

A Story of Urban Regeneration: Excavations in Advance of Development off St Peter's Walk, Northampton, 1994-7

by

IAIN SODEN

with contributions by Dr Philip Armitage, Tony Baker, Wendy Carruthers, Tora Hylton,
Alison Locker, Dr Richard I MacPhail & G M Cruise, Peter Masters,
Dr Richard K Morris, Steve Morris and Alex Thorne

SUMMARY

This report presents the data from excavations carried out ahead of and during redevelopment of an area around Woolmonger Street between 1994 and 1997. The fieldwork and the current report were funded by Wimpey Commercial Property Ltd in discharge of a section 106 planning agreement. The extensive fieldwork was carried out following a programme of desk-based assessment and on-site evaluation, which gave rise to a tripartite arrangement of some pre-emptive archaeological recording, some intensive watching-brief recording and a strategy for partial preservation in-situ. The present report draws upon all of the evidence and has taken account of published and unpublished data from previous excavations on the site since 1981 which offer information on areas and levels now preserved below the latest redevelopment. The data produced evidence for occupation from the early-middle Saxon period through the late Saxon, medieval and post-medieval periods. There is documentary evidence to corroborate some of the excavation results and still more to challenge future work in the area. Evidence has been found for Saxon and medieval town planning, aspiration to wealth and status, trade and industry, social organisation in the home, and change and decay within the wider picture of the history of Northampton, the area of the Danelaw and the midlands.

ACKNOWLEDGEMENTS

Northamptonshire Archaeology gratefully acknowledge the help and co-operation of initially John Laker and then Henry Moore of Wimpey Property, Alan Deakin and Steve Middleton of Wimpey Construction, David Shrewsbury of Hadland Chartered Surveyors.

The help and guidance of Mike Shaw, formerly Senior Archaeologist of Northamptonshire Archaeology was invaluable. Thanks to John Williams, once Principal Archaeologist of the former Northampton Development Corporation for providing documentary assistance. Brian Dix, Michel Audouy and Steve Parry were all instrumental in the management of the archaeological project. Discussions with Glenn Foard and Sandy Kidd of Northamptonshire Heritage provided much food for thought during excavation and post-excavation analysis. Archival material was generated by Paul Blinkhorn and Tony Baker. Mike Shaw and Paul Blinkhorn kindly read the text and made generous and helpful comment. Warm appreciation is expressed for the contributions of all whose analysis is presented here.

SUMMARY OF PREVIOUS WORK

Prior to the present redevelopment of the area, a series of trial excavations was carried out, each of which was planning-related and undertaken to answer pertinent and specific questions about the area, particularly the extent of Saxon occupation and

the location of the late Saxon town defences. These interventions were as follows (Fig 1):

At St James' Square, 1981, the excavators dug two trenches which located medieval stone foundations which were postulated as possibly being associated with the 13th-century Augustinian Friary to the south-east of the area. Widespread metallised surfaces were found, strewn with animal bone, including a preponderance of horn cores, suggesting industrial tanning or horn working in the 11th or 12th century. Organic preservation was good and samples suggested that flax retting may have been carried out nearby in the late Saxon period. Otherwise there was a great deal of rubbish disposal in pits from the 10th century onward. The report on these excavations has been published previously (Williams and Farwell 1983). For the purposes of this report these trenches have been renumbered Woolmonger Street Trenches 5 and 6.

Adjacent to Commercial Street, 1984 a single trench showed that the immediate area had been terraced in the medieval period, possibly in the as yet undefined area of the Augustinian Friary. The excavator initially considered that this was as part of a pond or ponds but this seems unlikely as there were no pond silts associated (extracted from summary report in archive). This trench is not considered in the numerical sequence.

At St James' Place 1987, two trenches were dug (subsequently numbered 7 and 8, to preclude confusion with St James' Square). While postholes, slots and rubbish pits of 10th - 12th century date were located, most of the overlying medieval material had been lost to subsequent development. A shallow 12th-century ditch, possibly a major property boundary, was located aligned east-west across both trenches (extracted from summary report in archive).

A small trench at Woolmonger Street 1987 located a robbed medieval frontage (re-numbered Trench 9). Subsequent cellarage had removed earlier remains from most of the trench, but a post hole was located which contained residual middle Saxon pottery (extracted from report in archive)

REDEVELOPMENT: ARCHAEOLOGICAL ASSESSMENT AND EVALUATION

In the light of the trial excavations carried out in the 1980s the present series of fieldwork commenced

with a desktop study of the entire development area, which highlighted areas in which buried archaeology was believed to survive (Shaw 1993). Accordingly a series of trial excavations was carried out in 1994 to evaluate the results of the study and the surviving remains (Fig 1).

Trench 1 was dug to test for the presence of a surviving historic frontage on the north side of the Street, while on the south side Trench 2 was cut on the brow of the marked slope which fell away from the southern frontage. Trench 3 was cut in order to establish whether the town's late Saxon defences crossed the site.

In the event Trench 1 located a medieval stone building with a late Saxon-early medieval timber precursor. This trench and the remains in it were later to be subsumed and extended by full archaeological recording in Trenches 13, 15 and 16 (see below).

Trench 2 contained pits and truncated walls, with a recent cellar. It was inferred that the break of slope south of the street was a terrace of late medieval date. This area was later covered by a comprehensive watching brief.

Trench 3 was 110m long. Since there was a considerable build-up of slopewash and occupation debris, beginning at the foot of the slope, the significant archaeology was buried up to 3.5m down. This meant that the evaluation trench at the surface had to be up to 9m wide and stepped in twice in order to provide a 1.5m-wide base safely. No sign of the defences was uncovered; instead the base of the trench was found to be peppered with pits of late Saxon, medieval and post-medieval date. There were only a few structural remains, subsequently found to coincide with similar remains in nearby Trench 14 (see below).

In view of the various early trial excavations carried out south of the street, the extent of recent disturbance and the low level of threat from the current redevelopment, this area subsequently became the subject of a successful strategy of widespread preservation *in situ* and there was only minimal subsequent exposure.

Trench 4 lay in the region of Kingswell Street and located a late-medieval or post-medieval stone-lined drain 2m below the existing ground surface. This was sealed by post-medieval layers but nothing else. In common with the area of Trench 2, this was the subject of a comprehensive watching brief.

The results of these trenches were summarised by Shaw & Steadman (1994).

A STORY OF URBAN REGENERATION: EXCAVATIONS OFF ST PETER'S WALK, NORTHAMPTON 1994-7

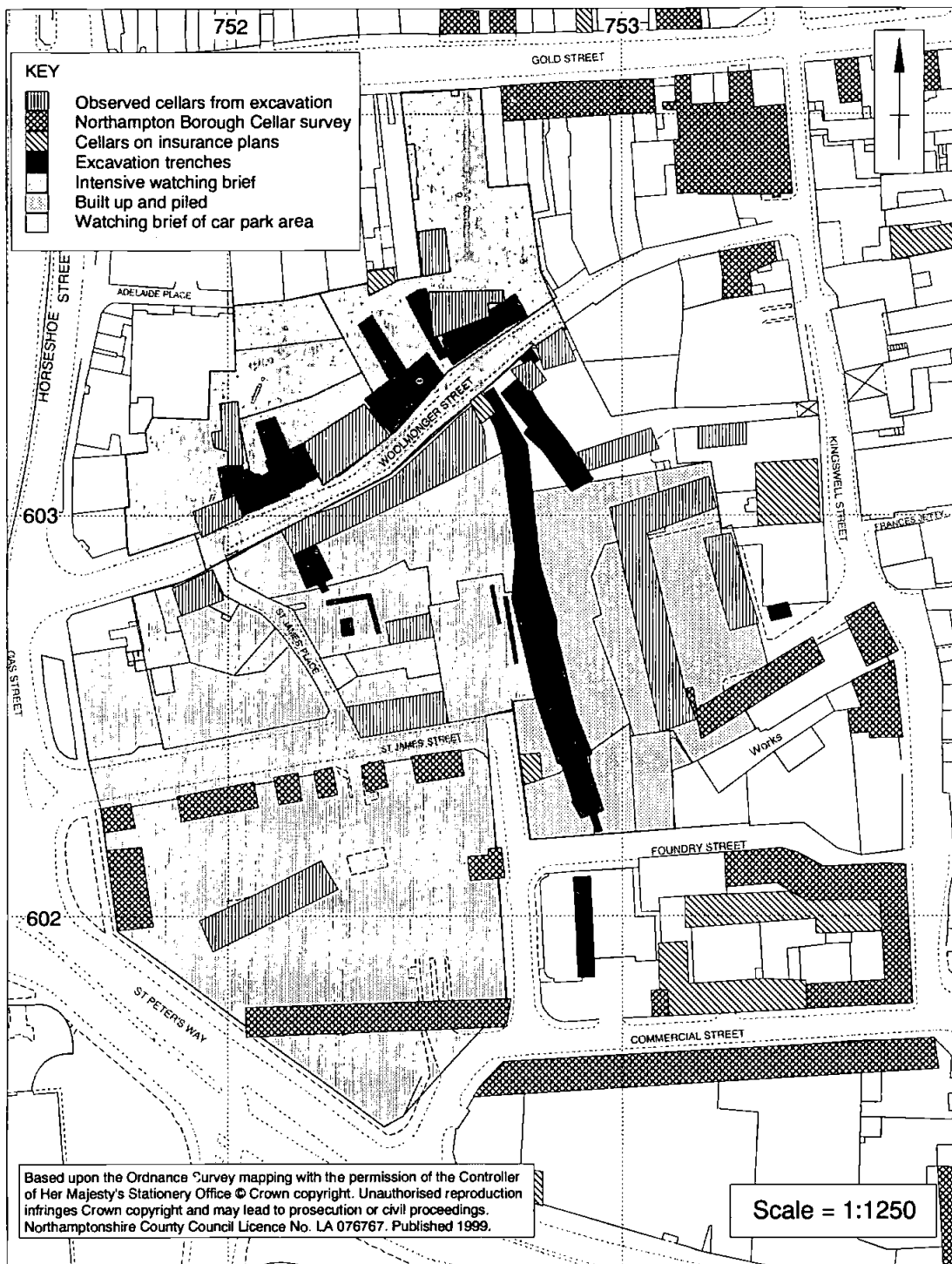


Fig 1 GIS site map (OS 1st Ed) with all interventions and fieldwork, cellars (1:1250).

Trenches 5, 6, 7, 8 and 9 were the numerical coding, given with hindsight, to some of the interventions carried out during the 1980s (above).

A subsequent second phase of trial excavation was carried out in 1994 on areas which had previously been unavailable due to the proximity of vacant buildings, later demolished. Two trenches (10 and 11) were dug on the northern frontage of Woolmonger Street to assess the survival of former frontage structures.

Trench 10 indicated that the frontage had been discontinuous throughout the medieval period, there being only rubbish pits in this area, dating from the late Saxon, medieval and early post-medieval periods.

Trench 11 located the remains of part of a medieval building, of which both wall foundations and floors appeared to have remained partly intact. The extent of these remains were subsequently widened and fully recorded (see below).

The second phase of evaluation has been reported upon previously (Parry & Webster 1994). Trenches 12-16 constituted areas chosen as a result of evaluation as under the greatest redevelopment pressure while affording the best archaeological potential on the site.

Trench 12 contained the only early-middle Saxon remains, despite residual pottery of the period being found across the site. These comprised postholes and a truncated section of ditch, which are not interpretable. Late Saxon remains here suggested a pre-street layout, with alignments of a ditch and postholes eccentric to the alignment of the Woolmonger Street carriageway. Early medieval remains in this trench comprised remains of a timber structure, built probably in the 12th century.

As the evaluation had suggested, the trench contained the remains of a 13th-century stone house, now shown to comprise a frontage of two unequal bays, believed to constitute a Hall and a Parlour, with a single cell outbuilding which was probably a detached malthouse or kitchen. There is evidence that the building was provided with a first floor and external stairs before its demise in the later 15th century.

Trenches 13, 15 and 16 contained a better-preserved sequence of buildings. The trenches were dug individually in three separate excavations as each adjacent area, including the road carriageway, came up for redevelopment.

Occupation commenced probably in the 10th

century with the construction on a pre-street layout of at least four cellared buildings, one of which comprised two bays. Individual cellars were backfilled although the buildings above remained in use, before the eventual destruction of two of them in a conflagration around 1000 AD. The remaining buildings were abandoned soon after.

Rebuilding took place between c1000 and c1074 with the construction of a timber building with a frontage along what would become Woolmonger Street. This building, with many alterations, persisted until replaced in the 13th century by a two-bay stone house. The latter survived probably into the early 18th century.

Trench 14 lay in an area damaged by recent development. However scant remains attest to the former presence of both a frontage slightly askew in part to Woolmonger Street and other buildings to the rear while many of the deeply-cut rubbish pits which had survived indicate an occupation sequence from the late Saxon period right through the medieval era.

GEOLOGY AND TOPOGRAPHY

Woolmonger Street lies predominantly on Northampton Sand with Ironstone which slopes from a height of 69m above OD close to Gold Street at the north down to below 60m above OD close to Foundry Street at the south. A swathe of Upper Lias Clay is mapped as lying across the site, extending slightly to the north of St James' Street while further south river terrace gravels and alluvium are depicted as lying to the north of Commercial Street (British Geological Survey Map no 185).

The land sloped down markedly along a line close to and parallel with the south side of the Street down towards the River Nene. This was probably a major factor in the observation of well-drained soils north of the street, compared with waterlogged deposits found to the south in 1981 (Williams and Farwell 1983).

The most recent line of Woolmonger Street itself joined Horseshoe Street at the west with the northern end of Kingswell Street at the east. It was not parallel either with Gold Street to the north or St Peter's Street to the south, but cut indirectly across the town block at an eccentric angle from south-west to north-east. Following the redevelopment of the area in 1995-7, Woolmonger Street no longer exists, except for two truncated accesses at the east and west

ends of its former course. Similarly Kingswell Terrace and the other 19th-century roads south of Woolmonger Street have disappeared in the redevelopment.

DOCUMENTARY AND CARTOGRAPHIC HISTORY

Relevant early references to the thoroughfares in the Woolmonger Street enclave are as follows:

Woolmonger Street

Vicus Lanatorum early C13th (BL Cott Tib E v f. 153a, 176a); *vico Lanatorum* (Rental Edward I: PRO SC 12/13/28); *Wellemongerestrete* 1330 (Markham and Cox 1898); *Le Wolmongerstrete* 1462 (NRO early wills f7R); *in vico Lanatorum* 1504 (NBC records 29).

Gold Street

le Goldestrete 1330 (Gover et al, 1975); *in vico Aurifaborum* (Gold-smiths' Street) 1361 (NBC records 39);

Kingswell Street

Kyngeswellstrete 1431 (Markham and Cox 1898); *Kyngeswellestrete* 1444 (Gover et al 1975); *Kyngewell Street* 1504 (NBC records 29); *Kingswell Lane* 1618 (NBC records 86); *Kingy Lane* 1695 (NRO: NPL 2216);

Lewnys Lane

Venella juxta domum .. Lewelini (Rental Edw I); *Lewnyslane* 1504 (NBC records 29); *lane open towards Wolmongerstrete* 1504 (NBC records 29).

Kingy Sett Lane

(Sic) 1695 (NRO: NPL 2216)

Royal rental of 1504

The 1504 Town rental of crown properties (NBC records 29) records the following yearly rents for property on Woolmonger Street:

Woolmonger Street (in vico lanatorum) De quadam placea quam *Agnes de Orfeid* quondam tenuit, postea *William Wolfe*, modo [...], per annum..De quadam placea quondam *Joh-annes Kydlyngton*, nuper *John Podder*, wever (d1462), modo *John Willow*, *sadler* (fl. c1460-1504), per annum 12d

All the above mentioned people belonged to families whose lives had previously been or continued to be bound up with the immediate area, as is indicated by the wider royal rental of the town in 1504.

Agnes de Orfeid (?Orford) (floruit unknown): also known as *Agnes de Orfever* in another property rental in the same survey as a subtenant of the Carmelite Friary (Whitefriars). She lived during the last quarter of the 13th century when she was recorded on what is almost certainly the same Woolmonger Street property in the rental of Edward I (see below). The *Orfever* family name is recorded in 1280 in neighbouring Oxfordshire where they were wealthy farmers and in Hampshire in 1283 on the King's business (*Placita Coram Rege rolls*: 55, m15d; 79, m31)

John Willow, *Sadler*: also had property in nearby Gold Street where he succeeded *William Orferaide*, probably another spelling of the family name of *Agnes de Orfever*. He witnessed a deed of trust for Gold Street property in 1460 and a land grant in that street in 1469 (Nton Bor. Rec. 50, 51).

William Wolfe (floruit unknown): *John Wolfe* lived in a capital tenement on the corner of Gold Street. The 1504 rental records, amongst other things, plots along Gold Street running through all the way to Woolmonger Street. It seems possible therefore that this particular plot, the Orfeid plot, lay on the north side of the street

John Podder/Pedder: His will of 1462 is preserved (NRO early wills fo.7R no 10, 35). It provides for his wife *Agnes*, "*totum illud tenementum cum pertinentiis in quo maneo situatum in le Wolmongerstrete*". She was to hold the said tenement for the term of her natural life, whereupon it was to be sold after her death. It is presumably following her death that *John Willow* acquired it.

John Bykyrton, *Mercer* (NRO early wills fo.4, no 1). Left to his wife five cottages or stables with rooms above and closes previously held by *Sir John Sprygy* and *Thomas Knightley*. They lay in Woolmonger Street between tenements owned by *Canons Ashby Priory* to the east, and one *Thomas Smith*, *Fletcher* to the west. (Thanks to Mike Shaw for drawing my attention to this will).

Others also had property or interests in Woolmonger Street. Augmentation Office accounts for the former St James Abbey lands show a former monastic tenement occupied by one *Francis Shomaker* in 1545. Similarly one *Richard Woodward* owned a stable in the street, formerly the property of St James' Abbey (1545/307). St Andrew's Priory had held property there as in the Augmentation Office accounts the Wardens of the *Fraternity of St John* paid a capital rent on a tenement there, formerly held by the Priory (1545/308). The nearby Augustinian Friary also had interests in Kingswell Street in 1504 adjacent to its precinct, as had Wroxton Priory previously.

Relating the late medieval topography with what preceded is difficult but the task is eased somewhat by the survival of a rental of the King's land in Northampton, taken in the reign of Edward I (1272-1307). Its exact date is not known but repeated and increasingly heavy taxation was a bone of contention throughout Edward's reign with the bulk of subsidies levied after 1290 (Wilkinson 1986, 105).

Rental of Edward I (1272-1307; ?post 1290)

Woolmonger Street (*in vico lanatorum*)

De quadam placea quam <i>Agnes de Orfevere</i> tenet in eodem vico	12d
De quadam placea quam <i>Latia le Vyneter</i> tenet ibidem	12d
De tenemento quondam <i>Alicia Patoun</i>	4d
De <i>Willelmo de Clyve, clerico</i> pro medietate Venelli iuxta domum quondam <i>Lewelini</i> versus borialem	3d
De <i>Simone de Greenhull</i> pro alia medietate eiusdem venelli versus austrum	3d

While this early rental places some of those later remembered in 1504 into a temporal context, such as *Agnes de Orfever*, its mention of *placea* (plot), *tenementum* (tenement/house), *domus* (workshop) and a *venellum* (lane), *medietas* (moiety/half share) introduces invaluable topographic information into the immediate 13th-century townscape. The lane mentioned is probably that later known by its association with the pre-Edwardian rental inhabitant *Lewelinus* whose name seems to have become first elided and then adulterated through the forms Lewelin - Lewyn - Lewny. He appears to have been a Welshman, whose name was properly Llewellyn.

Lewnyslane

This lane or alleyway appears to have connected Kingswell Street and Woolmonger Street from at least the third quarter of the 13th-century on the evidence of the rental of Edward I for all these thoroughfares. It may have been partly blocked up earlier than 1504 as indicated by the rental of that year (note the descendants of de Grenehull and Vyneter (ennobled by 1349), still living close by):

Of *Simon Greenhull* for half of the lane which is the Lewnyslane, inclosed in his possession by the community which *Thomas Spriggy* late held behind the capital tenement formerly of *Sir John Vinter* of Kingwell St, now that half belongs to [*Emma**], the [second*] wife of the late *Richard Knottyng*, and now in the tenure yearly 3d

* from NRO Early wills fo.17R, will 28, 53: *Richard Knottyng* 1475. He was a mercer who witnessed a grant of Gold Street property along with the sadler *John Willows* (see above) in 1469 (Nton Bor. Rec. 51). *Thomas Spriggy*, a draper, was Mayor of Northampton in 1389 and again in 1402. *Sir John de Vyneter* had been Mayor in 1349 (Cox 1898, II, 549).

Of *Thos Edwardes, Mercer*, for the other half of the same lane which is open towards Wolmongerstrete, (Lewnyslane) once of *William Hull, Flecher*, late in the tenure of *William Newale*, now, yearly 3d

The interests dividing the two halves (*medietates*) of the lane to north and south remained of identical minimal value (3d) from 1272x1307 to 1504 making their identification as the same lane plausible, if not certain. Similarly one side remained identified by its proximity to a building (initially a workshop and a house thereafter) while the other was not. The survival of the name of Llewellyn in the name of the lane seems compelling evidence for their association as the same thoroughfare over more than 200 years. It is not possible to trace with certainty the line of Lewnyslane on the ground from documents alone but it appears to have linked with Kingswell Street on the evidence of the Vinter capital tenement in 1504.

While the early documents indicate between them the general nature of some of the medieval buildings in the street with an indication of a few of the trades

PEOPLE, TRADE AND PROPERTIES IN WOOLMONGER ST. AND LEWNYSLANE

DATE	OWNER/TENANT	INTEREST	TRADE	LOCATION
Pre-Edw I	Alicia Patoun	Tenement(2)		Woolmonger
Pre-Edw I	Lewelinus	Workshop(3)		Lewnyslane N
Edw I	Agnes Orfever	Tenement(4)		Woolmonger N?
Edw I	Latia le Vyneter	(7)	Vintner?	Woolmonger
Edw I	Wilelmus de Clyve	Moiety (3)	Clerk	Lewnyslane N
Edw I	Simon de Greenhull	Moiety (1)		Lewnyslane S
post Edw I	Willelmus Wolfe	Tenement(4)		Woolmonger N?
Pre 1504	Johannes Kydlington	Tenement(5)		Woolmonger N?
-1462	Johannes Podder	Tenement(5)	Weaver	Woolmonger N?
1462-	Agnes Podder	Tenement(5)		Woolmonger N?
-1475	Richard Knottinge	Moiety (1)	Mercer	Lewnyslane S
1475-	Emma Knottinge	Moiety (1)		Lewnyslane S
Pre 1504	Johannes Kydlington	Tenement (5)		Woolmonger N?
c1389-1402	Thomas Spriggy	Moiety (1)	Draper	Lewnyslane S
15th cent	Sir John Spriggy	5 cottages(5a)		Woolmonger
15th cent	Thomas Knightley	5 cottages(5a)		Woolmonger
15th cent	John Bykyrston	5 cottages(5a)	Mercer	Woolmonger
15th cent	Agnes Bykyrston	5 cottages(5a)		Woolmonger
15th cent	Canons Ashby Priory	Tenement(5b)		Woolmonger
15th cent	Thomas Smith	Tenement(5c)	Fletcher	Woolmonger
Pre 1504	Sir John Vinter	Cap Ten (6)		Lewnyslane S
Pre 1504	Thos Edwardes	Moiety (3)	Mercer	Lewnyslane N
Pre 1504	William Hull	Moiety (3)	Fletcher	Lewnyslane N
Pre 1504	William Newale	Moiety (3)		Lewnyslane N
1504	(Gatehouse)	*Alehouse(2)		Woolmonger N
post 1462-1504	Johannes Willows	Tenement(5)	Sadler	Woolmonger N?
1504	Simone de Grenchull	Moiety (1)		Lewnyslane S
-1539	St James' Abbey	Stable (8)		Woolmonger
-1539	St James' Abbey	Tenement(9)		Woolmonger
-1539	St Andrew's Priory	Tenement(10)		Woolmonger
1545	Richard Woodward	Stable (8)		Woolmonger
1545	Francis Shomaker	Tenement(9)		Woolmonger
1539-45	St John's Hospital	Tenement(10)		Woolmonger
1558-86	Richard Brittons	House (11a)	(abuttal 1586)	Woolmonger
1558-86	Lawrence Manley	House (11b)	(abuttal 1586)	Woolmonger
1586	William Rainsford	plot Rookes Mucke Hyll	(abuttal 1586)	WoolmongerS
1597	Chris Hodgkinson	House (12)		Woolmonger
C16th		#Alehouse(13)		Woolmonger
C16th		+Alehouse(14)		Woolmonger
1600	Henry Mandley	Stable (8?/11b?)		Woolmonger
1602		Stable (8?/11b?)		Woolmonger
1602		Two stables		Woolmonger
1604	Henry Mandley	Stable (8?/11b)		Woolmonger
1618	Laur. Raynesford	Hogstie (15)	Baker	Woolmonger S
1618	Richard Peale	(15)		Woolmonger S
1635	John Smart	Cottage (16)		Woolmonger
1635	Richard Smart	Cottage (16)		Woolmonger
1644	John Smart	Two cottages (17)		Woolmonger
1644	Thomas Thornton	Two cottages (17)		Woolmonger
1644	William Knight	Two cottages (17)	Tanner	Woolmonger
				N+S
1644	George Allan etc	Two cottages (17)		Woolmonger

IAIN SODEN

DATE	OWNER/TENANT	INTEREST	TRADE	LOCATION
-1675	Thos Stevens	Tenement (17?)		Woolmonger S
-1675 Todd	Tenement (17?)		Woolmonger S
1677-85	John Bateman	Ten. (17?) <i>rebuilt</i> (18)		Woolmonger S
Pre 1684	Francis Homer & John Hart			Woolmonger N
Pre 1684	Giles Bray	Stockwell Hall (19)		Woolmonger N
1684-	Richard Bray	Stockwell Hall (19)		Woolmonger N
1684-	Mrs Pilkington	Plot (21)		Woolmonger S
1684-	Tempeste Cooke	Plot (22)		Woolmonger S
1685	Mutton, Barris & Cooke			Woolmonger S
1695		Two tenements (18)		Woolmonger S
1695		Two tenements (20)		Kingy Sett Lane
1742	John Cooper	Tenement (23)		Woolmonger S
		Pond Yard/Parsnip Ground (24) and Rowkes Muckhill (25 since 1586)		Woolmonger S
1814	John Hollis	Pond Yard, Parsnip Ground (24) and Rowkes Muckhill (25)		Woolmonger S
		Kingswell Terrace laid out		Woolmonger S

* Alehouse known as Le Cardinall Hatte, stood at one end of Woolmonger St on north side

Alehouse known as The Greyhound (Cox 1898)

+ Alehouse known as The Tabard (Cox 1898)

Numbers in structure column refer to individual properties and their descent. Concordance between medieval and post medieval has not been possible. Useful abutments in the relevant deeds are rare. Properties underlined are recorded in deeds as having been burnt down in the Great Fire of Northampton, September 1675; they are subsequently recorded as having been demolished and rebuilt (1677).

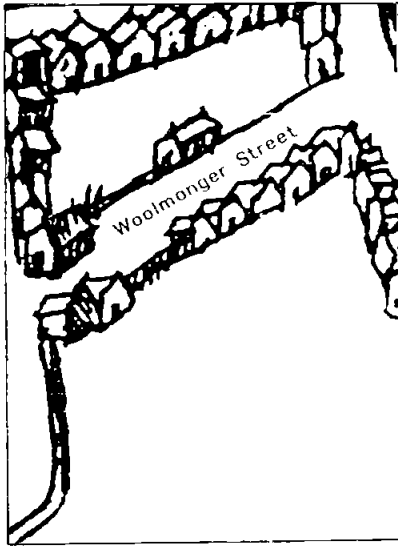
Documentary sources for above table:

PRO	SC 12/13/28, Rental of crown property, Edward I, 1272-1307)
NRO	NBC Records: 29, rental of crown property, 1504; 50, deed; 51, grant; 86, deed, 1618.
NRO	Early Wills: fo 7R no 10, p35 John Podder 1462; fo 17R p53 Ric Knottynge 1475.
NRO	First assembly book of Northampton. Topo index: 517, 554, 567, 568, 572, 595, 827 (1597-1621).
NRO	Deeds: YZ 5070 (1635); NPL 425 (1644); NPL 454 (1677); NPL 107 (1684); XYZ 1373 (1684); NPL 1293 (1685); NPL 2216 (1696); NPL 1202 (1697); BrW 70-81 (1697-1743); ZA 9824/13-16 Abstracts (1716-1814); YZ 5269 (1742). Cox (1898).

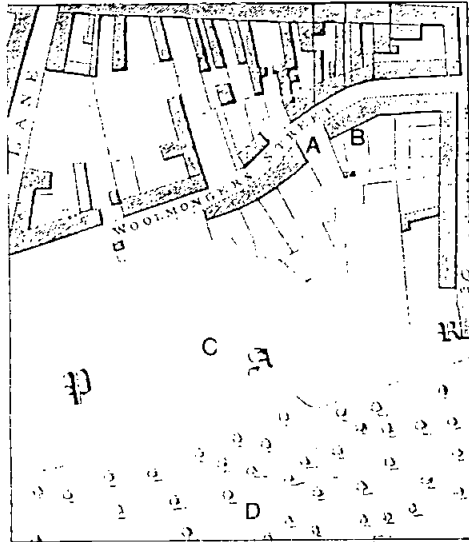
of the inhabitants, the best guide to trades plied there in any period only arises much later in 1768 when the Poll Book recorded 23 males eligible to vote, comprising 5 weavers, 5 labourers, 4 shoemakers and individuals who were a fellmonger (skin seller), a cooper, a baker, a gardener, a coach-maker, a basket-maker, a broom-maker, a cork-cutter and a sawyer. The list reflects the burgeoning industries of both the town and the wider area, while comprising the variety which is common of an urban population. The trades and professions of the medieval Woolmonger Street and Lewnys Lane are considered more closely later in this report.

HISTORIC MAPS (FIG 2)

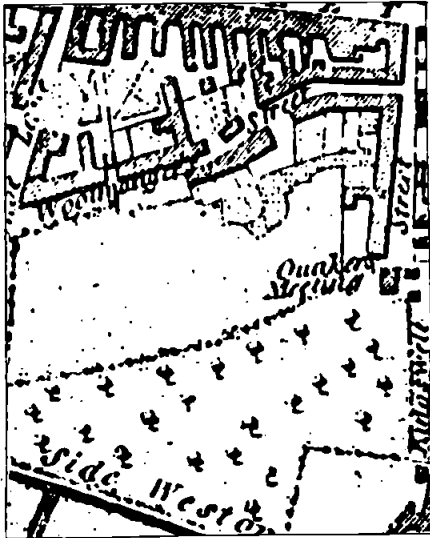
The earliest surviving depiction of Woolmonger Street is on the map of John Speed in 1610. The street was shown as relatively uncluttered, both north and south sides having large gaps in the frontages. Numerous tenements are depicted in a terraced block along the south frontage, each one aligned with a gable-end to the street suggestive of a press for space. By comparison one large freestanding building is shown with its long side aligned along the north frontage at about the middle of the street in a less space-conscious position. There is no sign of Lewnyslane.



1610



1746



1807



1883-4

Fig 2 Historic maps of 1610, 1746, 1807 and 1883-4.

The Noble and Butlin map of 1746 showed that considerable changes had taken place since 1610. While the southern side of the street retained a similar appearance to that previously depicted, the northern side had been redeveloped, with a series of new blocks laid out throughout the length of the street. In fact other documents (NRO NPL 454; NPL 1293, both of 1677) make it clear that Woolmonger Street had been affected to some extent by "the late dreadfull fire of 1675", with at least two properties destroyed on the south side of the street. The total damage on both sides of the street was possibly much greater. The single large building on the north side of the street shown previously by Speed is no longer identifiable on the map of 1746.

The plots of Wm Knight (1644) (Fig 2: A) and John Smart (1644) (B) are tentatively traceable, while the locations of the three-acre Pond Yard/Parsnip Ground (pre 1742-1814) (C) and Rookes/Rowkes (?Rourke's) Muckhill (1586-1814) (D) are identified with greater certainty.

The Roper and Cole map of 1807 documented an increasing press for space along both frontages. Gaps were by then few and small. Only the rear of the plots on the south side and the areas of open ground were undeveloped, apparently unchanged since first depicted in 1746. By 1847 Wood and Law's map of Northampton showed that the street was little changed from 1807 but by the time of the Ordnance Survey 1st edition of 1883-4, the process of redevelopment was complete, with the entire street built up along both sides. In addition the areas at the rear of the south frontage had become infilled, particularly by short blocks of terraced housing, such as Kingswell Terrace (1814) and St James' Place and Square, off St James' Street which had been laid out after 1807.

Subsequent Ordnance Survey editions show more complex arrangements but essentially little major redevelopment took place in the early 20th century. Piecemeal replacement of obsolete or decayed buildings seems to have been more usual. A series of Insurance maps by G.E. Goad, Civil Engineers used the Ordnance survey from 1899 until at least 1946 to document the nature of the premises along the street. This information was complemented by the entries in the trade directories by Kelly, White and others. Redevelopment in the 20th century slowed down and it was merely changes in plot ownership and use of existing buildings which seem to be represented,

with very little change in the nature of the buildings themselves.

The Second World War caused some collateral damage, the Grand Hotel in Gold Street, which backs onto Woolmonger Street, being severely bombed; other Gold Street properties were also badly hit (NRO: ZA 2374-2398; P/8047). A process of dereliction and decay in the 1950s, 60s and 70s led to the area becoming earmarked for redevelopment once more.

THE EXCAVATED EVIDENCE

INTENSIVE ARCHAEOLOGICAL RECORDING

Following the results of the field evaluations, which had comprised Trenches 1, 10 and 11 to the north of the Street and Trenches 2, 3, 4 and 9 to the south (Fig 1), it became clear that the requisite foundation levels of the proposed development could not be entirely accommodated above surviving archaeological deposits, as the site would have to be terraced to suit modern requirements.

Consequently three areas became the subject of full archaeological excavation and recording. These comprised: Trench 12, which subsumed and extended the former evaluation Trench 11; a group of three conjoined Trenches, 13, 15 and 16 which subsumed and extended the area of the former evaluation Trench 1; a separate area south of Woolmonger Street was excavated, Trench 14.

While the areas of intensive recording contained material which is coherent enough to stand alone, relevant information from (and re-interpretations of) the earlier evaluation trenches has been utilised to complement the record wherever appropriate.

WOOLMONGER STREET: NORTH SIDE

THE EASTERN PLOT

In Trenches 10, 11 and 12, six phases of occupation were present.

Phase 1 - early-middle Saxon (Fig 3)

Remains of this phase were significant given amounts of later disturbance but were scant, confined largely to this immediate plot and its environs and comprised merely irregular clusters of postholes (not all of which contained dating evidence but are grouped on stratigraphic grounds) and three short lengths of truncated gullies, (Trench 10/12, 24, 43; Trench 12/324-9, 331-9, 342-4, 353-61). There was no discernible pattern preserved in the layout of features. The few finds, however, constitute a group of intrinsic interest, comprising a stamped

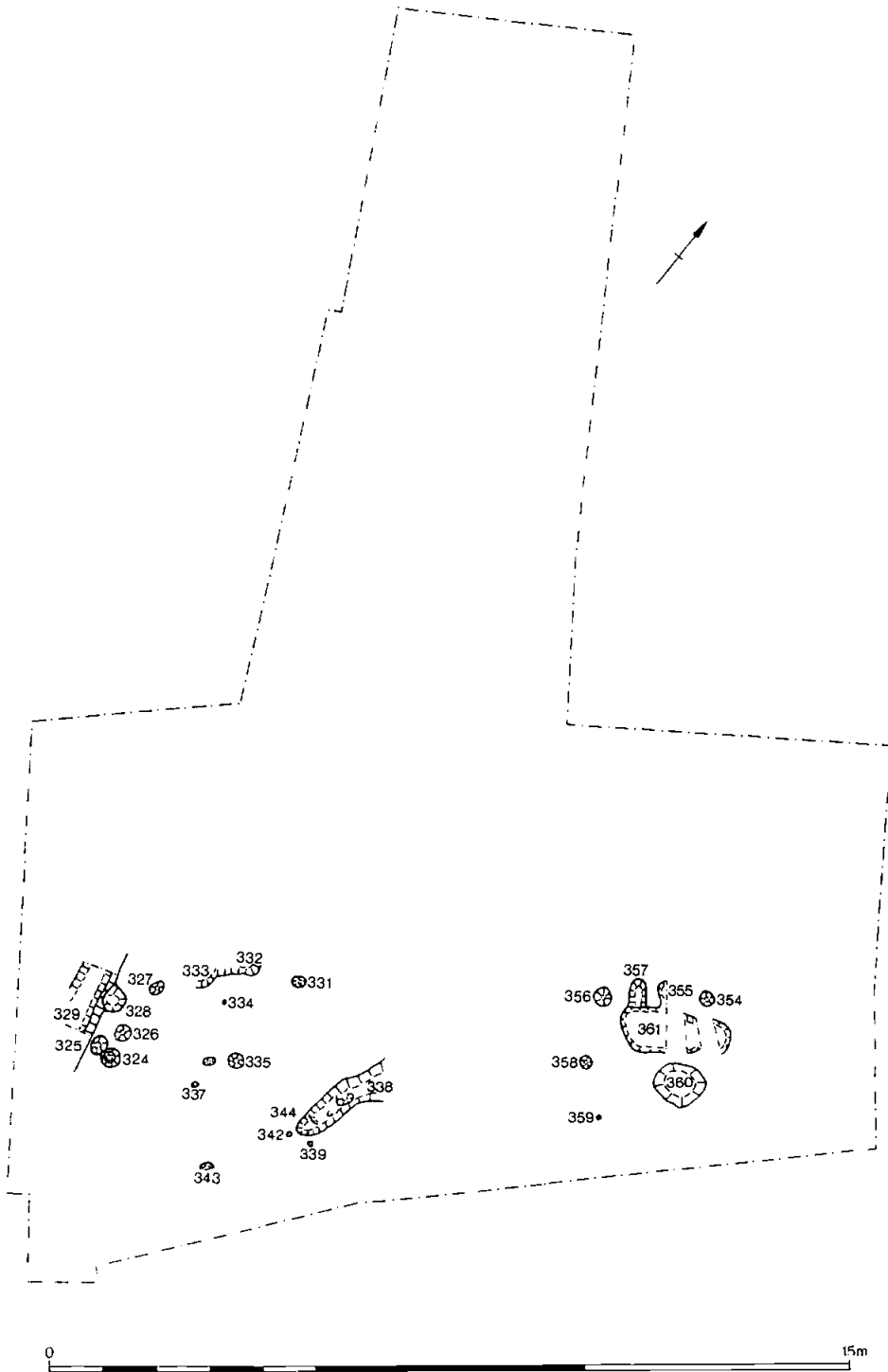


Fig 3 Phase 1 - Early/middle Saxon in Tr 11/12 conjoined.

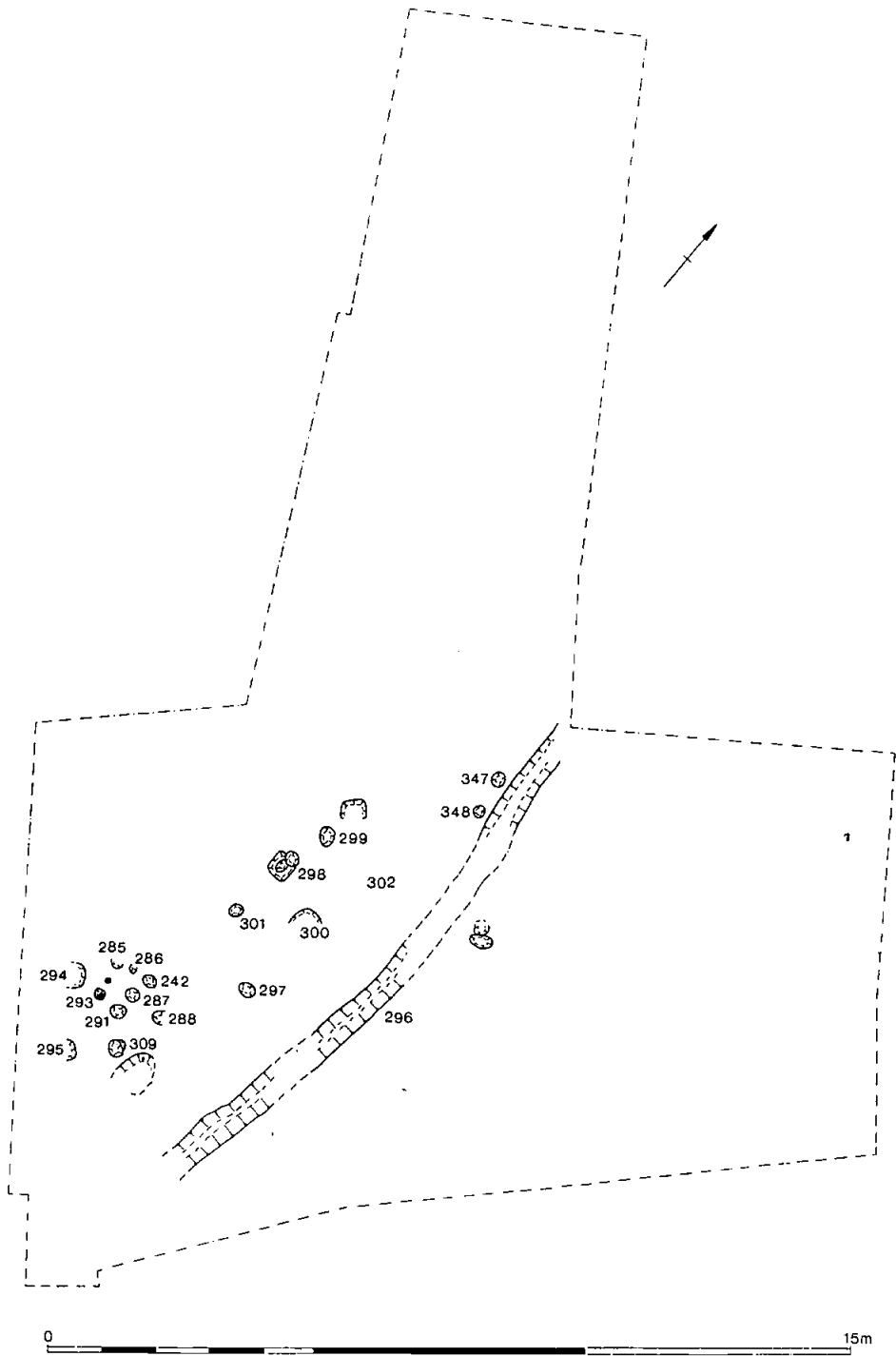


Fig 4 Phase 2a - Late Saxon in Tr 11/12 conjoined.

sherd of pottery (Fig 13), part of a loom-weight, a fragment of a rare, high status glass claw-beaker (Fig 18) and a bronze, equal-armed brooch (Fig 18). The remains are suggested as belonging to domestic occupation and were of 6th-century date on the evidence of the finds.

Phase 2a - Late Saxon (Fig 4)

Surviving remains of this phase in Trenches 11 and 12 were only a little better preserved at the east end of the northern street frontage than their early-middle Saxon predecessor. They comprised numerous post holes, a large proportion of which formed two distinct parallel lines running north-east to south-west (12/89, 242, 286-8, 291-5, 297-301, 309-11, 320, 345, 347-8, 362-3; Fig 4). Parallel with and just to the east of these was a gully some 0.5m wide, which was traced for 11m (12/296). Together they appear to have constituted a major boundary which was eccentric to the line of Woolmonger Street, probably indicating that the remains predate the thoroughfare. Beyond (east of) the gully, lay a scatter of rubbish pits (10/15-17, 27, 36, 41, 74: details in archive, c.f. Fig 11).

Phase 2b - Late Saxon to early medieval (Fig 5)

Subsequent to the demise of the Phase 2a boundary features, timber structures were erected. Due to their location within a later building, their significance cannot be fully appreciated. They are made up of a plethora of postholes which trend in an east-west direction and suggest an alignment on a new road frontage (i.e. that "Woolmonger Street" has been laid out). In close proximity are many small, driven stake holes, mostly filled with charcoal, occasionally producing charred seeds and faecal waste (see Carruthers, below).

The plan of the buildings is not evident from the surviving remains, nor is it possible to differentiate with certainty the interior from the exterior. While there is little to suggest the use of the buildings, the numerous features to the rear may be significant. Some occupation seems to be domestic, but there is added evidence for agricultural processes in the presence of three separate ovens, low levels of iron working, a ready water supply and some consistent archaeobotanical remains.

The date of the structures can be gauged by the associated pit dug close by (322) the fills of which (254, 308) contained primary 12th-century ceramic waste (Pottery report, below) and environmental data, both faunal and botanical from cooking (see Carruthers, Armitage, Locker, below). Three other contexts from this phase were rich in charred archaeobotanical remains (192, 266, 351) with distinct similarities between the range and proportions of their yields, suggesting that they derive from the same oven, perhaps feature 273, also possibly used for iron-working, (or that the same materials were habitually prepared; see Carruthers, below).

During this phase activity set back from the frontage increased. A stone-lined well (47) was dug, lying in a 3m-diameter, funnel-shaped well-pit (239). Set into the backfill of the construction pit was a circular oven (187) with a counterpart (273), nearby. Both were close enough to the well to be able to benefit equally from the water supply. Near to these lay a deep but truncated rectangular malt kiln (270) of 12th- to 13th-century date of a type found previously elsewhere in Northampton and nearby Warwick, amongst others (Williams 1979, 96-7; Cracknell and Bishop 1992, 37-8). A short stone drain (307) leading into a stone-lined sump (351) containing archaeobotanical remains completes this cluster of features which may be interrelated.

The presence of these features behind the frontage, meant that during this phase few pits were dug there. Instead rubbish disposal seems to have been concentrated to the north and east of the plot in Trench 10 and close to the roadside itself (10/16, 18, 32, 34, 37, 42, 44, 75-6; W/b pits 15-17; Fig 11). This implies that the new frontage at this date was discontinuous.

Phase 3 - Later Medieval (Fig 6)

During this phase occupation on the plot was further consolidated. The old timber structures were swept away, to be replaced by a building in stone during the second half of the 13th century. The new building measured 14.5m east-west x 5m north-south and was of two unequal bays, each containing a single room. For most of its length the north wall foundation (92) had been robbed away for its stone in the post-medieval period but the eastern, western and southern wall foundations survived (26, 76 & 5).

The eastern room measured 7m x 3.5m internally and contained a central hearth in two distinct halves. One half was of pitched but broken Collyweston-type limestone pieces, including tilestones (99), the other a mixture of ironstone fragments, pebbles and water-worn cobbles (142). A short ironstone foundation to the south of the hearth and projecting from the south wall of the building adjacent to the roadside may be the vestiges of the entrance arrangements.

The western room measured 4.8m x 3.5m internally and was divided from the eastern room by a stone wall (13). There may have been a second entrance from the street in the middle of the south wall, as indicated by worn flat blocks, redolent of a threshold.

To the rear of the property, the two circular ovens (187, 273) built late in Phase 2b were abandoned and a stone outbuilding was constructed over and around the old malt kiln (270) which appears to have still been in use. A large hearth (269) was laid against the north wall of the building (204), which along with the east wall (237) was well preserved. The south and west wall foundations (44) had been subsequently robbed out.

A varied series of dumps containing ironstone, sand, clay, pebbles and clay loams raised the floor of the building (268, 271, 272, 303, 304 & 306), to marry up the internal levels of the new structure with those needed for the efficient working of the existing malt kiln. The malt kiln was subsequently backfilled and after a time the hearth became redundant. The entire interior of the outbuilding was sealed with a new floor made entirely of rammed grey clay (42) which extended to cover an area outside also (40).

In the area between the main building and the outbuilding lay a hardstanding, consisting of rammed ironstone chippings (314). Within this area two regular depressions mark the location of posts which probably supported an awning or covering shelter which leaned against the outbuilding. Just to the rear of the outbuilding, the old well (47) continued to provide water, finally filled in no earlier than the mid-15th century as indicated by pottery from its fill (238).

A series of pits, together with a gully or boundary ditch were dug in the first part of Phase 3 (48, 52, W/B 8, 9, 12, 13, 18 & gully 19; Fig 11), all of which contained pottery and other finds. There were no pits dating to the later part of the period (14th-15th centuries), although these may have lain in areas which were subsequently destroyed by cellaring.

The later history of the main building at the frontage is one of major alteration. The floors of both rooms were of beaten earth which contained occupation detritus, including, in the west

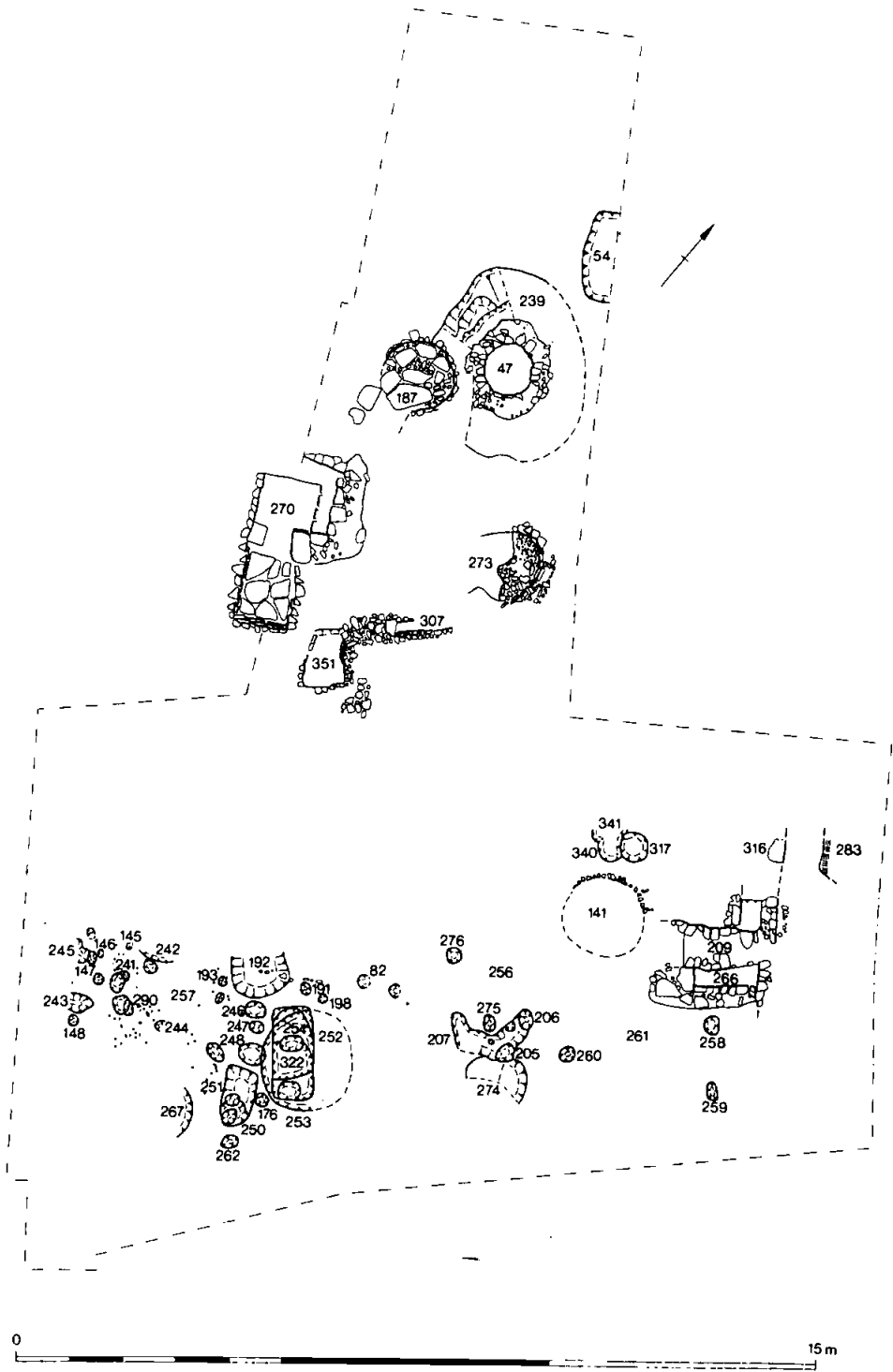


Fig 5 Phase 2b - Early medieval in Tr 11/12 conjoined.

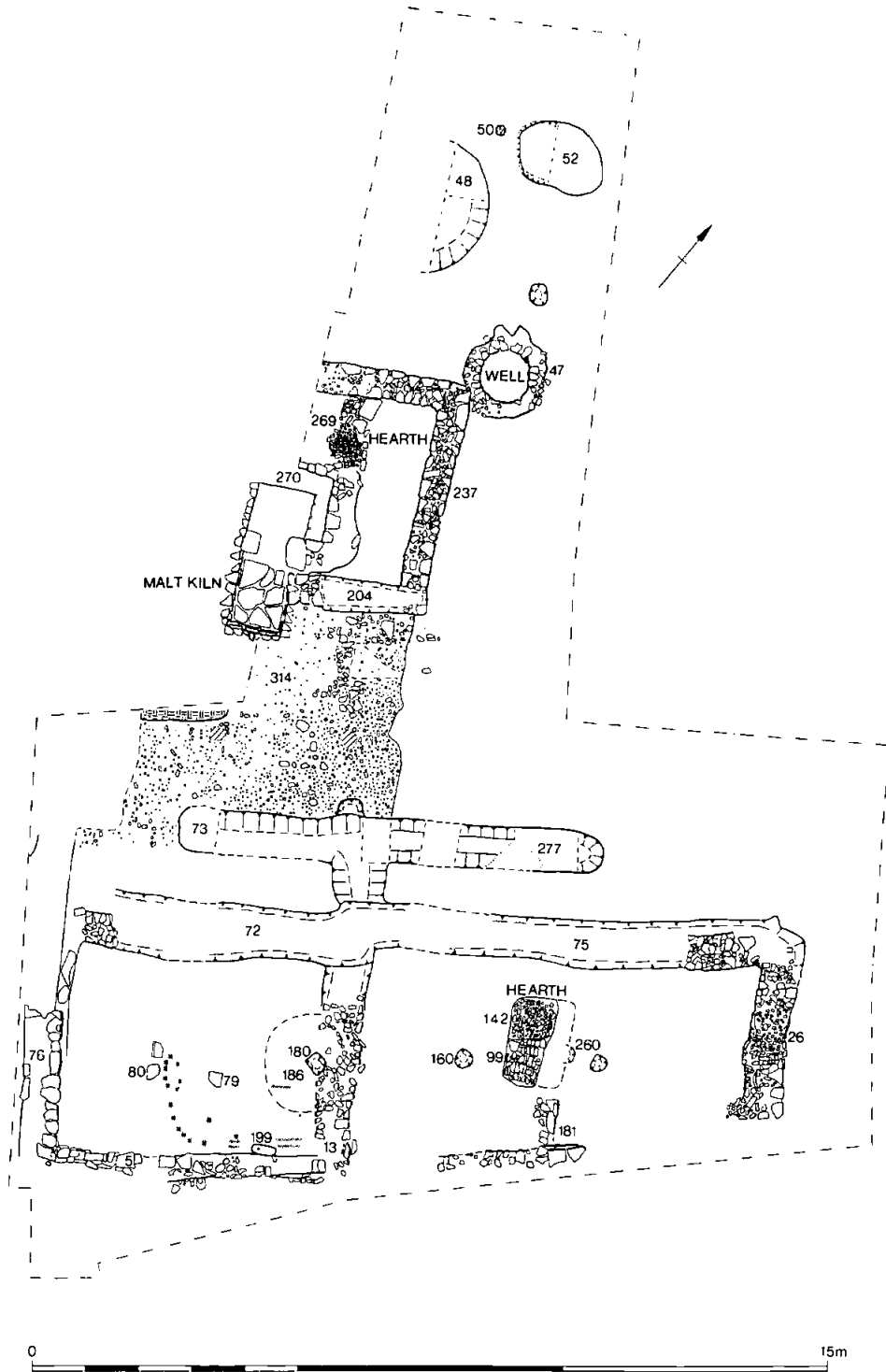


Fig 6 Phase 3 - Later medieval in Tr 11/12 conjoined.

room, the shallow grave of a neonatal child (199). This room also bore evidence of having had floorboards subsequently inserted within at least part of it. This comprised parallel lines of plaster (12) on which joists were set, an arrangement which has been noted elsewhere in a monastic room of similar size at Coventry (Soden 1995, 61, 63).

Both rooms contained evidence of the insertion of an upper floor throughout the building. The eastern, larger room contained two postholes (160, 260) for substantial uprights, set either side of the old hearth, while in the western room two stone postpads (79, 80) were laid in a similar arrangement. A third postpad, consisting of a reused architectural chamfered block, formed a further support. The access to the new upper floor was external and comprised two timber stairs back-to-back in an outshut-type addition to the rear of the building. Treads and risers may have been entirely enclosed as there were no finds whatsoever from within the stair area. Their foundation comprised a timber beam slot (277), from which the timbers were later robbed. There does not appear to have been any internal access to the upper floor.

In the eastern room the insertion of an upper floor above would have been problematic as the central hearth could no longer function. Therefore this was done away with and floored over with rammed grey clay, as was the rest of the room, only patches of which survived. Fragments of Surrey Whiteware lobed cup from the surface of the hearth indicates that this took place no earlier than the late 14th century. The reflooring in grey clay was total; it extended to cover the western room of the frontage building also although in neither area was this preserved as completely as in the outbuilding.

The end of the building appears to have come in the second half of the 15th century as a pit dug through floor of the western room contained pottery of that date, while no occupation layers within the structure produced similar pottery.

DISCUSSION

The different ground floor rooms were constituted very differently when the buildings were constructed in the 13th century. The remains in the eastern room are commensurate with a Hall, with some cooking facilities, while the western room is less spacious and contained the grave of a new-born baby. This room will therefore be referred to henceforth as the Chamber or Parlour.

The outbuilding was dominated by its successive ovens, comprising malt kiln and side hearth, apparently superseding earlier ovens fired outdoors in the open. This building is henceforth described as the Malthouse or Kitchen.

These terms are used for the buildings of this plot throughout this phase in general, to avoid confusion, but it must be borne in mind that there are bars to interpretation from the point that floorboards are introduced, rammed clay floors put down and an upper floor inserted. Both of the new floor types meant that there was little or no opportunity for finds to be deposited within the rooms. Similarly the insertion of an upper floor does itself imply a change in the way in which the living space was used throughout the building. This will be addressed later in this report.

A deep pit of the subsequent phase 4 (185, not illustrated) contained an architectural fragment (Fig 17) which is believed to derive from the stone building of Phase 3. If so it betokens a structure with notable decorative detail, and consequently suggests a status elevated above the ordinary.

Phase 4-5 - post-medieval (not illustrated)

This period began on this plot with the demolition of the Phase 3 stone building and the robbing of much of its foundation for stone. The aforementioned pit (185) was dug, along with other pits from the early 16th-century onwards, some within the footprint of the former building, others outside, some straddling the backfilled robber trenches, indicating just how quickly the old building was totally razed and the ground level made good.

The buildings which were demolished in the early 1990s to make way for the new development were warehouses of the late 18th to 19th centuries, traceable in the 1st edition OS map of 1885 and subsequently Goad's insurance maps up to 1949. Demolition and subsequent machine-excavation removed almost all traces of these buildings but for a few brick and ironstone foundations, an occasional stone lined pit and some damaging cellars. They were from the later 19th-century, served by drains and sewers comprising salt-glazed pipes, emptying into the main sewer placed 3m down along the carriageway of Woolmonger Street.

However there is no archaeological evidence that between the demolition of the Phase 3 stone building probably in the late 15th-century and the construction of the warehouses in the 18th-19th century, there was any occupation of this plot other than the occasional disposal of rubbish and the cultivation of garden soils which were allowed to accumulate and remained undisturbed over the reduced medieval structural remains in places.

WOOLMONGER STREET: NORTH SIDE, 2

THE WESTERN PLOT

Six phases of activity were recorded on the plot within which lay Trenches 13, 15 and 16.

Phase 1 - early/middle Saxon

There were no features of this date in this area. Finds of this date were residual in later features, the best of which was a sherd of stamp-decorated pottery from a pit sampled during watching brief (W/B 51: Figs 11, 13).

Phase 2

Sub-phase 2a - late Saxon (Fig 7)

Within this area lay the best preserved remains of this phase, also the most extensive.

The remains comprised three cellars, two of which were set beneath timbered buildings (Fig 7). All were cut into the Northampton Sand with Ironstone bedrock and had flat floors with vertical or near-vertical sides. A truncated fourth cellar (Cellar 4) was located nearby in watching brief (Fig 11) but little evidence of it survived other than the depth, one edge profile and ceramic evidence of the date of its infilling.

Cellar 1 measured 4.5m x 4.5m x 1m deep (144). It lay within a posthole configuration which aligned roughly east-west and north south (13/31, 139, 142, 145, 147, 173, 174, 175, 176, 177, 180, 181, 182, 185; 15/48-51, 57); the layout, however, was eccentric to the surviving road course which it partly underlay and by which it had been damaged.

While the cellar formed the western bay of the building, the postholes also surrounded an eastern bay which contained a central stone hearth (172). The floor of this bay was apparently the surface of the bedrock although an accumulation of sandy loams built up on top (135), contained pottery and other finds. Around the northern and eastern sides of the cellar lay a slot

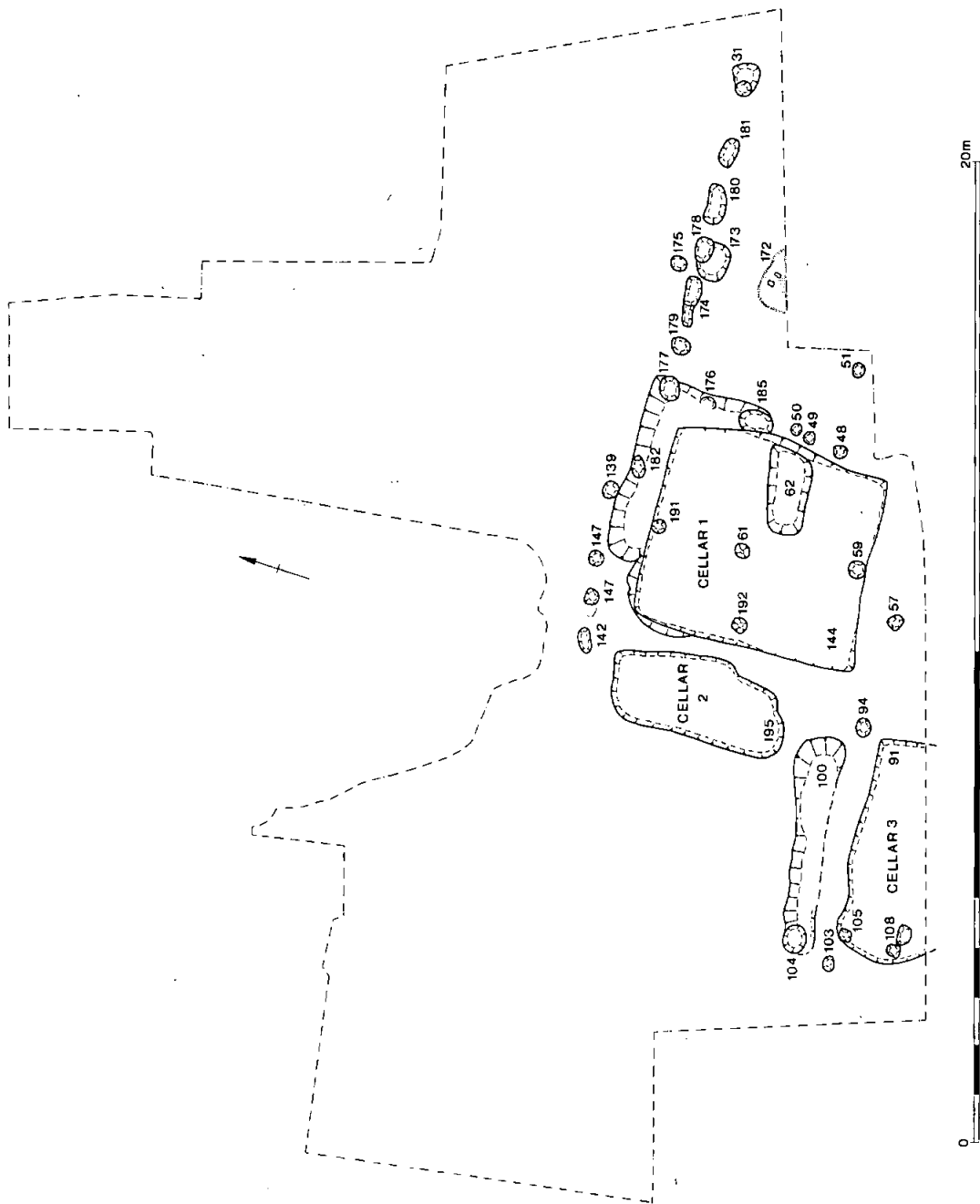


Fig 7 Phase 2a - Late Saxon in Tr 13/15/16 conjoined.

within which some of the postholes lay, which may have formed an interrupted sill-beam foundation where the ground level rose most sharply and where, as a consequence, soil was otherwise most likely to fall, or be washed, over the edge.

Around the edges of the base of Cellar 1 lay a configuration of rock-cut postholes (13/191, 192; 15/59, 61) which would have presumably supported the roof of the cellar (the floor of the building above). The central post hole (61) contained an almost complete vessel in Northampton Ware (Fig 13), produced in the period c900-975 AD. A shallow, rectangular pit in the base of the cellar is of unknown use (15/62).

Cellar 2 measured 3.6m long x 1.6m wide x 1m deep and lay just to the west of Cellar 1 (195). There were no indications of it having been surrounded by its own posthole configuration and it may have lain beneath the same building which stood over Cellar 1. Indeed the two were separated by a baulk of unquarried bedrock only 400mm wide.

Cellar 3 measured 4.5m x (2m extant) x 1m deep (91). As its measurements indicate, (its southern) half had been removed by the insertion of a post-medieval sewer within a trench 3m deep and 3m wide in the carriageway, which formed the southern edge of the excavation. The extant parts of this cellar were strikingly similar to Cellar 1; this example contained postholes in its base (16/105, 107, 108) and others lay beyond its edge (16/94, 103), suggestive of the building which had stood above it. A 1m-deep slot (16/100) containing at least one substantial posthole (16/104) lay parallel to its north side, suggesting that the building which stood above had substantial, deeply-founded footings.

All of the cellars had been deliberately backfilled, the posts within their bases having been withdrawn. However, the associated buildings probably continued in use. Distinctive layers of backfill lay within each. The most remarkable of them was the complete Cellar 1, in which lay two distinct backfill deposits (143 and 101), which contained in total 86 sherds of pottery dating the backfilling to about AD 1000 (Fig 13). It included foreign imports (see below). Cellar 2 contained in places up to seven separate tips of backfill material (16/69-75), while Cellar 3 contained five such layers (16/54, 87, 90, 106, 110). However, in neither cellar was the pottery yield so great as from Cellar 1.

The backfilled cellars may have been spanned with planks forming a ground floor as there was no evidence of occupation directly on top of the backfill material. A conflagration, appears to have subsequently consumed the buildings and their contents. A widespread and very dense layer of charcoal and ash was encountered in each trench (13/98 and 15/32, particularly) which lay directly on top of the backfilled cellars and, along with those underlying layers, had continued to slump (Fig 8). It also filled some of the post-holes around the cellar (such as 13/139) showing the intensity of the fire. Another, previously backfilled posthole (13/185) was sealed by charred planking amongst the burnt debris (Fig 8). The exceptionally large quantities of grain contained throughout the burning suggest that the buildings just before their destruction had a crop-storage or crop-processing function (Carruthers, below).

Only one of a number of pits sampled for dating evidence at the north end of the trench proved to be of this phase (13/41). It had been heavily disturbed by later pits. This paucity of pits is in keeping with results of the wider watching brief in which only two further pits were found to be of this phase within 20m of the trench (W/B 43, 54; c.f. Fig 11).

Sub-phase 2b - Late Saxon-early medieval (Fig 9)

Following the demise of the cellared buildings, the ground was levelled up and the subsidence caused by the former cellars was

made good with tips of material (13/95-7, 129, 156). Almost the same site was chosen for rebuilding as can be seen from the extent of the burnt debris over the former cellar (Fig 9: B).

A range of new timbered buildings were constructed on top of the newly prepared ground. During their lifetime they underwent an unknown number of internal alterations and/or extensions which left a plethora of post- and stake-holes, all of which belong to this sub-phase but part of whose configuration and layout lacks clarity of purpose (1/17, 46-8, 62; 13/18, 20, 22-9, 67, 74, 96, 103-5, 108, 110-114, 116-9, 121-2, 126-7, 136-8, 140, 141, 149, 151-3, 155-7, 188-9; 15/3, 14, 16, 20, 21, 24, 26, 27, 36-40, 43-4, 46-8, 56, 59-61; 16/28, 33, 35-40, 43, 46-9, 57, 64-5, 79-85, 93, 109; Fig 9).

However, what is clear is that the new range was realigned a few degrees from the old cellared structures. They appear to lie parallel to the carriageway of what became Woolmonger Street, but any routeway must have been to the south of the later verge as associated structural slots project into this area (15/52, 55, 58). In fact both they and some of the postholes may relate to a second range, lying perpendicular across what became the roadway, subsequently truncated by 19th-century sewers and drains.

The range contained two areas for food preparation (Fig 9: H). Although here they are referred to as hearths, they lack any hearstones or kerbs. As spreads of ash and areas of heat-scorching (13/14 and 77), they may mark the former locations of braziers, although the finds they produced did not indicate anything other than a domestic, cooking or consumption function for either. Of the ash spreads, one may have been contained by the internal divisions (77), while the other (14) appears to have spread along a line into adjacent rooms, possibly trampled through doorways.

The foundation of the north, west and (presumably) east walls of the range, together with internal divisions comprised lines of post-holes alone, some of which show the recutting of replacement posts, while the south wall was made up of post-holes set within a sill-beam trench, interrupted by the postholes at irregular intervals, some of the gaps possibly being for external access (13/15, 142; Fig 9). Small areas of flooring survived (13/11-13, 76, 92-3, 95, 99, 100, 109, 129), including vestiges of a mortar floor (13/89), decoratively rippled while still wet. Mostly these surviving occupation levels comprised small dumps of soils and beaten-earth which had been badly damaged by the internal alterations of this phase and subsequent phases of construction.

There were intercutting rubbish pits to the north (presumably the rear) of the property. One (13/157; fill layer 49) produced a coin of 1074-6 (William I), deposited after only minimal wear which clipped the rear of the building and indicating that the range was in existence by this date. Two rubbish pits belonging to this sub-phase were fully excavated and provide wide-ranging assemblages of finds and environmental data for this period (13/38 and 16/50); other pits lying only partly within the excavation or damaged by later features were sampled to extract information on their general date range; two were of this phase (13/51, 116). Some of these pits were recorded once more during watching brief (e.g. 13/157=W/B 40), while overall that final piece of fieldwork recorded numerous pits of this sub-phase behind this plot (W/B 30-1, 33, 37, 40-1, 45, 47-9, 51, 58; Fig 11). Further, undated pits are most likely to be of this sub-phase on the basis of similarity of fill colour (W/B 21-5, 27, 29, 34-6, 38, 42, 52, 56, 59, 60; Fig 11).

Phase 3 - later medieval (Fig 10)

In common with the eastern plot, the timber buildings were replaced in stone in the 13th century, although less of the structure and layout survived intact on this plot.

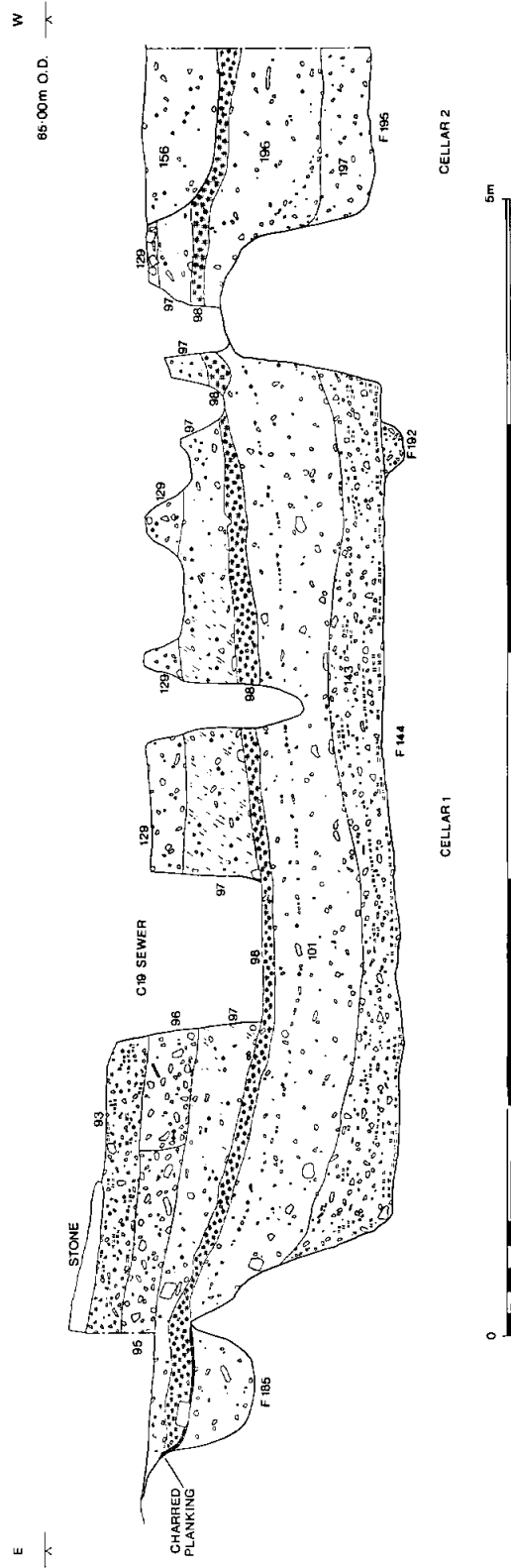


Fig 8 Section through late Saxon cellar 1 (Tr 13).

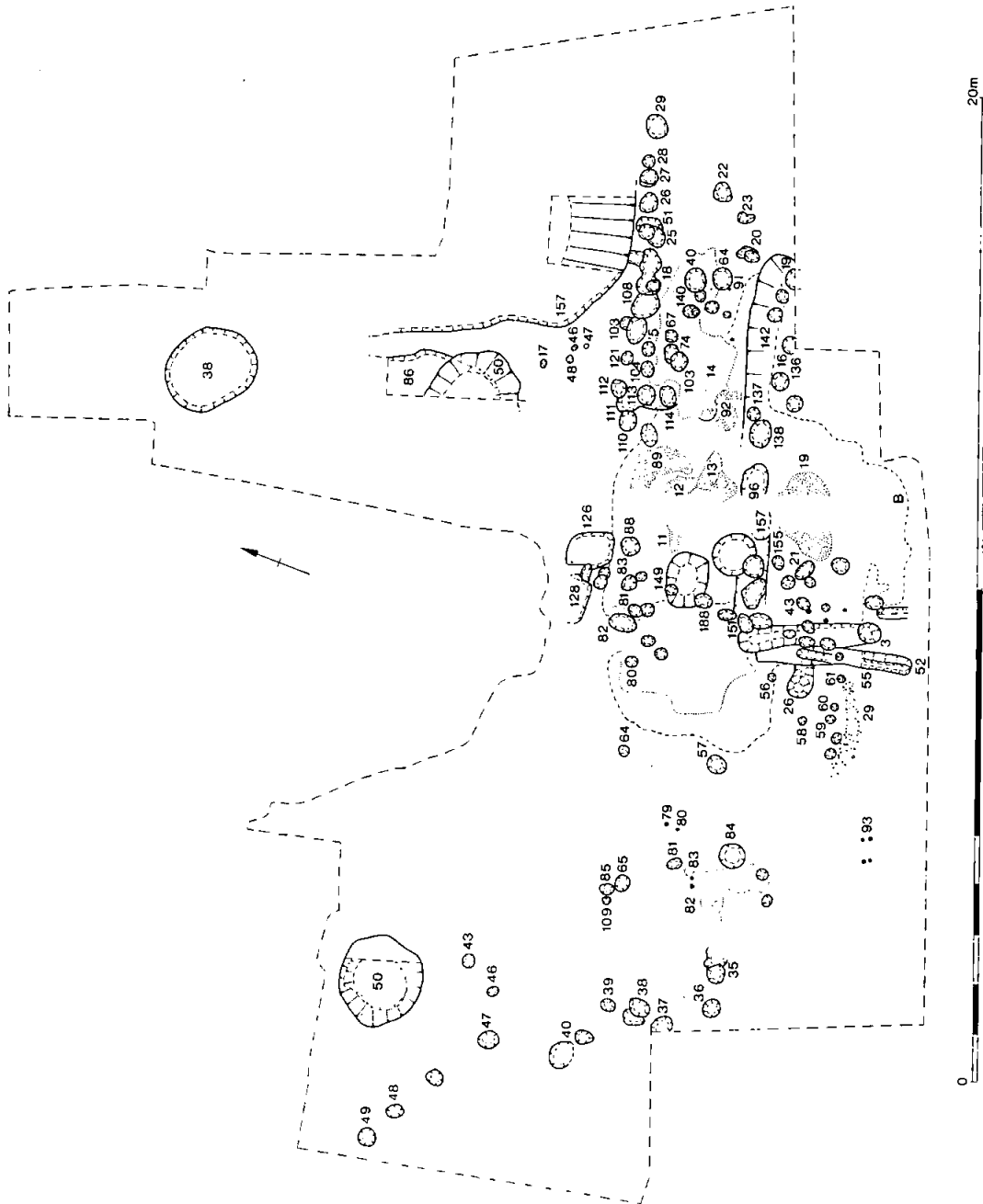


Fig 9 Phase 2b - Early medieval in Tr 13/15/16 conjoined.

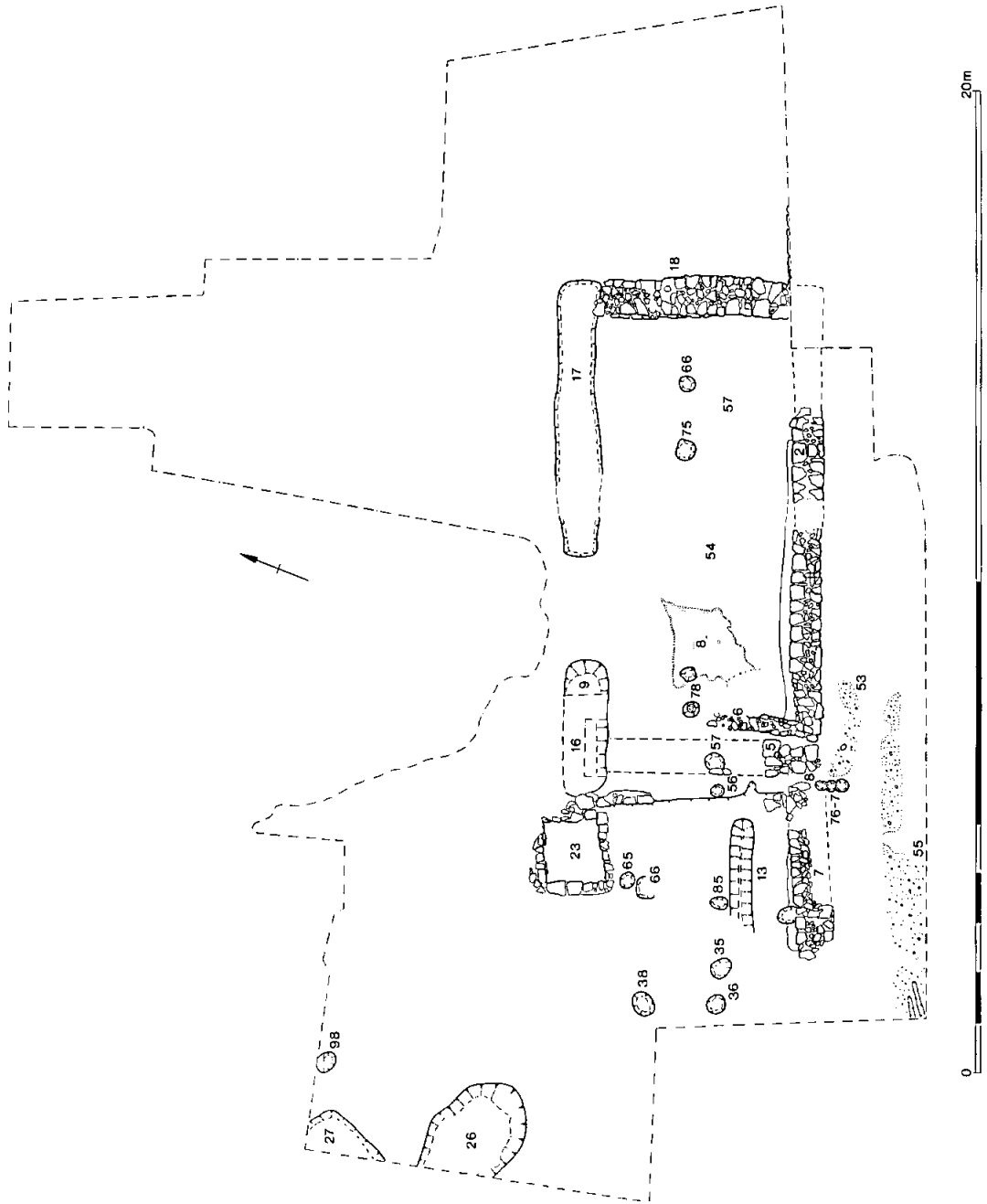


Fig 10 Phase 3 - Later medieval in Tr 13/15/16 conjoined.

The alignment of the new stone range was unaltered from its timbered precursor, although the positioning and stratigraphy makes it clear that elements of the old building were not utilised in the new one, at least not without prior dismantling.

The new building comprised only one room, with a later westward extension to form a second room. The wall foundations were of soil-bonded ironstone rubble (13/2, 5, 6, 18), set into shallow construction trenches. Although the north, rear wall foundation was subsequently robbed, a marked break in the robbing trench denotes the location of a rear door (between robbing trenches 13/9 and 13/17). A spread of ash and scorching (13/8) on the beaten earth floors (13/54, 57) marks the probable location of a hearth (or more likely a brazier in the absence of kerbs/hearthstones, while a central axis of post-holes (13/66, 75, 78), partly cutting through the ash, suggests that an upper floor may have been added, just as in the eastern plot.

A westward extension, partly timbered (postholes 16/35-6, 38, 56-7, 65-6, 76-7, 85), and partly of stone (south wall 16/7, 8), required the terracing of the natural ironstone to achieve the required levels (Fig 10). Within this extension a slot (16/13), parallel to the front wall may have held a sill supporting a stair to the upper floor of this and the main block. It was cut through an earthen floor (16/12) directly on top of the natural ironstone.

Ceramic finds suggest that this floor was put down in the late 13th century but a lack of later pottery might indicate that floorboards were introduced later in the life of the building. A single stone-lined pit at the rear was built so close to the back of the structures that it may be interpreted as an integral garderobe (16/23) although its (final) fill contained only demolition material from the building together with ceramics which put its demise and probably the last occupation of the range into the 16th century. This was corroborated by ceramic material from the first layer (16/10) to be put down over the former earthen floor of the extension (16/12) after a gap of over c200 years.

It was during this phase that Woolmonger Street came into existence. Although the buildings of the previous phase were similarly aligned, there was an absence of road-remains within the excavation. In this phase, however, patches of gravel metalling survived south of the building (16/53, 55), between the cuts of modern service-lines. Short but parallel grooves, interpreted as wheel-ruts, were noted at the west end of the trench, driven deep into the gravel and subsequently filled with silt.

Rubbish disposal in pits in this period seems to have peaked early, perhaps around 1300. Even then there are few pits of this phase behind the plot (W/B 50, also a well, 28: Fig 11). There are

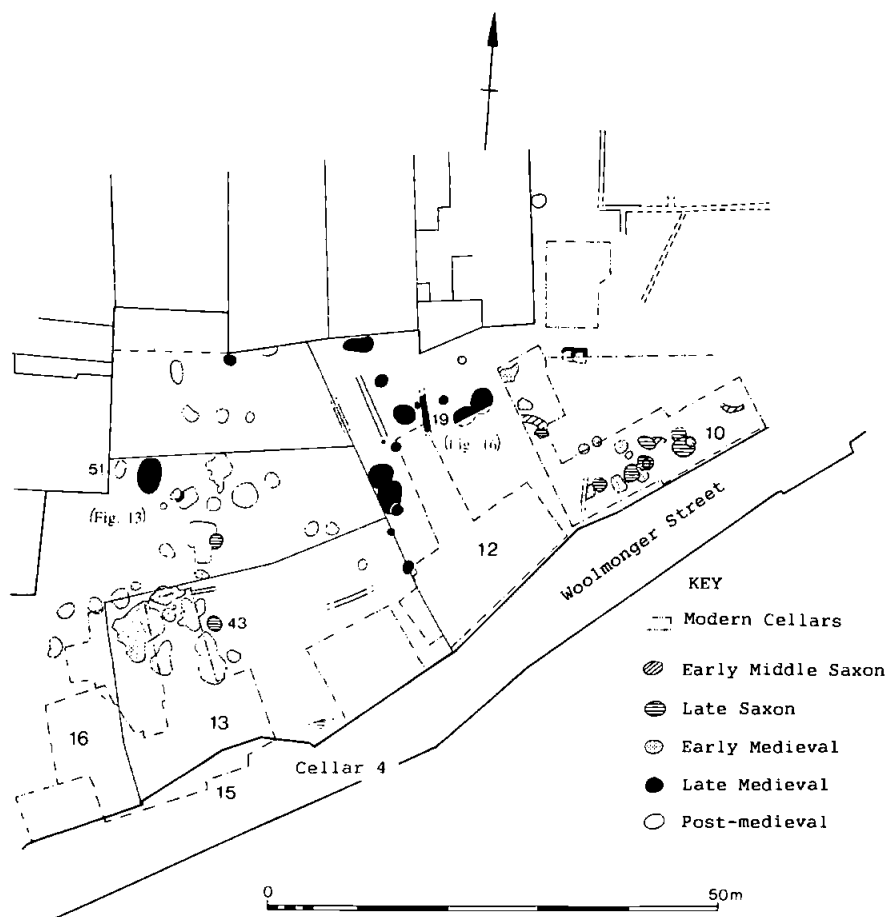


Fig 11 Watching Brief features of all phases and pits in Tr 10: the area north of Woolmonger Street.

various possible explanations: that rubbish disposal was elsewhere, perhaps south of the street; that later development has removed most of the late medieval pits; that occupation was not heavy enough to account for numerous pits; that occupation was such that pit digging was not required - i.e. rubbish was not produced which needed burial. It is also pertinent to note that the location of the old plot boundaries between Gold Street and Woolmonger Street is not known. Therefore, any pit at a distance behind either frontage may belong to either plot. There is no evidence either way in the actual pit layout.

*Phases 4-5 Post-medieval
(not illustrated)*

Following the demise of the stone buildings in the early 16th century, some of the walls were robbed for their stone, even down to the foundations (13/9, 17; see above) and the old floors covered over by debris (16/10; see above).

The next structures to be built thereafter survived only as three iron-stone rubble-built, brick- and tile-floored cellars which were set some 5m back from the street (16/17, 18, third not investigated). The fills of the two investigated contained pottery of 18th-19th century date. They clearly formed a sequence and the last was subsequently incorporated in part into a block of court-style housing, built in the 19th century to front both the street and new yards to the side. The walls of these houses had survived to a height of 2m, to be demolished in the current redevelopment. Associated services cut across the site from the later 19th century onwards, causing localised damage to earlier remains. A massive sewer main lay down the centre of Woolmonger Street. It was 3m deep and lay within a pipe-trench 3m wide, which had removed all earlier deposits along its course.

WOOLMONGER STREET: SOUTH SIDE

PRESERVATION STRATEGY (Figs 1, 12)

The design for the current redevelopment was such that over much of the area in which archaeology was believed to survive following evaluation in 1994, a level of preservation *in situ* was possible. This was the preferred strategy and the one adopted except in one case where terracing was required for new

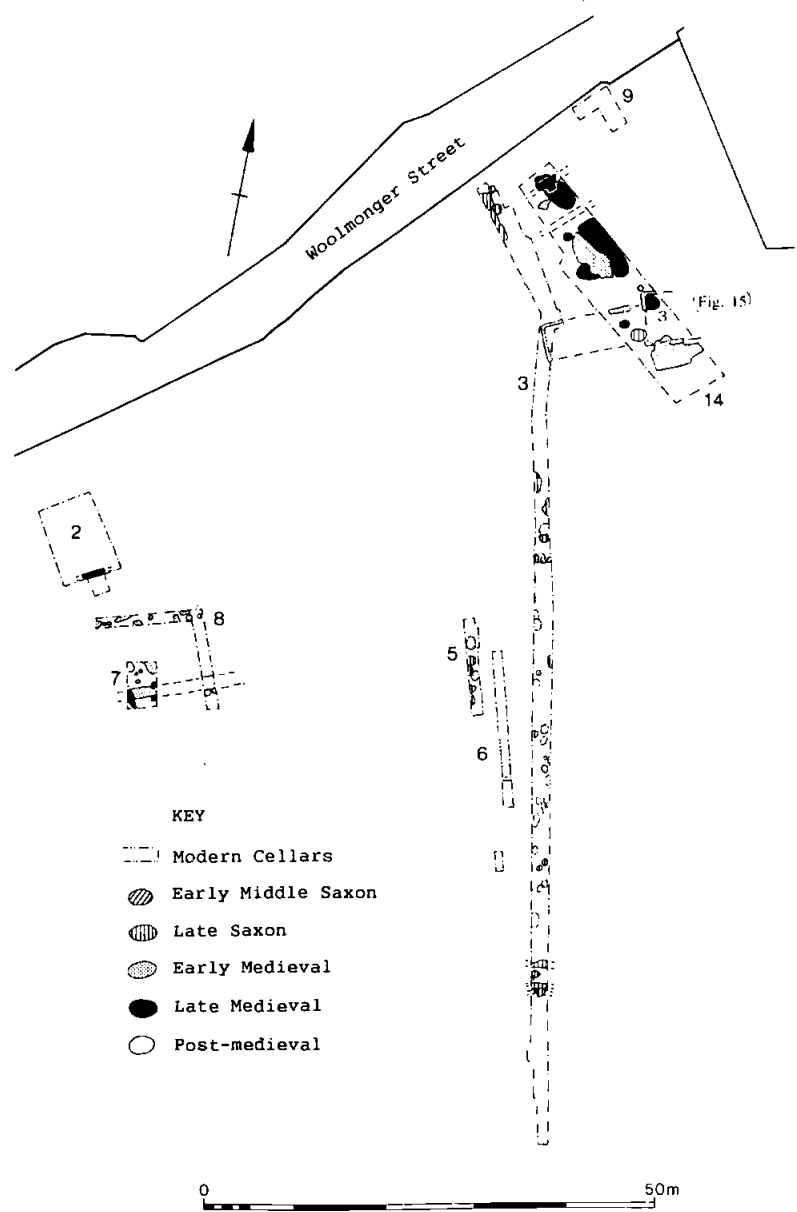


Fig 12 Watching Brief features of all phases and pits in Tr 2, 3, 14: the area south of Woolmonger Street.

foundations (Trench 14). Therefore any analysis of the area south of Woolmonger Street can only be carried out with the benefit of documents and the limited interventions of Evaluation Trenches 2, 3, 4, 7, 8 and 9 together with the subsequent Trench 14. Otherwise, the only further intervention into potentially significant archaeological deposits south of the street comprised the digging of holes for pile caps, monitored archaeologically as a verification exercise but which added nothing to our understanding of the site.

Three phases of occupation can be discerned south of Woolmonger Street from the excavated evidence, beginning in the Late Saxon period (overall site sub-phases 2a, 2b and 3). Since the remains are widely scattered within trenches of limited area, they are depicted by phase at small scale only in Fig 12. All but those in Trench 14 have been presented in greater detail previously (Shaw and Steadman 1994; Williams and Farwell 1983). A phased detail plan of Trench 14 is deposited in the site archive.

Phase 2a - late Saxon

Features of this date were comprised entirely of widely scattered pits and postholes (2/37, 3/40, 43, 45, 50, 118, 120, 136, 139-142, 252, 268, 273, 275, 277, 230, 232, 234, 236, 279 and 281; 14/16; for features of this date in Trenches 5 and 6 see Williams and Farwell 1983). There was also an otherwise apparently isolated series of three straight, parallel gullies lying close together at the south end of Trench 3 and which were aligned east-west (3/137-8, 143). This was misaligned to Woolmonger Street but parallel with Gold and Foundry Streets

Phase 2b - early medieval

Features of this date comprised structural remains of a building of at least two bays spanning across Trenches 3 and 14 (3/20, 14/1, 4, 11, 12). It was built at least in part of ironstone rubble on quite flimsy foundations, in places only one block wide and had been extensively robbed. It lay misaligned to Woolmonger Street but parallel to both Gold and Foundry Streets. Further south in Trench 6 another ironstone foundation was similarly aligned (Williams and Farwell 1983, 142-5: *Trench Z, walls 2 and 3*). A gully or small ditch spanning Trenches 7 and 8 also lay on an identical alignment (*St James' Place 1987 Trenches B and A respectively: information in archive*).

There was an upsurge in post-hole- and pit-digging in this phase, features of this type found throughout many of the trenches (3/26, 48, 57-9, 61, 63, 70, 121-5, 127-31, 135, 139, 141, 153, 155, 170, 194, 199, 221; Trench 6 - Williams and Farwell op cit, *Trench Z*; Trenches 7 and 8 - *St James' Place 1987, Trenches A, B/C*; Trench 14/5, 8, 10, 16 and 18).

Phase 3 - Later Medieval

Fewer pits seem to have been dug downslope during this phase, perhaps because of the increasing build-up of soils which characterise the overburden of the area at the foot of the slope right up to the 19th century.

Pinning back the soil build-up in Trench 2 was an ironstone retaining wall at the edge of what was to become a prominent break-of-slope until 1995 (2/11: Shaw and Steadman 1994, 2). This was one of the first structural features on the south side to lie parallel to Woolmonger Street as it became known. Further east in Trench 14 lay a wall of similar date (14/23), close to the carriageway, but also on this new alignment. Behind it (to the south) was a parallel bank, created on the natural ironstone by downcutting to either side.

There were further pits dug during this phase together with a stone-lined well, all lying in Trench 14 at the top of the slope (14/2, 3, 13, 14, 15, 17, 20, 21).

THE POTTERY

by Iain Soden

QUANTIFICATION

A total of 6,562 sherds of pottery, weighing 67.2kg, was recovered from Trenches 1-3 and 10-16, plus the subsequent watching brief recording. Pottery from Trenches 4-9 has not been reclassified here but the data has been taken into account.

The pottery spans the date range Romano-British to 19th century. For the purposes of this report only that of early-middle Saxon, late Saxon, medieval and early post-medieval date is dealt with (Phases 1-4); there were no features of Romano-British date on the site and 17th - 19th century occupation levels had been successively shredded by more recent redevelopments.

Forty-four Saxon and medieval fabrics were represented (Pottery table 1 in archive) with fifteen post-medieval types. Initial identification and assessment of Saxon and medieval pottery fabrics was carried out by Paul Blinkhorn, formerly Ceramicist with Northamptonshire Archaeology. The fabrics or types have in all cases been related to the Northamptonshire County Type Series (CTS) in which each type has been assigned a number in addition to its common name. All identifications in database form and tabulated data are retained in archive. The occurrence of types closely allied to structural phase can be seen in the pottery tables below.

SCOPE OF THIS REPORT

The pottery presented here is not an exhaustive catalogue but is designed to complement the considerable existing published reports on previous excavations in and around Northampton; e.g.: *St Peter's Street* (Williams 1979), *St Peter's Gardens* (Denham 1985) etc. It is a wasteful exercise to re-present previously-published types unless they either occur in forms not already encountered, or their occurrence indicates or corroborates a postulated use or status for a building, an area or a room.

Accordingly this report concentrates upon three aspects:

- i) The forms which have been encountered in secure occupation contexts at Woolmonger Street, as a guide to the use of domestic areas in

- and around buildings, in conjunction with the study of other finds assemblages.
- ii) Specific pottery groups which define distinct periods of occupation in Northampton (e.g. the Northampton ware horizon in the 10th century).
 - iii) Assemblages from fully excavated pits which can be assigned to a particular phase of frontage development. These groups generally contained the best-surviving examples of pottery from the site.

CTS	Common name
97	Northampton-type Maxey Ware
100	St Neots-type Ware
112	Late Saxon Glazed ware (Import)
130	Northampton Ware
200	St Neots-type Ware
205	Stamford Ware
323	Beauvaisis Ware (Import).

The fourth, truncated Cellar was noted in section in watching brief and was merely sampled for dating purposes. It was of the same date as the others.

PHASE 1

The early-middle Saxon pottery from the site comprises 101 sherds with an additional three sherds of specific middle Saxon pottery (Northampton-type Maxey Ware; fabric 97). Of these, all of the Maxey Ware was residual in later contexts, as were all but eighteen sherds of the early-middle Saxon material. The largest proportion of early-middle Saxon pottery was residual in the late Saxon fills of the contemporary cellars and associated features, in which were found 24 sherds.

Only one sherd was decorated, residual in Watching Brief (medieval pit 51; Fig 11). It is stamp-decorated in zones between parallel scored lines (Fig 13.1). Similar stamp designs and arrangements are common on decorated early Saxon pottery, including large groups excavated at Chalk Lane, Northampton, (Gryspeerd 1981, 108-111) and in 1995 at Daventry, where they have been dated to the 6th century (Blinkhorn in Soden, 1998).

PHASE 2 (SUB-PHASE 2a)

Pottery use and area function

Contexts which are certainly of this sub-phase produced relatively small quantities of pottery, but the assemblage was dominated by Northampton Ware (CTS 130).

The relevant contexts are those which predate the ash destruction layer which covered Cellars 1 and 2, therefore most characteristically the initial fills of the cellars (13/101 and 143, 15/34 and 61, 16/54, 70, 87, 90, 96, 99, 101 and 110).

The following types were present in this sub phase:

Date

While a variety of fabrics were present in the secure contexts of this sub-phase it is clear that the assemblage is dominated by Northampton Ware (130). This comprises 105 of the 190 sherds in the sample. Previously in Northampton this distinctive horizon has been dated on good evidence to the period c900-975 (Denham 1985, 54-5); there seems no good reason, on the evidence of this site, to dispute this dating.

The Northampton Ware forms are almost all either small wheel-thrown globular jars/cooking pots (Fig 13.2-3; c.f. Gryspeerd 1981, 115-8) or large coil-built storage jars/cooking pots finished perhaps on a slow wheel, but having untidy knife-trimmed bases (Fig 13.4-5). The one exception is a pinched spout from a rare spouted pitcher or bowl, a form entirely consistent with a 10th century date but better known in St Neots-type ware (Fig 13.6; c.f. Williams 1974, 52-3).

Because the secure contexts which characterise this sub-phase are not associated with the use of the cellars, but rather the point of disuse and infilling, little can be said in ceramic terms to begin to suggest former functions for the cellars. The value of the pottery is primarily in dating the end of the phase. Unfortunately there is no indication as to the origin of the backfills, particularly whether they are the vestiges of household rubbish (in effect large rubbish pits) or if they comprise soils imported from elsewhere in the immediate area, perhaps a more likely scenario given the largely fragmentary nature of the assemblage.

Likewise the appearance of small amounts of other wares suggests that the date of infilling falls at the end of the range c900-975. The imported Beauvaisis Ware beak-spouted pitcher fragment and other non-diagnostic sherds (CTS 323; Fig 13.7; c.f. Hodges 1981, 18, 62-4 and 74), are of the 10th century but the later fabric of St Neots-type Ware (CTS 200) does not appear

Table 1. The percentages of sherds present by type and cellar are as follows:

Area	CTS	EMS	97	100	112	130	200	205	323	Tot
Cellar1		17%	3%	4%	1%	72%			3%	50%
Cellar2		50%							50%	1%
Cellar3		4%		48%		41%	5%	1%		49%
Total		11%	2%	26%	<1%	55%	3%	<1%	2%	100

in Northampton until c1000. Since it appears only in Cellar 3, the one cellar not covered in a destruction layer of ash, it may be postulated that this cellar was backfilled last, sometime after the buildings over Cellars 1 and 2 had burnt down. A sherd of Stamford A Ware from the secondary fill of Cellar 1 and prior to the conflagration dates to c1000 AD (Fig 13.8). The burning therefore appears to have taken place at the turn of the 11th century.

Trade

Whether the pottery present can indicate much about the status of the buildings or the plots in which the buildings stood is arguable. Set against the larger assemblages of St Peters Street (McCarthy 1979, 226-7), St Peters Gardens (Denham 1985, 53-62) and Chaik Lane (Gryspeerd 1981, 110-118), the late Saxon types from Woolmonger Street in secure contexts appear at first sight to add little new evidence. However the occurrence of the Carolingian Beauvaisis Ware beak-spouted pitcher and other vessels here may continue to support Denham's arguments (1985, 56-7) for northern French influence in Northampton in the 10th century. All other major imports are of a regional nature and indicate that Northampton's trade routes looked eastward, as Gryspeerd suggested previously (1981, 110).

Use

While the use of the former cellars cannot be discerned, the ash layer which covered the area when the buildings over Cellars 1 and 2 burnt down contained no pottery whatsoever. Therefore it seems probable that the buildings in their final, un-cellared period of use, performed a purely aceramic function, with no domestic occupation. The environmental evidence of this layer strongly indicates that this function is one of crop storage or processing (Carruthers, below).

PHASE 2 (SUB-PHASE 2b TRENCHES 13,15 & 16)

Date

The destruction of the buildings over the Phase 2a Cellars provides a distinctive break in the site sequence and chronology which is invaluable. Cellars 1 and 2 were totally sealed by the ash layer, as were the structural postholes of the building above them, so the necessary rebuilding was total.

The number and extent of secure contexts of this phase was limited by the plethora of postholes of the subsequent structures but the pottery is nevertheless of value.

In the initial layers of the aftermath of the conflagration Northampton Ware still predominated (13/97 and 156, 15/10 and 18, comprising 78% or 143 of 183 sherds). Much may have been residual.

However, with the first renewed domestic occupation layers the picture changed. There was now a dramatically increased reliance on the ubiquitous material of the shelly ware tradition which coincided with at least a dramatic downturn or at worst the complete demise of the Northampton Ware industry.

A large secondary pit, dug close up against the rear wall of the building, contained a slightly worn coin of 1074-7 (lost after minimal circulation), shows that the building was already constructed by about that date. Fourteen sherds of St Neots-type CTS 200 fabric in a foundation slot (13/15 and 96) indicate that it was built after c1000 AD and may have followed on almost immediately after the phase 2a fire-destruction.

While there is structural evidence for some subdivision of the

new building and possibly two hearth areas, the pottery does not differ markedly from one part of the building to another, making spatial analysis fruitless. 387 sherds derived from the following secure occupation contexts: Floor/makeup layers 13/76, 93, 97, 99, 100, 109, 15/18; hearthside pit 13/84; Hearth 13/14.

The following fabrics were present in this sub-phase:

CTS	Common name
100	St Neots type Ware
101	"
105	"
130	Northampton Ware
200	St Neots type Ware
205	Stamford Ware
302	Reduced sandy Coarseware
319	Lyveden/Stanion A Ware
330	Shelly Coarseware

While there still existed a considerable proportion of Northampton Ware (173 sherds or 44% of the sub-group), increasingly it is abraded and the assemblage appears more fragmentary than its predecessor does from Phase 2a. This is probably due to the large number of postholes which characterise the structures of this phase, the digging of which would have released quantities of residual material onto the occupation levels.

The large proportion of fabric 100, the widespread St Neots-type Ware with late Saxon origins, characterises the phase (160 of 387 sherds, or 41% of the assemblage). Also the true medieval St Neots type (fabric 200) shows the phase straddles the conquest period (28-sherds/7%). Curiously the slightly later Shelly Coarsewares (330), elsewhere sometimes felt to be the successor of all the St Neots type shell-tempered Wares here appears in mid-phase (16 sherds/4% of the assemblage), indicating some contemporaneity of products (Fig 13.11-14). These types are often difficult to separate and they may originate from the same industry; they do seem to be part of the same tradition, along with the Lyveden/Stanion A ware (319), represented here by only 1 sherd, probably on account of its eponymous source being some distance away.

While the amounts of Shelly Coarseware from the building are small, those from pits 13/38 and 16/50 behind the building are overwhelming (98% by weight). This is explained by the uses of the space involved: pits are left alone, floor surfaces are swept clean and levelled up. While whole vessels can be reconstructed from the pits, the contents do not include significant quantities of odd sherds which tend to remain scattered about the floors and yards and subject to repeated disturbance. The mechanics of deposition are entirely different as well as the subsequent action going on around the deposits.

The plethora of postholes in phase 2b make spatial analysis fruitless as the individual rooms are not only many (potentially six) but their contemporaneity within one building range cannot be established beyond reasonable doubt. There is in this phase a preponderance of storage jar/cooking pot forms, none of which is remarkable.

PIT GROUPS (PHASE 2b; FIGS 14 & 15)

Two pit groups belonged to the latest part of this phase, 13/38 (Fig 14) and 16/50 (Fig 15). They derive from this particular phase of frontage development and were excavated because they were discrete and they complemented and augmented the range of material

within the buildings, which was limited in value due to the complex internal layout and dubious contemporaneity of features.

Pit 13/38 lay some 8m behind the buildings and was cut 1.8m deep into the natural ironstone bedrock (Fig 9). While it produced considerable evidence of charred cereals and animal bone as a guide to consumption, it also produced reconstructible cooking pots and a jug in Shelly Coarseware (330; Fig 14). It also produced parts of two ceramic lamps and a small stone cresset lamp (Figs 14, 18.8).

Nearby Pit 16/50 was of similar size and distance from the building it served (Fig 9). This produced a greater number of cooking pots similar to those from 13/38 (13) but with the addition of three jugs, a bowl and a lamp, all in the same fabric (330; Fig 15).

The pits provide a guide to the pottery fabrics and forms in use in the buildings towards the end of this phase. They do not however provide evidence of the wealth or social status of the occupants, simply because the materials and objects within them are of a type which are mundane and therefore cheap to replace. Pottery, by its very nature, is predisposed towards breakage, simply in the normal course of its use. More durable materials, such as copper alloys, are more sought after, more expensive - and repairable, either by patching or by eventual melting down and re-casting. Pits for such re-casting are occasionally excavated, filled with miscellaneous bronze fragments, such as at Derby Lane, Coventry (Perry, forthcoming); Metal vessels are much less likely to be discarded as rubbish.

A good example of the wide cost difference between pottery and metal vessels is the 2d paid in 1466 "to John Tynker (sic) for mending the great dish in St Mary's Hall", Coventry (presumably silver, pewter or copper alloy; Fretton 1891, 12). Only seven years earlier a brass ladle and a cream skimmer for the Hall's kitchen had cost 2s 3d (ibid, 11).

By comparison in the 13th century most ceramic pots cost between ¼d and ½d each; exceptional vessels rarely rose higher than 4d (Dyer, 1982, 38). This price guide changed little through time, despite inflation. For the Bishop of Winchester's funeral feast in 1407 (costing in total £130) his executors invited 1500 guests and paid out 13s 3d for 271 clay pots for the buttry; this works out as ½d each.

In the late 13th century, the average annual income for a rural peasant was approximately £1 (Chris Dyer, pers comm) or a skilled craftsman such as a carpenter 1s 10d per week (Dyer 1982, 39). Annual town rent was usually 12d, rising to 20d for a capital message. Individual rooms or bays, often inhabited by the very poor, were rented for only a few pennies a year. At that time the larger, wealthier households spent 25-50% of their income on food; as a general guide to food prices a quarter of wheat in the 11th century cost 2s, which rose with inflation to 6s in the 13th century.

As none of the pots from the pit 16/50 are of exceptional quality, it is reasonable to assume that they cost between ¼d and ½d each. Therefore the entire assemblage of a maximum 17 vessels represents an outlay of between 4¼d and 8½d; at the most representing 6.5% of an average annual peasant income or half a week's wages for a skilled craftsman. Moreover Dyer (1982, 38) postulated that a household might only purchase two or three pots a year. The investment was clearly very small.

A specific use for one vessel

In the hearthside pit 13/84 lay the lower half of a Shelly Coarseware (330) jug. Its provenance would suggest it was intimately connected with the use of the hearth. There are a number of

examples of cooking pots buried by a hearth (Moorhouse 1987, 24) but not jugs; it was pierced, had not been sooted, but was otherwise unremarkable. Independent finds and samples from the pit indicate a considerable range of food debris as follows:

- Charred bread wheat (in a grain:chaff:weed ratio of 42:1:4)
- Hazelnut shells (560 fragments, 94% of the entire site sample of this species)
- Bone from cow, sheep/goat (both predominate), also pig, horse and domestic fowl.
- Fish bones represented were from eel, herring (predominant) and cod
- Domestic fowl egg shell

It is reasonable to suggest that the pot was associated with the preparation of one or more foodstuffs when the hearth was in use sometime in the 12th-13th century. It is possible that it was used to convey water or other liquids to the hearth to be used in cooking.

Cooking practices

The difficulty of deciding when a cooking pot is a jar or vice versa is arguable. For the purposes of this report, such vessels have been termed storage jar/cooking pot. However, the appearance of sooting on a vessel normally indicates that it has been used in the cooking process, often the reason for and means of its demise. Therefore what may have started life as a storage jar, ends its life as a cooking pot. Because of the potential to taint foodstuffs, it seems unlikely that the sequence of roles might have been reversed.

In the case of very fragmentary pots, both sooted and unsooted sherds are to be found from individual vessels, so full reconstruction is necessary to decide on the exact nomenclature for each. As a result only pit groups normally offer themselves for study of sooting patterns as a guide to the use of the pottery in cooking.

While many early recipes are known, of which some contain explicit reference to the cooking method (Moorhouse 1988), few contain information which might relate to the actual excavated remains. Moorhouse's own study of the material from Kirkstall Abbey, Yorkshire (1987, 99-100), recorded a range of sooting marks which indicated certain heat and fire application to the contents of pots.

The sooting patterns of the cooking pots from the Woolmonger Street later phase 2b pits are distinctive and consistent. However they bear no relation to the definitive study at Kirkstall. Amongst the Woolmonger Street vessels the sooting is heaviest on the base towards the circumference, stretching up the sides of the body to between a third and half way, with a single patch on one side under the everted rim.

The most distinctive feature is, however, a relatively unscorched patch on the centre of the base exterior, which corresponds exactly with a heavy patch of sooting on the interior. This seems to suggest that the cooking pots were all stood over a spot flame, directed into the centre of the pot, which was sufficient to soot the exterior with smoke, and burn the food inside the pot directly above the flame. The sooting under one side of the rim might be accounted for by the pot not sitting upright.

The exterior base sooting of one pot begins at a very straight edge, suggesting that it was perhaps stood upon a trivet or prop above the heat source. The best modern analogy is either the continual simmering of a continental fondue at table once heated up or the traditional English stock-pot which might be

kept hot over the hearth and topped up with the meat fat and carcass remains to provide stock for subsequent meals.

PHASE 2b – TRENCHES 11 & 12.

Unfortunately only 56 sherds were present in secure occupation levels of this phase, areas and structural remains only surviving in islands between the destruction caused by Phase 3 foundations and their subsequent robber trenches. Consequently this material has not been used for further analysis. There are indications that the timber buildings put up here were a little later than their phase 2b counterparts further down the street, probably during the 12th century.

A single pit (322), however, serves to indicate that the material in general use within this plot at the end of this phase was very similar to that from the other plot.

Its fill (254), also containing small quantities (60) of charred cereals (in grain:chaff:weed proportions of 6:0:1), produced Shelly Coarseware (330) cooking pot fragments and a bowl. It is heavily sooted externally so has ended its life as a cooking vessel (Fig 13.11). A comparable vessel was excavated in Trench 13/50).

PHASE 3 – TRENCHES 11 & 12

In the conjoined Trenches 11 and 12 lay the best preserved remains of this phase, despite the structures being heavily robbed for stone in phase 4 with subsequent damage by more recent pits and foundations.

Comparison has been made between the earthen floor layers of the two frontage rooms and the detached outbuilding to the rear with a covered yard between. These are referred to as the Hall (contexts 99, 117, 175) the Parlour (78, 86, 91 and 177), the detached Kitchen (201 and 202) and Yard (314); these terms derive from the structural remains found within them. Also compared are a nearby pit (48) and an infilled ditch (WB 19), loosely termed Dumps.

The fabric types present in these contexts (except certain residual types) are as follows:

CTS	Common name
302	Reduced Sandy Coarseware
319	Lyveden/Stanion A Ware

320	Lyveden/Stanion B Ware
322	Lyveden/Stanion D Ware
324	Brill/Boarstall Ware
327	Scarborough Ware
329	Potterspury Ware
330	Shelly Coarseware
332	Surrey Whiteware (Tudor Green)
333	Midlands Splashed ware
338	Sandy Ironstone Glazed Ware
341	Olney Hyde B Ware
343	London Ware
345	Oxford Ware
347	Nuneaton A Ware
352	Calcareous Sandy Glazed Ware
365	Late Medieval Reduced Ware

The comparative proportions of the pottery fabrics present in these occupation contexts show clear biases which indicate the separation of the space into areas by function and the process by which casual loss is transformed into deliberate deposition by dumping the farther one goes from the point of use or consumption.

While the sherd count and size naturally vary between different types, reflecting the relative fragility of the fabric and the nature of deposition and subsequent abrasion, it is important to note that the variety of vessel forms in these areas corresponds accordingly.

Function

While all of the rooms or areas contain fragments of jars/cooking pots, mainly in the ubiquitous Shelly Coarseware fabric (CTS 330), their dominance in the Hall (111 of 130 sherds) suggests that the central hearth (99) may have been used for cooking purposes as well as heating and lighting. This is in keeping with the known functions of a medieval Hall, which was the space for general living, entertainment, dining, and sleeping, with little or no partition in smaller houses. Two sherds from a Surrey Whiteware-type lobed cup on the hearth attest the dining aspect of this room.

The adjoining Parlour, in contrast, contained a far wider variety of types (159 sherds), perhaps indicating a storage function, or combining this with a preparation function once the detached Kitchen was erected to the rear for cooking purposes. One form which might otherwise be associated with either cooking (hall/kitchen or kitchen) or consumption (hall),

Table 2. The main fabrics as a percentage of the sample (497 sherds).

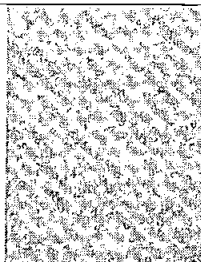





















Area	Fabric	330	329	324	Others
Hall		85%			15%
Parlour		32%	32%	20%	16%
Kitchen		26%	45%	11%	18%
Yard		46%	25%	2%	27%
Dumps		21%	22%	25%	32%
Ave		44%	19%	9%	28%

Table 3. The forms present in the same contexts break down as follows:

Area	Form	Jar/CP	Bowl	Bal.jug	Jug	Drip.pan	Lobed cup
Hall		●					●
Parlour		●		●	●	●	
Kitchen		●	●		●		
Yard		●			●		
Dumps		●	●		●		

is the Olney Hyde B ware dripping pan (Fig 14.16), but it is only found in the Parlour, for which neither association seems plausible.

In contrast to the Hall, the Parlour contained remains of a variety of glazed jugs, for liquid storage or decanting purposes, including regional imports from Brill/Boarstall (Bucks) (Fig 14.15) alongside the more local Potterspurty types. This variety further suggests a storage function for the room.

The Kitchen contained only 42 sherds. The forms represented are unexceptional although an unscooted bowl in late medieval reduced ware (CTS 365) may hint at another possible function as well as cooking, perhaps dairying.

The Yard between the kitchen and the main house yielded a typical trample assemblage of 48 relatively small sherds. It may represent casual breakages while travelling between the kitchen and the main house, or the throwing out of broken vessels when floors were swept. It contains no detectable biases in either fabric or form other than to perhaps highlight that Brill/Boarstall jugs are not as common as their Potterspurty-produced counterparts.

Dumps of household waste in pits are ubiquitous in medieval towns and the excavated example close to the kitchen (context 48: 84 sherds), together with a shallow ditch or gully excavated in watching brief (WB context 19: 34 sherds; Fig 16.36-9) show that the eventual deposition of rubbish further from the buildings, evens out the balance of types present throughout the plot, free from the strictures of the functions of the immediate area.

As often observed, there is a lack of table wares, which gives rise to the conclusion that consumption at table was generally from vessels in other materials, such as wood, leather or occasionally pewter. These have either not survived due to inappropriate ground conditions, or in the case of metals, were

melted down for reuse when badly damaged or finally removed by the departing occupants.

Dating

The Phase 3 occupation dates from no earlier than the mid 13th-century due to the presence of large quantities of Potterspurty Ware, a Nuneaton A Ware baluster jug (Perry 1996, 43) and a Scarborough Ware jug (Fig 16.39; McCarthy and Brooks 1988, 230).

The occurrence of two sherds of Surrey Whiteware lobed cup on the Hall hearth (99) suggests that the final reflooring in clay, which covered the hearth (contexts 6 in the Parlour, 20, 22, 24 in the Hall and 42 in the Kitchen) together with the insertion of an upper floor, took place probably no earlier than the late 14th-century (Pearce and Vince 1988, 17; Soden 1994, 93).

No occupation contexts of phase 3 contain Cistercian wares, or any of the 15th-century type-fossils ubiquitous on urban sites, such as Raeren stonewares. Cistercian Wares and other late 15th-century pottery first appear on this plot in the Phase 4 robber trenches and pits cut into the final floors. While it is not easy to tread anything into hard beaten clay floors, the absence of any definitive later 15th-century types of pottery from the phase, even from pits behind the building, all of which were sampled, indicate that domestic occupation of the buildings ceased in the period 1450-1500. This is entirely borne out by the material from phase 4 (see below).

PHASE 3 - TRENCHES 1, 13, & 16.

A similar exercise was carried out on the Phase 3 building in these trenches. The building was probably of two unequal bays but lacked any evidence for a detached outbuilding. It was also

Table 4. The results from a sample of 262 sherds (179 sherds from contexts 13/8, 54 and 57 in the Hall-main block; 83 sherds from contexts 16/10 and 16/12 in the Parlour-extension)

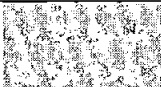





Area	Fabric	330	329	324	Others
main block		71%	2%	1%	26%
extension		55%	1%		44%

Table 5. Vessels from the Parlour

Area	Form	Jar/CP	Gl. jug	Ungl. jug	Bowl	Cup
Hall		●				
Parlour		●	●	●	●	●

less well preserved than its counterpart further up the street. It was subsequently extended to the west to add a further room, probably containing a stair.

The main block contained the widespread scorchmarks of a hearth, while the extension lacked such a feature. For these reasons the terms Hall and Parlour are tentatively attributed, similar to the other building (above). The pottery from the occupation surfaces of the main block was compared for significant differences with that from the extension.

The minute quantities of both Potterspurry Ware and Brill /Boarstall types is in stark contrast to the other Phase 3 building. However the other fabrics in this case are in a wider variety of mainly cooking pot forms in the Hall-main block and glazed jugs and bowls in the Parlour-extension (Nuneaton A ware, London Ware, Lyveden/Stanion B ware - good, illustrated examples of the latter were excavated in Trench 14, context 3 ; Fig 16.33-5). Also in the Parlour the majority of sherds in fabric 330 are unglazed jugs, not seen in the other building at all. Thus the biased form-range distribution noted in the two bays of the other building is maintained here.

Function

The above exercise demonstrates that there is a marked difference between the nature of the assemblages from each room. The eastern block or Hall, with its hearth, contains almost exclusively jars/cooking pots in fabric 330; the western extension, while also having some of the same, is dominated by unglazed jugs in fabric 330 and glazed jugs in other regional imported types, an assemblage widened by the addition of other forms not found in the Hall. Thus an interpretation of the western block extension as a Parlour, having a storage function is plausible.

Dating

As in the other Phase 3 building the occurrence of well-dated regional imports (Nuneaton A ware, London Ware) confirms existing dating of more local types. Thus the phase appears to have begun about the mid-13th century. The building seems to have outlived that in Trenches 11 and 12 as there is the base of a Brears ?type 4 Cistercian Ware cup from context 16/10 (Brears 1970, 21). This extends occupation at least to the late 15th century and possibly into the 16th century.

A stone-lined pit or cistern adjoining the rear of the building (16/23) produced both medieval flat- and glazed ridge-tiles from the building's destruction. It also produced a fragment of Potterspurry Ware watering pot, perhaps indicative of horticulture

on the plot (Fig 14.17). Conclusive dating came in fragments of four further Cistercian Ware vessels (including half of a Brears type 4 or 7 cup (ibid.).

The presence of Cistercian wares in both the last occupation floor and a demolition deposit indicates that the building was abandoned and demolished probably c1500 and probably no later than c1550.

PHASE 4

Throughout the area phase 4 is characterised by robbing of the derelict phase 3 buildings. With few surviving structural remains of this phase, only a scatter of pits and other deeply cut occupation features remained to be excavated.

No features can be ascribed to particular buildings and little of the material retrieved has any value other than to date the period of dereliction which followed Phase 3 on Woolmonger Street. This appears to have gone on into the 17th century, when pottery was still being deposited in a group of pits (25, 35, 36), dug into the robbed remains of the Phase 3 building in Trench 12.

It was not until the 18th century that a rebuilding programme closed up the gap left where the stone building in Trench 12 had stood, on the evidence of Manganese glazed earthenware and Nottingham Stoneware in a construction trench (not illustrated).

The robbing of the walls of the phase 3 building seems to have begun in the 15th-century. Despite John Speed's depiction in 1610 of a building intact at this spot, the pottery from the robber trenches clearly indicates a date of before 1500 at which the building was reduced to below foundation level. There is no Cistercian Ware in any of the robber trenches or any later pottery, nor is there any clay tobacco pipe. Cistercian Ware in this trench first appears in a pit (35) dug through the already backfilled foundation robber trenches.

Other pottery of intrinsic value

Despite the anticipated levels of residuality common to all deeply stratified urban sites, other vessels, some of them residual, are represented in the record which deserve mention on their own merits, partly because they are good examples of the type or are of a particular form not encountered elsewhere on the site and rarely beyond. Such vessels are illustrated and catalogued below.

CATALOGUE OF ILLUSTRATED POTTERY (FIGS 13-16)

Phase 1

1. WMS 96W/B pit 51 Early-middle Saxon stamp-decorated body sherds in a coarse quartz tempered fabric (Residual).

Phase 2a

2. WMS 96 Tr 15/61 Almost complete Northampton Ware Jar (fabric 130) from primary fill of Cellar 1, c900-975.
3. WMS 96 Tr 16/87 Rim and shoulder of a Northampton Ware Jar from fill of Cellar 3, c900-975.
4. WMS 94 Tr 3/103 Rim and shoulder of a large Northampton Ware Jar from pit 3/136.
5. WMS 96 Tr 15/9 Base and lower half of large Northampton Ware Jar.
6. WMS 95 Tr 12/257 Spout from a Northampton Ware spouted bowl or pitcher. A newly recognised form in this ware.
- 7-8. WMS 96 Tr 15/34, & Tr 13/143 Red painted beak-spout and body sherds from a Beauvaisis Ware pitcher (fabric 323) from the backfill of Cellar 1
9. WMS 95 Tr12/101 Glazed and applied-decorated handle fragment from a large Stamford Ware (205) storage vessel (?Form 21) in coarse Mahany A fabric (Kilmurry fabric A/D) with type 6 glaze, from the secondary backfill of Cellar 1; 1000 AD (Kilmurry 1977; Miles and Leach, paper to West Mids Pot Res.Gp, Feb1987).
10. WMS 94 Tr 3/44 Almost complete carinated spouted bowl with intumed rim in St Neots-type Ware (100) from fill of pit 45. c900-1100.

Phase 2b

11. WMS 95 Tr 14/us Rim and body of a large bowl with intumed rim in Shelly Coarseware (330). Very similar to the earlier St Neots form. c1100-1400.
12. WMS 95 Tr 12/266 Bowl and stem of a lamp in Shelly Coarseware. Very heavily sooted.
13. WMS 95 Tr 14/14 Base, stem and part of bowl of a lamp in Shelly Coarseware.
14. WMS 95 Tr 13/84 Base and lower half of Shelly Coarseware jug from a hearthside pit.

Phase 3

15. WMS 95 Tr 12/78 & 12/86 Multiple body fragments from a glazed, decorated jug in Brill/Boarstall ware (324), from the earthen floor layers of the Parlour of stone building in trench 12.
16. WMS 95 Tr 12/86 Profile of part of dripping pan in Olney Hyde B ware (fabric 341). From the Parlour floor.
17. WMS 96 Tr 16/23 Base of a watering pot in Potterspurly Ware (329); apple-green glazed. Probably 15th-16th century.

PIT GROUPS

Phase 2b

- 18-23 WMS 95 Tr 13/38, 12/254 A bowl (12/254), two storage jars/cooking pots; lower half of a jug; two lamp bases, from fills 60 (of 13/38) and all in Shelly Coarseware.
- 24-32 WMS 96 Tr 16/50 Two jugs, one decorated; six storage jars/cooking pots and a lamp, all in Shelly Coarseware.

Phase 3

- 33-5 WMS 95 Tr 14/3 Three jugs, one each in Brill/Boarstall Ware (324), Lyveden/Stanton B Ware (320) and London Ware (343).
36. WMS 96 W/B ditch 19 Rim fragment of very large lipped bowl in Potterspurly Ware. Pierced, possibly for suspension; probably later 13th century.
37. WMS 96 W/B ditch 19 Rim and shoulder of a large storage jar/cooking pot in Potterspurly Ware; probably later 13th century.
38. WMS 96 W/B ditch 19 Body of green glazed and decorated Brill/Boarstall ware jug; later 13th century.
39. WMS 96 W/B ditch 19 Rim and shoulder of a heavily rilled baluster jug in apple-green glazed Scarborough Ware (327); later 13th century.

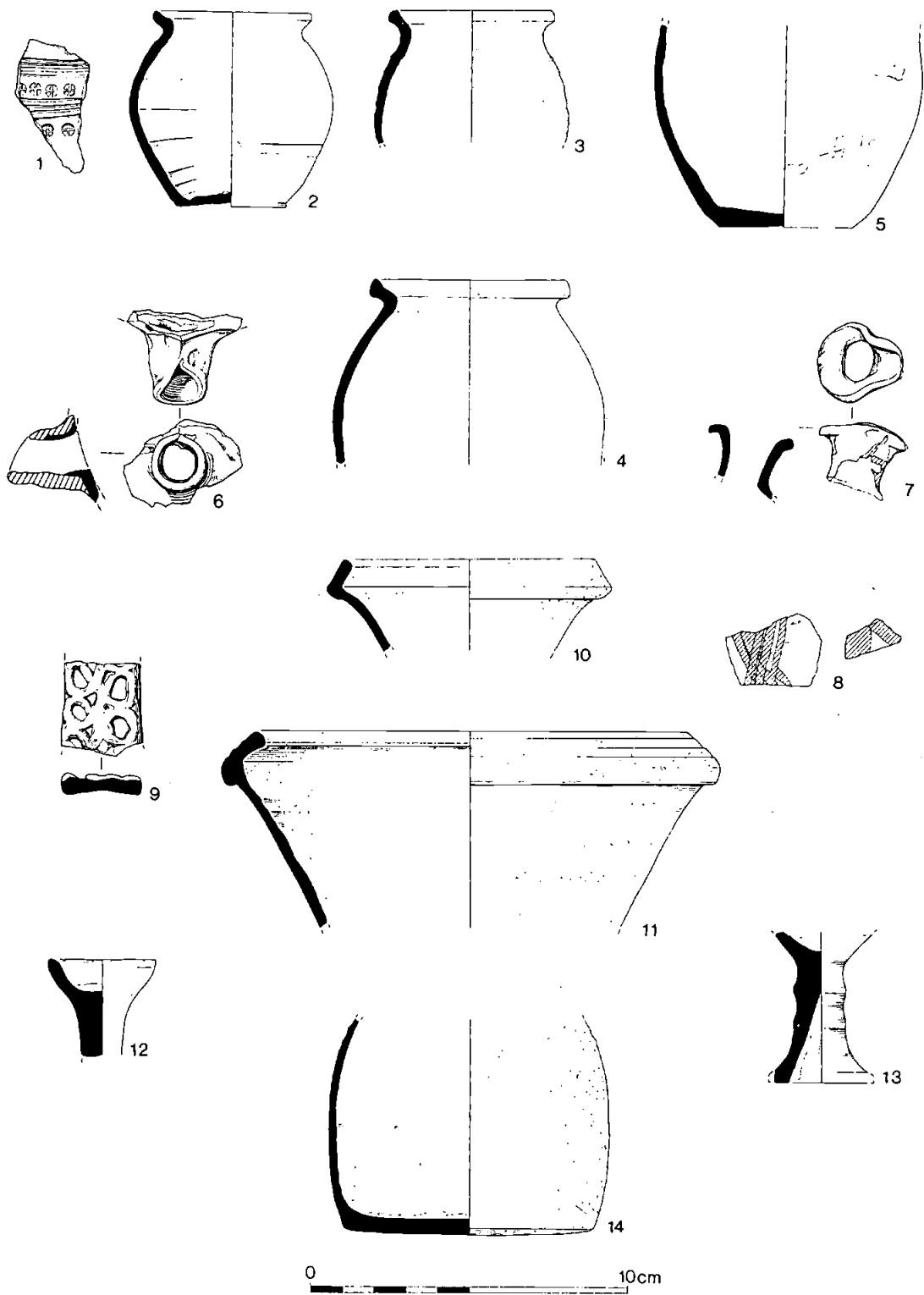


Fig 13 Pottery: Phases 2a and 2b

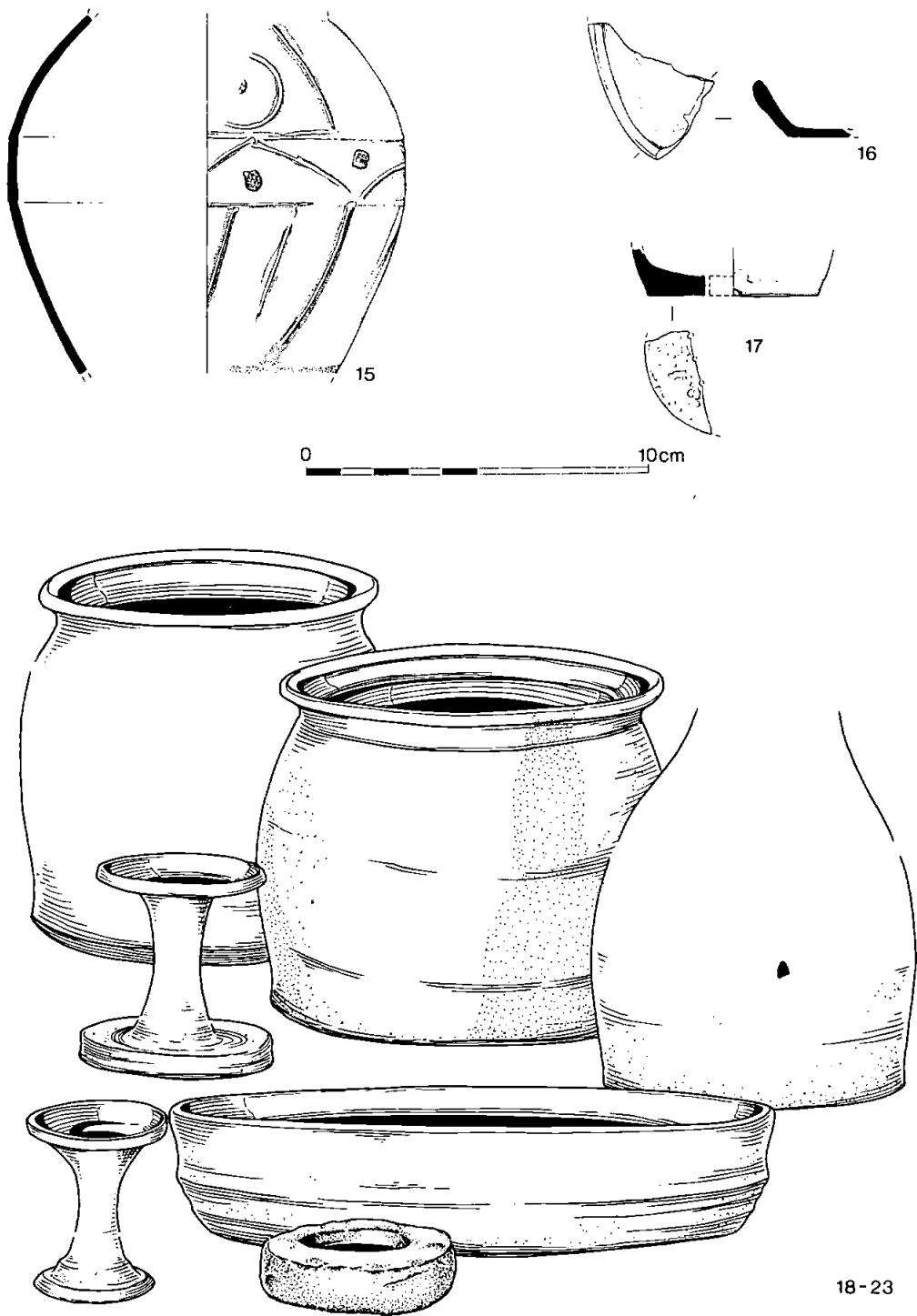


Fig 14 Pottery: Phases 2b and 3; pit group Tr 13/38



24-32

Fig 15 Pottery: phase 2b pit group 16/50

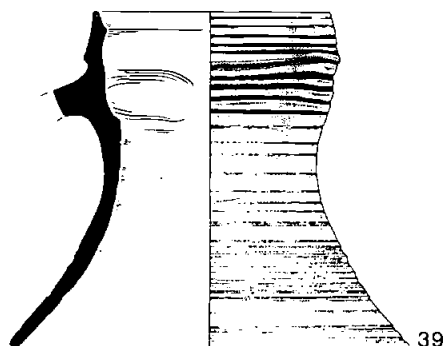
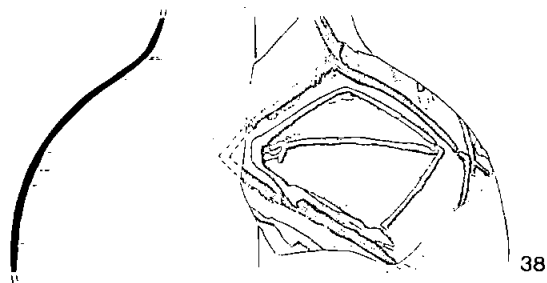
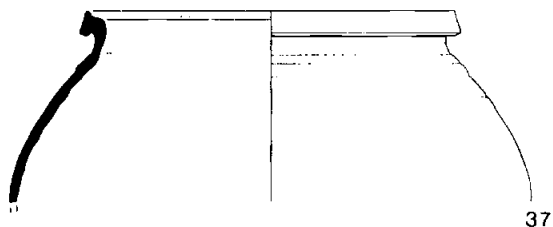
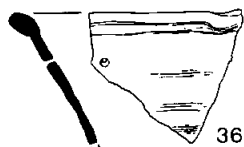
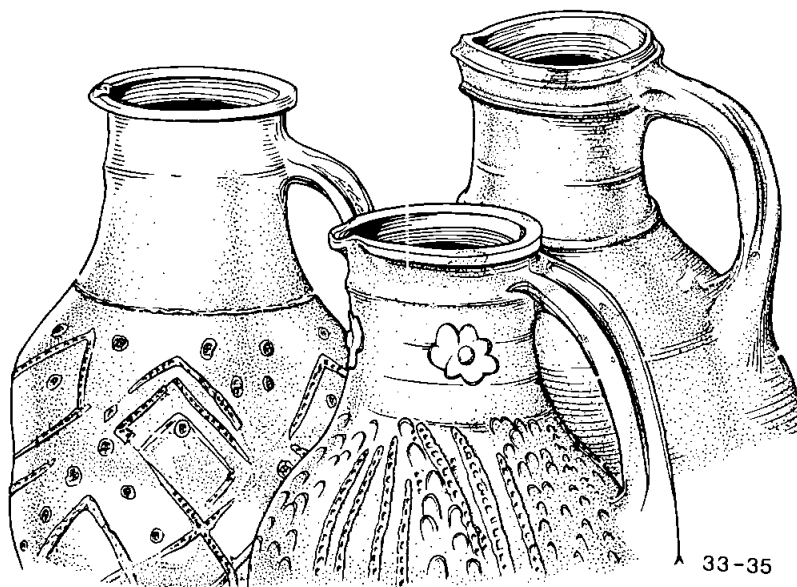


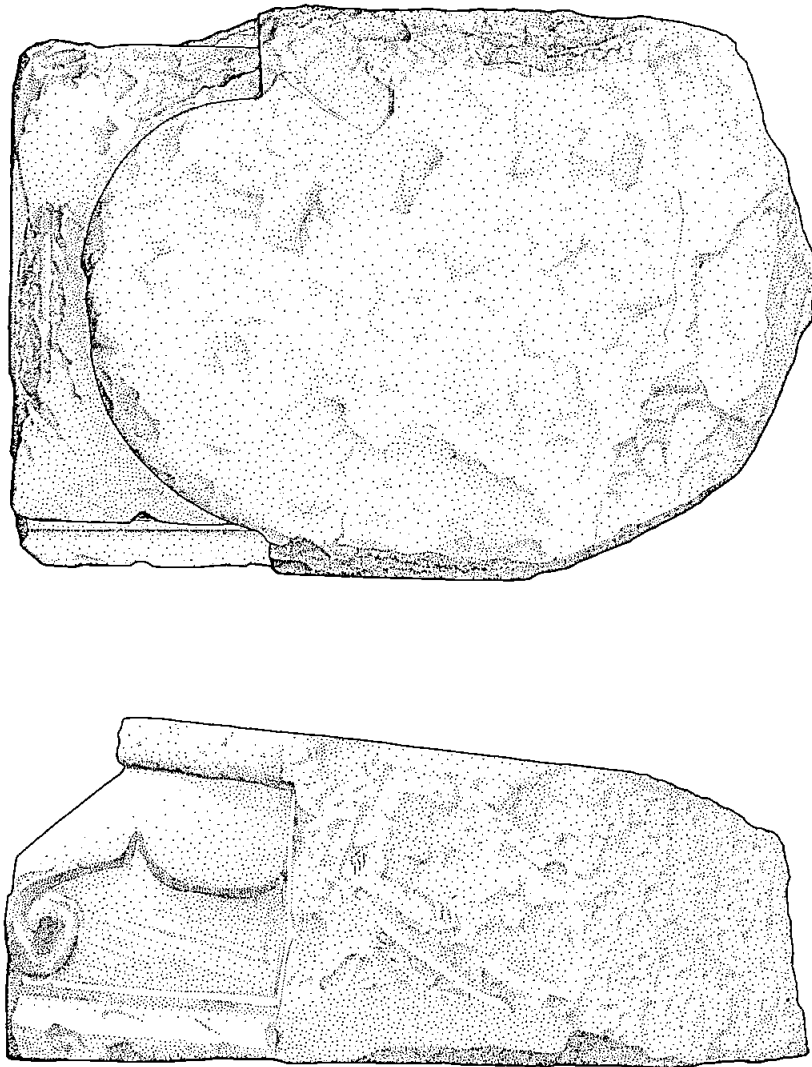
Fig 16 Pottery: later medieval Phase 3-pit group 14/3; pottery from watching brief.

ARCHITECTURAL FRAGMENT
identified by Dr Richard K. Morris, University of Warwick

The architectural fragment from Woolmonger Street is a Romanesque capital for an engaged wall-shaft of approx. 175mm diameter (Fig 17). It might be from a door- or window-surround, although the geometry one might expect in such a piece is unconvincing; more likely it derives from a wall respond for vaulting, given that the width of its abacus (when complete) would have been around 320mm - enough to carry a rib.

Capitals of this general type, with a corner scroll, could occur at any time in England in the last third of the 11th century or through the 12th century. Examples usually dated to the late 12th century in the crypt at Berkswell Church, Warwickshire and examples dated to the 12th century are more common than those of 11th century date. Similar but vastly more ornate examples can be seen in St Peter's Church nearby.

Given that the fragment was found residual in a post-medieval pit, its architectural origin is not known. It could derive from any of the nearby churches in existence since the early medieval



0 20 cms

Fig 17 Architectural fragment

period; St Peter's, St Gregory's, St Giles', Holy Sepulchre and All Saints' Churches are all candidates, whose subsequent alteration would have released tons of stone into general circulation. A secular origin is possible but seems less likely on current evidence as no secular stone buildings (with vaulted cellars) are known to have been in existence in the late 11th-12th centuries in Northampton. Timber houses appear generally to have given way to stone successors in the 13th century or later on current excavation evidence. Surface damage indicated that the block had not fared well subsequent to its final deposition in the pit and may have been in re-use as a mere building block for many years.

SMALL FINDS
by Tora Hylton

The excavations produced finds from trenches 1-4 and 10-16 spanning the period from the 3rd-19th centuries. The presence of 26 worked flints extends the date range to the prehistoric period. The Romano-British and early/middle Saxon finds are few and mainly residual. The majority of artefacts came from late Saxon and medieval deposits of the 10th to 15th centuries and formed an assemblage comparable with finds from other excavations in Northampton, St Peters Street (Williams 1979) and Chalk Lane (Williams and Shaw 1981). Although the numbers are small the assemblage contains artefacts which provide an insight into life on Woolmonger Street. A series of pits contained evidence for metal-working, together with bone-, horn- and antler-working debris; this suggests small-scale manufacture, most probably for domestic use. A small number of objects reflect

Table 6. The range of small finds

MATERIAL	TOTAL
Silver	1
Copper alloy	59
Iron objects	25
Iron nails	37
Lead	4
Stone	37
Bone/antler	17
Glass	28
Ceramic	9

personal adornment, recreation and personal equipment. Of particular interest is the presence of a small group of late Saxon artefacts which reflect cultural influences, trade and literacy.

In total 217 individually recorded finds in eight material types were recovered. Each object has been described and measured. A descriptive catalogue of all the finds is retained in the archive. Bulk finds include slag (c. 18,174kg); tile (c. 6.00kg) and a small number of clay tobacco-pipes.

The majority of finds were located on the northern side of Woolmonger Street, with the highest concentration occurring in Trenches 12 and 13, where the settlement remains were best preserved. Early Saxon finds were located to the north-east, principally in Trench 12.

PREHISTORIC (identifications by Andy Chapman)

Although there was no evidence for Prehistoric occupation on the site, the presence of 26 late Neolithic/early Bronze Age flints attest to activity in the area. Extensive flint scatters have been recorded elsewhere in Northampton mainly to the north-west, Chalk Lane (Williams 1981, 90-94) and St Peters Street (Williams 1979, 137). The majority (23) of the flints were residual in late Saxon and early medieval deposits; three flints were located in Phase 1 deposits. The assemblage, which largely comprises vitreous flint with a small proportion (mainly the larger pieces) of opaque and granular flint, includes 20 flakes, 3 blades, 2 scrapers and a core. Two flints are worthy of note, a discoidal scraper (Tr 13, SF 59) and a possible (unfinished) transverse arrowhead (Tr 13, SF 15).

ROMAN

Five Romano-British coins were recovered as residual finds from deposits of late Saxon and early medieval date. The coins date to the 3rd and 4th centuries. One was located in a late Saxon deposit (13/49) it is perforated, presumably for suspension. A catalogue of the coins is retained in the archive.

EARLY SAXON (PHASE 1 c. 450- c.850).

Although features of early/middle Saxon date are few, there are three fragmentary objects which are stylistically characteristic of that period. The objects were located north of Woolmonger Street (Trenches 10,12) and comprise a loomweight, an equal-armed brooch and a fragment from a claw beaker. The presence of an incomplete annular loomweight within a late Saxon pit (Tr 10/12) attests to localised domestic textile manufacture, and therefore settlement. The remaining objects were residual within late Saxon and Post-medieval deposits. The brooch (Fig 18, 1) was residual in an occupation layer (Tr 12/261). Although it is fragmented, the pieces indicate a small brooch with a central bow flanked by two triangular panels. Brooches of this type have been dated to the early 5th century (Myres 1986, 61-62) and their distribution is known to be north

Table 7. Smallfinds from Phases 2a, 2b & 3

FUNCTIONAL CATEGORY	PHASES		
	2A	2B	3
PERSONAL POSSESSIONS			
Costume and jewellery		3	3
Toilet equipment			1
Recreation		4	
EQUIPMENT AND FURNISHINGS			
Building equipment			
General ironwork			
Nails	1	12	6
Household equipment			
Knives		2	1
Hones		4	1
Metalworking	1	5	
Textile working		5	
Weapons			1
Horse furniture			
Coins		1	
Glass			3
Lead	3		
Flint	10	11	2
MISCELLANEOUS AND UNIDENTIFIED			
Copper alloy	1	6	2
Iron	1	7	3
Antler and bone		3	
Pottery		1	
Stone		1	

of the River Thames. A single claw from a beaker was located in a Post-medieval pit (Tr 12/38), together with a Roman coin and medieval lobed mount. The terminal of the claw is detached from the body of the vessel, suggesting a sixth-century date (Fig 18, 2). A small number of glass beads from later deposits may also be of Saxon date.

LATE SAXON TO LATE MEDIEVAL (PHASES 2a, 2b & 3)

Late Saxon/Early medieval material was predominantly located on the northern side of Woolmonger Street, where the best occupation layers were preserved in a sequence of Late Saxon timber structures (Phase 2a-2b) and early medieval stone structures (Phase 3).

LATE SAXON (PHASE 2a c. 900 – c. 1000)

There is little of 10th-century date to characterise the nature of occupation at that period. With the exception of five prehistoric flints, no distinctive material was found within the cellars to indicate their former use. The only objects worthy of note are three lead objects and a fragment from a crucible. The lead objects include offcuts of sheet metal and a large disc-shaped ?weight, pierced by a ferrous metal rod, found in the destruction layer over Cellar 1.

EARLY MEDIEVAL (PHASE 2b c. 1000/1074-1250)

In tandem with the finds from St Peters Street, Northampton (Williams 1979) the artefactual evidence implies an intensification of activity during the late Saxon and early medieval period. Saxon-Norman finds from the 11th-century timber buildings are represented by greater variety and number. There are very few objects representing building equipment which would have formed part of, or been attached to, permanent structures or objects of household use. A small group of spinning and weaving implements attest to localised textile manufacture, while the presence of small amounts of metal working debris and pieces of partially worked bone and antler suggest small-scale manufacture. The presence of a decorated strap-end and schist whetstones attest to cultural influences and trade with Scandinavia. An unstratified parchment pricker may also be of this date or a little later and indicate literacy. Finally, a cut farthing of William I, two sceptres type (identified by Mark Curteis of Northampton Borough Museum), was found in a pit, together with a bone "buzzer" and an iron horseshoe; the coin provides a *Terminus Post Quem* of 1074-7 for the pit from which it came (13/49) and suggests a date for the timber building which it respected.

Personal possessions

Items for personal adornment include a strap-end, two finger rings and a glass bead. Of particular interest is the presence of a strap-end (Fig 18, 3) found on the floor of a timber building. Although objects of these type are not uncommon, this particular example is distinctive and of intrinsic importance. It was found within a burnt deposit which represents Phase 2a destruction. The strap-end has a split end and a rounded end, the latter a typical characteristic of 10th-century strap-ends (Margeson 1985, 29, 4). It is decorated with two distinct zones of ring-and-dot and interlace. Although the interlace motif is crudely executed, it

displays stylistically similar characteristics to the Scandinavian Borre-style interlace, recognisable because of its "ring-chain" appearance. This artistic trait was transported to the British Isles by Scandinavian settlers in the ninth and tenth centuries (Hall 1990, 31). Although not identical, a similar example decorated with a panel of ring-and-dot was found at Caldicote, Norfolk (ibid. 1985, Fig 25). Other examples with Borre-style interlace are known from York (Roedahl (et al) 1981, YD 39).

There are two finger rings. A bone finger ring of simple form (Fig 18, 4) was found in a posthole and a copper alloy finger ring (Fig 18, 5) was retrieved from a hearth-side pit (13/84), together with two bone skates.

Fragments of three bone skates and a "buzzer" (Fig 18, 6) represent items associated with recreation. The bone skates, identified as clothes fasteners, are manufactured from horse and cattle metacarpals; their anterior or posterior surfaces are highly smoothed/polished through use. Skates have been found previously in Northampton (Oakley 1979, 315); for a discussion on typology and date range see MacGregor 1985, 141-4). "Buzzers" are common finds throughout England and the continent on sites of Saxon and medieval date, but there is some dispute concerning their real function. They are frequently interpreted as clothes fasteners or toggles (Oakley 1979, 313), while Crowsfoot (Rogerson and Dallas 1984, 182) states that they are bobbins for winding wool. MacGregor (1985, 102-3), however, suggests that they may have been mounted on a twisted string as a buzzing, spinning toy. In recent years the latter has interpretation gained support. An example from Beverley was found to be threaded with a knotted leather thong (Foreman 1992, fig 84, 505). For a discussion see Lawson (1995).

The parchment pricker (Fig 18, 7) would have been used to lay out the page in manuscripts or for transferring patterns in domestic crafts (Harman 1985, 45). The example from Woolmonger Street displays distinct similarities to examples from Norwich Castle (Harman 1985, fig 38, 6) and Facombe Netherton (Fairbrother 1991, fig 10.1, 15-16).

Equipment and furnishings

Building and related equipment is poorly represented. There are no structural fittings and only 13 nails, primarily located on floors within the timber buildings or within pits. One object represents domestic equipment, a possible lamp, manufactured from limestone and found in a pit (13/38). The lamp is disc-shaped with a circular recess (Fig 18, 8).

There are a small number of objects which may be classed as personal possessions, and these include two whittle-tang knives and four whetstones. Both knives, one retrieved from an occupation surface (1/21) and the other from the floor of a timber building (13/76) together with a whetstone, are incomplete and heavily encrusted in corrosion products. The second knife displays similarities to early forms, with an elongated, S-shaped, curved cutting edge (Goodall 1985, Fig 125, 97-102).

Four whetstones were found within Phase 2b deposits, two in pits (Pits 13/38, 3/213), one on the floor of a timber building (13/76) and one in a burnt layer (13/115), possible hearth sweepings. Two of the whetstones are perforated for suspension and two have been honed from micaceous schist from Scandinavia.

Industry and crafts

Metalworking

There is plenty of evidence for copper-and ironworking in Northampton, at St Peters Street (Williams 1979), Marefair

(Williams, F 1979) and Chalk Lane (Williams and Shaw 1981). In keeping with the evidence from these sites, small quantities of slag and fragments from crucibles were also found at Woolmonger Street. Structures specifically associated with metalworking were not identified, but two hearths (12/187, 12/273) produced small amounts of slag, together with a pit (13/86) which also contained a fragment from a crucible.

With the exception of one fragment from a pit (Trench 10/41) in Phase 2a, eight fragments were retrieved from pits (10/34, 13/86, 13/157) in Phase 2b and the floor of a timber building (13/76). The fragments of crucible are small and undiagnostic.

Textile-working

A small group of spinning and weaving implements attest to textile manufacture, probably on a small scale for domestic use. Two spindle-whorls, one of bone (Fig 18, 9) and one of stone, relate to hand spinning, and both came from occupational layers/surfaces. Two complete pin beaters and one fragment were found on the floor and in the wall trench of the timber building (Trench 13) and these may have been used for weaving. The two complete pin beaters have spatulate and pointed terminals; one is decorated with ring-and-dot (Fig 18, 10). Pin beaters of this type are typically of late Saxon date (MacGregor 1987, 191). The pointed end is for picking up and weaving a small group of threads, while the flat end is for beating the weft threads. Brown (1990, 227) has postulated that weaving implements of this type may have been used for tapestry weaving on a vertical two-beam loom.

Antler, bone and hornworking

There is evidence for antler-, bone- and hornworking, albeit on a small scale, probably for domestic purposes. Unfinished pieces or the waste products of artefact manufacture were found predominantly in the vicinity of the timber building (Trench 13) and within two pits (13/86, 13/157) sited nearby. Both pits produced evidence for hornworking, while Pit 157 also contained many sawn rib fragments. Hornworking is represented by 11 horn cores with chop or saw marks, indicating that the outer horn sheath had been removed (Dr Philip Armitage, pers comm). There are a large number of pieces of worked cattle ribs (51), which have been split lengthways to form rectangular bone plates measuring 42.7 length x 17.7 wide x 4.4 thick, some of which are perforated. The assemblage represents small-scale bone working and is paralleled by a similar assemblage from Chalk Lane (Gryspeerd 1981, 130). Split ribs may have been used for handles, like an example from Chalk Lane (ibid, WB 27), or for decorative mounts (Oakley in Williams 1979, 315). One fragment displays similarities to the side-plate from a composite comb. A worked burr from a red deer antler was located in a pit (86, context 13/70).

MEDIEVAL (PHASE 3 c.1250 – 1500)

Phase 3 constitutes the construction and occupation of the stone buildings. In total this phase produced 28 small finds. Building equipment is represented by a small number of structural nails and a strap-hinge. The latter are thought to have been used as fittings to carry doors, gates and window shutters.

Five objects represent items for personal adornment. All were located on floors within the stone building. A copper alloy buckle plate and fragment of green glass bead were found on the parlour floor. The buckle-plate has a date range of c. 1350-1450. A bone bead and a decorative quatrefoil repoussé mount

were found on the hall floor. In addition a fragment from a pin was located within the kitchen/malthouse. Finally, a buckle with oval frame (Fig 18, 11) and integral plate, dated to 1250-1400, was unstratified in Trench 12. A similar example is known from London (Ward-Perkins 1993, Plate LXXVII, 15-16).

A number of objects were retrieved from two pits (Trench 14/15, 14/17) to the south of Woolmonger Street. The former contained a strap-hinge (see above), a knife blade and a possible socketed arrowhead. The latter contained the only evidence for toiletry equipment from the site, a pair of tweezers (Fig 18, 12).

LATE MEDIEVAL/POST MEDIEVAL

(PHASES 4-5 c.1500 - 1800+)

Phase 4 and 5 material is dominated by building debris from robbed trenches of the stone building. This includes nails (11) and a hinge-pivot, together with small amounts of ceramic and stone (limestone), roof tile and window glass. Perforated roof slates were found in Trench 12, while seven fragments of glazed medieval roof tile in a Potterspury type fabric were located south of Woolmonger Street in Trench 3.

In total there are eight pieces of window glass. All display the blackened manganese surfaces so commonly observed on decaying medieval window glass. The thickness of the glass ranges from 1.5-4mm. Two fragments are decorated with a cross-hatched motif in reddish brown iron-oxide paint. One quarry is almost complete and a number of pieces have grozed edges.

A total of 24 clay-tobacco pipe fragments were recovered, comprising 4 bowls and 20 stem fragments. The only complete bowl was classified using Moore's typology for Northamptonshire (1980, fig 6, 2), and is dated to c. 1640-60.

CATALOGUE OF ILLUSTRATIONS (FIG 18)

1. Equal-arm brooch, copper alloy. Incomplete, broken in seven pieces. Fragments indicate a small brooch with a central bow from which extends two triangular panels. The catch plate and part of the perforated lug to which the pin would have been attached are still in place on the underside. A rouletted motif is visible close to the outer edge.
Length (incomplete): 49mm Width: 19.
Trench 12/261, Phase 2b, SF No 48
2. Claw-beaker, glass, fragment only. Oval-sectioned curved rod of green glass, tapered to a point. L: 22mm
Trench 12/38, Phase 4-5, SF No 44
3. Strap-end, copper alloy. Cast tongue-shaped strap-end with bifurcated terminal (split-end strap-end). There are two zones of decoration; at the split end there are two rows of four ring-and-dots, flanking a single row of three. This adjoins a complex interlace motif, flanked on all sides by a "milled" type motif. Width: 14mm Length: 48mm.
Trench 13/100, Phase 2b, SF No 28
4. Finger ring, bone. Sub-circular with D-shaped cross-section. Measurements: 25 x 20mm.
Trench 1/16, Phase 2b, SF No 1
5. Finger ring, copper alloy. Slender hoop with D-shaped cross section, widening slightly towards rectangular-sectioned shoulders, which are undecorated. The rectangular bezel is furnished with an empty oval setting. Diameter: 20mm Height: 3.5mm.
Trench 13/84, Phase 2b, SF No 12
6. Perforated pig metatarsal, incomplete, part of terminal missing. The perforation has been cut with a knife and protrusions trimmed.
Trench 13/49, Phase 2b, SF No 40
7. Parchment pricker, bone. Incomplete, lower part of shaft missing. Spherical head surmounted on a parallel-sided circular-sectioned shaft, slight collar at the junction. The shaft is decorated with three bands of three incised rings. A small recess on top of the head indicates point where pin was secured while being turned on a lathe. Length (incomplete): 38mm.
Trench 12/Unstratified, SF No 49
8. Lamp, limestone. Disc-shaped with circular recess. Diameter: 116mm.
Trench 13/38, Phase 2b, SF No 6
9. Spindle-whorl, manufactured from a bovine long bone. Hemispherical with central perforation. Similar to an example from Goltho (MacGregor 1987, fig 161, 80). Diameter: 37mm H: 20mm Weight: 10.4g.
Trench 12/156, Phase 2b, SF No 39
10. Pin-beater, bone, complete. Spatulate terminal tapering to a well worn, rounded point. The spatulate terminal is perforated but no sign of wear is evident round the hole. The pin is slightly concave and both sides are decorated with ring-and-dot. One side is ornamented with 14 longitudinal, centrally placed rings-and-dots. The other side has 17, of which 7 are barely visible. Wear patterns indicate how the tool was held. All surfaces are highly polished. Length: 108mm.
Trench 13/15, Phase 2b, SF No 3
11. Buckle-plate, copper alloy. Oval frame with attached plate. The frame is furnished with a recess for retaining the pin, and the bar is off-set. Buckle length: 11mm Width: 16mm Plate length: 13mm Width: 12mm.
Trench 12/86, Phase 3/parlour floor, SF No 25
12. Tweezers, copper alloy. Complete, with twisted shank and flaired blades. The tweezers arms are angled inwards. Similar example from London (Egan and Pritchard 1991, 1774). Length: 67.5mm.
Trench 14/17, Phase 3, SF No 1

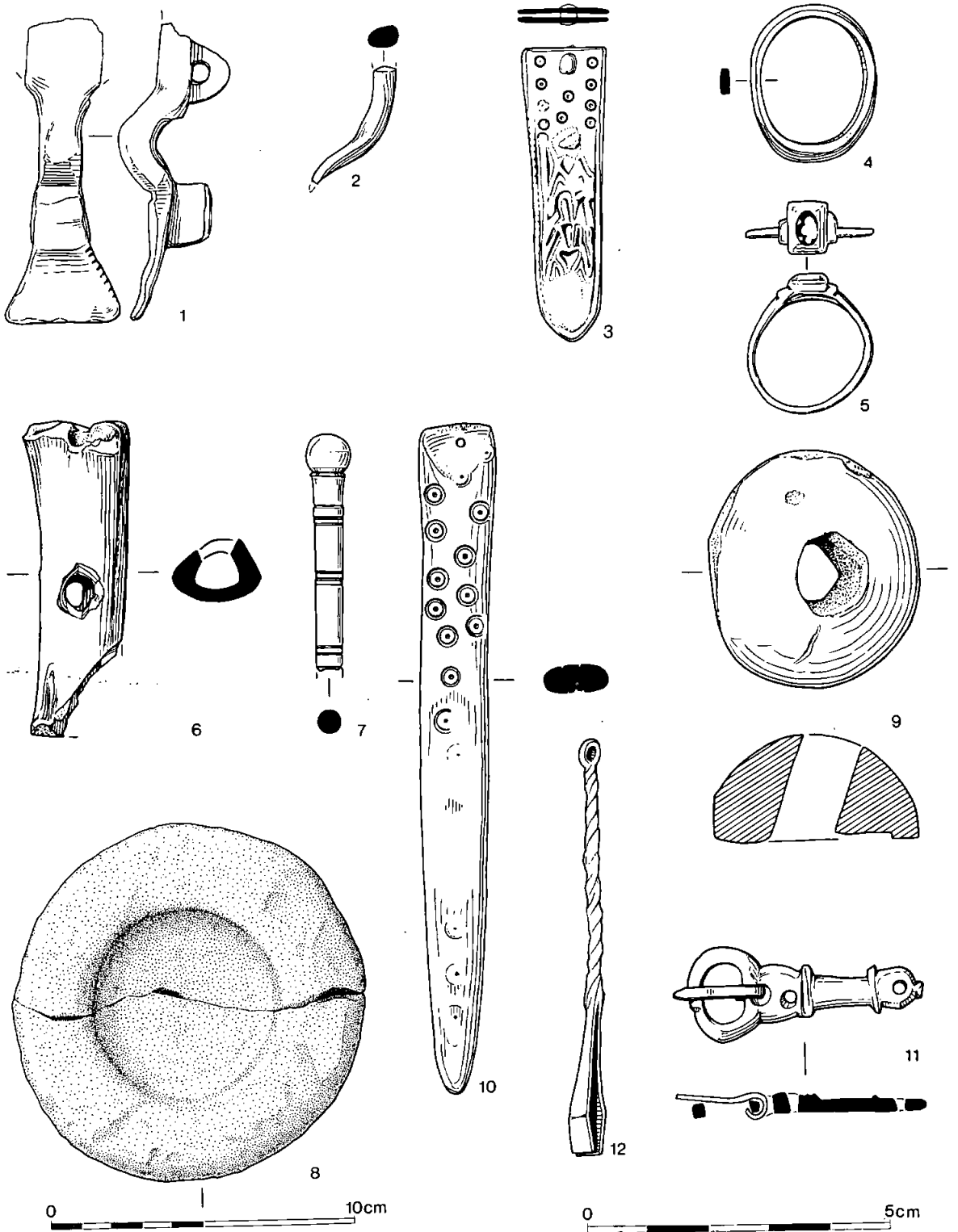


Fig 18 Small finds

CONCLUSIONS FROM SOIL MICROMORPHOLOGICAL ANALYSIS -
EVIDENCE OF A PAST ENVIRONMENT
By Dr Richard I MacPhail and G.M Cruise

Four Kubiena-box samples were taken by the authors with adjacent bulk samples from subsoil and colluvial deposits at the base (south end) of Trench 3 in 1995. An additional continuous column sample was provided by Northamptonshire Archaeology. Full details of all analyses, comprising soil micromorphology, soil chemistry and pollen analysis are in archive. The conclusions are as follows:

Soil micromorphological and other studies of a single profile near the base of a slope section, suggest a considerable history of soil disturbance during the period preceding late Saxon (Phase 2a) occupation.

Interpretations must be limited to the area studied, but as trenching had revealed a substantial colluvial slope deposit, it is possible that a major part of the local Woolmonger Street area could have been affected by these disturbances.

- i The natural ferritic brown earths of the Banbury Soil Association were highly disturbed causing compaction, slaking and the deposition of fine particles, both in the humic topsoil and in the subsoil. The disturbance could have been due to animal trampling.
- ii Burial of this soil by burned colluvial soils probably derived from woodland burning and clearance. Biological activity after burial continued to mix the buried and colluvial soils.
- iii Burning, soil disturbance and the build-up of a cultivation colluvium continued.
- iv Severe erosion upslope apparently began to affect both subsoils and parent materials.

FAUNAL REMAINS
by Dr Philip Armitage

INTRODUCTION

A total of 8,320 animal bone specimens from closely phased deposits which were relatively undisturbed (intact, broken/butchered pieces, and fragments of skeletal elements) were submitted for analysis. Of these, 5,428 (65.2%) are identified to species and part of skeleton, and 2,892 (34.8%) remain unidentified.

Of the 5,428 identified specimens, 5,070 (93.41%) are from mammalian species, 354 (6.52%) from bird, and 4 (0.07%) from amphibian species. Of the 2,892 unidentified fragments, 2,799 (96.8%) are probably mammalian, and 93 (3.2%) bird.

The species represented are listed as follows:

DOMESTIC:

<i>Equus caballus</i> (domestic)	Horse
<i>Equus asinus</i> (domestic)	Donkey
<i>Bos</i> (domestic)	Cattle
<i>Ovis/Capra</i> (domestic)	Sheep/goat (probably predominantly sheep)
<i>Sus</i> (domestic)	Pig
<i>Canis</i> (domestic)	Dog
<i>Felis</i> (domestic)	Cat
<i>Gallus gallus</i>	Domestic Fowl

<i>Anser anser</i> (domestic)	Domestic Goose
<i>Columbia livia</i>	Rock dove, probably domestic pigeon

COMMENSAL:

Mus musculus (*m.domesticus*) House Mouse

WILD SPECIES:

<i>Cervus elaphus</i>	Red Deer
<i>Dama dama</i>	Fallow Deer
<i>Lepus</i> sp.	Probably Hare (brown or common hare)
<i>Rana temporaria</i>	Common Frog
<i>Vanellus vanellus</i>	Lapwing, peewit/green plover
<i>Anas penelope</i>	Widgeon
<i>Corvus carone</i>	Carrion Crow

It is interesting to note that even in the hand-collected samples, bones of smaller species were included: elements of common frog were in samples from TR12/308 (phase 2a) and TR16/50 (phase 2b), while bones of pigeon came from samples TR13/101 (phase 2a) and TR16/50 (phase 2b). Additional evidence for the presence of the smaller species also come from sieved samples, which yielded bones of house mouse: TR12/308 (phase 2a) and TR12/307 (phase 2b).

METHODOLOGY

Study of the faunal assemblages followed standard archaeozoological methodological and analytical procedures. Identification of the bone elements was undertaken using the author's modern comparative osteological collections. Reference was made to the following osteological manuals: Schmid (1972), Getty (1975) and Cohen & Serjeantson (1986). Where possible, skeletal elements of sheep and goat were distinguished separately using the diagnostic characters described by Boessneck et al (1964) and Clutton-Brock et al (1990). Identification of equids - distinguishing between horse and donkey - was based on enamel patterns in the lower cheek teeth, as reviewed by Armitage (in Armitage & Chapman, 1979: 342-344) and Davis (1980:293-294).

Age at death/slaughter in sheep mandibles (lower jawbones) was based on pattern of eruption and dental attrition in the lower cheekteeth, after the method of Payne (1973). For the pig bones, ages at death/slaughter were determined from epiphyseal fusion in long-bones and from eruption/wear in the molar teeth, using the data published by Bull & Payne (1982). While age at death in dog and cat was established from epiphyseal fusion in the limb bones, using data published by (respectively) Sumner-Smith (1966) and Smith (1969).

In the sheep innominate bones, sex was identified by the depth (thickness) of the medial rim of the acetabulum, appearance of the ilio-pectineal eminence, and shapes of the ischial tuberosity and ischial arch, according to the criteria of Armitage (1977: 75-79). Similar diagnostic characters described by Grigson (1982) were employed in sexing the cattle innominate bones. Descriptions (age, sex, and length-category) of cattle horn cores followed the system devised by Armitage & Clutton-Brock (1976) and Armitage (1982). In the upper and lower canine teeth (tusks) of pig sex was determined on the basis of morphological differences, as described by Mayer & Brisbin (1988). Gender in the tarsi-metatarsal bones of the domestic fowl was determined by the presence (male or castrate/capon) or absence (female) of a spur, as discussed by West (1982).

Estimates of stature (shoulder/withers heights) in the adult livestock were calculated from the lengths of their long-bones using the factors of Kiesewalter (1888) for horses, Fock (1966) for cattle, and Teichert (n.d.) for sheep, as published by von Den Driesch & Boessneck (1974). Shoulder heights in adult dogs were calculated using the regression formulæ of Harcourt (1974).

Where applicable, the minimum number of individuals (MNI)/species was calculated after the method of Chaplin (1971: 70-75).

RESULTS

Condition of the bone

Only a very few specimens exhibit evidence of weathering due to prolonged exposure in the open, and these are from throughout the site with no discernible concentration in any particular context or phase. All other bones are in a generally good state of preservation, indicating that the majority of the bone waste had been buried immediately or within a short time after being discarded. Several bones apparently had been given to dogs to gnaw on prior to their being disposed of along with the other general household refuse and again no distinct pattern can be identified in the spatial/temporal distribution of these specimens over the site.

While the actual state of preservation of the bones is generally good, very many of them have suffered from post-depositional damage, resulting in their fragmentation. Perhaps not unexpectedly, many of the bones recovered from the Late Saxon and early medieval beaten-earth floor layers are fragmented from the effects of repeated trampling. However, many bone elements from pit infills likewise exhibit fragmentation, possibly explained with reference to compression and compaction of the refuse material densely packed in such features.

Assemblages with especially high levels of fragmentation are characterised by noticeably high frequencies of isolated (loose) teeth from domestic livestock (cattle, sheep, pig and including horse where present) - as recorded for pit 13/38, pit 13/50, hearthside pit 13/84, pit 157, floor 13/97 (all Phase 2b), floor layer 13/97 (Phase 3) and pit 12/69 (Phase 4).

In addition to post-depositional damage, considerable breakage in the long-bones of cattle and sheep apparently had taken place prior to disposal, as a result of tertiary butchering. Many cattle and sheep humeri, radii, femora, and tibiae are represented by small pieces/fragments of bone exhibiting straight edged breaks or spiral fracturing, evidence of splitting and smashing of these bones in order to obtain the marrow. Recognised as part of the kitchen waste, such examples of these smashed marrow bones are present in assemblages from throughout the site and in all phases, with noticeably high frequencies recorded in the following context assemblages/features:

Phase 2a: TR12/308 pit infill, TR13/98 burnt layer, TR16/69 infill cellar 2, TR16/87 infill cellar 3

Phase 2b: TR12/241 layers, TR13/76 floor layers, TR13/84 hearthside pit, TR13/49 pit 157 infills, TR16/50 pit infill

Phase 3: TR12/78 floor layers-west room, TR13/54 floor layers

PHASE 2a

Total number of bones 1686, of which 1060 (62.9%) are identified to species and part of skeleton, and 626 (37.1%) remain unidentified.

Of the identified bones 964 (90.9%) are mammalian, 94 (8.9%) bird, and 2 (0.2%) amphibian (frog). The unidentified material comprises 614 (98.1%) mammalian, and 12 (1.9%) bird bone fragments.

Analysis revealed that all faunal assemblages attributed to Phase 2a irrespective of category of origin (whether debris covering floors layers or infills to pits/cellars) differ very little from each other in respect of the major species present, their frequencies and parts of their skeletons (= anatomical distribution). Substantially, the bone from Phase 2a represents discarded domestic food debris from all stages of carcass/meat processing, preparation and consumption. For all the major domestic food species (cattle, sheep, pig and domestic birds) the anatomical distribution (see archive) indicates the presence of the waste products from slaughter/primary and secondary butchering, as well as kitchen/table waste. As discussed in more detail below, there is apparently very little waste from bone/horn working activities.

Apart from hare and deer bones - which are discussed separately below - all the meat consumed came from domestic animals, principally from cattle and sheep, with a lesser contribution from pig, mostly mature animals, but bones of calves, lambs/kids and sucking pigs are also represented. The exploitation of wild animals in the rural hinterland apparently was confined to catching hare, and perhaps also red deer. However, as red deer is represented in Phase 2a by a single metatarsal bone (from TR13/101, infill to cellar 1) it does not necessarily follow that this provides definite evidence for the eating of venison on this particular site. An alternative (and equally plausible) explanation is that this particular bone was introduced/imported onto the site specifically as raw material for bone-working. The long straight shaft of this bone makes it ideally suited for this purpose. If this was so, then the deer could have been hunted and eaten elsewhere. Besides the red deer metatarsal bone, the only other direct evidence for the use of animal skeletal material in artefact manufacture is provided by part of a sheep skull from the infill to cellar 1 (context TR16/69) which exhibits marks made by an axe or heavy cleaver across the base of the horn core, evidence for the removal of the outer horn sheath.

Domestic fowl apparently was important in the local diet during Phase 2a, supplemented by the flesh of domestic geese, and perhaps the flesh of domestic pigeon also (this must remain a tentative interpretation of the faunal evidence however as the bones identified as *Columba livia* may belong to the rock dove rather than to its domesticated descendant). In later times (medieval period) doves/pigeons became a common feature of manorial estates, and these birds eaten in great numbers.

Cat is represented in Phase 2a by three elements all from mature animals aged over 15-17 months: two humeri (layers TR13/98 and TR13/302) and one tibia (cellar 3 infill TR16/87). These cats were either household pets or feral animals allowed to roam freely through the settlement as valued destroyers or vermin - an important role given the presence of house mouse (as evidenced by the recovery of a tibia of this animal from pit infill TR12/308).

Measurements taken of the dog mandibular ramus from TR13/101 infill to cellar 1, indicated a medium sized animal and therefore unlikely to have been kept for hunting large game as deer - an activity requiring instead of one of the "remarkably large hound type" dogs known from such Saxon sites as Thetford in Norfolk, described by Clutton-Brock (1976: 385-386). The dog from Phase 2a WMS95 probably represents a household pet - that may also perhaps have served as a guard-dog, and also might have played a part in controlling rodent infestations.

The three horse bone elements recovered during excavation - comprising a calcaneum (pit infill TR12/308) and a metapodial

bone and phalanx II (both from infill to cellar 1 TR13/101) - from an inadequate sample on which to base an interpretation of the function/purpose of these animals of this site in Late Saxon times (but see section 3, below, for a general discussion on equids from WMS95).

Special mention should be made of the presence of frog in Phase 2a, evidenced by their bones found in the pit infill TR12/308. Contrary to what is generally supposed, the common frog *Rana temporaria* does not require constantly to live in close proximity to aquatic habitats; this amphibian, outside its breeding season, often spends a considerable part of its life on land. Even though an aquatic habitat may not have been necessary to attract this amphibian to the site, its presence presumably does indicate that at least part of the site was overgrown/wasteland or semi-rural, with close association with the surrounding countryside. Further, it may be suggested that the frog (or frogs) found in pit TR13/308 had fallen in and unable to escape had perished - the man-made feature acting as a pitfall trap.

PHASE 2b

Total number of bones 5368, of which 3482 (64.9%) are identified to species and part of skeleton, and 1886 (35.1%) remain unidentified.

Of identified bones, 3325 (95.49%) are mammalian, 155 (4.45%) bird, and 2 (0.06%) amphibian (frog). The unidentified material comprises 1809 (95.9%) mammalian, and 77 (4.1%) bird bone fragments.

On the basis of the anatomical distribution of the major species represented, all the bone assemblages - including those recovered from floor layers as well as pit infills - are interpreted as primarily comprised of discarded food debris; with waste from all stages of slaughter/primary and secondary butchering, intermingled with refuse from kitchen and table.

On the available evidence provided by the identified bones of the meat-yielding species, the inhabitants of the site in the late Saxon-early medieval period seemed to have followed a somewhat basic dietary regimen of limited variety, apart perhaps from the occasional pigeon (and wild bird), otherwise comprising much beef and mutton, with lesser amount of pig, supplemented with the flesh of domestic fowl and geese. Despite the absence of variety, there is evidence for consumption of more succulent meats provided by slaughtering young animals (calves, lambs/kids, and suckling pigs). (Unlike their predecessors) on the site, the inhabitants in Phase 2b show no evidence of exploiting the rural hinterland. Hare is noticeably absent from the refuse deposits, and there is no evidence for the consumption of venison.

Apart from the antler (imported as raw material for artefact manufacture) the only other skeletal element of red deer from Phase 2b is a small piece of a metatarsal bone (from TR13/158 - pit infill.) as this fits into the broken shaft of the red deer metatarsal bone recovered from Phase 2a (context Tr13/101) it seems this is residual/redeposited from the previous occupational phase. Given that Phase 2b at WMS95 coincides with the Norman presence in England, the absence of any evidence for the consumption of venison possibly indicates that the inhabitants of the site were not of sufficiently high socio-economic status to participate (legally) in hunting game in the countryside outside the town precincts - as is well documented, Norman hunting laws were stringent and highly restrictive.

Among the non-food related animal bones from Phase 2b are those of cats and dogs, identified in the following assemblages:

Pits: TR13/38, TR13/50, TR13/69, TR13/157, TR16/50
Floor Layer: TR13/97

For the majority of these assemblages, each species is respected by small quantities of bones from single or at most two individuals (all fully grown animals). Pit 38 (TR13/38) however yielded exceptionally high quantities of both cat and dog bones-respectively, 68 and 183 identified elements, interpreted as the skeletal remains of at least ten cats and between eight and eleven dogs. On the basis of the epiphyseal fusion in the limb bones, the dogs from Pit 38 appear to have been over five months but less than a year old at time of death; the cats also appear to have died whilst still relatively young, most of them aged between five to ten months, except for three individuals aged over one and a half years. All these cats from Pit 38 may be the remains of deceased household pets, but the preponderance of young individuals seems to indicate unusually high mortality levels either from natural causes or perhaps from human action (? killing of the cats for their pelts).

Any household cat (or indeed any feral cat) would have proved useful in rodent control; a necessity given the presence of house mouse on the site during the late Saxon - early medieval period, as evidenced by the discovery of the jawbone of this species among the bones recovered from context TR12/307 (drain infill).

Owing to the incomplete condition of the majority of the dog bones from Phase 2b - and young age of these from Pit 38 - it is not possible to carry out a detailed osteometric study of these skeletal remains. A single adult dog tibia was however recovered intact (from TR13/97) allowing measurements of its length (192mm). Using the regression equations of Harcourt (1974) the shoulder height of this dog when alive is calculated (from the bone length) at 57cm. The reconstructed stature of the Phase 2b dog places it in the upper size-range (23 - 71 cm) established by Harcourt (1974:171) for Anglo-Saxon dogs, and compares well with the medium to larger sized dogs from Flaxengate, Lincoln (contexts dated 900-1200) documented by O'Connor (1982:37) - and is somewhat taller than the Saxon and medieval dogs from Walton, Aylesbury (data of Noddle, 1976).

Two tibia/fibula recovered from pit TR16/50 attest to the presence of the common frog at the site during the Late Saxon-early medieval period, indicating the existence of overgrown waste ground or a garden-like area on the site.

Special mention should also be made of the mandibular ramus of an adult domestic pig recovered from pit 157 (context TR13/160) that exhibits evidence of a gross pathological condition, interpreted as evidence of a severe infection following traumatic injury (fracturing of the jawbone) which apparently was only partially healed at the time of death of this animal (see Fig 1). An identical case has been documented by O'Connor (1982:37) in a pig from medieval Flaxengate, Lincoln.

PHASE 3

Total number of bones 828, of which 628 (75.8%) are identified to species and part of skeleton, and 200 (24.2%) remain unidentified. Of the identified bones, 586 (93.3%) are mammalian and 42 (6.7%) bird species. The unidentified material comprises 196 (98%) mammalian, and 4 (2%) bird bone fragments.

As in the two earlier occupational phases (2a & 2b) the diet of the inhabitants during the later medieval period comprised much beef (with some veal) and mutton, augmented by pork (and some sucking pig), as well as the flesh of domestic fowl, very few

geese appear to have been eaten (unlike earlier periods). A metacarpus of red deer was identified (from TR12/78, floor layer, west room). However, it would be unwise on the basis of this single element to postulate venison was eaten at this period, especially as the bone in question is very poorly preserved and has every appearance of being residual (redeposited from an earlier occupational phase).

It is well attested from both archaeological and documentary (historical) sources that late medieval urban centres had developed well organised market economies for the procurement and distribution of foodstuffs - with specialist butchers selling prepared joints/cuts of meat to townspeople in the local meat markets. However, the anatomical distribution recorded in the cattle and sheep in Phase 3 continues to indicate that livestock were brought in to the site live-on-the-hoof for the purposes of home killing/butchering/consumption. Or, perhaps, whole untrimmed carcasses of these animals were purchased in the local market for the feeding of large households - a scenario which would also account for the feeding of large households - a scenario which would also account for the presence in the refuse deposits of all body parts (including those of the head and extremities of the feet).

From the viewpoint of scholars researching the early history of British sheep breed-types, it is interesting to note that Phase 3 marks the first appearance (on this site) of evidence for naturally polled sheep (represented by part of a skull from TR12/314, yard surface), as well as a sheep with scars (rudimentary bud-like horns) (from TR13/54, floor layer), and an adult ram with short "Stumpy" horns (from TR12/91, floor layer, west room). By

comparison, the sheep from earlier periods (phase 2a and Phase 2b) are horned in both sexes.

Phase 3 also yielded evidence of a donkey (identified from a layer molar tooth from TR12/86, floor layer, west room). Throughout continental Europe during the later medieval period, the donkey was widely employed as a pack-carrier - but apparently less so in England, where also it was considered as the "most undignified of all mounts to ride on", according to Dent (1972: 96-103).

Domestic cat is represented by three bone elements from floor layers TR13/54 and TR13/57: mandible, humerus, and vertebra. No dog bones are identified in any of the assemblages from this phase.

DISCUSSION

Various workers in archaeozoological research have devised livestock-ratios in order to investigate and better understand relationships at different historical periods between urban consumers and their main sources of meat supplies. Some of these ratios are adopted for analysing the empirical data collected from the faunal assemblages. It is important to recognise, however, the limitations of these available data when extrapolating the results from this one site in the wider context of the economy of the whole of Northampton.

Owing to the paucity of material from Phase 4, the two assemblages from contexts TR12/69 and TR13/58 are omitted from this discussion.

Table 8 (below) shows the percentage frequencies of the

Table 8: Percentage frequencies of the principal meat-yielding species, based on fragment (NISP) counts. Faunal assemblages from Woolmonger Street, Northampton in comparison with those from other British Late Saxon to later medieval urban sites.

	Cattle %	Sheep %	Pig %
Woolmonger Street			
Phase 2a	39.2	51.5	9.3
Phase 2b	44.8	48.5	6.7
Phase 3	32.9	59.0	8.1
Lincoln, Flaxengate			
10th century	59.2	29.2	11.6
Aylesbury, Walton			
Saxon	42.2	34.7	23.1
Saxo-Norman	36.4	43.7	19.9
Medieval	36.6	46.9	16.5
Aylesbury, George Street			
Medieval 12-14th century	45.1	37.7	17.2
North Elmham Park, East Anglia			
Late Saxon-early Medieval	32.1	32.3	35.6

Sources: O'Connor (1982), Noddle (1976), Jones (1983), Noddle (1980)

principal meat-yielding species calculated from the Northampton data, and compared against other Late Saxon to later medieval towns and settlements. Inspection of the calculated frequencies reveals exceptionally low values for pigs for all phases at Woolmonger Street, reflecting the small contribution made by this animal to the overall diet. In numerical (and in actual quantities of meat) cattle and sheep were clearly of far greater importance. At the other urban settlements, pig apparently was much more important.

Another way of demonstrating the preponderance of cattle over pigs in the Northampton assemblages is through calculating directly the ratio between these two animals, based on NISP counts:

Ratios of pigs to cattle:	
Phase 2a	1 : 4.2
Phase 2b	1 : 6.7
Phase 3	1 : 4.1

These ratios reveal for all phases a high ratio of cattle of pigs, which according to Bourdillon (1980:183) "is the strongest indication of substantial provisioning of the town". As discussed by Bourdillon, "a good sufficiency of cattle is a sign of solid provisioning in a medieval town... for a solid surplus of cattle places more demands on pasture and on the organisation than do the modest needs of early sheep or the omnivorous scavenging of pigs". On this criterion the high representation of cattle in all phases, coupled with the apparently low incidence of pig, argues for the existence as early as the Late Saxon period of a strong market economy in which the settlement had the ability to draw freely on the livestock resources of its agricultural hinterland (= catchment area). The presence of bones from calves recorded in assemblages from all phases, seems to indicate a thriving rural economy - one able to support the slaughter of young animals well before they had reached maturity and made any contribution towards stock replenishment, or even served as plough oxen.

However, it is important to realise that urban consumers were not exclusively reliant on the rural hinterland for their everyday food requirements. Even into the later medieval period, towns - and even cities as London - remained remarkably rural in tone with backyard smallholdings intermingled with the houses, where smaller livestock such as pigs, chicken, geese and the occasional goat, were raised for the purposes of home-provisioning. By keeping such animals, town residents managed to diversify their basic diet, with supplies of meat and eggs (and milk when goats were also kept). In order to detect subsistence (backyard) farming in urban faunal assemblages, O'Connor (1994:145) calculated frequencies of the combined counts of Pig/fowl/geese bones, expressed as a percentage of the total number of bones for all the principal meat-yielding species (cattle + sheep + pig + fowl + goose). Applying this form of analysis to the faunal data, the following results are obtained:

Frequencies of pig+fowl+geese	
Phase 2a	17.3%
Phase 2b	10.3%
Phase 3	14.7%

While these values compare favourably with 14.9% calculated by O'Connor (1994) for the mid 10th century faunal samples from Coppergate, York, they are noticeably lower than those documented for late 10th/early 11th century Coppergate, York

(26.3%) and 12th-14th century George Street, Aylesbury (30%) calculated from data given in Jones, 1983:32. One interpretation of the low frequencies for Northampton, is that these indicate backyard livestock farming was carried out on a small scale only. It could be argued that the domestic fowl and pigs were not local but were procured from farms in the rural hinterland. However, the presence of bones from immature domestic fowl together with those of sucking pigs reinforces the interpretation that the inhabitants were raising such animals at the site.

One final aspect which needs to be addressed in the interpretation of the equid bones identified in the assemblages from all four phases. As already discussed, the donkey in Phase 3 was probably a pack animal. It is likely that the horses in the other phases also served in this capacity - i.e. were used in draught (including perhaps the pulling of carts) or they may have been for riding. Given the paucity of their bones in all phases, any interpretation must be regarded as highly tentative. Based on the absence of any butchering marks in those bones available for study, it seems reasonable to suggest horses were not eaten; while the preponderance of skeletal elements from the head and feet may indicate the horses had been imported to the site as skins rather than complete carcasses - the killing and cutting up of the animals having taken place elsewhere.

FISH BONE
by Alison Locker

INTRODUCTION

Fish bones were recovered both by hand collection separated from the animal bones by Dr Philip Armitage and from sieved samples belonging to three phases; Late Saxon, Late Saxon/Early Medieval and Medieval. Although Northampton is some 70 miles from the nearest port at Kings Lynn many of the species identified were marine.

The following species were present; Elasmobranch indet., roker (*Raja clavata*), Rajidae indet., eel (*Anguilla anguilla*) herring (*Clupea leuciscus*), roach (*Rutilus rutilus*), Cyprinidae, cod (*Gadus morhua*), Gadidae, stickleback (*Gasterosteus aculeatus*), perch (*Perca fluviatilis*), c.f. sea bream (*Sparidae*), mackerel (*Scomber scombrus*), plaice (*Pleuronectes platessa*), plaice/flounder (*pleuronectes platessa/Platichthys flesus*) and flatfish indet.

Most of the bone in this late Saxon phase comes from the pit fill 308 and is dominated by herring and eel. The latter could have been caught locally, as could tench, perch and stickleback, although stickleback is likely to be an incidental catch or the stomach contents of a larger fish and not food remains. The tench bones were from a fish around 45-50 cms inn total length, a large individual and the perch preopercular was from a fish of 22 cms total length (Desse et al 1987) the average size being 35 cms (Wheeler 1978, 236). The salmonid vertebra is large and most likely to be from salmon (*Salmo solar*) rather than trout (*Salmo trutta*), brought down from Newcastle or farther north in a salted condition.

Rays, herring, cod, mackerel and flatfish would all have been brought in from the coast. Cod was identified from two caudal vertebrae, which were sometimes left in the fish prepared for stockfish to give rigidity while drying. This is slender evidence for consumption of stockfish at the site, but given the inland location and further evidence in phase 2b is a reasonable

Table 9 : Fish species within Phase 2a

Trench Context	12 308S	12 308H	13 98H	13 101H	Total
Elasmobranch	1	0	0	0	1
Roker	1	0	0	0	1
Ray	2	0	0	0	2
Eel	9	0	0	0	9
Herring	24	2	0	1	27
Salmonid	0	0	1	0	1
Trench	0	3	0	0	3
Cyprinid	3	0	0	0	3
Cod	2	0	0	0	2
Large Gadid	0	2	0	0	2
Stickleback	1	0	0	0	1
Perch	0	1	0	0	1
Mackerel	0	1	0	0	1
Flatfish	0	2	0	0	2
Total	43	11	1	1	56

S= Sieved H=Hand picked
12/308=pit fill 13/98=burnt layer capping cellars 13/101=cellar

possibility. A 'buckler' from a roker (thornback ray) was present, the other ray denticles identified were indeterminate to species.

The largest sample of fish comes from this phase, mostly eel and herring *vertebral centra* from the sieved deposits. Continuing evidence for the exploitation of rivers is suggested by the presence of eel, pike, dace, roach and stickleback. The latter includes the remains of at least four fish in 13/68.

Both whole cod and possibly stockfish may be present. A premaxilla from 13/59 was from a large specimen of around 120cms total length. The presence of this bone shows the fish had not had the head removed before reaching the site. This may be the remains of large fresh cod transported quickly from the coast, or one salted with the head on. However, contemporary evidence suggests that large gadids usually had the head removed during processing prior to salting or drying. In 13/50 a fragmented cod cleithrum showed evidence of cut marks as did a posttemporal from the same deposit. Both these bones are part of the appendicular skeleton which is left in the fish when the head is removed along with some vertebrae to give rigidity while drying.

Rays, mackerel and flatfish are poorly represented but indicate a varied supply of marine fish during this period.

PHASE 3

Only three bones were recovered by hand collection from three contexts.

Roker was identified from a single buckler and cod from two caudal vertebrae.

DISCUSSION

The expansion of Northampton during the late 11th to 12th centuries to 'a major urban centre in the country' (Shaw et al 1997, 412) would have created an important market for marine fish despite the minimum distance of 70 miles from the coast. All the marine fish identified could have been brought in salted or dried. The herring industry was established on the East Anglian coast by the late Saxon period, where large numbers of herring were salted and barrelled each season.

Mackerel is an oily fish that quickly deteriorates after capture, so it would seem likely that these were brought in salted. There is some evidence for whole cod and stockfish, as an important market fish cod may have been worth transporting as quickly as

Table 10: Fish speciesPhase 2b

Trench Context	12 254H	12 307H	13 50H	13 59H	13 68S	13 68H	13 84S	13 84H	16 50S	16 50H	Tot
Ray	0	0	0	0	0	0	0	0	2	0	2
Eel	0	0	0	0	36	0	1	0	1	0	38
Herring	5	11	0	0	7	0	5	0	18	0	46
Pike	0	0	0	0	0	0	0	0	4	0	4
Dace	0	0	0	0	1	0	0	0	0	0	1
Roach	0	0	0	0	0	0	0	0	6	0	6
<i>Cyprinid</i>	0	0	0	0	1	0	0	0	6	0	7
Cod	1	0	3	1	0	0	0	1	0	5	11
Stickleback	0	0	0	0	15	0	0	0	0	0	15
S Bream	0	0	0	0	0	0	0	0	1	0	1
Mack	1	0	0	0	0	0	0	0	0	0	1
Plaice	0	1	0	0	0	0	0	0	0	0	1
PI/Fl	0	0	0	0	0	1	0	0	0	0	1
Flatfish	0	0	0	0	0	0	0	0	1	0	1
Total	7	12	3	1	60	1	6	1	39	5	135

12/254=layer 12/307=drain infill 13/50=infill pit 50 13/59=infill pit 38
13/68=infill pit 38 13/84=infill/hearthside pit 16/50=infill pit

Table 11: Fish species within Phase 3

Trench Context	12 98H	12 117H	13 57H	Tot
Roker	1	0	0	1
Cod	0	1	1	2
Total	1	1	1	3

possible to Northampton, commanding a high price to cover the transport costs.

Eels were caught seasonally as they migrated down stream, wicker work traps called eel-backs were built across weirs, often associated with mills and caught large numbers of fish (Wheeler

1979,61). These were eaten both fresh as well as salted and barrelled.

Pike and the *cyprinids* identified all suggest that local angling provided freshwater fish for the table.

Phases 2A and 2B produced similar fish assemblages. The paucity of material from phase 3 result from the bias of hand collection favouring larger bones and a similar bias towards the larger marine species, i.e. cod, haddock (*Melanogrammus aeglefinus*) and ling (*Molva molva*) was found in hand collected fish from medieval and post medieval deposits at Black Lion Hill (Locker 1985, 137).

CHARRED PLANT REMAINS AND THE ARABLE ENVIRONMENT

By Wendy J. Carruthers

Throughout the excavations at Woolmonger Street soil samples were taken from a range of deposits for the recovery of charred

plant remains. The samples were processed by staff at Northamptonshire Archaeology using standard floatation techniques. A mesh of 1mm was used to retain the residue and sieves of 1mm and 500 μ mesh were used for the flot. The unsorted flots and two residues from 23 samples were sent to the author for analysis. These samples had been selected for analysis because their contexts could be phased, were uncontaminated and were considered likely to produce economic evidence which could be tied in with the archaeology.

Samples 15/32 and 13/98 consisted of large quantities of well-preserved cereals which were subsampled using a riffle box (sample divider) and 25% of each was examined in detail under a microscope. The remaining proportions however, were rapidly scanned by eye and large objects such as horse beans were extracted.

RESULTS

The list of taxa recovered is given in archive. Nomenclature and most of the habitat information is taken from Stace (1991).

State of Preservation

The state of preservation of most of the charred cereal remains was remarkably good, particularly for the large concentrations of cereal remains 15/32, 13/98 (Late Saxon) and Watching Brief pit 43 (Late Saxon/Early Medieval). This suggests that charring occurred under fairly controlled conditions such as in an oven. Some of the other Early Medieval samples contained quite high percentages of poorly preserved, vacuolated cereals indicative of charring at high temperatures (see the table of cereal percentages below).

Small rounded lumps of grey/white slag-like material were present in both Late Saxon and Early Medieval samples. They were quite frequent in samples 15/32, 12/192 and 12/351 and were also present in 13/84, 13/98, and 12/266. Samples were sent to Matt Canti (Ancient Monuments Laboratory) for examination. I am very grateful to him for the following information: 'Both samples consist of lumps of vesicular glassy material. It is fairly common on sites where there has been burning or industrial processes, but it is not fully understood. It is widely believed to be the result of the melting of grass ashes' (Canti pers comm).

Results from EDAX produced primarily silica, as would be expected, and experimental work melting grass ash at 800°C for half an hour produced similar glassy lumps (Matt Canti, pers comm). Cereal chaff is also high in silica (Robinson & Straker, 1991), so the glassy lumps could be all that remains from the burning of crop processing waste and/or waste hay at high temperatures. It is difficult to reconcile the recovery of well-preserved cereals from the same samples as melted glassy lumps, as both types of material would not be preserved under the same conditions of combustion (Boardman & Jones, 1990). This suggests that the assemblages contain waste from more than one source, although this could be sweepings from the ash pit and drying chamber of a single oven. The samples containing the glassy lumps were from two different areas of the site as well as from both phases, so contamination is not suspected. Presumably, therefore, similar processes were taking place during both phases of occupation.

There were traces of mineralised plant remains in the flots from contexts 12/118 (a single small grass caryopsis) and context 12/351 (two *Brassica/Sinapis* sp. seeds; charlock, mustard etc.). The mineralisation may have taken place *in situ* in the case of the sump (context 351), which may have provided the moist,

organic-rich conditions necessary for their formation (Green, 1979). The seed in the stake-hole 118 probably originated in redeposited faecal waste or compost.

CEREAL IDENTIFICATION

Wheat

Both hexaploid bread-type (*Triticum aestivum*-type) and tetraploid rivet-type (*T. turgidum*-type) wheat were confirmed as being present in the sample from context 43 (Watching Brief sample, Late Saxon/Early Medieval). This was possible because the sample contained crop processing waste which included some well-preserved rachis fragments from both taxa (see Jacomet, 1987, p.47 for identification criteria). None of the other samples produced rachis fragments that were in a good enough state of preservation to allow identification to be taken to this level. Unfortunately, cereal grains alone cannot reliably be identified past the 'free-threshing wheat' category (Jacomet, *ibid*). The increasing number of records for tetraploid wheats from medieval sites in central and southern England suggest that both wheats are likely to have been grown (Moffett, 1991). Their different cooking properties (bread-type wheat produces a well-risen loaf whilst rivet-type wheat is more suitable for biscuits) and growth habits (rivet-type wheat grows on a long straw useful for thatching) make it worthwhile growing both types.

Barley

Hulled 6-row barley (*Hordeum vulgare* L.) was confirmed as being present due to the presence of some twisted lateral grains. It is possible that 2-row barley was also cultivated, but charred rachis fragments are rarely recovered in a good-enough state of preservation to confirm this.

Rye

The presence of large numbers of rye grains and a few rachis fragments confirmed the cultivation of rye (*Secale cereale* L.) as a crop in the Late Saxon period at least. The much lower occurrence of rye in the Early Medieval samples suggests that it may have lingered on in the fields as a weed, or was cultivated as a minor crop, or was grown primarily for fodder and an early-bite crop so did not become charred so frequently.

Oats

Although it is not possible to determine whether wild or cultivated oats were being grown according to grain morphology, the recovery of a few oat pedicels from the Late Saxon/Early Medieval pit (context 43) has demonstrated that both wild (*Avena fatua*-type) and cultivated hexaploid oats (*A. sativa* L.) were grown at this time (see Moffett, 1987 for identification criteria). As for the medieval rye, the relatively low occurrence of oat grains indicates either that they were primarily weed oats, or that they were also an infrequent crop, or that they were grown primarily for fodder and so had little contact with fire. Oats are valued as a high-energy fodder for draft animals, and oat straw is also a useful fodder crop.

Legumes

Peas, vetches and horse beans were identified primarily from the Late Saxon samples. Legumes are less likely than cereals to become charred, and so are usually under-represented in charred assemblages. In addition, charring frequently destroys important identification criteria (hilums in particular) so it is not often

possible to determine whether weed vetches or cultivated vetch was present. The few surviving hilums in the well-preserved sample, watching brief context 43, indicated that both weed vetches (cf. tufted vetch and cf. hairy tare) and possibly cultivated vetch (*Vicia cf. sativa*) were represented.

A relatively large number of horse beans (*V. faba* var. *minor*) were recovered from the Late Saxon destruction layers (Phase 2a), over the cellars (15/32 & 13/98). Because the precise evolutionary origins of the horse bean are still obscure, and some workers have split the species into subspecies according to seed dimensions (Muratova, 1931), it is useful to record seed dimensions, particularly from such a large, well-preserved assemblage. Comparisons can then be made with other sites with the hope that ultimately their route from the centre of origin in the Middle East (Hopf, 1986) across Europe will be traced. Figure 1 plots the individual dimensions of 50 well-preserved beans. Figure 2 shows how the Woolmonger Street beans compare to a number of other sites that have produced large numbers of beans.

DISCUSSION

The table below shows cereal percentages for the 7 most productive flots. Before comparisons between phases are made, however, it should be remembered that of the four samples from the Late Saxon Phase 2a, the very productive samples 15/32 and 13/98 comprised one widespread layer. Thus, it is not known whether this large deposit of burnt grain was representative of the period or not.

Having sounded that note of caution, it is interesting to see that rye was dominant in the Saxon deposit, as compared with its minor occurrence in all of Medieval samples. Although rye has been recovered from most sites dating from at least the Saxon period (with some finds dating back to the Iron Age), it is nearly always found in small quantities. Bread-type wheats are usually the dominant cereals recovered from the Saxon period onwards, although a few sites where the soils are poor and/or the climate is cold and wet have produced evidence for large-scale cultivation of rye (e.g. West Stow; Murphy, 1983) and oats (e.g. Loughor Castle, Carruthers, 1994). Where soils and climate do not appear to be limiting factors, cultural influences may affect the types of cereals grown. Saxon deposits from West Heselton, Yorkshire (Carruthers & Hunter, in progress), are producing samples that contain primarily barley, which may reflect influences from the

continent, since rye and barley are far more dominant on the continent at this time (Green, 1979). However, as indicated above, with a single deposit such as 15/32 - 13/98 it is not possible to rule out the charring of an atypical example of a crop grown infrequently for a specific purpose.

An additional problem in trying to compare the Saxon and Medieval assemblages is that they originate from a range of different feature types including pits, hearths, sumps, post-holes etc. As the burnt waste materials may be derived from different processes, comparisons may not always be valid. It is clear from variations in the grain/ chaff + weed seeds ratios (see the tables above and below) that different types of waste product are represented. The deposit that stands out from the rest is the watching brief sample, context 43. Whilst most Saxon and Medieval charred plant assemblages contain predominantly cereal grains, this sample contained both the larger category of crop processing waste characterised by large heavy remains such as culm nodes and large weed seeds (e.g. corn growmwell, *Lithospermum arvense* L.), and the small chaff and weed seeds such as rachis fragments, stinking mayweed seeds (*Anthemis cotula* L.), Chenopodiaceae etc. (Hillman, 1981). This sample is particularly useful, therefore, in providing evidence for the cultivation of rivet-type wheat by means of identifiable rachis fragments, as well as indications of the types of soils cultivated and the weedy state of the crops grown. The presence of large numbers of stinking mayweed seeds suggests the cultivation of damp, heavy soils. Small-seeded weed vetches (*Vicia/Lathyrus* sp.) were also numerous. Leguminous plants have a competitive advantage on soils that are depleted of nutrients, because they can possess nitrogen-fixing bacteria in root nodules. The cultivation of weed infested crops on poor, heavy soils might suggest some sort of strain on the arable economy in this period.

The sample from pit 192 also contains some crop processing waste, i.e. a few rachis fragments, a few large-seeded weeds and quite large numbers of small weed seeds. Most of the other samples contained primarily grain with just a few weed seeds, and these probably represented domestic waste from cooking, hand-cleaning of crops etc.

Although difficult to determine from these few samples, there are some indications that crop husbandry improved in the Early Medieval phase. Weed indicators of nutrient-rich soils such as the Chenopodiaceae (fat hen etc.) are more numerous in the Early Medieval samples, suggesting that manuring may have been introduced or increased. In addition, the poisonous weed seed,

Table 12: Plant species by context

	15/32	13/98	wb/43	12/192	12/266	12/351	13/84
Wheat	29%	22%	71%	31%	28%	31%	21%
Barley	0.5%	2%	0%	6%	6%	8%	1%
Oats	0.5%	1%	0%	8%	8%	11%	2%
Rye	46%	49%	+	2%	4%	3%	3%
Indeterminate grains	22%	23%	29%	53%	54%	47%	73%
Grain/chaff + weeds index	26	20	0.3	2	2	7	9
Number of cereal grains	5325	3874	259	515	235	492	296
Phase	LS	LS	LS/EM	EM	EM	EM	EM
Feature type	destr.l	destr.l	pit	pit	hearth	sump	hearth

(Feature types include: destruction layer, pit, hearth and hearthside pit)

corn cockle (*Agrostemma githago* L.) was much less frequent. The high levels of corn cockle in the Saxon destruction layer sample (15/32 - 13/98) must have been a great problem to the occupants, as accidental consumption of the seed as a contaminant of flour can cause debilitation and increased susceptibility to leprosy (Godwin, 1975). Because the large seed is of a similar size to cereal grains it cannot be sieved out of the crop but must be hand-picked. The decrease in this harmful weed could be due to the introduction of root crop rotations, which are said to be effective in reducing germination and seedling development (Silverside, 1977). However, the Saxon samples might be particularly badly infested because they contain primarily rye rather than wheat. Godwin (*ibid*) suggests that corn cockle has a close biological link with rye, so a reduction in the cultivation of rye in the Medieval period might have helped to reduce the problem.

A number of similarities in the assemblages from three features in trench 12 suggest that there may be some sort of relationship between them. Pit 12/192, hearth 12/266 and sump 12/351 form a triangle, each being c3 metres apart. Similarities between the assemblages are as follows: The flots all contained slaggy lumps; the cereal percentages and grain to chaff + weed seeds index are very similar (cereal %'s all within 3% of each other); the fragments per litre values are very similar (32, 29 and 44). The weed assemblages show many similarities such as the presence of indicators of acidic soils (*Rumex acetosella*, *Raphanus raphanistrum*) and damp/wet soils (*Cyperaceae*). Stinking mayweed and *Chenopodiaceae* are frequent in all three samples, and most of the other infrequent taxa occur in all of them. Presumably, therefore, waste from activities involving the hearth had been deposited in pit 12/192 and some of this had been washed into sump 12/351. The weed indicators of acidic and damp soils probably originate from fuel and tinder for the hearth, perhaps hay from damp meadows down by the River Nene. Alternatively, water containing the seeds may have been involved in whatever processes were taking place at the hearth.

Another sample that stands out from the rest is that from hearth-pit 13/84. The flot contained 560 fragments of hazelnut shell, amounting to 9.3g. Although this only represents c. 22 whole nuts (Carruthers, forthcoming), these remains probably represent all that survived the burning of a much larger number being consumed around, or processed over the fire. The cereal remains from this sample contained some crop processing waste in addition to a high proportion of poorly preserved grains, reflecting charring under uncontrolled conditions. This material probably represents tinder, fuel and cooking waste.

Seven other samples produced small numbers of hazelnut shell fragments, including 3 Saxon samples. Other foods that may have been gathered from woods and hedgerows are apple (cf. *Malus sylvestris* core fragment) and elderberries (*Sambucus nigra* L.). Fruit and nut remains are less likely to become charred than cereals, so it is difficult to determine how important gathered foods were in the diet. However, the presence of the concentration of nutshells in feature 84 suggests that they were a valued source of nutrients. This is often considered to be the case in rural settlements, where access to luxury imported goods was more restricted.

Legumes are also likely to be under-represented in charred assemblages, so the high occurrence of horse beans and presence of a few peas in the Saxon samples suggests that they played an important role in providing a protein-rich food. Peas and beans were only positively identified from single samples from the Early Medieval phase. As indicated earlier, it is difficult to tell how much this is due to the chance-nature of preservation by

charring from these few samples. However, in general, Saxon sites more frequently produce concentrations of legumes, e.g. mineralised peas fragments from a cess pit at Abbots Worthy, Hampshire (Carruthers, 1991), suggesting that the importance of this element in the diet may have decreased once imported goods and orchard crops became more widely available.

Leguminous crops may have been grown on a field or garden scale, as might cultivated flax (*Linum* cf. *usitatissimum*). A single cf. flax seed was recovered from the Saxon sample 13/98. Flax is frequently found on Saxon sites, particularly if waterlogged deposits are present. Flax retting waste was recovered from 10th - 11th century waterlogged samples from Trench 5 (St James' Square; Robinson, 1983), demonstrating that it was cultivated locally in Late Saxon Northampton.

COMPARISONS WITH OTHER SITES

Because of the variation in the samples from Woolmonger Street, it is not easy to make a general comparison with other sites. The less productive samples were similar to many Saxon and Medieval assemblages in containing primarily mixed cereals (mainly wheat) with some weed seeds. The vast concentration of well-preserved grain from the Saxon destruction layer is difficult to compare with other sites because it is a single, large deposit and so may not be typical of the period. Some large assemblages were recovered from Late Saxon features in Daventry (Carruthers, 1998) but even so, these contained concentrations of less than 5% of the charred remains from Woolmonger Street. All of the Saxon and Medieval samples produced predominantly wheat, and rye was never greater than 3% of the identifiable cereals. The samples from Daventry were very uniform, and the absence of other types of charred waste indicated that they represented the large-scale processing of crops in the area over a number of years. Cultivated flax, horse beans and possible peas were present, but in very small numbers. Hedgerow fruits and nuts were also very poorly represented, with single occurrences of hazelnut shell, elder and wild strawberry.

Previous excavations in Northampton (Robinson, in Williams & Farwell, 1983) have provided some information about the Late Saxon environment. Excavation in Woolmonger Street Trench 5 (St James' Square) revealed wet but not marshy conditions. As noted above, waterlogged deposits provided evidence for flax retting, and the usual mixture of charred cereals was recovered. The range of arable weed seeds was similar to that from Woolmonger Street, with corn cockle, stinking mayweed and some indicators of acidic soils present.

SUMMARY

The charred assemblages from Woolmonger Street, Northampton, were similar in their overall composition to most Saxon and Medieval assemblages, i.e. most of the samples contained primarily cereal grains from wheat, barley, oats and rye, with a few arable or disturbed ground-type weed seeds. However, several of the samples were notable for a variety of reasons. The late Saxon destruction layer (15/32 - 13/98) contained particularly high concentrations of well-preserved grain, and this was primarily rye which was badly contaminated with corn cockle. A large number of horse beans and a few peas were also present. The watching brief sample (pit 43, late Saxon/early medieval) contained crop processing waste, providing evidence for the cultivation of both bread-type and

ivet-type wheat, as well as smaller amounts of barley, oats and rye. Three features (192, 266 & 351) produced assemblages that were very similar in composition, suggesting a possible relationship between them. The hearth-pit 13/84 contained a large quantity of charred hazelnut shell, giving evidence for the importance of this wild food source. The reason why relatively few samples produced such a wide range of evidence is that in general, the charred remains were well-preserved, when compared with assemblages from many urban and rural sites of this period.

DISCUSSION

Within the Woolmonger Street development, part of the street frontage and rear plots was archaeologically excavated, part was covered by a watching brief during groundworks and part was the subject of a preservation strategy. However, enough area was the subject of detailed investigation for the project to contribute greatly to the study of the origins and growth of both the street and the wider town of Northampton.

SETTLEMENT ORIGINS

The received model for the birth of the town is that which resulted from excavations of high status middle Saxon Palaces and associated remains around St Peter's Church (Williams 1979; Denham et al 1985). Further middle Saxon remains of lesser status and size have been found in a wider arc at Black Lion Hill (Shaw 1985), Marefair (Williams 1979), Chalk Lane (Williams and Shaw 1981) and at Gregory Street (info. in archive). In synthesising the topographic data, firstly Williams (1982) and later Foard (1995) have postulated that the original middle Saxon core was small in area, close to the "Palace" site beneath and adjacent to St Peter's Church. Recent excavations at Green Street have perhaps reinforced this picture of a concentrated middle Saxon core with thinner occupation further out, particularly at Green Street where middle Saxon occupation was limited to pottery in a buried soil, but (in common with Woolmonger Street) with no features present (Chapman, forthcoming).

While there is no evidence at Woolmonger Street for middle Saxon settlement origins, there is evidence of earlier Anglo-Saxon occupation in the eastern plot north of the road, perhaps in the 6th century (Trenches 10, 11 and 12). However, a high degree of later damage to relevant early-middle Saxon features means that their detailed interpret-

ation is inadvisable. Of intrinsic interest, however, is the apparent high status of the finds of this date (although many are residual), particularly the fragment of a glass Claw Beaker and a fragmentary equal-armed brooch, probably both of the 5th-6th century (Hylton, above). Continued occupation through the middle Saxon period is attested by the presence of very small quantities of pottery of this period, although residual in later features. Almost all of the early-middle Saxon evidence lies north of the street. On one hand, this may be a result of actual settlement dynamics, following Williams' and Foard's arguments for a small concentrated origin around the "Palace" site; on the other hand it may reflect the disproportionate level of archaeological intervention between the two sides of the street in the current programme of 1994-7. This seems most plausible as transitional Maxey/St Neots type pottery (formerly S3/T1) of the middle-late Saxon period was also present (but residual) in basal deposits in Trench 5 dating to the period 850-950 (Denham, V., *The Pottery*, in Williams and Farwell 1983, 147). Thus more middle or middle-late Saxon remains may exist downslope, buried beneath the hillwash and soil buildups (and now the car park), unaffected by development thanks to the preservation strategy for the site.

SETTLEMENT LAYOUT

The late Saxon remains constitute the earliest interpretable remains on the site. The cellared buildings were of a type seen elsewhere, particularly at Chalk Lane in Phase 3A (Williams and Shaw 1981, 96-106 and fig 6) and, to a lesser extent, at St Peter's Street and St Peter's Gardens (Williams 1979, 92-5; Williams et al 1985, 43-4), although at these other sites the remains were termed sunken-featured or sunken-floored buildings.

It was noted at Chalk Lane and St Peter's Gardens that the settlement pattern comprised these and posthole buildings "*somewhat irregularly disposed with no signs of formal planning*" (ibid 43-4). If set against the later road alignments, this is certainly true and it is equally so at Woolmonger Street where the setting of the buildings of this period (Phase 2a) are eccentric to both the Street and the buildings of the succeeding phase (2b). They might not, however, be considered eccentric to the course of the more major thoroughfares which gave birth to Gold St/Marefair and Horsemarket/Horseshoe Street (formerly Lane).

This lends further credence to the idea of a planned rectilinear settlement pattern at the establishment of the *burgh* in the early 10th century, last advanced by Foard (1995, 111-2). The absence of a discernible track to relate to the Phase 2a building remains at Woolmonger Street is not problematic as all of the linear features found elsewhere across the site (Trenches 3 and 12: Phase 2a) lie either parallel or perpendicular to the Gold St - Horseshoe Street plan. In addition the succeeding building remains and linear features (Trenches 3, 6, 7, 8, 14: Phase 2b) which lie along the putative Lewnys Lane course, predate the laying out of the curving Woolmonger Street as we know it but are, more importantly, aligned parallel or perpendicular with Gold Street to the north. In addition, if the line of "Lewnys Lane" is projected eastward it may be seen to link with Angel Street, one of the Norman streets of the new Borough planned soon after the conquest (ibid 113-4); a similar (but very tentative) projection of the series of linear gullies (whether structural or boundary) at the south end of Trench 3 in phase 2a makes a corresponding link with the line of St John's Street, the old Three Potts Lane, another of the Norman planned Streets (op cit.).

The association of the medieval building remains south of Woolmonger Street with Lewnys Lane, documented from the time of Edward I to Henry VIII is perhaps equivocal. In its favour is the description that the lane lay open to Woolmonger Street (at one end) in 1504 and opened to the Vinter capital tenement on Kingswell Street (at the other end; see documentary report, above). No other candidates seem better qualified to be identified as Lewnys Lane on the basis of available evidence.

An alternative scenario depends upon a different interpretation of the documents which would see Lewnys Lane aligned north-south, running from Woolmonger Street parallel with Kingswell Street. (Mike Shaw pers comm). This would see the former east-west line deduced from excavation as simply an early line of Woolmonger Street, not to be associated with Lewnys Lane at all. This seems an equally plausible possibility. While the building remains were constructed in Phase 2b, they may well have continued in existence for much of the medieval period as suggested by continued pit-digging between the buildings and Woolmonger Street.

The building remains of Phase 2b related closely to the line of Woolmonger Street which had persisted to the present. The axes of the building in the Western

plot at this Phase differed considerably from that in the preceding phase, having been swung around by up to 30°. Similarly, the linear alignments of Phase 2a remains in the eastern plot was perpendicular to Gold Street, in contrast to the phase 3 building in that plot which respected the new Woolmonger Street frontage, a swing of up to 45°. The dating evidence from the western plot, particularly from a coin in Trench 13, indicates that the new buildings, and thus by implication the new road layout also, was in existence by c1074-7. The absence of proper phase 2b buildings in the eastern plot seems to imply that there was no proper frontage at that point, but that the road had only swung to its eventual eccentric arc as part of phase 3, whereupon the stone buildings there were constructed from about the middle of the 13th century.

The consolidation of Woolmonger Street as a metalled thoroughfare ought not to predate c1250, as the metalling remains in Trench 16 clearly relate to the Phase 3 stone building in the western plot north of the Street, built about the middle of the 13th century. While no metalling survives in the eastern plot, the layout of the Phase 3 stone buildings are clearly based on the consolidated Woolmonger Street alignment. Despite a dearth of building remains on this plot from Phase 2b, what does survive seems to relate equally closely to this frontage, suggesting that there too the new Woolmonger Street line was in existence during that phase.

The density of occupation along what became Woolmonger Street is very varied. It is possible that the nearby line of Lewnys Lane divided any potential pressure for development in the immediate area, or that the proximity of Gold Street and Kingswell Street/Bridge Street, as bases both for living and commerce were more attractive prospects. Whatever the reason, there is considerable evidence that the frontage of Woolmonger Street on its eventual line was never fully developed. Excavation has shown that at any point, discernible buildings were constructed with their long axis along the road, rather than end-on, just as at St Peter's Street (Williams 1979). Comparison with St Peter's Street, however, shows Woolmonger Street to have been less densely developed as no structures were put up against the ends of the buildings to form a terrace. Similarly no building was ever erected in the area neighbouring the phase 3 building in the eastern plot, it merely remained a yard or garden containing rubbish pits. Elsewhere along the Street, there was too much

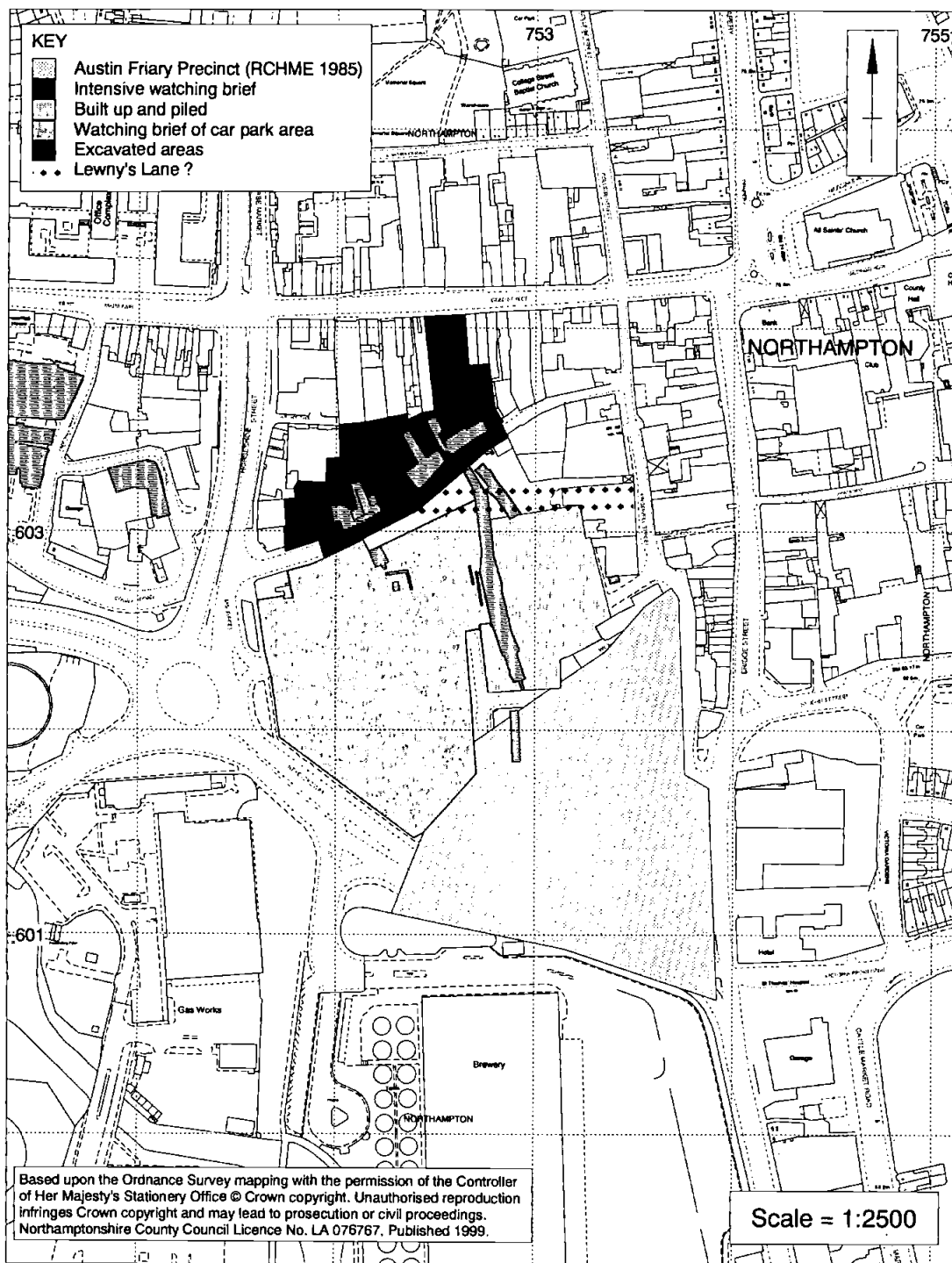


Fig 19 GIS map showing proposed east-west course of Lewny's Lane: a part of the late Saxon *burgh*? Austin Friary Precinct shown after RCHME (1985), (1:2500).

damage from later cellars to be sure that this picture continued without break, but it seems that at some points there existed buildings (e.g. Trenches 3 and 14), while at others none were built (e.g. Trench 2).

CULTURAL INFLUENCES AND TRADE

Material evidence of the occupation of Northampton by the Danes in the 10th century has often been sought in the artefactual assemblages of local excavations. At St Peter's Street there was recovered an Irish bronze shrine mount, said to be found mostly as spoils of war on Anglo-Scandinavian sites (Williams 1979, 254 and fig 109). At Chalk Lane three Edmund Memorial pennies minted by the Danish administration were recovered, which also helped to date the Phase 3A remains there, while from the same site there was an animal-head terminal with Urnes-style decoration (Williams and Shaw 1981, 102-6; 122-4). At St Peter's Gardens an Anglo-Scandinavian sword pommel was recovered which had Borre style decoration (Goodall, A.R., *The non-ferrous metal objects* in Williams et al 1985, 66-7).

The Borre style strap end from Woolmonger Street Trench 13 is of 10th century date and may be described as Anglo-Scandinavian (Hylton, above). It adds weight to the continued search for evidence of Saxon cultural exchange with, or influence by, the Danish occupying forces in that period.

In addition, the occurrence of Carolingian pottery at Woolmonger Street lends greater credence to arguments for northern French influence in Northampton in the 10th century (Denham, V., *The late Saxon wares* in Williams et al 1985, 56-7). All other major imports are of a regional nature and indicate that Northampton's trade routes certainly looked eastward, as Gryspeerdt has suggested previously (Gryspeerdt, M., *The Pottery* in Williams and Shaw 1981, 110).

The appearance of a corrupted version of the name Llewellyn associated with a workshop suggests that a Welshman lived and worked (note the 'workshop' reference) at the end of the lane which bore his name in the 13th century. His trade is unknown and in the absence of further details no specific Welsh trade links can be postulated..

INDUSTRIAL AND CRAFT ACTIVITIES

It is worth remembering that the documentary record

for Woolmonger Street and Lewnys Lane is quite detailed in either specifying or implying the presence of a number of trades at any period. For the 17th and 18th centuries it cannot be enhanced by the excavated evidence.

There is, perhaps, a surprisingly long list of trades plied along the street. Few are remarkable in Northampton, but there is only minimal overlap between the documentary and material evidence. This may be due to the fact that the majority of the trades for which material evidence does exist appeared on the site at a time which is largely undocumented. Further trade-evidence may lie beneath the area covered by the preservation strategy.

One hiatus in all the evidence is that nothing corroborates the name of the street, that of *Vicus Lanatorum*, the Street of the woolmongers or wool sellers. It may be that if some or many of the earliest medieval inhabitants along the new thoroughfare made their living selling fleeces or woollen cloth from the monastic and secular estates of Northamptonshire, then it would be during the 12th-13th century particularly (Phase 2b), when sheep farming was increasing rapidly, particularly as a result of Cistercian Grange farming. It was at this period that the street probably acquired its name. Indeed it was certainly so-called by the early 13th century. In 1202 Northampton, Leicester and Winchester paid the crown a fee of £10 to be free from cloth assizes. Only Lincoln, York and Beverly (serving the vast monastic estates of Lincolnshire and Yorkshire) paid more. Apparently there had been more than 300 weavers in the town (Williams 1982, 30).

It is doubtful whether the act of selling wool would leave any material evidence - although woosack seal matrices, attached to bales of fleeces or bolts of cloth, are occasionally found near sale/manufacturing centres, such as at Coventry (Rylatt and Soden 1991, 75); it may be that where wool could be bought in bulk, perhaps at cost price, there too might the weavers congregate to manufacture. This could explain the presence of (potentially) both cloth- and tapestry-weavers from numerous pin-beaters, spindle-whorls and a loomweight found in phases 2b and 3. However, there must remain the possibility that such items represent no more than household-based handicrafts with no mercantile purpose whatsoever. It is curious however, to see a weaver, a draper and two mercers in the documentary record for the Woolmonger Street area.

Table 13: Evidence for trades or craft activities in Woolmonger Street and Lewnys Lane

Documentary evidence	Date	Archaeol. Evidence (Trench no)	Date/phase
		Flax retting (Tr5)	C10-11/2a
		Crop processing (Tr13,15,16)	C10-11/2a
		Antler working (Tr3, 13)	C11-13/2b
		Bone working (Tr12)	C11-13/2b
		Tanning (Tr5, 12, 13)	C11-13/2b
		Skinning/Tanning (Tr13)	C11-13/2b
		Metalworking (Tr10, 13)	C11-13/2b
Clerk (Clyve)	C13	Literacy (parchment prickers Tr12)	C13-14/3
		Tanning (Tr 13)	C13-15/3
Vintner (le Vyneter)	C13		
Weaver (Podder)	-1462	Weaving (?tapestry pin beaters Tr13); (spindlewhorls Tr12); (loomweight Tr10)	C11-15/2b-3
		Gardening (Tr16)	C15-16
Sadler (Willow)	c1462-1504		
Stabling (Woodward)	1545		
Draper (Spriggy)	c1389-1402		
Mercer (Edwardes, Knottyngye, Bykyrston)	c1469-1504		
Fletcher (Hull, Smith)	1504	Archery (arrowhead Tr14)	C13-16
Alehouses	C16		

An apparent decline in the weaving or woollen cloth trade in the 13th century may have precluded the continued deposition of further evidence for these trades in any one place. At a Royal inquisition in 1275 inequalities in the application of mercantile tolls were blamed for a recent exodus of fullers, weavers, dyers, drapers, glovers, skinners and others. It was reported to have been of detriment to the entire town (Williams 1982, 31). By 1334 Northampton's wealth was in serious decline. It is of interest that this period saw the documented rise of immensely successful woollen cloth manufacture and trade at nearby Coventry (Fox 1947, 50ff).

DOMESTIC ARRANGEMENTS AND THE
STATUS OF HOUSEHOLDS C.1100 - 1500 (FIGS 20, 21)

PHASE 2b

The house plans in phase 2a and 2b are unremarkable and too few similar examples have been excavated in the town to ensure that comparisons are known to reflect status variations. However, the faunal remains recovered in phase 2b in the western plot may provide a useful guide to the wealth of the household there. Martin Locock stated the following (in Soden 1990) upon analysing a bone assemblage from Coventry Castle (12th century):

"Medieval society was adept at the incorporation of social statements into everyday life and one of the main theatres of status was the feast (Kisban 1986, 4). As a result, it is possible to assess the status of a household by examining its diet. High status foods, restricted to wealthy landowners, included fresh fish and venison, followed by wild birds and rabbit and hare. The principle behind this set of values is that the best foods were those which required land, and were therefore indicators of status. Thus the ownership of fishponds or deerparks and the consumption of their products, was a means of displaying landholding (Dyer 1988). Rackham (1986, 125) has noted that venison was not available for purchase: access to it was restricted to those with land. The importance of this value-system is that it was accepted by all and had the effect of excluding the simply wealthy in favour of the landowners, and therefore bolstered up the prestige of rural, feudal nobility against the rich craftsmen and merchants of the towns."

This hypothesis was tested by Locock in a variety of site assemblages across a known spectrum of status, to provide an overview of 30 years of archaeozoology in Coventry (Locock, in press). It was brought to fruition in the analysis of an assemblage at the Royal Manor of Cheylesmore, just outside the town walls of Coventry and now in the modern city centre (Locock in Rylatt, Soden & Dickinson 1992, 49-54). Cheylesmore Manor was from 1328 the dower house of Queen Isabella, widow of the murdered Edward II. Her son, Edward III, was a frequent visitor. Reference is made once more to Locock (1992, 54):

"If this assemblage were examined in isolation, it would be interpreted as a high status rural site, with animal resources brought in from a wide area...with a significant element of food from hunting, fowling and fishing...Thus it would seem that the situation of the manor house, on the edge of the medieval town, with a park to the south, allowed it to operate a manorial economy similar to that of truly rural manors. The access to land, not available to others in Coventry, was displayed by the types of food land alone could provide: whole carcasses of cow, sheep and pig; deer and hare from hunting; rabbit from warrens; and fish and birds from rivers and

ponds. Any visitor to the manor house would have noted the contrast with the monotonous diet of the other townspeople and, to this extent, the cooking and serving of food for guests can be seen as a deliberate performance."

(Thanks to Martin Locock of Glamorgan Gwent Archaeological Trust Ltd for permission to quote verbatim from his reports).

The analogy with nearby Coventry is apposite because a similar spectrum of status is known in excavated sites which have parallels in Northampton.

At the Royal Manor of Cheylesmore the range of species at table is paralleled in the range excavated at the royal apartments at Northampton Castle (Mary Harman, report in archive), Coventry (baronial) castle bakehouse and ditch (Locock 1990), St Peter's Street (Williams 1979), Much Park Street, Coventry (Wright 1988) and Woolmonger Street. These sites are set out in the table below.

While this comparison is not exhaustive (fish species identification is not available for two of the Coventry sites, while the third recovered none), it can be seen that the pattern proposed by Locock for Coventry (including many other sites) begins to bear up in Northampton. A programme of monitored consistent sampling would enable more exact comparisons to be made within the town, but it would appear that on current (almost) like-for-like comparisons, even given inequalities of sampling strategy and varied retrieval rates for hand-picked examples, a varied diet at Woolmonger Street relied basically upon market-bought meat and fish, the former limited by exclusion from hunting land, the latter by access to salted or smoked sea-fish.

There are clearly exceptions but the range of meats and fish at table compare very poorly with their truly wealthy neighbours at the Castle but might be considered of similar status at this period (11th-13th centuries) to the inhabitants of the timber buildings in St Peter's Street.

PHASE 3

The recovery of well-preserved house plans on the north side of Woolmonger Street amongst the Phase 3 remains enables detailed enquiry into the use of space within the buildings and their individual plots.

As has been demonstrated above, considerable spatial analysis has been possible when dealing with

Table 14: A comparison of animal and Fish bones from 6 Medieval sites

Species	Site 1.	Site 2.	Site 3.	Site 4.	Site 5.	Site 6.
Cattle	*	*	*	*	*	*
Ovicaprid	*	*	*	*	*	*
Pig	*	*	*	*	*	*
Red deer	*	*	*		*	
F. deer		*	*			
Roe deer		*			*	
Rabbit/hare	*	*	*		*	
Squirrel					*	
Fowl	*	*	*	*		*
Goose	*	*	*	*		
G.N. diver			*			
Duck	*	*		*		
Swan		*				
Heron	*	*				
Crane				*		
Pheasant	*					
Partridge	*			*		
Dove		*				
Pigeon	*					*
Plover		*				
Woodcock				*		
Snipe		*				
Cod	?	*	?	*		*
Salmon	?	*	?			
Herring	?	*	?	*		*
Eel	?		?			*
Ling	?	*	?	*		
Ray	?		?		*	
Sea Bream	?		?		*	
Flatfish	?		?	*		*
Pike	?	*	?			*
Roach	?		?			*
Dace	?		?			*

Key to sites represented in table 14

1. BARONIAL (C13th) - ROYAL (C14th) Cheylesmore Manor, Coventry (13th-14th century)
2. ROYAL Garderobes of Royal apartments, Northampton castle (12th-13th century)
3. BARONIAL (12th) - CIVIC (13-14th): Castle Bake- house, Coventry (12th-14th century)
4. URBAN DOMESTIC: St Peter's Street, Northampton (Phase 5/Group 3 only: c1100-1400)
5. URBAN DOMESTIC: Much Park Street, Coventry (Phase 1 only: c1150-1350)
6. URBAN DOMESTIC: Woolmonger Street, Northampton (Phase 2b only: c1074-1250)

the pottery from within and just beyond the houses, lacunae being filled and the data enhanced on occasions by study of the pit groups behind them.

With the clear separation of one room and its assemblages from another comes the question of function and use of each room. While this can be an end in itself, enquiry can be taken further to elucidate aspects of medieval social hierarchy and mores. What constituted public, private and social space in the medieval home? How was privacy maintained? How was daily life dictated by access to heat or light? Might detailed layout reflect private aspirations? Enough work has been carried out since Eric Mercer's *English Vernacular Houses* (1975), to trace surviving medieval house plans in Northamptonshire (e.g. Woodfield 1981) and on similar spatial analysis elsewhere such as London (Schofield 1994), or - closer to Northampton - at Coventry (Wright 1988) and in Warwickshire (Alcock 1993, 1994) or Worcestershire (Field 1965) to begin to propose an occupation and development model for the Phase 3 dwellings on the north side of Woolmonger Street. Specific excavated but unpublished examples such as at West Cotton, Northamptonshire (Chapman, forthcoming) and Burton Dassett, Warwickshire (Palmer, forthcoming) have had degrees of spatial analysis applied.

NORTH SIDE OF THE STREET: WESTERN PLOT (FIG 20)

A house of probably one bay was constructed around 1250, replacing a much-altered timber structure which was perhaps 200 years old. The new structure measured approximately 11m x 5.5m externally (36 ft x 18ft), the walls of which were c0.7m thick at ground level. Internal measurements were therefore 9.6m x 4.1m (31'6" x 13'5"). This size is directly comparable with the coeval House 4 (phase 6A) at St Peter's Street (Williams 1979, 143; figs 30 & 77), the largest house in that excavation. The absence of any discernible internal partition in this example may be the result of a 19th-century sewer trench almost bisecting the building or may derive from the use of a timber soul-plate of which nothing survives, some division should perhaps be inferred. A hearth or site of a brazier at the west end of the block marks the focus of cooking activities and suggests the title of Hall for this block.

An extension to the west provided a second, smaller bay, the pottery from which is commensurate

with a Parlour function. The probable inclusion of a stair implies the creation of a first floor in what was previously a single-storey dwelling. It is not known what provision would have been made for the hearth although the inclusion of a fire-hood and chimney at the junction between the two areas would not have been difficult given the proximity of the hearth-scorching to the pre-existing load-bearing wall. The addition of the upper storey gave rise to the row of post-holes along the long axis of the old block. That they were not floored over indicates that they remained in place as supports and were not just dug for the remodelling works alone.

The extension from a single bay, single storey building to one in which a distinction between Hall and Parlour and two floors can be discerned defines a boundary between social and private space. In the Hall was carried out all entertaining and family activity; it also contained sleeping quarters originally. The creation of a parlour, often simply termed 'chamber' introduced a storage and sleeping area, with more storage and any further sleeping requirements probably being created upstairs in an upper chamber or 'solar'. The Hall remained as the centre of entertainment and family life. The study of inventories from Stoneleigh in Warwickshire has borne out the consistency of the basic functions of the named rooms from the medieval into the post-medieval period (Alcock 1994, 223).

It is not possible to do more than speculate on the changes in society which gave rise to the perceived need for greater segregation. Perhaps it is over-complicating the issue to imply an emerging need for social and private spaces to be segregated; rather it may simply be a wish or need to increase useful space, or the desirability of greater comfort in the home (Alcock 1994, 215).

NORTH SIDE OF THE STREET: EASTERN PLOT (FIG 21)

When in Phase 3 the buildings in the eastern plot were put up, the structure comprised two unequal bays, divided into Hall (7.5m x 4m internally; 24'8" x 13'1") and Parlour (5m x 4m internally; 16'5" x 13'1"), with all the implications for use of space outlined above for the western plot. Their remodelling to add stairs and an upper floor may similarly be a matter of aspiration to higher status or on a more mundane level just reflect a need for greater storage space or a wish for more comfort. Such innovations

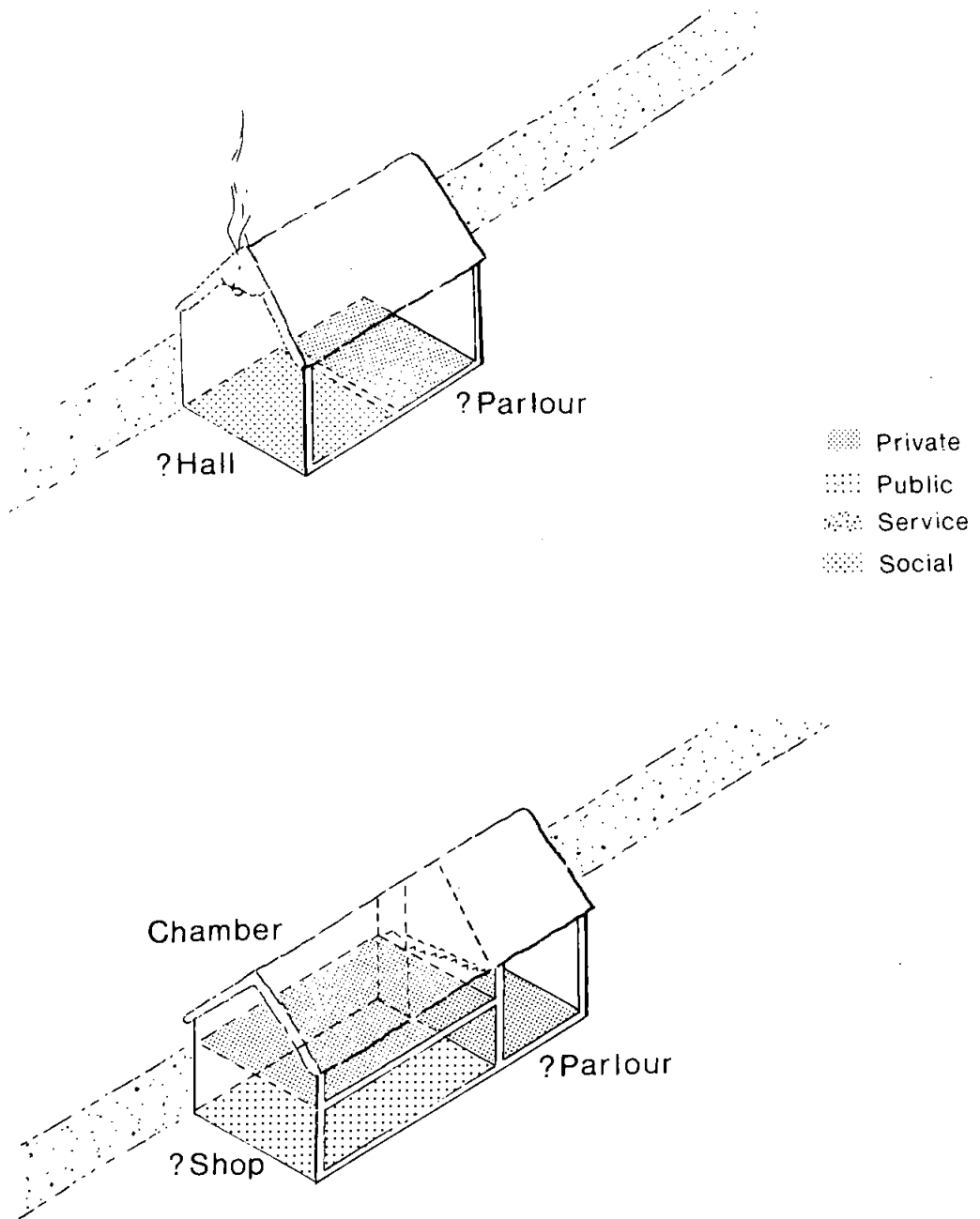


Fig 20 Reconstruction of changing spatial division in Phase 3 stone building in western plot (Tr 13/15/16 conjoined).

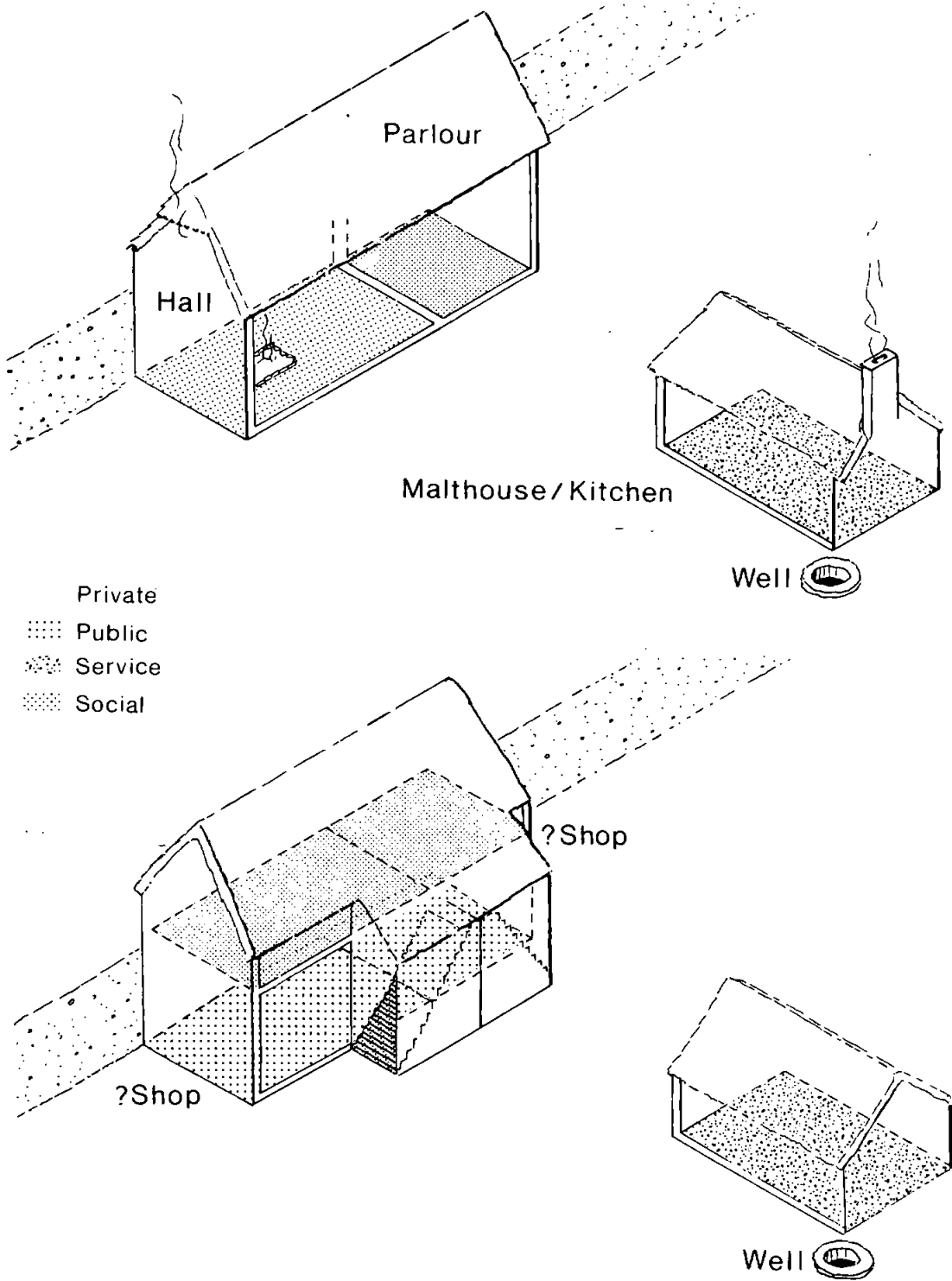


Fig 21 Reconstruction of changing spatial division in Phase 3 stone building in eastern plot (Tr 11/12 conjoined).

are common in late medieval London (Schofield 1994, 199) but are also suspected in rural villages such as Burton Dassett (Palmer 1987, 7 and forthcoming).

There are marked differences, however, when compared directly with the western plot at the time of remodelling, here dated to no earlier than the late 14th century from pottery on the Hall hearth which was floored over.

Here the stairs were not added within a new room, but placed within a purpose-built outshot at the rear of the building and comprised two flights back-to-back which allowed independent access to the two upper rooms (the number is presumed). This might imply that the social:private distinction between the existing ground floor Hall and Parlour before remodelling might have been carried upstairs also, the first floor similarly segregated on the same basis - Hall and Chamber above comprising social space, while the Parlour and Chamber above were private Space. While this is speculative, there remains a question as to why two stairs might be needed if there were some normal doorway link between upstairs rooms.

Another potentially compelling possibility, although speculative, is that the two parts of the building were actually subdivided into tenancies with no direct link at either floor. This implies the complete loss of the home's Hall:Parlour distinction and potentially the lease of the property for commercial reasons.

If the two parts became shops or similar (?stables: see will of John Bykyrston, above) on the ground floor with new storage/living space above, this would satisfactorily explain the loss of any ground-floor hearth. It also introduces the possibility of Public:Private space segregation with the Public ground floor accessible from the street but the Private first floor reached by private stairs from a private rear yard. Such a ground floor usage would also explain the pitifully small amounts of 15th century pottery associated with the ground floor of the main building - shops might not produce any, although the introduction of floorboards regardless of room use would have the same effect.

Given restricted internal space, these two units might best be served with cooking facilities by a separate building, which is just what was constructed in this phase. Although this was probably coeval with the Hall:Parlour period, it remained in use after the remodelling and might be seen as 'the common

oven', a term often applied where cooking facilities were otherwise limited.

The status of a Hall: Parlour: Kitchen complex would not necessarily draw comment as such layouts are not uncommon in either urban or rural situations. Such is found at West Cotton (Andy Chapman pers comm) and in London (Schofield 1994, 194, 200) and items such as detached kitchen blocks may have a basis in preventing house fires, always the scourge of the medieval town, as Northampton found to its cost in 1516 and 1675.

Neither would the subdivision of the buildings no earlier than the late 14th century draw comment but for the fact that within the destruction and robbing contexts at the end of the building's life is a fragment of painted wall plaster and eight fragments of window glass, two of them painted. If painted plaster is found in a domestic context it is normally associated with structures of some note. Similarly window glass was so expensive that even by the end of the medieval period generally only the wealthiest families could afford it, most making do with shutters and louvers. It is only from the 14th century that even monastic houses could begin to afford to have their cloisters glazed (Coppack 1990, 70). Many did not archive such luxury until the 16th century such as Norton, Cheshire, and the Austin Friars, Leicester, while others may never have been glazed (Green 1989, 150-1; Mellor and Pearce 1981, 44). Dissolution surveys in the 1530s took care to list glass carefully and even specify that buildings were unglazed (Coppack 1990, 66-8). The presence of such material suggests that at least part of the Phase 3 building in Woolmonger Street was glazed (whether installed in the Hall:Parlour period or new for the remodelled scheme) and implies the possession of actual wealth as the purchase of such material would be conspicuous; it implies aspiration to greater status.

The later 13th century also saw a nationwide burgeoning of types of pottery which are generally thought to imitate more expensive materials (green glaze = bronze patina). This can be said of Grimston-type ware, London-type ware, Nuneaton ware, Lyveden-Stanion ware, all found in relation to the phase 3 buildings. There is no implication here of enhanced status (as pottery is still clearly pottery, as distinct from bronze) but rather it infers aspiration to higher status (Duncan Brown, pers comm). In this lies an increased awareness of the hierarchies within society and a perception that ostentation to any degree may affect society's view of the individual. Changes in

dining habits were also contributing factors in the 14th century (Duncan Brown pers comm). In the 18th century this perception of place in society, climbing the social ladder, helped drive the spread of tea- and coffee-drinking, or at least the acquisition of tea- and coffee-wares which might imply that the owner partook of an expensive and fashionable pastime (David Barker, pers comm).

From ongoing work by the Museum of London, it can be said that a test of an assemblage's place in a hierarchy is the range of materials present, out of a list of possible examples: at the excavations of the site of the Royal Wardrobe in London came vessels of precious metals, bronze, pewter, iron, glass, pottery, leather and wood (Geoff Egan, pers comm). Although that site contained contexts with good preservation of organics, even an indirect comparison shows that the Woolmonger Street site (where no such organic preservation existed) compares poorly, with only bronze, glass and pottery represented (and only the last in any appreciable quantity).

Although care must be taken to remember the possibilities for reuse of metal objects and the capacity for melting down and recasting, it seems clear from the Royal Wardrobe that real status brought with it higher purchasing power; although some effort seems to have been made towards the conspicuous display of purchasing power, perhaps through a glazing scheme, in Woolmonger Street we see perhaps only aspiration to status.

CHANGE AND DECAY

The cycle of redevelopment which began with the destruction of the late Saxon formerly cellared buildings of Phase 2a turned twice more in the medieval period, at times when Northampton's fortunes are known to have fluctuated.

The destruction of the formerly cellared buildings can be placed around 1000 AD. An entirely speculative (and unsubstantiated) explanation for this destruction would be the conveniently-dated destruction of the town by the Danes in 1010 or in a later attack in 1065 (Williams 1979, 5). Corroborative evidence would need to be very clear indeed to substantiate such a theory as subsequent history shows that accidental fires could and did regularly ravage towns (Northampton in 1516 and 1675). Similarly fire is a very effective way to dispose of old and decrepit buildings which may not contain elements worth re-using. It is, however, more than

mere curiosity to note that at Chalk Lane a possible charcoal destruction layer was identified overlying phase 3A buildings (Williams and Shaw 1981, 100). Although it was only mentioned in passing, this may possibly be associated with earlier destructions of the 10th century (*ibid*, 102).

The replacement with timber buildings in Phase 2b has been seen to indicate a realignment and potentially reflect a new (Norman) urban organisation which imposed a more regularised street pattern and laid out regimented plots for occupation. During this phase the more extensive range of buildings in the western plot seem to have grown by a process of accretion, with many internal alterations as well. It is unfortunate that surviving structural remains of this phase were far less extensive in the eastern plot due to Phase 3 foundations. However what does survive appears not to relate to any housing fronting the street but rather comprised fencing and miscellaneous structures together with hearths and ovens. They may even lie within former Gold Street backages. The buildings south of the street probably relate to another thoroughfare, potentially that of Lewnys Lane and indicate that while the west end of Woolmonger Street had been fossilised (by use) by the 12th century, occupation further east was along a line which became Lewnys Lane (Fig 19).

In the 13th century the wealth which Northampton had acquired over the previous century or so had filtered down sufficiently for existing (and by now aged) buildings along Woolmonger Street to be replaced in stone. In addition those in the eastern plot appear to be new plots set out along the entirely newly created frontage.

There is no hint at any other reason for the replacement of the buildings in the western plot in stone other than fashion, perhaps borne out of aspiration. It may be that the phase 2b timber buildings were so old and decrepit as to need replacement, but the pattern of translation into stone at this time reflects findings elsewhere in the town, such as at St Peter's Street (Williams 1979).

Remains directly opposite show that buildings were erected for the first time on both sides of the road although, as has been seen, in no great density. It may be that those already existing on Lewnys Lane continued in use but that lane seems to have been largely subsumed and documentary evidence shows it to have been stopped up at the east before 1504. One possible reason for its reduction to a cul-de-sac

and the new eccentric alignment of Woolmonger Street may have been the settlement of the Augustinian Friary Precinct to the south-east and the need to skirt it with the road system, both as a matter of secular expediency and preservation of the Friars' privacy. Such a diversion and the gift of land to establish the Friary probably went hand-in-hand and we may infer single ownership of much of the land south of Woolmonger Street. Whether Lewnys Lane ran east-west or (in Shaw's interpretation, north-south) the establishment of the Friary could cause its blocking most effectively. Most commentators have dated the foundation of the Friary to 1322 (VCH III; Serjeantson 1911) which would preclude the idea of moving Woolmonger Street specifically for the Friars. However this date was noted by Cox as merely received wisdom (1898, II, 523) and refuted it, alluding to deeds which refer to the Augustinian house as being in existence in 1275 and 1290. If already founded by 1275 then its foundation might not appear in Royal records since it would predate the Statute of Alienation in Mortmain (1279) which required crown ratification for all grants of land to monastic houses. Clearly the Friary was hungry for land (its rule forbade the ownership of any which was not physically attached to the precinct) and seven subsequent enlargements were recorded between 1330 and 1380 (Serjeantson 1911, 71-3). Some doubt remains as to the exact position of the Friary Church and conventual buildings which appear to have been close to Bridge Street (v RCHME 1985, 49: fig 7; v Fig 19). Serjeantson (*ibid*) placed them further west, under what became Rowkes Muckhill (in his day Augustine Street). The precinct, however was much larger and could only spread north and west, constrained as it was by Bridge Street on the east and the River Nene and town wall to the south. The effects of the Friary foundations upon the surrounding and pre-existing street patterns are known from elsewhere to have been on occasion profound (e.g. Norwich). But the Austin Friars' foundation at Northampton (along with the other mendicant foundations) came at a time when Northampton was in a period of decline and as a result the press for land from other quarters may not have been great allowing a smooth passage for alteration to the existing townscape. A similar welcome for such, perhaps unexpected, regeneration can be seen in the foundation of the Dominican Friary at Chester c1236-8, where derelict land was utilised, again up against the town walls (Ward 1990, 23).

NORTHAMPTON'S SAXON TOWN DEFENCES

Since the end of fieldwork at Woolmonger Street, the Saxon town defences have been identified for the first time, at Green Street on the west of the town (Chapman, this volume). It was the intention of the Woolmonger Street excavations to establish the southern arc of their circuit, for which reason the 110m-long evaluation trench (Trench 3) was dug. Their absence in the trench indicates that they probably lie further to the south, possibly at the edge of the flood plain of the River Nene. The analysis of the soil micromorphology of basal deposits in Trench 3 indicates that the area was the subject of much activity just prior to the late Saxon period, surely evidence for the area's early inclusion in the late Saxon town. At Green Street, their line was at least in part re-utilised by the 12th century medieval defences, where the proximity of the river was a similar contributory factor, probably both for engineering and defensive considerations. It may be that this 12th-century re-use of the early 10th-century defensive line extends right around to the gate at Bridge Street encircling the area which became the precinct of the Austin Friars and pushing their expansion north and west.

TEXTUAL REFERENCES

- PRO SC 12/13/28, Rental of crown property, Edward I, 1272-1307)
 NRO NBC Records: 29, rental of crown property, 1504; 50, 51, 86, deeds, 1460-1618.
 NRO Early Wills: fo 7R no 10, p35 John Podder 1462; fo17R p53 Ric Knottynge 1475; fol 4 will I John Bykyrston.
 NRO First assembly book of Northampton. Topo index: 517, 554, 567, 568, 572, 595, 827 (1597-1621).
 NRO Deeds: YZ 5070 (1635); NPL 425 (1644); NPL 454 (1677); NPL 107 (1684); XYZ 1373 (1684); NPL 1293 (1685); NPL 2216 (1696); NPL 1202 (1697); BrW 70-81 (1697-1743); ZA 9824/13-16 Abstracts (1716-1814); YZ 5269 (1742).

BIBLIOGRAPHY

- Alcock N.W., 1993 *People at home: living in a Warwickshire Village 1500-1800*. Phillimore, Chichester.
 Alcock N.W., 1994 Physical space and social space: the interpretation of vernacular architecture, in Locock M. (ed), *Meaningful Architecture: Social interpretation of buildings*, Worldwide Archaeology Series 9. 207-30.
 Armitage, P.L., 1977 *The Mammalian Remains from the Tudor Site of Baynard's Castle, London: A Biometrical and Historical Analysis*. Ph.D. Thesis: Royal Holloway College, London & British Museum (Natural History).

- Armitage, P.L., 1982 A system for ageing and sexing the horn cores of cattle from British Post-Medieval sites (17th to early 18th century), in B Wilson, C Brigson, and S Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, 37-54.
- Armitage, P.L., and Chapman, J., 1979 Roman Mules, *The London Archaeologist* 3 (No. 13); 339-46, 359.
- Armitage, P.L., and Clutton-Brock, J., 1976 A system for classification and description of the horn cores of cattle from archaeological sites. *Journal of Archaeological Science* 3; 329-48
- Ayers, B. 1985 *Excavations within the North-East Bailey of Norwich Castle, 1979*, East Anglian Archaeol Rep. 28
- Beresford, G. 1987 *Goltho: The development of an early medieval manor c. 850-1150*, English Heritage Archaeological Report No 4.
- Blinkhorn P., (1998) 'The Pottery' in Soden I. (1998).
- Blinkhorn P., (forthcoming) 'The pottery' in Chapman A. (forthcoming).
- Boardman, Sheila & Jones, Glynis, 1990 Experiments on the effects of charring on Cereal Plant Components. *Jour. Arch. Sci.* 17, 1-11.
- Boessneck, J., Müller, H.H., and Teichert, M., Osteologische Unterscheidungsmerkmale zwischen Schaf (*Ovis aries* Linné) und Ziege (*Capra Hircus* Linné). *Kühn-Archiv* 78 1 - 129.
- Bourdillon, J.M 1980 Town life and animal husbandry in the Southampton area as suggested by the excavated bones *Prox. Hants Field Club Archaeological Society* 36; 181-91.
- Brears P.C.D. 1970 *The English country pottery: its origins and traditions*
- Bull, G., and Payne, S., 1982 Tooth eruption and epiphyseal fusion in pigs and wild boar. In B. Wilson, C. Grigson, and S. Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, 35-71.
- Carruthers, W.J., 1991 The plant remains, in P.J. Fasham & R.J.B. Whinney, *Archaeology and the M3*, Hants Field Club Mono. 7, 67-75.
- Carruthers, Wendy, 1994 Charred Plant Remains, in J.M. Lewis, *Excavations at Loughor Castle, West Glamorgan 1969-73. Arch. Cambrensis* CXLII, 173-7.
- Carruthers, Wendy (unpublished) Charred plant remains from the Medieval farmstead at Eckweck, Avon. Ancient Monuments Laboratory Report Series.
- Carruthers, Wendy J. (unpublished) Charred Plant Remains from Le Pinacle, Jersey.
- Carruthers, Wendy J. (forthcoming) The Southern Hebrides Mesolithic Project: Charred Plant Remains from Staosnaig.
- Carruthers, Wendy J. (1998) Charred Plant Remains in Soden I., 1998 Saxon and Medieval settlement remains at St John's Square, Daventry, Northamptonshire, *Northamptonshire Archaeology* 27, (1996-7), 85-91.
- Carruthers, Wendy J. & Hunter, Katherine (in progress) The plant remains from Saxon & Roman West Heslerton, Yorkshire.
- Chaplin-R.E., J., 1971 *The Study of Animal Bones from Archaeological Sites*
- Chapman A., (forthcoming), *Excavations at West Cotton, Northamptonshire*, English Heritage Monograph.
- Chapman A., (forthcoming), *Excavations on Green Street, Northampton, Northamptonshire Archaeology*.
- Clutton-Brock, J., 1976 The animal resources in D.M. Wilson (ed.) *The Archaeology of Anglo-Saxon England*, 373-92.
- Clutton-Brock, J., Dennis-Bruan, K., Armitage, P.L., and Jewell, P.A., 1990 Osteology of the Soay sheep. *Bulletin British Museum (Natural History Zoology Series* vol.56 (No. 1); 1-56.
- Cohen, A., and Serjeantson, D., 1986 *A Manual for the identification of Bird Bones from Archaeological Sites*.
- Coppack G., 1990 *Abbeys and Priors*. London, Batsford and EH
- Cox J.C., 1898 *The records of the Borough of Northampton*.
- Cracknell S. and Bishop M.W., 1992 *Excavations at 25-33 Brook Street; Warwick, 1973. Trans Birm. Warws. Archaeol. Soc.* 97 (1991-2), 1-40.
- von den Driesch, A., 1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Volume 70 (No. 3); 289-312.
- Denham V., 1985 'The Saxon pottery', in Williams *et al* 1985, 46-62.
- Dent, A., 1972 *Donkey, the story of the Ass from East to West*.
- von den Driesch, A., and Boessneck, J., 1974 Kritische Anmerkungen zue Wideristhöhenberechnung aus Langenmasse vor- und Frühgeschichtlicher Tierknochen. *Saugetierkundliche Mitteilungen* 22; 325-348.
- Desse J, Desse-Berset N and Rocheteau M., 1987 Contribution a l'osteometrie de la perche. *Fiches D'Osteologie Animal pour L'Archeologie*. Series A: Poissons No. 1 Centre de Recherches Archaeologiques du CNRS. APDCA Juan les pins.
- Dyer C., 1982 The social and economic changes of the later middle ages and the pottery of the period, *Medieval Ceramics* 6, 33-42.
- Dyer C., 1988 The consumption of freshwater fish in medieval England, in Aston M.A. (ed) *Medieval fish, fisheries and fishponds*. BAR 182, I, 27-35.
- Egan, G. and Pritchard, F. 1991 *Dress Accessories c.1150-c.1450*, Medieval finds from excavations in London, 3, HMSO
- Ellenberg, Heinz, 1988 *Vegetation Ecology of Central Europe* (4th Ed.) Cambridge University Press.
- Evans, D H. and Tomlinson D G. 1992 *Excavations at 33-35 Eastgate, Beverley, 1983-86*, Sheffield Excavations Rep, 3
- Fairbrother, J P. 1990 *Facombe Netherton: Excavations of a Saxon and medieval manorial complex, II*, British Museum Occ Pap, 74
- Field R.K. 1965 Worcestershire peasant buildings, household goods and farming equipment, *Medieval Archaeol.* 9, 105-45.
- Foard G., 1995 The early topography of Northampton and its suburbs, *Northamptonshire Archaeology* 26, 109-22.
- Foreman, M. 1992 Objects of bone, antler and shell in Evans and Tomlinson 1992, 163-74
- Fox L., 1947 *Coventry's Heritage*.
- Fretton W.G., 1891 *Memorials of St Mary's Hall, Coventry. Transactions of the Birmingham and Warwickshire Archaeological Society*.
- Getty, R., (ed.) 1975 *Sisson and Grossman's Anatomy of the Domestic Animals*. Fifth edition.
- Godwin, Sir Harry, 1975 *The History of the British Flora*. 2nd Edition.
- Goodall, I H, 1984 *Iron Objects in Rogerson and Dallas* 1984, 76-106
- Green, F.J., 1979a Medieval Plant Remains: Methods & Results of Archaeobotanical Analysis from Excavations in Southern England with especial reference to Winchester & Urban Settlements of the C10th - C15th. Unpublished .M Phil. Thesis, University of Southampton.
- Green, Francis J., 1979b Phosphate Mineralisation of seeds from Archaeological Sites. *J.A.S.* 6, 279-284.
- Greene P., 1989 *Norton Priory: the archaeology of a medieval religious house*.

- Grigson, C., 1982 Sex and age determination of some bones and teeth of domestic cattle: a review of the literature. In B. Wilson, C. Grigson and S. Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, 7-23.
- Gryspeerd M., 1981 'The pottery', in Williams 1981, 108-118.
- Gryspeerd, M., 1981 'The Worked Bone', in Williams 1981, 130-2.
- Harcourt, R.A., 1974 The dog in Prehistoric and early historic Britain. *Journal of Archaeological Science* 1; 151-175.
- Hall, R. 1990 *Viking Age Archaeology in Britain and Ireland*, Shire Archaeology.
- Hillman, Gordon, 1981 Reconstructing Crop Husbandry Practices from Charred Remains of Crops in R.Mercer (ed), *Farming Practice in British Prehistory*.
- Hodges R., 1981 *The Hamwih pottery: the local and imported wares from 30 years' excavations at Middle Saxon Southampton and their European context*. CBA Research Report 37.
- Hopf, M., 1986 Archaeological Evidence of the spread and use of some members of the Leguminosae family, in C. Barigozzi (ed.) *The Origin and Domestication of Cultivated Plants. Devel in Agric. & Managed Forest Ecology* 16, Elsevier.
- Jacomet, Stefanie, 1987 *Prähistorische Getreidefunde*. Botanisches Institut der Universität Abteilung Pflanzensystematik und Geobotanik, Basel.
- Jones, G.G., 1983 The medieval animal bones. In D. Allen and C.H. Dalwood (eds.) *Iron Age occupation, a Middle Saxon cemetery, and twelfth to nineteenth century urban occupation: excavations in George Street, Aylesbury, 1981*, *Records of Bucks* 25, 31-49.
- Kilmurry K., 1980 *The pottery industry of Stamford, Lincolnshire, AD 850-1250*, BAR 84.
- Kisban E., 1986 Food habits in change: the example of Europe, in Fenton A., and Kisban E. (eds), *Food in change: eating habits from the middle ages to the present day*, 2-10.
- Lawson, G. 1995 Pig Metapodial 'Toggles' and Buzz-discs - Traditional Musical Instruments, *Finds Research Group 700-1700, Data Sheet 18*.
- Locker A., 1985 The fish Bones, in Shaw, M., Excavations on a Saxon and Medieval Site at Black Lion Hill, Northampton. *Northamptonshire Archaeology* 20., 137.
- Locock M., 1990 The animal bones, in Soden I., *Excavations in Hay Lane 1989-90*. Coventry Museums Report.
- Locock M., 1992 The animal bones, in Rylatt M., Soden I., and Dickinson J.E., *Cheylesmore Manor: excavations 1992*. Coventry Museums report.
- Locock M., in press, Animal bones and the urban economy: 30 years of archaeozoology in Coventry. *Proc. Osteoarchaeological Research Group*.
- MacGregor, A 1985 *Bone Antler Ivory and Horn: The Technology of Skeletal Materials since the Roman Period*.
- MacGregor, A 1987 Objects of bone and antler in Beresford 1987, 188-193.
- Mayer, J.J., and Brisbin, I.L., 1988 Sex identification of *Sus scrofa* based on canine morphology. *Journal of Mammalogy* 69 (2); 408-12.
- Margeson, S and Williams, V. 1985 Objects of bone and antler in Ayers 1985, 44-47.
- McCarthy M.R., 1979 'The pottery', in Williams 1979, 151-240.
- McCarthy M.R. & Brooks C.M., 1988 *Medieval pottery in Britain 900-1600*.
- Mellor J.E. and Pearce T., 1981 *The Austin Friars, Leicester*, CBA Research Rep. 35.
- Mercer E., 1975 *English vernacular houses*.
- Moffett, L., 1991 The archaeobotanical evidence for free threshing tetraploid wheat in Britain, in Ing. Eva Hajnalová (ed), *Palaeoethnobotany and Archaeology*. Acta Interdisciplinaria Archaeologica VII, 233-243.
- Moffett, L.C., 1987 The Macro-Botanical Evidence from Late Saxon and Early Medieval Stafford. Unpublished Ancient Monuments Laboratory Report Series 169/87
- Moorhouse M., 1988 'Pottery vessels in the medieval kitchen' in *The medieval kitchen and its equipment*, Papers presented to the Finds Research Group and the Medieval Pottery Research Group September 1987.
- Moorhouse M. & Wrathmell S., 1987 *Kirkstall Abbey I: The 1950-64 excavations: a reassessment*.
- Muratova, V., 1931 Common beans (*Vicia faba*) *Bull. Appl. Bot. Genet. Plant Breed. Suppl.* 50, 285.
- Murphy, P., 1985 The cereals and crop weeds, in S. West, West Stow: The Anglo-Saxon village Vol.1. *EAA*. 24, 100-108.
- Myres, J N L, 1986 *The English Settlements*. Clarendon Press, Oxford.
- Noddle, B., 1976 Report on the animal bones from Walton, Aylesbury. In M. Farley Saxon & Medieval Walton, Aylesbury: Excavations 1973-4. *Records of Buckinghamshire vol. XX Part 2*, 269-88.
- Oakley, G E. 1979 The worked bone in Williams 1979, 308-18
- O'Connor, T., 1982 *Animal Bones from Flaxengate, Lincoln c 870-1500* Lincoln Archaeological Trust, The Archaeology of Lincoln Volume XVIII-1.
- O'Connor, T., 1994 8th-11th century economy and environment in York. In J. Rackham (ed.) *Environment and Economy in Anglo-Saxon England*. CBA Research Report 89, 136-47.
- Palmer N., 1987 *Burton Dassett excavations*, Interim report.
- Parry S., and Webster M., 1994 Woolmonger Street, Northampton: Proposed retail development; Stage 3 - Further trial trenching, Northants Archaeol. Unit report.
- Payne, S., 1973 Kill-off patterns in sheep and goats: the mandibles from Asvan Kale. *Anatolian Studies* Vol. XXIII; 281-303.
- Pearce J., & Vince A., 1988 *A dated type-series of London medieval pottery; 4: Surrey Whitewares*.
- Perry J.G., 1996 'Nuneaton and later pottery' in Rylatt M. & Stokes M.A., 1996 *The excavations at Broadgate East, Coventry 1974-5*, 43-6. Coventry Museums Monograph 5.
- Perry J.G., (forthcoming) *Excavations in Derby Lane, Coventry 1982-4*, Coventry Museums Monograph.
- Rackham O., 1986 *The history of the countryside*.
- RCHME, 1985 *An inventory of archaeological sites and churches in Northampton*. Royal Commission on Historical Monuments England.
- Robinson, Mark, 1983 The Late Saxon Environment, in Williams J.H. & Farwell D., Excavations on a Saxon site in St. James' Square, Northampton, 1981. *Northants Archaeol.* 18, 150.
- Robinson, Mark & Straker, Vanessa, 1991 Silica skeletons of macroscopic plant remains from ash, in
- Roesdahl, E, (et al), 1981 *The Vikings in England* (exhibition catalogue) (London)
- Rogerson, A, and Dallas, C, 1984 Excavations in Thetford 1948-59 and 1973-80, East Anglian Archaeology Report No. 22
- Renfrew J., (ed.) *New Light on Early Farming*.
- Rylatt M. and Soden I 1991 Stray finds (principally from metal detection) from Warwickshire reported in 1991, *West Midlands Archaeology* 34, 75-6.
- Schmid, E., 1972 *Atlas of Animal Bones*

- Schofield J., 1994 Social perceptions of space in medieval and Tudor London houses, in Locock M. (ed), *Meaningful Architecture: Social interpretation of buildings*, Worldwide Archaeology Series 9. 188-206.
- Serjeantson R.M., 1911 The Austin Friars of Northampton, *Northants Nat.Hist.Soc. & Field Club*, XVI, no 127, 71-87.
- Serjeantson R.M. and Adkins W.R.D. (ed) 1906 *The Victoria County History of the County of Northampton: Volume III*.
- Shaw M. 1985 Excavations on a Saxon and medieval site at Black Lion Hill, Northampton, *Northamptonshire Archaeology* 20, 113-38.
- Shaw M. 1993 Woolmonger Street, Northampton: Proposed retail development; Stage 1 - Desk-based assessment, Northants Archaeol. Unit report
- Shaw M, Chapman A and Soden I, 1997. *Northampton Current Archaeology No. 155* pp 408-415.
- Shaw M. and Steadman S., 1994 Woolmonger Street, Northampton: Proposed retail development; Stage 2 - Trial trenching, Northants Archaeol. Unit report.
- Silverside, A.J., 1977 A Phytosociological Survey of British Arable-weed and Related Communities. Unpublished University of Durham PhD Thesis.
- Smith, R.N., 1969 Fusion of ossification centres in the cat. *Journal Small Animal Practice* vol. 10; 523-30.
- Soden, I., 1995 *Excavations at St Anne's Charterhouse, Coventry 1968-87*, Coventry Museums Monograph 4.
- Soden I., 1998 Saxon and Medieval settlement remains at St John's Square, Daventry, Northamptonshire *Northamptonshire Archaeology*, 27, 51-99.
- Stace, Clive, 1991 *New Flora of the British Isles*. CUP, Cambridge.
- Summer-Smith, G., 1966 Observations of epiphyseal fusion of the canine appendicular skeleton. *Journal Small Animal Practice* vol. 7; 303-11.
- Ward S.W., 1990 *Excavations at Chester: the lesser medieval religious houses, sites investigated 1964-83*, Grosvenor Museum monograph 6.
- West, B., 1982 Spur development: recognising caponised fowl in archaeological material. In B. Wilson, C Grigson and S. Payne (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, 255-61.
- Wheeler A 1978. *Key to Fishes of Northern Europe*.
- Wheeler A 1979. *The Tidal Thames*.
- Wilkinson B., 1986 *The later middle ages in England 1216-1485*.
- Williams F., 1979 Excavations on Marefair, Northampton, *Northamptonshire Archaeology* 14, 38-79.
- Williams J.H. 1974 A Saxo-Norman kiln group from Northampton, *Northamptonshire Archaeology* 9, 46-56.
- Williams J.H., 1979 *St Peters Street, Northampton. Excavations 1973-76*, Northampton Development Corporation.
- Williams J.H. and Shaw M., 1981 Excavations in Chalk Lane, Northampton, *Northamptonshire Archaeology* 16, 87-135.
- Williams J.H., 1982 *Saxon and medieval Northampton*.
- Williams J.H., Denham V. and Shaw M., 1985 *Middle Saxon Palaces at Northampton*, Northampton Development Corporation.
- Williams J.H. and Farwell D., 1983 Excavation of a Saxon site in St James' Square, Northampton, 1981, *Northamptonshire Archaeology* 18, 141-52.
- Wright S.M., 1988 Much Park Street, Coventry: the development of a medieval street, excavations 1970-74, *Trans. Birm. Warks. Archaeol. Soc.* 92 (for 1992), 1-133.

WOOLMONGER STREET - THE PROJECT

The Project was managed successively by Mike Shaw, Michel Audouy and Steve Parry between 1993 and 1998. Brian Dix was then the Chief Archaeologist at Northamptonshire Archaeology. The excavations were directed initially by Mike Shaw and Steve Parry (1994) and latterly Iain Soden (1995-7), who compiled the report. The field teams were supervised by Sean Steadman (1994) and Tam Webster (1995-7). The report illustrations were drawn by Alex Thorne, Steve Morris and Tony Baker. GIS mapping for the report was carried out by Peter Masters using MapInfo. The fieldwork teams comprised Robert Atkins, Tony Baker, Leslie Collett, Mark Holmes, Tora Hylton, Chris Jones, Steve Lawrence, Peter Masters, Leslie Mather, Steve Morris, Matthew Sharp and Paul Thompson.