were thrown against the north wall of structure 2. Most of the material was instead redeposited inside and to either side of later graves, with very little in the soil immediately over the burial. (This is also the case with F4 etc and was also found to a lesser extent in trench C.) It is unclear whether the material was deliberately separated, or whether it was heaped with soil around a grave marker. But, in either case, the accumulation of bone would have served to delineate later graves.

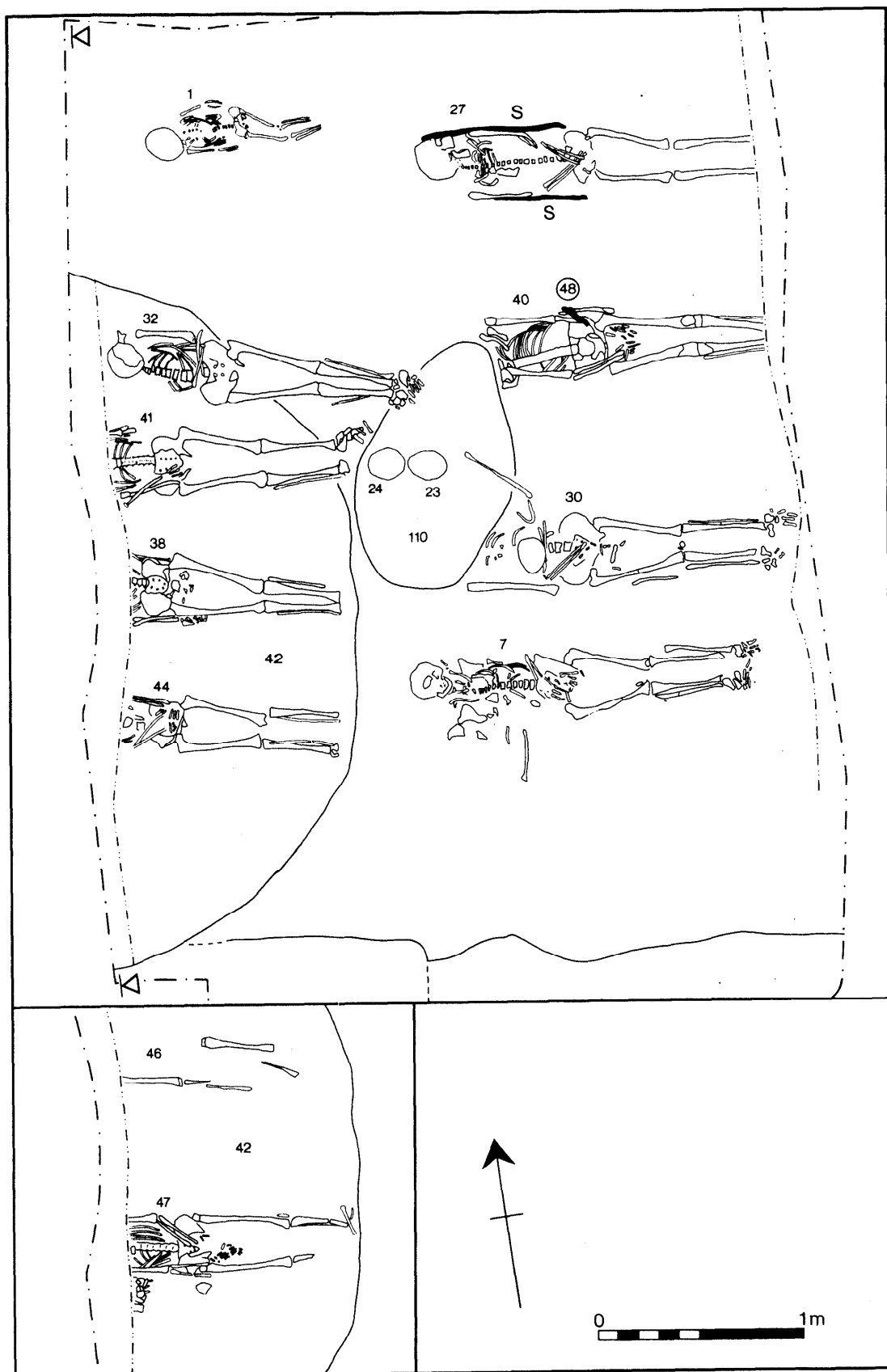


Figure 42 SOU 13: group II burials. 'F' prefixes to the feature numbers are omitted. The number in a circle is an item number. S indicates wood stains.

Trench A: Group II burials (fig 42)

This group contains the earliest burials in trench A that can be relatively dated. They were disposed in two rows set at least 1m north of structure 2.

F1, F32, F38, F41, F43, F44, F46, F47. These eight skeletons formed a western line of burials, deposited in at least two phases. There is some evidence in favour of a third or fourth phase. F37, buried directly above F44, may have been part of group II, but has been assigned to the group III burials (see below). F43 was a very disturbed collection of bones, with its skull apparently *in situ*. On that basis, it has been included in group II, though it may have been part of the skeletal spread F4 etc in group I. If it does belong here, the relative dating (F43 below and cut by F32, and F32 cut by F41) would indicate three phases of burial.

In the first phase, the graves of three adults, FF43, 46 and 47 (the latter being male), were dug into the fills of F42. All that survived of F46 were the arm bones, the right *in situ* and the left slightly disturbed. The rest of the skeleton presumably finished as part of F4 etc in group I. It is supposed that most of F43 was similarly redeposited. A fourth burial, F32 (adult male), was made in F42, disturbed F43, and was cut by the pit F110.

In the second phase, two adult males, FF41 and 44, were buried in F42. F41 cut both FF32 and 46, and F44 disturbed F47.

Two other burials cannot be assigned to either phase. F38, an adult male, was buried in F42. F1, a child cut by F2 (group III), might belong to the second phase since redeposited skeletal material was found beneath the body. The partial remains of a neonate (F115) were found in the upper fill of F42. It is not clear whether this body was redeposited by or overlay the burials of group II, and it cannot be assigned to any particular burial group.

F7, F24, F27, F30, F40. These comprised an eastern line of burials that may once have included one or two more burials to the south - see F9 etc above. F7 perhaps disturbed earlier material, and was cut by FF17 and 29 (both group III). F30 was slightly disturbed by F29, and cut by the pit F110. F40 underlay F33 (group III), and was cut by F110. F24, one of the skulls found in this pit, appears to have belonged to F40. F27 was buried in a narrow coffin that may have been intact, and thus preserved the skeleton from damage, when a shallow pit, F34, was later dug over it. The sub-group comprises four adults (two male, two female).

The two rows were spread over much the same area, but twice as many were buried in the western than the eastern row. Although this might give cause to doubt that all the burials described above comprised a single group, the preponderance may be explained by the fact that the bodies of the western row were mostly buried in the pit F42. The graves would have sunk as layers settled. No reasonable estimate can be made of the period of time intervening between the two or three phases of burial in the western row. It may be that the graves

were dug in much the same sequence as that suspected for group VII (see below): they may have been dug in an orderly row northwards from the church, and only when the row was completed was a further row of graves dug in the same area.

FF30, 32, 40, and 41 were cut by the pit F110, and F27 underlay another pit, F34. Both pits were shallow rubbish pits cut by group III burials. The presence of two such pits in the graveyard must occasion some surprise, especially as at least twelve more bodies were to be buried there later. (F145, a pit in trench C, was also cut through skeletons, but its relative dating is less secure.) The digging of these pits probably indicates that burial had been suspended north of structure 2. There are some differences between the group II burials and later inhumations, principally the fact that later bodies were buried much closer to structure 2. Also, the burial-row alignments differ between groups II and III by up to 17°. All this might support the view that there was a pause, during which grave mounds subsided, and after which slightly different burial practices were instituted.

Trench A: Group III burials (fig 43)

This group was probably disposed in two rows, the closest burials being about 0.3m from F11 (the cut for structure 2).

F2, F12, F17, F28, F29, F33. The row roughly corresponded to the eastern row of the group II burials. The interment of the southernmost body, F28, probably caused the redeposition of some of the material in F9 etc (group I). It underlay F10 and was disturbed by F15, its skull (F12) being dislodged. F17 cut F7 (group II) and material from F9 etc was redeposited either side of the grave. F29 cut F7 and postdated F30 (group II). F33 cut the pit F110, probably redeposited some of the material F4 etc (group I), and was itself disturbed by F31, probably also by F26. F2 cut F1 (group II) and the pit, F34. It overlay F27 (group II), and its body was tilted to the south, which the excavator plausibly ascribed to the collapse of F27's coffin. The sub-group consisted of three adults (two male, one female) and two children.

F36, F37, F45, FF36 and 45 together represent the jumbled remains of two bodies, overlain and slightly disturbed by F15 (group IV). It is not clear what caused the jumbling of FF36 and 45. If F5 was a pit in the top of F42, presumably the bones were disturbed when it was dug. However, if F5 was little more than a slumped hollow in F42, the disturbance may have been due to causes centred outside the excavated area.

The three bodies perhaps formed part of a western row of graves; although F37 may have belonged to the group II burials (see above), and the disturbance to the other two may mean that they had not been buried in the place where they were found. The sub-group comprised three males, two of them adult and one juvenile.

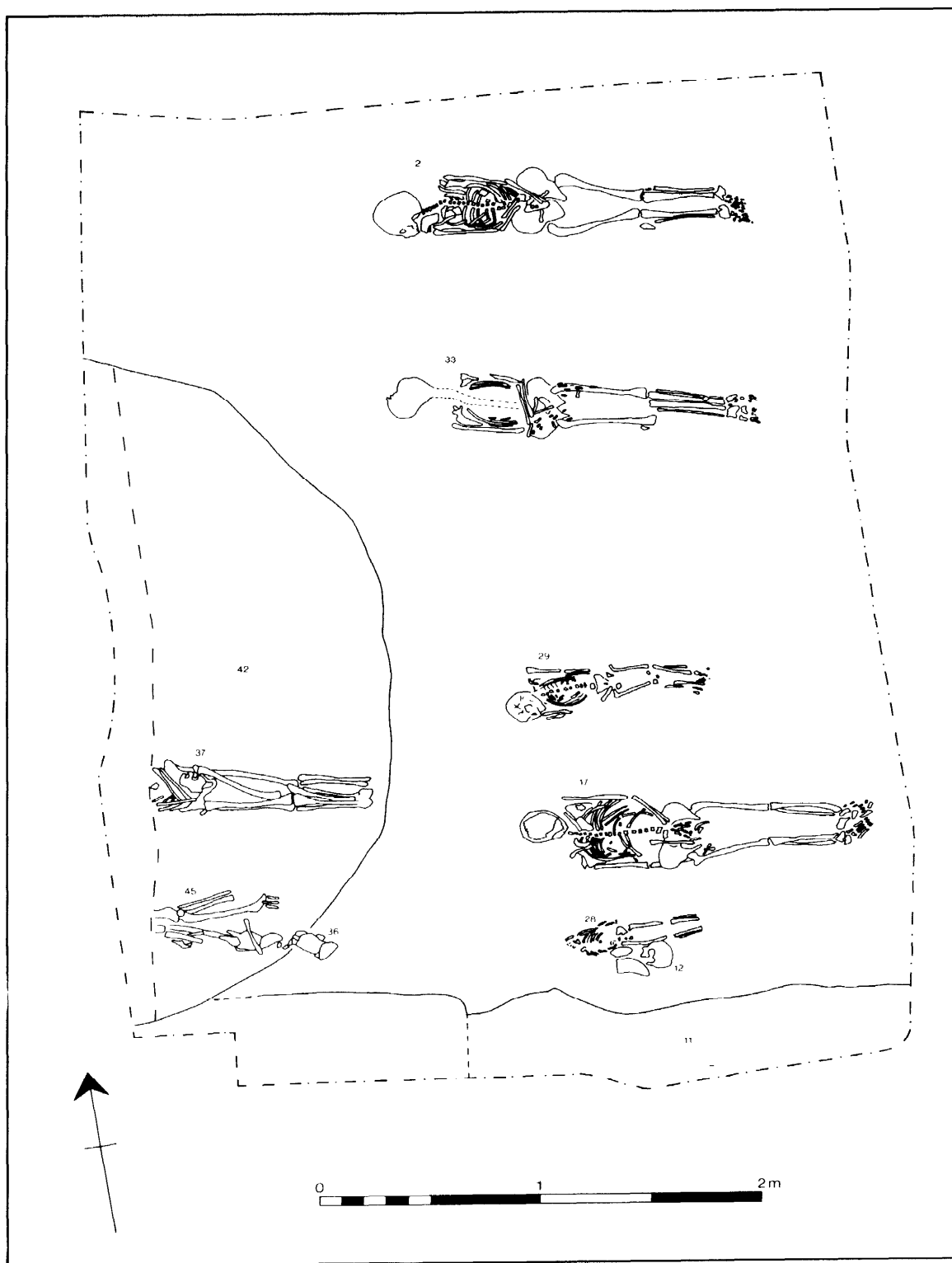


Figure 43 SOU 13: group III burials. 'F' prefixes to the feature numbers are omitted.

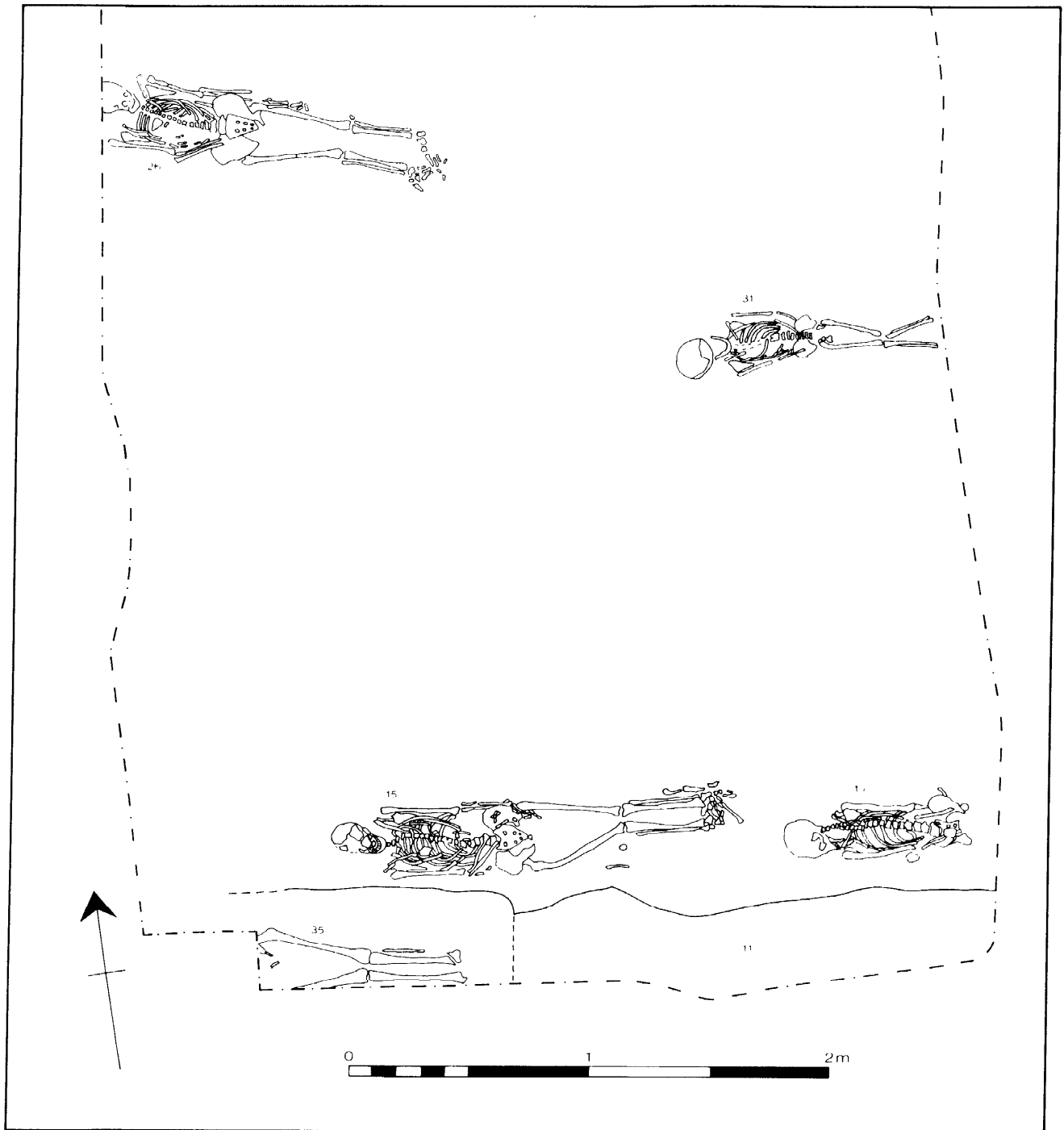


Figure 44 SOU 13: group IV and V burials. 'F' prefixes to the feature numbers are omitted.

Trench A: Group IV burials (fig 44)

F10, F15, F26, F31. The southernmost of these burials still respected structure 2, but lay as close as about 0.2m from the cut for F11. F26 redeposited some of F4 etc (group I) and probably disturbed F33 (group III). F31 disturbed F33. F10 disturbed F9 etc (group I) and overlay F28 (group III). F15 disturbed F9 etc and F28. It overlay and slightly disturbed part of F36/F45 (group III) and cut F42. The group consisted of three adults (two male, one female) and one child.

Group IV graves were erratically dispersed. As these burials (with the possible exception of F35, described below) were the last in the area, they probably represent the last stages in the use of the graveyard when bodies were no longer buried in rows, and perhaps when any relatively 'free' space was used for interment.

Trench A: Group V (fig 44)

Only F35, the skeleton of an adult, is included here. The south-west sector of trench A was poorly recorded, and a number of interpretations may be made of this burial. It is just possible that the grave was dug inside a doorway that corresponded to that noted in the southern wall (see above). In such a case, the burial cannot be relatively dated. However, the most likely interpretation of the available archaeological evidence is that F35 cut F11, and therefore postdates structure 2. If this is correct, rather than explain F35 as an isolated grave coincidentally dug on the site of a former cemetery, the writer prefers to suggest that F35 only slightly postdated the other burials and the demise of structure 2, and was probably the last inhumation in this area of the graveyard.

Trench C burials

The pattern of burial in trench C was similar to that in trench A. In general terms, three rows of graves were dug nearly square to structure 2 and set either side of an open area that seems to have been an unmetalled path. However, the patterns of burials cannot be so easily distinguished here as they were in trench A. The relative chronology of the grouping is likewise more tentative (fig 45).

Trench C: Group VI burials (fig 46)

Two adult male skeletons, FF64 and 103, comprise this group. Both lay between two rows of the group VII inhumations, and appear to have been the earliest burials in the vicinity. F64 was cut by F56 and underlay F65. F103 cut the post-hole F102 (period 1), and underlay and was partly cut by F89. Most of the right side of the body had been removed together with the skull, perhaps because of the burial of F68 (group VII). The skeletal material thus cut away was eventually redeposited above F73 (group VIII). This final redeposition was due to the digging of the grave F60 (group VIII), which also obscured the relationship between FF103 and 73.

However, the grave F73 was shallower than F103, and this might indicate that it was cut at a later date through soil redeposited by earlier burials.

Trench C: Group VII burials

This group was disposed in three rows set well south of structure 2. In some respects, the classification of group VII is tentative. The simplest interpretation of the evidence is that the graves were dug in a series back from the church, and only when a row was filled was another series of graves dug in the same area. Up to four phases of such burial can be distinguished, although it is possible that some of the last burials in group VII (FF67, 70, 87, and 89) in fact belong to group VIII.

F53, F65, F69, F70, F74, F77, F83, F89, F101, F106 (figs 47 and 48). There is no readily discernible pattern in this, the easternmost row of burials, although there was apparently a preference for interment near to structure 2: seven of the ten skeletons were grouped within the northern 2m of the row. The sub-group comprised eight adults (four male, three female, one indeterminate) and two children.

F77 was badly disturbed by FF53, 82, and 87, and probably by F89. However, the few surviving bones lay in roughly their correct position relative to each other. F53 also overlay F87, disturbed FF54 and 55, and was cut by FF87 and 89. F89 also cut the post-hole F102 (period 1), overlay and partly cut F103 (group VI), and was cut by F87.

F74 cut the pit F92 (period 1) and was disturbed by FF59 and 111 (both group VIII). It appears to have been cut by F70, which was also cut through the pit, F92, and overlay F83. F83 cut F92, and underlay F69 which was badly decayed. F65 cut F64 (group VI). The exact position of F106 (not illustrated) is now unknown, although it is described in the site records as partially underlying F101 to the south. This latter body had been disturbed, perhaps by ploughing, and was surrounded by fragments of its skeleton including its skull.

F54, F55, F56, F58, F66, F67, F68, F76, F78, F79, F82 (fig 49). These skeletons comprised the central row of burials, immediately to the east of the supposed path. A study of the distribution and relationships of the skeletons makes it clear that there was an overall preference for burial near structure 2, and that the graves were regularly dug in a steady progression away from the preferred northerly position. At least three phases of burial are represented here. The subgroup consisted of eight adults (three male, four female, one indeterminate) and three children.

Very little remained of F68, although its leg bones survived *in situ*, and its skull had been not far dislodged. This skeleton had been disturbed by the burial of F67 (whose grave-fill included other fragments of F68), F79, and F82. The burial of F53 may have further redeposited some of the bones. All these factors, and the burial of F68, were probably

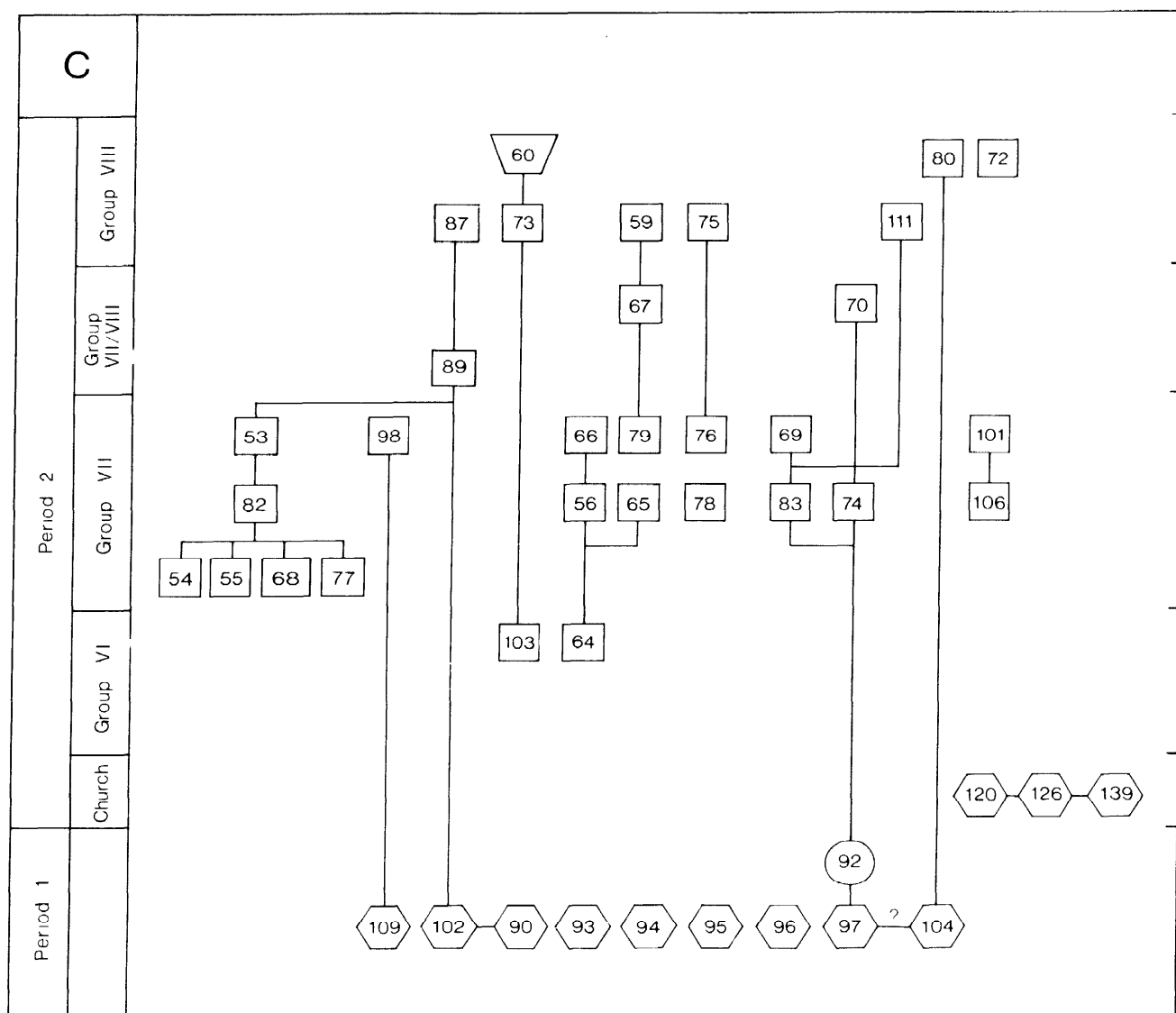


Figure 45 (left)

responsible for the redeposition of FF54 and 55. These well mixed and partial remains of a child and an adult cannot be relatively dated, although they may have antedated F68. It is possible that some but not all of the skeletal fragments here included with F55 were in fact dislodged portions of FF53 and 103. F82 disturbed F77, underlay F53, and was disturbed by F79. F79 underlay F67, and was disturbed by F59. F78 underlay and was cut by F76, which was cut by F75 and disturbed by F59 (both group VIII). F66 was slightly disturbed by F75. F56 cut F64.

F85, F86, F88, F98 (figs 40 and 50). The southern three of these skeletons formed a third row of burials west of the north-south path, and set at

least 3m from structure 2. Given the apparent preference in both areas of the graveyard for burial close to the church, the only explanation that suggests itself for the anomalous distancing of the row is that the graves were also set south of an unmetalled east-west path. This would have run westwards from the north-south path, clear of the eaves of structure 2. It is likely, then, that F88 was buried under the eaves on the extreme edge of this path. The conformity of this burial to the general line of the other three suggests that it, too, formed part of the row.

F98 cut the post-hole F109 (period 1), and F88 was cut by the pit F145 (period 3?). There is much uncertainty about the relative dating of the four

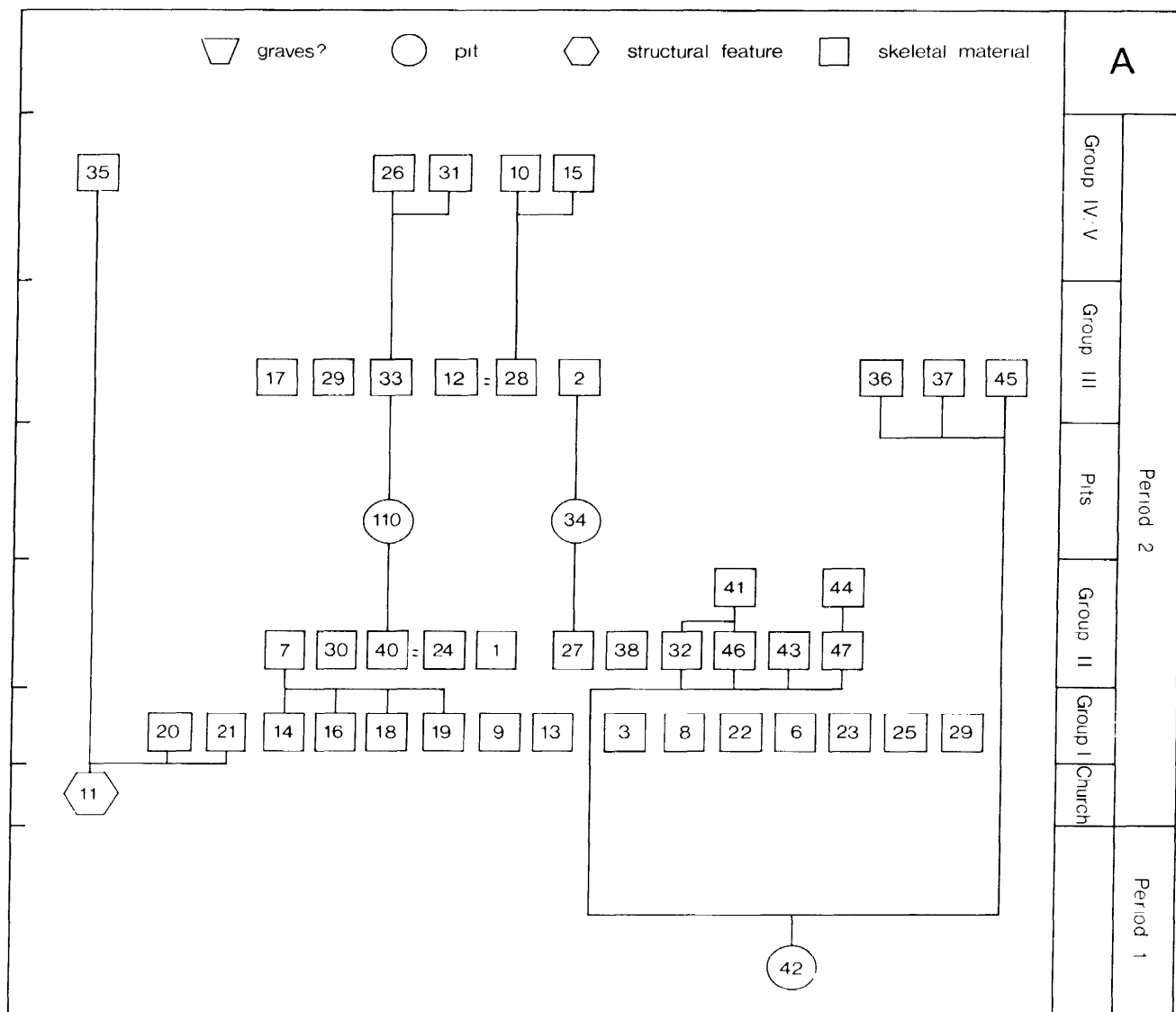


Figure 45 (right) SOU 13: a matrix of the evidence for periods 1 and 2 in trenches A (right) and C (left).

burials. This is mainly due to the fact that much of the evidence lay outside the area excavated, but is compounded by defects in the site record. Far more of F98 was recovered than is shown on any plan; and only the feet of F88 were drawn, the other details that are shown here being taken from an unlabelled photograph. The sub-group comprised three adults (two male, one indeterminate) and one child.

Trench C: Group VIII burials

Included in group VIII are all the skeletons which it may plausibly be argued are the last inhumations in trench C. Besides several qualifications to this view, noted below, some of the burials in group VII might belong in this group.

F59, F60, F72, F73, F75, F80, F87, F111 (figs 51 and 52). F75 cut F76 and slightly disturbed F66 (both group VII). F59 disturbed FF67, 74, 76, and 79 (all group VII). F87 cut FF53, 77, and 89 (all group VII). F111 overlay F74. F73 perhaps postdated F103 (group VI: see above) and was disturbed by F60. F60 (not illustrated), which also disturbed F103, was a grave-like feature containing no trace of a skeleton. One assumes that the grave was prepared but never used.

FF60 and 73 are included in this group by analogy with the later inhumations in trench A, since they did not conform to the main rows of burial and were dug closer to structure 2.

F72 was a disturbed burial that appears to have survived roughly *in situ*. Associated with it was a

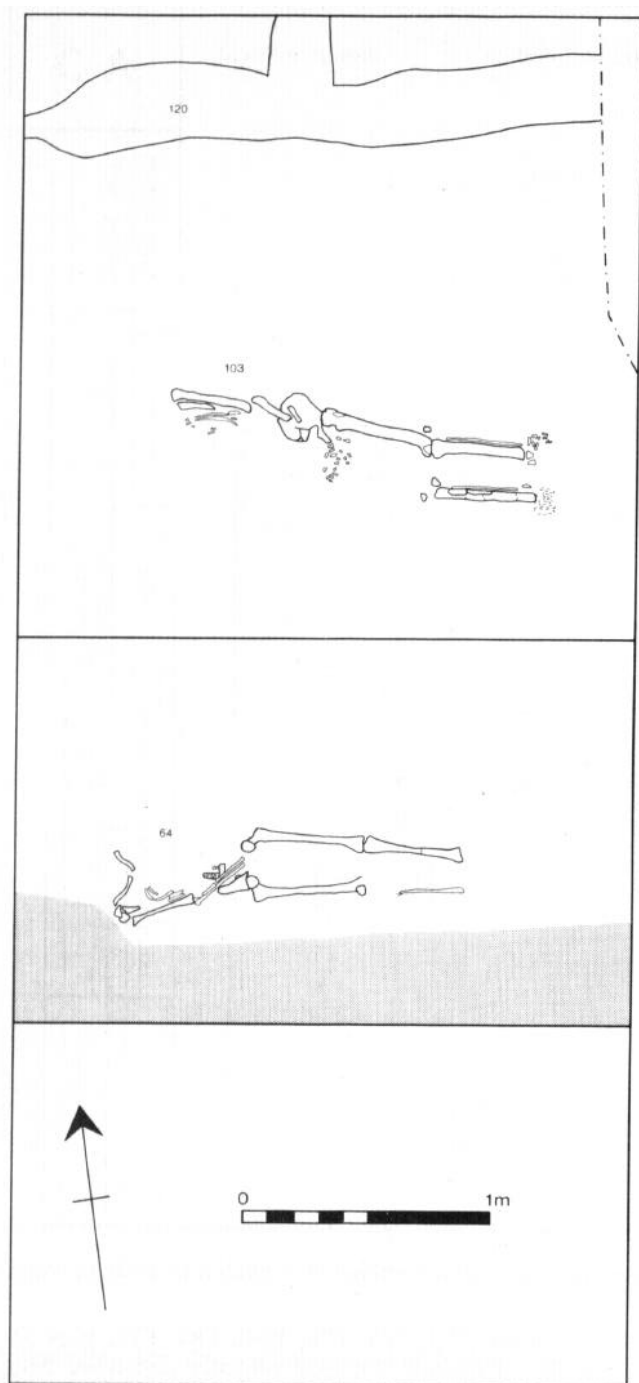


Figure 46 SOU 13: group VI burials. See fig 40 for their location within trench C. 'F' prefixes to the feature numbers are omitted.

number of adult bones that did not derive from the surrounding skeletons, and presumably represent the remains of a separate burial disturbed by F72. The eccentric position of this skeleton argues for its inclusion in group VIII. F80 (fig 52) cut F104 (period 1/2?) and was buried in the north-south path only 0.25m south of the doorway in structure 2. Although this was perhaps a privileged place of burial, and

the interment therefore may have been made at any time during the existence of the graveyard, it is equally possible that this was a late burial. Since all other graves were dug clear of the path, F80 may date, like F35 (group V), from the demise of the church and its associated approaches.

Excluding F80 and the adult bones in F72, the group consisted of three adults (two male, one female) and four children.

Extent of the graveyard

No physical boundaries to the cemetery were found. However, the easternmost row of group VII burials probably represents the eastern extent of the graveyard south of structure 2. Given the evidence that burial close to the church was preferred, it seems unlikely that many more skeletons await discovery south of trench C. The western limit was not found, and probably would have been masked in trench C by the east-west path. However, the presence of human bone in pit F145 and its absence in F146 (a pit of similar date, 0.78m to the west) might indicate that the western limit of the graveyard lay roughly between the two pits. (It should be borne in mind that not all of the human bone in F145 derived from F88.)

The limits of the graveyard north of structure 2 were not found. If they resembled those suggested for the southern area, it is likely that most of the burials were discovered. The western boundary presumably lay within the unexcavated 4.4m between trenches A and B. The eastern end of the church was not exposed, and it is impossible to say whether or not there were any burials beyond it, in *exhedris ecclesiae*.

If the majority of the graveyard had been exposed at SOU 13, and assuming a consistent density of burial, the cemetery would have held about 100 corpses.

Burial practices

Individual burial arrangements

A total of 33 adults and five children were sufficiently intact to merit study for evidence of coffined burial. Almost certainly 21 (63.8%) of the adults had been buried in coffins, another eight (24.2%) had probably been so buried, and another three (9.1%) may have been coffined or perhaps wrapped in a shroud. There was no evidence of differentiation because of sex, distance from the church, or inclusion in a particular burial group. Of the children, at least one, probably another three, and perhaps the fifth had been buried in coffins (MF1:C4-7).

The positions of the hands and arms of 26 adults and five children could be gauged. Although the positions varied, the most common placement in adults resulted in the crossing of the hands over or about the pelvis. There was no evidence among the adults that the different laying-out positions reflected differences in sex or changes in custom,

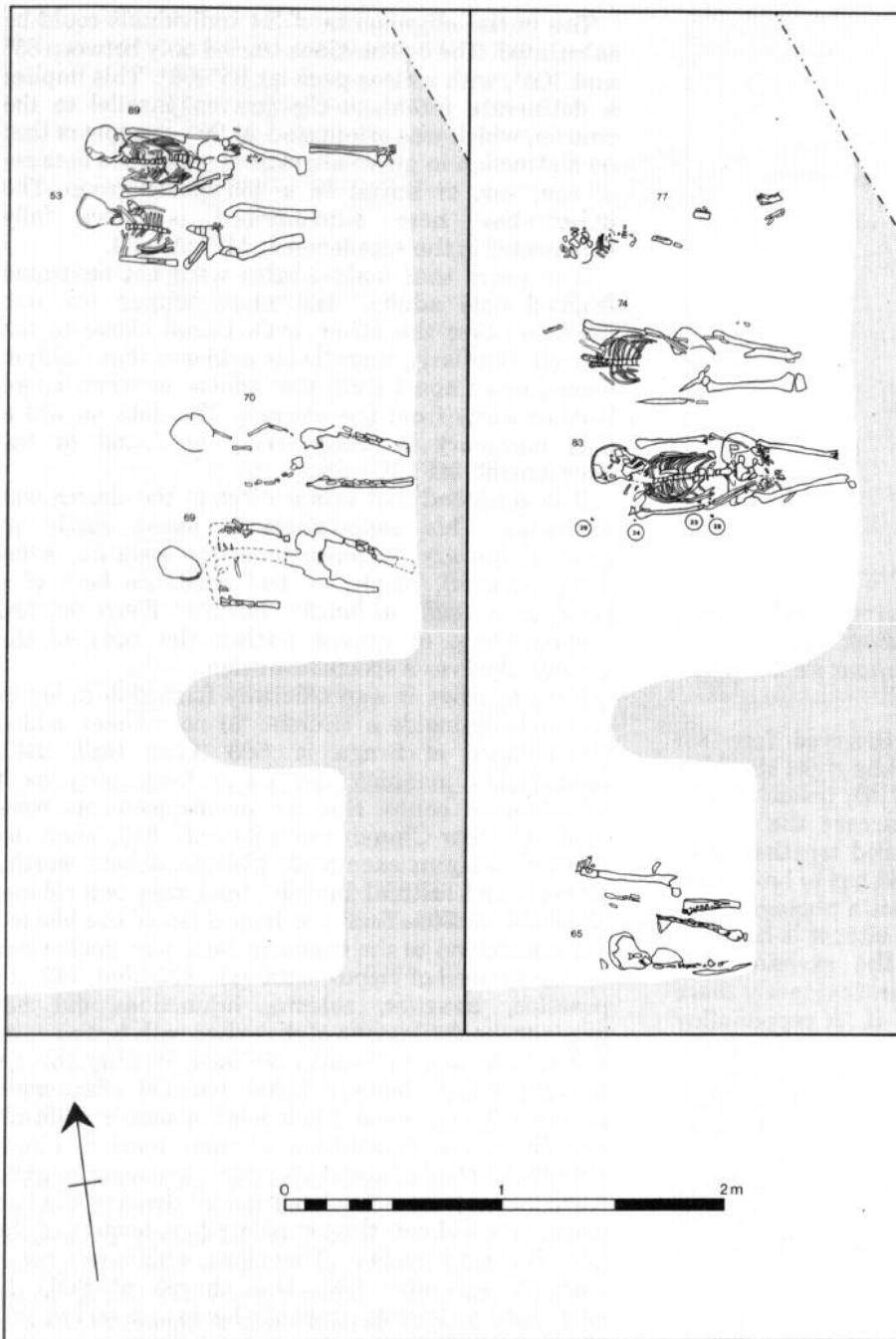


Figure 47 SOU 13:group VII burials, eastern row, in two main phases of deposition. The difference in the shape of the modern disturbance reflects the levels at which the skeletons were uncovered. See also fig 48. 'F' prefixes to the feature numbers are omitted. Numbers in circles are item numbers.

and the positions were not related to a body's relative nearness to the church. The younger children were laid out with their arms by their side. This difference from the usual adult practice probably indicates nothing more than that those who laid out a child's body experienced difficulty in keeping its hands crossed. There is no apparent significance in the different positions in which the hands were placed, except that all positions are consistent with a tightly constrained burial, in a coffin or in a shroud. Aries (1985, 52-3) was clearly wrong, therefore, in supposing that the crossing of a corpse's arms first appeared in burials of the 12th century.

One could be certain of the in situ position of the skulls of fourteen adults and three children. No comprehensible pattern emerges from a study of this small group. There was no direct evidence of 'ear muffs' or 'head pillows', although these would have disappeared if they had been made of wood.

There were few grave goods, but a knife (item 48) was found on the left forearm and pelvis of F40 (fig 42), and another (item 41) on the left pelvis of F80 (fig 52). Both were adult males. Two knives were found in disturbed contexts: item 5, probably derived from one of the skeletons F36/F45; and item 10, perhaps from a disturbed burial in the group F4 etc. A copper-alloy object bearing some resemblance

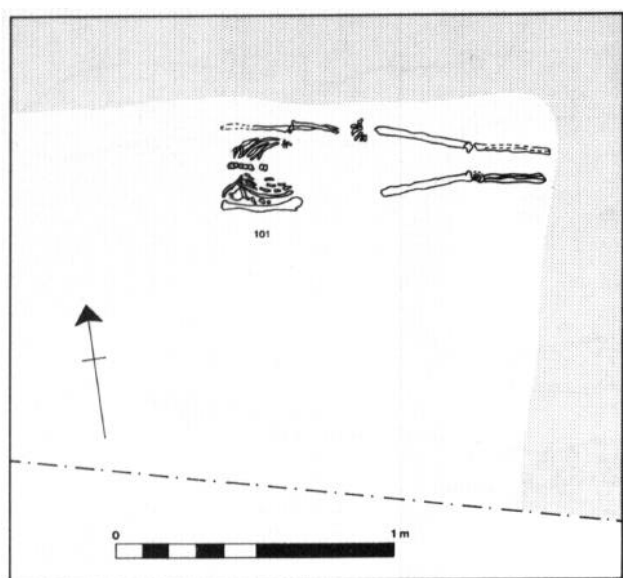


Figure 48 SOU 13: F101 (a group VII burial, eastern row). See fig 40 for its location within trench C. The feature number is given without its 'F' prefix.

to a châtelaine (item 1) was recovered from an uncertain context — either from the right shoulder of the male skeleton, F88, or from just inside the pit, F145. If, as 'seems to have been the case, the various pieces of this object were recovered together, it is likely not to have been redeposited but to have been buried with F88. One would expect a photograph to have been taken of the object in situ, if it had lain on the shoulder of F88; but the skeleton was uncovered at the end of the dig, and evidently there was no time to draw a plan of it. A copper-alloy buckle (item 2), presumably redeposited from F103, was found in the empty grave F60. Few other items associated with clothing were found, all of them within the general area of burial, but otherwise unprovenanced. These consist of another buckle, perhaps three pin shafts, and perhaps three tag ends. It is likely that most of the bodies were not clothed before burial, and may have left the world naked or in a winding sheet.

Row-graves and the church

The graves were shallow, the deepest measuring 0.62m. Where the evidence survived (54 burials), it can be seen that between 72.2% and 77.8% of these graves were disposed in rows set approximately square to the church. (A similar pattern may have existed at SOU 32: see below, p 000.) The rough alignments of these rows (where 0° is OS grid north) are as follows.

- Group II (trench A) 100-17°
- Group III (trench A) 0°
- Group VI (trench C) 11°
- Group VII (trench C) 0°

The significance of these differences is discussed further below.

The burial alignments of 34 individuals could be calculated. The orientations varied only between 85° and 104°, with a clear peak at 95°-96°. This implies a deliberate intent to dig graves parallel to the church, which was orientated at 96°. It appears that no distinction in grave alignment was made because of age, sex, or burial in a particular group. The information here summarised is more fully expounded in the supplement, MF1:A6-B4.

It appears that male adults were not separated from female adults, and that neither sex was favoured over the other with burial closer to the church. Similarly, there is no evidence that children were buried apart from the adults, or were buried further away from the church. The data on which this summary is based may be found in the supplement, MF1:B7-C3.

It is supposed that burial close to the church was desirable. This supposition is based partly on general literary evidence (see, for instance, Aries 1981, *passim*), partly on the existence here of a number of sub. stillicidio burials. Even so, the non-existence of graves within the body of the church deserves a special mention.

For centuries it was officially forbidden to lay to rest a body inside a church: 'in no manner' added the Council of Braga in 563 (Conc Gall, 246), presumably meaning not as a fresh body or a collection of bones. Similar pronouncements were made at other Church councils until 813, when the Council of Mainz exempted 'bishops, abbots, worthy priests, and faithful layfolk' from this ban (Mansi 1757-98, X, 75). That the last class of the blessed did not extend to the common flock was made clear by the Council of Tribur, sitting in 895 (*ibid*, 142). In practice, however, solemn injunctions did not prevent the defilement of churches with bodies — as the offence was commonly defined. Writing about a century before Mainz, Bede (*passim*) often mentioned with approval the burial of people within a church, or the translation of their remains into a church. (A total of about 30 people are mentioned by him.) Apart from a few hermits, all these people had been, or had been closely related to, leaders of the Church or a kingdom. Therefore, whether or not it was in use after 813, the church at SOU 13 contained no burials probably because it served only the unexalted commoner.

Dating

It would be misleading to argue further that, because they were the remains of common folk, these 81 skeletons constitute a reliable cross-section of the town's population. But one can draw attention at least to the 'wide gene pool' out of which the bodies had been constituted (Thomson forthcoming). This may be a sign that the cemetery had served a relatively large population: in which case, one may suppose that it had been filled over a short period. Further evidence suggests that this period had lasted between ten and a hundred years.

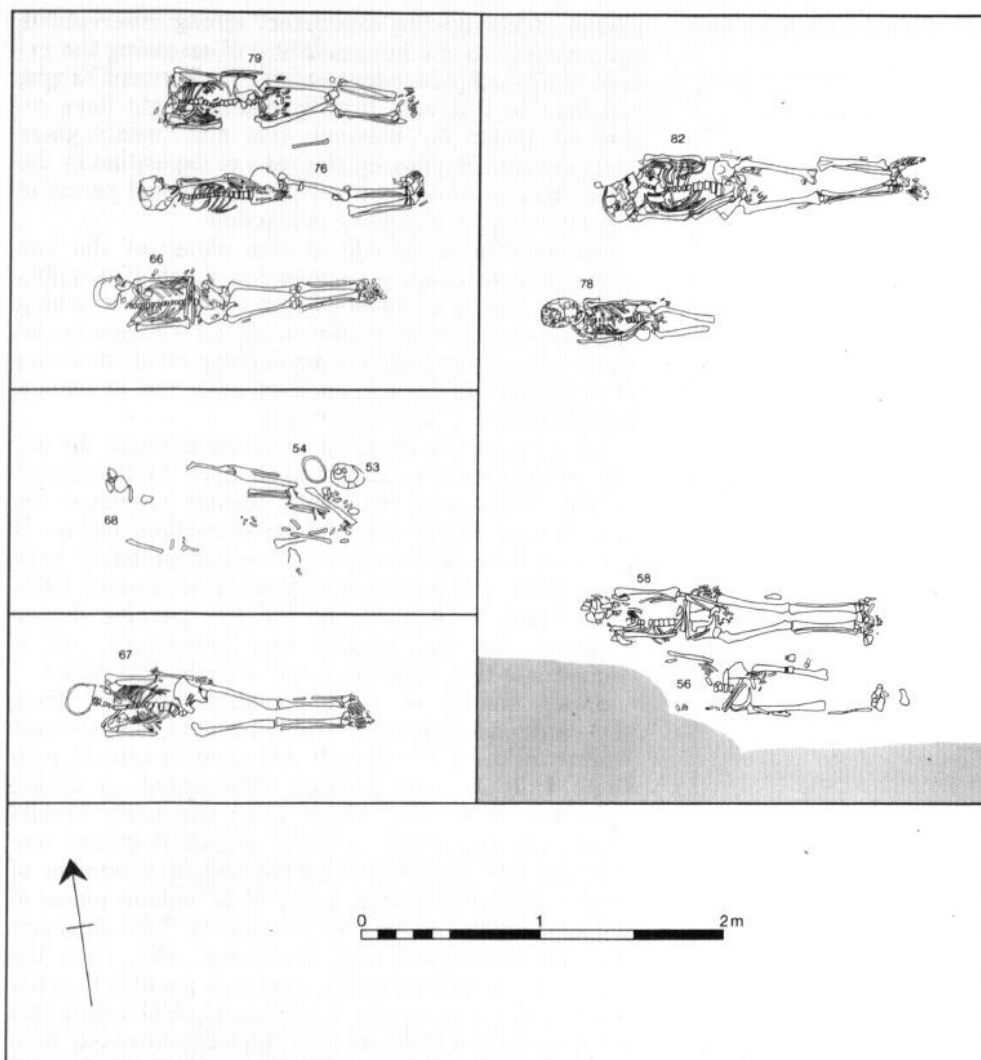


Figure 49 SOW 13:group VII burials, central row. See fig 40 for their location within trench C. 'F' prefixes to the feature numbers are omitted.

First, one must note that there were at least five phases of burial north of the church (group II, two phases; and groups III, IV, and V, one in each), and at least five phases south of the church (group VI, one phase; group VII, three phases; and group VIII, one phase). Although it may not be argued that each phase was of a similar duration, this similarity between the two areas of the graveyard perhaps suggests contemporaneous use. There are other signs of a simultaneous development. In both areas, the early and eccentrically aligned row-graves (groups II and VI) were succeeded by differently aligned row-graves (groups III and VII), and the final burials in both areas were 'erratic'. Grave-digging within about a metre of the church seems generally to have been a late feature. These data seem to indicate that both areas of the graveyard were used at the same time, also that emphasis on burial was periodically shifted from one side of the church to the other. The following is a provisional and relative chronology of the cemetery.

- 1 Burial both sides of the church (groups II and VI), with most graves dug to the north in at least two phases.
- 2 Burial to the south only (group VII) in one or two phases, with the north unused except for the digging of rubbish pits.
- 3 Final phases of group VII burial to the south. Group III burials to the north.
- 4 'Erratic' burials of groups IV and VII either side of the church.
- 5 Final group V burial?

One reason for this supposed alternation of burial areas may be that the grave-diggers were allowing time for a body to decay before making another burial in the near vicinity.

Except in the case of F27, there is no evidence that the presence of a coffin protected the body from later disturbance. On the contrary, there is more evidence (especially from F30 - see MF1:C5) that other surviving coffins were dug through. It is

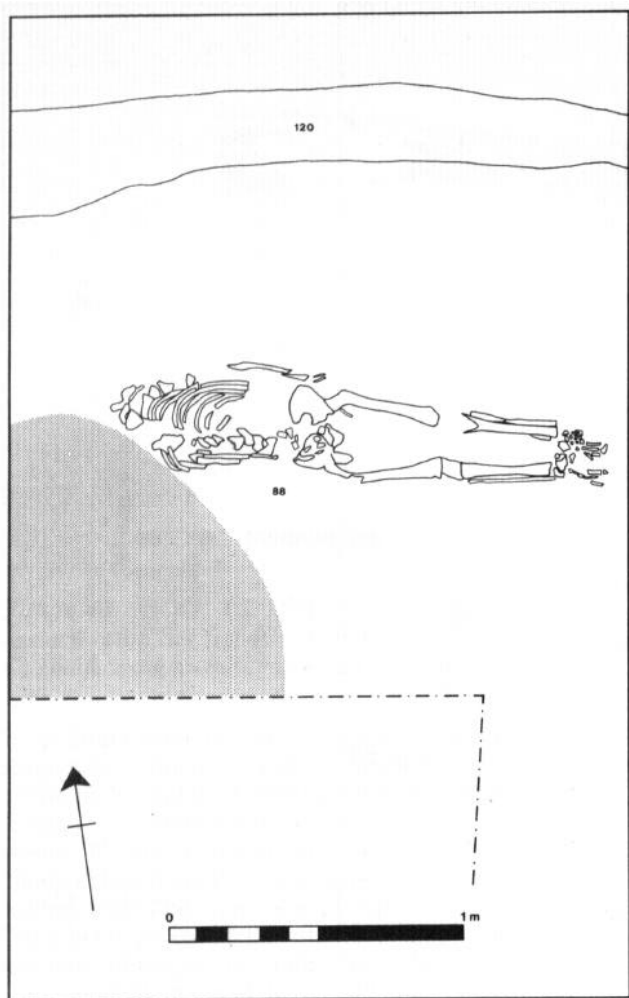


Figure 50 SOU 13:F88 (a group VII burial). 'F' prefixes to the feature numbers are omitted.

noteworthy, therefore, that only in the case of F27 were any wood stains observed by the excavator. Perhaps that coffin had been of thicker wood and stouter manufacture, and able to withstand the damage caused by later diggings. The existence of coffins need not be taken as complicating any estimate of the period of time during which the graveyard was open.

The process of defleshing might have taken a year or eighteen months (R Connolly, pers comm), and the surviving ligaments would normally have been insufficient to prevent the disarticulation of any heavily disturbed skeleton. According to this evidence, the graveyard could have been filled in about a decade.

In other cases it is likely that the ligaments still survived and that later disturbance was in places not heavy enough to cause total disarticulation. Most clearly, the burial of the group IV body, F31, disturbed the group III skeleton, F33, all of whose right leg, including the tarsals and metatarsals, was pushed northwards (fig 43). Since these latter bones were not scattered, they were probably still artic-

ulated. Although he expressed strong reservations (due mainly to the impossibility of assessing the extent of any adipocere formation), Dr Bernard Knight felt that in this case the ligaments might have remained intact for between ten and twenty years (pers comm). Supposing the rate of deposition in the graveyard to have been constant, a burial period of anywhere up to a century is implied.

Presumably, a decade is the closer of the two estimates, although it may be too short. It is highly unlikely that the cemetery was used for anything like 100 years: this would mean an average burial rate of about one body a year, during which slow rate of deposition grave rows would have had to remain recognisable.

Early burials in trench A were cut through the pit, F42, which may be dated to the early Middle Saxon period. These and some late burials pre-dated the late Middle Saxon feature, F5 (described below). If the church was bicameral, it would probably have been built in the 8th century or later (Cherry 1976, 180). Such is a summary of the positive dating evidence for the church and graveyard. All it indicates is that these features were Middle Saxon.

Small sherds of pottery were recovered from several trench A graves, and from the two east-west wall trenches of the church. All must be treated with some caution, and perhaps discounted as dating evidence. It is very likely that the early Middle Saxon pottery found in some trench A graves was rubbish and had been redeposited in a number of stages from the period 1 pit, F42: broken pieces of pottery make unlikely grave goods. The excavator did not distinguish the grave-cut, F35, from the northern wall trench, F11, and it is possible that the pottery that supposedly was found in F11 was in fact recovered from F35 and also derives ultimately from F42. Nor did the excavator properly distinguish between two layers in F120 (the southern wall trench of the church), the upper of which it will later be argued postdates the church. It is not now known where in these two layers the pottery was found.

One primary series sceat (item 4; M2) was recovered from an uncertain context; perhaps the group II grave F27, perhaps the later pit F34, or perhaps the group III grave F2. Datable to the end of the 7th century or the beginning of the 8th, the sceat may have been a primary deposit, or may have derived from F42, like the early Middle Saxon pottery. Its existence cannot help define the rough dating limits already set out.

Period three occupation

Pits

F5 (fig 39) was a large, shallow feature in trench A, rounded in plan and virtually conforming to the boundaries of the earlier pit, F42, which it overlay. This coincidence strongly suggests that F5 originated as a slumping of F42 layer 1, which is interpreted here as principally the upcast that

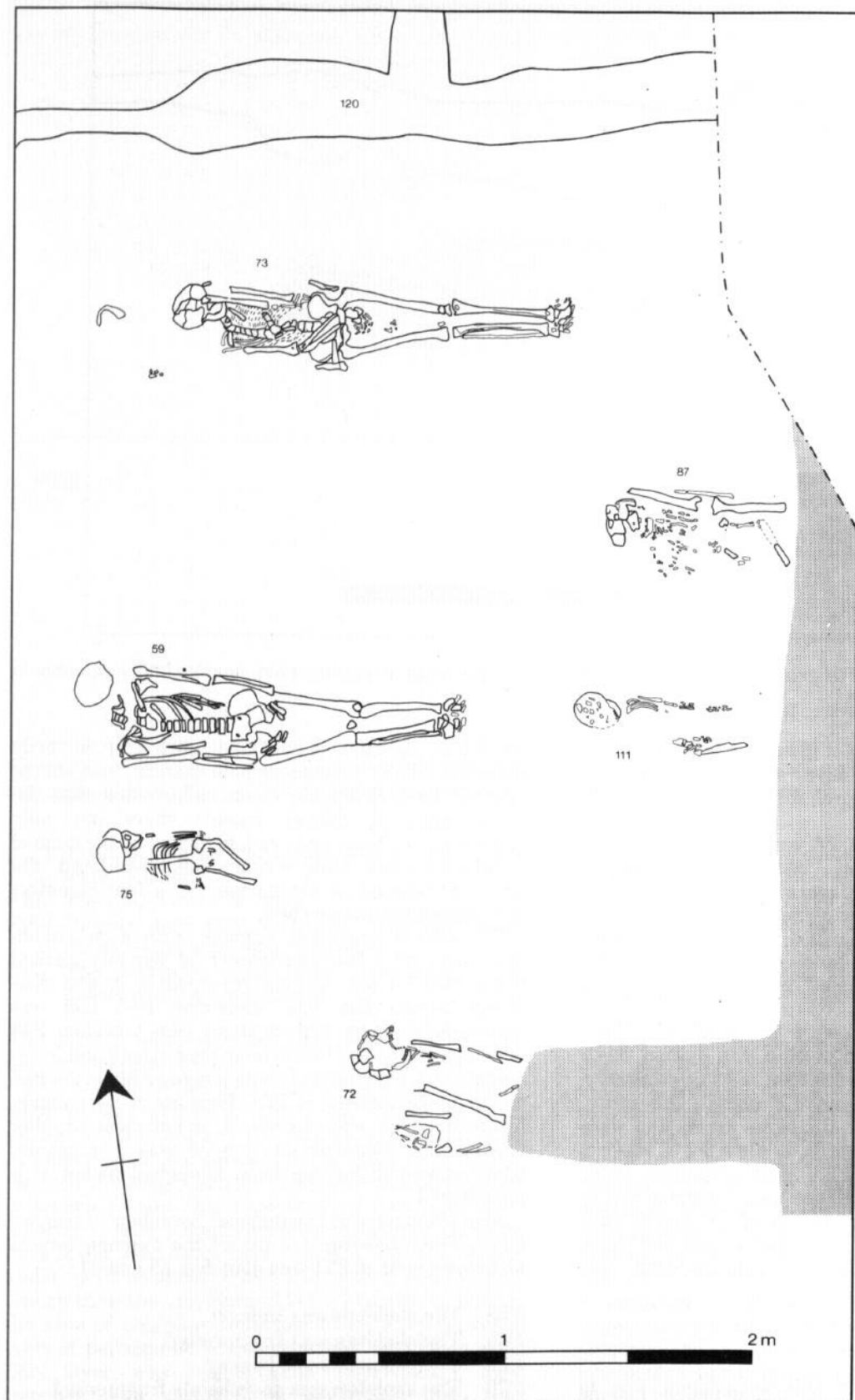


Figure 51 SOU 13:group VIII burials. See also fig 52. 'F' prefixes to the feature numbers are omitted.

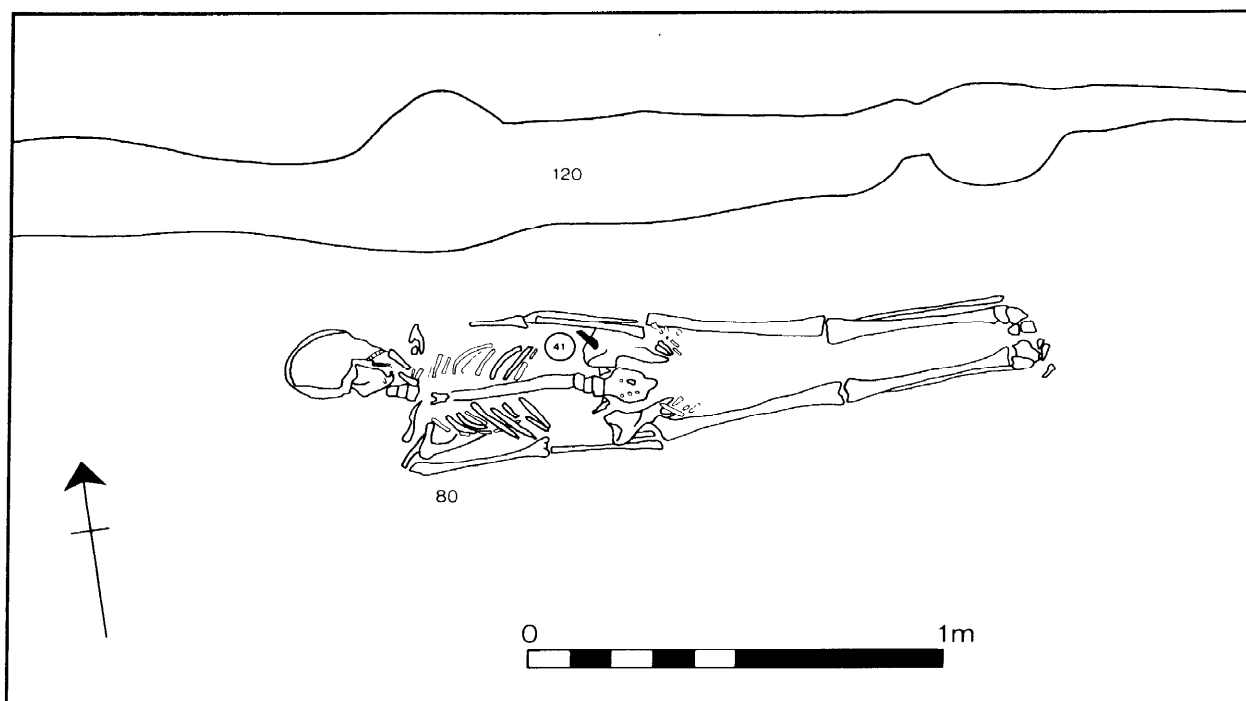


Figure 52 SOU 13: F80 (a group VIII burial). 'F' prefixes to the feature numbers are omitted. The number in a circle is an item number.

resulted from the digging of graves. It was sealed by F147, a greyish brown layer that sealed all the Anglo-Saxon layers and probably represents plough disturbance.

The layers that filled F5 are not described in detail, but appear to have been mainly layers of rubbish and soil. Three layers (layers 3, 6, and 7) contained large quantities of oyster shell. The upper layer (layer 1) was described once as containing 'crushed oyster shell and much gravel', although the main section drawing, copied here, seems to mark a greyish brown soil.

FF145 and 146 (fig 53) were two shallow rubbish pits in trench C, rounded in plan and section. F145 was 0.36m deep and F146 0.33m. F145 contained a discrete, thin, bottom layer of charcoal. Otherwise, both pits were filled with the same layers and were alike sealed by F140, described below. F145 was cut through the skeleton, F88, and contained other skeletal material. No evidence was recovered of any buildings assignable to this period. Although both pits contained a small amount of charcoal and burnt daub, there is no reason to suppose that this material was not residual.

Streets

The original purpose of this excavation was to uncover the supposed junction of two Anglo-Saxon streets. Once the graveyard had been discovered priorities were understandably revised, but to such

an extent that gravel surfaces were only cursorily recorded. Such evidence as does exist is presented in graphic form in fig 53. It must be noted that the percentages of gravel shown there are only approximate. They were not recorded at the time of excavation and this writer has calculated the amounts through a comparison of a few imperfect drawings and photographs.

F51 was a gravelled surface with a maximum thickness of 0.1m. Composed of densely packed flints laid on the natural brickearth, it was disturbed across the top, underlay F48 and was extensively cut by 19th-century pipe trenches. F48 was a gravelly soil containing pipe stems and interpreted as a ploughsoil. It was presumably connected with the disturbance of F51. Because of the incompleteness of the site records, it is not clear whether the narrow, easternmost line of gravel is natural (the brickearth having been ploughed away) or is part of F51.

Also illustrated is the general boundary of crushed bone. The following is a list of the damage done to skeletons west of F51 (see also figs 49 and 51):

- F53 The skeleton was broken.
- F65 The skeleton was fragmented.
- F69 The remains were broken.
- F70 The skeleton was completely fragmented.
- F74 The legs were broken.
- F77 The remains were crushed.
- F87 The remains were crushed.

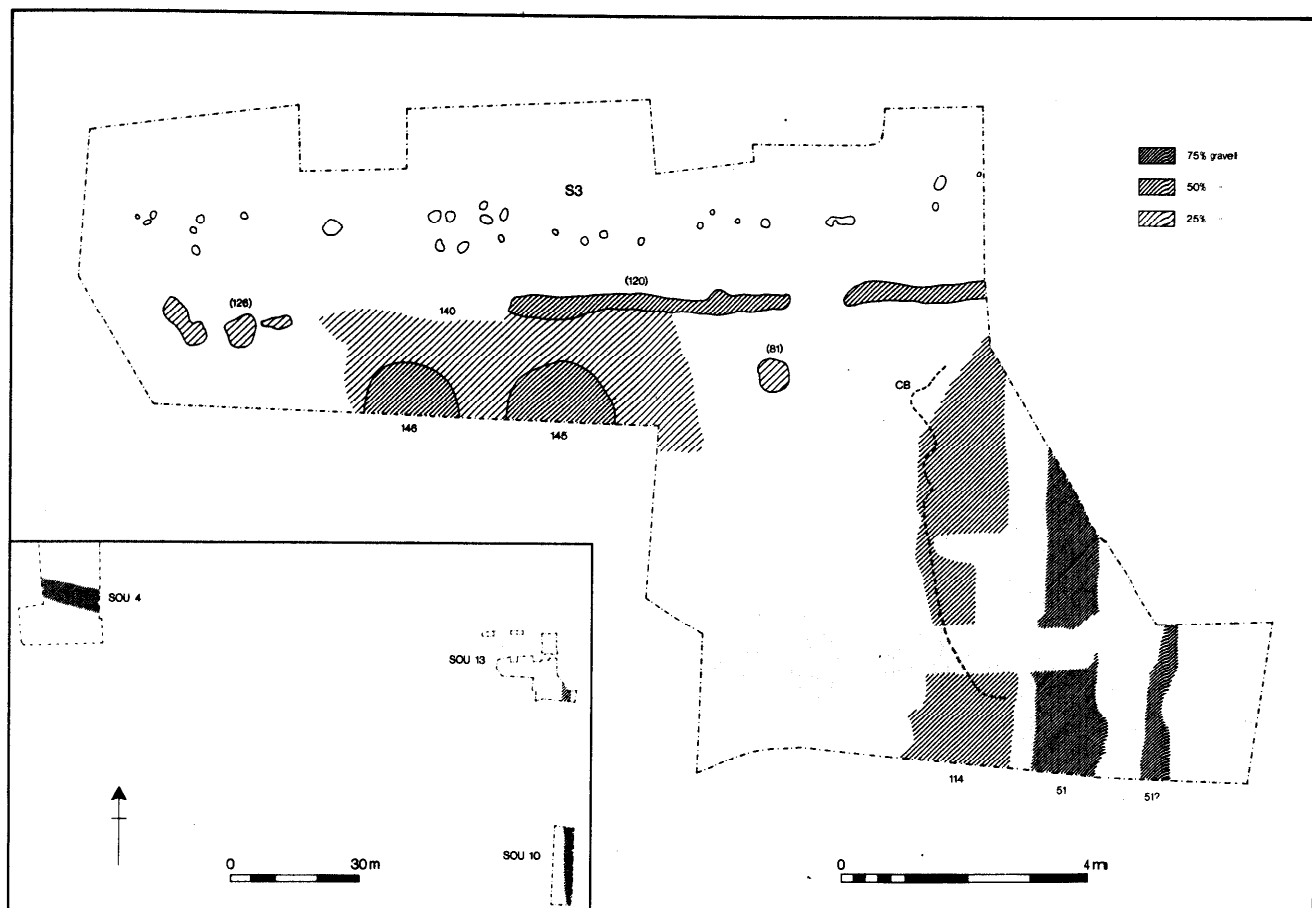


Figure 53 SOU 13: period 3 activity. 'F' prefixes to the feature numbers are omitted. Gravel percentages are only approximate. Key: **CB** the western boundary of the crushed bone, **S** structure.

F101 The tibiae and the lower part of the femur were crushed.

F103 The tibiae were broken.

F106 Despite poor site recording, it appears that the skeleton was badly broken.

F111 The remains, especially from the waist downwards, were crushed.

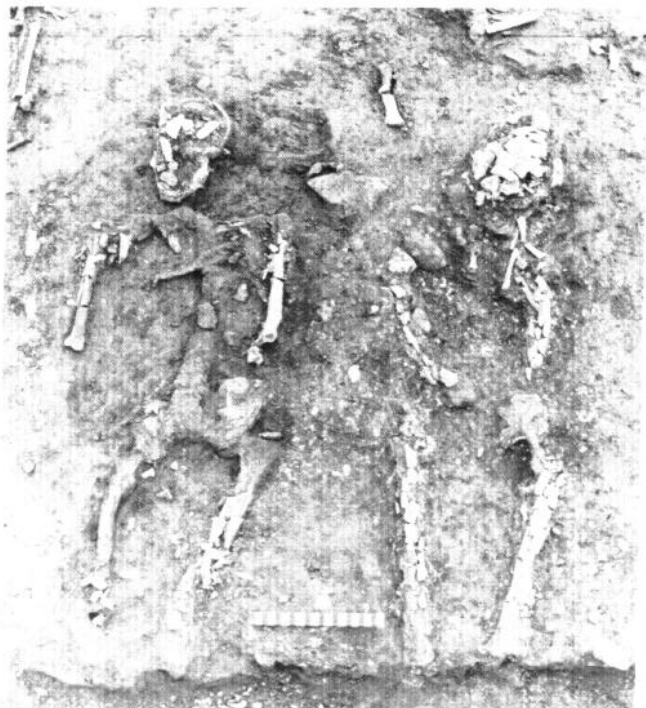
Also broken were various redeposited bones that need not be listed here.

The boundary between the broken and intact material was generally sharp (pl 4), but became unclear to the north. The brickearth within this boundary was compacted, in a way also noted beneath the Anglo-Saxon streets on Six Dials. F73 in trench C and the skeletons in trench A were unbroken. Also preserved from extensive damage were lower skeletons such as F83 (fig 47), which underlay FF69 and 70, and F74, which was far less broken than the overlying F111. The graves within the area of crushing underlay F114, a 0.05m-thick layer of perhaps 50% gravel mixed with black soil. This layer was cut by the 19th-century pipe trenches, and underlay a ploughsoil that was noticeably stonier for about 2.5m west of F50. Dispersed gravel was found in all the grave-fills in

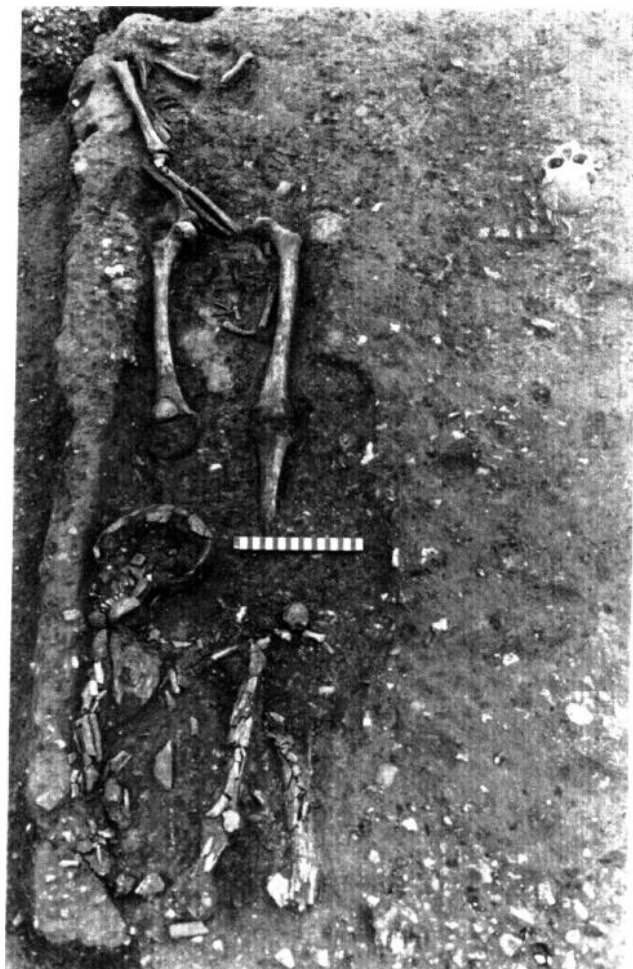
trench C. Since all or some of this could have been redeposited from the underlying natural, its existence must be ignored when deciding whether or not a street existed in this area. No mention is made in the site books of gravel layers found sunk into the graves; but no mention of the grave fills is found there either, and the significance of this silence is not readily assessed.

Although the evidence is ambiguous and can be variously interpreted, it is likely that F51 represents the remains of a gravel surface laid onto the natural brickearth and disturbed by later ploughing. F114 either was the much disturbed remains of a gravel surface that overlay the graves on the eastern edge of the cemetery or it was gravel dislodged westwards from F51 by ploughing. No datable finds were recovered from F51, except for a modern brick on its uppermost and disturbed surface. Nevertheless, in dimensions and methods of construction, it resembles other Middle Saxon streets uncovered in Hamwic during the previous century and a half. Accordingly, F51 may be interpreted as the remains of a Middle Saxon street aligned north-south.

As it survived, the street skirted the eastern edge of the graveyard, but, as stated above, adjacent



Plates 4 and 5 SOU 13, photographed from the east. Scale in 10mm units. Pl 4 (right) shows the crushed skeleton, F65, and the uncrushed skeleton, F56. Pl 5 (above) shows the crushed skeletons, FF69 and 70.



skeletons had been broken by vertical pressure, apparently by wheeled traffic.

This street was aligned square to the church; and it is just possible that it was a contemporary feature lying to the east of that building and its graveyard, and is accurately represented by the *in situ* gravel of F51. In that case, skeletons would have been broken only by traffic that strayed from the metalled surface before turning back on to the street to skirt the church. However, the traffic had been heavy and constant enough to shatter most of the bones (pl 5) and it seems unlikely that the street and the church were coincident. Even if the chancel were small, there would have been scarcely space enough for the two features to occupy the area immediately east of the excavated area. Furthermore, it is clear that traffic overran the graveyard only after the final burials were made. Besides the fact that group VIII skeletons were crushed and early burials were unaffected, much isolated skeletal material not here detailed can only have been broken after redeposition (see, for instance, the bones north of F65,

shown in pl 4). The implication is that street traffic postdated the church and its graveyard.

The destination of the street is uncertain. To the south, and providing it ran for another 35m, it would have linked with the street excavated on SOU 10. With the very dubious exception of what may have been a gravel layer in F5 (see above), there is no evidence of a continuation to the north. But, if it had deviated slightly to the east, the street would not have been uncovered in trench A and no conclusions may legitimately be drawn about its non-appearance there.

It may instead have returned to the west. The lack of crushed skeletal material in the north of the cemetery presumably indicates that no east-west street overran the graveyard; but a street may have been laid where the church had stood. Structure 3, a renewed east-west fence line, running parallel to the church but beyond its limits, and one of the stake-holes of which appears to have been cut through a structure 2 post-hole, may have delimited the southern edge of an unmetalled street.

More direct evidence of such a feature is virtually absent. Much gravel lay in the top half of the structural features, FF81, 120, and 126, and also in the southernmost of the stains supposed to represent the west wall of the church. If a later, metalled street had replaced the unmetalled one, most of the evidence would have been removed by the Victorian levelling of the area; and would have survived in fact only where it had sunk into negative features. Interpreting the survival of the gravel in these terms, one must assume that the southern boundary of the street had shifted between its unmetalled and metalled phases. This is not an impossibility: evidence of a similar shift is to be found elsewhere in Hamwic — certainly at Six Dials and perhaps at SOUs 4 and 32.

Another gravel layer survived to the south of this presumed street. F140 was a layer with a maximum thickness of 0.25m, originally composed perhaps of 50% gravel mixed with soil. It overlay FF80, 88, 95, 145, and 146, sinking into the two pits and becoming mixed with their upper layer. Outside FF145 and 146 the layer was more diverse and contained some animal bone. It may originally have been a gravel surface which properly survived only where it had sunk into earlier features, and elsewhere had been disturbed by ploughing. The layer (whether in its original form or in its disturbed form is not clear) thinned and eventually disappeared to the west, probably because of the Victorian levelling mentioned above. F140 might also have been the source of the gravel that had filled or sunk into the earlier structural features, although the absence of any evidence that the skeletons were crushed probably indicates that it did not form part of an east-west street. Rather, F140 may represent the remains of an alley leading from that street.

The evidence is poor and, although it does not contradict this interpretation, it can scarcely be said

to support it. It is at least interesting to note that, if the line of the street found at SOU 4 (100m away) is produced eastwards, eventually it coincides with the point supposed here to have been occupied by a street.

It is also interesting to note that the position of these two supposed streets roughly coincided with that of the paths thought to have run up to and alongside the church. Nothing suggests that the paths had been used as unmetalled streets, but the possibility remains that their prior existence in some manner predetermined the location of the gravel surfaces.

Dating

The only sure dating evidence was recovered from F5, which contained a wide range of Middle Saxon pottery, much of it probably redeposited from F42. That pottery which is not taken to be residual is datable to the late Middle Saxon period. The small quantity of late Middle Saxon pottery that was recovered from F120, if it had been found in the upper, gravel layer, might roughly date the supposed east-west street-

The north-south street seems to have been laid down after the Middle Saxon graveyard fell into disuse and before modern disturbance deposited a brick on its upper surface. It is unlikely that the street was the strand road shown on late-18th- and early-19th-century maps, for that feature seems to have lain further to the east, under the present-day Marine Parade. Although there is no sure evidence either way, it seems unlikely that the late road was metalled. On the contrary, as has been argued above, the fact that SOU 13's street was metalled probably points to its use at a time when Hamwic was still in existence. It is more likely than not, therefore, that the street was a Middle Saxon feature.

SOU 14 (SARC XIV)

Introduction

Excavations at SOU 14 were directed by J Cockerill. In July 1973 a rectangular trench 21m east-west by 16m north-south was opened by machine to the west of Paget Street and the south of Chapel Road. Two small extensions to the north were made soon afterwards. In all, 345m² were exposed at SOU 14.

Following an initial clearance by hand, excavation continued through the removal of 50mm levels, the surfaces of which were planned. Features (numbered F1-F103) were more normally excavated as soon as they became clear. Nearly every large feature was half-excavated as a single unit. What remained of its constituent layers were then numbered; these were excavated stratigraphically.

The natural soil was encountered at about 1.68m OD. It was described as a brickearth, and seems to have been pale brown or pale greyish brown in colour. Its thickness cannot now be ascertained. It overlay gravel.

The uppermost layers of the pits had been spread over the surviving top of the brickearth in a manner reminiscent of plough disturbance. However, no ploughmarks were noted. Apart from FF65 and 79, and perhaps FF21 and 78, all of which are discussed later, post-Middle-Saxon disturbance consisted of a number of pipe trenches and soakaways and at least nine scaffolding post-holes. These features may be dated from the 1840s onwards. The only features found in the south-western corner of the site (obscured on fig 54 by an inset) were continuations of the disturbance shown on the rest of the plan.

Early features

Pits

The depths cited below are those of the feature before it was truncated by the removal of 50mm levels.

F19 (fig 55) was a well, apparently cut through F94. Surviving to a depth of 1.54m, it consisted of a cylindrical shaft inserted off-centre into a conical pit. Although compressed out of shape, the shaft was probably originally 0.7m in diameter. Traces of a lining survived as a dark stain.

The well pit had been backfilled with brickearth and gravel, intermixed with a small amount of rubbish (layer 2). The shaft appears first to have begun silting up then to have filled with a collapse inwards of the pit filling (layers 14-17 and the unnumbered 'stoney mixed fill' above layer 14). It was further infilled with a variety of natural soils (layers 4-9) which may

represent later collapses, or a deliberate attempt to fill the hole, or both processes. As all these layers slumped, the top was filled with domestic rubbish (layers 1 and 3). The nature and location of layers 10-13 are not recorded.

Small amounts of bone-working debris were found in layers 2 and 4, both of which contained one piece of glass each. One piece was also found in layer 7. Layers 1 and 3 contained progressively more bone-working debris (68 fragments in layer 1) and five pieces of glass. Three other glass fragments were recovered from unrecorded layers in F19. A fragment of a human ulna was perhaps found in layer 2. Pottery was recovered from layers 1-5 and 7.

F22 was sub-rectangular in plan and section, and was at least 0.3m deep. A small feature, it contained two layers; the main one being dark soil containing some 'burnt daub' and charcoal. This was sealed by a thin layer of a dark, gravelly soil in which was found one piece of glass. It is likely that the feature was finally used for the disposal of rubbish, but its form suggests that it had been meant to be an internal storage pit. If so, it may have been dug within the south-western corner of structure 1, discussed below.

F24 (fig 55) was a well 1.33m deep, constructed like F19 except that the shaft was centrally placed. The shaft was originally 0.7m in diameter.

The backfill of the well pit (layers 2 and 3) contained much bone-working debris and one piece of glass. There was no sign of silting or collapse in the shaft, which had been backfilled with dark soils intermixed with domestic rubbish (layers 1, 4, and 5). These layers contained much bone-working debris, with one piece of glass in layer 5. Pottery was recovered from all five layers. Some layer of the well may also have contained finds provenanced at the time of excavation to a stake-hole, F42, which lay immediately to the south-west of F24. The nearness of the two features, and perhaps the spread of upper layers beyond the confines of the well, may have prompted a metathetical misnumbering. Most notable of these finds is a small amount of human bone. This survives as fragments of an ulna and a metacarpus, as well as a patella (Pay forthcoming). One 'other' bone is mentioned but not specified in the original post-excavation records.

F24 may have been dug to replace F19. If so, it is possible that some of the redeposited soil found in the shaft of F19 could have been derived from the excavation of the second well.

F26 was bowl-shaped in section and 0.86m deep. Its fill comprised cess in the bottom, sealed — probably deliberately — by a layer of redeposited



Figure 54 SOU 14: site plan. 'F' prefixes to the feature numbers are omitted. S indicates structure.

brickearth. This layer contained pottery and three fragments of glass. Above the brickearth was a thick layer of domestic rubbish which contained some bone-working debris, pottery, and three fragments of glass.

F27 (fig 56) was apparently not bottomed, although it was excavated to a depth of 1.21m. It was roughly sub-rectangular in plan, but natural erosion had led to a splaying of the top. The lowermost layers exposed (not illustrated) were seven thin layers of redeposited or eroded brickearth, two of which contained some bone-working debris. Over these was more brickearth (layer 7), and over this a number of 'cessy' layers (layers 5, 6, and 8) which together contained five or six fragments of glass and some bone-working debris. These were sealed by a

layer of 'loose clay' and domestic rubbish (layer 4) which contained much charcoal and bone (120 fragments sawn) as well as some small pieces of chalk and nine or ten fragments of glass. The upper 0.72m of the pit was filled with three more layers of domestic rubbish (layers 1-3), all of which contained charcoal, burnt daub, animal bones (many of these sawn), a small amount of human bone, and six pieces of glass. Also recovered from these layers was 'white ash', which may have been burnt chalk. During preliminary post-excavation work on the animal bones recovered from this site, it was noted that the upper two layers of F27 contained a fairly large amount of human bone: 25 cranial fragments; two humerus fragments; single fragments of a femur, a tibia, a radius, and an ulna; and twenty 'other frag-

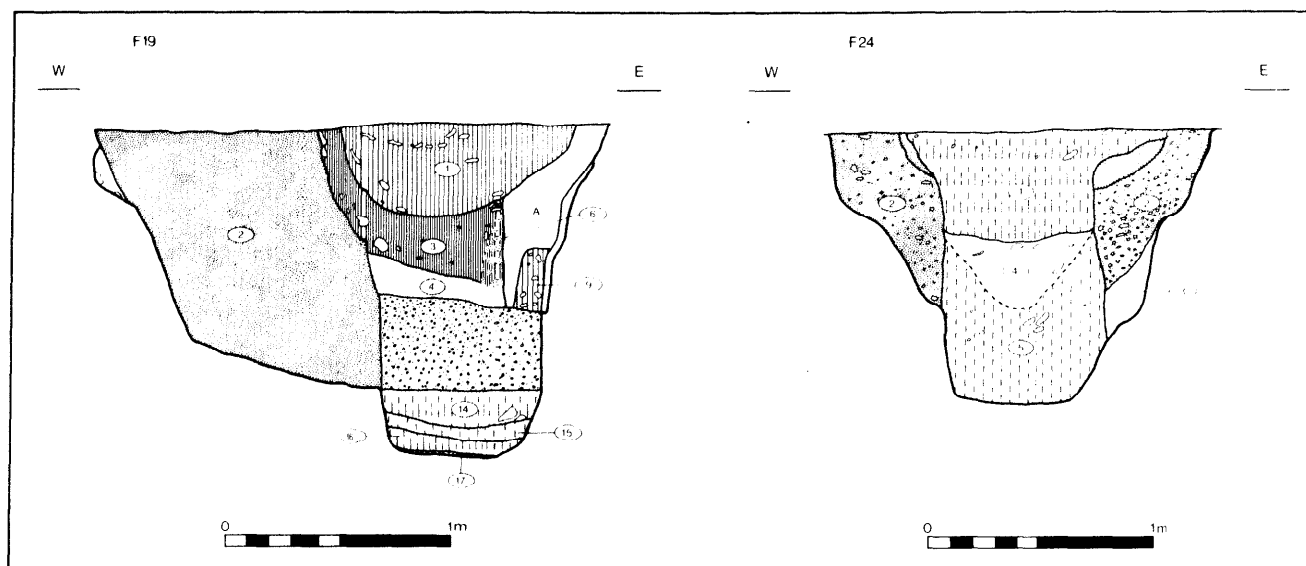


Figure 55 SOU 14: FF19 and 24. Key: A not described in the original sources. See also fig 17.

ments'. All of this material has now disappeared and the only bone claimed for F27 is a metacarpal fragment from layer 2 (Pay forthcoming).

Four pieces of glass are otherwise unprovenanced within the pit.

F28 (fig 56) was reportedly 'ringed by stake-holes in its upper edge', but no other record of these features can be found. They were perhaps the remains of a screen around a cess pit. F28 had been cut through F103, and the remaining fill of the latter had partially eroded into F28 when it stood open. (F103 is a new numbering, its fill having been recorded as F28, layers 7, 9, 11-13, 15, and 16. The layer numbers have not been changed.)

The bottom layers in F28 consisted of brickearth (layer 14), described as 'cess-stained' to the south-west (layer 17), and partially beneath a deposit of 'black silt' (layer 8). This contained some animal bone. It underlay both 'brown, fibrous, organic matter' (layer 6; shown in fig 66, but not numbered there) and a dark soil derived from domestic rubbish (layer 5). Layer 6 contained some bone-working debris; and layer 5 one piece of glass. Above these were two layers of 'silt' or brickearth that may have been sealing layers (layers 3 and 4; the latter of which is shown on fig 56 but not numbered there). Both contained some charcoal, two fragments of glass and some bone-working debris. Above them, layer 2, a deposit of charcoal, contained some animal bone, four pieces of glass, and a vertebra of a whale — the anterior thoracic vertebra of a large whale such as a sperm whale, a black right whale, or a humpback (M Sheldrake, pers comm). This had been used as a sawing block: see pl 6. The uppermost layer (layer 1) seems to have accumulated from domestic debris as the pit settled. It contained between six and ten fragments of glass.

Three more fragments are unprovenanced within the pit. Pottery was recovered from layers 1-6.

F29 was a shallow and irregular depression, at most 0.14m deep. Dished in section, and with many small hollows pocking the base, it contained two similar fills of dark soil, both apparently of domestic origin:

Since there appears to have been a confusion over the finds numbering, with pottery provenanced to the unlikely 'F29, layer 5', it may be doubted that any of the finds ascribed to this feature had been found in F29. Nevertheless, the excavator recorded in the site notebook the presence in the feature of at least one piece of glass and 'much pottery and bone'. If the finds records are to be trusted, the upper layer contained among other things eight pieces of sawn bone, seven pieces of glass, and some 'white ash', thought here to have been burnt chalk.

It is unlikely that so shallow a feature had been dug as a rubbish pit. The excavator tentatively interpreted it as the base of a midden. Alternatively, the hollow may have formed naturally or through the scrabbling of an animal, and been filled from nearby surface deposits of rubbish.

F30 (fig 57) was a large pit, 1.39m deep and originally rounded in plan. Erosion had distorted its upper shape and perhaps obscured its relationship with F31. This erosion may have led to the accumulation of brickearth in the bottom of the pit (layer 8). However, part at least had been thrown in as rubbish, for this layer contained eight pieces of glass, some animal bone (seventeen pieces sawn), a tile, and a piece of chalk. A small capping of gravel to the south (layer 9) may have been eroded from the sides. Found either within this layer, or sandwiched between it and layer 8, was one piece of sawn bone.

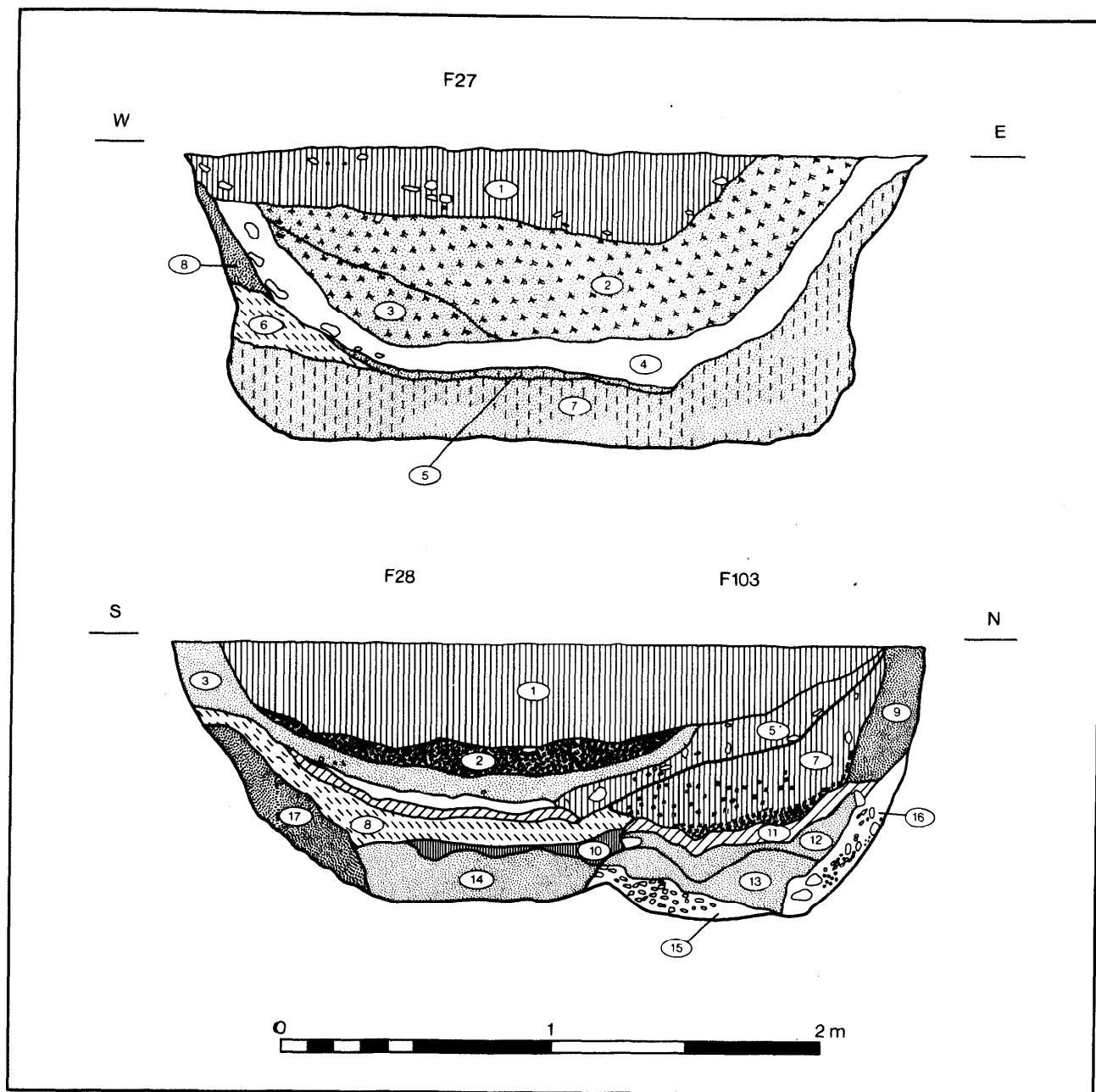


Figure 56 SOU 14: FF27, 28, and 103. See fig 17 for the key.

Sealing these was layer 7, which probably was two layers. The lower part was a spongy and fibrous layer with 'some evidence of wood — saplings or branches'. The upper part to the north may have been brickearth mixed with much bone. One presumes that this part contained the bulk of the 128 pieces of sawn bone recovered from layer 7. The upper part was similar to layer 5, which contained much animal bone (91 pieces sawn) and three fragments of glass; but was divided from it in part by layer 6, a greyish layer of brickearth that supposedly contained two pieces of bone-working debris. Above layer 5 was a thick deposit of dark soils, probably derived from domestic rubbish. It

contained charcoal, 'burnt daub', a fragment of a loomweight, animal bone (40 pieces sawn), and eight fragments of glass.

This layer had probably accumulated in the top part of F30 and filled the pit, before it and the layers beneath it finally settled. Over it was a band of gravel (layer 3) which contained a small amount of animal bone and a piece of glass. This layer can be interpreted as the remains of an above-ground layer that survived later disturbance through sinking into the pit. Its orientation cannot be calculated, unless one supposes that it also survived as a gravel layer in F82, 7m to the north-east.

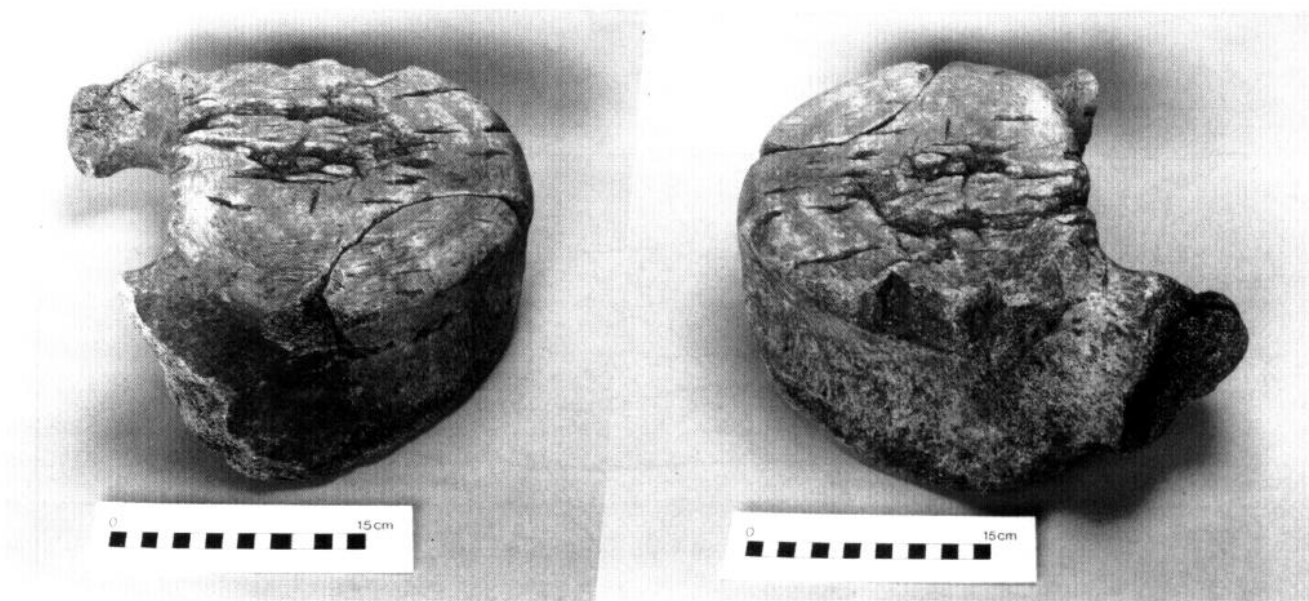


Plate 6 A whale vertebra, showing cuts on both epiphyses. The bone has suffered post-excavation breakages, especially of the vertebral processes, not all of which have yet been repaired.

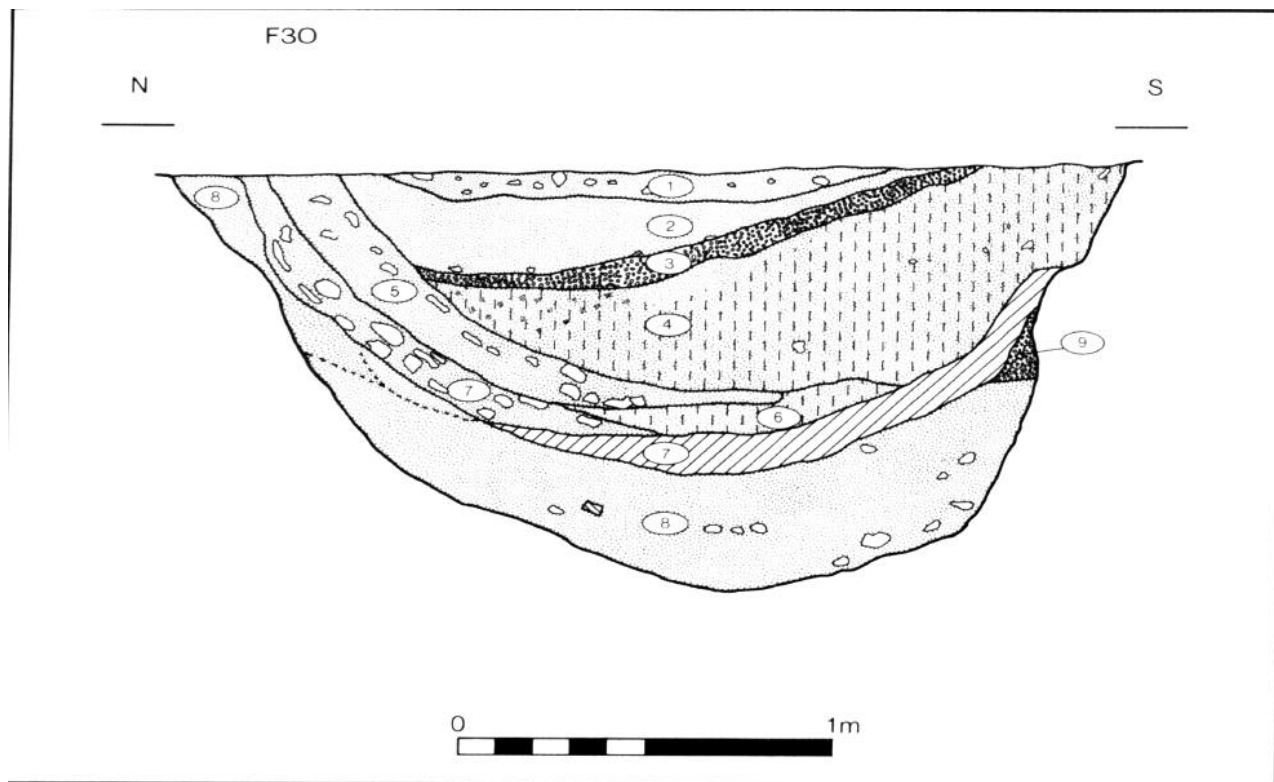


Figure 57 SOU 14: F30

Two layers of apparently domestic refuse covered the gravel, the lower of which (layer 2) contained a piece of glass and some animal bone (seventeen pieces sawn), and the upper of which (layer 1) contained animal bone. A fragment of a human tibia was perhaps found in layer 2.

Insufficiently well provenanced within this pit were a further 38 fragments of glass. Pottery was recovered from layers 2-8.

F31 was sub-rectangular in both plan and section and at most 0.34m deep. Its single fill, which was virtually indistinguishable from the soil through which the pit had been cut, contained some pottery and one very small piece of glass — the latter perhaps intrusive. In its shape and fill it resembles small pits found at Six Dials and interpreted as early brickearth-digging pits probably associated with the erection of adjacent buildings. But its shape and fill may indicate instead that it was a child's grave: see below.

F34 was irregular in plan and much cut by modern features. No record survives of its shape in section, the relationship of its fourteen layers with each other, or its relationship (if any) with F82. Since one pit excavated at SOU 14 had its layers numbered in reverse order (that pit is F82), it is not certain that F34, layer 1 was the top layer. It appears that a great many of the layers were redeposited brickearth, some of which sealed 'cessy' or 'brown organic' layers. Seven fragments of glass were found. One is insecurely provenanced, four were from layer 1, and one each from layers 2 and 10. Two pieces of sawn bone were found in layer 2, and two in layer 6. Pottery was recovered from layers 1-6, 8-10, and 13. All these layers (except 8-10) contained sherds of more than one imported vessel in the same fabric. One of these sherds found in layer 3 fitted one found in layer 13. Given the incompleteness of the record, it is unwise to be dogmatic, but the impression gained is of a generally fast and mixed fill of the pit.

A small amount of human bone was included in a container marked 'F34 bag 1'. This possibly was filled when the upper surface of the pit was being investigated. According to a preliminary list, the human bone comprised two phalanges and two ribs as well as single fragments of a cranium, a humerus, and an ulna. When the bone came to be studied, it was said to comprise fragments of a humerus, a femur, a tibia, a metacarpus, and some phalanges (Pay forthcoming). The differences between the two lists are sufficiently marked to suggest that the human bone from SOU 14 has been muddled at some point during storage.

F37 was not excavated.

FF78 and 79 (fig 58) may have been one pit. Both contained virtually identical upper fills of brown brickearth and similar lower layers. F78, layer 2 was 'yellowy brown clay' (perhaps brickearth) which was supposedly cess-stained; and F79, layer 3 was 'orange, greeny yellow clay' or 'clayey, cess-stained silts' with a few lenses of charcoal. Not found in F78

was an intermediary spread of gravel and grit (F79, layer 2). These differences presumably were sufficiently great to allow the excavator to differentiate the two features.

The few objects recovered from the features suggest that he was correct. The unique middle layer in F79 contained two sherds of pottery, one Middle Saxon but the other from a 13th-century vessel. Both bottom layers contained some animal bone, but two pieces found in F78, layer 2 had been sawn. These may have been residual, along with the sherd of Middle Saxon pottery in F78, layer 1 and a piece of glass recovered from somewhere in F78, but it is equally likely that only F79 postdated occupation in Hamwic.

F81 had been much cut by modern features and only the bottom 0.24m survived. Two brown layers were found in it, the upper one containing some animal bone and the lower one some 'burnt daub' and lenses of charcoal. Either or both of these layers also contained some pottery.

F82, appearing on the edge of the site, was effectively half-sectioned. Its upper fills were much cut by modern disturbance that obscured its relationship with F34. It appears to have been sub-rectangular in plan and 1.02m deep, with sloping sides and a relatively flat bottom. The lowermost layer mainly comprised redeposited brickearth, but mixed with some animal bone (four pieces sawn), one piece of glass, and pottery. Above this were up to nine layers of cess and domestic rubbish deposits. The uppermost of these was capped, at a depth of about 0.57m, by a layer of flints of various sizes. This may have been the sunken remains of a gravel surface (compare F30, layer 7, above).

Above the flints was up to 0.2m of redeposited brickearth which underlay in its southern half another layer of flints. This was also perhaps part of a gravel surface. The final fill was of domestic rubbish.

Found in some unknown upper layers were five pieces of bone-working debris.

F93 (fig 58) was irregular in plan and section and at most 0.3m deep. Its single fill of pale brown brickearth contained some animal bone, charcoal, and 'burnt daub'. An interpretation of this depression as a deliberately dug pit or as a structural feature is unsatisfactory. It may have been created by an animal.

F94 apparently was cut by F19. Only the southern part appeared in the excavated area. Its shape in plan is unclear. There is no surviving record of its shape in section, its fill, or how far it was excavated. Finds included some animal bone and much burnt daub. If it had been associated with structure 1 it seems to have outlasted it for a short time at least.

As explained above, F103 (fig 56) has been identified by this writer as a pit cut by F28. Sub-rectangular in plan, it was 1.1m deep. Its bottom layers comprised gravel (layer 15) and redeposited brickearth (layers 12 and 13). Above

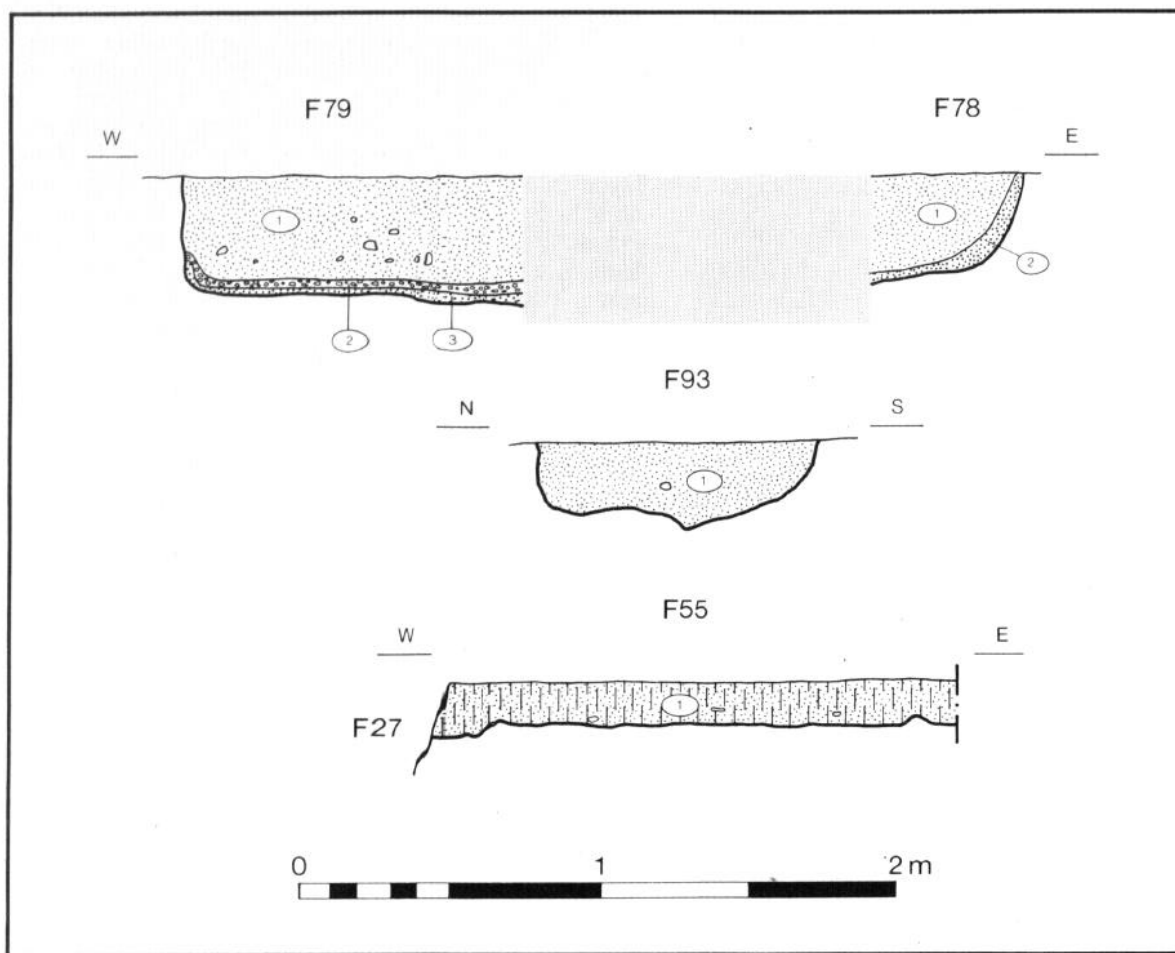


Figure 58 SOU 14: FF55, 78, 79, and 93. See fig 17 for the key.

these was 'brown spongy, fibrous' material (layer 11) which was contiguous with redeposited brickearth (layer 9). Both layers were sealed by dark soil (layer 7) which contained much charcoal, especially towards the bottom, and some animal bone. These were the only finds certainly from the pit. It is possible that one piece of sawn bone was found in layer 9, and two pieces in layer 13; if they had not in fact been found in F28.

Structural evidence

The ploughing that is supposed to have disturbed the upper parts of pits may have wholly removed shallow structural features. Such destruction might account for the lack of pre-Victorian features in the south-western quarter of the site, a phenomenon remarked upon by the excavator. That structural evidence in this area has been lost is suggested by the survival of two post-holes, FF38 and 47, and perhaps a third post-hole, F37. Other features that might indicate the presence of a building are a possible brickearth-digging pit, F31, and the remains of an 'alley' found in F30. Despite this

evidence, it has not been thought advisable to distinguish the two or three post-holes as part of a structure.

More complete evidence survives in the northern half of the site, although one again suspects that post-holes have been ploughed away. The problem of interpretation here is a different one, however. Most structural features have been distinguished from Victorian scaffolding post-holes on the grounds that the latter were differently shaped and filled with a soil that cannot be recognised as modern. Nevertheless, the coincidence of a Victorian post-hole with a supposedly Middle Saxon building line means that one should be cautious in identifying early structures. Four supposedly Middle Saxon post-holes and one stake-hole contained sherds of Middle Saxon pottery: so too did two Victorian post-holes. In short, while further buildings may have stood in the south of the site, it is just possible that fewer than three structures stood in the north. These are described below.

Structure 1 is represented by all of its wall lines except the northern one (FF20, 41, and 67 to the west; FF64 and 86-9 to the south; and FF48, 61, 63, 84, and 85 to the east). Typically, the post-holes

were U-shaped in profile and about 0.3m deep before their truncation by spit removal. (According to the finds record cards, 52 fragments of animal bone were recovered from F88. This seems unlikely.) The stake-holes to the south of F24's shaft may represent the line of an internal partition, although it is equally likely that they were part of a fence line associated with F24.

The building measured 5.6m east-west by at least 2.8m north-south. It shares many features with certain house-types discovered elsewhere in Hamwic, notably the presence of an 'overshot' wall in the south-west corner and the opposition of firmly and weakly grounded walls. Because of these similarities, one assumes that the east-west dimension was the width of the building.

In that case, structure 1 and the well, F24, cannot have been contemporary features. If one trusts the evidence of a single sherd recovered from F89, structure 1 was the earlier of the two features and may, therefore, have been associated with the well, F19, and the storage pit, F22.

Structure 2 appeared on SOU 14 as the south-western corner of a building. Its west wall line, at least 2.9m long, was represented by two post-holes, FF56 and 57; and its south wall line, which was 'overshot', by the three post-holes, FF83, 98, and 100. Typically, these were U-shaped in section and 0.25m deep.

The full east-west dimensions of the building (and consequently its relationships with surrounding features) are unclear. If it had continued eastwards to F69, a feature less than 0.05m deep, it was at least 9.6m long. This is a good possibility, despite the absence of intervening post-holes. As was stated above (p 41), it has been found that the rear walls of buildings are often poorly represented by surviving post-holes. If structure 2 had been aligned east-west, one long wall would have stood off-site, close to Chapel Road, and would probably have been the front of the building. Its other long wall, the one exposed at SOU 14, would have been a rear wall and might therefore have survived as no more than the four post-holes found. It seems more likely, however, that the structure had in fact been aligned north-south, having been built in the generally featureless 5.6m between its western wall and the pit, F27. The dating evidence, assessed below, does not discredit the notion that structure 2 and F27 were contemporary features. Although that evidence might also indicate that structures 1 and 2 stood at the same time, it is possible that structure 1 and the well, F19, were eventually succeeded by structure 2 and the well, F24.

Structure 3 appeared only as F55 (fig 58), an east-west linear feature at least 1.74m long by about 0.54m wide. This probably had been cut by F27. Despite its superficial resemblance to a grave, and the discovery in its fill of a fragment of a child's skull, the general absence of human bone (where one might expect it to have survived) and the irregularly cut base of the feature indicate that it had

served some structural purpose instead. About 0.14m deep before spits were dug across it, it contained within it a number of shallow depressions that might have served as post-settings. Its fill of 'dark brown clay with much fragmentary bone, flecks of [burnt] daub, and charcoal' seems to have contained no post-ghosts, however, and might be interpreted as the rubbish infilling of a feature designed to be left open. Yet, if it had been a property boundary, for instance, it is not immediately clear what was supposed to have been divided.

Dating and interpretation

Pottery was recovered in significant quantities from most of the larger features. The only pits not to contain any pottery were F22, perhaps associated with structure 1, and F103, cut by F28. Small quantities of Middle Saxon pottery were found in the fills of FF31, 78, 79 (this probably a medieval feature), 81, and 94; and in the structural features, FF43, 47, 89, and 98.

The excavator remarked that the pottery found in F47 had been used as packing. If so, these five organic-tempered sherds may indicate that an early Middle Saxon structure had stood in the south of the site. A similar date might be assigned to structure 2 on the basis of one sherd found in F98. Dating them according to the pottery they contained, other early Middle Saxon features may have been the well, F19 (broadly similar pottery having been recovered from the well pit and the first fills of the shaft), and the pits FF81 and 94 — the latter having been cut by F19 perhaps.

Disregarding the probably intrusive medieval pottery found in the uppermost part of F27, that feature seems to have been filled in the early Middle Saxon period or slightly later.

The pottery found in both the shaft and the pit of the well, F24, consistently dates it to the mid Middle Saxon period. Perhaps of a similar date are the fills of the pits, FF26, 29, and 30. The fills of FF28 and 82 similarly can be dated to the mid Middle Saxon period or later.

The relative dating of the glass fragments recovered largely parallels that suggested by the pottery. Thus, the early pits, FF19, 27, and 34, contained fragments of glass vessels with cavity rims (an early form); and the later pits, FF28-30, contained fragments with rounded rims (a late form).

Some general inferences about the relationships of structural features with the surrounding pits and wells have already been voiced. It will be seen that the dating evidence, although it does not unequivocally support such inferences, certainly does not deny them. Further, it will be argued below, largely through a study of the bone-working evidence, the area exposed as SOU 14 remained basically a unity throughout the period of Middle Saxon occupation: whatever changes and developments occurred in the area, they occurred within a single property.

An eastern boundary to this property can be found probably in the line of six pits that ran along the edge of the site. There is some slight evidence that the area immediately to the east of SOU 14 was given over to another property where a different trade was pursued. This argument centres on the discovery, supposedly in two pits, of 'white ash'. This material is mentioned in the site notebooks only in association with F27, and in the finds record cards only in association with F29. Because other objects probably were misprovenanced to F29 (see above), and because similar errors in numbering seem to have occurred at this site, it is very likely that the 'white ash' was recovered in fact only from F27. This is described further in the finds record as 'lumps of a fine chalky orange substance, with shelly inclusions', and can therefore be interpreted as burnt chalk or burnt shell. (No longer surviving, it cannot be studied directly.) Any one of a number of industries might have required the use of chalk or burnt chalk or burnt shell. For instance, the stone may have been used as a flux in metal working. Or chalk or shell might have been burnt to produce lime, used perhaps in the preparation of hides. One finds no evidence for the industrial use of lime at SOU 14, and it may be that the material was thrown into F27 from a property immediately to the east of that pit.

Do the excavations at SOU 14 afford a glimpse of several adjacent properties beside Chapel Road, each of which was devoted to the processing of one part of an animal — a *de facto* production line beginning perhaps with butchery and ending with the making of leather and bone objects? The possibility is intriguing; but it depends on very little direct evidence.

Debris from the working of animal bone was found in some quantity at SOU 14. (The figures and facts cited below have been taken from the original post-excavation work of Jonathan Driver and Ian Riddler's amendments to that work. Responsibility for the conclusions drawn or evaded is solely this writer's.) The debris consisted mainly of 1496 fragments of sawn cattle bone, with smaller quantities of sawn horse (113) and off-cuts of red deer and roe deer antler (59). The provenance of this material is shown in fig 59, where no attempt has been made to 'correct' the quantities so as take account of the relative degree to which any feature was excavated; but it is unlikely, for instance, that F82's present tally of twenty bone-working fragments would have been vastly increased if that pit had been fully excavated. Also found were four fragments of sawn sheep bone and three fragments of sawn post-cranial deer bone (one red and two roe). These were distributed through FF24, 27, 28, and 30.

Figure 59 illustrates the considerable difference in quantities found, with large amounts in three features (FF24, 27, and 30) and very small amounts in eight features (FF26, 29, 34, 78, 82, 88, 94, and 103). That this was a real difference is indicated by

a comparison of the quantities of all sorts of rubbish found within the pits. Thus, for one example, the first group of features contained 82.0% of the sawn cattle bone recovered at this site, but only 59.2% of the sawn and unsawn cattle bone (6263 fragments). The second group contained 3.5% of the sawn cattle bone but 20.2% of the sawn and unsawn cattle bone. These figures show that the disposal of bone-working debris was not wholly an arbitrary action governed by the availability of rubbish pits. It seems that the material found in the second group of features can be interpreted as 'background noise', for it represents small quantities both in percentage terms and in absolute numbers.

Besides the debris found in FF24, 27 and 30, one should perhaps pay attention to the contents of FF19 and 28. Neither feature contained significantly greater quantities of sawn bone — F28, in fact, contained less (4.3% of the sawn cattle bone, but 10.8% of the sawn and unsawn cattle bone). Nevertheless, the assemblages are sufficiently distinctive to merit further consideration; F19's because it contained 171 fragments of sawn bone and antler, and F28's because, as well as 68 fragments, it contained the whale's vertebra that had been used as a sawing block. Between them, FF19, 24, 27, 28, and 30 contained 96.4% of the bone-working debris recovered from the site.

The three most prolific features, FF24, 27, and 30, describe an equilateral triangle that excludes most other large features from its area. One might argue from this fact that the centre of bone working lay within that area, and was sited perhaps at structure 2. However, the neat geometry is completely changed if one also includes RF19 and 28: the five features effectively demark the entire pitted area of the site. Also, the dating evidence contradicts this somewhat static picture.

The earliest of the five features was the well, F19. Although the majority of the bone-working debris was found in the rubbish backfill of the shaft, as might be expected, nevertheless a sizable amount (at least 28%) had been thrown with the brickearth and gravel into the well pit. Clearly, bone working antedated the digging of F19. The presence of one antler tip in F94, a pit perhaps cut by F19, but apparently not investigated in detail, may indicate the same fact. These two features had been infilled in the early Middle Saxon period.

FF24 and 27 were filled at a slightly later date, and F30 later still — in the mid Middle Saxon period. F28 seems to have been the last to be filled.

The five features probably were distributed at various points within a single property and were infilled over a lengthy period spanning most of the 8th century and some part of the 9th century. The apparent shift of emphasis over this period of time may have been connected with the establishment of new buildings: starting with structure 1 in the north-west; moving east to structure 2; and ending perhaps in the south with an unnumbered structure now represented by only two or three post-holes.

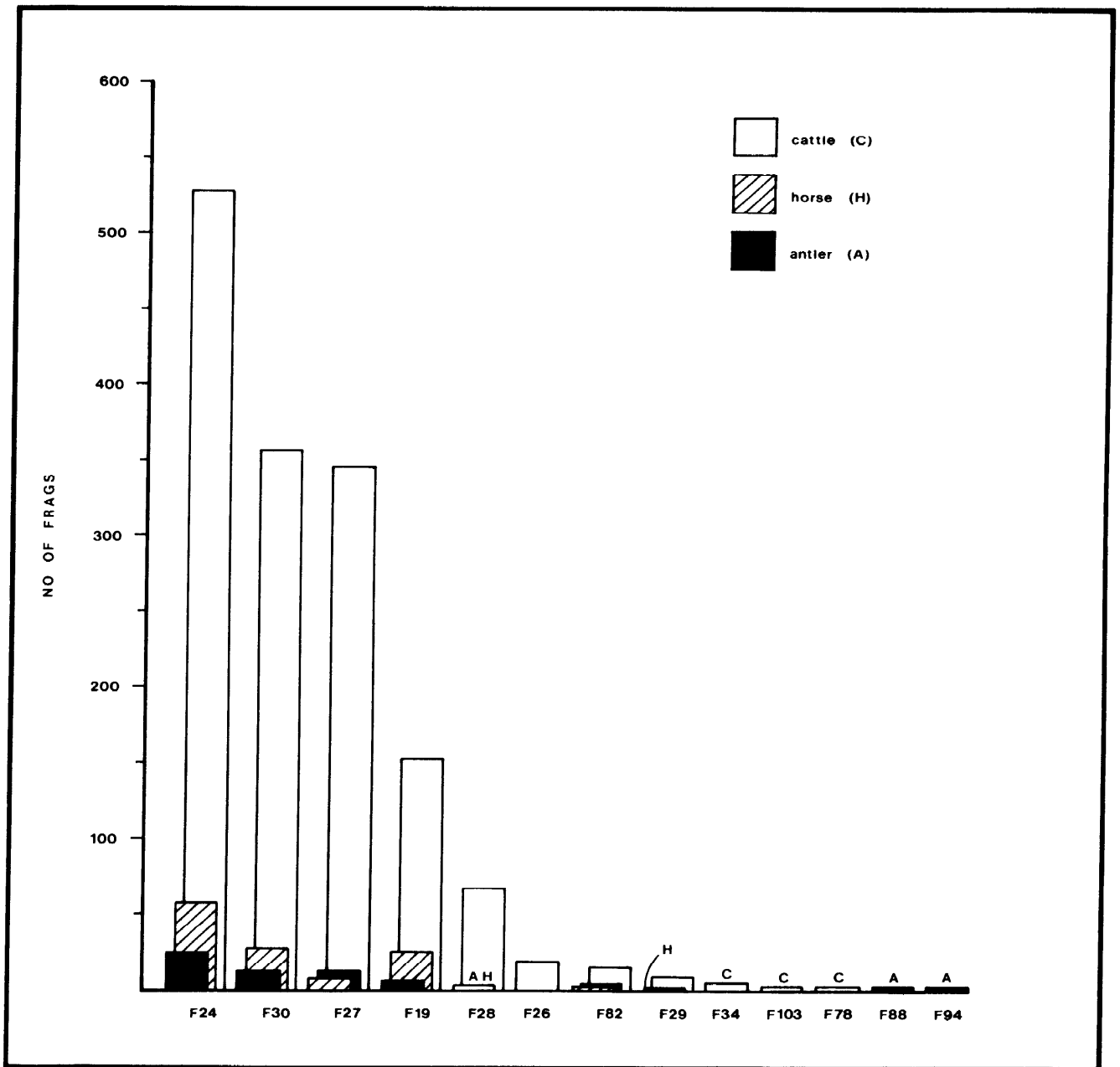


Figure 59 SOU 14: the provenance and quantities of worked-bone fragments

But SOU 14 was too small a site to disclose one unambiguous pattern.

Bone working had continued here for a considerable length of time. That industry was associated with all phases of occupation at SOU 14; there is no sign at all of discontinuity; and (to take one example) the occupation must have been at least long enough for two wells to be successively dug, used, and infilled. Seen in these terms, there is no particular difficulty involved in supposing that occupation had persisted into the 9th century — for 100 years, say.

However, during this time, only 150 fragments of sawn cattle bone, one fragment of sawn horse, and half an antler tip would have been thrown away on average every year. These figures may under-represent the available SOU 14 evidence: Driver (1984, 401-3) has argued strongly that some quantity of the unsawn bone found at the site had been brought there, either with the disappointed expectation of working it, or in physical association with the bone selected for working. Even so, one suspects that the excavated debris is only a small fraction of what was generated at this property. Some confirmation of this suspicion is provided by the existence of a whale's vertebra at SOU 14. One supposes that, if a vertebra was available, other parts of the whale's skeleton had been acquired by the bone worker. However, no other remains of a whale were recovered from the debris inside SOU 14's pits.

Pits located anywhere nearby (except perhaps to the east), might still contain large amounts of sawn bone. Do they contain other, related material? The SOU 14 assemblage provides plenty of evidence for the sawing of bone but virtually none for the manufacture of artefacts. Half-finished objects are represented only by parts of one comb connecting plate (item 153) from F24, which seems not to have had its rivetting holes drilled; perhaps also by an antler burr from the post-hole, F88, which may have been an unfinished spindle whorl. Finished objects are nearly as rare. Excluding item 153, fragments of a minimum of six combs were recovered. Except for one near-complete comb (item 44) from F27, all of these fragments were small and most had been sawn secondarily in at least on plane. (For further details, see Riddler in prep.)

A partial explanation of this scarcity of finished objects might be the fact that the artisans would not willingly have kept their products out of circulation or precipately abandoned their stock. However, the puzzling dearth of half-finished failures' and waste associated with the completion of artefacts can be explained only if one assumes that SOU 14 was not the place where objects were further worked or completed.

If the processes in the manufacture of bone objects had been segregated within a property, it is likely that SOU 14 would have disclosed only one type of the evidence. One might see the excavated area as part of a back yard, where bones were sawn; and the unexcavated street frontage to the north as the

more public locality where artefacts were fashioned. Yet it seems that, in the course of occupation at the property, the focus of rubbish disposal shifted. Other signs of a readjustment within the area are the apparent replacement of one well by another, and the laying down of gravel surfaces in places previously devoted to rubbish pits. Despite the fact of these changes, one must suppose that the segregation of linked activities was maintained. This is possible, but seems unlikely.

Nothing suggests a resolution of these problems. It seems certain, however, that far more extensive excavation in the vicinity of SOU 14 would amply repay the investment in time and money.

Such work presumably would greatly enlarge the corpus of glass fragments found at SOU 14. One hundred and forty-seven vessel fragments were recovered from at least twelve contexts (fig 60) and five beads from the probably modern feature, F101. Again using the cow-bone standard as an index of normal rubbish disposal, one finds that the dispersal of the glass across the site is generally predictable. Exceptions are provided by the fills of FF24, 26, 29, and 30. The first two contained less glass than might be expected (F24 had 1.4% of the glass but 22.6% of the cow bone, and F26 had 3.4% of the glass but 12.2% of the cow bone); and the second two contained more (F29 had 4.8% of the glass but 0.4% of the cow bone, and F30 had 40.1% of the glass but 11.8% of the cow bone). The figures from F29 must be suspect however. Although the quantity of glass found therein may have increased as a result of its nearness to F30, it is possible that this material, like the 'white ash' discussed above, should be provenanced to F27. (Should this be the case, F27's assemblage is not increased to significantly high proportions.)

No clear pattern emerges from these figures. The material was being discarded throughout the period of occupation of the site: as with the bone-working debris, glass was recovered from the construction backfill of F19's well pit and also recovered from the last features. Given the general, apparent regularity of the distribution, the significantly low amounts recovered from FF24 and 26 and the significantly high amounts from F30 (perhaps also F29) are not easily explicable. If any change in activity is indicated by the various quantities of glass recovered from chronologically distinct pit fills, there is no clue as to its nature.

A larger excavation might also extend the evidence relating to the human skeletal material found at SOU 14. According to Pay (forthcoming), the partial remains of at least two individuals were recovered from the constructional infill of F19's well pit; late layers in the pits, FF27 and 30; an unknown layer of the pit, F34; supposedly the structural feature, F42 (perhaps the well, F24); and the linear feature, F55. Assuming that these bones had all been redeposited from one earlier burial place, activity at that place must have pre-dated the digging of the early Middle Saxon well, F19; but

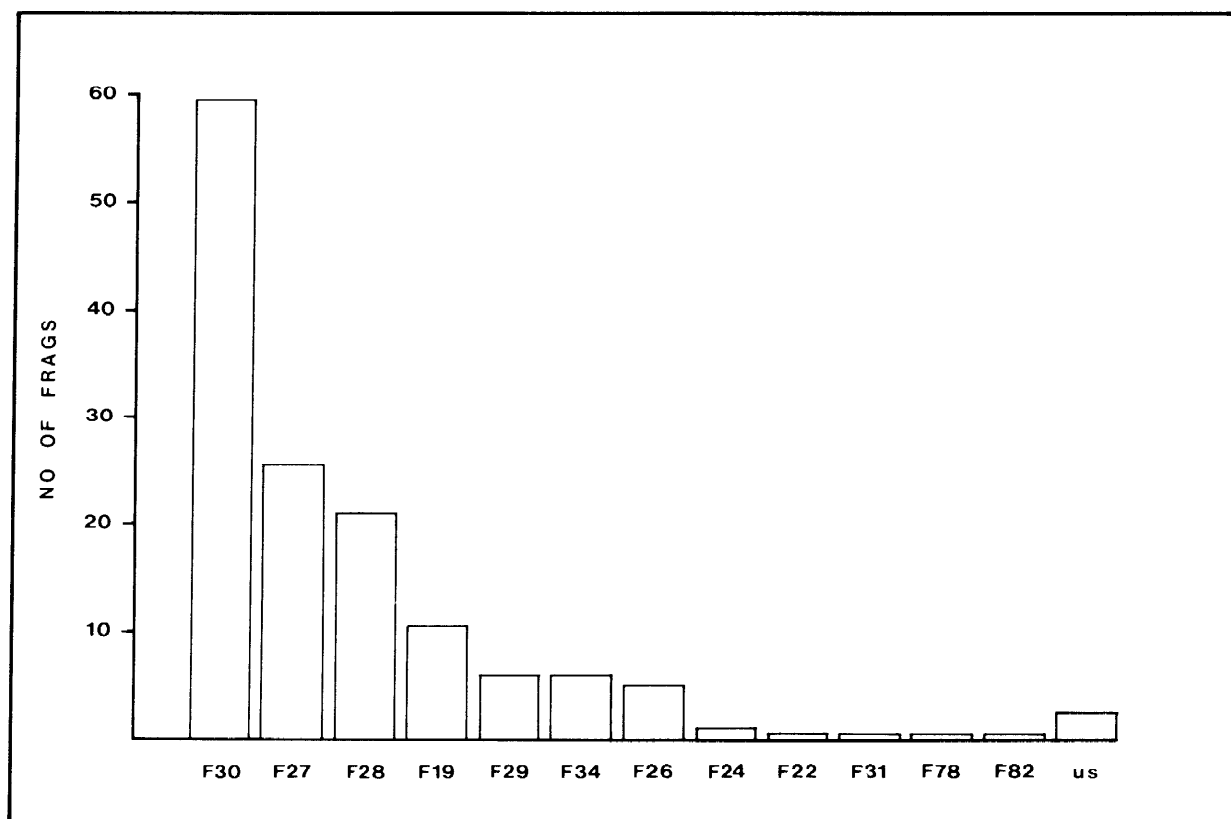


Figure 60 SOU 14: the provenance and quantities of glass-vessel fragments. Key: **us** unstratified

redeposition was a process lasting into or through the mid Middle Saxon period.

The location of the burial place is not easily determined. The evidence from SOU 32 is that human skeletal material might be displaced across distances of some 18m. If similar events had occurred at SOU 14, a cemetery might have lain on any quarter of the site. One possible grave was found. This was F31, an east-west-aligned sub-rectangular feature that had been infilled with redeposited brickearth. Some 1.4m long, if it were a grave it must have held a child. The lack of human skeletal material within that feature might be explained as the total disappearance of a child's remains. It is tempting to interpret the 'open' south-western corner of SOU 14 as an area in which only graves had been dug, their redeposited fills being invisible to the excavator, but this is very unlikely: an experienced excavation team would have taken the many

opportunities offered and recognised more grave-like features than F31 if there had been any more to be found.

The absence of other graves at SOU 14 is puzzling. If F31 had been an isolated grave, the propinquity of redeposited human remains must be a misleading coincidence. If it were an outlying grave, it might have been part of a cemetery established anywhere nearby — though perhaps more probably to the south of SOU 14. On the other hand, the majority of the human bone seems to have been recovered from the fills of F27, which suggests that the focus of the cemetery lay around the north-eastern corner of the site. And the presence of another grave to the north, at SOU 7, may be a sign that a cemetery had stretched between the two sites, in the same area as Chapel Road. For the moment, none of these possibilities can be excluded.

SOU 16 (SARC XVI) SOU 21 (SARC XXI), AND SOU 22 (SARC XXII)

Introduction

Investigation of the land to the south of Chapel Road and immediately to the west of Albert Road North began in 1974 with the digging by machine of a 4m-square trial trench (SOU 71). This seems to have exposed only the infill of a 19th-century cellar. In February 1975, under the direction of E Klingelhofer, SOU 16 was opened 16m to the south of SOU 71. The southernmost 1.4m of the site were not investigated and have been omitted from the relevant site plan. In October of the same year, D Barrett directed the excavation of SOU 21, a rectangular trench measuring 6.6m north-south by 5.4m east-west and located 2m to the east of SOU 16. In November he also directed the excavation of two parallel north-south trenches 3m to the south of SOU 16. SOUs 21 and 22 were opened concurrently and excavated by the one team. In July 1976, an irregular trench (also numbered SOU 21) was opened immediately to the east of SOU 16 and the north of the original SOU 21. This excavation was undertaken by the writer. Finally, observations were made in June 1982 of construction trenches dug at SOU 92, just to the south of Chapel Road. A report on that site is included in the supplement (MF2:C3-D3).

At SOUs 16, 21, and 22 a mechanical digger was used to clear the topsoil, and the underlying soil was first cleaned by hand before being further investigated. At SOUs 16, 22, and the original SOU 21 trench, this investigation took the form of the successive removal of 50mm levels (each of which was planned) and the more regular excavation of features as soon as they became clear. At the later SOU 21 trench there was little time to do more than record the apparent existence of features. The area of SOUs 16, 21, and 22 totalled 490m².

Features on SOU 16 were numbered F1-F159. These numbers are retained in this report. Features on SOU 21 (both sites) were consecutively numbered F1-F61. For the purposes of this report, SOU 21's features have been renumbered F160-F220. Features on SOU 22, originally numbered F1-F881, are here numbered F221-F1101.

The overlying natural soil, described as brickearth, was sandy silt. The surviving surface of this brickearth was encountered across the site at around 1.55m OD, but tended to slope slightly to the east. The brickearth on SOUs 16 and 22 was a pale yellowish brown with occasional darker patches, and that on SOU 21 a pale brown. In all cases, it was heavily

iron-panned and overlay gravel that contained many small concretions of iron. The gravel outcropped as high as 1.54m OD in the middle of SOU 16. Generally, however, the brickearth was about 0.15m thick in the west and at most 0.1m thick in the east of the site group.

At least one natural feature (not illustrated) was uncovered; the silted-up remains of a shallow, meandering stream in the north-east corner of SOU 22. It was cut by all other coinciding features. F246 was perhaps another natural watercourse, adapted for use by the inhabitants of structure 11: see below.

Such evidence, together with the existence of two possible drainage ditches, one of which is described in the next paragraph, the other further below, seems to indicate that the land exposed at these sites had stood close to a large body of water, presumably the River Itchen.

Post-Anglo-Saxon activity in the area took various forms. It is possible that structure 4, described below, was a medieval building. There was no direct evidence of medieval or post-medieval ploughing, although a slight scatter of later sherds might be ascribed to that activity. Of the two possible drainage ditches, one, F310, was clearly late. Containing medieval and modern pottery and finally infilled perhaps in the 18th century, it was aligned east-west, was a shallow V-shape in section, and had been recut at least once. Cut through structure 5, it was itself cut by a complex of 19th-century sewer trenches. A similar complex of Victorian features was uncovered on SOU 16, together with four cess pits and five walls, none of which had been set deeply into the brickearth. One of the cess pits also appeared on SOU 21, a site extensively cut by sewer trenches and four pits. All these features were probably connected with the intensive redevelopment of this area for housing, a process that began in the 1830s.

Early features

Structural evidence

The pit, F54, is interpreted below as a four-post sunken-featured building, perhaps associated with structure 3. Besides F54, one may distinguish up to seven other buildings and perhaps four fence lines. The buildings are described here as structures 1-7 and the fence lines as structures 8-11. These numbers relate not to any chronological order of the

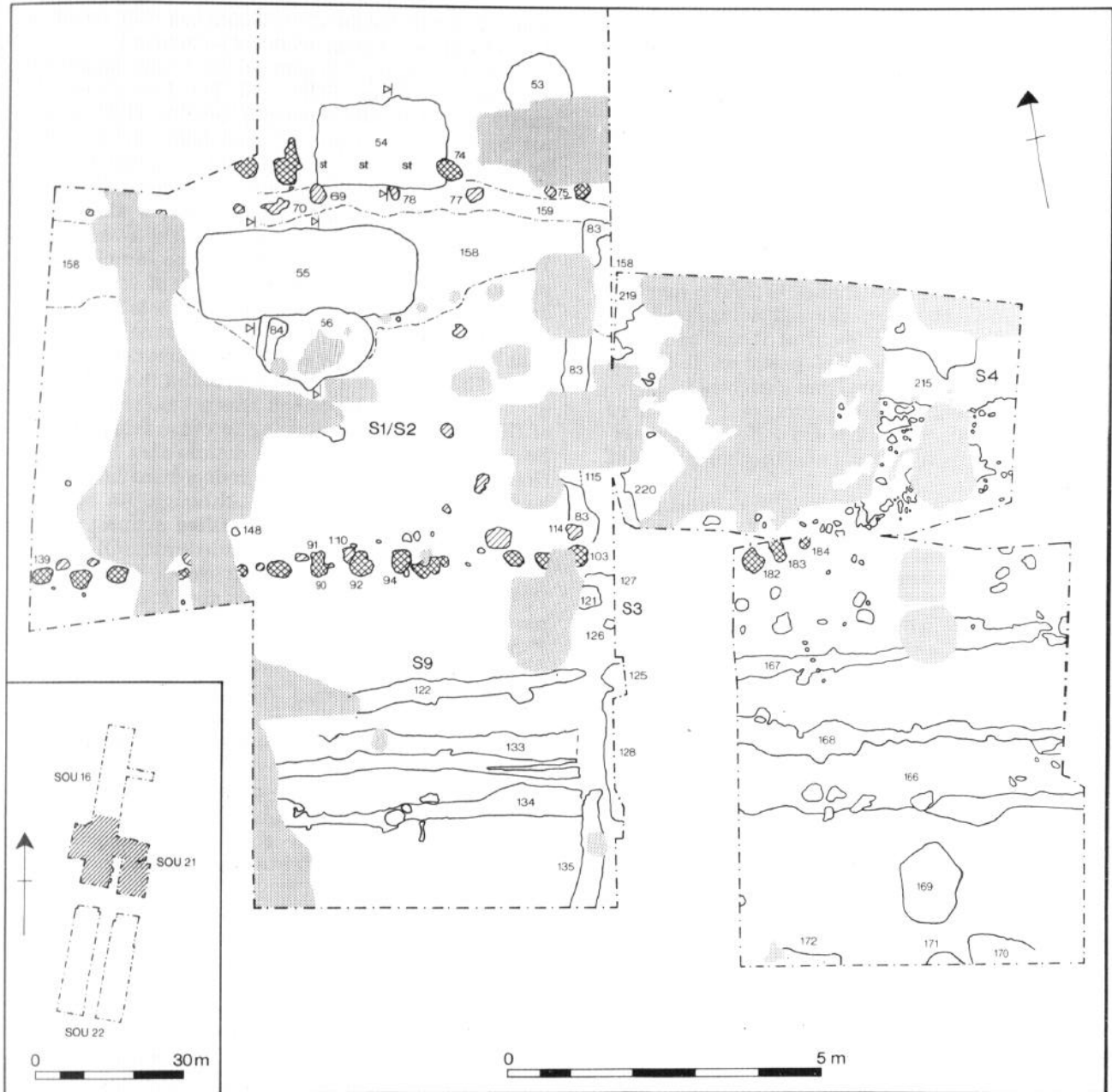


Figure 61 SOU 16 (central part) and SOU 21: site plan. 'F' prefixes to the feature numbers are omitted. S indicates structure.

features but to the roughly geographical order in which both groups are described.

Structures 1 and 2 (fig 61) were built over much the same area of land and both postdated structure 3. The layer, F158/159, sealed the fill of certain northern post-holes (FF69, 70, 77 and 78) but stopped just short of the outer line of post-holes. This spread also covered the southern part of F54 which had been cut by the post-hole, F74. (Photographs of F54 before excavation show stains that may have been the fill of three post-holes cut through the fill of the pit. The position of these stains is marked st on fig 61.) Two post-holes in the

southern line (FF90 and 92) had been cut through two others (FF91 and 110). These facts indicate that two buildings had stood here, something that might be inferred anyway about the staggered lines of double post-holes.

Holdsworth (1975a, 199-202; 1976, 35-40) has published the excavator's interpretations, the substance of which is that two bow-sided buildings had existed, set out on slightly different alignments around fairly regularly spaced vertical posts. This writer has followed most of the excavator's disentangling of the double lines, although with some minor reassignments; and with some associated

stake-holes left unassigned to one structure or the other. According to the present interpretation, structure 1 was the earlier building. Its post-holes had been grouped in opposed pairs, separated from each other usually by 1.2m gaps which lessened to 0.6m both in the middle of the building and at its western end. The 0.6m gaps may have occurred at the western return of the building and around a central doorway between FF75 and 77, reinforced by internal posts.

Structure 2 seems to have lost many of its post-holes to modern disturbance or to the careless digging of F54. However, the surviving evidence does not discredit the notion that it too had been built around opposed pairs of posts, in this case usually 0.6m or 0.65m apart from each other.

At their greatest widths, structure 1 measured 5.8m wide and structure 2 6.4m wide. Both buildings extended across the site and therefore were at least 8.5m long.

Holdsworth (1975a, 201; 1976, 37) included information provided by the first phase of excavation at SOU 21 as evidence that one structure continued along the line predicted by Klingelhofer. This evidence must be treated with extreme caution, for it is by no means certain that any of the features shown was a post-hole. Careful excavation proved difficult at SOU 21. The area was covered with numerous, rounded natural stains, most of which are not illustrated here. Although the holes that are illustrated were followed to a greater depth than the other stains, none was followed with any confidence through the thin covering of brickearth into the gravel. Nor is the evidence from the second phase of excavation at SOU 21 any more trustworthy. In this case, the extreme heat of 1976's summer further reduced what were generally slight colour contrasts, and hardened the brickearth to the point that it could not be penetrated except with a pickaxe. The use of this instrument was considered inappropriate to the investigation of probably shallow features, and the stains were only planned.

It is possible that some of the stains were not natural discolorations, and FF182-4 may mark a continuation of the south wall of structure 2. If real, these post-holes were clustered tightly together perhaps at the corner of the building.

Structure 1 appears to have had curved walls and can justly be described as bow-sided. Except among the disreputable stains of SOU 21, the wall lines of structure 2 show no signs of curving and were probably straight. The two buildings appear to have followed similar alignments. Their overall lengths cannot be calculated with any accuracy.

The dating evidence, reviewed below, indicates that these were both Late Saxon buildings, perhaps set in a property bounded to the north by the ditch, F51. Either or both of the structures may have been associated with the pits, FF55 and 56. The evidence for such an association is also reviewed below. Since these were both Late Saxon buildings, erected on much the same alignment and in virtually the same

area, it seems reasonable to suppose that structure 2 was built as a replacement of structure 1.

Structure 3 (fig 61) comprised many separately numbered features (FF83, 115, 121, 125-7, and 135) partly sealed by the spread F158/159. The line was cut by F114, a structure 1 post-hole; probably also by F103, a structure 2 post-hole. Excavation of the eastern edge of SOU 16 was rendered difficult by sporadic flooding of that area, and it is almost certain that structure 3 was not properly investigated. The difficulty of identifying features here is exemplified by the probable relationship of structures 3 and 9. The apparent truncation of this latter feature along the produced line of F135 strongly suggests that it had been cut by structure 3; but the only sign that F135 continued northwards and the soil in this area had been redeposited was a sparse scattering of flints and pebbles similar to those found in F83. So unclear were such basic details that it is likely that structure 3, filled with redeposited brickearth, had been underexcavated. Although its western edge seems to have been identified at most points, its eastern edge probably intruded into SOU 21 and is represented by the unexcavated stain, F220. F219, another unexcavated stain, may have been part of structure 3, if it was not a continuation of F158.

It being likely that structure 3 was underexcavated, the internal features have here been largely ignored as illusory, and the structural evidence is interpreted as being that of a north-south linear feature, 1m wide by at least 11m long, and perhaps 0.06m deep. The presence of some deeper features (the shallow post-hole, F121; the 0.1m-deep post-hole, F126; and the equally deep, short linear feature, F128) may indicate that the bottom was not entirely flat.

Structure 3 seems not to have been a boundary ditch since its line disregarded or was disregarded by every other feature in the area. It was presumably part of a building. Bearing many points of resemblance to structure 5, and lying on precisely the same line as that building's eastern wall line, it may represent a northern continuation of structure 5. Together, the two structures would have formed an unusually large building, at least 26m long. However, the lack of any sign of a north wall line makes this equation unlikely and suggests that structure 3 was a separate building lying almost wholly to the east of SOU 16, outside the areas excavated.

Structure 4 (fig 61) is represented by a possible corner of a building of unknown size. The evidence consists of only a dark greyish brown stain, F215, which was not investigated in any detail. It may have been cut through several of the smaller stains found at SOU 21. A cursory trowelling over the feature unearthed two small sherds of medieval pottery in the upper 30mm of its fill. It is not clear whether these were intrusive or more closely date the building. No associations with, or disassociations from, other features can be recognised.

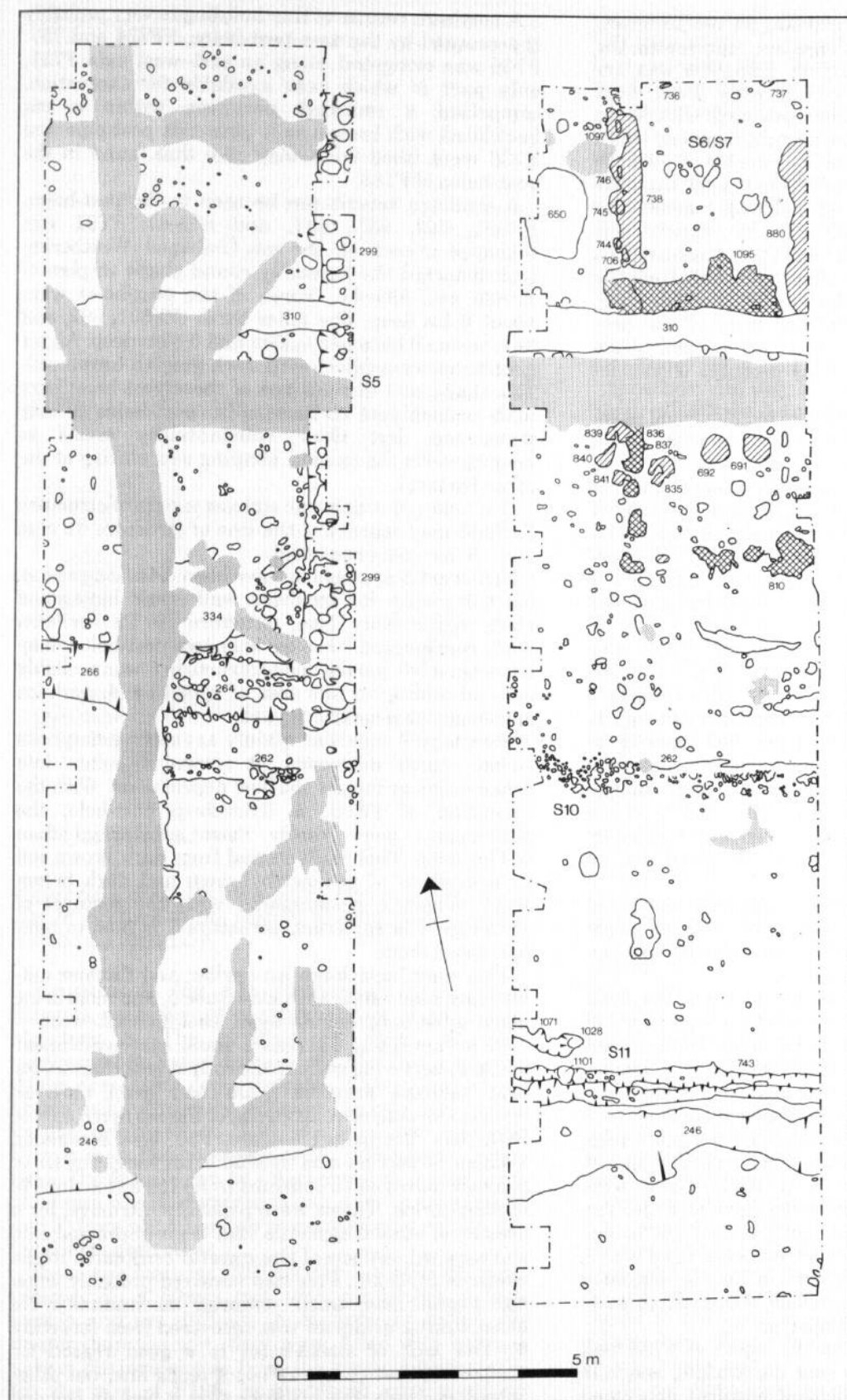


Figure 62 SOU 22: site plan. 'F' prefixes to the feature numbers are omitted. S indicates structure.

Structure 5 (fig 62) was exposed as two trenches, FF264/266 and 299, which together represented the south-east corner of a building. F264/266 was 1m wide and F299 at least 0.85m wide. Both were usually 0.15m deep and flat-bottomed with steep sides. An integral part of the trench, however, was a great many depressions, usually circular in plan, U-shaped in section, and up to 0.15m deeper than the bottom. The primary fill, spread thinly across the bottom of the trench and filling the depressions, was a layer of gravel intermixed with some brickearth. In places, this was virtually indistinguishable from the natural gravel into which the trenches had been dug, and it is possible therefore that some of the depressions had been overdug or never existed before 1975. Even so, structure 5 was probably of post-trench construction.

It was a fairly large building by Hamwic's standards. Its north-south dimension of at least 10.4m was presumably that of its long side. This may have continued north as structure 3 (see above), but, if it did not appear on SOU 16, it was at most 15m long. It was at least 4.8m wide. The supposed existence of a doorway in the southern wall (mentioned in the next paragraph) may indicate the buildings width: if the opening was in the middle of the wall, that wall was around 8m long.

The absence of post-depressions in F266 may indicate that a doorway existed at this point in the short wall. The fence line, structure 10, contained a gap opposite the position of this supposed doorway. It is suggested below that this fence line marked an internal property division, to the north of which were located structure 5, its yard, and two outbuildings (structures 6 and 7). The northern and southern boundaries of the property may have been marked by the fence lines, structures 9 and 11. These are all discussed below.

Structures 6 and 7 (fig 62) comprised a number of features of various shape, dimension, and fill. A not totally arbitrary division of these features into two building lines can be accomplished.

Structure 6 survived as several features, the main one being F738 which had been cut through F1095 of structure 7. This shallow north-south trench, although relatively flat-bottomed, included a deeper post-hole at its southern end and four shallow depressions towards the middle. The feature may have been remodelled at a later date, for its western edge had been 'scaloped' to include five irregularly spaced post-holes, FF706, 744-6, and 1097. These were roughly oval in shape, of the same depth as F738. The fill of the trench was consistently brown soil, except within the five post-holes which had been filled with a yellowish brown or brownish yellow 'clay' (presumably brickearth). To judge from their shape, these post-holes had contained split timbers.

The area immediately to the north of F738 had been the site of a stream (not illustrated), and it is unclear whether the structural features excavated there were overdug, underdug, or took the exact form shown on plan.

A northern return of this building is very probably represented by the two post-holes, FF736 and 737. F736 was elongated along an east-west axis. F737, only part of which was available for excavation, comprised a rounded post-pipe within a cut backfilled with brown soil. Both this post-pipe and F736 were filled with 'clay' like that found in the post-holes of F738.

A southern return can be seen in the post-holes, FF691, 692, 835, 837, and 839-41. F691 was V-shaped in section, the rest U-shaped. Weathering had distorted the basically round shape in plan of FF835 and 839-41. Three of the post-holes were about 0.1m deep, the other three (FF691, 692, and 841) were all between 0.33m and 0.39m deep. All six post-holes were filled with dark greyish brown soil. The shape and dimensions of these post-holes bore little resemblance to those of the post-holes already mentioned, but their substantiality seems in keeping with the careful shaping and placing of the other features.

If it was not a natural stain or a part of structure 7, F880 may represent the line of structure 6's east wall. It was not excavated.

Structure 6 appears to have been 6.4m long and at least 3m wide. Its southern wall would have stood close to the fence line, structure 10. Its northern wall, represented here by only two post-holes, may have been left partly open. Structure 6 was probably an outbuilding to the east of structure 4, perhaps opening onto a northern yard.

Structure 7 survived mainly as rather amorphous linear stains deepened at irregular points into stake-holes or larger shallow depressions. With the exception of F810, a 0.3m-deep post-hole, the depressions were rarely more substantial than 0.07m deep. Their fills varied from dark brown soil to a mixture of yellowish brown and dark brown soils. Where a relationship with the features of structure 6 is apparent, structure 7 is seen to have pre-dated them.

This may have been an earlier and flimsier outbuilding associated with structure 5, and measuring about 4.6m north-south by at least 3m east-west.

Structure 8 (fig 63) was a small east-west linear feature, surviving only to a depth of less than 0.05m (but perhaps another 0.1m had been removed during the machine-stripping of the northern part of SOU 16). The linear feature, F30, was a rounded V-shape in section and around 0.1m wide. The fill of greyish brown soil contained in its top a few chips of modern brick. These were probably intrusive, for a scatter of such fragments had been impressed into the exposed surface of the natural brickearth in the north of SOU 16. This had occurred probably when the topsoil had been removed mechanically. No other dating evidence was recovered from structure 8. The lack of stake-holes is a good reason for supposing that this was not a fence line, but other interpretations (for instance that it was an isolated plough mark) are even less credible.

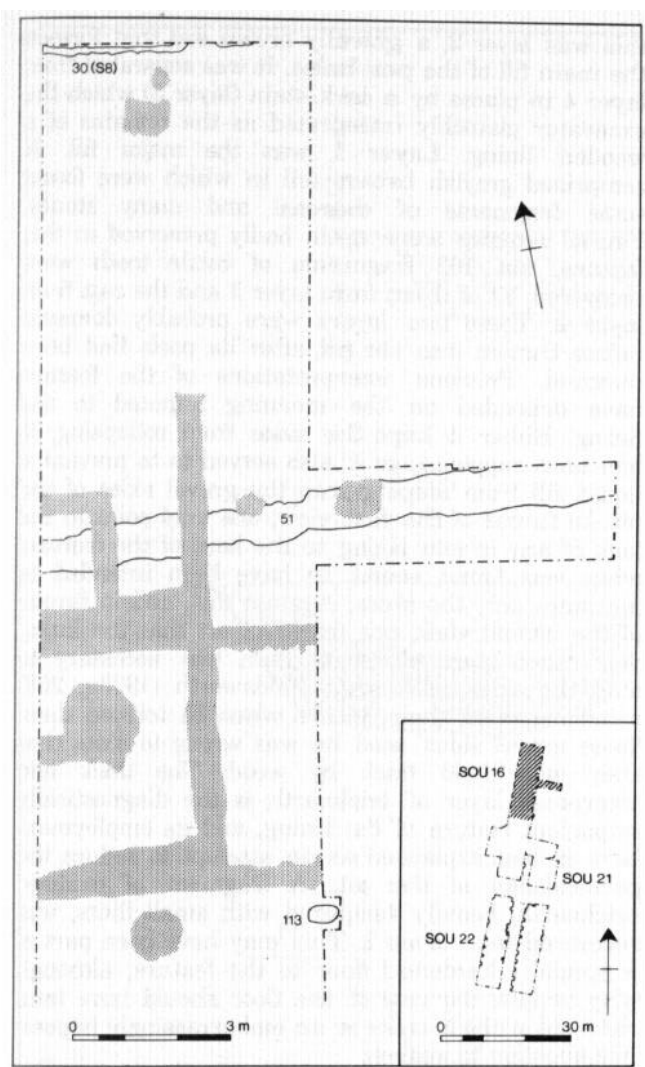


Figure 63 SOU 16: plan of the northern half of the site. 'F' prefixes to the feature numbers are omitted. S indicates structure.

Structure 9 (fig 61) comprised three linear features, each aligned roughly east-west and cut by structure 3. The clearest of these was the northernmost linear feature, F122/167. Measuring 0.08m deep at its deepest point, it was filled with a brown soil sufficiently different in colour from the natural brickearth to allow the confident assertion that it was flat-bottomed with stake-holes in its base. The feature can be interpreted as the remains of a fence line. It diverged to the east by between 4° and 5° from the other two linear features, which ran parallel to each other.

These two features, FF133/168 and 134/166 were removed in a 50mm spit without further investigation and are difficult to describe in detail. No deeper than the spit, they were filled with soil not always distinguishable from the natural brickearth. (In the case of F166, no northern edge could be found.) F134/166 was filled with pale brown soil. F133/168 consisted of two adjoining strips of soil,

the northern half greyish brown and the southern half pale brown. These strips bifurcated to the west. It is possible that these features contained more subdivisions than have been recognised here.

It seems unlikely that they represented structural features — fence lines, for instance, or shallow scoops for baulks. Running in parallel, they may have been the often regenerated and much weathered ruts of wheeled traffic, and perhaps represent the remains of an unmetalled track that skirted or lay within a fence. This fence cannot be linked stratigraphically with any of the buildings found on SOU 16 and, since it might be assumed that the fence was subordinate to some building, the likely association is with structure 5, the main building found at SOU 22.

Structure 10 (fig 62) was an east-west linear feature, F262. In its western half it was a relatively flat-bottomed trench, 0.1m deep, in the bottom of which were found numerous stake-holes. The eastern half appeared as a tightly grouped multitude of stake-holes within a linear feature, not all of which was fully excavated. Presumably a number of successive fence lines, it was cut by a 19th-century pipe trench, to the west of which no trace of the linear feature could be found. This gap of at least 0.76m coincides with a point supposed to have been a doorway in structure 5, and it is likely that the two structures were related, the fence having been a property division or boundary.

Structure 11 (fig 62) comprised three east-west parallel depressions at least 13.24m long. The most southerly feature, F246, was irregular in plan and section and at most 0.13m deep. The feature was filled with greyish brown soil which lightened towards the bottom and was not easily distinguished from the natural brickearth. Its irregular outline, unclear boundary, and apparently silted fill suggest that this had been a watercourse, perhaps a naturally occurring stream bed.

The other two linear features also contained greyish brown soils but were otherwise different from F246. They consisted of two contiguous trenches with sharp boundaries. In the eastern trench, where they were excavated, they proved to be about 0.07m deep and relatively flat-bottomed. Both contained deeper stake-holes and linear depressions, and F743, the most northerly of the two, also contained a post-hole with associated stake-holes. The post-hole, F1101, was about 0.15m deep and apparently filled with the same greyish brown soil.

The two features were presumably two fence lines. The post-hole, F1101, may have been a reinforcement or formed part of a gateway. Part of F743 may have been replaced; the replacement being indicated by the short linear feature, F1071, which terminated to the east in a post-hole, F1028, at least 0.18m deep. These features were also filled with greyish brown soil.

It is not clear what structure 11 was intended to divide. Out of the many interpretations of the evidence available, one might argue that the fence

was the formalisation of a boundary originally demarked by a stream, access to which was then gained through a gateway. Access having been gained from the north, it may be supposed that this boundary was associated with structure 5.

Pits

F53 (fig 61) may have been not quite fully excavated, the upper sides being indistinct from the natural brickearth. Probably circular in plan, it was steep-sided and flat-bottomed. Some 0.33m deep, it had been cut about 0.2m into the underlying gravel. The principal constituent of the fill was brown soil and a 60mm-thick layer of charcoal. Conditions at the three sites did not favour the preservation of bone, and the only faunal remains to survive in this feature were ten cattle teeth recovered from the charcoal layer. The pit may have been infilled with domestic rubbish, or partly infilled in that manner, but it seems unlikely that a feature of such small capacity would have been dug for use as a rubbish pit. Some more specialised function may have been intended. The excavator suggested that it had been a quenching pit associated with F55, thought to have been an iron-working feature. Problems with such an interpretation concern the difficulty of relatively dating the two pits; the difficulty of assigning a function to F55; and the likelihood that, if the two features were contemporaneous and had been associated with iron working, they had been separated from each other by the wall of a house. Furthermore, the only dating evidence from F53 was a few small sherds of medieval pottery, found in the upper layer. If these accurately indicate when the pit was infilled, and are not intrusive, it is likely that F53 post-dated the other pre-modern features at SOU 16. It is easy to cast doubt on the excavator's interpretation, but it is difficult to suggest what the pit had been used for.

An association with F55 was suggested to the excavator by the presence of a charcoal layer in which were found two fragments of what he interpreted as an iron drawplate (see Holdsworth 1975a, 204). This object (item 3) is in fact part of a wool comb. No significance may be attached to the fact that charcoal layers were found in both F53 and F55.

F54 (figs 61 and 64) was cut by F74 (a structure 2 post-hole) and probably by other post-holes discussed below. It may have been cut through FF69 and 78 (structure 1 post-holes), but in neither case was this relationship certain; and the dating evidence probably indicates that structure 1 was a much later feature (see below). It was overlain to the south by F159, a layer associated in its final form with structure 2.

The pit was roughly rectangular in plan, 0.24m deep, flat-bottomed, and with steeply sloping sides. There was a shallow, upright post-hole in each corner, about 0.09m deeper than the bottom of the feature.

The primary fill (layer 4) was a sterile, greyish brown brickearth that filled the outside parts of the post-holes. The upper surface of the brickearth was flat. It seems to have been a deliberate lining. Above

this was layer 2, a gravelly brown soil that formed the main fill of the post-holes. It was separated from layer 4 in places by a dark stain (layer 3) which the excavator plausibly interpreted as the remains of a wooden lining. Layer 1 was the major fill. It comprised greyish brown soil in which were found some fragments of charcoal and many stones. Faunal remains were again badly preserved in this feature, but 103 fragments of cattle teeth were recovered, 91 of them from layer 1 and the rest from layer 2. These two layers were probably domestic refuse thrown into the pit after its posts had been removed. Previous interpretations of the feature have depended on the meaning imputed to the lining. Either it kept the sides from collapsing, it has been supposed, or it also served to prevent a liquid fill from seeping into the gravel sides of the pit. In favour of the first view, one may point to the lack of any in situ lining to the base of the feature: what was found seems to have been intended to maintain only the sides. Against this, and in favour of the second view, one might object that the lining was much more elaborate than was necessary to stop the sides collapsing. Holdsworth (1975a, 203) misrepresented their nature when he termed them 'loose gravel sides', and he was wrong to state that they were held back by wood. The thick and interposed layer of brickearth is the diagnostically important feature of the lining, and its employment here is best explained as an attempt to reduce the permeability of the pit. A fragment of oxidised brickearth, heavily tempered with small flints, was recovered from layer 2. This may have been part of a specially hardened floor to the feature; although why or how the rest of the floor should have been removed without trace is an embarrassingly impossible question to answer.

Taking the first view, that the sides had been held back by the lining, the excavator thought that the feature may have been a weaving pit, the post-holes having been used to bed a two-beam vertical loom and two corner posts. Around or across this contraption was fixed a covering of some sort. The wool-comb fragments found in F53 presumably indicate the wool was being woven in the area, at some time; but this is no proof that F54 was a weaving pit. It is true that a vertical loom is shown in the Utrecht Psalter, equipped with two extra posts and a canopy. However, it is by no means certain that the illustration depicts something then known in Western Europe (see Hoffman 1964, 328-30; van der Horst and Engelbregt 1984, 35-6). A strong connection has been claimed between weaving and 'pit houses' (Hald 1963, 88; Ohlsson 1976, 96-7; Hope-Taylor 1977, 239 and references; Randsborg 1980, 62), but the configuration of such features differs in many ways from that of F54. Most significantly, there is no sign that looms were set at the very corners of the pits, a layout that must seriously have inconvenienced anybody meaning to use F54 as a weaving pit.

Supposing instead that the lining had been meant to reduce F54's permeability, the excavator and Hold-

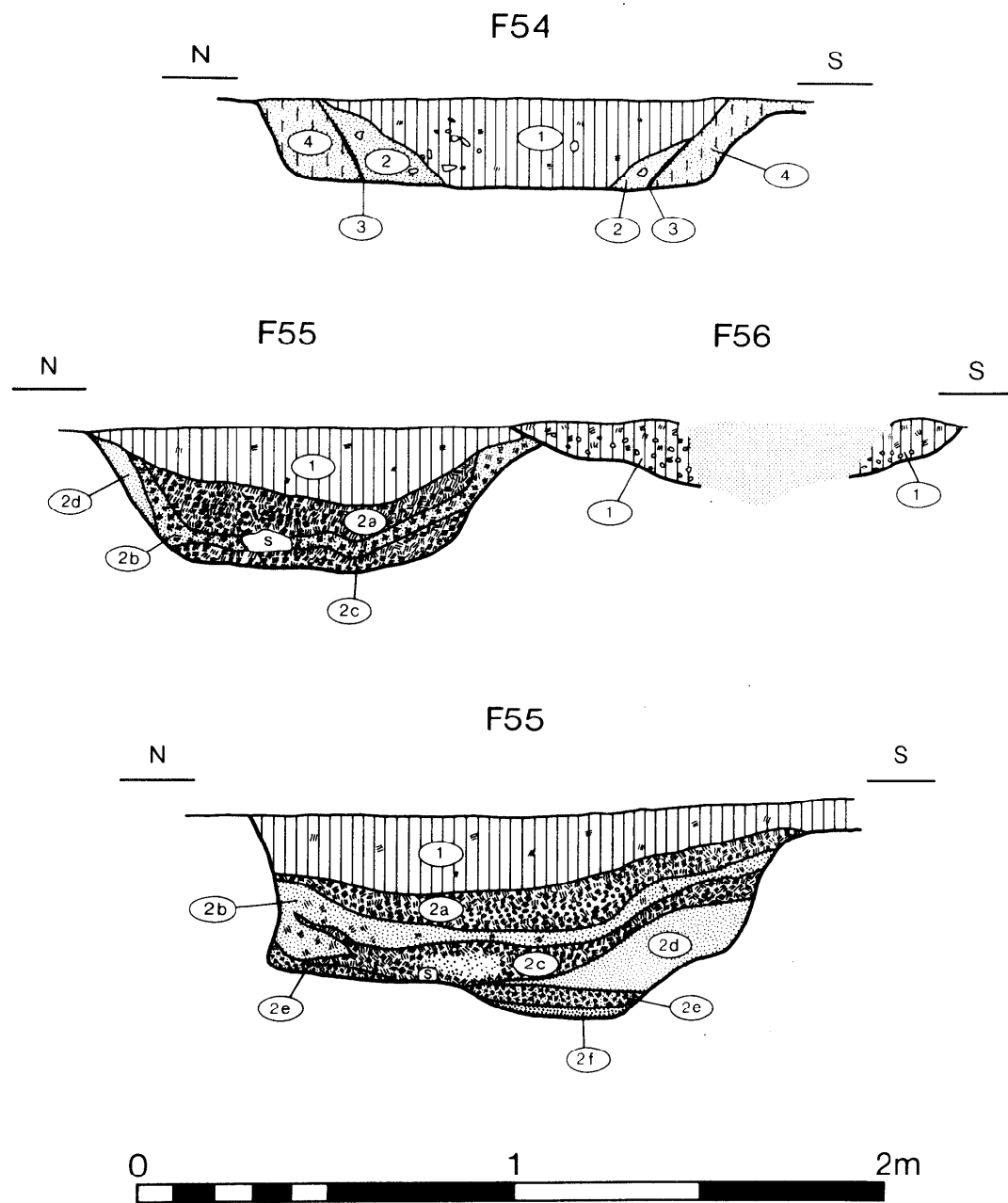


Figure 64 SOU 16: FF54-6. Key: S slag. See also fig 17.

sworth (1975a, 203-4) drew attention to a Roman tombstone and suggested that the scene it depicted — a man standing in a fulling trough and holding on to side rails — held a clue to another possible function of F54. There are a number of objections that have to be made. A fulling trough is easily emptied and replenished, but a fulling pit is not, and its efficiency is seriously impaired as a result. Although the process contains many advantages, there is no proof that fulling was being carried out in the Middle Saxon period (Hedges 1980, 173-4). Appeal to a Roman scene is perhaps as valueless as pointing out that a man standing in a wattle-lined liming pit is shown in a 16th-century illustration of leather processing (it is reproduced as Waterer 1956, 152, fig 114). Nevertheless, some industrial activity requiring a less frequent replenishing of a liquid medium may have been carried on. Hides may have been limed or horns retted: in neither case could we expect subsidiary evidence to have survived at SOU 16.

Alternatively, the lining may have served to keep water out. One might see F54's brickearth lining as an attempt to duplicate the conditions necessary to keep a storage pit dry, and the four post-holes as the remains of a roofed superstructure. If correct, such an interpretation indicates that F54 was a sunken-featured storage hut. Holdsworth (1975a, 202) disliked the interpretation of the pit as a storage pit because he felt that such a function did not accord with the feature's outdoor position. However, he was writing before excavations began at Six Dials, in the course of which many large storage pits were discovered, none of them located inside a building. The present writer favours the interpretation of F54 as a storage hut despite several reasons to disbelieve it. It is not clear, for instance, why the builders of a storage hut should have wanted also to dig a pit. And the almost complete absence of any evidence of a floor lining is a powerful reason for caution; though, it does not disprove the contention that some sort of sunken-featured building had stood here.

As was explained above, the dating evidence suggests that F54 and structure 1 were not contemporary features. Although the same evidence gives little reason for confidence on this point, it might be supposed that F54 was associated therefore with structure 3. This question is further pursued below.

F55 (figs 61 and 64) was cut by F56. Basically sub rectangular in plan, but with very rounded corners, it was pinched inwards slightly in the centre. The sides were gently sloping except in the north-western and south-eastern segments, where they were nearly vertical (more exact figures are given below). At these points of near-verticality, the base of the sides had been 'undercut'. The bottom of the feature was generally flat, and the feature 0.41m deep. In the western half, however, the bottom was dished to a maximum depth of 0.53m.

Up to eleven layers were removed in a piece as layer 2, many of the separate elements being distinguished on section drawings with the suffixes a-f. With the

exception of layer 2d, the fills were uniformly spread throughout the pit. In the bottom was a thin layer of what was called clay but appears to have been brickearth (layer 2f). Above it, but also intermingled with it in places, was a layer of sporadically gravelly brickearth (layer 2c). These two layers, which contained no finds, probably accumulated naturally, the gravel (and perhaps some of the brickearth) deriving from a collapse or 'undercutting' of the sides, and other brickearth silting up the open pit.

In the south-west part of the pit, layer 2e underlay layer 2d, a dark greyish brown soil containing flecks of charcoal. Over these were an intermingled sequence of perhaps seven layers, distinguished only as layers 2a-c. The lowermost, layer 2c, comprised charcoal, separated into two layers in places by lenses of brickearth that contained flecks of charcoal. A similarly constituted layer of brickearth and charcoal flecks (layer 2b) sealed layer 2c and was sealed by layer 2a. This was two layers of charcoal separated by a lens of brickearth. It is possible that the brickearth layers represent linings of the pit, or floor levels that have subsequently sunk into the pit, and that the charcoal forming layers 2a and 2c had been burnt in the feature. If such was the case, it is plain that there had been no burning over the brickearth intense enough to oxidise or reduce this material. Given the somewhat mixed nature of the deposits, it is equally possible that layers 2a-d had been thrown into the pit from another point of origin and perhaps in a comparatively short time.

The upper fill (layer 1) was in fact part of an above-ground layer, F158, which spread far to the east and west of the pit. This comprised dark greyish brown soil containing flecks and fragments of charcoal. It continued to the south, in increasingly diluted form, as F159. Between them, FF158 and 159 overlay F55, part of F56, and F127 (structure 3). It also overlay some of the post-holes of structure 1, but stopped abruptly short of the post-holes of the later building, structure 2.

Supposing from these facts that F55 had stood within structure 2, and supposing also that the dishing of the bottom showed that F55 had periodically been cleared out, the excavator thought that the clearing out had been impeded by the nearness of structure 2's north wall. Because the wall had prevented easy access from the north, this cleaning was undertaken from the south side, as a result of which the north side of the pit had been cut vertically downwards and its base undercut (compare Holdsworth 1975a, 204; and 1976, 42). This may be doubted. Except in the mid-point of the feature, the sides were generally steep and differed from the vertical by between 9° 30' and 14° 30' (to the nearest half-degree). With this 5° difference in slopes, it is perhaps unimportant that the north-western edge differed from the vertical by 4° 30': but if it is thought significant, one must then explain why the south-eastern edge was similarly angled and similarly 'undercut' at its base. There was no nearby

wall at this point to hinder cleaning out from the south. Taken as a whole, the evidence probably indicates only that very steep sides were unstable and tended to collapse. The 'undercutting' and layers 2e-f probably resulted from such collapses. The discharging of part of F55 may have resulted from a clearance of the pit, but it is as likely to have been an original feature.

The pit has been interpreted as an iron-smelting feature (*ibid*). This interpretation rests on three facts, none of which proves to be overly convincing. Evidence of iron-working was recovered from F55 and the surrounding area, it was claimed. Secondly, the feature was of a shape consistent with its use as a furnace. Finally, there are reasons to suppose that it had been cleaned out periodically and reused.

This last proposition has already been considered and rejected. If the evidence proves anything, it shows that F55 had not been cleaned out, but was left open to fill naturally. The main evidence for iron working was provided by objects found in the vicinity. These were supposedly parts of a draw plate in F53; a crucible fragment found north of F54 (item 9); another crucible fragment (item 12) found in F55, layer 2 (not otherwise differentiated); the remains of a tuyere found in F55, layer 2; fragments of iron slag found in FF55, 77, and 83, including tap slag; some 'pieces of ironstone, probably ore'; and 'several fragments of dressed sandstone, possibly part of an anvil' (Holdsworth 1975a, 204; 1976, 42-3).

The so-called draw plate was part of a wool comb. The 'crucible fragment' found in F55 is probably a small piece of hearth lining. The other 'crucible' was in fact a lamp. The supposed tuyere consisted of a roughly hemispherical lump of brickearth, 0.28m wide by 0.12m thick, which had been broken from a larger piece of brickearth. The object had been subjected to heat along its unbroken, rounded face, for the brickearth was scorched in varying degrees over a radius of about 0.13m. In the centre of this scorching was a fully oxidised area only 0.08m in radius. This limited degree of heating seems incompatible with the employment of the object in a furnace, and its shape is not that of a tuyere. Whatever the object was, it seems not to have been used in the iron-working processes.

Most of the iron slag has now disappeared. There is no record of the appearance, quantity, or weight of this material, some of which may have been iron pan. However, it is likely that the main part did comprise iron slag of some sort, for a large object recovered from F127 (item 8), misidentified as 'an iron lump' and therefore, one supposes, withheld from delivery to a specialist, proves to be a piece of smithing slag, probably a hearth bottom. The object can probably be taken as evidence of nearby smithing, for it is unlikely to have been transported far from its place of origin. The other 'slag' was probably of similar type, although the lost fragments may have been smaller in size. This conclusion rests on a number of assumptions. Communications between

the excavating team and the off-site finds processors were poor, and, by the time attempts were being made to place the slag with a specialist, the excavator had quitted Southampton, and the identification of slag was entirely the responsibility of the finds processors, whose knowledge of this material was very limited. The so-called tap slag may have been fragments of smithing slag or fuel-ash slag. If the hearth bottom had been misidentified as 'an iron lump', one may assume it was somehow different from those pieces identified as iron slag. This difference can only have been one of size: therefore the other pieces were smaller.

The 'ironstone' cannot be found now, and presumably was also sent away for study. There is no certainty that it was ore, and conceivably it was smithing slag. Or it may have been a ferruginous sandstone, small pieces of which were recovered from FF83 and 127. Sandstone has been found at other sites in Hamwic, and its appearance at SOU 16 would not be remarkable.

Most of this material was recovered from the charcoal layers in F55. Now lacking most of the evidence, one is at a considerable disadvantage when seeking to interpret it. At least, there is no good evidence for smelting in the area: one might expect to find thick layers of charcoal and other debris of the sort found at Ramsbury (Haslam 1980, 9-30), and not a few pieces of uncertainly identified 'tap slag' and 'ore'. Smithing may have occurred nearby, possibly at SOU 16, and just possibly in the immediate vicinity of F55. It is argued below that F55 had stood within structure 1 or 2. Since it is unlikely that charcoal and assorted rubbish would have been brought into a building for disposal in a pit, probably that charcoal had been burnt within the building; presumably therefore in F55. Some specialised function is suggested by the odd shape of the pit, which might indicate for instance that it had been a single-flued clamp kiln. However, the only possibly diagnostic finds were smithing slag recovered in small quantities from the charcoal layers.

F56 (figs 61 and 64) was a shallow, bowl-shaped feature that survived to a maximum depth of 0.19m. It has been claimed that the single fill (a very gravelly, dark greyish brown soil with many small fragments of charcoal) was the same as F55, layer 2a, a layer described above. This is unlikely, for the layers were differently constituted, and it appears that F56 had been cut through part of the infilling of F55. It may have been cut by the linear feature, F84, before it was infilled, and it lay partly beneath F158, an above-ground layer already described.

The feature has been interpreted as a smithing hearth (Holdsworth 1975a, 204; 1976, 42), an interpretation apparently forced both by its supposed association with F55 and by the nature of its fill. Such an interpretation is not sanctioned by the evidence presented here, but the function of this feature remains unclear. Situated almost centrally within structures 1 and 2, it may have been a

domestic hearth. One odd feature was F84, a shallow runnel, U-shaped in section, terminating in a slightly deeper hole. Filled with the same soil that filled F56, if it were a man-made feature it probably held a small screen within F56. But it is more easily interpreted as an animal's burrow that eventually collapsed and filled with more of the material through which it had been tunnelled.

FF169-72 (fig 61) were four vague areas of discoloration noted in the south of SOU 21. None contained any finds. The 'fill' was brickearth. All may have been natural features.

F334 (fig 62) was round in plan, bowl-shaped in section, and 0.88m deep at its deepest point. Over an initial fill of brickearth and gravel, the main layers comprised dark soils with many inclusions and lenses of charcoal, some burnt brickearth, and three small pieces of smithing slag. Two-thirds of the bone observed in this pit had deteriorated to such an extent that they were not recoverable, and it may be presumed that other fragments had disappeared without visible trace. The small fraction of bone actually recovered (90 fragments, of which 35 were teeth) is a pointer to the domestic refuse thrown into the pit; perhaps intermixed with some industrial waste. It is unlikely that F334 had been dug inside structure 5, a building which the dating evidence suggests was not a contemporary feature (see below).

F650 (fig 62) was sub-rectangular in both plan and section, and 0.35m deep. A small amount of bone survived in its fills of greyish brown soil with charcoal flecks. The location of this pit, between structures 5 and 6, might suggest that it was a contemporary of these features.

Ditches

The east-west drainage ditch found at SOU 22, F310, has already been mentioned. Cut through structures 5-7, its date of origin cannot be closely ascertained. It seems finally to have fallen into disuse in the 18th or early 19th century.

The other ditch, F51 (fig 63), was a shallow, rounded-V-shaped feature about 0.24m deep, at least 10.6m long, and aligned east-west. It sloped gently to the east, the angle being less than one degree however. There was no evidence that it had fulfilled a structural function and its isolation as a feature anyway suggests that it was not the bedding trench of a house. The dating evidence, set out below, suggests an association with structure 1 or 2 or both, and one might interpret F51 as a 'bourney', a property boundary that also functioned as a watercourse.

Dating and interpretation

Ignoring structure 4, about which everything possible has already been written, discussion of the dating of the features uncovered at the three sites is

facilitated if one first considers the last in the sequence.

Any decision about the relative dating of F55 and structures 1 and 2 requires the emphasising of some of the evidence and the discrediting of the rest. This evidence comprises the pottery recovered from the post-holes of structures 1 and 2; the pottery recovered from F55 and from the spread above it, F158/159; a radiocarbon date from F55; the coincidence of F158/159 with the northern wall line of structure 2; and the separate integrity of those wall lines and F55.

Six sherds were recovered from post-holes, two from F148 and one from each of FF94, 100, 102, and 139. Three sherds (in FF94, 102, and 139) were very small. Although none was a fragment of a Middle Saxon pot, and all three seem to have been pieces of Late Saxon or early medieval vessels, their diminutive size perhaps indicates that they were intrusive. The other three sherds, however, were much larger and cannot be dismissed as (for instance) the by-products of ploughing. All were fragments of Late Saxon flint-tempered vessels. In addition, supposedly from F127 (structure 3), was recovered a large sherd of Late Saxon vesiculated (chalk-tempered) ware (DH Brown, pers comm). Given the difficulties of accurately excavating the eastern area of SOU 16 and the errors that are known to have occurred when structure 3 was excavated, it is highly likely that this sherd was recovered from a post-hole of structure 1 or 2, the line of which passed through structure 3, next to F127.

Not only the size, but the very limited distribution, of these fragments tends to indicate that they were primary deposits and not plough-intruded objects. It may also be remarked that, with the exception of two sherds recovered from the ditch, F51, all the fragments of Late Saxon or early medieval pottery found at SOU 16 were recovered from (or probably recovered from) structure 1 and structure 2 post-holes. The conclusion seems inescapable that these buildings were therefore equally late.

There are other reasons for supposing this to be the case. These were stratigraphically late buildings, of a form and dimension not generally paralleled by the large buildings of Hamwic. Although bow-sided buildings in England are known from perhaps the Early Saxon period, most are dated to the late Middle Saxon and Late Saxon periods (for a short discussion, see Bahtz 1976, 88). Construction around regularly spaced and paired post-holes is not usually evident in Hamwic, nor are building widths of 5.8m or 6.4m. It is reasonable to argue, therefore, that these two buildings postdated the urban occupation of Hamwic and may have been contemporaries of the *wic-hithe* mentioned in two 11th-century charters (see above).

(Two large sherds of Late Saxon sandy ware were recovered from F51, a ditch that contained no other dating evidence. Again, the size of these sherds and their limited distribution make it unlikely that they were intrusive. An association of F51 with struc-

tures 1 and 2 seems likely. If so, it appears that each structure stood within a carefully delimited property.)

Of the pottery from F55, layer 2 (otherwise undifferentiated), 96% was imported; and F55, layer 1, interpreted as part of the later trample, contained three sherds, all of them imported pottery. The relatively small amount of local pottery in F55, layer 2 was variously tempered with sand, mixed grit, and flint. A Middle Saxon date is indicated, possibly at a midpoint or somewhat later point in that period. Charcoal from the same layer produced a radiocarbon date that, after amendment, was calibrated at 1 sd to the period 825-1215 (HAR 1165: see also above). The pit was not cut by any post-holes of structure 1 or 2.

This thin body of evidence can be interpreted to prove both that F55 was one of Hamwic's pits and antedated structures 1 and 2 by perhaps two centuries and that it was a Late Saxon feature. But the balance of probabilities is tipped when one considers the disposition of the layer F156/157. In its final form, the layer was a contemporary feature of structure 2. The excavator thought the layer was a final fill of the pit, spread far and wide: therefore the final fill occurred when structure 2 was standing; therefore in all probability F55 had been dug inside that building. However, the layer had few of the characteristics of a pit filling. It was widely dispersed outside the pit. Despite claims to the contrary, it was not 'a charcoal spread' similar in nature to those layers found in F55 (Holdsworth 1975a, 204) but a spread of dark greyish brown soil containing charcoal flecks. An easier interpretation of the layer is that it represents an area of trample, derived in part from the other fills of the pit. The fact that a trampled layer in its final form was defined by structure 2 is not an argument that it originated in structure 2; but it is an argument against antedating F55 by two centuries. If we suppose that the pit had been infilled a considerable time before buildings were erected around it, we must also suppose that eventually the fills of that pit were somehow exposed on the surface and trampled around to form F156/157. It is much more probable that the trampling quickly followed the infilling of F55. Accordingly, we may conclude that the pit was a Late Saxon feature, dug inside either structure 1 or structure 2.

In such a case, the high percentage of imported pottery recovered from F55 is worthy of remark. It has been suggested above that the wic-hithe was located near to SOU 16. The pottery from F55 may indicate that the landing shore was still visited by traders from across the Channel.

One moves now to the earliest structures found at the three sites. According to the relative chronology, it seems that structure 5 was the first building erected in the area, associated with two successive outbuildings, structures 6 and 7, and with only one pit, F650. Three fence lines can be associated with the buildings, structures 9-11. The first two of these

may have delimited a yard in which the buildings stood. The last, structure 11, marks the southern boundary of an apparently open area. The arrangement suggests a rural or semi-rural layout, segregated into a living and working space and something like a paddock — an arrangement similar to that found for instance at Cowdery's Down, Hampshire, during the period 4A/4B occupation of the 6th or 7th century (Millett 1983, 158). If so, it is possible that other fence lines await discovery outside the areas excavated. Certainly, the probable existence of east-west wheel ruts, running to the south of structure 9, seems to indicate that connections were maintained between the river and other units to the west. Also, according to the excavated evidence, access to the 'paddock' was by way of the main building, structure 5. It is unlikely that such an inconvenient arrangement was the only one provided for, and one may assume that structure 9 was pierced at some point with a gateway. This, in turn, implies that structure 9 continued for considerably further than the distance exposed at SOU 22.

Structure 5, its outbuildings, and the property within which they stood cannot be closely dated. The trenches of structure 5 contained six sherds of pottery, recovered from unknown depths in the features. These were one sherd of organic-tempered pottery, two of imported Middle Saxon pottery, one scratch-marked sherd, and two medieval sherds. One presumes that structure 5 was not a contemporary of the pit, F334; and was probably earlier than it. The pit contained a charcoal layer, layer 4, from which two samples were obtained for radiocarbon dating. After amendment, these dates may be calibrated at 1 sd to 504-852 and 456-871 (HAR 1673 and HAR 1853). Most of the pottery recovered from the pit was imported ware. The local pottery (12% by weight) may be assigned in equal quantities to the early Middle Saxon and mid Middle Saxon periods. A date in the mid Middle Saxon period is probably indicated. The pit, F650, contained no dating evidence apart from a small fragment of a Middle Saxon glass vessel. F836 (structure 7) contained a piece of tile, perhaps medieval. F262 (the structure 9 fence line) contained one sherd of chalk-tempered Middle Saxon pottery. F246 (the structure 11 stream) contained two sherds of medieval pottery; and F743 (the structure 11 fence line) a sherd of scratch-marked pottery and another of medieval pottery.

Taken at their face value, these elements of the evidence deny the relative dating suggested above, that the property and buildings here grouped together formed one contemporary, early unit. However, some of this material may have been intrusive, the product of medieval ploughing. Also, it is not inconceivable that the stream, F246, had functioned as an early boundary before, eventually, it silted up in the Middle Ages. Because of these uncertainties, it is best to conclude that the unit cannot be closely dated. If one places one's trust in at most four sherds, one might conclude that the unit dates to the

early Middle Saxon period. Despite the implied connection between this unit and the river, there is little to suggest that it was associated with mercantile activity at the waterfront. Few definite conclusions may be drawn from this relative absence of evidence since only one pit certainly associated with structure 5 was found. Furthermore, the fill of F54, to the north of structure 5, reflects commercial activity in the early Middle Saxon period.

This pit was infilled with domestic rubbish early in the Middle Saxon period: over half the pottery it contained was organic-tempered (another two-fifths were imported). One is unwilling to suggest an association with structure 5, mainly because it seems unlikely that F54 was the main receptacle of rubbish from a building at least 14m away. The pit may have stood as an outbuilding to structure 3, or stood alone as a separate building, or been associated with a building not exposed at SOU 16.

Supposing the fence line, structure 9, to have formed part of the structure 5 complex, at least the northern part of the property was succeeded by structure 3. If the pit, F334, can be associated with structure 3, it would appear that the earlier property had been wholly taken over by structure 3 and its appurtenances, probably in the mid Middle Saxon period. A sherd of Late Saxon pottery was ostensibly recovered from F127, part of structure 3. This, it has been argued, was probably recovered in fact from a post-hole of structure 1 or 2, which cut structure 3. Dating structure 3 is difficult, therefore, except in the broadest of terms, between the mid Middle Saxon period and the Late Saxon period.

To summarise, structure 5 and its appurtenances, together forming an early, perhaps semi-rural prop-

erty, were first laid out, perhaps in the early Middle Saxon period. This property was succeeded by structure 3. In its turn it was succeeded by structure 1, a Late Saxon feature rebuilt as structure 2. One or both of these structures probably contained F55, perhaps a pit associated with smithing.

A curiosity of this group of sites is the fact that there seems to have been little or no continuity in the positioning of structures 1, 3, and 5. This can be variously explained. If a larger area were to be excavated, we might find that there had existed a single, large property, within which buildings had been differently positioned according to changing needs. The imported pottery was concentrated on SOU 16 and there may have occurred a shift in occupation within this property from the southern area (at SOU 22) to the northern one, perhaps to reposition buildings nearer the waterfront. But it seems unlikely that we are glimpsing the intermittently changing use of a single property. If the ditch, F51, represented the northern boundary of a property, lasting for perhaps three centuries, one might expect to have found some sign of an early use. However, there is no evidence that it existed before the Late Saxon period. It is likely, therefore, that there had been discontinuity of occupation at SOUs 16, 21, and 22, possibly after the dereliction of structure 5, and certainly before the erection of structures 1 and 2. The possible lull in building after structure 5 and before structure 3 cannot be convincingly explained, although it might represent the temporary abandonment of a low-lying area. The pause before the building of structures 1 and 2 probably coincides with the disappearance of Hamwic as a major settlement.

SOU 18 (SARC XVII)

Introduction

M Blades directed the excavation, in April 1975, of a north-south-aligned trench (A) near the corner of Chapel Road and Marine Parade. This trench measured 13.2m by on average 4.4m. Subsequently, an irregularly shaped northern extension (B), which measured some 5.4m by 3.1m, was cleared down to the brickearth in an attempt to recover more information. The total area exposed was 79m² (fig 65). In both cases, the topsoil was removed by machine and the underlying surface cleaned by hand. In trench A, the site was investigated through the trowelling away of successive 50mm levels, each level being planned and each feature being more normally excavated as soon as its outline became clear. In trench B, there was time only to clean the surface by hand and draw a plan of the exposed features. Features were numbered F1-F29. This writer has added F30-F44.

Shackley (1980, 4-6) analysed several samples of brickearth in the vicinity of this site, and one from SOU 18 (sample 3: site 4 in her numbering). Her analysis indicates that the brickearth found there is a sandy silt, a redeposited loess. Generally, it survived to a height of 1.58m OD. It varied greatly in thickness and tended to thin to the south and west. It overlay gravel, which was encountered at 1.16m OD where it was exposed by F10; at 0.89m OD where it was exposed by F10; at 0.89m OD where it was exposed by F12; and at 1.24m OD where it was exposed by F13. Gravel also outcropped at 1.45m OD in the south-west corner of the site.

The earliest evidence of post-Anglo-Saxon disturbance consisted of two linear features that varied in depth from 10mm to 70mm. These were at their thinnest in the west, where they generally were 40mm wide, and thickened considerably to the east. They had been cut through the upper parts of FF13 and 19, and seem to have been associated with the

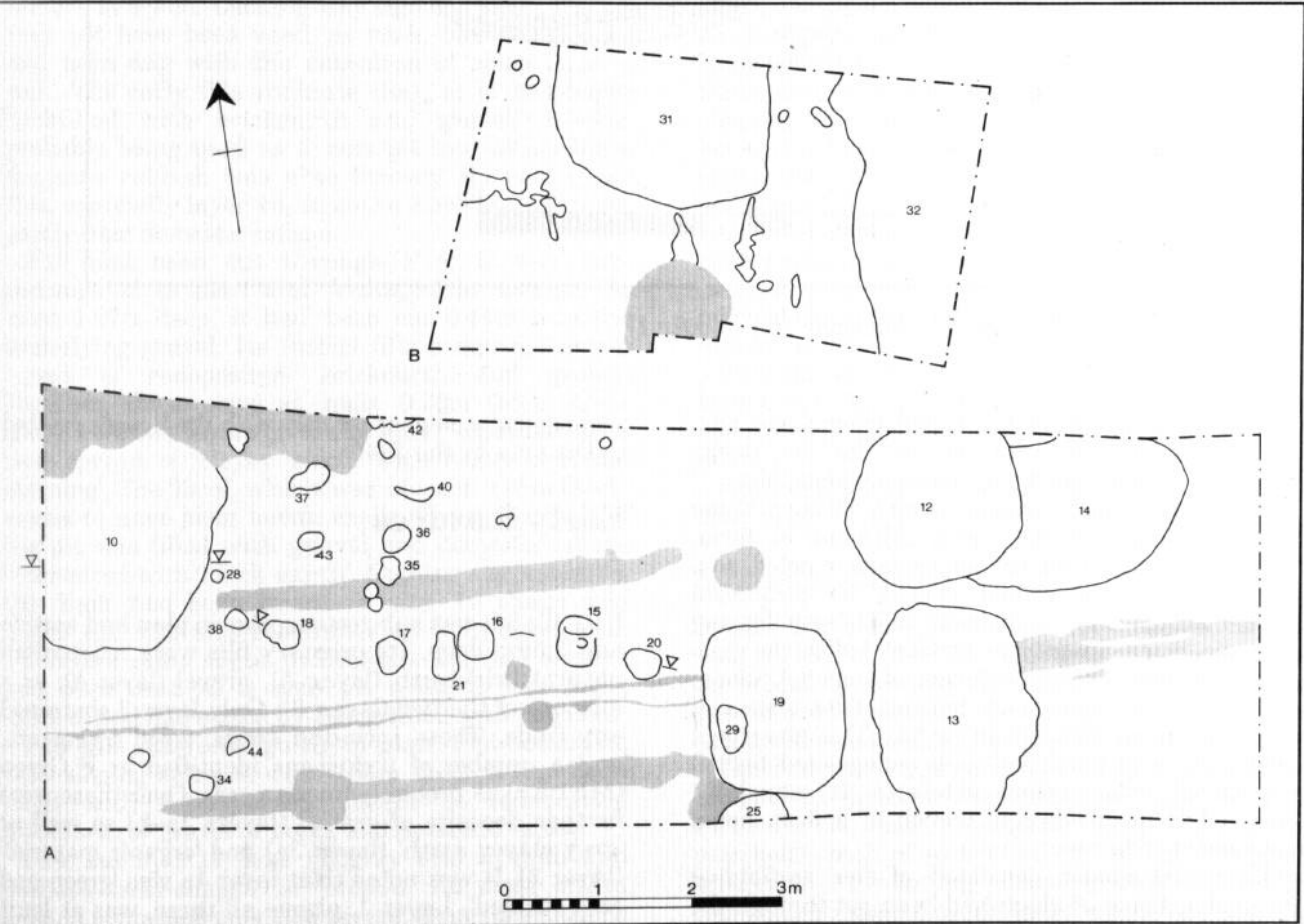


Figure 65 SOU 18: site plan. 'F' prefixes to the feature numbers are omitted

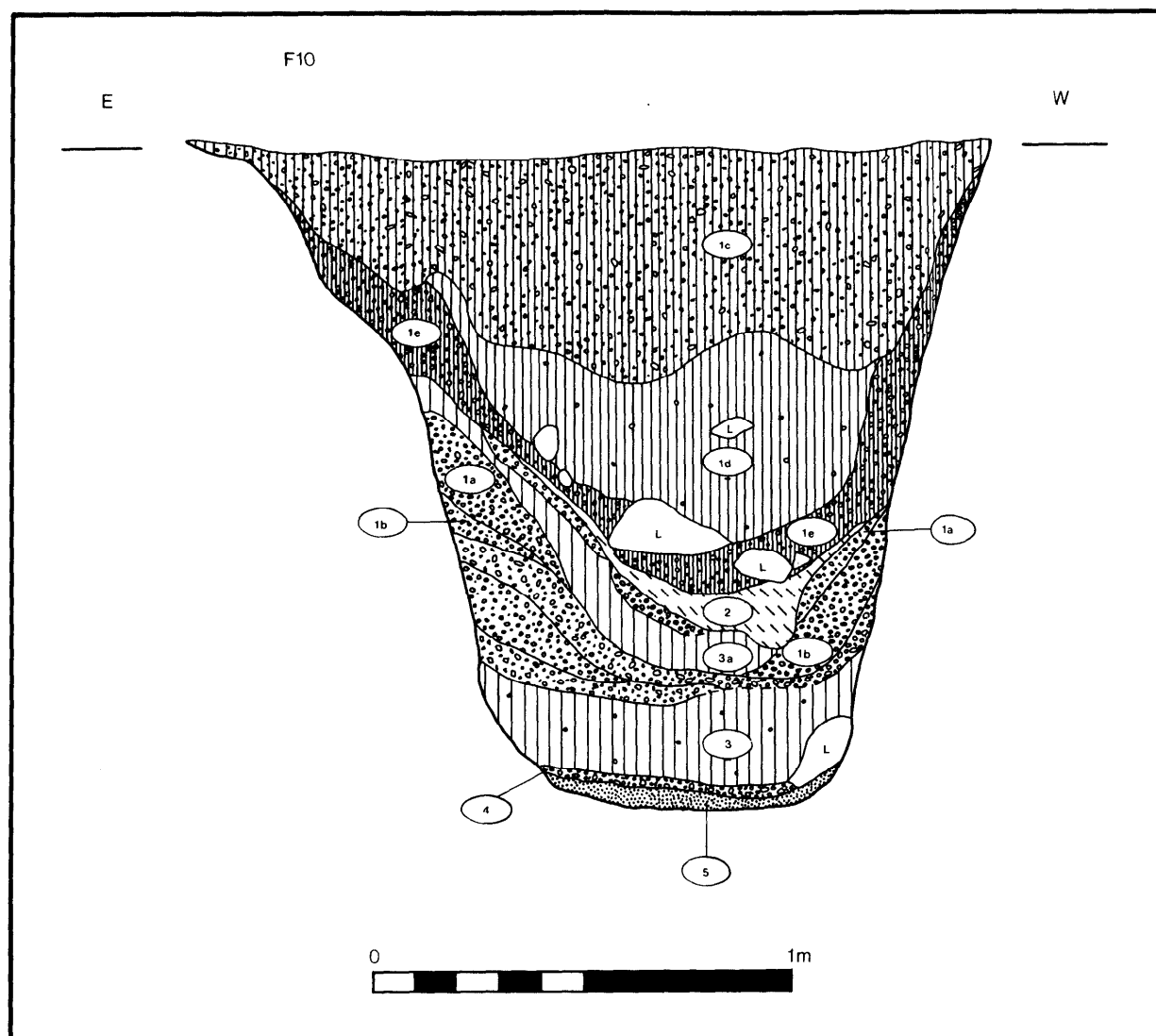


Figure 66 SOU 18: F10. Key: L limestone. See also fig 17.

outspreading of part of the topfill from these pits. The excavator's interpretation of the two linear features as plough marks is extremely plausible.

Two other linear features, which flanked these putative plough marks, were different in form. Flat-bottomed and dug (as the excavator noted) to a shovel's width, they had served no structural function; but may have been brickearth-digging trenches. Such an activity perhaps led to the disturbance in the north-west corner of trench A, where was found a rectangular feature (the shape of which has been distorted in fig 65). This was about 0.4m deep and backfilled with redeposited topsoil intermixed with modern artefacts. It may have been a brickearth-digging trench of a form noted elsewhere in Hamwic.

Other disturbance consisted of five scaffolding post-holes, three of which had been cut through the linear features, and a Victorian 'dead well'. These

were associated presumably with the houses erected in the area by the 1840s.

Early features

Pits

F10 (fig 66) was sub-rectangular in plan and section and 1.59m deep. Its primary fills were redeposited natural brickearth (layer 5), gravel (layer 4), or a mixture of the two (layer 3). Only layer 3 contained any finds. These included seeds, wood fragments, and a number of inclusions identified by F Green (MF1:ES) as probably human cess. Over these were further deposits of gravel (layers 1a-b) as well as 'grey clayey earth' (layer 3a) and 'organic material' (layer 2). It was noted that layer 1a was 'green and cess-stained'. Layer 1, above all these, was at least three layers, identified in this report as layers 1c-e.

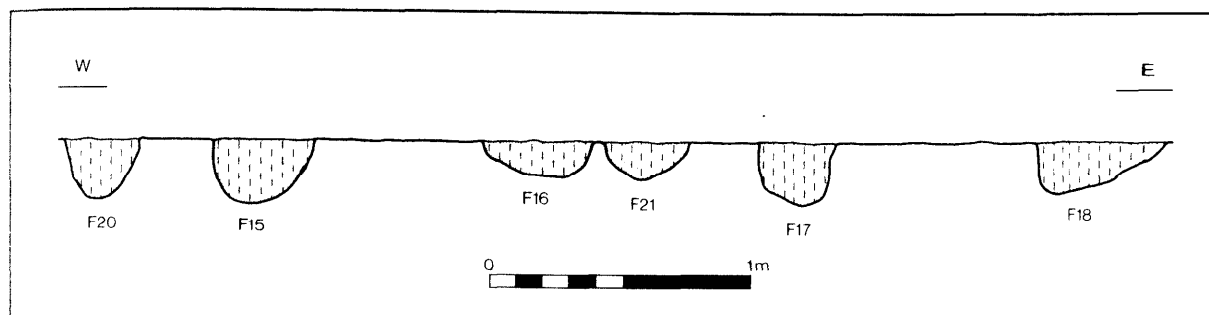


Figure 67 SOU 18: FF15-18 and 20-1. See fig 17 for the key.

Layer 1e comprised 'dense small gravel', perhaps 60% gravel; layer 1d perhaps 5% gravel and a large quantity of animal bones; and layer 1c 'dense large gravel', perhaps 70% gravel. All were bedded in a matrix of 'black earth'.

The large amount of redeposited gravel in the bottom half of the feature suggests that the initial fill was quickly achieved. The fact that undressed blocks of the same Tertiary limestone were scattered throughout layers 1d, 1c, and 3 suggests further that most of the pit was swiftly backfilled. Noting that F10 had been cut some 1.17m into the natural gravel, the excavator interpreted the feature as a well. Lacking any sign of a shaft, the pit may not have been used as such, but conceivably had been dug with the intention of using it as a well. The early fills indicate that, as it was being backfilled with brickearth and gravel, it was probably being used as a cess pit into which some domestic rubbish was also thrown. Its two upper fills, especially layer 1d, seem to have been derived partly from domestic refuse.

F12 had been cut through F14. It was sub-rectangular in plan and V-shaped in section. At most 1.07m deep, it had been cut 0.44m into the underlying gravel. Its initial fills comprised seven layers of redeposited brickearth and gravel. Together, these were at most 0.28m thick. Over these were two layers of 'white lime?' separated by a thin spread of 'clayey earth with heavy charcoal staining'. The 'lime', which was at most 0.28m thick, seems to have been burnt chalk. The upper half of the pit was filled with gravel and domestic refuse intermixed with 'black earth'. Nothing suggests that the 'lime' had been burnt *in situ*. In shape and initial fill, F12 also resembles an unfinished well. There are some slight indications that the feature had been used as a cess pit while it was being infilled, and had ended by being filled with rubbish.

P13 was sub-rectangular in plan. Flat-bottomed, with sloping sides, it was 0.85m deep. It had been filled with interspersed layers of redeposited brickearth or gravel or both, and domestic refuse.

F14, cut by F12, was roughly oval in plan and perhaps bowl-shaped in section. At most 0.77m deep, it contained only two layers. Over its southern side was a spread of redeposited brickearth, no

more than 0.11m thick. The main fill was of redeposited gravel 'indistinguishable from the natural gravel'. This may have been thrown into the pit after it had been dug out in another area. If so, it is likely that F14 had been deliberately left open, and one might interpret the brickearth layer as the remains of a lining to the pit. Such was the excavator's interpretation. However, there are no other clues to the intended function of this pit,

F19, apparently cut, by FF24 and 29, was similar in shape to F13, but was only 0.45m deep. It had been filled with three layers. The bottom of these, confined to the base of the pit and at most 0.09m thick, comprised 'dark grey brickearth containing much charcoal and [burnt] daub, a piece of lava, and some bone'. This was overlain by gravel up to 0.34m thick, which contained thick streaky inclusions of charcoal and some 'daub' — these being more noticeable towards the west. The upper layer was redeposited brickearth containing 'some charcoal and gravel'. It was at most 0.36m thick.

Of the two later features, F29, which may have been a post-hole, is described below. F24, an oval patch of 'black soil, gravel', and domestic rubbish is more likely to have been a final fill of F19. As such, it is not shown on fig 65.

F25 was scarcely exposed by the excavations. At least 0.56m deep, it contained at least three layers, none of which indicates how or why the pit was filled.

FF31 and 32 were two or three unexcavated pits, their upper surfaces exposed in trench B.

Structural evidence

It appears that post-holes were limited to the western half of SOU 18. Such an arrangement may have been connected with the pits that lay to the east of the post-holes: these formed a line perhaps at a division between properties.

The evidence presented on fig 65 cannot easily be interpreted further. The excavator supposed that FF15-18, 20, and 21 (fig 67) formed a line of post-holes, each of which had been filled with 'grey brickearth' containing some gravel. Similarly constituted 'stains' were noted elsewhere during excavation. These have been shown as FF34-43.

F34 was at least 0.15m deep, FF35-8 at least 0.08m deep, and the rest no more than 0.05m deep. None was formally investigated. Depending on how many of these 'stains' are reinterpreted as post-holes, one might see a continuation of the somewhat irregular line as far as F38; a number of internal features north of FF17 and 18, between which there had been a doorway perhaps; or two separate buildings, one with an eastern end lying between FF34 and 39, the other with a south-western corner at F17. An objection to this last interpretation is the absence of any sign of a northern return to the east of F20. It might be thought instead that a southern return is marked by F29. According to an interpretative sketch section, this feature was about 0.35m deep and had been dug through all three layers in F19. Despite its surface appearance as 'an oval patch of black soil and gravel', it could not be followed with any certainty through those layers. If it existed (and the excavator insisted that it did), presumably it was a post-hole.

Dating and interpretation

Dating evidence was recovered from FF10, 12, 13, 19, 24, and 28. Of these features, FF12, 13, 19, and 24 contained very little pottery — sufficient, perhaps, to date their fills as Middle Saxon, but insufficient to refine that date. In a middle layer of F13, however, was found a coin (item 14; M91 bis) that may have been a forgery of a *BMC* Type 49 sceat.

Pottery from the lower fills of F10 may be dated to the early Middle Saxon period, and pottery from the otherwise undistinguished 'layer 1' to the mid Middle Saxon period. This distinction may indicate that the infilling was more protracted than has been suggested above. The post-hole, F28, contained two sherds of pottery that together weighed 88g. These may have been used as packing. If they were, the post-hole could be dated by them to the early Middle

Saxon period. Perhaps because of the large amounts of brickearth and gravel thrown back into the pits, only 1821g of pottery was recovered. Some 32% (by weight) of this assemblage comprised imported wares; indicating perhaps that SOU 18 stood close to the Middle Saxon waterfront.

The large quantity of redeposited brickearth and gravel makes the interpretation of the pits somewhat difficult. It has been argued, by analogy with features investigated elsewhere in Hamwic, that FF10 and 12 may have been unfinished wells. Such an interpretation depends in part on the fact that gravel had been thrown back into these features; but it is plain that such an activity was not uncommon at SOU 18 regardless of the type of pit that had been dug. In consequence, any suggestion that FF10 and 12 had been dug as well pits can be advanced only very hesitantly.

A related problem affects other interpretations of F10, especially its layer 1c. On almost any other site in Hamwic, one would be inclined to see that layer as the remains of an above-ground gravel surface, the existence of which marks a hiatus in the infilling of the pit. This interpretation gains some credence if one further supposes that the later pottery from 'layer 1' had mainly been found in the rubbishy layer 1d. Since, however, nearly every layer in F10 contained substantial amounts of gravel, it seems unwise to distinguish one layer as not directly related to the infilling of the pit.

But the evidence does provide one corrective to a possibly mistaken interpretation. Elsewhere in this volume, pits containing little but gravel are thought to have been probably modern soakaways. This interpretation cannot be made of F14, a pit cut by F12. However, the significance of the gravel fill of F14 is difficult to assess. One might see it as only a more intense version of the gravel layers found in other pits; as a layer for once unmixed with rubbish or cess. More probably, one might see this as the opportunistic disposal into an empty hole of gravel dislodged when another pit was dug in the vicinity.

SOU 32 (AH 23)

Introduction

Investigation of a large area of Clifford Street was hastily arranged in 1968 in advance of redevelopment, and took the form of a rescue excavation. The work was directed by D Hill for the first weeks and by G Lewis thereafter. The topsoil and any stratified surface deposits were removed by bulldozer from a roughly rectangular area measuring about 82m east-west and about 37m north-south. After manual clearance to expose the brickearth, plans of the area were drawn and selected features excavated by hand. Most of the features were serially numbered F1-F641, some being further distinguished with a letter suffix. This writer has added F642. The total area investigated measured some 2530m².

Because so many features were not investigated in any detail, a full excavation report on this site is not presented. Discussion is limited to its cemetery, its street, the industrial evidence, and any associated features.

Cemetery

Ten graves containing human skeletal remains were found, FF401, 402, 412, 414, 418, 421, 428, 447, 465A, and 560. Six other grave-like features were found, FF407, 436, 465, 592, 600, and 642. These contained no human skeletal material. However, because the survival rate of bone within some of the ten certain graves was so low, it is reasonable to assume that at least some of the six grave-like features had been graves. The likelihood is greater if FF436, 465, 592, and 605 had been the graves of infants or children, whose bones would have been less likely to survive (see below).

In addition, some human bone was found in nearby pits: a left femur in F251; another in F305 with a right humerus; a pair of tibiae from F347; and two heads of femurs, one each in FF415 and 416. Overall plans of these features appear as figs 68-69 and drawings of most of the individual graves as figs 70-1.

Information about the features is generally incomplete, in part because the relevant site notebooks given by PV Addyman to SARC have since been lost. The following descriptions have been collated from the information shown or written on the original plans and section drawings, shown on photographs, and already published (Addyman and Hill 1968, 73-4; Addyman 1973, 218-28). This author's silence on a particular point is a sign that he

does not possess the relevant information. Details about the sex and age of those skeletons that now survive are based on a report by Pay (forthcoming).

Graves

F401 had been cut by the pit, F374. The grave was roughly rectangular in plan and section, flat-bottomed, 0.72m wide at its widest surviving point. The body had been placed in a rectangular container, the remains of which survived as a stain, and buried close to the northern edge of the grave. A gap of some 0.25m was left between the container and the southern edge of the grave. This gap had been infilled with 'yellow clay', presumably redeposited brickearth. The soil within the confines of the container was 'dirty orange/brown clay'.

F402 had perhaps been cut by F374. The grave was rectangular in section, flat-bottomed, on average 2.09m long, and 0.14m deep. Its shape in plan was variously drawn, both as a rectangle 0.61m wide, and as widening from east (0.39m) to west (0.65m). The body of an adult had been placed along the centre of the grave, but rather to the west, so that there would have been a gap of about 0.4m between its feet and the eastern end of the grave. Although no wood stain was found, it is argued below that the body may have been placed in a container. The fill of the grave was again 'dirty orange/brown clay'.

F407 was cut by two modern features. It appears to have been rectangular in plan, perhaps narrowing slightly to the eastern end. Its length was at least 1.71m and its greatest surviving width was 0.72m. No skeletal remains seem to have been found. The excavator had difficulty in finding a northern edge to the grave, beyond the area of later disturbance. This suggests that the grave had been backfilled with brickearth. In the eastern corners of the feature were located two post-holes. The larger of these, F407A, measured 0.17m square, and the smaller, F408, 0.10m square. Because of modern disturbance it is not known if a corresponding pair of post-holes existed at the western end. The coincidence of FF407A and 408 with the corners of the supposed grave makes it likely that they were grave-related features.

F412 was cut by the pit, F347. (The tibiae found in that pit were apparently not redeposited from this burial.) The grave was sub-rectangular in plan and section at its eastern end, but tended to widen, deepen slightly, and become rounded in section towards the west. Its greatest width was 0.56m, and it survived to a maximum depth of 0.14m. It was 1.38m long. The body seems to have been laid in the

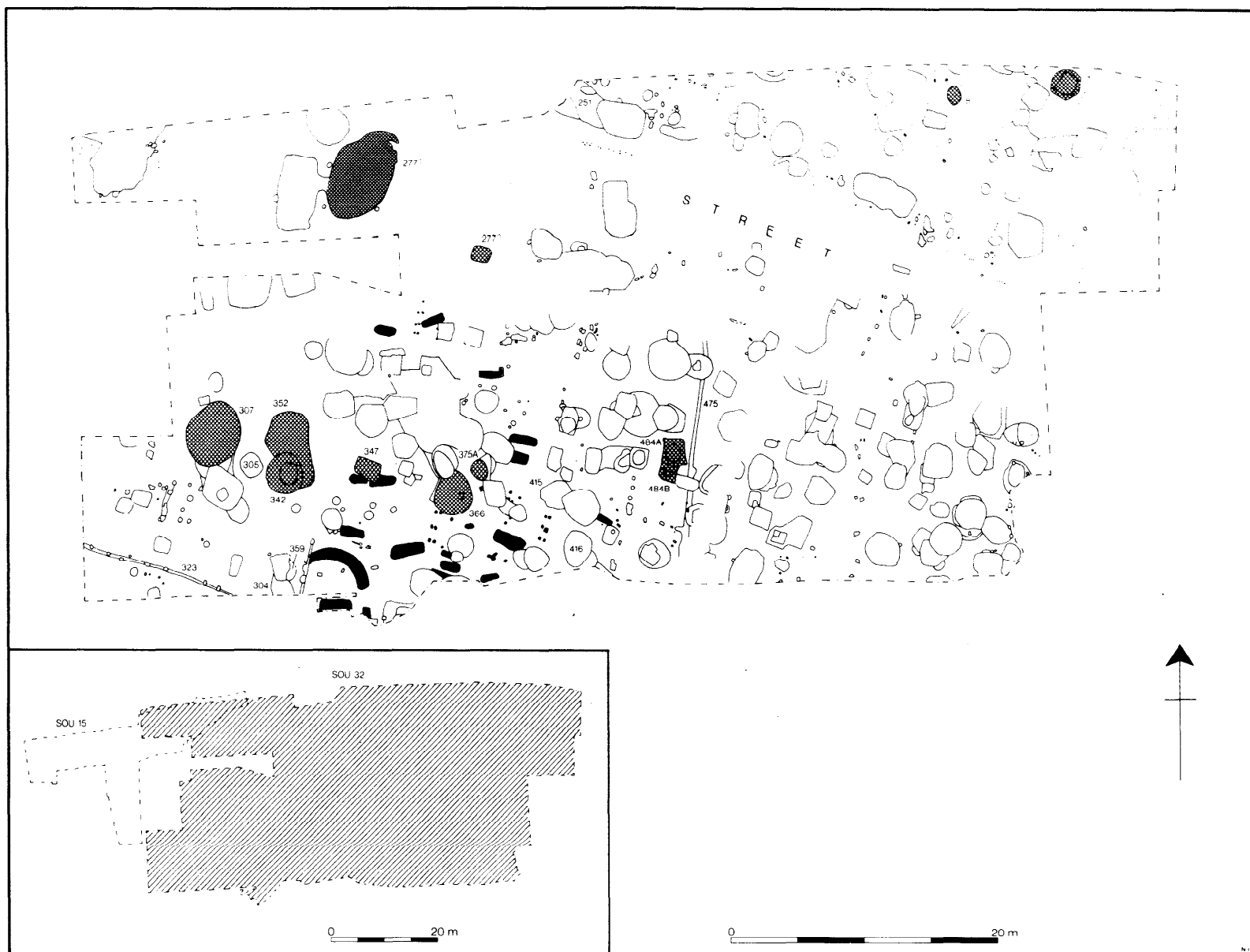


Figure 68 SOU 32: a plan of the entire site, omitting modern disturbance. Features numbered on figs 69-72 or not mentioned in the text are not numbered here. 'F' prefixes to the feature numbers are omitted. The features shown by cross-hatching were pits and wells that contained quantities of bone-working waste, and those shown in solid were part of a cemetery (see fig 69).



Figure 69 SOU 32: the cemetery area. See fig 68 for its general location and figs 70-1 for some more detailed plans. Only features mentioned in the text are numbered here. 'F' prefixes to the feature numbers are omitted. A-E are five possible grave rows and q indicates part of a quernstone found in F397.

southern half of the grave. A sceat was recovered from the grave fill, immediately to the south of the crown of the skull. The skeletal remains have been lost. Judging from the dimensions of the grave and the plan of the in situ positions of the bones, this was the burial of a child.

F414 was also cut by F347, and again appears not to have been the source of the tibiae found in the pit. The grave was sub-rectangular in plan and in its east-west profile, but rounded in its north-south profile. The grave deepened steadily to the west, where it survived to a maximum depth of 0.19m. It was about 2.04m long. The body was laid fairly centrally in the grave. Again, the skeletal remains have been lost, and the planned evidence indicates only that this was not an infant burial.

F418 contained the remains of a female adult who had been buried in a rectangular container, which survived as a wood stain. The container had been placed along the centre line of the grave and rested on two wooden cross-pieces. It is not known whether these survived in fact or as stains, and their shape in section was not recorded. The cross-pieces were 0.68m and 0.63m long. The grave was sub-rectangular in plan but consistently wider to the east. Some 2.53m long, it varied in width between 0.8m and 1.05m. Its depth and shape in section are not certainly known, although the extant photographs show a shallow grave that appears to have been flat-bottomed, steep-sided, and perhaps 0.3m deep.

F421 was cut by the pit, F422. It contained an adult who had been buried in a container, which

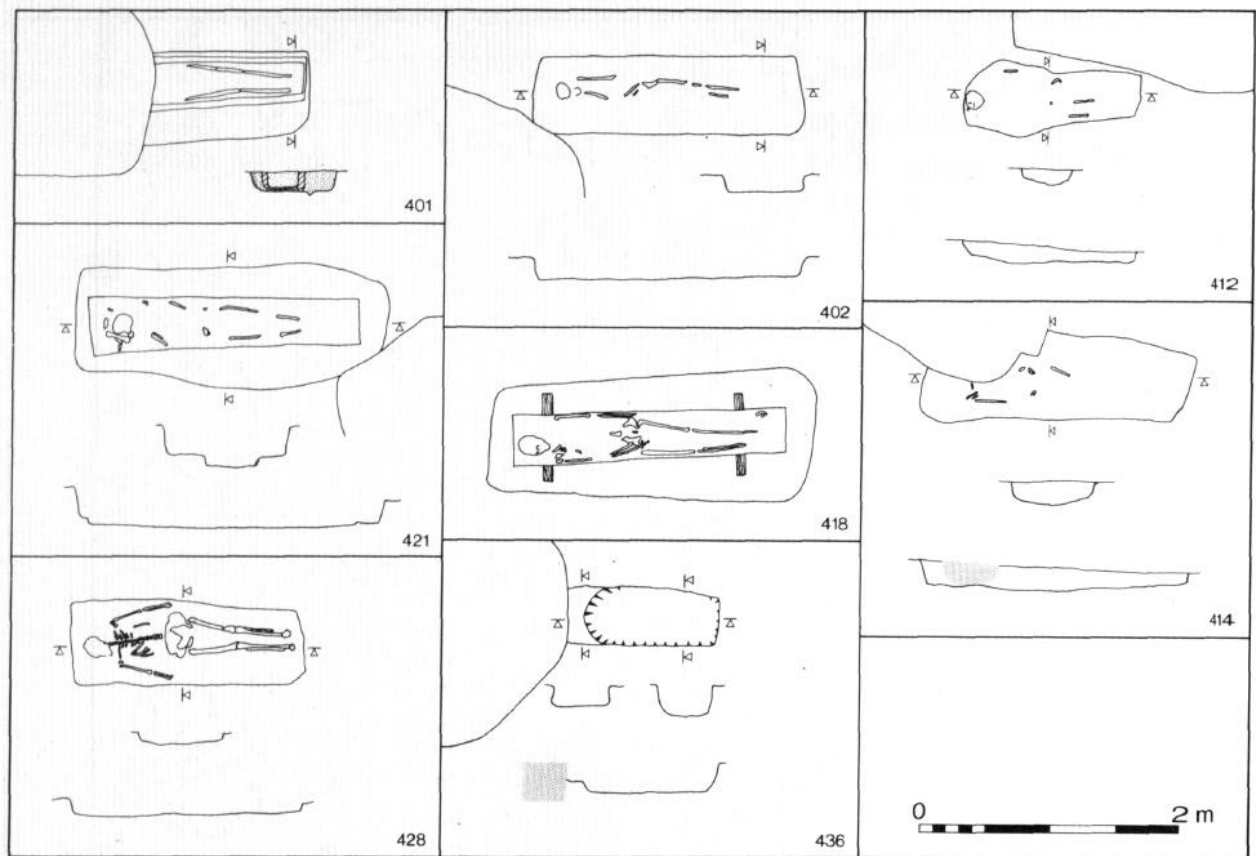


Figure 70 SOU 32: graves 401-36, excepting grave 407. The positioning of the features is shown on fig 69. 'F' prefixes to the feature numbers are omitted. See fig 17 for the key.

survived as a wood stain. The container seems to have been rectangular. It had been placed along the centre line of the grave. The grave was roughly sub-rectangular in plan and section, 2.42m long, and at most 0.96m wide. Generally about 0.24m deep, the grave had cut in its base a rectangular slot 0.08m deep. This slot corresponded in dimensions and position to the container. Apart from the burial, the entire fill of the grave comprised redeposited brickearth. Running along the top of the grave was a slot, F397, sub-rectangular in plan, 0.27m wide, and at most 2.1m long. Although perhaps a later intrusion, the conformity of the linear feature to the grave suggests that it was the bed of a grave marker. (The skeletal remains here ascribed to F421 were provenanced on their finds box to F397. This is taken to have been a synecdochical misnumbering.) Lodged in the grave-fill, immediately to the north of F397, was a fragment of a quernstone. This may also have been intended as a grave marker.

F428 was cut by the pit, F346, and a post-hole, F441A. The grave was sub-rectangular in plan and section, 1.78m long by 0.66m wide, and survived to a depth of 0.12m. It contained the skeleton of an adult male.

F436, apparently also numbered F461, was cut by the pit, F413. Sub-rectangular in plan and section, it was 1.18m long by 0.46m wide, and generally

survived to a depth of 0.24m. At its western end, it lessened in depth to form a 'shelf' 0.16m deep. No skeletal remains were found. If, however, this were a grave, its overall dimensions suggest that it had been dug for the burial of an infant, and the survival of bones could not be expected.

F447 was cut by the post-hole, F448. The burial, the only surviving remains of which were teeth, was that of a child. Four beads (items 1-3 and 453), which had probably been placed as a necklace on the body, were also recovered. The grave was sub-rectangular in plan and section, though somewhat rounded in plan at the western end. It was 1.44m long by at most 0.51m wide, and survived to a depth of 0.16m.

F465 was sub-rectangular in plan and section, with a tendency to roundness of the eastern and western ends. Some 1.56m long by 0.61m wide, it generally survived to a depth of 0.26m. However, dug 0.05m deeper was a sub-rectangular slot, 0.65m long by 0.35m wide. This was positioned along the central line of the feature in its eastern half, and aligned parallel to the main cut of F465. The shape of F465 is that of a grave, but no skeletal remains were found. If it were a grave, it may have been used for the burial of a child.

F465A was cut by two pits, FF363 and 364, and by the post-hole F399G. It contained the remains of a

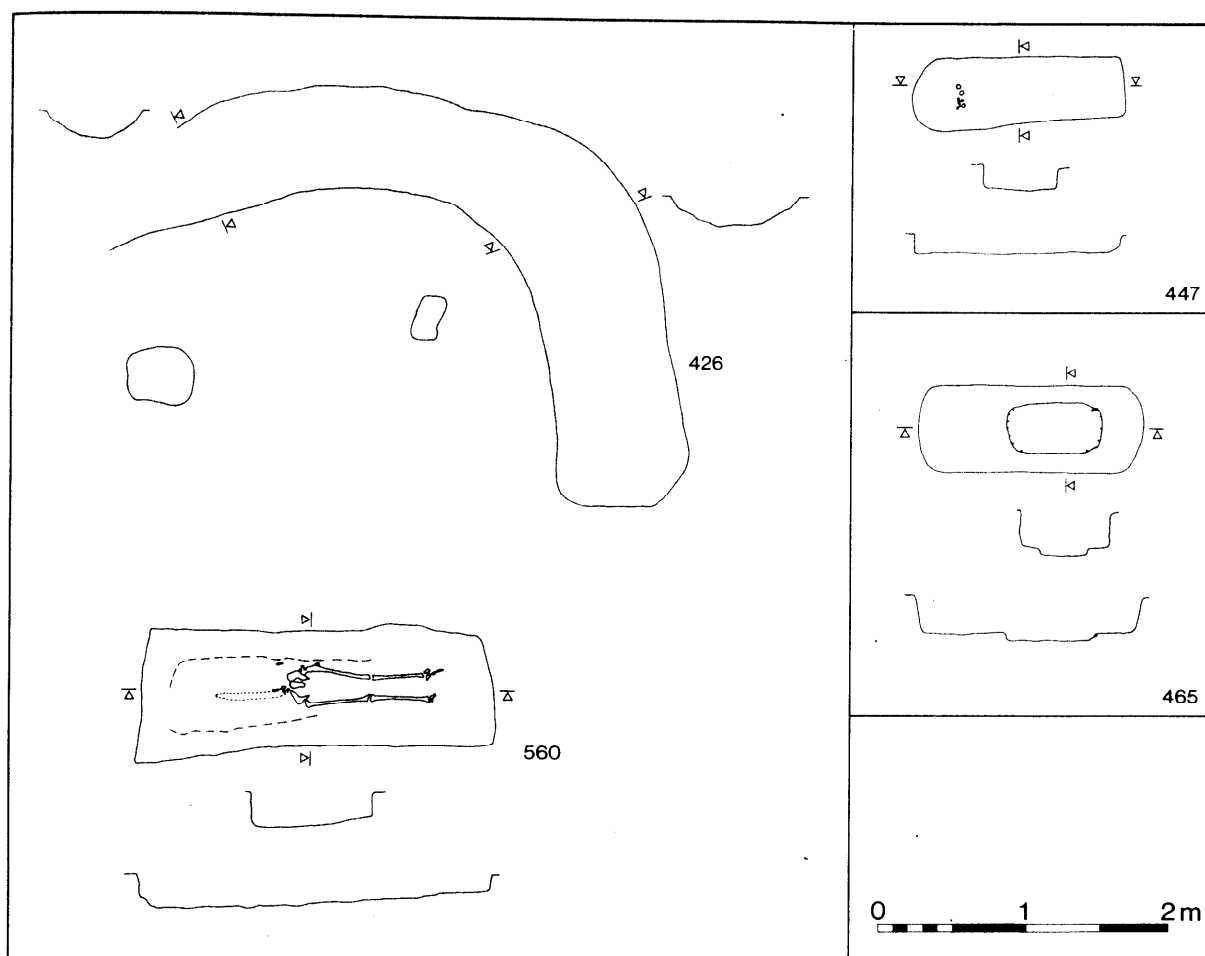


Figure 71 SOU 32: graves 447, 465, and 560, with associated features. See fig 69 for the positioning of the features. 'F' prefixes to the feature numbers are omitted.

juvenile. The grave was probably sub-rectangular in plan, at most 0.22m wide, and at least 0.42m long. The edges of this feature were marked on the original plan with a broken line. It is not clear why this was done.

F560 contained the remains of an adult placed centrally within the grave. If, as is argued below, the skeletal material provenanced as F426 in fact came from F560, the adult was female. The grave was very roughly sub-rectangular in plan and section, but was dug progressively wider and deeper to the west. There was a small 'step' 0.06m deep in the western end, similar to that encountered in F436. The grave was 2.35m long and between 0.76m and 0.92m wide, and survived to a maximum depth of 0.21m. Around the skeleton was a fill of 'yellow clay', presumably redeposited brickearth, and in the outlying areas of the grave the fill consisted mainly of 'sticky grey clay'. At the base of the point of junction of these layers, a discontinuous dark stain was noted. This was supposed by the excavators to have been the decayed remains of a coffin.

To the north of the grave was located a curved ditch, F426, which appears to have continued to the

south-east after an 'entrance gap' or 'causeway) as F584. No clear trace of it was found to the west, and the area south of F560 was unexcavated. Nevertheless, no explanation of F426/584 seems likely other than that it was a penannular ditch. It was 1.39m wide and rounded in section, and survived to a maximum depth of 0.42m. The nature of its fill is unknown, although the evident difficulty in tracing the full extent of the feature suggests that it was filled with redeposited brickearth. It seems to have been cut by the linear feature, F360 and, if it continued to the west of F560, by the pits FF304 and 359. It was presumably a quarry ditch for the raising of an earthwork related to F560.

Human skeletal material is provenanced on its find boxes to F426, but the existence of such material in the ditch fill appears not to have been recorded elsewhere. Contrariwise, although the remains of a skeleton in F560 were drawn *in situ*, no such provenance has been accorded to any of the surviving human bones. It seems very probable therefore that the ascription to F426 is a metonymic error, and the skeleton may be assumed to have been found in the grave F560.

FF592, 600, and 642 are here included as possible graves primarily because they resemble such features, but also because they are marked, along with most of the graves described above, as a distinct group of features on the site plan prepared for publication (Addyman and Hill 1968, 73, fig 27). F642 also appears as an unnumbered grave-like feature on a later plan of the cemetery (Addyman 1973, 224, fig 4). However, the overall site plan appears not to illustrate the authors' final thoughts. They refer (Addyman and Hill 1968, 74) to 'eleven possible graves' rather than sixteen; and one suspects that the discrepancy in numbers is in part accounted for by their exclusion from the reckoning of FF592, 600, and 642, as well as F465A which does not appear on the site plan. One may suppose that no human skeletal remains were found, unsurprisingly in the case of F642.

FF592 and 600 were sub-rectangular in plan. F592 was 1.58m long by 0.7m wide, and F600 1.7m long by 0.49m wide. These dimensions would indicate that, if the features were graves, their occupants were not adults. F642 survived as a sliver of a feature, the rest having been cut away by the pits FF365 and 643. Its north-west corner was rectangular in plan. On the original site plan it was called a grave. No other information about these grave-like features is available.

Some human remains were recovered from the pits, FF251, 305, 347, 415, and 416. Few conclusions can be drawn from this small group of material, especially since relatively few pits were excavated. None of the bones can certainly be linked with any of the skeletons known to have lain in graves, and certainly some of them are the remains of at least two other inhumations. FF347, 415, and 416 were dug within the area of the cemetery. F251 lay some 18m to the north, and F305 6.5m to the west, of the known graves. It may also be noted that a preliminary search of the faunal remains from SOU 15, a site located immediately to the west of SOU 32, has uncovered four fragments of perhaps human bone, recovered from pits lying some 27m from the nearest known grave (J Bourdillon, pers comm).

Extent of the cemetery

Within SOU 32, the cemetery certainly extended 22m north-south and 21m east-west. The discovery of some human bone in two pits outside this area may indicate that the cemetery was originally larger, on SOUs 15 and 32; but this is unlikely. The most probable explanation of this material is that it had been redeposited over some distance.

No definite physical limits to the cemetery were found, unless the eastern boundary was marked by F475, a north-south linear feature situated just over 5m east of F436 (fig 68). It has been suggested that structures associated with penannular ditches were located on the periphery of certain cemeteries (see for instance Hogarth 1973, 118; Philp 1973, 168); and it is possible that the location of F560 and

the associated ditch, F426/F584, was governed by the need to site the earthwork at the western limit of the cemetery.

At some point in the second quarter of the 19th century, during brickearth digging in SOU 47, a field that lay 14m to the south of the area excavated in 1968-9, 'several [human] skeletons were dug up in a part . . . remote from the spot where the other objects are stated to have been found' (Atherley 1850, 162). Presumably here was also recovered 'a glass tumbler . . . by the side of a skeleton' (*ibid*). The field was large and measured some 140m east-west by some 63m north-south, and the location of the graves within this area cannot be more closely specified. Nevertheless, it is a reasonable assumption that they formed a southern continuation of the SOU 32 cemetery. The short and circumstantial description may be taken to imply that these graves were neither very numerous nor widespread. One guesses, therefore, that the original north-south extent of the cemetery was at least 37m, but probably little more. On that assumption, and supposing that the density of burial was fairly constant throughout the cemetery, in all perhaps 40 people had been buried there.

Church

Addyman (1973, 224) identified a number of post-holes as the remains of 'some sort of timber building [within the cemetery], perhaps a church of two cells; perhaps a mortuary chapel; perhaps not a building at all'. This admirable summary of all the possibilities cannot be bettered but must be expanded. So cut about by pits was the area that it is difficult to isolate and identify positively all but the most rudimentary building lines. It is possible that a building of the form supposed by Addyman existed here, albeit one with sets of double posts supporting the shorter walls and irregularly spaced posts supporting the longer walls. Given the oddities of domestic construction encountered elsewhere in Hamwic, such a building would not have been of implausibly different construction. The post-holes running northwards from F444 to F394 may mark the line of an internal division. There may have been a small porch in both the northern and the southern sides of the building, remnants of which survive as F399G and F644. The main dimensions of such a building, if it existed, would have been about 8m by 5.2m.

The lines of the post-holes are apparently interrupted by the pits, and occasionally the post-holes have been cut by them. One might argue that the supposed building was contemporary with the graves, also cut by the pits. A slight clustering of graves either side of the long walls is evident, and there is a rough parallelism between most of these graves and the line of this building. This evidence can be used to suggest that a bicameral church or mortuary chapel existed here, and its existence determined the placement and alignment of the graves.

If this were a church, it is probable that the grave, F421, was dug inside it. But the position of F421 astride the supposed division of the building tends to suggest that the division did not in fact exist, and at least some of the post-holes in the area therefore had nothing to do with the building. Certain other post-holes were not contemporary with or earlier than the graves. F399G was cut through F465A and, further to the south (perhaps too far to be of significance), F448 was cut through F447. It is possible that, similarly, some of the 'church's' post-holes postdated the cemetery.

The possible existence of two rows of graves stretching northwards from F642 to F407 and from F447 to F402 might discredit somewhat the notion that an intervening building stood here (see below, p 178). And the supposed similarity in alignment between the 'church' and nearby graves is perhaps accidental: as is argued below (p 179), the link may have been instead between the alignment of a grave and that of its grave row.

The evidence is ambiguous and the arguments capable of infinite qualification: to summarise Addyman's summary, it is possible but not certain that a building existed here, associated with the cemetery. If it did, it was probably a church.

Penannular ditch

Despite the paucity of the available evidence, it is here assumed that FF426 and 584 represent the remains of a penannular ditch dug around the grave, F560. The soil upcast from this ditch was presumably the major part of the funerary structure, but what shape this took is a matter for conjecture. Comparison might be made with the Bargates site in Christchurch where a late pagan Anglo-Saxon cemetery comprised secondary inhumations within Bronze Age barrows but also included a grave surrounded by a penannular ditch (Jarvis 1983, 107, fig 57), a combination that tends to suggest that the single grave had been covered by a mound.

The area within the ditch at SOU 32 probably measured some 17m^2 , and the volume of soil excavated was perhaps 7m^3 , or 9m^3 if about 0.2m of this feature has been lost because of later disturbance. Although barely sufficient, this 7m^3 or more of soil would have been enough to allow the erection of a low mound over the grave; a mound of probably less than a metre's height. The grave seems not to have been enclosed by a mausoleum: with the exception of two post-holes to the north of F560, which may have been later features, no possible remains of such a structure were noted in the area. The existence of such a mound would imply that the 'entrance way' had no practical function (compare Hedges and Buckley 1985, 17-19).

However, it is still possible that the 'entrance way' was indeed meant to give access to the area of the grave. The upcast soil could have been used to form a bank within or without the interrupted circuit

(compare Musty 1969, 112, where it is also argued that an external bank would have given the appearance of a disc barrow).

Grave markers

It has been supposed that F560 was marked by a small barrow or bank. It may further be supposed that the sites of the other graves were indicated by small heaps of soil left over from the digging and infilling of the graves. There is evidence that more formal grave markers were used with FF407 and 421.

In the case of F407, post-holes were found in the eastern corners of the grave, and one presumes that another pair had existed in the later-disturbed western corners. These may have been the equivalent of the sockets found in the sides of graves uncovered at St Peter's, Kent (Hogarth 1973, 109 ll), and have had a similar function. The posts could have supported a roofed superstructure, or been the uprights against which planks were set (compare the 'kerb-slots' found at St Peter's: *ibid*, 113-15), or performed both functions. If horizontal planks had been supported by corner posts, perhaps they revetted a small mound of earth over the grave.

Running along most of the length of the top of F421 was a narrow slot, F397, shown on fig 69. This might be compared with the beam slot' overrunning grave 2 at SOU 34 (see below, p 193). It seems unlikely that F397 was other than a grave-related feature, and it was probably the setting for a horizontal grave marker. The quern fragment found immediately nearby, if not part of later disturbance, may have formed part of this marker.

Grave types

The depth of ten graves and grave-like features is known. This varied from 0.12m (F428) to 0.32m (F421). The average depth was 0.21m. These are surviving depths, and Middle Saxon levels seem to have been reduced by later disturbance. Nevertheless, it is probable that all the graves were shallow.

The graves were usually sub-rectangular in plan and section, and dug only slightly larger than the body or its container. About a third of the graves (FF402, 412, 414, 418, 560, and perhaps 401 and 407) tended to widen or deepen to the west. This increase may have been deliberate and connected with the need to accommodate the container or an enshrouded body. Alternatively, it may signify nothing more than that the grave diggers were not overly concerned to produce a perfectly rectangular cut: this unconcern is perhaps embodied in the roundedness of many corners and the fact that F421 widened to the east. Two graves were relatively wide: F418 presumably because the space was left for a coffin's cross supports; and F421 perhaps through carelessness.

There is no evidence that the extra width of these graves was connected with the provision of chambers, although an argument for the existence of narrow chambers might be developed. In five cases, the base of a grave was not flat. The cuts for F418's cross-supports have already been mentioned above. Cut into the bottom of F421 was a rectangular slot, 0.08m deep, which corresponded in position to the wood stains found in that grave. This had the effect of leaving a regular ledge on all four sides of the grave. Similar ledges have tentatively been interpreted as the supports for a grave-lid (*ibid*, 110-11); but such an interpretation seems unlikely here, given the relative shallowness of the slot. Bather, one must assume that the container was set into the bottom of the grave.

Two graves (FF436 and 560) were dug with ledges in the western end only. F436's ledge, at 0.16m high, would have been just high enough to allow clearance of supine body; but the height of the other, 0.06m, would not. It again seems likely, therefore, that the ledge delimited the area of the grave in which the body was laid. Late Saxon examples of this sort of feature have been excavated at Norwich, where they are thought to have been the guiding edges of plank linings (Ayers 1985, 19). Such is the most plausible explanation of the internal features of these three graves from SOU 32, but it does not wholly agree with other evidence, presented in the next section. Nor does it properly explain the shape of F465.

The cut in the bottom of F465 was 0.65m long, 0.35m wide, and 0.05m deep. It was considerably smaller, then, than the grave which was 1.56m long and 0.61m wide. If, as has been suggested above, F465 was a child's grave, the cut may have been prepared to receive the body. However, without invoking the unsatisfactory explanation of human error or a last-minute change in burial arrangements, no reason can be offered as to why the grave was more than four times larger than the cut within it.

Coffins and other containers

Of perhaps sixteen burials represented by surviving graves or grave-like features, the evidence from eight is too incomplete to allow any assessment to be made of whether or not the burials had been buried in a container. In one further case (F428), if a coffin had been used it must have been as broad as the grave so as to accommodate the body's splayed arms. Despite the evidence of some bone movement, no wood stain was noted around this well preserved skeleton, and the balance of probabilities is that it was not coffined. One may argue that at least seven burials (43.8% of the sixteen burials; 87.5% of the eight that are complete enough) involved the use of a separate container. As has just been pointed out, in four cases (FF421, 436, 465, and 560) the internal features of the graves might suggest that they were lined with wood. In four cases (FF401, 418, 421, and 560) a wood stain was noted. There was no such

stain in the grave of F402, whose skeleton was badly preserved, but the surviving bones show that the body had been tightly pent, and that there had been significant movement of bone, apparently within an open space after burial.

The containers demarked by the wood stains were narrow and varied only between 0.37m (F401) and 0.39m (F421) at mid-point. Their lengths were also roughly equal: 2.07m (F421), 2.09m (F418), and perhaps 2.10m (F560). Their shape in section cannot be ascertained. In plan, they were roughly rectangular or slightly trapezoidal. The containers of FF418 and 421 widened slightly and regularly from foot to head. The available evidence does not discredit the possibility that the other coffins were similarly shaped. There was no evidence of metal fittings having been used in the construction.

In two cases (FF418 and 560) and possibly in a third (F421), it appears that the containers were longer than was needed, and considerable foot-space was left. There is no readily obvious explanation of this phenomenon, but it is possible that differently sized individuals were being accommodated in standardised coffins. This possibility might find support in the rough uniformity of the containers' dimensions.

In one case (F418) the container rested on cross-supports and presumably was a coffin. Similar arrangements have been encountered in the Low Countries (see, for instance, Roosens and Alenus-Lecerf, 1965, 15-85; de Boe 1970, 9-103; Verwers 1973, 315-29; and Verwers 1978, 252-305), and at St Peter's in Kent (Hogarth 1973, 112-3). It appears likely that, as with the other English example, the cross-pieces found at SOU 32 were set into the floor of the graves. Other cuts into the grave, perhaps related to the use of coffins, are discussed below.

Grave rows

Up to five rows of graves may be discerned on a plan of the cemetery (fig 69). The westernmost row (A) comprises four or five graves: FF412, 428, 560, and 592, with F414 appended perhaps. To the east lies a row (B) of two graves, FF418 and 600. East of that there is a row (C) of three or four graves: FF407, 465, 465A, and 642. If a church had existed in the position supposed by Addyman, F407 would represent presumably a solitary grave or part of another row. To the east, a fourth row (D) may consist of FF401, 402, 421, and 447. The existence of a church here would divide the row into three sections, with F447 a solitary grave or part of another row and F421 dug inside the church. Finally, F436 may have been the survivor of an easternmost row (E).

The *prima facie* evidence against this interpretation is strong. Two rows are represented by a total of three graves, and two other rows may in fact have been four rows and a church-burial. Nevertheless, the alignments of the posited rows vary by only

some 8° : to the nearest whole degree, and where 0° equals OS north, these alignments are A 10°, B 6°, C and D 14°, and E incalculable. There is also some evidence that individual grave alignments varied according to the row in which they were dug - see the following section. Although the argument is difficult to sustain in the case of F436, which may have been a solitary grave, it is possible that graves belonging to other rows have been wholly removed by later pit digging; and common-sense appeals to the numbers found may be misleading therefore. However, few of the intervening pits were excavated, and one cannot check this possibility by reference to the material recovered.

Grave alignments

Included in the supplement (MF1:B4-6) are data that indicate a significant, positive correlation between the alignments of a grave and its grave row. It is yet possible that all graves had been aligned on, or parallel to, a single feature. The church, if it existed, was aligned at 108°; the mean alignment of all rows except row B lay within 10° of this; and the closest similarity was found in rows C and D, rows that would have lain either side of the supposed church. If F418 in row B had been dug pointing at the church, the otherwise eccentric, mean alignment of row B might also be made to harmonize with a church-based interpretation.

Dating and summary

It is reasonable to suppose that this cemetery of perhaps 40 graves was in existence for only a short period, and that the graves are all roughly contemporary with each other. F412 contained an early, BMC Type 54 sceat, apparently as part of its original fill (item 412; M113). Such coins were struck probably in the period 700-15 (Blackburn 1984, 171, table 2). No other closely datable finds were recovered from the graves. Four of the pits that cut the graves were investigated. F363 contained mid Middle Saxon pottery and FF347, 374, and 413 mid or late Middle Saxon pottery. On internal evidence, then, and assuming these graves were dug in fairly quick succession, the cemetery was in use probably for some time in the first half of the 8th century. It is unfortunate that the 'glass tumbler' found in a nearby grave in the 19th century is not readily identifiable and cannot be used to help refine this date further.

Similar grave structures have been uncovered at St Peter's and apparently elsewhere in Kent. They have been provisionally dated to the late 7th and the 8th centuries (Hogarth 1973, 116-19). Such dates are effectively the same as those suggested for the SOU 32 cemetery, and might be preferred to the evidence from Continental cemeteries which is datable to the 6th and 7th centuries (see, for instance, de Boe 1970, 109-11; Verwers 1978, 265).

This cemetery provides evidence of the most elaborate burial techniques yet discovered in Hamwic.

Of sixteen graves and grave-like features, it seems that one was covered or enclosed by an earthwork, the positions of two others were deliberately marked, and one contained coffin supports. Four graves had a rectangular slot cut in the base. One of the marked graves may have been dug inside a church. In this latter case, if there had been a church-burial, it would strongly imply that the individual was perceived to have been of high status.

Street

Location

The precise location of the street is debatable. The gravel was bulldozed away when the site was opened, and only later was it realised that a street had disappeared. RG Thomson (pers comm) remembers that the gravel was aligned far more to the south-east than is shown on the map of the site (Addyman and Hill 1968, 73, fig 27). Some support for his contention is provided by Addyman and Hill, who suggested that the SOU 32 street was 'perhaps a continuation of one of those located in the 19th century [at SOU 47]' (*ibid*, 74), and implied that it was set 'at right angles to the presumed lagoon edge' (*ibid*, 82). Neither interpretation would be possible unless the street had been aligned more exactly north-west-south-east. (For a recreation of 'the presumed lagoon edge' and a street aligned roughly square to it, see fig 3b.) On the other hand, Addyman and Hill twice affirmed that the street had been aligned 'WNW-ESE' (*ibid*, 72 and 82); which is how it was shown on their site plan. There is no evidence that the gravel had been laid over the pits in the south-east corner of the site, and it is unlikely that every one of these pits had been cut through the feature. Accordingly, this writer follows the normal view that the street had lain in a comparatively featureless area of the site, and had been aligned in the manner clearly stated by Addyman and Hill.

Measurements

When the excavator later noted that the position of the lost gravel coincided with a comparatively featureless area of the site, the conclusion was drawn that this had been 'presumably a road' with 'pits and other features . . . laid out for the most part parallel . . . or at right angles to it' (*ibid*, 74).

It is not known how thick this feature was, or how many metallings comprised it. Its width was reportedly 'some 25 feet [7.6m]' (*ibid*, 72). This was an overestimate, perhaps, that did not distinguish the true surface from flints displaced outwards by later ploughing. If the argument about parallel and rectangular features is correct, the distance of 5m between the produced line of the stake-holes, FF137-40, and the northernmost of the post-holes forming a line to the west of the pit, F630, may represent more closely the proper width of the gravel.

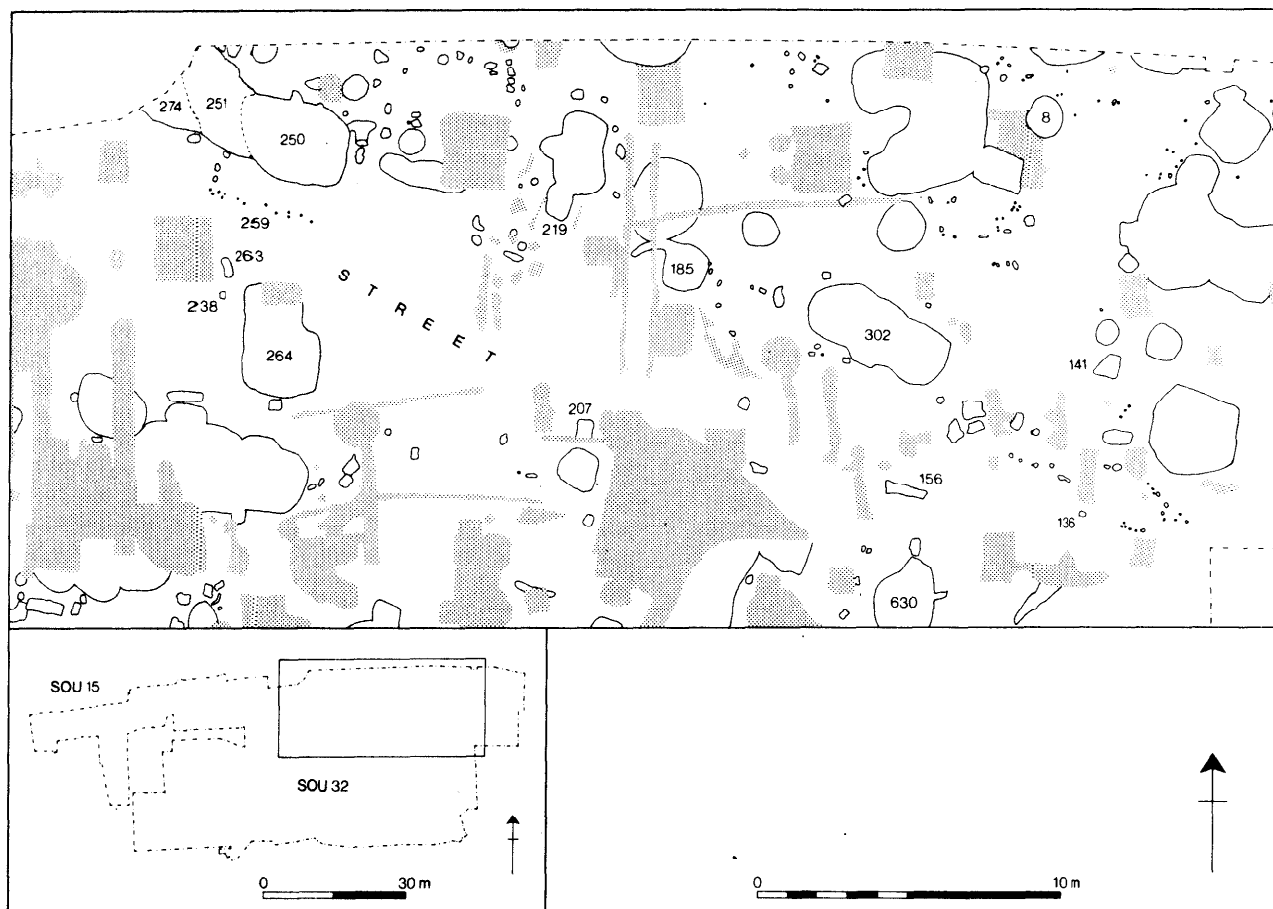


Figure 72 SOU 32: the area of the street. Only features referred to in the text are numbered here. 'F' prefixes to the feature numbers are omitted.

The gravel ran 'across the site' (ibid, 74). Depending on the alignment of the feature, it would have therefore been at least as long as 40m, and perhaps as much as 52m. According to the alignment preferred below, the greater distance is more likely.

Many areas to the south of the gravel were comparatively featureless, but there was a clustering of features to the north of the gravel (fig 72); and this allows one to state fairly confidently that the gravel spread cannot have deviated much from straightness. Its alignment can be variously inferred, from the evidence of the supposedly associated features. In the following sections 0° is OS north.

- 1 If the line of post-holes to the west of the pit F630 had been set out square to the gravel surface, the gravel would have been aligned at 111°. But this can be only an approximate measurement mainly because it cannot be assumed that the building line was exactly square, and also because the alignment of these post-holes may have corresponded to a now-incalculable local anomaly in the line of the gravel.
- 2 The northern edge of the gravel may have been marked by a line running through the line of stake-holes, F259 (nearly parallel therefore

with the pits, FF250, 251, and 274), eastwards through the post-hole, F136, and thence through the line of stake-holes that lay to the east of it. The alignment would have been 108°. However, although there is a satisfyingly high degree of agreement between the extreme ends of this line, no features can be found in the middle section to confirm or deny its existence. The evidence of two supposed fence lines is not overwhelming, therefore.

- 3 Instead, the northern edge could have run slightly further to the north, along the bottom edge of the pits, FF250, 251, and 274, eastwards, roughly parallel to the pit F302, and through the line of stake-holes, some of which are numbered FF137-40. The alignment would have been 109°. This would imply that the fence lines mentioned previously as a possible boundary underlay or were cut through the gravel. Neither possibility may be discounted; but a more serious objection is that the edge has been drawn between the lip of three pits to the west and a short fence line to the east. Nothing in the centre confirms or denies the edge.
- 4 Finally, a line parallel to and virtually equidistant from the pits, FF185, 219, and 302, can

be drawn. This would pass through the centre of the pits, FF250, 251, and 274, and with a slight deviation along the fence line mentioned just above. The alignment would have been $110^{\circ} \pm 1^{\circ}$. The digging of pits into the edge of a street is not unknown (see above, p 34) and the line is suggested along most of its length by the position of one feature or another. Nevertheless, there is little reason to suppose that the pits in the centre of the line (from which the extremes have been produced) were dug at precisely chosen distances from the gravel.

The evidence is slight and ambiguous, but it will be noted that, whatever element, is used as a basis of calculation, the estimated alignment varies only between 108° and 111° . The true alignment perhaps lay at 108° or 109° , the alignments of the fence lines.

Relationships

A number of features may have underlain or been cut through the gravel. Besides those already mentioned, one may point to the pits, FF156 and 264; and the post-holes, FF207, 238, and 263. There are no section drawings of these features.

The fact that the area covered by gravel was kept relatively free of other features indicates that all coexisted. Addyman and Hill (*ibid*, 82) argued further that 'buildings were . . . laid out in relation to the roads. . . . Even the pits, where an axis can be established, exhibit the same parallelism.' The implications of such a layout are considered above, and only site-specific points need be made here.

The evidence from the southern area of SOU 32 - especially from the furthest-removed point, the south-western corner - must be treated with caution. Although, for instance, the 108° alignment of the 'church' and the 109° alignment of the linear feature, F323, accord with that supposed to have been the alignment of the gravel surface (fig 68), it is more likely that their positioning was influenced by one of the gravel streets uncovered farther to the south, at SOU 47, in the 19th century (Kell and Bergne 1864, 69). Nor may the alignments of those features close to the gravel surface be cited without creating a tightly circular argument, for these alignments have been used to establish that of the gravel surface. (One might point out, however, that these alignments are all closely similar to each other's.) Once all these features have been excluded, there remain few that one can suppose to have been contemporary with the gravel surface, and fewer with calculable alignments. The axes of the remaining pits display neither close similarity to each other nor a rectangular relationship with the gravel surface.

One may conclude only that the gravel was laid down before most of the nearby features were dug, and remained in existence with these features.

Dating and interpretation

Few of the features located in the vicinity of the gravel surfaces were excavated. Pottery recovered in small amounts as a result of the cleaning over the surface fills of the pits is datable only to the Middle Saxon period. It is probable that the gravel surface was a Middle Saxon feature, but no further refinement in dating is possible.

The gravel ran in a straight line across the site for a considerable distance, probably at least 50m. It was an early feature of the area, if not the earliest, and was laid down seemingly before the adjacent structural features were dug. These are all characteristics of Hamwic's streets rather than its alleys (see above) and it is extremely likely that this gravel surface was a street.

The relative numbers of features either side of the street has to be commented on. In the first place, it is not certain that figs 68 and 72 wholly accurately represent a lesser quantity immediately to the south of the street. There are small omissions of detail from the original plans of the southern section, and structural features (but not pits) were unrecorded perhaps. A loss of structural evidence could have been compounded by the later disturbance of different parts of the area. If this interpretation is correct, both sides of the street presented roughly mirror images: they were lined by buildings, and behind them lay their yards.

On the other hand, the apparent fewness of features immediately to the south of the street may have been a real one; in which case, the large number of features well to the south has also to be considered (fig 68). In the absence of a wholesale relative dating, this argument is impossible to pursue very far, but it is possible that the focus of occupation to the south of the street lay off-site, alongside another east-west-aligned street. In that case, what may have been exposed at SOU 32 is part of a more complicated pattern, with properties established consistently to the north of streets, and with their rears consistently abutting the southern edge of another street.

If the evidence can be read in favour of either of these views, it can also support a compromise between them. Perhaps we catch a glimpse at SOU 32 of buildings to the north of an east-west-aligned street, with yards behind them; and also buildings to the south of that street, with yards behind. And perhaps we also see other yards, attached to buildings that were concentrated off-site, alongside another street.

Industries

The contents of few of the pits could be excavated, and no coherent picture of industrial activity emerges. Even so, there is some evidence that iron, copper-alloy, and bone were worked on site.

Iron working

Disregarding the 'background noise' of small and scattered amounts of iron slag reportedly found at SOU 32, the only evidence for the working of iron is represented by the contents of a pit apparently observed in the side of a pipe trench. This pit, which survived to a maximum depth of 0.88m, contained three layers. The lowermost one, 0.12m thick, was a 'layer of slag lumps' and was sealed by a 0.44m-thick layer containing 'much slag and daub'.

The pit is numbered F251 on the section drawing, clearly a misnumbering since the F251 shown on all plans was of a different size and was not cut by a pipe trench. Attempts to discover the provenance of this spurious F251 have been unsuccessful.

It was noted on the drawing that a sample of the 'slag and daub' was taken. Some 18.5kg of slag from 'F251' is now held in store. If this truly is a sample, the pit must have contained remarkably large quantities. The material is all smithing slag and includes hearth bottoms, some with hearth lining adhering. The other material saved from 'F251' includes a few small pieces of burnt daub from a wall.

Copper-alloy working

Addyman and Hill (*ibid*, 68) refer to 'a number of examples' of "bronze drippings" found at SOU 32. Nothing more is known of these objects. Recovered from the ploughsoil was item 194, half of a ring-mould made from marl. Despite the poor provenance of the object, the mould may have been used for the manufacture of copper-alloy rings during the Middle Saxon period (see also above, p 56).

Bone working

'Every part of [SOU 32] produced waste, off-cuts, incomplete or broken and bone and antler articles and complete objects' (*ibid*, 75). Of the surviving offcuts, most appears to have come from FF7, 8, 141, 277, 307, 342, 347, 352, 366, 375A, and 484 (fig 68). The interpretation of the distribution of these features is complicated by the fact that no plan of F141 survives. (On internal evidence, it was probably located in the north-eastern corner of the site, near F7.) Also, two pits were numbered F277 on plan, and it is not certain which contained the bone-working evidence. Lastly, very few pits were investigated closely: the distribution of offcuts may be said to have been biased towards those opposite corners of the site where many features were excavated. Nevertheless, there is enough evidence to suggest that bone was being worked in the south-west of the site; also, perhaps, the north-east.

Most of the features may have been roughly contemporary with each other. Excepting FF7, 8, and 141, which can be dated only to the Middle Saxon period, FF277, 307, 342 and probably 375A had been infilled late in that period, the remainder

in the middle of that period or later. Because so many pits were not excavated, it is unclear whether the east-west linear spread of pits found in the south-western corner of the site was a real one or not. However, it may be worth noting that bone-working debris was later found in a pit 15m due west of F307 (SOU 15 F2: see MF1:D7). A summary report by Ian Riddler on the bone-working evidence from SOU 32 forms the rest of this chapter.

Worked bone and antler

A total of 708 offcuts of bone and antler was recorded from SOU 32. This is not a large total, in the light of subsequent work on Hamwic assemblages, and the material itself was neither remarkable nor spectacular. Nonetheless, it has formed a very useful archive, against which later work can be judged.

Most of the material for SOU 32 came from FF 307, 347, and 484. A further eight features produced more than ten offcuts each and details of these are given below. There is no established total that would define a feature as a bone-working pit or layer in itself, but in relative terms three densities of material per feature were established. These are:

50 offcuts and overbone-working feature

11-50 offcuts dispersal from a bone-working feature

1-10 offcuts 'background noise'.

The totals for the three classes are set out in table 4. (In the case of the well, F342, it may be that material was dispersed from F352, through which it had been cut.)

Bone waste dominates the assemblage, and F484 was filled almost exclusively with it, a situation that recalls some of the bone-working pits of SOU 14. FF307 and 347 showed a more balanced mixture of bone and antler, with bone nonetheless more conspicuous in each case.

Most of the bone waste derived from cattle. The overall species representation by animal type, for the site as a whole, is presented in table 5. (Note that totals for bone offcuts are lower than in table 4 because only material that could be specifically identified to species is listed here.)

These figures conform to an emerging pattern for 'mid-period' Hamwic. The relative representation of horse is low when compared with SOU 14, but it is that site which is exceptional (Driver 1984, 399-402). The relative representation of sheep, whale, and post-cranial deer is about average.

The total number of bone offcuts, including those that could not be securely assigned to species, was 440, and the total for antler was 268. Antler offcuts tended to be more numerous in area deposits, which might suggest that they were stratigraphically later than bone offcuts. The evidence is not conclusive but it is possible that the relative use of antler in Hamwic increased over time.

Within the cattle offcuts metapodial representation was predominant and only 42 offcuts of the 432 were not of this bone type. The 42 tended to be

Table 4 Bone-working-waste quantities

a) Bone-working Features			
Feature	Bone	Antler	Total
307	122	35	157
347	75	40	115
484	75	1	76
b) Dispersal from bone-working features?			
Feature	Bone	Antler	Total
7	-	20	20
8	3	12	15
141	1	10	11
277	16	6	22
342	13	3	16
352	10	7	17
366	14	4	18
375A	14	-	14
c) All other contexts			
	Bone	Antler	Total
Other Features	69	59	128
Area Deposits	17	71	88
Unstratified	11	-	11

Table 5 Species representation

Species	No	% of bone offcuts (antler excluded)
Cattle	288	91.4
Sheep	7	2.2
Horse	13	4.1
Deer (post-cr'l)	2	0.6
Whale	5	1.6

Table 6 Cattle metacarpal and metatarsal frequency

Bone type	Male	Female	% male	n
Metacarpus PX	22	16	57.9	38
DL	40	28	58.8	68
Metatarsus PX	20	4	83.3	24
DL	27	10	73.0	37

either radius or tibia and the range of sawn-bone types was restricted, and shows little variety. Frequency-distribution diagrams were produced for measurable proximal and distal metacarpus and metatarsus of cattle for SOU 32. The metacarpus diagrams suggested that there was deliberate selection of male bone. The various figures are given as table 6. It can be seen that the figures for metacarpus are reliable, giving a representation for males of almost 60%. This is almost the reverse of the situation for unworked cattle from Hamwic, where the ratio is roughly 2:1 in favour of females.

The statistics for the metatarsus come from a smaller sample but they are enigmatic because of both the predominance of male specimens and the divergence of readings between the proximal and the distal metatarsus. This may reflect a difference of treatment of that bone from the metacarpus, on the part of the boneworker; but the full significance of these differences has yet to be established. All of the antler and post-cranial material recovered from SOU 32 derived from red deer. Evidence regarding the antler burrs, 39 of which were recovered from this site, will shortly appear (Riddler forthcoming).

SOU 34 (HAM E: AH 16) AND SOU 35 (HAM D: AH 15)

Introduction

SOU 35 antedated SOU 34. It was opened in September 1961 just to the west of the old line of Golden Grove, under the direction of F A Aberg. The site consisted of a north-south trench at most 22.4m long by about 11.0m wide. After the topsoil had been removed by a bulldozer, the underlying surface was cleared and all features not demonstrably modern were excavated.

SOU 34 was opened in January 1962, originally to the north-west of SOU 35, it appears. That phase of excavation comprised a small trench which eventually was extended throughout 1962 until the site measured some 37m wide by up to 20m long. The first trench was opened by a bulldozer, its first extension by a dragline, and its second extension by a bulldozer. Late in 1962 or early in 1963, a third extension was added, a trench in Golden Grove, roughly 14m long by 3m wide. Excavations were directed first by FA Aberg, and from October 1962 onwards by J Pallister. An area of 222m² was exposed at SOU 35, and perhaps 670m² at SOU 34 (see the supplement, MF1:I6-7).

Excavation was consistently pursued by cleaning the machined area by hand, shovelling away any surviving topsoil to expose the underlying brick-earth, cleaning this surface, and excavating any features exposed. Pits were numbered 114-16, 119, 120, 126-8, 130, 132, 136, and 140-62. They were sometimes further distinguished by letter suffixes. Of these, pits up to and including pit 128 were uncovered at SOU 35, with the exception of pit 127. This and the pits numbered higher than 128 were uncovered at SOU 34. Found there also were a linear feature (BS1) seventeen post-holes (PHs1-17) and three burials (graves 1-3).

The excavators usually referred to the natural topsoil as 'clay', presumably some form of brick-earth. They indicated that this soil lay two feet (0.6m) below the ground surface - roughly at a height, therefore, of 3.5m OD. In his site notebook, Aberg recorded that pit 114 was cut through successive natural layers of 'clay' (1.1m deep), 'yellow-orange sand' (0.6m deep), and gravel (at least 0.8m deep). The upper two layers may have been differently constituted or differently weathered versions of one basic layer. Certainly, a separate sand layer cannot be described in photographs of other excavated features, which appear to show an upper layer of brickearth, between 1.2m and 1.6m thick, over gravel. Other evidence of this variation

in thickness comprises the statement that the 'clay' of SOU 35 'was only about 5 feet [1.5m] thick' (SAS 1963d) and the drawn profiles of certain pits excavated at SOU 34 which show the 'clay' as varying in thickness between 0.79m and 1.73m. The gravel underlying the brickearth was at least 1.54m thick.

The first recognisable form taken by later disturbance was brickearth-digging pits, the existence of which was noted at SOU 35 (but not recorded on plan) whenever they had been cut into the fill of Anglo-Saxon pits. No reference to any such features at SOU 34 can be found in the scanty written record of this site; but it may be supposed that brickearth had also been dug there as it was at SOU 35, and just to the east at SOU 43. Other modern disturbance (little of which was planned) comprised cess pits, sewer trenches, pits for Anderson shelters, and perhaps scaffolding post-holes. All features described in this paragraph date from the redevelopment of the area for housing in the 1840s up to the digging of air-raid shelters in about 1940.

Early features

Pits

The writer's silence about the shape, depth, or fill of a pit is due to gaps in the original record. Pits 114-16, 119, 120, 126, 128, and 142 are shown on fig 73. Pits 127, 130, 132, and 155-9 are shown on fig 76. Pits 120, 128, 136, 140-54, and 160-62 are shown on fig 74.

Pit 114 was rectangular in plan. It had vertical sides and a rounded base, and was 2.13m deep. At 1.22m below the surface of the pit a small slot ran continuously around the sides. The slot varied in depth between 0.2m and 0.25m, and in width between 0.08m and 0.15m. This subsidiary feature was probably the result of a collapse or erosion of the band of 'sand' through which the pit was cut (see above). The pit had been disturbed along its western edge by the digging of a 19th-century pit. The sides of pit 114 had been stained green, presumably a result of the high phosphate content of the fill. There was no sign in the fill that this feature had been used as a cess pit, and the four layers in the pit had apparently been derived from domestic refuse.

Pit 115 was roughly oval in plan and rectangular in section. At most 0.92m deep, it was bisected by a

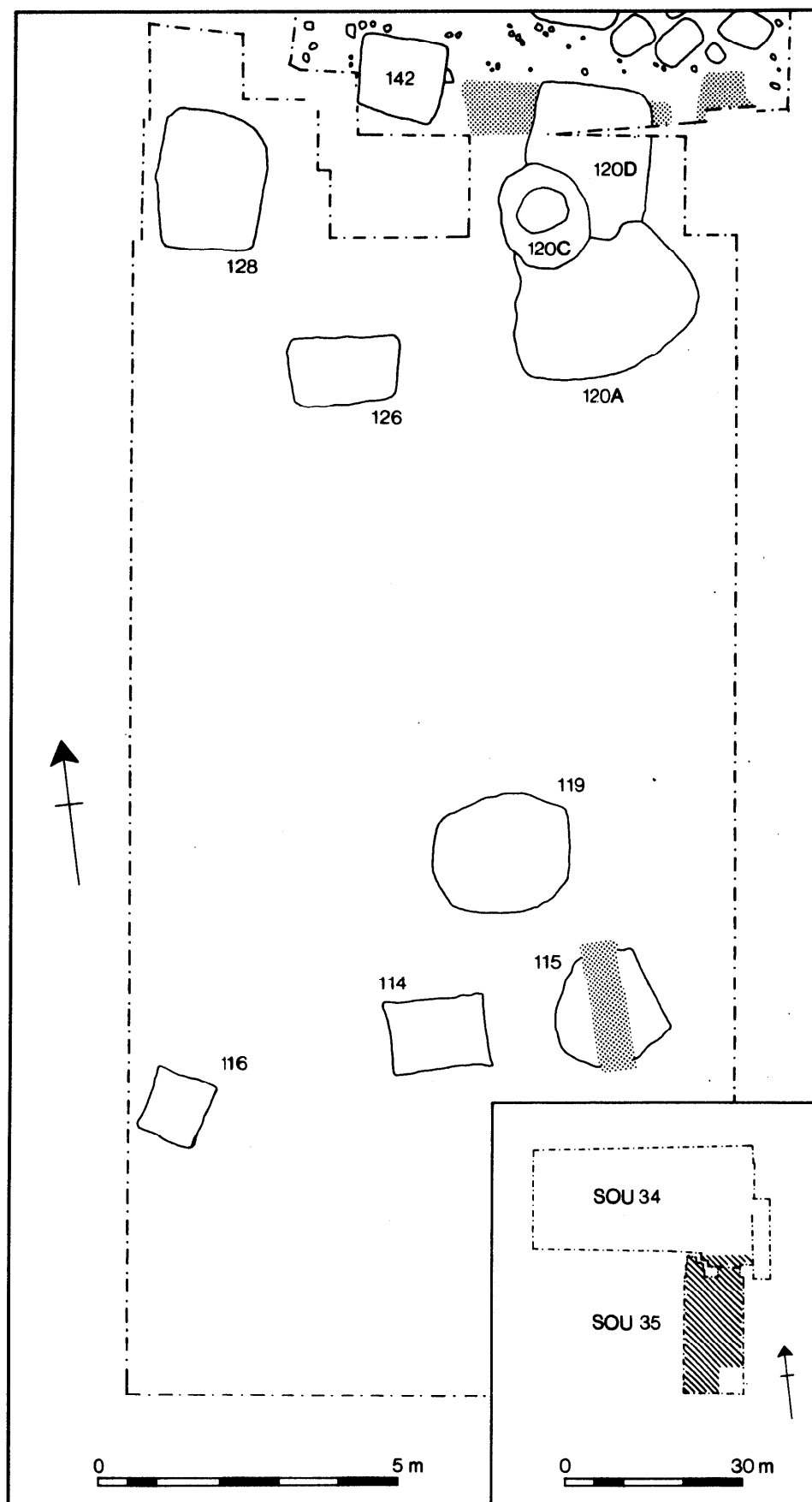
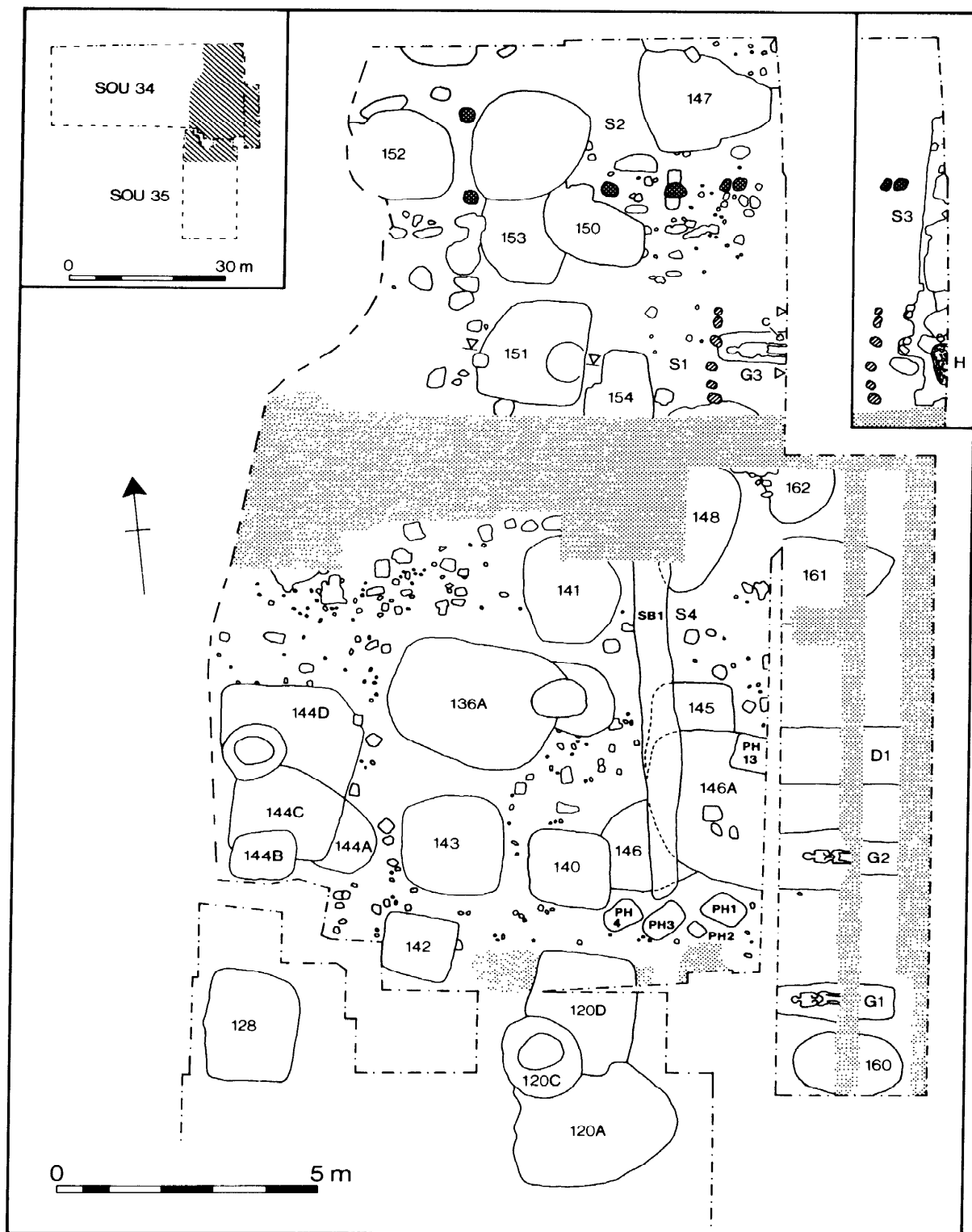


Figure 73 SOU 35: site plan. 'Pit' prefixes to the feature numbers are omitted.



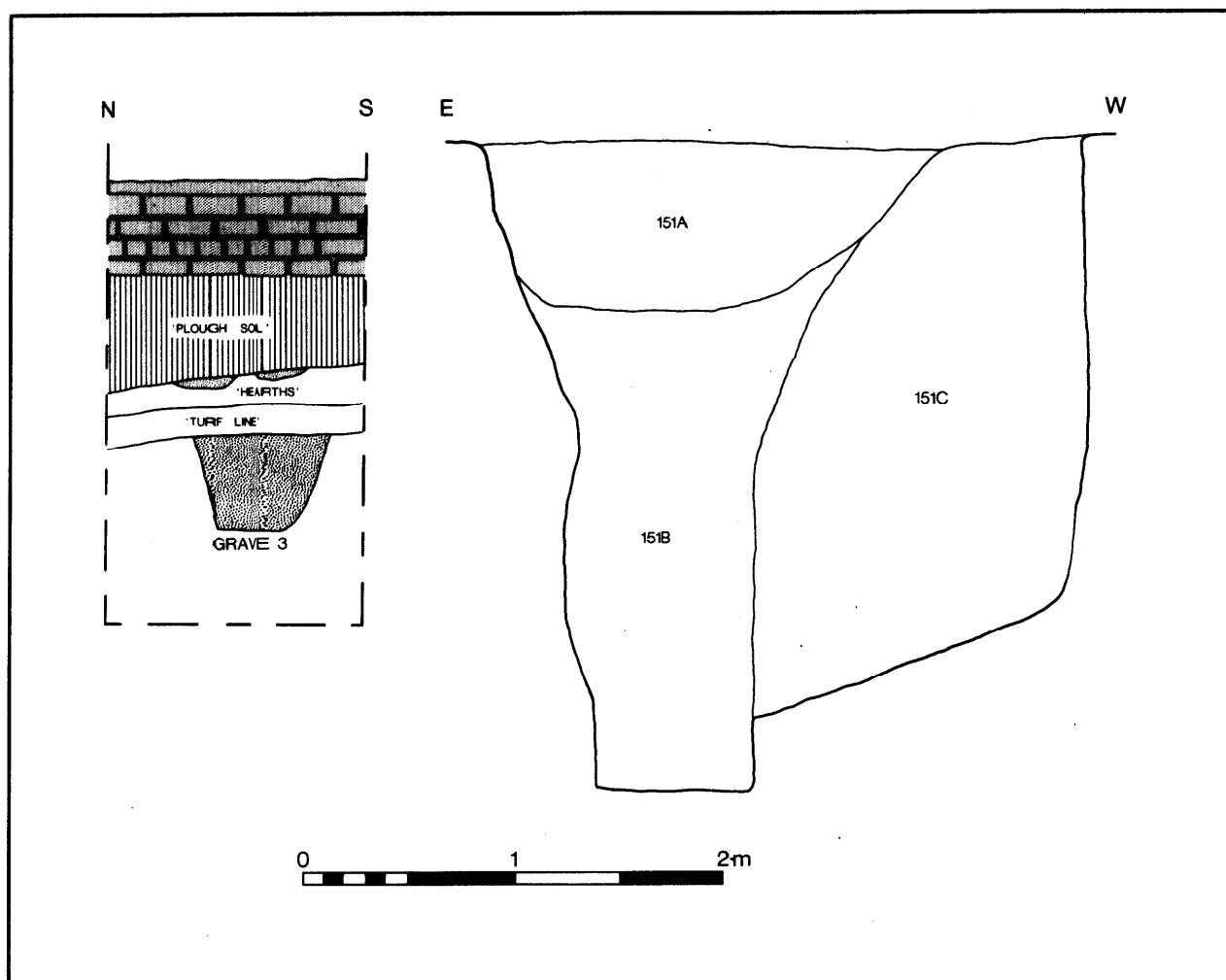


Figure 75 SOU 34: grave 3 (the broken line indicates the limits of the original drawing) and pit 151.

19th-century pipe trench. The single filling of the pit contained domestic refuse.

Pit 116 was rectangular in plan and section, and at most 1.42m deep. The upper part of its eastern edge had been cut away by a 'clay pit'. The upper layer contained much charcoal and burnt daub, and probably represents a clearance of the area after a building had been damaged by fire. Most of the finds from this pit appear to have been deposited as domestic rubbish. Pit 119 was 'oval rather than round' in plan, 1.37m deep, and irregular in section with some bellings outwards of the sides where they had been cut through the natural gravel. The bellings may have been due to a collapse of the sides. If so, the pit had been cleaned out before its final infillings, since no collapsed gravel was noticed in the fill. It is equally possible that the helling was due to the clearance itself. The lowermost layers seem to have been cess intermingled with domestic refuse and sealed by a thick layer of 'clean yellow sandy clay' (presumably redeposited brickearth). The 0.48m of deposits above this sealing layer had apparently derived from domestic rubbish. Most of

the pottery recovered lay in the uppermost 0.14m. The pit had been cut by two 'clay pits' to the north and west, and later by two pipe trenches which overran its southern and eastern sides.

Pit 120A was cut by several 'clay pits' to the east, by pits 120C and 120D, and it seems by pit 120B. It was oval in plan. The pit was reportedly

four to five feet [1.2m-1.5m] deep. The sides sloped gently to a flat bottom, or what was thought to be the bottom. On further examination it was discovered that just off centre there was a scooped out hollow about two feet [0.6m] across and eighteen inches [0.5m] deep packed with bones (SAS 1962c).

Pit 120B was not planned. The excavator described it as a '? rectangular pit of dark uniform fill cut into 120.' It was also said to have been 'very shallow. Nothing of interest was found' (SAS 1962b). If not a separate pit, it may have been the uppermost layer of pit 120A.

Pit 120C was a well cut through pits 120A and 120D. It was constructed by inserting a circular

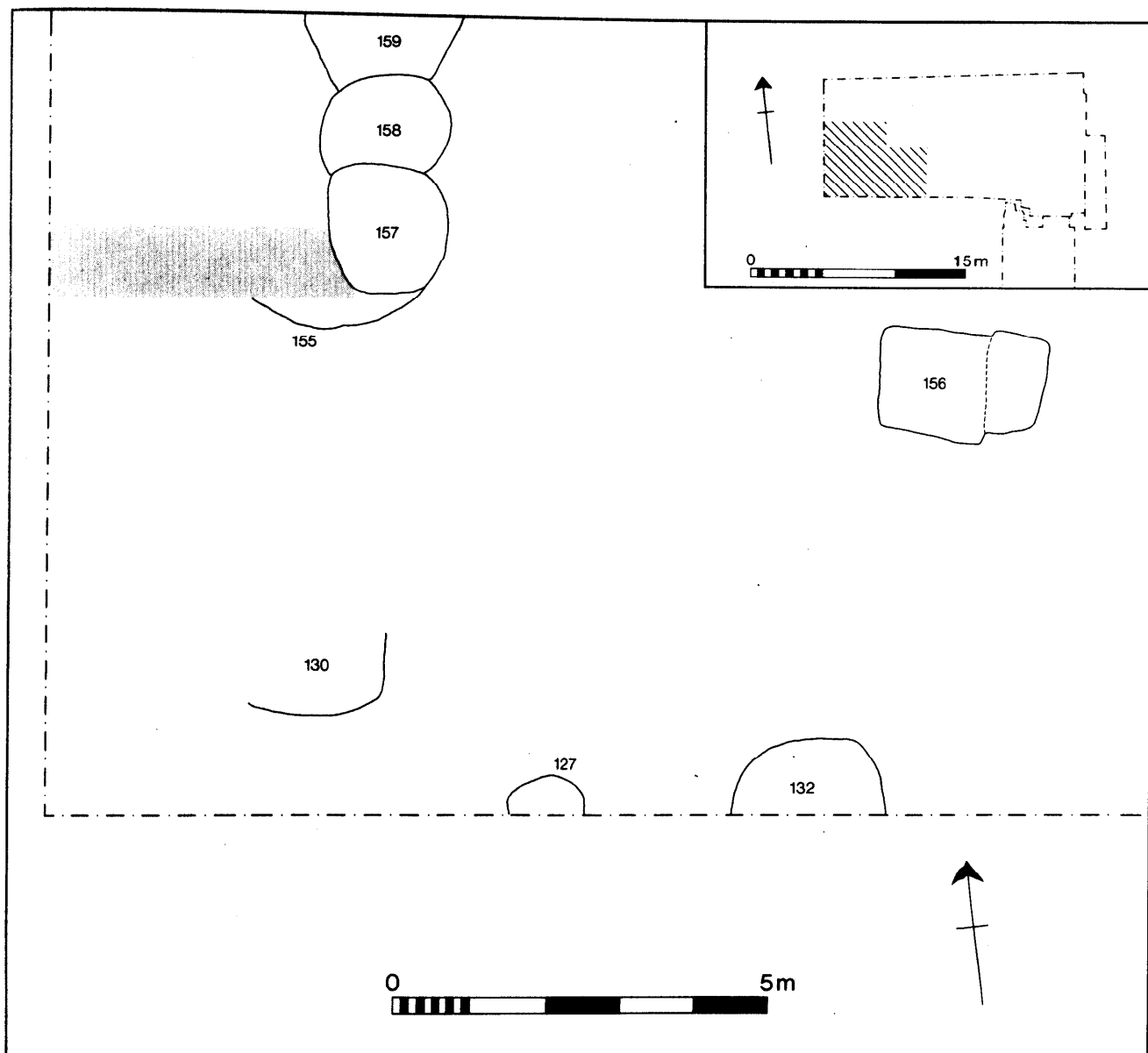


Figure 76 SOU 34: the south-western area of the site. See the text for further details.

shaft (diameter 0.64m) just north of centre in an oval well pit. This pit had been backfilled with natural soil and gravel (layer 3) which contained some pottery. The backfill appears to have slumped while the well remained in use, for at the top of the well pit around the shaft there occurred a layer of gravel (layer 2). Although the shaft had become misshapen, no natural phenomenon seems to have led to the disuse of the well. However, two unnumbered and otherwise unexplained layers at the base of the shaft may represent a small amount of silting. Apart from these layers and a thin lens of gravel originally about 1.5m from the top of the well, the shaft was backfilled with an apparently uniform layer derived from domestic refuse (layer 1).

Pit 126 was sub-rectangular in plan and bowl-shaped in section. According to the SAS bulletin for June 1962 it was about eighteen inches (0.5m) deep. Its stratification was 'simple' and consisted of two layers, at least the upper one having contained domestic rubbish. The pit had been cut away to both the north and the south by two 'clay pits' and a soakaway.

Pits 127, 130, and 132 are shown on a sketch map of 'Site E' (fig 115; and see MF1:11-5). Pit 128 was roughly rectangular in plan and section, except that a large hollow 0.34m deep had been scooped out of the bottom and was apparently an integral part of the construction. The pit was 1.42m deep at its deepest point. It was filled initially with what seems to have been domestic rubbish, which was then

sealed by natural soils, presumably redeposited as a result of the digging of another pit. After these layers had settled, the majority of the pit was filled with more domestic rubbish.

Pit 136A was large, approximately sub-rectangular in plan, and cut through pit 136C. It was cut by pit 136B, which was small and vaguely oval in plan, and also cut through pit 136C. Pit 136C may have been sub-rectangular in plan.

Pit 140 was sub-rectangular in plan and cut through an edge of pit 146.

Pit 141 was irregular in plan and a 'slight hollow' in section. Its single fill comprised a 'grey ashy' substance that contained a few oyster shells. This may have been burnt chalk or burnt shell. Clearly, the feature was not intended for use as a rubbish pit, but its purpose — although probably related to industrial processes — is unclear. It was cut by an Anderson-shelter pit.

Pit 142 was roughly square in plan, and pit 143 was approximately sub-rectangular in plan. Pit 144A may have been oval in plan and cut by pit 144C. Pit 144B was roughly square in plan and cut through pit 144C. This latter pit was large and perhaps sub-rectangular in plan, and perhaps cut through pit 144D. Pallister (nd1, 6) suggests that it was a storage pit.

Pit 144D was 1.03m deep with heavily undercut sides. It 'had had a fire in the bottom' which 'was not a permanent fireplace, [or] the result of a general conflagration of the pit filling' (ibid). Pit 144D1 was probably sub-rectangular in plan and section, and was 1.37m deep. It had been cut through the eastern edge of pit 144D. This pit was also thought to have been a storage pit (ibid).

Pit 145 was small and perhaps sub-rectangular in plan and section. It had been cut by pit 146A and by SB1, the linear feature of structure 4 (see below).

Pit 146 was originally perhaps oval in plan. It had been cut by pits 140 and 146A, and by SB1. Pit 146A had been cut through pits 145 and 146, and was cut by SB1.

Pits 147 and 149-53 are shown on two plans, one of which seems to have been drawn before most features had been excavated, but shows all features; the other of which was intended for publication and shows only a selection of features (effectively, the six pits mentioned here and grave 3). One presumes that it had been traced from an original plan of the features, drawn after they had been excavated — a plan that has since been lost.

The two surviving plans cannot be made to agree. The exact position of the pits is different, their relationships with each other are differently marked, not all of the structural features shown on the earlier plan can be accommodated on the later one, and the trench edges are shown in different positions. Because it contains more information, the earlier plan has been used as the basis for fig 74 and the information that follows. The later plan, which might more accurately show the shapes of the features, is reproduced in microfiche (fig 111).

Pit 147 had sloping sides and a flat bottom. It was 0.79m deep. It was described as having been 'sub rectangular in shape being 9 feet 6 inches [2.9m] across' (ibid). The fill comprised 'a small quantity of clay silt in the bottom', over which was a 'very black filling which contained much charcoal. This was interpreted as the 'burnt down remains of a workshop cum dwelling' (ibid, 7). Pallister made this interpretation presumably because the pit contained up to seven copper-alloy-working crucibles as well as waste derived from bone working (all of which is described in more detail below). However, these industries were not necessarily associated with the structures uncovered in the immediate area and the charcoal need not have derived from the burning of a building.

Pit 148 was oval in plan. It was cut by SB1 and a modern feature.

Pit 149 was originally circular in plan, sub-rectangular in section, and 2.39m deep. The 'filling of the lower 60 inches [1.5m] consisted of alternate layers of greenish clay and sealing layers' (ibid, 5). These sound as if they were the fill of a cess pit, but part at least may have derived from industrial debris (Ovenden nd, 31). The upper fill was 'black sooty occupation debris, from which came almost all the finds from this pit' (Pallister, ibid). The finds seem to have comprised mainly domestic rubbish.

Pit 150 was very roughly oval in plan, sub-rectangular in section and at most 1.12m deep.

Pit 151 (fig 75) was a well, originally assumed to have been three separate features. The well pit, 151B, was roughly sub-rectangular in plan and section, and 2.75m deep. The shaft, 151C, which had been positioned along the eastern edge of the well pit, was tubular with an original diameter of 0.76m and was 3.11m deep. No trace of a lining was found. The well pit had been backfilled to the shaft with redeposited 'mixed clay and gravel'. The top of the well had subsided and this dishing, 151A, had been 'filled with a grey ashy deposit' — again perhaps burnt chalk.

Pit 152 was oval in shape with . . . a depth of 5 feet 6 inches [1.7m]. The clay sides of the pit were of a greenish colour and very hard. A layer of clean clay silt was present in such a position that implies that filling had already partly commenced before it was deposited. . . . The upper part of the filling was black sooty soil with large quantities of burnt clay daub' (ibid).

Whatever the original function of this pit — Pallister interprets it as a storage pit - it seems clear that the last material deposited represents an opportunistic clearance into the feature of the remains of a fire-damaged building.

Pit 153 was described as 'circular in plan'. At a maximum depth of 2.48m, it was far deeper than it was wide, was cut into 1.2m of natural gravel, and may therefore have been meant for use as a well. The apparently uniform fill of 'clean mixed clay and gravel' (ibid) is consistent with the backfill of a well pit, but there appears to have been no shaft. It may

be that the feature was therefore never used for its intended purpose: compare, for example, SOU 36 pits 10A, 24, 30, and 37.

Pit 154 was irregularly shaped in plan and cut by a 19th-century pipe trench.

Pits 155-9 were originally drawn on a separate plan that almost certainly depicts the south-western corner of the site. See the discussion in the supplement, MF1:I2-5.

Pit 155 was of uncertain shape and cut by pit 157 and a 19th-century pipe trench. It had 'hard green sides and impressions of timbering' (Pallister nd2, 6). Presumably, the feature was meant to be kept open, but there is insufficient evidence to identify its original function.

Pit 156 was 1.47m deep and sub-rectangular in section. It was the only pit of a definitely rectangular shape. The plan suggests that there may have been two phases, or indeed two pits, but the filling throughout was the same, and there were the same hard green sides all round. . . . Still preserved in the eastern wall were the impressions of two vertical timber planks. The pit was filled with dark soil and rubbish (Pallister nd1, 5).

The feature 'was not dug down to the gravel' (Pallister nd2, 6). Probably, it had been meant to be used as a storage pit. The 'hard green sides' may be compared with the 'green stained silty material' around the sides of SOU 20, F70, another supposed storage pit (see above, p 45). Pit 157 was cut through pits 155 and 158. Reportedly 'circular in plan', it was sub-rectangular in section, the sides having eroded slightly at the point where they had been cut into the underlying gravel. The feature was 1.83m deep and 'filled with dark soil and rubbish'. Again the sides 'were green and hard and showed impressions of timbers on the north eastern side'. Like pit 156, this may have been constructed as a storage pit and later backfilled with rubbish, an interpretation advanced by Pallister (nd1, 6).

Pit 158 was cut by pit 157 and appears to have been cut through pit 159. Pits 158 and 159 'were not fully excavated but were similar in size and construction to pit 157' (*ibid*). Pallister suggested that these had also been storage pits.

Pit 160 was oval in plan and unexcavated. Its top layer comprised a 'considerable mortar filing' (SAS 1964). Pit 161 may have been oval in plan. It seems not to have been excavated. Pit 162 was not excavated.

Structural evidence

No early structural features were noted by the excavator of SOU 35. Any such features probably had been destroyed by brickearth diggers. Various explanations may be offered of the general absence of structural features from the SOU 34 record. Many putative stake- and post-holes were drawn on the only plan known to have been made while the excavation was in progress (a plan of the eastern segment of the site). These do not appear on the

smaller plan prepared for publication (fig 111). Either the features proved not to be structural elements or they were arbitrarily excluded from the later plan. Since the features generally make coherent sense, and since it is plain that a great many other features have been excluded from another plan prepared for publication (fig 116), the authority of the original plan of the eastern segment has been preferred. It is possible that structural features in the rest of SOU 34 had been removed by brickearth diggers.

Except where stated, the depth, and fill of the following features are unknown. All are shown on fig 74.

Structure 1 appeared on SOU 34 as a north-south line of six post-holes. The line may have been continued to the north by some of the cluster of post-holes recorded on plan, although it is equally likely that any one of these features was part of structure 2, described below. If the line did continue northwards, the featureless gap may have been the site of a doorway, albeit a rather large one at 1.34m across. It is not clear whether the line of post-holes formed the eastern or the western wall of the building. If they were part of the eastern wall, the line of the opposite, western wall may have appeared on SOU 34 as another north-south line of post-holes about 4.6m to the west. On the other hand, if they were part of the western wall, there may have been an association with the hearth or hearths found at the eastern edge of SOU 34.

These were called 'a series of burnt hearths' (Pallister nd1, 4). The section drawing prepared for publication in the 1960s (copied as fig 75) shows two fragments of apparently the one hearth lined with clay or brickearth. This feature lay above grave 3, which is discussed in the next section but one. The plan (fig 74) shows nothing of the sort in the position marked on the section drawing, but does show what appear to have been many large or medium-sized flints in approximately the same position - which flints do not appear on the section drawing. It may be that at least one hearth was constructed here by spreading a thin layer of brickearth over a flint base. Unless he were subdividing these two elements into separate hearths, Pallister's reference to a 'series' of hearths is unexplained.

Structure 2 seems to have been represented by a line of east-west post-holes with probably a northern return of the west wall. The post-holes of an east wall may be hidden in the cluster of structural features by pit 147. If so, one dimension of the building (presumably its width) would have been 5m.

Structure 3 appeared as a north-south linear feature, 5.86m long, with some suggestion at both ends of a return to the east. It may have contained several post-holes. Structure 3 appears to have postdated grave 3 and to have been cut by three otherwise undescribed features.

Structure 4 appeared on SOU 34 as a north-south linear feature, SB1, which had been cut through



Plate 7 The south-eastern corner of SOU 34, photographed from the west, and showing parts of SB1 among the excavated pits. Scale probably in 1ft (0.3m) units.

pits 145, 146, 146A, and 148. It was cut by an Anderson shelter pit. The feature appears on photographs (pl 7) as a trench, gently U-shaped in profile and about 0.1m deep. Various associations might be discerned: an overshot return wall represented by PHs1-4, an internal division marked by ditch 1, or a return represented by the beam slot that overlay grave 2. None of these associations is any more likely than the others. (The post-holes and ditch are described immediately below; the beam slot in the later description of the graves.)

It has been thought better not to dignify the other structural evidence as components of a numbered building. Of the seventeen numbered post-holes, PHs5-7 and 9 cannot be identified on any surviving plan. PH13 may have been the western end of ditch 1, described in the next paragraph. Only PHs1-4 can be interpreted confidently as structural features. Perhaps part of structure 4, the line of these post-holes appears not to have continued into the eastern continuation of SOU 34. Although they may have been overlooked there, or simply not planned (one wonders, for instance, where the eastern half of pit 146A has disappeared to), clearly it is impossible to relate PHs14 to any other feature in the area.

Ditch 1,

which was 27 inches [0.69m] deep, ran . . . in an east-west direction between graves 1 and 2 [sic]. The fill was an even coloured brown clay, and

contained only a few animal bones. . . . It is not a boundary ditch for the cemetery as burials occur both to the north and south of [it] (ibid, 4-6).

Perhaps a property boundary or part of structure 4, if it concluded in PH13 the ditch was later than pit 146A.

Streets

A north-south street may have run through the middle of SOU 34. This suggestion depends on the fact that plans of the site show only its eastern extreme and its south-western corner (MF1:I4-7), and no record exists of the central portion, a north-south band 8m wide. One assumes that the failure to make a record of this area was because nothing of interest was discovered there. If that area had been occupied by a street and adjacent buildings, most of the evidence for these features would have been removed when brickearth was extracted from the site, and any remaining scraps of gravel perhaps lost to the dragline and bulldozer used to extend SOU 34 to its full dimensions. (The line of the supposed north-south street is shown on fig 10d.) Arguing in this manner, one might also suppose that the failure to draw a plan of most of the northern section of SOU 34 (a strip 6m wide) indicates that there had also been an east-west street there.

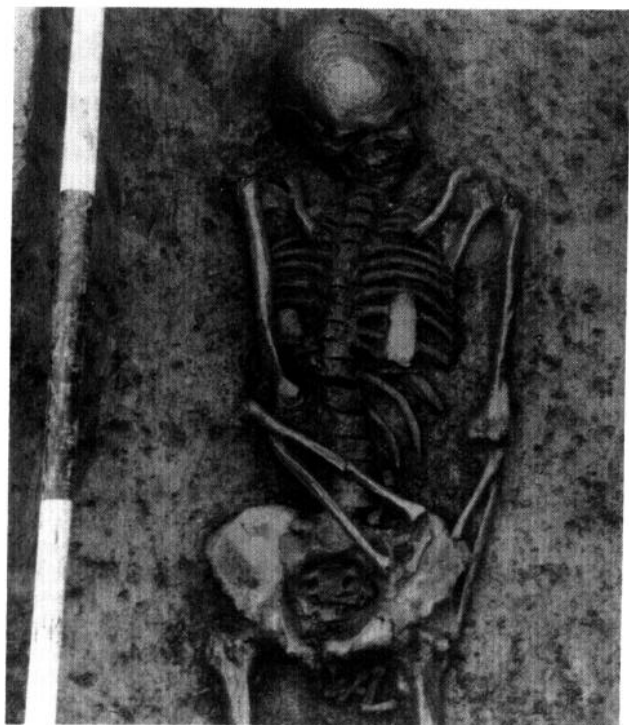


Plate 8 SOU 34, grave 3, photographed from the east. Scale probably in 1ft (0.3m) units.

Human skeletal remains

Three substantially intact interments (graves 1-3) and a small amount of redeposited human bone from three other individuals were found. Except for two skull fragments, recovered from the fill of pit 146A (Pay forthcoming), this skeletal material is now missing.

The skeletons found here would appear to have been associated with those found at SOU 43, which was sited a little to the east of SOU 34, probably also with those found in the 19th century, at a site now numbered SOU 48.

The graves were reportedly shallow (Pallister nd, 4). According to the section drawing (fig 75) grave 3 was 0.46m deep. This drawing marks a feature 0.65m wide at the top and 0.32m wide at the bottom. The grave's width appears greater on all photographs (pl 8), and one may suspect that grave 3 had been overcut deliberately to allow the excavator room to work. That being likely, one can place little faith in the 1.22m-width of grave 2, as shown on plan; although overly large graves had certainly been dug at SOU 32 (see above).

'A wooden beam slot ran over the top of the filling of grave 2 along the length of the grave' (*ibid*). At first reading, this appears to be another parallel with the cemetery of SOU 32, but discussion of the feature is hampered by the present difficulty in recognising it. It may appear on plan as the 0.67m-wide continuation of grave 2.

The lengths of the graves appear excessive until they are measured: grave 1, for instance, probably was little longer than the 2.12m shown. It is possible that the sketchily planned skeletons have been wrongly drawn. (Note that the skeleton in grave 3 has been redrawn for publication here, using photographs as a guide. According to the original site plan, it was much smaller and lay in a different attitude.) If their dimensions have been correctly plotted, however, and if graves 1 and 2 both held children therefore, the excessive lengths of the graves may also find parallels at SOU 32.

No mention was made of coffins or wood stains. The skeleton in grave 3 (pl 8) seems to have been a parallel-sided burial. Despite some evidence of bone movement, seen most clearly in the right humerus, it remains unclear whether this tight parallelism should be ascribed to the encoffining or enshrouding of the body. The skeletons in graves 1 and 2 perhaps were parallel-sided. Recovered from the fill of the structural feature, SB1, was a possible shroud hook (item 8). This might have been redeposited from the fill of pit 146A which contained some disturbed human bone, and is evidence perhaps of the use of at least one shroud.

Where any relationship between the graves and other features can be recognised, the graves are seen to be earlier. Grave 3 underlay the hearth mentioned above, was separated from it, in fact, by what the excavator called a turf line (fig 75). It also appears to have underlain structure 3. If the beam slot that overran grave 2 had been a structural feature, it too could be evidence of the primacy of the cemetery. And pit 146A, although various explanations can be offered of how its fill contained human skulls, is most easily understood as a later, intrusive feature.

Dating and interpretation

The graves thus appear to have been the earliest features dug in the eastern area of SOU 34 and possibly the entirety of the site. The three intact skeletons of SOU 34 were extended and had been laid east-west, with their heads to the west. Although there are obvious difficulties involved in arguing from what appears to have been a small sample of a much larger cemetery, it is assumed here that these were Christian burials.

No datable objects were recovered from the three graves or, apparently, from SOU 48's 'great number of human bones' (Keele and Roach Smith 1857, 61). However, 'found within a grave near the spot I have called the cemetery [was] a curious vase of green glass . . . lying over the face of a skull'. This 'vase' has been identified as a palm cup, perhaps of the 7th century (*ibid*; Addyman and Hill 1969, 79). It must be pointed out that Keele, in his letter to Roach Smith, describes the relevant grave as a feature separate from the 'cemetery', and it may be that the burial was not associated with the others found. But it is equally likely that an association did

exist but could not be observed in the adverse conditions under which Keele worked.

Several possible features of SOU 34 graves may resemble features of graves dug at SOU 32: that is, the excessive length of graves 1 and 2, the excessive width of grave 2, and the marking of grave 2 with a beam slot. As has been explained above, it is not certain that any of these features existed at SOU 34. If they did, one might suppose that the SOU 34 graveyard was roughly contemporary with that at SOU 32, a place used for burial probably early in the 8th century.

The final piece of dating evidence is provided by the pottery recovered from pit 146A, a feature supposed to have postdated burial in the area. This material may be dated only to the mid Middle Saxon period, however.

Although each element of evidence does not closely date the cemetery, taken together these elements make it more likely than not that burials were being made at SOU 34 early in the 8th century.

As seems to have occurred at SOU 32, the area of SOU 34 probably was later given over to domestic occupation. Closely dating this occupation is difficult, principally because the layer-provenances of the pottery (found mainly at SOU 34) were not recorded; and one proceeds with the perhaps questionable assumption that later pottery was found in the upper layers of a pit.

Using this method, one finds that the pits ranged from the early Middle Saxon period (pits 141, 142, and 147) to the late Middle Saxon period (pits 127 and 156), with most datable to the mid Middle Saxon period.

Three coins were found at SOU 34 (items 79-81; M94, 150, and 41). Item 80, a denarius of Charles the Bald (843-77), was recovered from somewhere in the fill of pit 152, most of the pottery from which is assigned to the mid Middle Saxon period. Item 81 was found somewhere in pit 144C. It is a BMC Type 49 sceat, the dating of which type has become a matter of debate (see above). The third coin, item 79, reportedly recovered from the spoil heap, is a secondary-issue, BMC Type 37 sceat.

If the 'turf line' over grave 3 perhaps points to a disuse of the area between the period of burial and the period of domestic occupation, no such clear distinction into phases can be seen in the archaeological evidence of that later occupation. The dating evidence indicates that domestic occupation lasted through most of the 8th century and into the 9th century.

Pallister (ndl, 9-10; nd2, 9-10) records that from pit 147 were recovered four or five crucibles and the fragments of two or three more. (To judge from the original finds drawings, one of these was a lamp.) Of these, one rim fragment (item 118) and three complete copper-alloy-working crucibles (items 115-7) survive and are described in further detail by Bayley (1986, *passim*). All four appear to have been thumb pots with a slightly everted rim to aid

pouring. (For a preliminary description, see Addyman and Hill 1969, 66-8.) Reference is also made to 'Several small fragments of bronze [which] can be interpreted as drippings from bronze casting' (Pallister nd2, 9-10). This has all disappeared. No reference can be found to any other related debris recovered from pit 147 or from an adjacent pit; which is not to state that such material was absent.

Pit 147 also contained at least 36 bone strips manufactured from the ribs of domestic animals, probably cattle, and a small amount of antler-working waste. The bone strips had been trimmed but not further worked, and probably were intended for use as thin comb-connecting plates (Riddler in prep). Related material from this pit was the waste of an activity using antler consisting of sawn pieces of antler and many what for want of a better term I call antler shavings, many of which are curled in a similar fashion to the now fast disappearing gipsy chrysanthemums (Pallister, *ibid*).

This too has disappeared. The records are silent about any other associated waste found at SOU 34, with the exception of a small amount of bone-working debris recovered from pit 149, which probably postdated the infilling of pit 147.

The incomplete site records give no reason for supposing either that copper-alloy working and bone working were being carried on at the same time, or that one industry succeeded the other. This uncertainty is compounded by the fact that pit 147 was uncovered in the north-eastern corner of SOU 34. Since it seems not to have been a contemporary feature with structure 1 or structure 2, one presumes that the foci of these industries lay outside the excavated areas. The pit also contained some bloomery cinder, and other by-products of iron working were found in pit 149 (Ovenden nd, 31). However, despite the survival of two smithing hearth bottoms, recovered from unknown contexts at SOU 34, insufficient material was recovered to justify any argument that iron was being worked actually at SOU 34.

Pits 141 and 151 may have contained burnt chalk. None of this material survives for further analysis. A lump of aggregated burnt chalk mixed with some charcoal does survive from somewhere in pit 159. There is nothing to indicate whether more of that material has now been lost. Pit 141 appears to have been filled early in the Middle Saxon period, and pit 151 in the middle of that period. Pit 159 contained Middle Saxon pottery, but not enough to warrant suggesting a narrower date for its infilling. Some of the burnt chalk may have been associated with 'a thick vein of lime and chalk visible' in the northern edge of one extension (SAS 1962b) - at some point around what eventually become the middle east-west line of SOU 34. This 'vein' was presumably a deposit exposed in section by a dragline. It cannot be dated. One might argue from these fragments of evidence that various areas of SOU 34 were at various times given over to an industry that involved the use of burnt chalk.

SOU 36 (KINGSLAND: AH 11)

Introduction

Archaeological investigation of Hamwic began in July 1946, in advance of expected development, and continued for certain periods during the Easter and summer vacations every year until its completion in the summer of 1950. The main focus of this early work was SOU 36, the Kingsland site, just to the west of St Mary Street. The site director was MR Maitland Muller, assisted for the final two years by DM Waterman. The main form of investigation was by excavation, but, in 1947 at least, soil samples were obtained by means of an auger. Nothing of consequence is known about the success of this boring. From 1949 onwards, when excavations on a larger scale were first attempted, the topsoil was removed mechanically; in that year by a bulldozer and in 1950 by a mechanical shovel.

Maitland Muller generally followed the practice of opening small areas for excavation and seasonally increasing their scope. This accounts for the curious outlines of trenches B and C shown in figs 77 and 81. Trench A was probably similarly shaped, but the two surviving plans show only a detail of part of the trench (fig 80) and the outline of the rectangular excavation of Easter 1950.

Two east-west trenches were opened, one entitled trench G, the other not identified on plan with a letter. This has been called trench X. No record survives of trenches D-F except the reference to 'four cuttings' opened in 1949, to the west of trenches A-C, which contained 'only three small Saxon pits' (Maitland Muller and Waterman 1950, 142). These features must have been pits 21, 25, and 26, uncovered in trenches G and X. Trench X was probably originally lettered D, E, or F therefore, and the other two trenches cannot have contained any Anglo-Saxon features; a fact that may account for their omission from any location plan. Their dimensions were probably about 6m wide by perhaps 7.6m long (*ibid*). Allowing at least 100m² for the area of these two trenches and the 'missing' area of trench A, one finds that at least 845m² were opened at SOU 36.

Features were numbered serially according to type: pits 1-44, huts I-VII (these later renumbered as pits by the excavators), and post-holes 1-7. Certain pits were divided by letter suffixes into separate features. Recognisably modern features were not numbered. This system has been retained here, except that the redundant hut numbers are not used.

The natural soil was variously referred to as 'clay', 'brickearth', and occasionally 'sand'. Its colour was

usually described as orange. Presumably, it was a yellowish brown brickearth of some form. It lay a little more than '2 feet or so [about 0.6m]' below the ground surface (*ibid*): at an average height, therefore, of roughly 4m OD. The brickearth survived in varying thicknesses, from as little as 0.5m thick to at least 1.02m thick, and perhaps to 1.46m thick. It overlay gravel, which was at least 1.12m thick, and in places perhaps 1.63m and more thick. Below the gravel was a stratum of 'clean sand', exposed only in the bottom of pit 10A.

Major modern disturbance on this site was restricted to the digging of a small number of pits and pipe trenches. Shallow brickearth-digging trenches ran up to the Anglo-Saxon pits, the top fills of many of which had been disturbed, perhaps in an initial stage of brickearth digging, or perhaps as a result of ploughing. Maitland Muller (1951, 125-6) describes the main evidence for brickearth digging, and in a letter of 1961 states that one trench was about 4' 6" (1.4m) wide. The disturbance seems to have been similar to that noted at SOU 43 (pl 1). With the exception of the suspected ploughing, all disturbance is ascribable to the redevelopment of this area for housing from the 1840s onwards.

Early features

Pits

The pits are described here in numerical order. Pits 1-11 were uncovered in trench C; pit 12 in trench A; pits 13-20 in trench C; pit 21 in trench G; pits 22-4 in trench B; pit 25 in trench X, pit 26 in trench G; pits 27-42 in trench B; pit 43 as separate features in trenches B and C; and pit 44 in trench B. Pit 12 (trench A) is illustrated in fig 80, pits in trench B are illustrated in fig 81, those in trench C in fig 77, and those in trenches G and X in fig 82. It seems that two separate features were numbered pit 43; once in trench B (where the feature was not excavated) and once in trench C (where the feature was excavated). The pit is shown twice here, on figs 77 and 81, but is described only from its appearance in trench C.

Although every effort has been made to collate the published and unpublished information, difficulties have arisen. Of special note is the reference (Maitland Muller and Waterman 1949, 50) to two 'square topped pits', both with 'a horizontal slot cut in the pit wall, in which, in one instance, were spaced a number of iron nails.' These features cannot now be certainly identified.

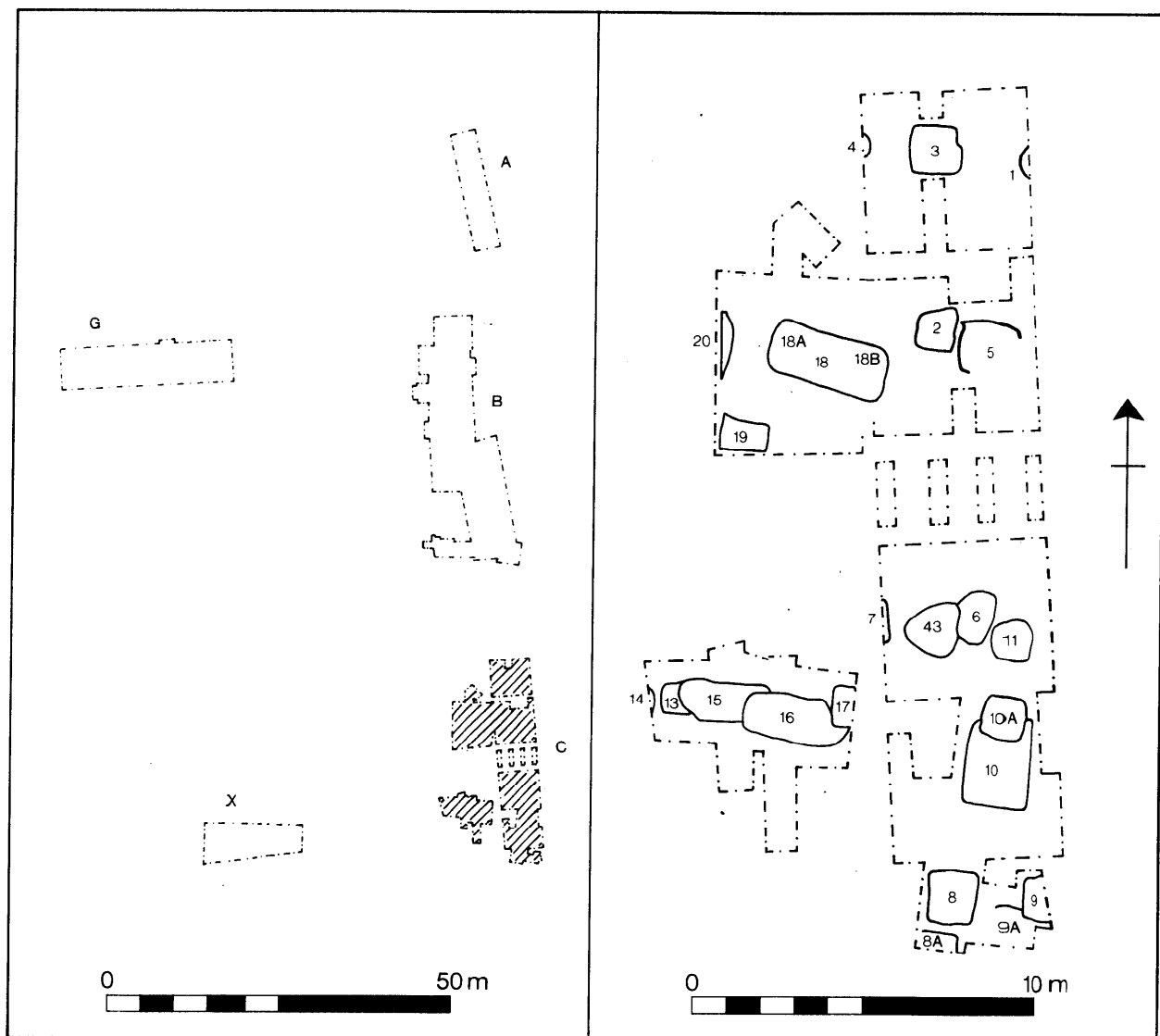


Figure 77 SOU 36: the pre-modern features in trench C. 'Pit' prefixes to the numbers have been omitted.

Pit 1 generally lay outside the excavated area, and little record of it survives. It appears to have been rounded in plan.

Pit 2 was sub-rectangular in plan with nearly vertical sides and a flat bottom. Further details are now unknown.

Pit 3 was sub-rectangular in plan and section, and 1.47m deep. The lowermost fills were redeposited brickearth and gravel. Sealing these were two layers of 'black earth', together at most 0.72m thick. Containing charcoal and much burnt daub, these may have been clearance layers. Above them was a layer (up to 0.42m thick) of apparently domestic debris. This lay beneath four thin layers, sandwiched into which were two layers of gravel. The latter may represent the remains of two hard-standing areas or alleys that had sunk into the pit as its fills settled.

Pit 4 was uncovered only along its eastern edge. Its shape, dimensions, and fills are not known.

Pit 5 was cut away to the south and west by a modern pit. It was sub-rectangular in plan and section. Further information is now missing.

Pit 6 (fig 78) was cut by pit 43. It was sub-rectangular in plan, roughly conical in section, and 2.06m deep. The sides had severely eroded away at the point of junction between the natural brickearth and underlying gravel. This erosion was probably responsible for the gravel that formed the bottom layer in the pit, layer 10. (It is not clear whether or not this was mixed with brickearth.) Sealing this was a thick layer (layer 9) of greyish brown soil which contained plentiful bone, much charcoal, some oyster shells, and a 'rusty decayed vegetable-like substance'. The layer, some of which may have been cess, presumably was derived mainly from domestic refuse interspersed with plant remains, not necessarily of domestic origin (compare SOU 11 F47). Sealing it was a thin layer (layer 8) of redeposited brickearth, and above that two more rubbish layers (layers 5

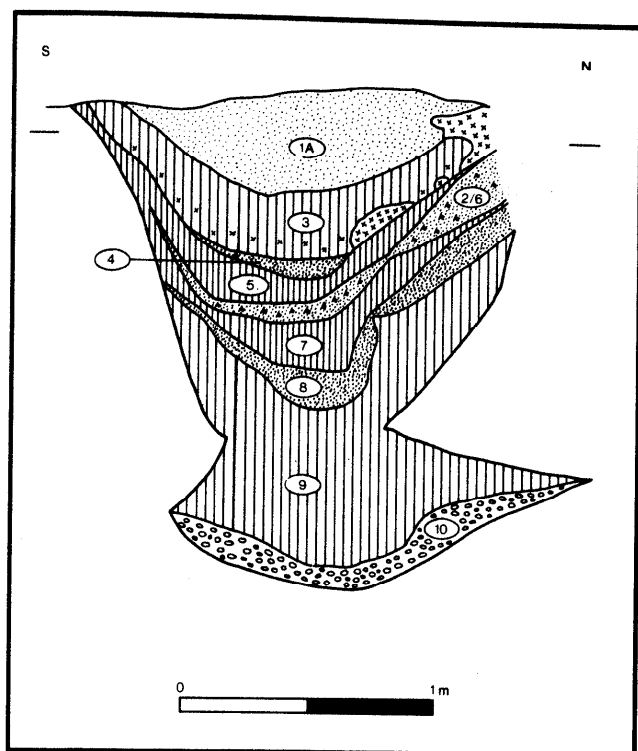


Figure 78 SOU 36: pit 6. See fig 17 for the key.

and 7) separated by a layer of redeposited brick-earth (layer 2/6). Between the top layers and layer 5 were a lens of brickearth (layer 4) and dense clusters of 'white ash'. These were variously recorded as layer 1, layer 3, and a separate, unnumbered layer. The 'ash' was perhaps calcareous and may have been burnt chalk. The top two layers (layers 1A and 3) were derived from domestic refuse,

Pit 7 generally lay outside the area excavated. Perhaps sub-rectangular in plan and section, it was 1.46m deep. Over an initial fill of brickearth and gravel, possibly eroded from the sides of this feature, the other layers were mostly composed of domestic refuse. A layer near the top of the pit contained loomweights and four large stones, perhaps also used as loomweights. This layer contained the only pottery recovered from the pit.

Pit 8 was sub-rectangular in plan and section, and at least 1.04m deep. To the east ran what the excavator called an 'annexe'. This was a linear spur some 0.56m wide (north-south) and 0.95m long, which fell away from ground level in the east to a depth of 0.22m at its point of junction with the pit. Its relationship with pit 9A is unclear, as indeed is its relationship with pit 8. The east-west slope of about 13° makes it unlikely that it was a structural feature. No record survives of the nature of the fill of either that pit or its 'annexe'.

Pit 8A generally lay outside the excavated area. It may have been sub-rectangular in plan. Its depth its shape in section, and the nature of its fills are unknown.

Pit 9 was cut through pit 9A. About half of it was exposed in the trench. Sub-rectangular in plan and section, it was 0.73m deep and filled with alternating layers of rubbish and redeposited brickearth.

Pit.9A was cut to the north by pit 9 and extensively cut away by a modern feature. Perhaps two-thirds of the pit lay outside the area excavated. It was probably sub-rectangular in plan and bowl-shaped in section. Very little of the fill remained. This comprised two layers of rubbish separated from each other by a thin layer of oyster shell.

Pit 10 (fig 79) was cut through pit 10A. Sub-rectangular in plan and section, it was 1.24m deep. The first fill was brickearth (layer 6; not illustrated). Over this were rubbish layers (layers 1, 3, and 5) interspersed with thinner layers of brickearth (layers 2 and 4).

Pit 10A (fig 79) was a well, cut to the south by pit 10. The well pit was sub-rectangular in plan and section. It had been backfilled with gravel and presumably brickearth. The shaft, which was deeper than the pit, was circular and some 0.7m in diameter. It had been dug through the gravel and rested on a 'clean sandy floor'. Traces of a lining survived as a 'black discolouration' in the bottom 0.35m of the shaft. The fill of the shaft consisted of two layers, the lowermost one (layer 2) being 'clayey gravel', and the uppermost (layer 1) loose earthy gravel'. There is no indication that these layers contained any domestic rubbish. The shaft shows no signs of distortion or collapse, and it may be that the diggers, of the well, having reached the sand underlying the gravel, had created an inefficient well which was soon infilled — initially at least with some of the remaining brickearth and gravel thrown up by the excavation of the pit.

Pit 11 was a well, the exact construction, the fill, and the depth of which are unknown. The surviving records give some reason for believing that it was constructed like pit 10A by inserting a circular shaft into a roughly squared pit. The shaft was dug into the gravel. At its bottom were preserved the remains of fourteen boards' in an incomplete circuit. When complete, the circuit probably had been made up of 22 boards'. The shaft may have been constructed, at least in its lowermost part, from a reused cask or barrel (compare pit 17 below and SOU 7 F53).

Pit 12 (fig 80) was cut across the top by two modern pits, not shown here in plan, and a narrow pipe trench. Its exact position in trench A is unclear. Some 0.96m deep, it was irregularly shaped in plan, and had stepped and sloping sides and a flat bottom. Cut into the pit were two post-holes; one (PH7) of uncertain diameter in the northern edge, and one (unnumbered on plan, but perhaps PH6) of 0.19m diameter in a roughly central position. Their depth and relationship with the fill of the pit is not recorded. To the south of the pit, cut into the brickearth, was another post-hole (PH1) of 0.11m diameter and of unknown depth.

The fill of the pit comprised four layers. The lowermost (layer 4) appears to have been a rubbish

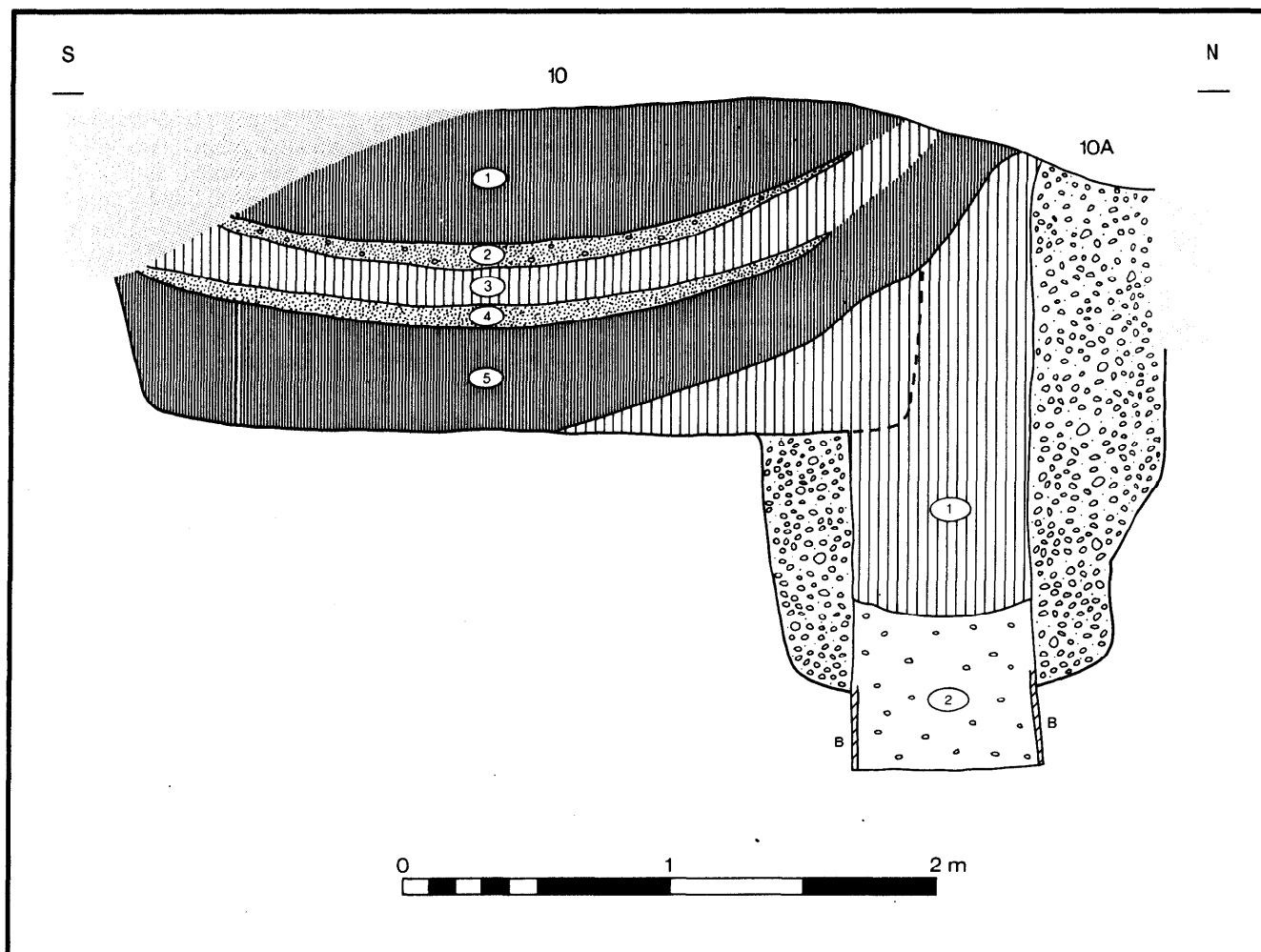


Figure 79 SOU 36: pits 10 and 10A. Key: B 'black discoloration due to decayed wood: See also fig 17.

layer that contained 'the remains of the skeleton of an infant under six weeks old' (Maitland Muller 1949b, 68). This was sealed by a thick layer (layer 3) of what was probably redeposited brickearth. Over this was a thin layer (layer 2), 'probably the remains of vegetation', and over that a layer (layer 1) of now-indeterminable composition.

Pit 12 was originally called hut I. Of the seven features designated as huts, all were later given pit numbers and re-interpreted as perhaps 'cellars under houses built on the ground surface' (Maitland Muller and Waterman 1950b, 37). It had also been suggested of pit 12 that its 'awkward size and shape, and the character of the floor debris, may indicate some kind of storage hut rather than a dwelling' (Maitland Muller 1949b, 68). The excavators' unwillingness to continue interpreting huts II-VII as huts is understandable. However, it is possible that pit 12 was a sunken-featured building. Similar features of 'awkward size and shape' have been found elsewhere: compare, for instance, structure VI at Bishopstone (Bell 1977, 200-1) and Grubenhaus S4 at Portchester (Cunliffe 1976, 19), both of which

are of similar size and shape with possible entrance-ways and post-holes sited outside the depression. Sunken-featured buildings with ledges similar to that found in pit 12 are huts 84 and 105 from Mucking, Essex (Jones 1974, 198). The arrangement of triple post-holes is not unknown, the best example being building C17 at Cowdery's Down, Hampshire; with building C18 perhaps another example (Millet 1983, 217-8 and 225-7).

The 'awkward shape' of pit 12 may indicate that, not having been floored at ground level, its sides had been eroded (compare the observations on the sunken-featured buildings of West Stow: West 1985, 117). Instead, a floor may have been laid on the ledge that ran about 0.6m below the surviving top of the feature, below which the cut was noticeably more regular. If so, the layers observed in pit 12 cannot have been contemporary with its use as a sunken-featured building and were probably later, opportunistic pit fills.

Pit 13 was cut by pit 15. It was a well about 2.2m deep, constructed like pit 10A. The fill of the well pit was 'clean "natural" orange clay [brickearth]

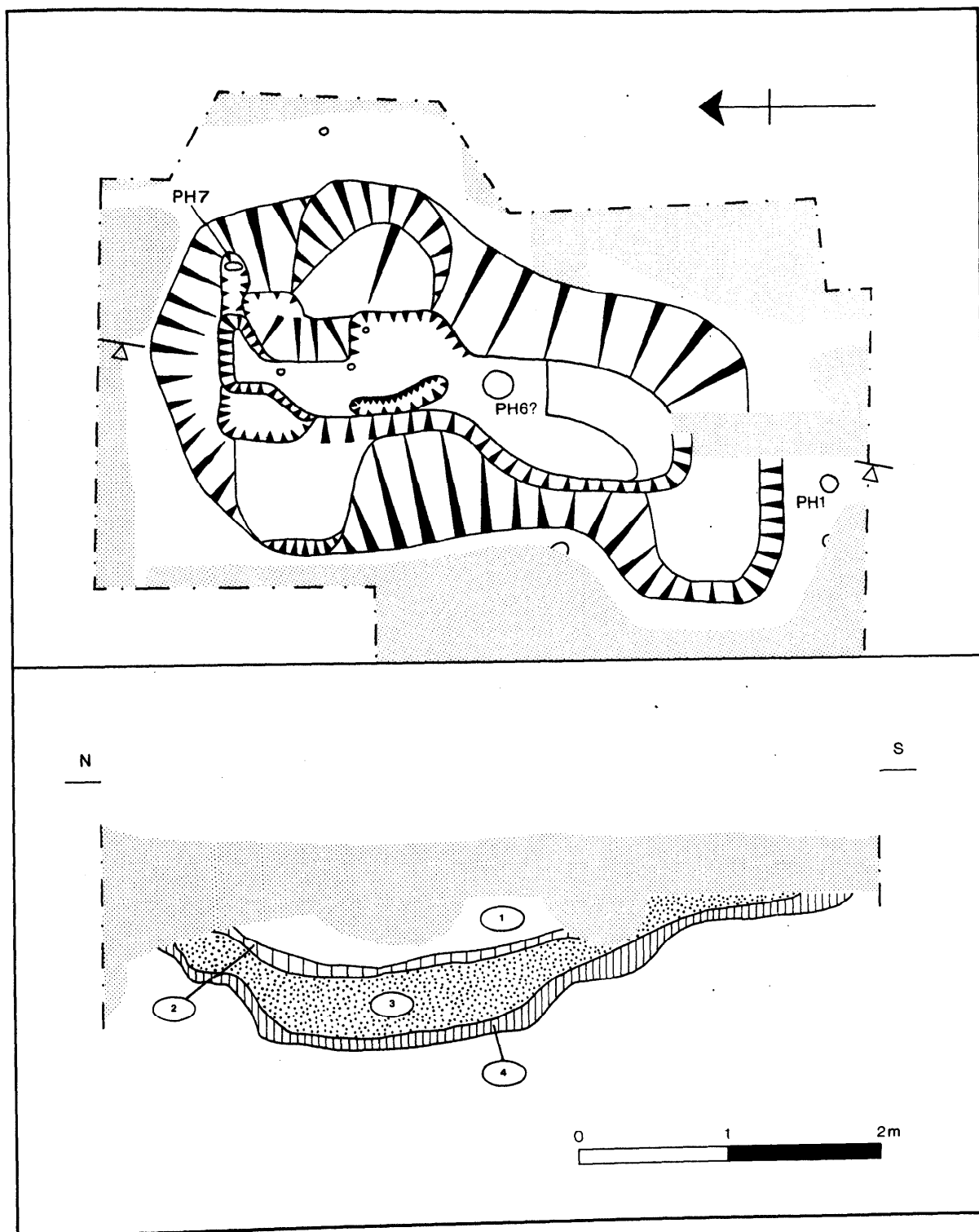


Figure 80 SOU 36: pit 12 and PHs1, 6?, and 7. See fig 17 for the key.

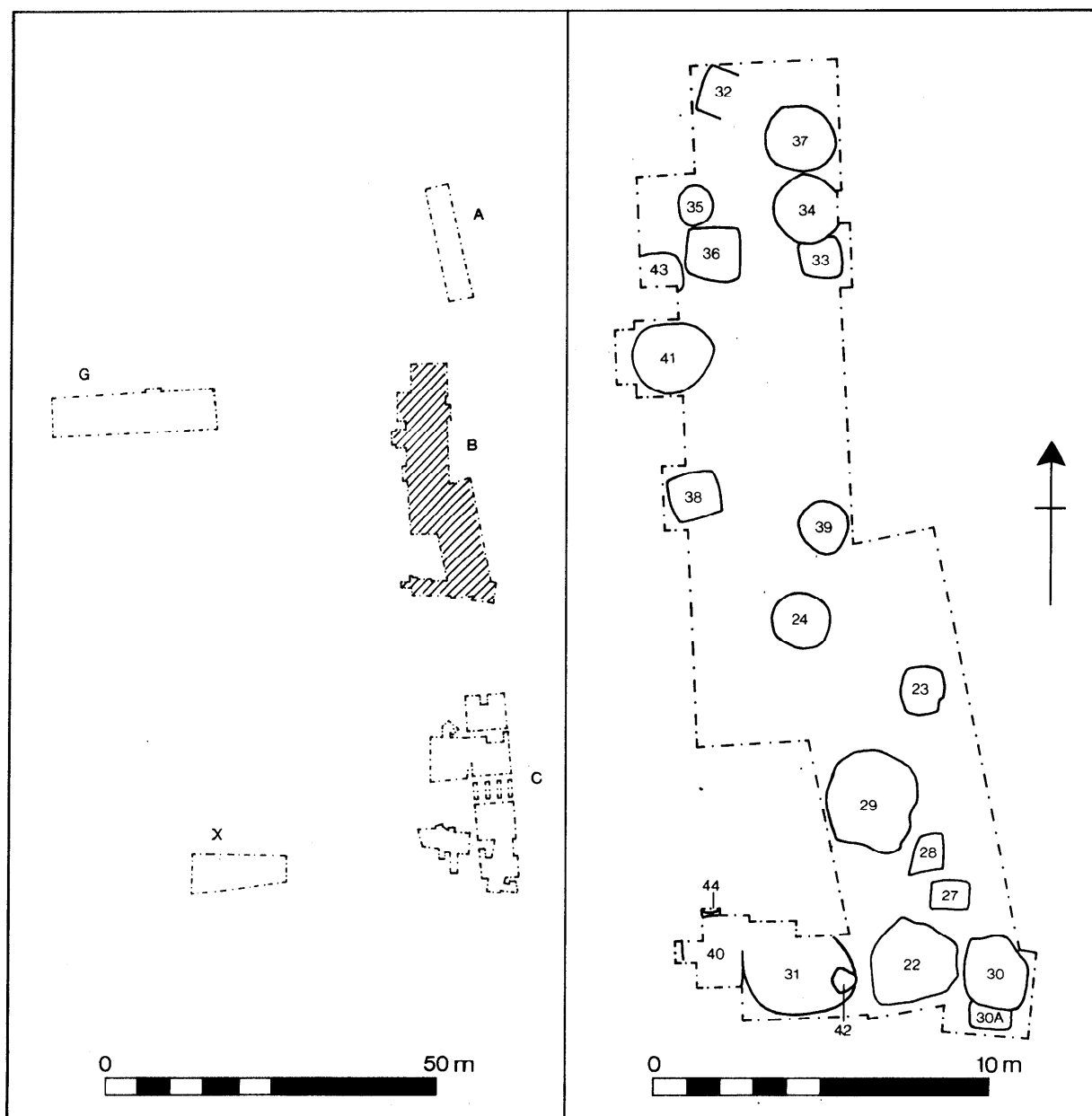


Figure 81 SOU 36: the pre-modern features in trench B. 'Pit' prefixes to the numbers have been omitted.

(Maitland Muller 1951, 127). The circular shaft which

ran into the natural gravel about a foot [0.3m] deeper than the surrounding packing . . . contained a scatter of fist-sized stones. This [shaft] was 2 feet 6 inches [0.8m] in diameter at the base and narrowed to 2 feet [0.6m] at 5 feet [1.5m] up. A chocolate coloured deposit at the bottom of the [shaft] was probably the remains of some kind of wooden revetment (*ibid*).

Pit 14 scarcely appeared in the area excavated, and nothing can be said of its shape, dimensions, or fill.

Pit 15 was cut by pit 16 and cut through pit 13. Sub-rectangular in plan, it was bowl-shaped in section and about 1.9m deep. 'The filling', wrote Maitland Muller (*ibid*),

consisted of a series of thin layers of alternating clean gravel or clay, and grey clay containing occupation debris. This stratification included two very thick medial and final layers of burnt daub.

Beneath the lower layer of burnt daub was found a hoard of 23 sceattas, 'with two and a possible third scattered 18 inches [0.5m] away' (*ibid*, 128). The third object has since disappeared.

Pit 16 was cut by pit 17 and cut through pit 15. It was also cut by a modern pit to the north-west and

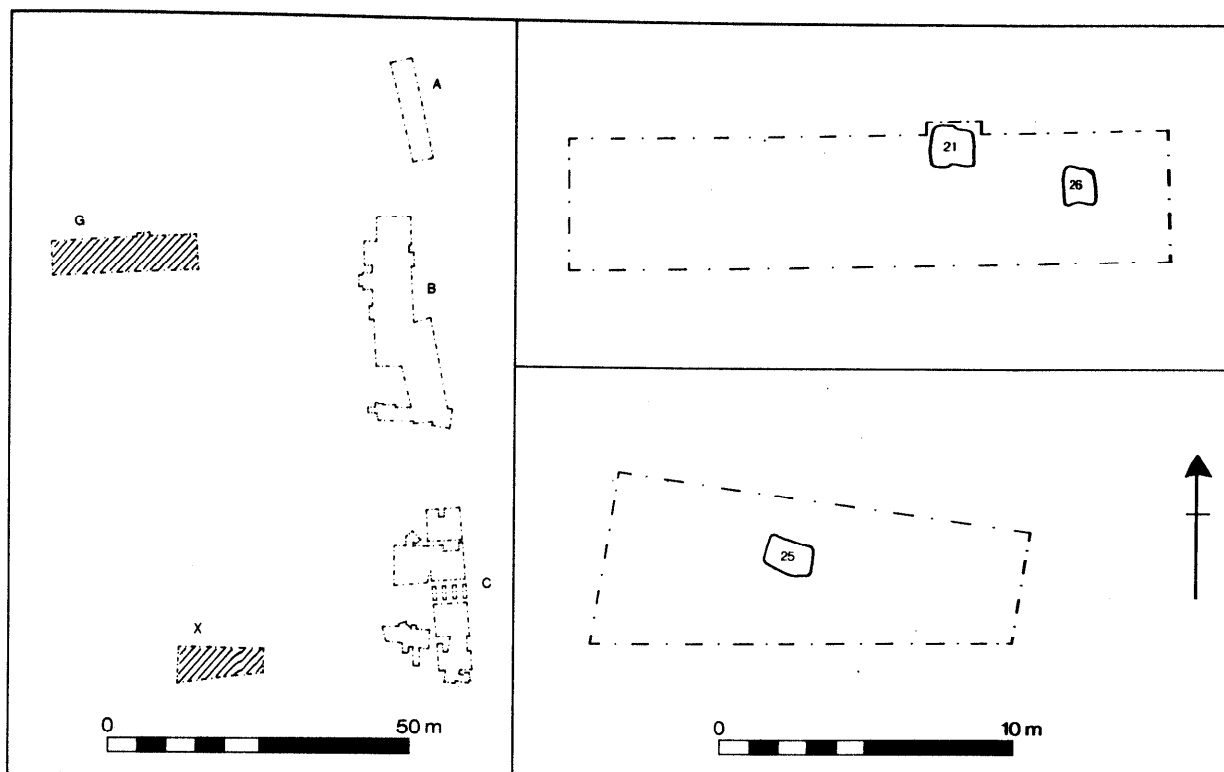


Figure 82 SOU 36: the pre-modern features of trenches G and X. 'Pit' prefixes to the numbers have been omitted.

'apparently much disturbed [across the top] in modern times'. The feature was sub-rectangular in plan and irregularly shaped in section. It was about 1.7m deep. The fill comprised redeposited brickearth and gravel, sealed by 'a thick layer of occupation debris' (ibid). In this were found fragments of copper-alloy-working crucibles.

Pit 17 cut pit 16 and was cut by the same modern features that disturbed that pit. It was a well, constructed like pit 10A. At least 0.4m of deposits had been removed from the top of the feature. The well pit survived to depth of some 1.66m and the shaft to at least 2.1m. The well pit was filled with redeposited brickearth and gravel. The fill of the shaft was not fully enough recorded for any certain interpretation to be made. Only the bottom 1.68m were recorded in detail. Some 0.75m in diameter, the shaft had been sunk 0.87m into the natural gravel and had been formed (at least in the bottom 0.3m) from perhaps fifteen vertically set staves or planks, the remains of eight of which survived in situ. Like that of pit 11 (see above), this lining may have been constructed from a cask or barrel.

Pit 18 was at least two features, here distinguished as pits 18A and 18B. The plan of these features appears to have been lost. Pit 18A was cut through pit 18B, was 1.49m deep, and was irregularly shaped in section. Pit 18B may itself have been two pits or perhaps a single, recut pit. Overall, it was 1.68m deep with sloping sides and a flat bottom. The fill of these features were insufficiently well recorded for

any confident interpretation to be made now of their natures. Most appear to have been rubbish layers.

Pit 19 is equally difficult to interpret. No good plan of this feature survives, and only part of it was exposed for excavation. It was sub-rectangular in plan and section, 1.36m deep, and effectively bottomed on the natural gravel, into which it had been cut for about 0.1m. The fill seems generally to have been derived from domestic refuse.

Pit 20 was only partially excavated. The extant record of this feature is a sketch section drawing. The pit was about 0.9m deep and probably sub-rectangular in section. The seven layers it contained were each distinguished on the drawing only by numbers.

Pit 21 was sub-rectangular in plan and section, although the bottom was dished at the point where it rested on the natural gravel. Some 1.4m deep, it had been cut at most 0.29m into the gravel. The lower half of the pit was filled with four thick layers of brownish yellow 'sand' (perhaps brickearth) separated from each other by thin layers of 'grey soil'. All these layers may represent a single infilling of the pit, although the 'grey' layers might be taken to indicate that there were intervals between four periods of dumping. In the top half of the pit were two rubbish layers topped by a layer of otherwise undescribed 'yellow-grey sandy loam' which may have been more brickearth.

Pit 22 was large and amorphous in plan, but its size and shape may represent the erosion of a

smaller sub-rectangular feature. It was bowl-shaped in section and 1.82m deep. The fill largely consisted of rubbish layers.

Pit 23 was sub-rectangular in plan, and probably so in section. Its depth and fills are not now known.

Pit 24 was circular in plan, and initially vertical with a flattened conical bottom. It was 1.62m deep. The fill consisted almost entirely of redeposited brickearth and gravel that appears to have been difficult to distinguish in places from the undisturbed sides. The pit may have been an incomplete and abandoned well-digging, backfilled with the material removed during excavation and a lens of burnt daub.

Pit 25 was sub-rectangular in plan and seems to have been heavily disturbed across its top. Its fill of 'dark grey occupation soil with charcoal, bones, and pottery' lay '4' 6" [1.4m] below the excavation surface' and survived to a 'greatest depth, as existing, of 9" [0.2m]'.

Pit 26 was sub-rectangular in plan and section, 1.18m deep, and filled both initially and finally with layers of redeposited brickearth. Between these was a thick layer derived from domestic rubbish.

Pit 27 was sub-rectangular in plan, and probably so in section. However, there was a north-south slope of some 8° in the base of the feature. The pit had been disturbed across the top and survived to a depth of only 0.37m. The undisturbed fill consisted mainly of redeposited brickearth, perhaps intended to seal a primary cess deposit. The presence of cess may be indicated by the fact that 'the base was "chloriticized" light grey green'.

Pit 28 was trapezoidal in plan, and like pit 27 possessed a probably sub-rectangular base that sloped however by up to 14°, this time from south to north. Like that pit, it had been disturbed across the top and at most survived to a depth of 0.32m. What remained of the fill was redeposited brickearth beneath a rubbish layer.

Pit 29 approached a sub-rectangular shape in plan and was bowl-shaped in section. It was 1.68m deep. The fill initially comprised redeposited brickearth, the main layer of which contained 'much daub' (presumably burnt). Over this was a rubbish layer which was sealed by more brickearth. The upper layers were of domestic refuse.

Pit 30 was cut through pit 30A, and was cut by a modern pit. Approaching a sub-rectangular shape in plan, it appears to have been dug with roughly vertical sides and a dished base which was deepened by a conical excavation, at most 0.6m deep, which had been commenced just below the point of junction between the natural brickearth and gravel. Measuring in all 1.81m deep at its deepest point, it may have been intended for use as a well, though no trace survived of a shaft. The fills were incompletely recorded, but seem to have consisted mainly of redeposited brickearth and gravel separated by a layer of 'fine brown ash'. These layers perhaps represent the quick backfill of an unused well pit. There may have been a complex later history of reuse and recutting of pit 30 to form a number of rubbish pits.

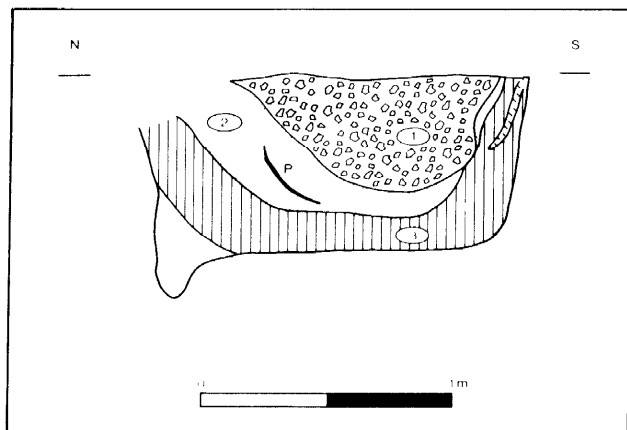


Figure 83 SOU 36: pit 33. Key: P 'burnt plank'. See also fig 17.

Pit 30A was cut by pit 30 and apparently by a modern rubbish pit. Sub-rectangular in plan and section, it was about 1.18m deep. No adequate record of its fill survives.

Pit 31 was cut by pit 42 and cut through pit 40. Roughly oval in plan, its shape in section is unclear. It may have been saucer-shaped and 1.01m deep, in which case the lowest layer excavated was in fact natural soil. Alternatively, taking this 'natural' to have been redeposited, the pit was 1.8m deep, and had irregularly sloping sides and a dished base that rested on the natural gravel. Disregarding the 'natural', its fill was of domestic rubbish.

Pit 32 was cut to the east by a modern feature. Sub-rectangular in plan, it had steep sides and a flattish base which was dug about 0.07m into the underlying gravel. It was 0.89m deep. Its fill was mainly of rubbish, including a layer of 'fine powdery grey ash'. Like a layer in pit 6 (see above) this may have been burnt chalk.

Pit 33 (fig 83) was cut to the north by a modern feature and was cut through pit 34. It was sub-rectangular in plan and section, and about 0.8m deep. A depression at the north end may have been a post-hole, but the nature of its fill and its relationship with the pit are not known. Over an initial layer of rubbish (layer 3) was a layer of redeposited brickearth mixed with some bones and burnt daub (layer 2). The remains of a burnt 'plank' were found in this layer, reportedly 41" (1.04m) long by 1' 2" (0.36m) wide by 3/8" (10mm) thick. In common with the rest of the wood recovered from this site, this 'plank' has not survived. The top layer (layer 1) comprised 'daub [presumably burnt] and a few fragments of burnt bone'. It would appear that the two upper layers were dumped as post-destruction clearance.

Pit 34 was cut by pit 33 and a modern feature. It was a well. The well pit was circular in plan. In section it was vertical to the gravel and thereafter conical. The tubular shaft was at least 2.57m deep (perhaps originally about 2.9m deep) and about

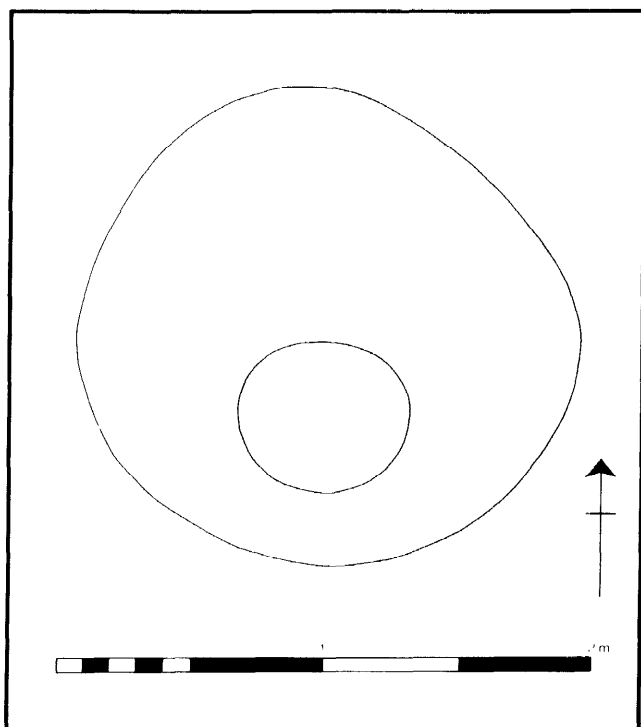


Figure 84 SOU 36: pit 39.

0.75m in diameter at the base, widening by stages to about double that diameter near the top. Since any distortion of the shaft should appear as a centripetal impinging of the pit fill, it seems likely that the shaft was intended to narrow as it deepened. The pit was backfilled with brickearth. The shaft was filled with four or six layers, none of which can now be described. There is no record that any trace of a lining was found.

Pit 35 was circular in plan and sub-rectangular in section, though the corners between the sides and base were gently rounded. It was at least 0.54m deep. Its fills are not described in any surviving documents, but seem to have been the same as many of those found in pit 36, with which it may therefore have been contemporary.

Pit 36 was disturbed across the top by modern features. Approaching a sub-rectangular shape in plan, its sides were roughly vertical until they reached the underlying gravel. Thereafter, the sides and base were dug to an irregular shape. Any full description made of the layers in this pit has disappeared. It appears that the layers were generally the same as those found in pit 35.

Pit 37 was cut across the top by a modern pit. Rounded in plan, its shape in section is somewhat unclear. It seems to have been dug with vertical or nearly vertical sides down to the natural gravel. The sides then sloped inwards to form a cone. At the base was then dug what is best described as a truncated tubular shaft, perhaps 1.44m in diameter and

between 0.34m and 0.65m deep. Pit 37 was 1.88m deep at its deepest point. Although the reference to a 'shaft' is meant descriptively, it seems quite possible that this feature, so similar to the well, pit 34, next to which it was dug, was intended to be further extended and used as a well. Descriptions of most of the eight layers found in pit 37 no longer exist.

Pit 38 was sub-rectangular in plan and roughly U-shaped in section. It was 1.43m deep. It was filled with at least seven layers, the descriptions of which have been lost.

Pit 39 may have been a well, but as no section drawing survives this is unclear. The plan (fig 84) shows a large pit somewhat rounded but inclining to an oval shape, inside which and offset to the south is a circular feature about 0.64m in diameter. This may represent a shaft.

Pit 40 was cut by pit 31 and disturbed across the top by a modern feature. Much of the pit lay outside the area excavated and its shape in plan is uncertain. It is not clear how the sides were shaped, though they may have been vertical. The base was markedly dished. The pit was some 2.4m deep. Its bottom layer consisted of redeposited brickearth, up to 1.66m thick. Over this were two rubbish layers separated from each other by a layer of 'fawn clay' (perhaps redeposited brickearth). The uppermost layer, which was a rubbish layer, contained burnt daub.

Pit 41 was rounded in plan and of irregular shape in section. It appears that the sides were cut vertically down to the natural gravel and thereafter sloped inwards to form a rounded base. The pit was 1.3m deep. The majority of the pit was filled with three layers of redeposited brickearth between which were two rubbish layers. The upper fills had been derived from domestic refuse. Pit 42 was cut through pit 31 and disturbed across the top by a modern feature. Vaguely oval in plan, its sides were steep and its base was flat. It was deeper than it was wide: at least 1.32m deep (of which 1.09m survived) and an average 1.01m wide. Any record made of the fill of this feature has been lost. Its function is unclear.

Pit 43 was cut through pit 6. Irregular in plan, its shape in section is unknown, as is the nature of its fills. It was at least 0.82m wide.

Pit 44 barely appeared on site. Nothing else is known about it.

Structural evidence

That buildings had stood at SOU 36 is indicated by the presence of wells and perhaps cess pits there, also by the inclusion of burnt daub in their fills. It can be assumed, therefore, that brickearth digging had obliterated nearly all traces of these buildings.

Of the seven numbered post-holes, perhaps three have been described above with pit 12. The remainder, PHs2-5 are shown on fig 80, though without distinguishing numbers. PH2 lay to the east of pit 12 and the other three formed a triangular group within

it. If they were not root marks, they were stake-holes of unrecorded depth and fill. Their function is unknown.

Human skeletal remains

The discovery of an infant's skeleton in the bottom layer of pit 12 has already been mentioned. It is presumed that the infant had been deliberately buried and not redeposited from another resting place, since, if it had been redeposited, few bones would have survived and been swiftly recognised. The lack of any reference to an associated grave cut probably indicates that the infant had been placed in pit 12 as it was being infilled.

However, there is some reason to suppose that a cemetery had existed close to SOU 36, perhaps to the east of trench A Maitland Muller, in a letter of 1961, mentions the discovery of 'an adult jaw' in some unspecified pit. In 1986, during the excavation of a 2m-square soakaway some 12m to the east of trench A, the skeletal remains of at least two adults were found, intermixed with soil redeposited in the 19th century. These individuals had apparently been disinterred and reburied by brickearth diggers, and the jaw found by Maitland Muller may also have come to rest in the backfill of a brick-earth-digging 'pit'. Further investigation of the area might reveal evidence similar to that found at SOU 43; disarticulated skeletal remains piled together in the backfill of shallow trenches.

None of the human bone recovered from SOU 36 now seems to exist.

Dating and interpretation

Pits 4, 13, 14, 25, and 26 contained no dating evidence. Pits 1, 9A, 24, and 32 contained insufficient finds to warrant dating them to any lesser period than the Middle Saxon period. Of the rest of the pits, surprisingly few appear to have been dug or infilled early in this period. Pit 12 produced only eleven sherds, two of Roman pottery and seven of imported pottery. An early Middle Saxon date for the infilling is hesitantly suggested on the basis of the other two sherds (one of an organic-tempered pot and one of a sandy-tempered pot) found somewhere in the pit. This relatively late date for a sunken-featured building is paralleled within Hamwic by SOU 16 F54, and outside Hamwic by a similar feature found at Shepperton Green, Middlesex (Canham 1979, 109).

Pit 13 is stratigraphically earlier than pit 15. The pottery in pits 15 and 41 is consistent with an early or a mid Middle Saxon date. A potentially narrower date-range for the first fills of pit 15 is suggested by the hoard of 23 sceattas it contained (items 157-79; M25, 27, 31, 44, 56, 61-4, 66-9, 72, 73, 83, and 85-91). Two of these are secondary-series BMC Type 39 sceattas, the rest various forms of BMC Type 49 sceattas, as are the two other coins known to have

been found in the same layer as the hoard (items 180 and 181; M65 and 75). Until the debate about the dating of the latter type has been resolved, however, it must remain unclear whether BMC Type 49 sceattas were also a secondary series or were struck later, in the reign of Cynewulf (757-86). Two coins found somewhere in pit 20 were another BMC Type 49 sceat (item 182; M57) and a primary runic sceat (item 183; M1) which was perhaps imitative. No pottery was recovered from this pit.

The fills of the other 33 pits can all be dated to the mid and late Middle Saxon periods; at least fourteen of which (pits 2, 6, 7, 8A, 11, 16, 18A, 21, 22, 28-30, 33, and 40) can be assigned to the later period, either for stratigraphic reasons or because of the pottery found in them. The top layer of pit 22 also contained a penny (item 156; M145) which is held to have been struck late in the reign of Egbert (802-39).

This dating evidence, to which should be added a penny of perhaps the mid 840s (item 184; M136) found at a now-unknown provenance within the site, contributes to a picture of occupation different from that apparent elsewhere in Hamwic. The period of heavy occupation seems to have begun fairly late in the 8th century and to have continued well into the 9th century. However, it is possible that the relative absence of evidence of early-8th-century occupation is an accident, due to the positioning of the trenches of SOU 36.

It is clear that a great many wells were dug here. Of the 42 pits whose functions can roughly be identified (that is, excluding pits 1, 4, 8A, 14, 39, and 44), five (11.9%) were wells and three (7.1%) have been identified as unfinished well pits. It seems that the wells were dug in lines; and if larger areas had been opened the percentage of wells found would probably have been lower. What is surprising is the relatively high number of unfinished wells, which should perhaps also include pit 10A, interpreted here as a well that was not used as such. No ready explanation may be offered for what appears to have been the wasted investment of much labour, unless one invokes some sort of catastrophe theory. But this seems unlikely, both because there is no other evidence of interrupted labour and because there is no good reason to suppose that three wells were simultaneously being dug and simultaneously abandoned.

The sceattas found in pit 15 are usually referred to as the Kingsland Hoard. Given the unlikelihood that they had been accidentally dropped into the pit and not recovered, the title is probably accurate. Their hoarding may be seen as a response to an external threat (earlier, however, than the catastrophe invoked in the previous paragraph), and the thick layer of burnt daub that sealed the coins may be evidence that the threat became a reality. But, in the absence of any historical support, this is flimsy evidence for such an interpretation.

Industries are poorly represented on SOU 36. There is some evidence (pit 16) for copper-alloy working and (pits 6 and 32) some activity associated with the use of burnt chalk.

SOU 43 (HAM c: AH 18)

Introduction

SOU 43 was located between what were Golden Grove and Grove Street, in a position lying to the east of what is now the southern end of Golden Grove. Investigation of SOU 43 began in August 1961, under the direction of FA Aberg. The topsoil was stripped by a bulldozer from a rectangle measuring 29.2m north-south by 7.2m east-west. Subsequently, a ramp and steps were provided, lessening the area available for excavation, and three small extensions were made. The area investigated measured 196m².

After clearing of the newly exposed surface, the features were excavated by hand in at least two different ways. The fill of pit 103 was removed in horizontal spits, and it seems that the fills of pit 108 were more normally removed. It is not clear how the other pits were excavated. Features numbered were pits 100-13 and burials 1-4.

The surviving written record comprises the remains of two notebooks kept by Aberg, a few short descriptions written on the site plan, and some equally short entries in bulletins of the local archaeological society (SAS 1961a-d). The notebooks are entitled 'Hamwic 1961 Notebook' (N1) and 'Hamwic Excavations Notebook' (N2). N1 seems complete, although it contains five loose leaves at both its beginning and its end. N2 consists of nine leaves torn from a notebook other than N1. On internal evidence, N1 was compiled at various periods during the excavation of SOU 43, and N2 after the site was backfilled. The entries in N2 seem to have been a distillation of those in N1, with some significant amendments; but the notes on pits 111-13 (which are not mentioned in N1) were presumably drawn from another, unlocated source. Whenever possible, in the following report, preference is given to the earlier notebook. Where significantly different descriptions are given, their provenance has been noted.

The natural soil was described as clay, and its colour twice noted as orange. Presumably it was some species of yellowish brown brickwork, which, at around 10YR 5/4, often appears orange. This soil was exposed at a depth of about 0.4m below the existing ground surface; at an approximate height, therefore, of 3.1m OD. It overlay gravel, which was exposed only in the sides of the deep feature, pit 108, at an unrecorded depth.

Modern disturbance on this site may be divided into two main phases. The later phase consists of sewer trenches, soakaways, and 'dead wells', all associated with a sanitary system built to serve the

houses erected here in the 1840s. Also of this phase are a number of small rubbish pits, dug perhaps in the back yards of these houses. All features of this phase were cut through those of the earlier phase.

These earlier features were apparently dug for the extraction of brickearth immediately prior to the building of the houses in the area. They were numbered pits 103-5, 107, 109, and 110 (fig 85). 'Clay pipe stems', 'glazed pottery', '19th-century pottery, and other modern artefacts were recovered from these features. In their most readily identifiable form, the features were wide, long, flat-bottomed trenches, never cut deeper than 0.3m into the brickearth, and backfilled with dark soil intermixed with modern and Middle Saxon artefacts. They were dug in fairly regular strips separated by narrow baulks, which often failed to survive. (Several of these features appear on pl 1, which shows the unexcavated pit 109 in the background and the excavated pits 103 and 104 in the foreground.) Where the trenches exposed the edge of a recognisable earlier feature, they were usually diverted so that they did not expose more. The existence of brickearth-digging trenches that avoided earlier pits has also been claimed at SOU 1 (Hassall 1980, 22-4) and at SOU 36. Noting the existence of an oval extension to the south edge of pit 104, Aberg plausibly surmised that it had been a shallow Anglo-Saxon pit (like pit 100, described below) which had been entirely robbed during the course of the digging of the rest of pit 104. He also suggested, perhaps with less reason, that the uninvestigated, modern pit 110 was likewise a robbed pit.

Early features

The modern disturbance described above will have wholly destroyed shallow features; but scarcely damaged the fills of most of the deeper features.

Pits

Pit 100 was rounded in plan with a 'concave shape' (N2) to its bottom. It appears to have survived to a maximum depth of only 0.1m. It was filled with a dark soil that contained 'much oyster shell and bone' and a 'large number of flecks of charcoal' (N1), as well as 'some wood ash' and 'mussel shell' (N2). It seems to have been a domestic rubbish pit.

Pit 101 was of unclear shape in plan and of unknown depth and shape in section. Only the westernmost segment was excavated - a segment at most 0.43m wide and 0.38m deep. Excavation revealed a 'medium brown' layer, either of 'clay' (N1)

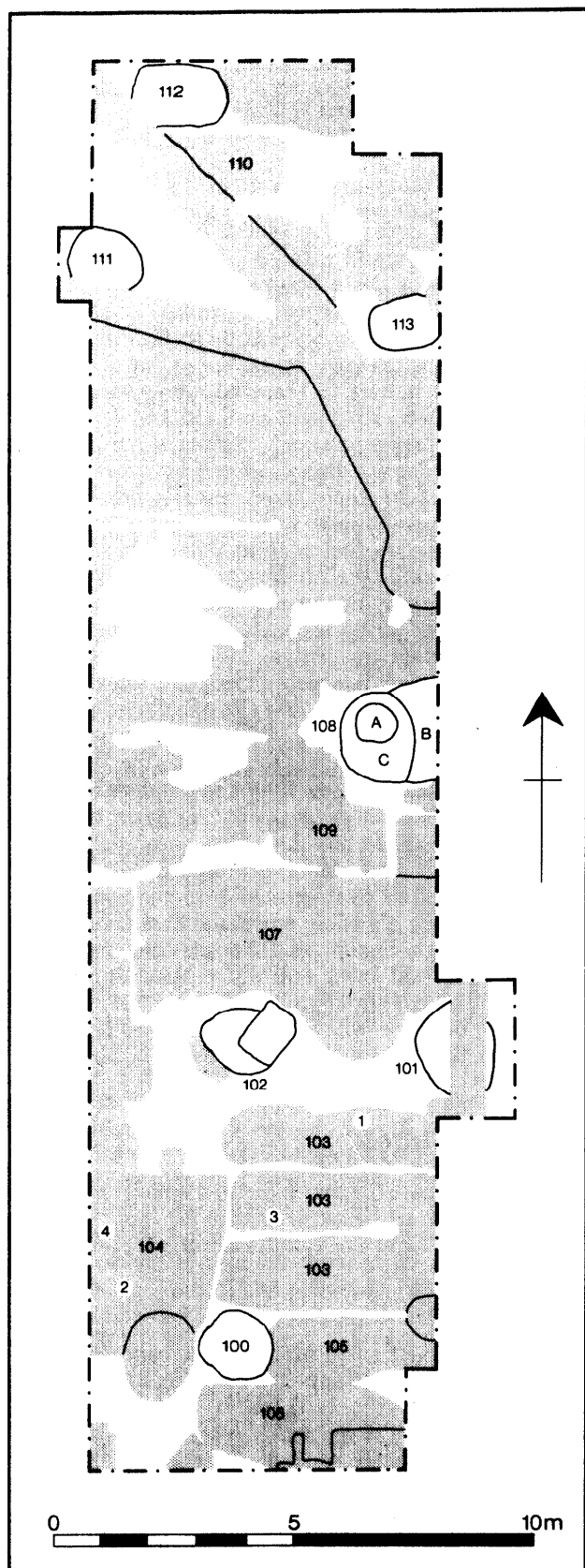


Figure 85 SOU 43: site plan. Numbers in circles are 'grave' numbers. Other numbers are feature numbers without their 'pit' prefix. See also pl 1.

or 'soil' (N2), which contained some oyster shell and animal bones.

Fit 102 appears to have been cut by a rectangular pit, a fact that, if true, may account for the 'complicated fill' that was observed. The two pits were not distinguished during excavation. Their depths and shapes in section are not recorded. The fill was 'very ashy' (N1) and comprised 'ashy charcoal [layers] alternating with thin streaks of clay and black occupation material' (N2).

Fit 108 was once thought to have been three features, and was distinguished during excavation by letter suffixes; but in fact it was two features. The earlier one, pit 108B, was of unknown shape in plan and section. Some 1.6m deep, it contained a thin layer, 0.08m deep, of 'darker soil', sealed by the main fill of 'lighter grey coloured . . . clay with an admixture of gravel'. This may have been redeposited natural. There was some animal bone in this layer and a great amount of a material variously described as 'burnt clay' (N1), 'daub' (N2), and large fragments of burnt daub' (SAS 1961d).

The later feature was a well, pit 10A/C, the excavation of which was 'not followed below 6ft [1.8m]' because of a collapse of the section. The well pit, 108C, had been 'cut through natural orange clay into gravel' (N2), and, at the time the excavation was abandoned, it was noted that its 'edge [was] coming in at [the] base'. This may mean that the well pit was conical, but more probably means that until that point the sides were close to vertical. Pit 10% was filled with redeposited natural 'clay' and gravel, into which had been thrown a small amount of animal bone. The shaft, 108A, was 'approximately 22ins [0.6m] in diameter' (N2), presumably was tubular, and had been set off-centre in the well pit. It was filled with an indeterminate number of layers derived from domestic rubbish, and was especially noted for the large quantity of bones found within it. At some point, 'grey ash' (N2) was encountered. There seems to have been a slump in the top of 108A/C, the edges of which were apparently these shown on plan. Some 0.7m deep, it was filled with domestic refuse.

Pit 111 was of unknown shape in section and about 0.8m deep. It contained a single, 'grey ashy layer' intermixed with some charcoal, animal bone, and oyster shell.

Pit 112 was 'rather shallow'. Its lowermost layer 'was a grey charcoal filled layer containing large quantities of burnt, fragmentary bone'. Above this was 'chocolate brown soil with a lot of charcoal'.

Pit 113 was only about 0.4m or 0.5m deep. It was filled with 'dark brown' soil that contained 'large quantities of charcoal' and large numbers of oyster shells and bones'.

Human skeletal remains

Redeposited in the fill of several brickearth-digging features were groups of spreads of human bone, entitled by the excavator 'burials'. The title is retained here, and the approximate position of the

four main groups is shown on fig 85 by an encircled number.

Burial 1 (pit 103) comprised half a damaged skull - the occiput and parietals. . . . Beneath the larger fragment was a smaller portion and close by was a fragment of the upper jaw and the lower mandible broken into two pieces and lying apart. Long bones and other human remains were also scattered throughout this disturbed layer.

Burial 2 (pit 104) comprised a well preserved skull and upper jaw. [The skull] lay on an area cut or broken off sometime in the past. Its position was at an angle resting on the parietal bone.

Burial 3 (pit 103) comprised a fragmentary human skull [with a] broken occiput in [a] very worn condition and fragments of parietals. [There were] no facial or jaw bones anywhere near it but some vertebrae and arm bones.

Burial 4 (pit 104) was a 'group of pelvic and long bones' (N2) discovered at the edge of the trench. After this edge had been 'cut back 30" x 36" [0.8m by 0.9m]', at a point now unknown, there were exposed 'a disturbed mass of bones . . . lying in disorder one on top of the other. They included a loose lower jaw bone, vertebrae, clavicle etc' (N1 : N2 has 'clavicles').

Burial 5 is this writer's designation. In pit 105 were 'found scattered in the fill' some human bones 'not as numerous as in pits 103 and 104'.

Burial 6 is also a new title. Somewhere in the series of four trenches known as pit 107 were found human bones', seemingly of no great quantity.

Dating and interpretation

One coin was found (item 4: not in Metcalf 1988). Insecurely provenanced to pit 102, it has anyway been lost. 'Saxon pottery' was reportedly recovered from all the numbered pits except pits 109 and 110. However, no pottery survives that is provenanced to pits 104, 105, 107, and 108B, and it has probably been lost or (less likely) intermixed with the pottery from the other pits. It is possible that the surviving pottery from these pits is smaller in quantity than was originally recovered. Because of all these uncertainties, very little can safely be said of the pottery dating evidence, except that it points to a Middle Saxon date for the infilling of the non-modern pits.

No structural evidence survived; but the presence of a well and rubbish pits implies the existence of structures, at least in the near vicinity of SOU 43. The shallowness of many of the pits is surprisingly different from the pattern usually seen; and, apart from suggesting that they had been truncated by ploughing, the writer can offer no explanation of the difference.

'Grey ash' was found in pit 111 and in the shaft of the well, pit 108A. Its survival in this colour suggests that it was in fact burnt chalk. 'Ash' was also found in pits 100 and 102, and (despite the

description of this material in pit 100 as 'wood ash') it is possible that it was also burnt chalk. If so, there may have been some industrial activity on or near SOU 43 requiring the use of lime. This may have been centred on pit 102, which was mainly filled with 'ash'. The description of the fills of this feature is reminiscent of putative industrial features found at Six Dials. A direct association may have existed with those features on SOU 34, to the west, where burnt chalk was found.

Much of the human bone recovered by the excavator seems to have been lost. Pay (forthcoming) states that the surviving material represents the remains of at least five adults; two male, two female, and one unsexable. Nothing in the original site records suggests that the minimum number should be raised. The bones had been disinterred as a result of brickearth digging, as had happened nearby, at SOU 48: Keele, writing of a period in the 1840s, states that in laying out a part of the . . . estate for building purposes, a great number of human bones were found on the space now occupied by a row of houses called 'Grove Street' (Keele and Roach Smith 1857, 60).

Although perhaps truncated by ploughing, the graves must have been shallow if they and their contents were to be removed by trenches dug no deeper than 0.3m. Since the graves were dug out and not skirted by the trenches, it may be that they were filled with redeposited natural soil and therefore were not seen by the brickearth diggers.

The skeletal remains can be linked with those remains found at SOUs 34 and 48. On the basis of the SOU 34 evidence, the cemetery may be dated to the early 8th century (see above).

SOU 43 lay somewhat to the west of Grove Street; probably just to the west of the main part of SOU 48. The eastern and western extremes of the SOU 34/43 burials were some 15m apart. This is the minimum east-west dimension of the cemetery. The north-south dimension cannot be calculated. One may note that SOU 43's redeposited skeletal material was found in the southern half of the trench, and was concentrated in the southern quarter - in a position roughly opposite the graves found at SOU 34. However, as Keele indicates, the bone was recognised by the brickearth diggers: if it had been passed around, for instance, or temporarily put aside out of the way, its point of origin could have been almost anywhere inside or close to SOU 43.

If the five bodies had all been buried in the southern third or quarter of SOU 43, their graves would have been dug into an area measuring about 50m² - 65m². That is not a high density of burial, and is similar to that noted at SOU 34. According to this evidence, it is more likely than not that the cemetery contained relatively few bodies. Because of the many uncertainties, however, any calculation of absolute numbers is a meaningless exercise.

SOU 99

Introduction

The site comprised an area between St Mary Street and Kingsway, and was formerly occupied by the Stoner Motors garage on the Kingsway frontage and numbers 46-52 St Mary Street. In 1978 Southampton Archaeological Research Committee opened two sondages there, exposing the upper fills of pits (SOU 68: see MF2:B2). By September 1982 all buildings on the site had been demolished prior to redevelopment. The excavation of SOU 99 was directed by the authors for the Trust for Wessex Archaeology.

An area of some 3175m² was available for excavation, of which about 1000m² was known to have been disturbed by petrol tanks, garage pits, services, and cellars. The line of a proposed service road at the west of the site immediately adjacent to the Kingsway frontage was also excluded from consideration as little damage to archaeological levels was anticipated (the road-construction level being that of the modern ground surface). A deep service trench along this road was the subject of a separate observation, however (SOU 168: see MF2:G5-7). The final shape of the excavation (fig 86) was determined largely by the need to avoid the

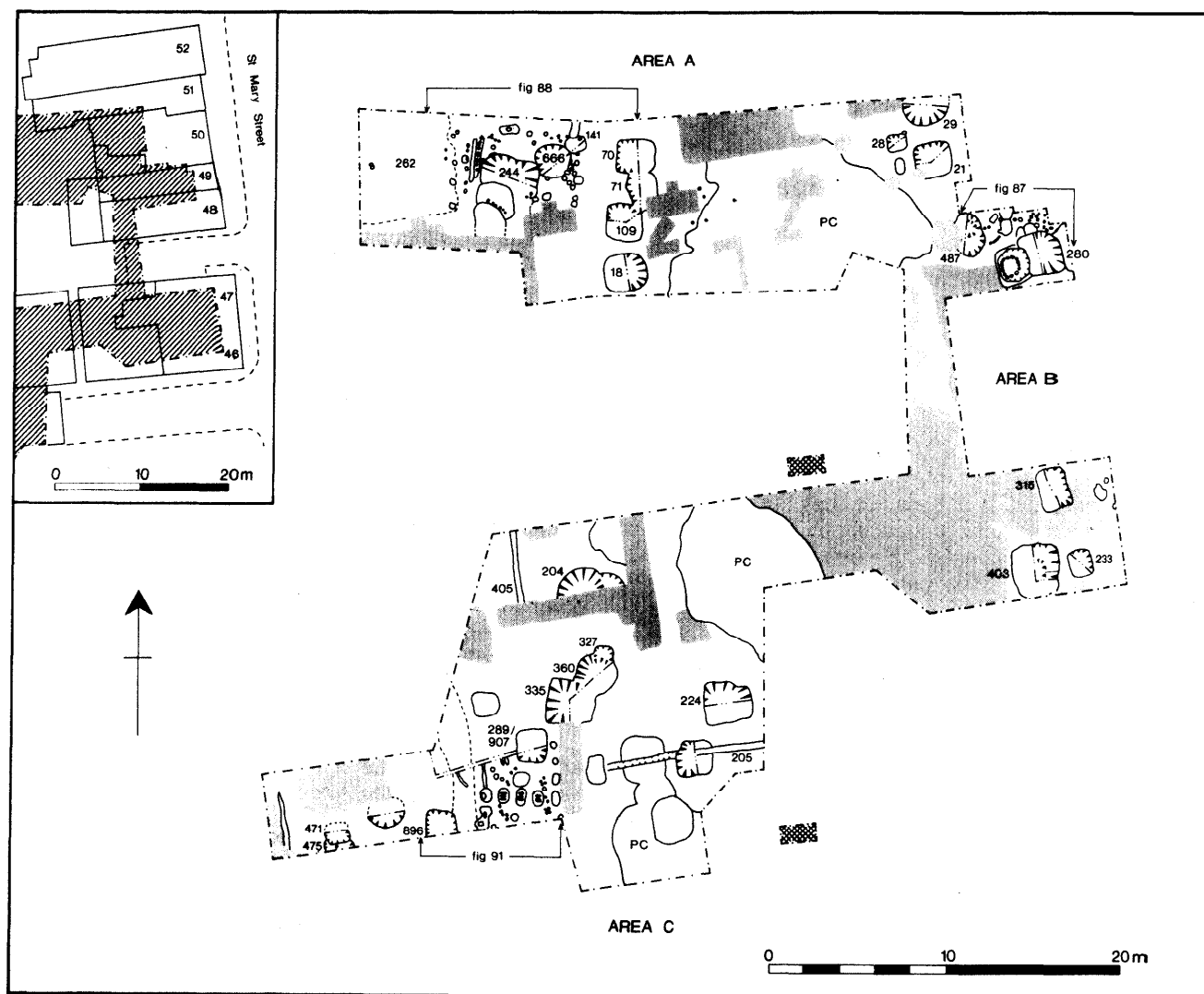


Figure 86 SOU 99: site plan. The two cross-hatched areas are the trial holes, SOU 68. Key: PC pit complex.

cellared areas along the St Mary Street frontage and the petrol tanks associated with the former garage. In addition, the need to store spoil at the site restricted the area available for investigation. Within these limitations, it was considered desirable to sample at least one complete east-west transect and one extended north-south trench incorporating the St Mary Street frontage. Some 910m² were opened therefore.

By analogy with excavations at the Six Dials site, the excavation area could be expected to contain approximately five wells, 100 pits and eight or more buildings. These estimates suggested that 'total' excavation was impractical given the limitations of time and funding. An excavation strategy and sampling design was formulated, therefore, which gave priority to recovering information concerning site layout. Consequently, although as large an area as possible was stripped by machine so as to establish an overall site plan, it was decided to concentrate on specific feature types best suited to answering questions concerning site status and chronology.

Buildings and other structures were to be accorded a low priority unless of a type previously unknown in Hamwic. In the event, few recognisable structures were discovered.

Pits and wells were considered likely to be the most useful types of feature to sample in order to recover data on chronology, wealth, status, and functional activity. A 25% sample was thought sufficient to provide an overall assessment, and it was decided to sample pits on a deterministic basis to ensure a relatively even spread across the whole site. Complex groups of several pits that would have been excessively time-consuming to separate were excluded, but pits with simple relationships (for instance, groups of two or three) were selected because of their potential for providing clear sequences of material. Eventually, 30% of the pits were half-sectioned and 202 5dm³ samples were extracted from the fills of 31 features for fine sieving. Gravelled surfaces and other stratified layers are comparatively rare finds within Hamwic, and it was considered necessary to examine any such deposits as fully as possible.

The Southampton City Museums continuous-numbering (context) recording system was used. Contexts were numbered 1-907.

The underlying subsoil was a fine sandy silt 'brickearth'. This was encountered at 4.15m OD in the east and 3.90m OD in the west, a gradient of about 1:200. There was no perceptible north-south slope. The brickearth was about 3m thick and overlay gravel. 'Two distinct horizons were seen in the brickearth. The uppermost layer was approximately 1m thick and was sandier and paler than the lower layer, which was darker orange in colour and contained a higher proportion of clay particles. A more detailed description of these deposits and the results of a particle analysis are to be found in the supplement (MF2:F4-G2).

Initial machine-clearance revealed two substantial areas of post-medieval brick-built cellars on the St Mary Street frontage (fig 86 inset). The cellars associated with numbers 50-2 St Mary Street were partially machine-excavated and found to be about 2.2m deep, at which depth all but the bases of the deepest Anglo-Saxon pits had probably been removed. The cellar underlying number 48 was not investigated for depth, but an area of disturbance was traced beyond the boundary of that house and across the passageway known as Pope's Buildings. The only uncellared areas of the St Mary Street frontage available for excavation were below numbers 46/47 and 49, and possibly part of number 50. Behind the cellars, an area of disturbance was noted which equated with the rear line of these buildings: within this damaged area disturbance of some 0.1m-0.2m below the brickearth surface was common and precluded the recognition of Anglo-Saxon building plans in the eastern part of the site.

Other major areas of disturbance were related to features associated with the Stoner Motors garage, particularly the petrol tanks located immediately behind the Kingsway frontage, which restricted the area available for excavation in the central and western parts of the site. Minor areas of damage were widespread across the site and included brick foundations to coal sheds and closets with associated pipes. All areas of disturbance are shown in detail on the site plans stored in archive.

Early features

Also stored in archive are full details of excavated features, which are described here. Other criteria for the selection of features for discussion in this report are explained under each feature-type heading. Only summary dating evidence is incorporated, and spatial considerations are introduced later.

Structural evidence

Due to persistent bad weather and the amount of later disturbance to the site, the record of buildings is unlikely to be complete. No complete house plans were recovered, but all clusters of post-holes or other structural features have been assigned to 'structures' and all such structures are described below. Individual post-holes not assigned to structures are not discussed.

Area B

Structure 1 (fig 87). The only evidence for a building on the St Mary Street frontage was a cluster of twelve circular or sub-circular post-holes 0.1m-0.4m in diameter (contexts 370-80 and 434) and five larger, shallower sub-rectangular features (contexts 431, 432, 465, 467, and 486). These varied in depth

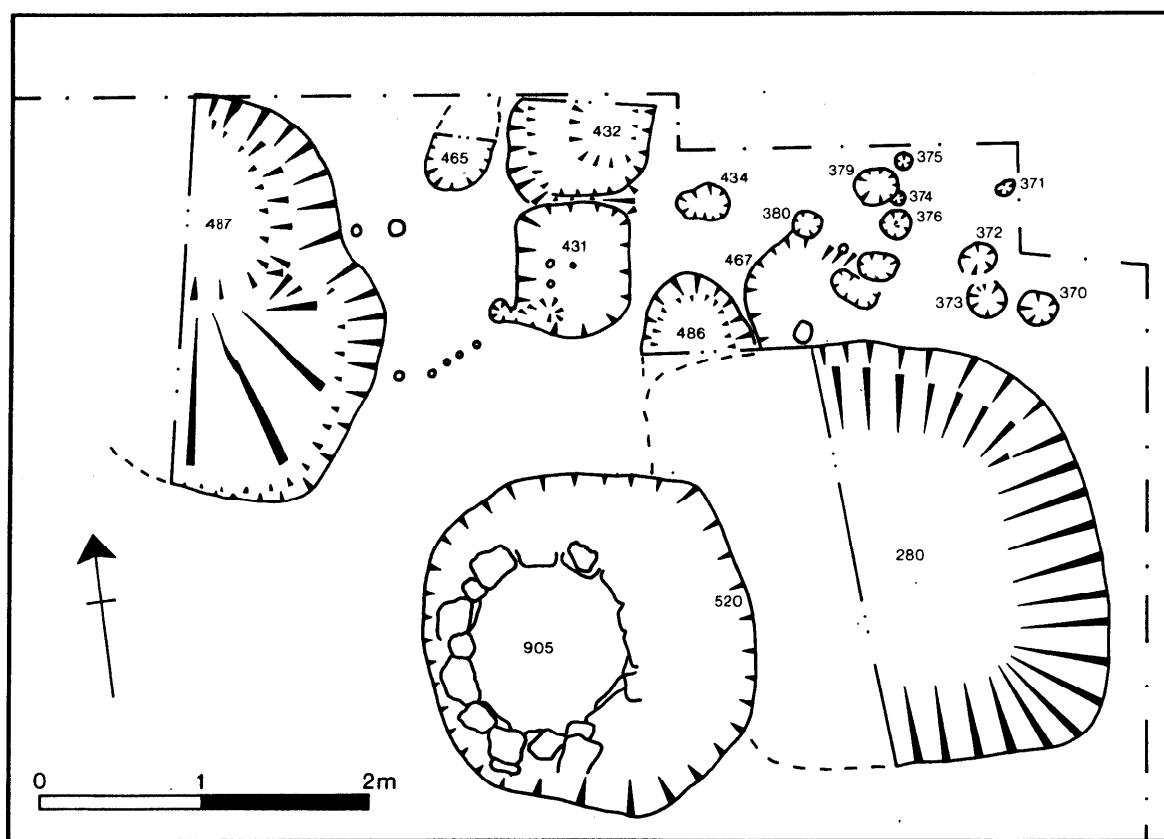


Figure 87 SOU 99, area B: structure S1 and pits. See fig 86 for the location of these features within the site.

between 0.05m and 0.4m. This cluster, which may represent the corner of a building of unknown dimensions fronting onto St Mary Street, may be divided into at least two phases, the smaller post-holes 377, 378 and 380 being seen to cut post-pit 467. Post-pits 467 and 486 were cut by pit 280, which may indicate that by the time the pit was dug the building was no longer in use or had had its wall line altered. The area between and bounded by the post-holes contained brickearth with a distinctly packed and trampled appearance which might be interpreted as the remains of a floor. The fills of the features, apart from 486, were an homogeneous greyish brown sandy loam with no evidence of post ghosts, although two (431 and 467) had stake-hole impressions in their bases. Context 486 produced a large quantity of burnt material, charcoal, and ash. A total of almost 8kg of iron slag was recovered from these post-holes, but the only broadly datable item was a Romano-British barbarous radiate coin from 466, the fill of context 467 (item 33; M168).

Area A

Two complexes of buildings were excavated, associated with a possible street (see below). These complexes were situated in areas A (structures 2-8: see figs 88 and 89) and C (structures 9-13: see fig 91). Together with the gravelled area and its various resurfacings and a number of associated pits and

layers, they form a stratigraphic sequence summarised in fig 95.

Structure 2 (fig 88a). Two shallow (0.15m-0.17m) gullies, contexts 646 and 648, running approximately east-west, were truncated at the west by modern disturbance and at the east by pit 109. They were not stratigraphically related to any of the other structures in this area. Their fills contained oyster shell and a very small quantity of iron slag. Context 648 contained a single sherd of glazed medieval pottery.

Structure 3 (fig 88a). The earliest stratified building within this complex comprised a group of post-holes (contexts 664, 729, 757, 759, and 889-93) which may have formed the corner of a rectilinear building underlying layer 681, a leached, hard-packed brickearth with iron pan (section C, fig 89). Layer 681 contained two late Roman sherds, one of Oxford red colour-coated ware and the other grog-tempered. In the absence of any other dating evidence it seems possible therefore that this small group of features belonged to a Roman phase.

Structure 4 (fig 88a). An irregular group of post-holes (contexts 773, 775, 777, 779, and 781) which all cut layer 681 but underlay 616 (section C, fig 89) may be associated with structure 5, and certainly postdate structure 3 on stratigraphic grounds. No finds were associated with these features.

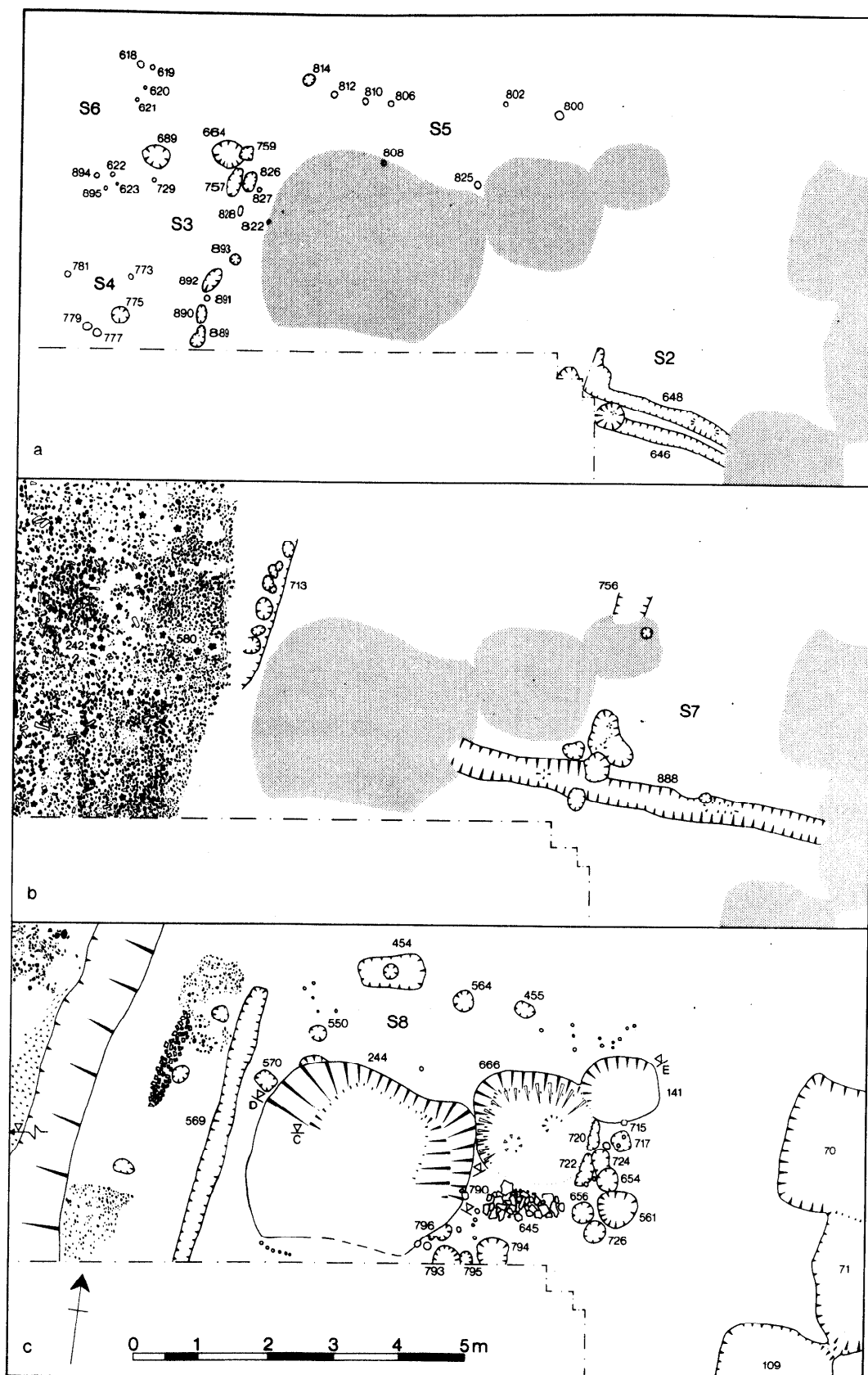


Figure 88 SOU 99, area A: structures S2-8, gravel surface 242, and pits. See fig 86 for the location of these features within the site.

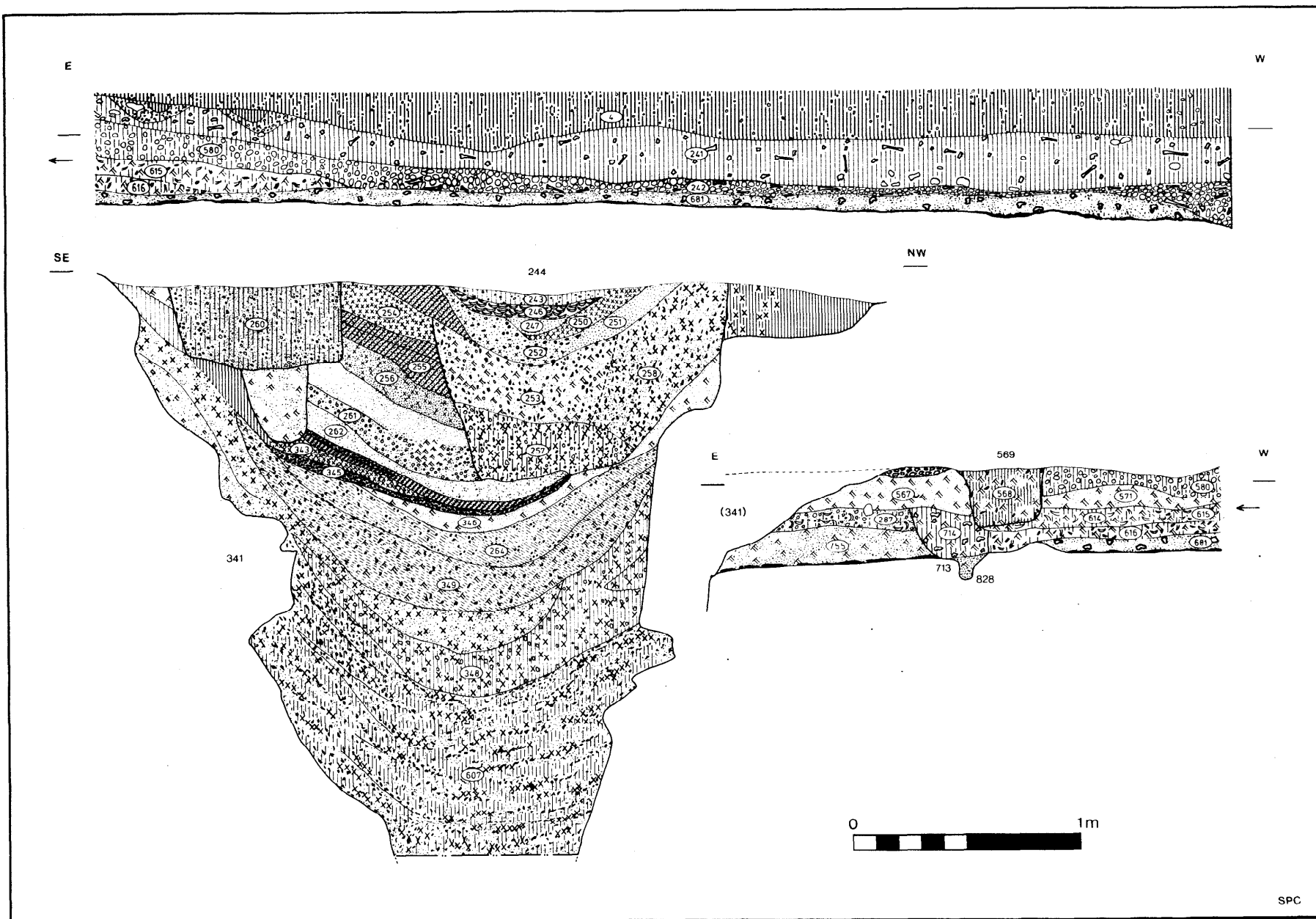


Figure 89 SOU 99, area A: sections C (top) and D (bottom left). To simplify the topmost drawing, the upper 0.4m of layer 4 have been omitted.- See fig 17 for the key.

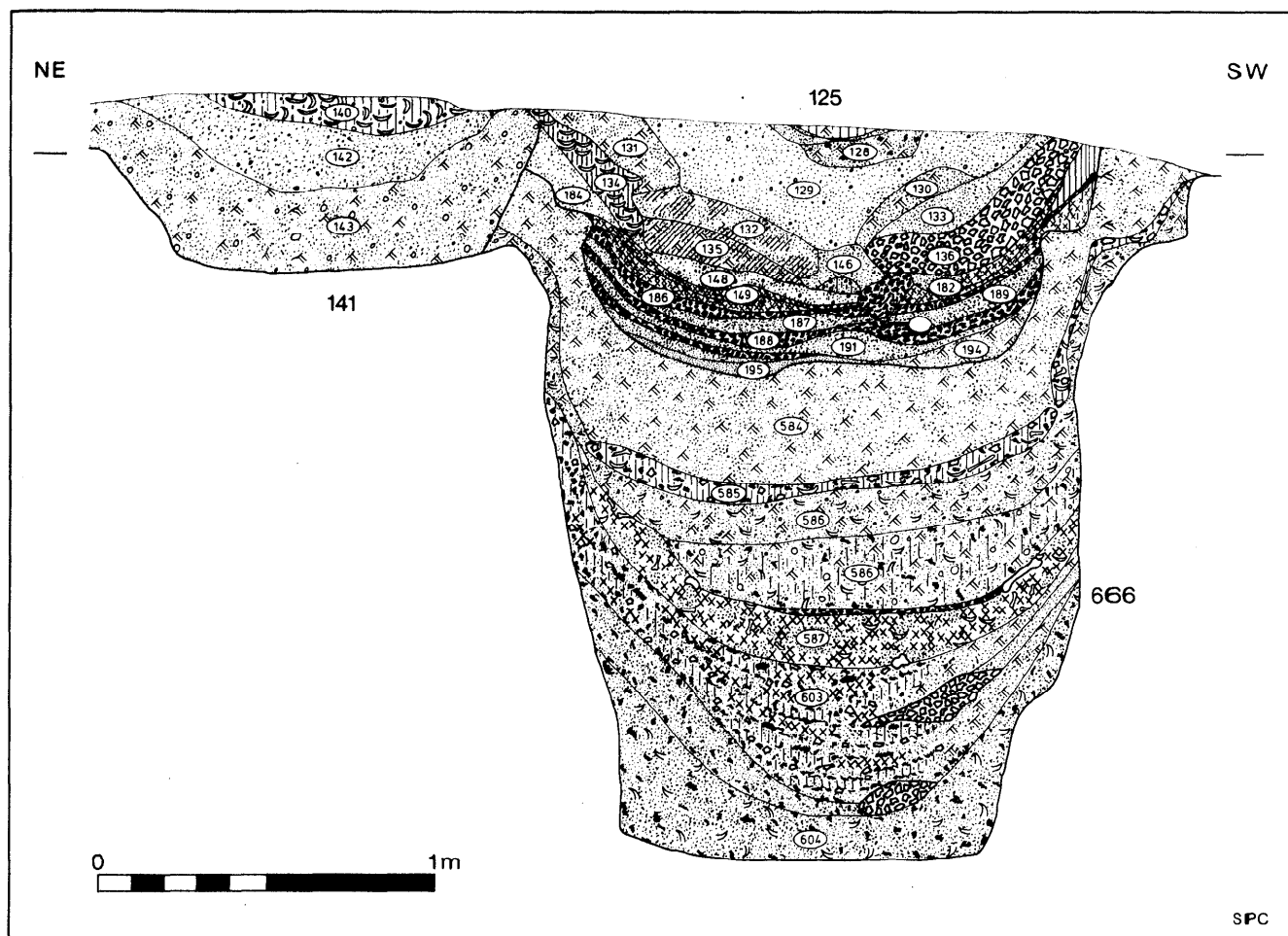


Figure 90 SOU 99, area A: section E through pits 125, 141, and 666. See fig 17 for the key.

Structure 5 (fig 88a). Other post-holes that cut layer 681 or its stratigraphic equivalent, layer 755, were contexts 800, 802, 806, 810, 812, 814, 816, 822, and 825-7. These appear to have formed the corner of a rectilinear building of unknown dimension which might also include post-holes 808, 828, and 893, none of which was firmly tied to this building stratigraphically but would fit best with this plan. There was no direct dating evidence for any of these post-holes.

Structure 6 (fig 88a). The post-holes assigned to structure 6 were cut through layers post-dating the construction of structure 4 (755), but were sealed by layer 287 (section C, fig 89). The building cannot be directly related to structure 5 stratigraphically but probably post-dates it. The group, which does not form a recognisable building plan, comprises contexts 618-23, 689, 894, and 895, none of which contained any datable finds.

Structure 7 (fig 88b). This building stratigraphically post-dates structures 3-5. It comprised a deep (0.45m-0.54m) steep-sided slot, 835/888, which ran roughly east-west for about 6m and had been truncated at either end by later pits (71 and

244/341). Stratigraphically it was later than layer 287 but underlay 567 (section C, fig 89). The fill of this large slot preserved the outline of a probable central beam or continuous post-setting with brickearth packing on either side. Several post-holes directly associated with the slot probably formed a partition wall, the most northerly extent of which was represented by slot 756. It seems likely that a doorway existed at the southern end of this portion between the post-holes and the slot, although much of this area had been heavily disturbed by subsequent Anglo-Saxon activity. It seems that the western end of this building was formed by a post-in-trench wall, context 713. This building would have been at least 9.5m in length but its width is unknown. Two sherds of presumably residual Roman pottery were recovered from slot 835/888 and small quantities of burnt flint, oyster shell, slag, charcoal, and daub from other features belonging to the structure.

Structure 8 (fig 88c). A layer of clean orange brickearth (567) was laid over the post-holes of structure 7 (section C, fig 90), through which a building comprising slot 569 and post-holes 454,

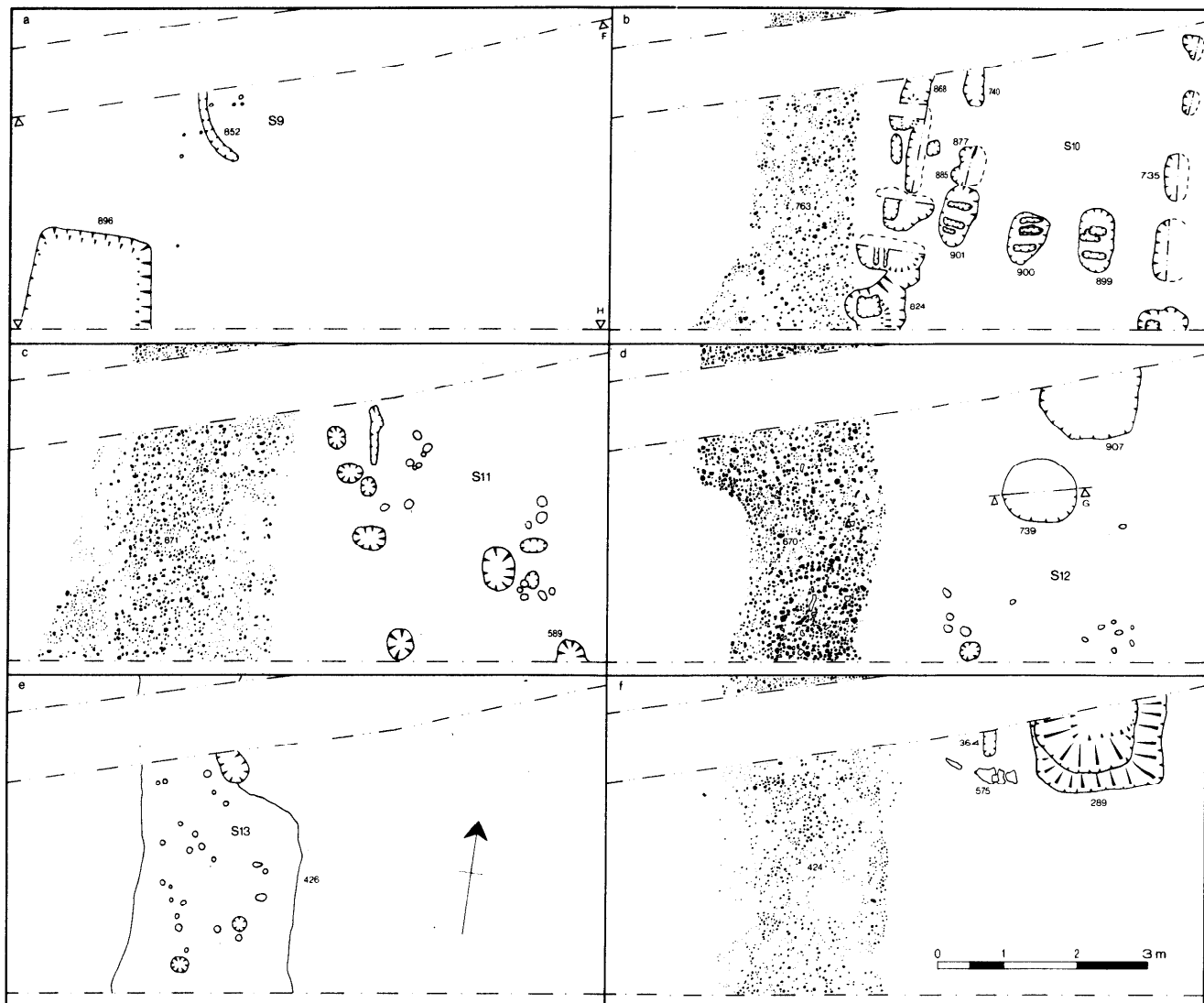


Figure 91 SOU 99, area C: structures S9-13, gravel surfaces, and pits. Only features mentioned in the text or shown in other figures are numbered here. (Context 824 is a structural feature within 854.) See fig 86 for the location of the features within the site.

455, 550, 561, 564, 570, 654, 656, 715, 717, 720, 722, 724, 726, 790, and 793-6 was cut. This building apparently lay on a different alignment from that of structure 7, having gable walls to north and south and a width of about 5m.

Area C

Structure 9 (fig 91a). Eight stake-holes and a curvilinear gulley (context 852), together with the sub-rectangular pit 896, underlay a gravel surface (670/671). Cutting through levels of redeposited loose brickearth (316) and compacted brickearth (691), the gulley (section F, fig 92) could not be separated on stratigraphic grounds from elements of structure 10. The absence of any associated finds limits interpretation, but the form of the gulley suggests a pre-Anglo-Saxon (probably late prehistoric) date.

Structure 10 (fig 91b). A substantial timber building was represented by post-holes and post-pits, which demonstrate a variety of constructional technique. Among the features were simple post-holes, and discontinuous trenches and pits with impressions in their bases that suggest they had held two or three upright planks. Gable ends were apparently to north and south. The building was of unknown length with an internal division represented by plank-pits 899-901, and was approximately 3m to 3.5m wide. Although this cannot be demonstrated, it is likely that the structure had a complex constructional sequence. The resurfacing of a gravelled area (671) overlay the western outer wall line of the building; and, if the building continued in use, it could have done so only if it had contracted to a line represented by features 740, 877, and 885. Disturbance to the adjacent areas was

too great to allow the recovery of more of this building, and confirmation that it was of more than one phase with alterations to its ground plan could not be obtained. One post-hole (735) contained oyster shell, but there were no finds from any of the other features.

Structure 11 (fig 91c) and structure 12 (fig 91d). Overlying structure 10 was a series of thin discontinuous spreads of apparently industrial material, ash, and charcoal lenses, through which were cut a number of post- and stake-holes. The two groups are differentiated in fig 91 on the basis of complex stratigraphic arguments to be found in the site archive. No recognisable structures can be formed from these groups, whether they are considered separately or together. Structure 13 (fig 91e). A cluster of stake-holes was cut through the surface 426, and was apparently sealed by 424. Stratigraphically it should postdate structures 11 and 12.

Interpretation

The possibly pre-Anglo-Saxon buildings, structures 3 and 9, were incomplete and not associated with any other contemporary features. Their significance cannot be assessed. Sufficient evidence survived only in the cases of structures 1, 5, 7, 8, and 10 to allow the plausible suggestion that these had been Anglo-Saxon timber buildings, but none could be confidently assigned to a specific type. The various constructional techniques employed are all well known at Hamwic with the exception of the plank-in-pit features that formed part of structure 10, for which the closest parallels are Structures B4 and C8 at Cowdery's Down, Hampshire (Millet 1983, 205-8 and 210-12). None of the other groupings formed recognisable plans. If they did once comprise parts of buildings, it must be assumed that a substantial number of structural elements either failed to survive the widespread post-medieval disturbance or were not recognised during excavation due to adverse weather conditions: this may have been the case particularly for buildings employing only simple post or stake construction.

The coin and pottery evidence from structures 1, 2, and 7 must be disregarded as residual or intrusive. The recognisable buildings may be assigned to the Middle Saxon period only because their constructional techniques are analogous with those of buildings of a similar date or because of their stratigraphic relationship with more firmly dated contexts. The relevance of the stratigraphy to the development of the building sequences is further discussed, below.

Cobbled and gravelled surfaces

No evidence was found for any earlier surfaces of St Mary Street. The apparent continuation of structure 1 beyond the site and beneath the modern pavement suggests that the edge of any Anglo-Saxon street would have been directly below the present street.

At the western edge of the excavation, metalled or cobbled surfaces were recorded in both areas A and C. Subsequent machine excavation established that (where later disturbance had not removed them) these surfaces could be traced between the two areas, and the two spreads are therefore considered to be a single unit forming a hard standing, a yard, or perhaps a street or trackway onto which structures 8, 10, and probably 7 fronted. The fullest record of resurfacing was recovered from area C: area A exhibited only a part of the sequence. The two areas are therefore described separately before discussion. The stratigraphic relationships between the buildings and these surfaces are summarised in fig 95. Gravelled surfaces almost certainly representing yards were noted in area C at SU 42500 11750, adjacent to an unexcavated pit complex, but were not investigated.

Area C

The metallurgy was evidently not a primary feature: it entirely overlay structure 9 and its early surfaces also apparently sealed pit 896 (fig 93). It has already been suggested that morphologically structure 9 is perhaps prehistoric, and the only finds from pit 896 were a substantial (c 12kg) quantity of oyster and mussel shells from the upper fill. The spreads comprising the surfaces often consisted of little more than localised patches, and thin dumps of material levelling holes worn into original surfaces which could not be traced over larger areas. However, four major, largely continuous gravel or cobble resurfacings could be identified (contexts 424, 670, 671, and 763: see figs 92 and 93). The main sequence was as follows. Only major interludes, layers that appear in section or other layers containing datable finds of significance, are described, in stratigraphic order. All other details are to be found in the site archive.

- 1 Context 763, a compacted fine orange gravel, was laid directly onto either natural brickearth or a redeposited brickearth surface 316. Context 316 contained an iron knife blade (item 153) and a single sherd of Middle Saxon pottery. There were no finds at all from 763. The gravel was a maximum of 0.15m thick and sloped sharply to east and west, producing a distinctively cambered profile. At its maximum, 763 was 2.5m wide, and was partially slumped into the top fill of pit 896.
- 2 Context 671 consisted of fine gravel within a matrix of orange brickearth laid either directly above 763 or else separated from it by spreads of yellow sandy loams containing ash and charcoal (context 681). Context 691 contained a small quantity of daub but there were no finds from 671. Context 671 was a maximum of 0.12m thick and formed a cambered surface at least 3.25m wide.
- 3 Context 670 comprised a cobbled layer, constructed from flints 0.03m-0.05m in diameter together with abundant quantities of

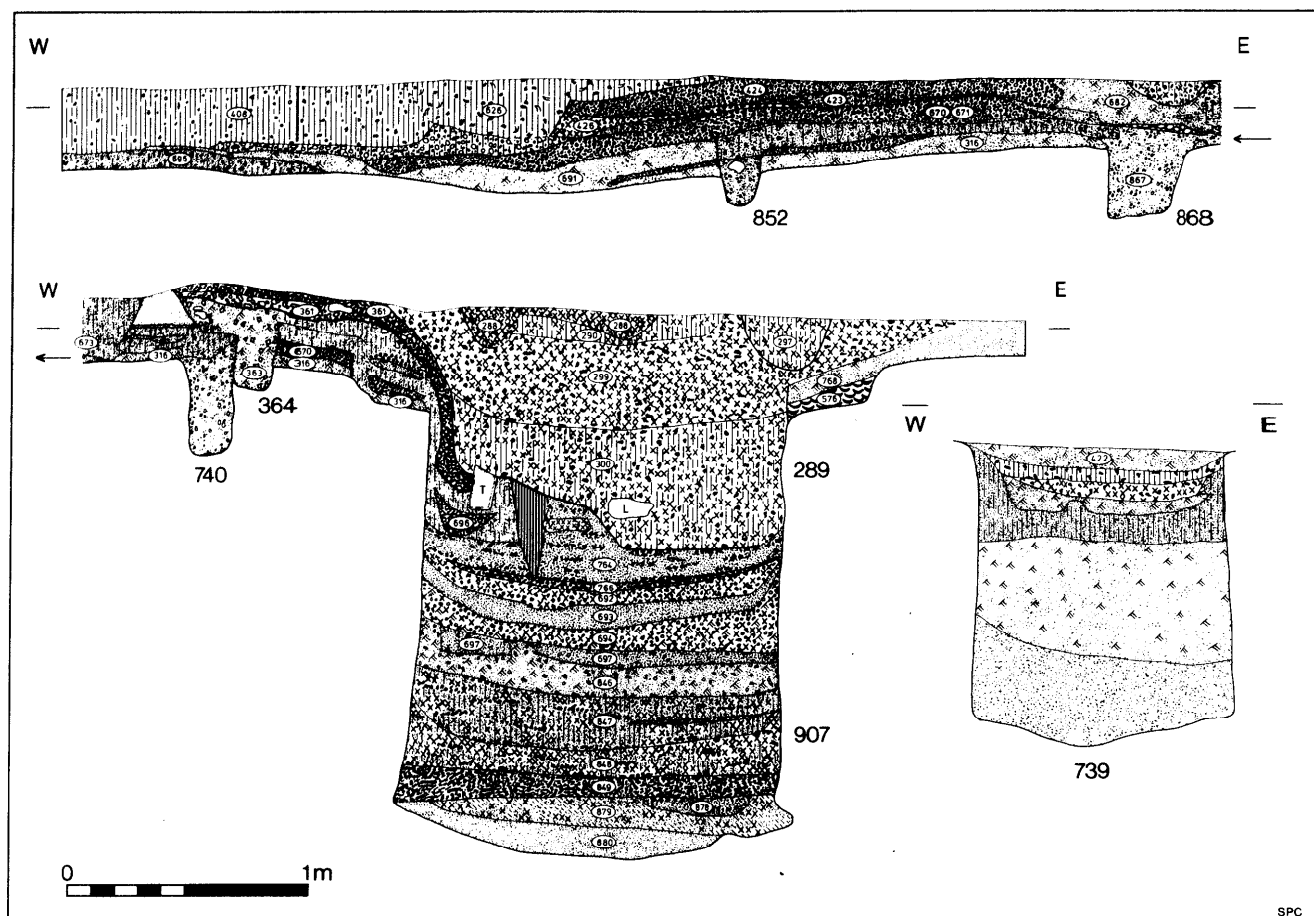


Figure 92 SOU 99, area C: section F (main drawings) and section G through pit 739, Key: L limestone, T tile See also fig 17.

animal bone. It contained tile, slag, shell, and fragments of burnt red sandstone; but no directly datable finds. A comparable layer was uncovered by machine excavation midway between areas A and C, and the composition of this surface is identical to that of context 242 in area A, assumed to have been the same layer. Within area C the layer was a maximum of 0.05m (one flint) thick and formed a very slightly cambered surface to a spread at least 3m wide, although subsequent activity meant that its original width could not be traced. In part it directly overlay 671, but elsewhere a lens of brickearth with abundant quantities of charcoal intervened. Context 427 contained daub, slag, animal bone, a lead object (item 58), and sixteen sherds of Middle Saxon pottery including blackware imports. A date in the first half of the 8th century is tentatively suggested for this small group of pottery.

- 4 Overlying 670 were lenses of ashy, sandy loam (426) covered by a fine gravel spread (424), up to 0.10m thick and forming a surface about 2.5m wide, although again the full width did not necessarily survive. From the gravel, five sherds of local and imported Middle Saxon

pottery were recovered, including one sherd probably from the same vessel as sherds in the earlier layer 427 and from the upper fill of pit 289.

None of the layers above context 424 contained closely datable assemblages of material, and there is no evidence for the date this final surface fell into disuse. There is no evidence that the cobbling outlasted the major period of Middle Saxon settlement.

Area A (figs 88 and 89)

The only surviving metallised surface in area A was context 242 and its equivalent, 580. Context 580 was identical in composition to 670 in area C, which has already been described. The surface lay directly on the probable Roman layer, 681, and also either overlay or demonstrably post-dated contexts 571 and 614-6. This surface therefore post-dates the construction of all buildings in area A except structure 8. The layer was up to 0.18m thick, and was an almost flat surface except where it rose to cover earlier layers on its eastern side. The full width was not exposed in the excavation, and must therefore have exceeded 5.8m. The 2.5m³ or so that were excavated produced approximately 650kg of animal bone but only nine sherds of Middle Saxon

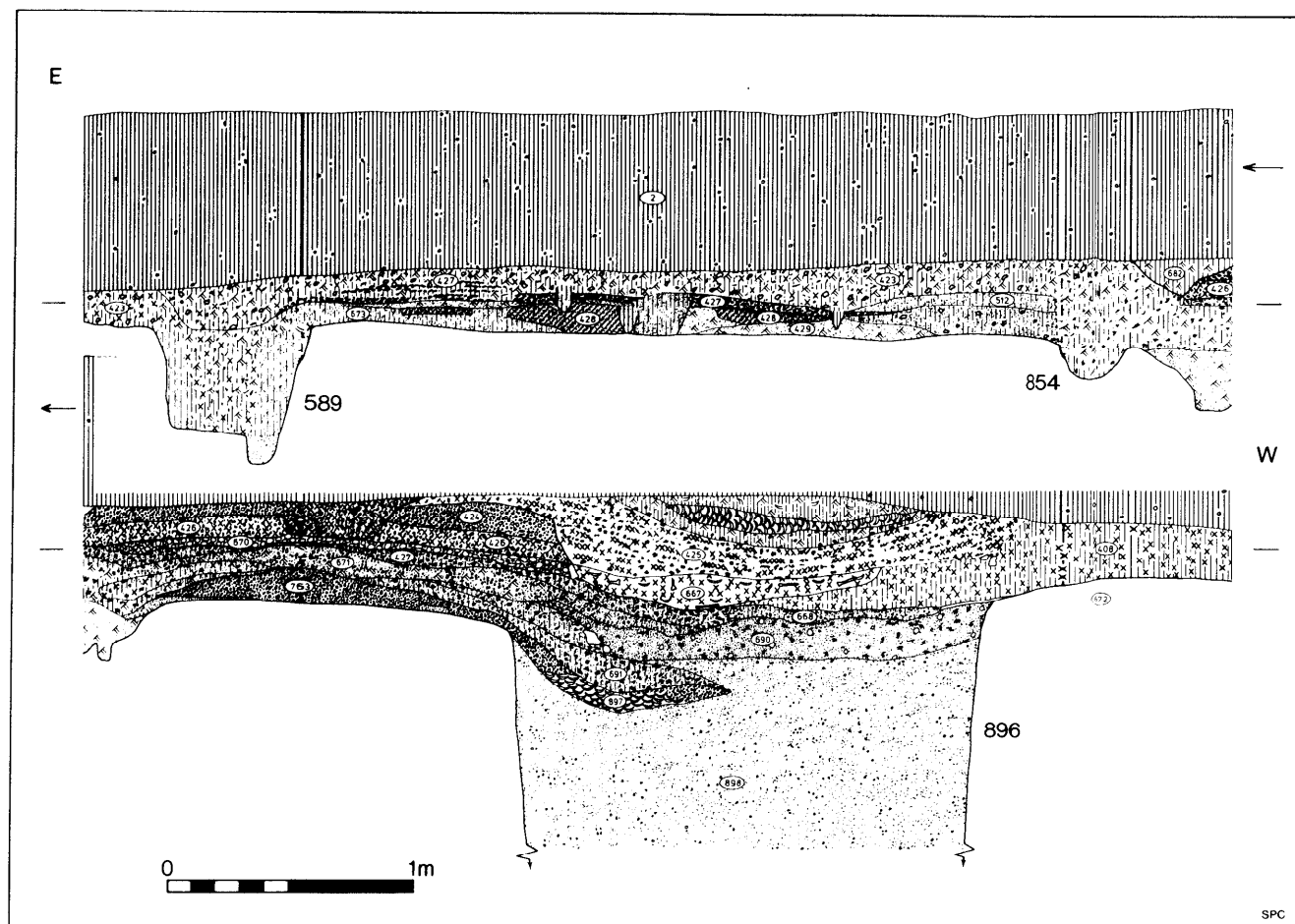


Figure 93 SOU 99, area C: section H. To save space, most of context 2 has been omitted from the lower drawing as well as the final 1.5m excavated from pit 896. See fig 17 for the key.

pottery. Contexts 241 and 4, the layers overlying contexts 242 and 580 and structure 8, both contained medieval or later pottery.

Interpretation

Some explanation must be offered, regarding layers preceding the cobbled surface 242/580/670, for the differences in the evidence between areas A and C. Structures 5 and 7, although demonstrably pre-dating the laying of contexts 242/580, did respect the edges of the metallated surface, and the alignments of both buildings were apparently governed by its later courses. It therefore seems unlikely that no metallated area existed prior to 242/580. Suggestions that surfaces prior to 670 in area C are yard spreads rather than roads do not seem adequate to explain the influence of the later gravelled route on earlier building plans in area A. A more likely explanation is that any underlying stratigraphy was removed from area A prior to the laying of the cobbled surface, and some support for this interpretation is provided by fig 89, section C. The gradient of 242/580 downwards from the building frontages towards the middle of the road was quite unlike the convex cambered profile apparent in area C, and

there were discontinuities in layers either side of the building lines represented by features 569, 713, and 828. In particular, the differences between the profiles of 567 and its equivalent 571 could be explained by a later truncation of 571 outside the building line. There is no obvious reason why the removal of earlier surfaces should have been thought necessary in this part of the site. The gravelled areas were evidently not complete, and their width remains conjectural. All surfaces were a minimum of 2.5m wide. The maximum possible width was about 16m, for no north-south metallated surfaces were observed to the west at SOU 168, and it is clear that, had they spread that far, the surfaces would have been recognised.

The possibility exists that at least some of these surfaces may represent a back street or thoroughfare parallel to St Mary Street. Arguments in favour of this suggestion would include the linearity of the alignment and cambering of surface 671. There are, however, substantial differences in formation and development between areas A and C, and this differential maintenance between properties suggests private ownership of what might be better considered as alleys or yards. Observations at SOU

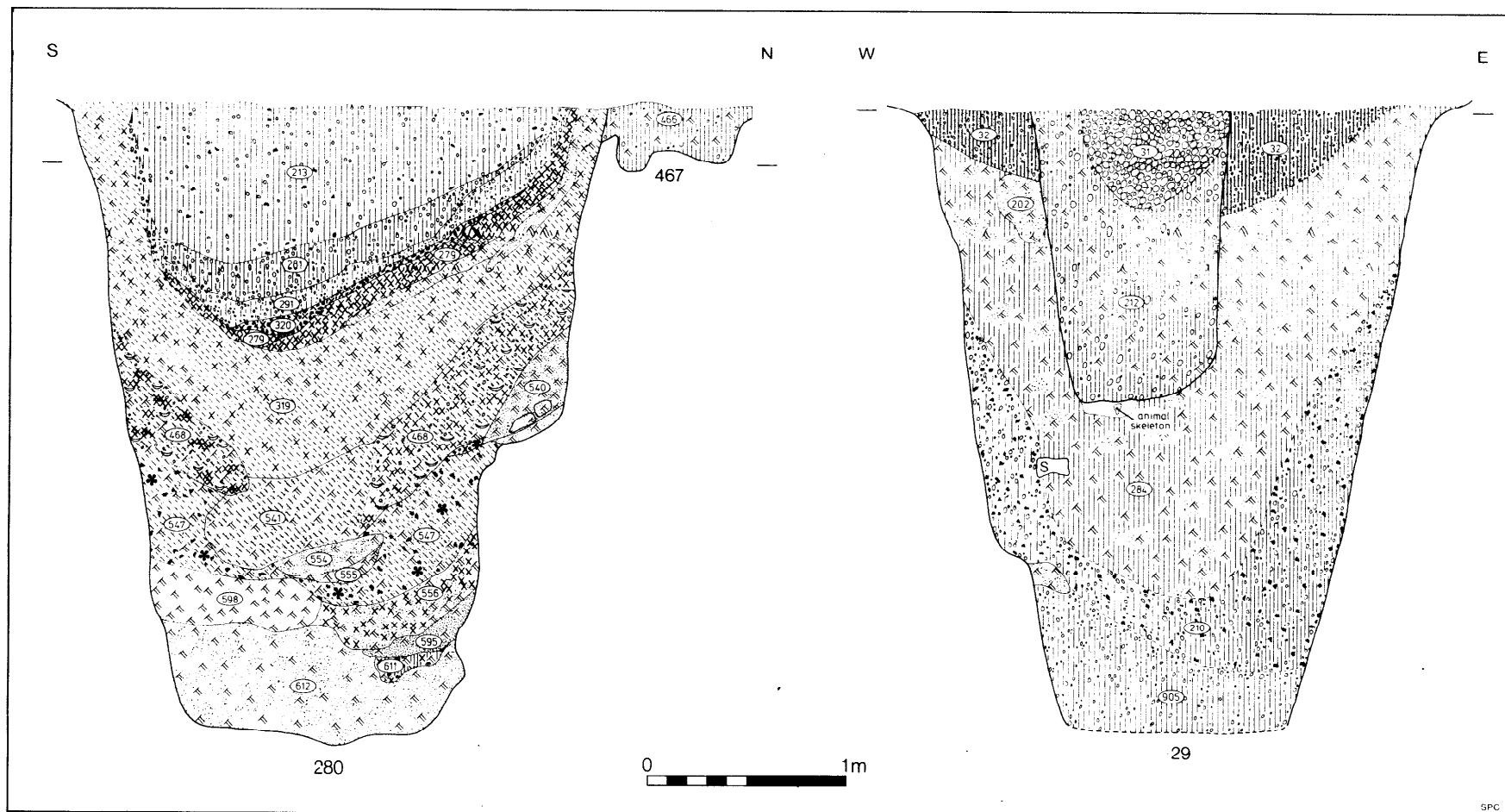


Figure 94 SOU 99, area B: section A through pits 280 and 487, and section B through pit 29. Key: S stone. See also fig 17.

168, where other gravel spreads were recorded (MF2:G6-7), suggest that a network of small thoroughfares existed to the west of SOU 99. The amount of animal bone present within the cobbled surfaces 242/580 is worthy of comment: such a large quantity is unlikely to represent casual discard and was possibly a deliberate inclusion within the matrix.

Direct dating evidence was limited, and there was no useful *terminus post quem* or *terminus ante quem* for any of the surfaces. The single, small, and early-8th-century group of pottery merely demonstrates a Middle Saxon date for the usage of the surfaces.

Pits

Twenty-eight pits were defined, all of which were at least partially excavated. No feature was more than half-sectioned and some pits had to be abandoned before completion. Three large pit complexes (fig 86) were also identified but, in accordance with the sampling design, were not excavated. No inferences can be drawn from unexcavated pits or from pits abandoned at an early stage as in every case the pit plan at ground level was found to be unrepresentative of the original shape of the pit at a depth of about 0.2m, the top edges being considerably weathered or eroded.

The analysis of the profiles, plans, and capacities of pits did not produce many coherent groupings (details are to be found in the site archive). Pits could be divided into three groups according to their depth: shallow pits less than 1m deep cut only into the upper sandy layer of brickearth; pits of medium depth cut into the lower layer of brickearth; and deep pits cut through the brickearth and into the gravel. Depth was in fact the most marked difference between pits and might reflect functional differences. The pits cut into the upper structure of brickearth held water and overflowed in heavy rain, whereas the deeper pits cut into the lower brickearth drained slowly. Pits cut through to gravel were never seen to retain water, although undercutting of the sides - presumably erosion due to the previous presence of standing water - was observed in pit 341.

Although the surface area varied considerably between pits, this information could not be used to predict correctly their depth or profile shape. Only pits 29 and 204 retained apparently circular plans after profile excavation. Stake-hole rings around pits were located in only one case, around pit 120 in area A (not fully excavated).

Profiles were found to be consistent, most pits having near-vertical and regular sides and flat bases. Deeper pits tended to be slightly less regular, but this was not marked. Ledges had been left in the sides of pits 29, 280, and 487. The pits illustrated are those with stratigraphic relationships with buildings or gravel surfaces, or those with particularly unusual or distinctive fills.

Interpretation

It has already been suggested that a functional difference may explain the varying depth of pits. Pits cut into gravel would have been particularly well adapted for use as cess pits, and indeed there is evidence of primary cess filling in many of the deeper pits. One possible exception to this blanket interpretation of deeper features is pit 29, which was distinctively circular in plan. Excavation revealed a central shaft which could be traced to a depth of about 1.4m (fig 94). No evidence could be found for the continuation of the shaft below this depth, although the narrowness of the pit made safe and accurate excavation and recording difficult. Pit 29 is perhaps best considered as well of a form known elsewhere in Hamwic. Feature 896 may also have been a well, the shaft of which lay outside the excavated area (PE Andrews pers comm).

The difficulties of ascribing functions to pits is particularly highlighted by consideration of the shallower features. There is a scarcity of recognisably 'domestic' refuse within these pits, and storage particularly of perishable material would not seem practicable in view of rapid and presumably regular flooding. Activity which is industrial in nature is certainly represented by some pits. Pit 666 (figs 88c and 90) was apparently a cess pit in its first phase, but when just over half full it was sealed by compacted brickearth (584) through which pit 125 was cut. This feature, sub-rectangular in plan and essentially flat-bottomed, had a lipped profile and contained substantial quantities of burnt daub or clay which may have originally derived from a domed superstructure springing from the lip. An adjacent limestone and tile hearth, 645 (fig 88c), was associated physically and stratigraphically with 125, as were spreads of burnt brickearth, clay, and charcoal waste, all of which apparently post-dated structure 8. A less well defined recut, 289 within context 907, had similar contents and stratigraphic associations with buildings in area C (fig 92). The form of these features, as well as the nature of the slag, suggests smithing activities.

Site interpretation

Areas of discernible stratigraphy within Hamwic have been extremely rare finds, and are particularly important when the difficulties of independent dating are considered. The local pottery types are not closely datable, nor is their mode of production fully understood. Dating of the imported wares depends on the establishment of chronologies for Continental production centres, which can be done with only in-different accuracy for some wares and may in any case not truly reflect periods of use in Hamwic. Other find types - for instance coins, which vary in date from a primary-issue Series E sceat (item 118, M4) to a penny issued by Cuthred of Kent (798-807) (item 12, M138) - do no more than roughly indicate the period of occupation. Within these limitations

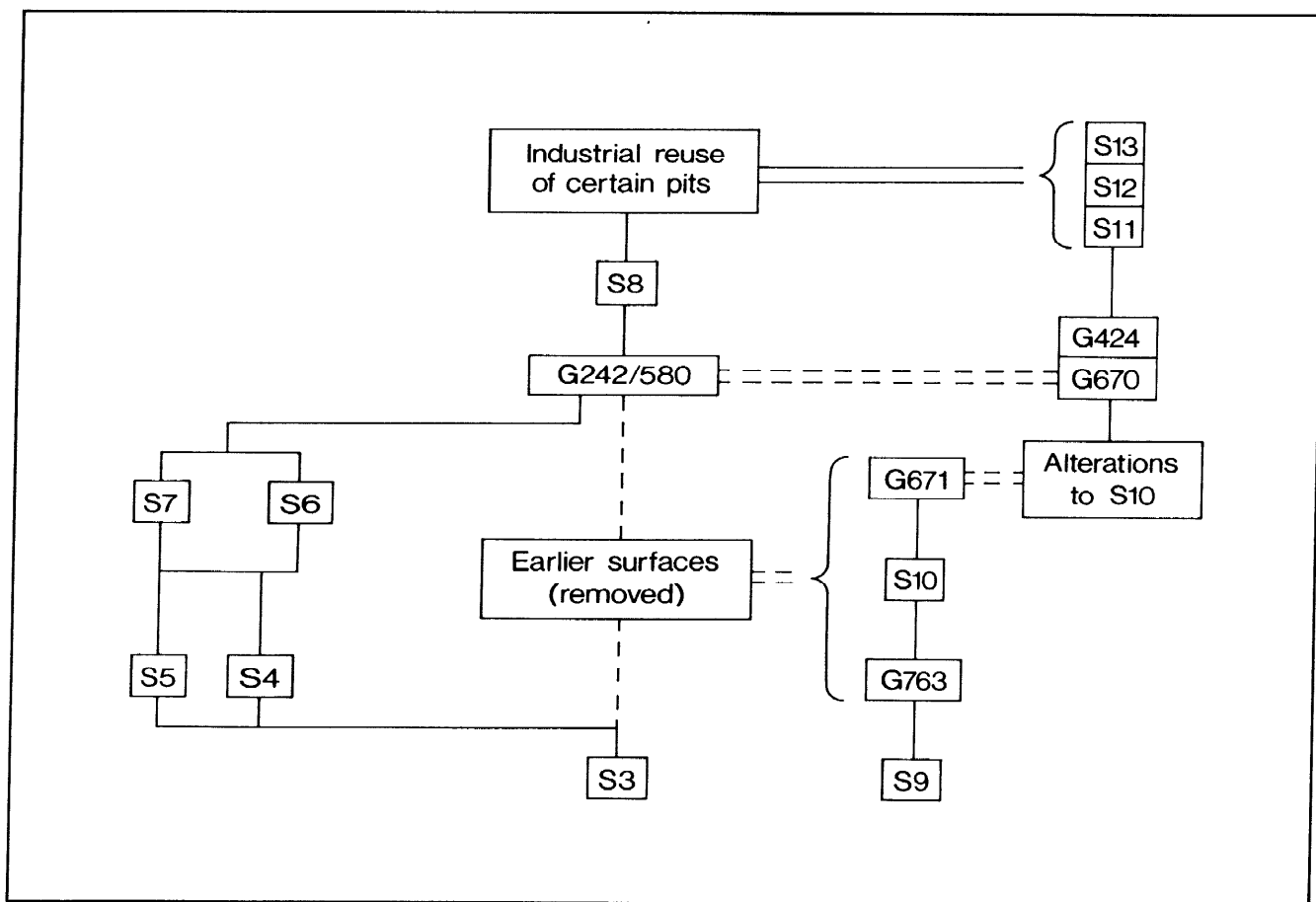


Figure 95 SOU 99: a diagram showing the observed and suggested relationships of metallised surfaces (M), structures (S), and other products of site activity, during the period of Middle Saxon occupation.

there is no evidence to suggest any Anglo-Saxon occupation predating the mid 8th century at SOU 99. The very few artefacts or artefact groups recovered that suggest a post-9th-century date (discussed below) were invariably found in tertiary or unstratified contexts, and it is clear that the bulk of activity represented by the stratigraphic sequence (fig 95) must be compressed into a very small time-scale from the mid 8th century to the late 9th. Study of fig 95 suggests that a common trend was present in both areas A and C: a series of insubstantial structures associated with a small street or alley were succeeded by buildings of a presumably domestic nature (structures 7, 8, and 10) fronting onto a rather wider, better-surfaced street or alley. Following this 'domestic' phase the buildings were overlain

by 'industrial' waste and some pits were recut and reused for manufacturing processes. Thereafter the street or alley fell into disuse and activity ceased in the western part of the site.

The decline in activity in the 10th century was apparently synchronous across the site. Later Anglo-Saxon pottery (discussed more fully elsewhere) was confined either to the tertiary fills of earlier features (examples are those of pits 18 and 29) or layers overlying all other stratigraphic units (for instance context 4, overlying the gravel surfaces). From a similarly late context came two pieces of 'forest' glass, datable to the late 9th century at the earliest. Where there are no demonstrable stratigraphic relationships, little can be said concerning settlement development.

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