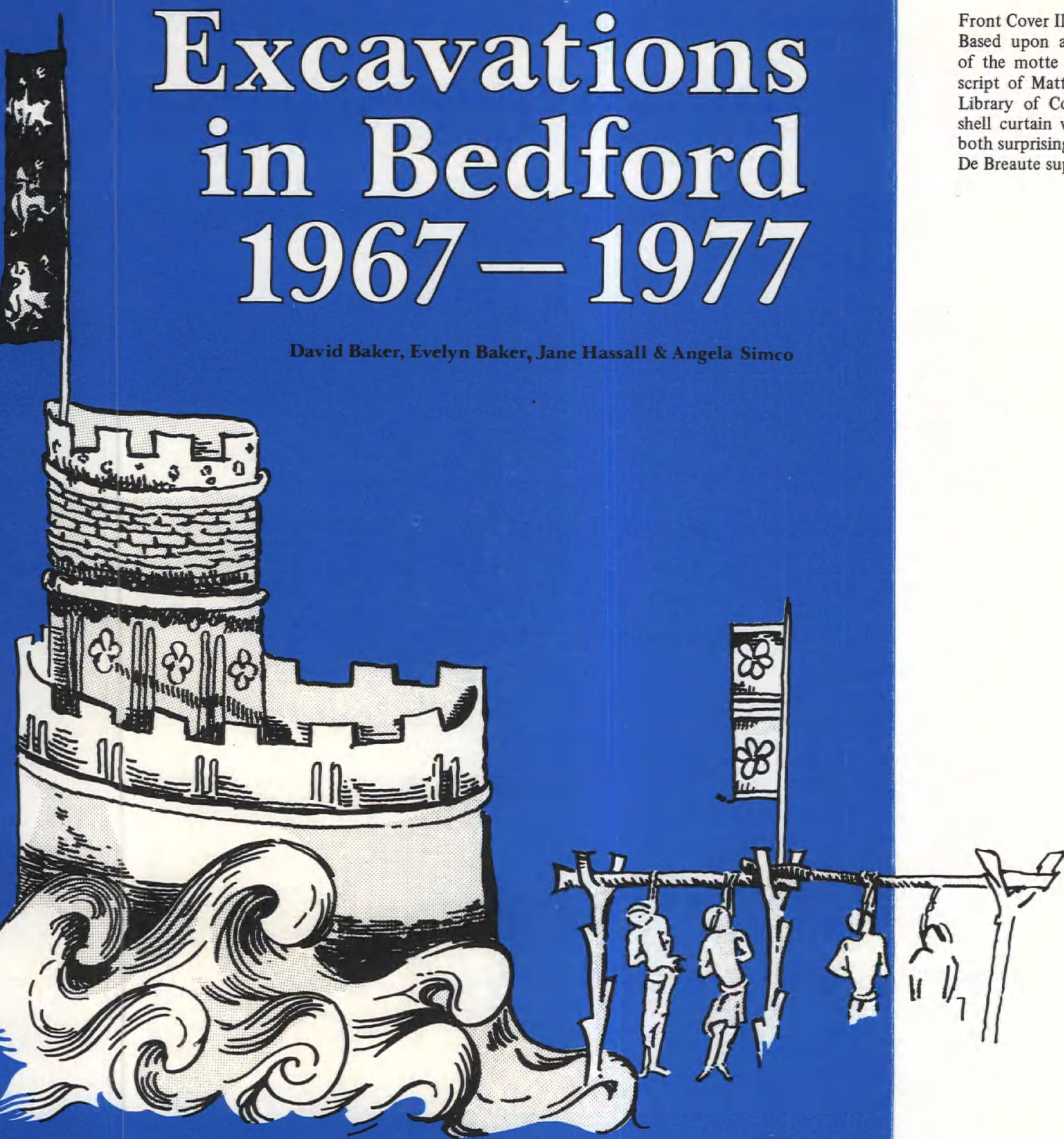


Excavations in Bedford 1967—1977

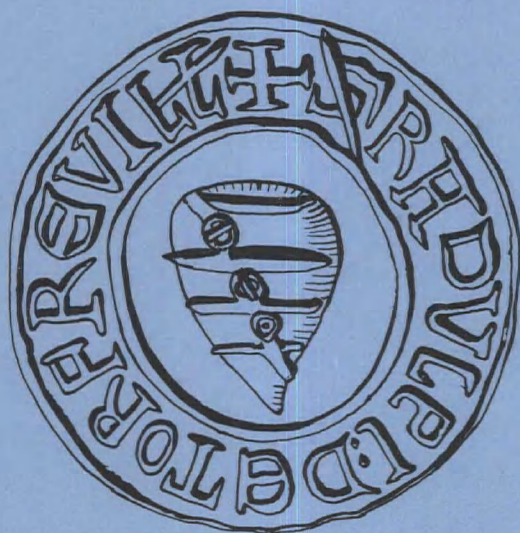
David Baker, Evelyn Baker, Jane Hassall & Angela Simco



Front Cover Illustration

Based upon a probably imaginary representation of the motte at Bedford Castle, from the manuscript of Matthew Paris' *Chronica Majora*, in the Library of Corpus Christi College Cambridge. A shell curtain wall and an inner tower are shown, both surprisingly intact after the siege. Vanquished De Breaute supporters occupy the gallows.

BEDFORDSHIRE ARCHAEOLOGICAL JOURNAL



EXCAVATIONS
in
BEDFORD 1967-1977

VOLUME 13 1979

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EXCAVATIONS in BEDFORD 1967–1977

David Baker, Evelyn Baker, Jane Hassall & Angela Simco

THE BEDFORDSHIRE ARCHAEOLOGICAL COUNCIL

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Photographs by David Baker except for Pls 9, 11, 29–24 (Beds CC Photographic Unit), Pl 20, 21 (Jane Hassall) and Pl 23 (Angela Simco).

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JANE HASSALL BA AMA is curator of Ancient House Museum at Thetford, Norfolk, and was Archaeological Officer at Bedford Museum, North Bedfordshire Borough Council from 1972 to 1979. She was responsible for rescue excavations in the town of Bedford from 1972, and for the archaeological collections in the Museum. She has also carried out excavations on the moated site at Willington 'Docks' (1973).

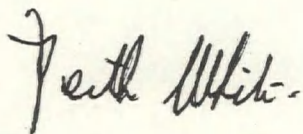
ANGELA SIMCO BA is Senior Conservation Officer (Field Archaeology) in the Planning Department of Bedfordshire County Council. She has excavated at Newnham Marina (1972 – 75), Stotfold (1975), Thurleigh Castle (1976) and Bushmead Priory (1978), and has particular responsibility for current parish survey programmes.

PREFACE

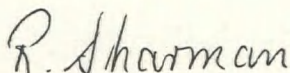
People have lived in the area of what is now the town of Bedford for hundreds of years. Only in the last few decades has a widespread interest in the remains of its past been developed, mainly due to the opportunities provided by greater literacy and leisure. Perhaps an increased mobility has made people appreciate the value of roots in the historic environment.

This volume mainly deals with buried rather than visible history. The debris of previous centuries is converted into informative archaeological evidence by scientific investigation in advance of modern urban renewal.

The excavations in Bedford between 1967 and 1977 represent the constructive co-operation of many parties, involving national and local government, County and Borough Councils and amateur and professional archaeologists. Bedfordshire is fortunate in having a County Archaeological Council which acts as a focus for these interests, and publishes a Journal of academic repute, so that local discoveries can also reach a national and international audience.



Keith White
Chairman, Environmental Services Committee,
Bedfordshire County Council.



R. Sharmān
Chairman, Amenities Committee
North Bedfordshire Borough Council.

March 1979

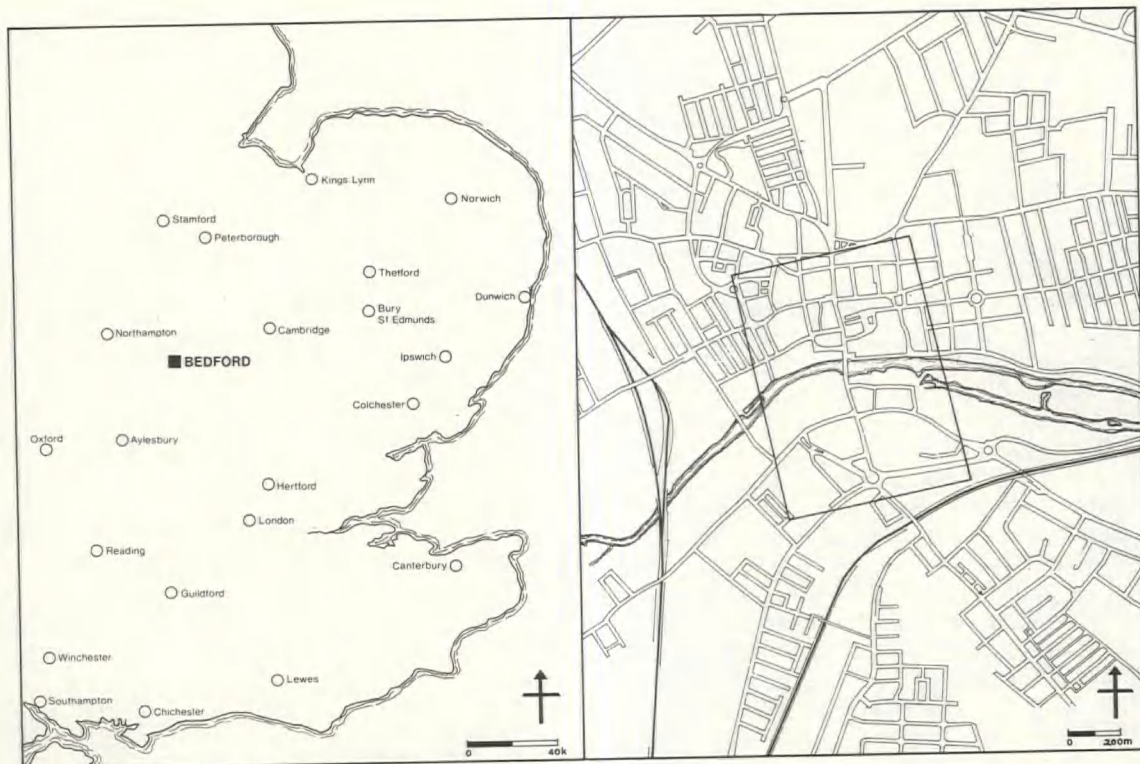


Fig 1 Location of Bedford and historic core of town

INTRODUCTION DAVID BAKER

The county town of Bedford lies 80km north of London, on the River Great Ouse, which rises near Brackley in Northamptonshire and flows into the North Sea at the Wash about 4km north-west of King's Lynn. The town stands upon riverine sands and gravel overlying limestone and capped by a thin layer of sandy clay.

The Erosion of History, published in 1972 by the Council for British Archaeology's Urban Research Committee, listed Bedford as having Saxon origins and some evidence for defences. It noted the currently expanding population and a programme of comprehensive urban redevelopment, including a ring road proposal affecting one or more historically significant areas. It regarded arrangements for archaeological research as permanent, and recognised some activity in the field of recording historic buildings. Six years later, most of these observations still broadly apply, though

the pace of redevelopment has slowed down, partly through economic recession, and partly because so much of the historic core has already been rebuilt.

The first phase of a continuing urban excavation campaign has resulted in the investigation of 32 sites between 1967 and 1977. This monograph is intended as a systematic report, grouping the excavations by location, and publishing the finds as a single collection. This should provide a secure basis from which future Bedford excavations can be economically reported. Seven sites had already been published in detail when it became possible to prepare a comprehensive monograph. Those excavations are only summarised here, but some of the finds have been republished in order to make the catalogue complete. A list of all sites together with excavation and museum codes appears in *Appendix A*.

Recommendations have recently been made on procedures for the publication of rescue archaeology reports (DOE, 1975). Execution is still a matter of some controversy: there is scope for in-

terpretation and experimentation, some of which may be evident in these pages. In retrospect, this monograph may well be seen to represent a transitional stage, with the application of some of the new publishing techniques to excavations mostly recorded by methods predating and not envisaging them. The excavation archive which is described in *Appendix B* has been established together with the finds at *Bedford Museum, The Embankment, Bedford MK40 3NY*.

The excavation strategy in Bedford during the last ten years has been characterised by inevitable compromise between the opportunities provided by modern development and the need to solve the historical problems of urban limits, defences, plan and settlement evolution. One aim, the sampling by excavation of each part of the historic core, has not yet been fully realised due to the pattern of redevelopment. Some priority was given to the south-east quadrant north of the river, containing the site of Bedford Castle. More recent excavations have concentrated upon large areas capable of providing less fragmented blocks of evidence at the St John's Street sites. It has become clear that for Bedford, as for other towns, small scale investigation will only repay the effort when a known site, specific problems, or an explicit sampling strategy is involved.

During the decade encompassing these excavations, the resources available varied considerably, becoming more extensive after 1974 with the development of the County Council's Archaeological Field Team. The first sites at St John's Street (BSJ67) were hurriedly excavated by myself as a local schoolmaster assisted by senior pupils in July 1967, during the fortnight between examinations and the summer holidays. Work from 1970 to 1973 was carried out in the course of summer volunteer sessions, periods of up to six weeks when several sites were tackled. In 1973 this reached a climax when three sites were excavated, all on a significant scale. Nonetheless, lengthy campaigns on large sites were not practicable before 1974, when BSJ74 was excavated for nearly three months by Jane Hassall, Bedford Museum's Archaeological Officer since 1972, assisted by the County Council's new Field Team and volunteers. From 1976, added assistance came from the Job Creation Programme of the Manpower Services Commission. All this is not to suggest that an ideal or even an adequate level of resources has been reached, but merely to indicate the improvement of the capability for research during the decade.

Detailed acknowledgements of all those who have been involved in this work are noted with individual excavation and finds reports, but some general appreciations should be shown here. Throughout, the work has been supported by grants from the (now) Department of the Environment, without which little would have been possible: Miss S. Butcher, and Messrs B.K. Davison, A. Fleming and J.G. Hurst have been particularly helpful. Technical assistance and grants have been provided by North Bedfordshire Borough Council and its predecessor Authorities. Interest has been shown by many members, notably Councillors Mrs J. George, B. Dillingham and R. Whittingham. The personal interest of Mr F.W. Dawkes, Director of Technical Services in this period, was especially important in establishing the excavation programme. The material side of both excavation and post-excavation work has had its proper home in Bedford Museum thanks to the kind co-operation of successive Curators, Messrs F.W. Kuhlicke and H.J. Turner. Bedfordshire County Council, through its County Planning Officer, Geoffrey Cowley, has supported the work since 1971 and organised it from 1972 as part of a county-wide rescue archaeology service, since 1976 aided by substantial grants from the Manpower Services Commission under its Job Creation Programme. Bedford Archaeological Society gave financial assistance in the early years and throughout has shown a friendly interest. The Harpur Trust has supported projects on its land, and has helped indirectly through the contributions made by its pupils, several of whom assisted with the supervision of various Bedford sites. We are most grateful to the specialists who have made contributions to various parts of this report — David Williams (petrology of pre-Saxon-Norman pottery), David Wilkinson (architectural fragments), Peter Woodward (flints), Dr Richard Marks (window glass), H.J. Turner and Marion Archibald (coins, jettons and tokens), T.P. O'Connor (human bone), S.E. Rigold (12th century lead seal matrix), Annie Grant (animal bones), Richard Thomas (wood), M.L. Ryder and Elisabeth Crowfoot (textiles). We are very grateful to other specialists who have advised on the production of this monograph and to Dr Elisabeth Zadora-Rio and David Parsons for preparing the French and German abstracts.

Responsibility amongst the four authors for the various sections of this monograph is indicated where appropriate: there is a collective responsibility for the remainder. I am personally most

BEDFORD

EXCAVATION AREAS 1967 - 1977

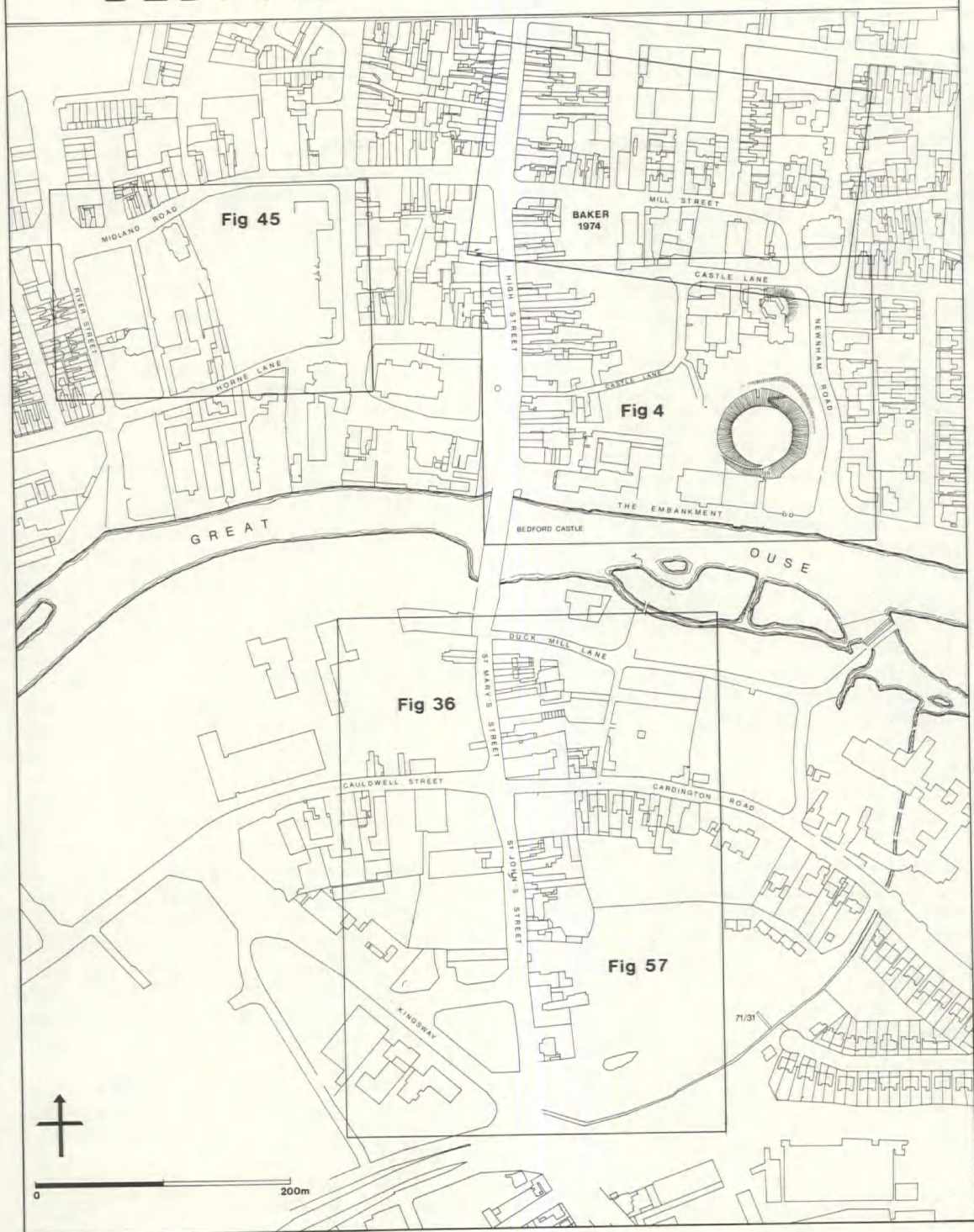


Fig 2

grateful to my three colleagues for agreeing to delay the production of their excavation reports in order to achieve this more effective form of publication. It should also be recorded that the bulk of the post-excavation work has fallen upon Evelyn Baker and Jane Hassall, especially that most onerous task, the preparation of the pottery report. Post-excavation finds assistants have been Hilary Kent and Sally Tabrett. Finds were mostly drawn by Ann Rotheram, Corinne Renow and Diana Blaxter. The County Planning Department's Drawing Office staff, especially Peter Kendle, Melanie Birchmore and John Johnson, assisted with the preparation of illustrations. The County Photographic Unit staff, Ken Whitbread and Dave Stubbs, provided some of the photographs. We are grateful to Mrs Howliston and her colleagues, and to Mrs Valerie Johnston for typing drafts.

During the later stages of preparing this monograph came the sad news of Gerald Dunning's death in April 1978. He had been a pupil at Bedford Modern School, and had long taken an interest in Bedford and Bedfordshire archaeology. It was his characteristically trenchant but kindly comments at the opening of the 1970 County Record Office exhibition in the Elstow Moot Hall, on the Elstow Abbey excavations (Dunning, 1970a), which lit a spark that eventually led to the organisation responsible for much of the work reported here. He had made specialist contributions of more than local significance to the published excavations of 1967 and 1971, and maintained regular contact with Bedford Museum and its collections. During the excavations he was a constant source of encouragement, a wise guide on pottery problems, and a friend as well as a senior colleague.

Gerald Dunning's academic memorial lies in the many contributions made by him to the literature, recently listed as a section in the collection of essays presented to him (Evison, Hodges and Hurst, 1974, 17 - 32). This monograph deals with a subject and a place which was important to him. Its four authors, and the Bedfordshire Archaeological Council, therefore wish to pay a local tribute in dedicating it to his memory.

ORGANISATION OF THE MONOGRAPH

The usefulness of this report to a varied readership depends upon an understanding of its organisation, objectives and limitations, as well as its relationship with the basic excavation archive described in *Appendix B*. It is divided into three interdependent sections, devoted to the *Excavations*, the *Finds*, and a brief *Discussion*.

The *Excavation* reports have been grouped by areas of the town. Sufficient evidence has been published from each site to support and illustrate the conclusions reached from an ordering of data stored in the excavation archive. The amount of detail has been deliberately varied according to the coherence and quality of the evidence. All sections are preceded by italicised summaries, and are printed in two type sizes. The larger is used for introductory material, including summaries, and discussions; the smaller is reserved for the detailed descriptions. Thus, according to inclination, the reader may skim the results or plumb the evidence more deeply. This typographical device is of particular use when dealing with features which, though they could be assigned to a specific phase, could not be further interpreted. *Context references are italicised*.

As far as possible, drawings have been used as a substitute for elaborate verbal descriptions. Drawings and texts are interrelated, the former also representing a selection, with fuller illustration usually available in the excavation archive.

Each excavation report is followed by a section summarising the relevant finds, organised by excavation period and phase. This is intended primarily as a cross reference to the Finds section of the monograph, and **Catalogue numbers are given in bold type**. Reference to other, unpublished, finds is made where appropriate, especially to the occurrence of pottery fabrics, the coding of which is given in the Pottery report at the start of the Finds section of the monograph. Some notable assemblages, such as material of the Saxo-Norman period from St John's Street and of the Post-Medieval period from Cauldwell Street, have merited more detailed reporting than most features or assemblages. The Animal Bone reports contributed to each area by Annie Grant are summaries of longer studies with more extensive tables contained in the archive.

The *Finds* Reports deal typologically with classes of material, in an attempt to provide a foundation for the study of finds from further excavations in Bedford. Selection for publication has

therefore been based upon the typological value of the object rather than on its membership of a particular assemblage. Material dating from the Saxon period through to Post-Medieval times may be illustrated on the same page. The catalogue descriptions include context references and suggested dates for the object and its context where possible. The reconstruction of material assemblages has been largely confined to the archive report. The use of the two type sizes generally follows the principles applied to the Excavation Report.

The Pottery is by far the largest section of the Finds Report. Its detailed treatment is intended to establish a ceramic sequence after a decade of excavations. It should be possible for most of the pottery from future excavations to be reported by means of space-saving reference rather than by repetition of vessel types already published here.

The Animal Bones have been summarised for the whole series of excavations as one class of evi-

dence in the Finds section. This account draws upon the individual reports presented with each excavation area, and comments upon the wider implications of the material.

The *Discussion* section of the monograph has deliberately been kept brief. This first campaign of excavations could neither cover a large enough proportion of the town nor sample it systematically enough to allow useful comprehensive generalisations about Bedford as a whole. For similar reasons it was felt that this report is not the place for a general synthesis with current results from other urban studies, though it is intended as material for those involved in such work. Attention is drawn to the article on town origins and development by two of us (Hassall and Baker, 1974).

There is a simplified index which should be used in conjunction with the Contents pages and the Bibliography.

THE EXCAVATIONS

Bedford Castle

DAVID BAKER and EVELYN BAKER

with sections by JANE HASSALL and ANGELA SIMCO

SUMMARY (Fig 3)

Bedford Castle occupied the south-east quadrant of the town north of the River Ouse, dominating the bridge and the eastern urban boundary. It may have been founded in the late 11th century, though the first documentary references do not occur until the 1130's. It was extensively refortified in the eight years before the final siege of 1224, after which it was systematically slighted on royal orders. The truncated motte is the only substantial feature surviving into this century, though the latest perimeter is preserved in the urban topography, and some evidence for other elements can be gleaned from early antiquarian literature.

Rescue excavations carried out between 1969 and 1973 were designed to sample the areas made available each year. Documentary, ceramic and stratigraphic evidence allows the proposition of five broad periods on the site, though these cannot be correlated in detail between all the excavations.

- 1 Middle Saxon, probably Early: timber buildings and other features.*
- 2 Middle/Late Saxon to Early Norman: occupation layers, overlapping with —*
- 3 c1100 to c1225: Castle, several phases of buildings, earthworks and ditches.*
- 4 Medieval: after the destruction of the Castle in c1225.*
- 5 Post-Medieval: use of the site as a dump and a quarry; 19th and 20th century development.*

The 44 trenches covered by this report are grouped into five areas (Fig 4).

Area A. *A trial trench on the west side of the motte showed a ditch on the west side, stone-lined on its inner face. The motte may have been constructed and was certainly reduced in at least two phases.*

Area B *The main Period 1 evidence was found south of Castle Lane. It was a sequence of possibly four early Middle Saxon post-in-trench timber buildings, overlain by Period 2 deposits, both cut by a substantial Castle range of stone buildings. A two-phase ditch, with some stone lining surviving on its inner face, ran east towards the motte, probably defining the inner bailey.*

Area C *An overall stratigraphical sequence could not be established in three groups of trenches north and west of Castle Lane, though Period 2 occupation deposits were found in most of them. Substantial robbed footings and a large, probably early 13th century, lime kiln, were uncovered on the north perimeter of the castle.*

Area D *Two phases of construction and some post-holes for timber superstructures were found in a trial trench on the north-east side of the north-east earthwork on the Castle perimeter.*

Area E *Part of the south curtain and a wall tower or water gate was located.*

There is a strong case for more extensive work on these and other Castle sites before the commencement of redevelopment postponed in 1973. The outstanding problems remain the nature and extent of the pre-Castle occupation and the basic plan and evolution of the Castle itself.

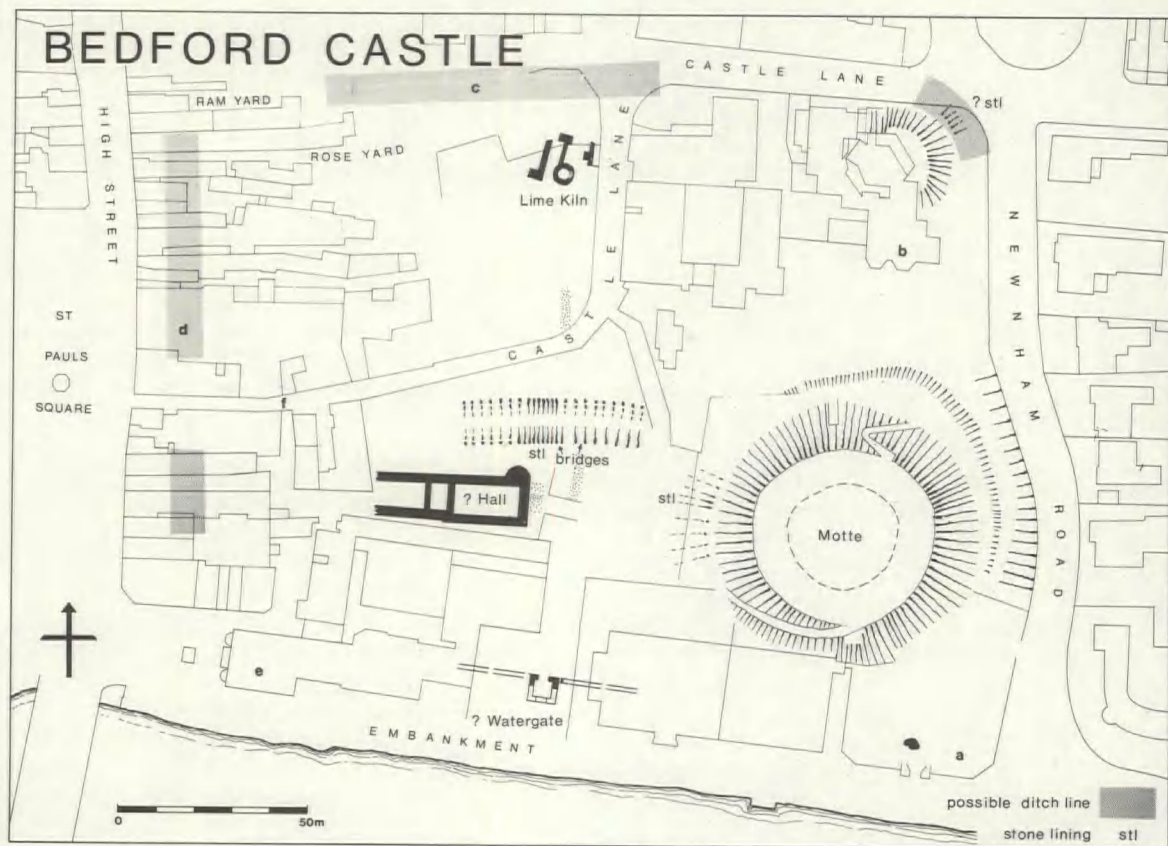


Fig 3 Bedford Castle: summary of results, 1969 – 73.

INTRODUCTION

by DAVID BAKER

The results from 44 trenches and areas are described in this report. They were excavated between 1969 and 1973 in five seasons totalling about 20 weeks. The labour force consisted largely of volunteer students and local senior school pupils, and was professionally supervised in the last two years. In each season a different piece of land was briefly available, and investigations had to be completed at the end of the session to permit the establishment of temporary surface car parks. Excavation policy therefore consisted of trial excavations, seeking major Castle features and pre-Castle occupation evidence, expanded where possible into small area investigations. Larger area excavations, a preferable method of working, were not practicable in the days before the creation of the County Field Team in 1974, despite the co-operation and

generosity of the various sponsors. Work was carried out in response to apparently imminent plans for the development of the Castle Lane area. This was postponed in 1974 and at the time of writing (March 1979) there is no firm commitment to proceed with any particular development scheme.

The same finds collection policy applied to all the Castle excavations reported here. All the pottery and bone was kept, but no sieving was undertaken; architectural fragments with worked faces were retained, as were roof tiles from which the dimension of a complete side could be obtained. Samples were taken from large groups of shell.

The five Periods outlined above have been used as a framework throughout the Castle report, though in some excavations there were uncertainties about the horizons between them. Within each trench or group of trenches, phasing has been applied independently, though each phase has been assigned to a Period. Phases do not correlate be-

Excavations in Bedford 1967—1977

David Baker, Evelyn Baker, Jane Hassall & Angela Simco



Front Cover Illustration

Based upon a probably imaginary representation of the motte at Bedford Castle, from the manuscript of Matthew Paris' *Chronica Majora*, in the Library of Corpus Christi College Cambridge. A shell curtain wall and an inner tower are shown, both surprisingly intact after the siege. Vanquished De Breaute supporters occupy the gallows.

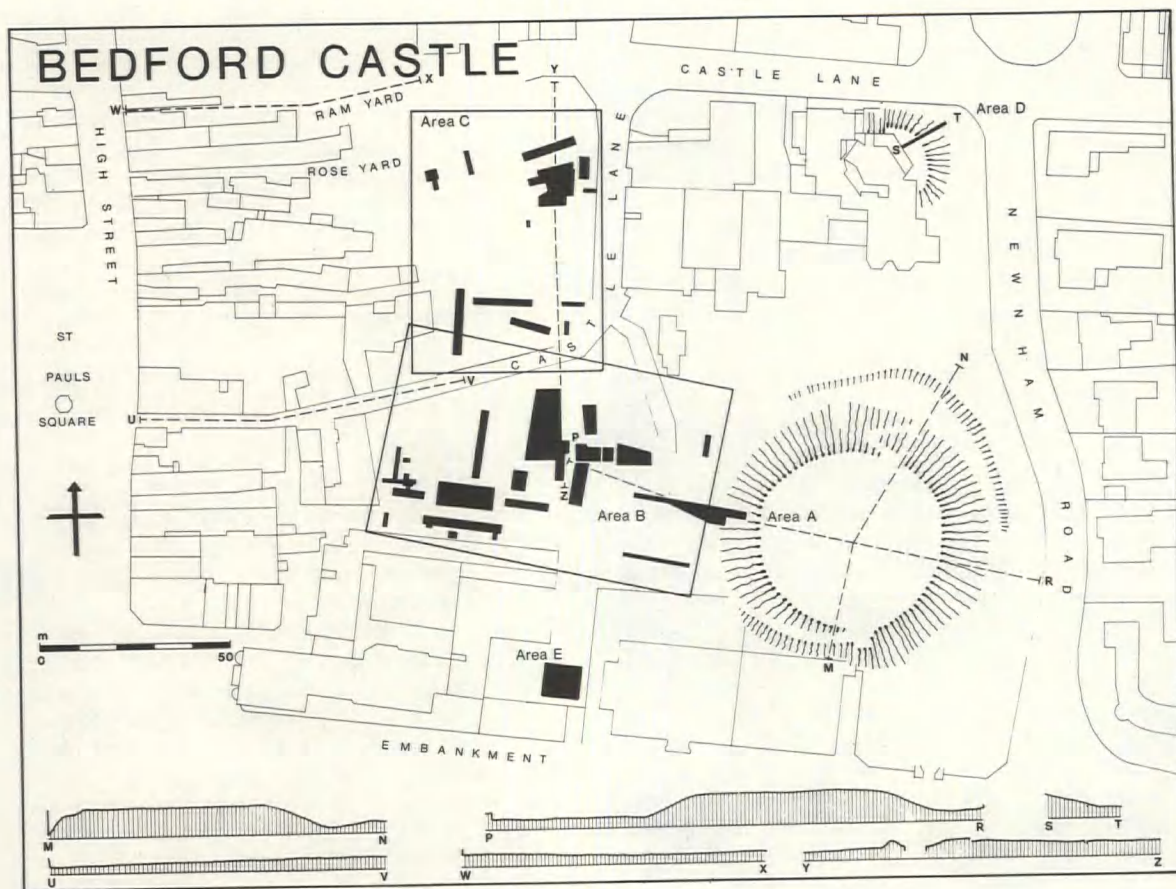


Fig 4 Bedford Castle: excavation areas and ground sections.

tween trenches unless this is specifically stated.

We are grateful to many people who have discussed the Castle evidence with us at intervals since 1970. While accepting full responsibility for the report in its printed form, we should like to acknowledge many valuable comments and helpful suggestions made by Brian Davison upon an earlier typescript version. Publication drawings were mostly prepared by Evelyn Baker.

DOCUMENTARY EVIDENCE

SOURCES

Royal papers provide only four short references to Bedford Castle before the siege of 1224. This is probably due to the special position of the Beauchamp family who held it with the barony of Bedford and must have undertaken necessary works from their own resources (Colvin, 1963, II, 558).

Chronicles are more informative. The *Gesta Stephani* (Rolls Series, 1886, 30 – 33) describes the involvement of Bedford Castle in the civil wars of the mid-12th century. The final siege is described in classic detail by Ralph de Coggeshall's *Chronicon Anglicanum* (Rolls Series, 1875, 204 – 8) the *Annales de Dunstaplia* (Rolls Series, 1866, 86 – 89) and Royal Letters (Rolls Series, 1862, 229 –

36). Monastic chroniclers had a vested interest in the dramatic: their descriptions of impregnable fortresses and bloody assaults were not necessarily topographically exact. In the same way, the royal papers relating to the 1224 siege were more concerned with the mechanics of warfare and its financial consequences than with the nature of the beleaguered fortress: even the commands for the slighting were couched in generalised terms.

There are several references to the site after the destruction of the castle. Deeds from the 16th century onwards occasionally use features like the outer ditch or a wall as a boundary limit. John Speed's map of 1610 shows the site and a few features, but Reynolds map of 1841 was the first to be properly surveyed.

Camden and Leland, who provided little detail, were the first antiquaries to note the castle site. More extensive interest in the 19th century was timely for its appearance just before urban expansion covered much of the site, but misleading for the confusion of useful observations with speculation about Roman and Danish activity in the town. Scholars followed one another, each adding their own piece of interpretation or recollection. A seminal paper was the 'Historical Notice of Bedford Castle' (Hurst, 1851, 381 – 391). It preceded the privately printed 'Bedford Castle' (Hartshorne, 1861), another paper of the same title (Elwes, 1864, 243 – 257), passages in a general 'History of Bedford' (Blyth, 1868), and the 'Great Siege of Bedford Castle' (Goddard, 1906). 'Old Bedford' (Farrar, 1926) wove all into an imaginatively compelling tapestry.

ORIGINS

The brief Bedford entry in Domesday Book makes no mention of the Castle, but this does not preclude its existence by 1086, since the Survey was primarily concerned with assessment for taxation, rather than expenditure on fortifications. A map of castles known to have been built by 1086 (Renn, 1968, 15) has to omit Bedford, though strongholds existed in all the adjacent county towns of Cambridge, Huntingdon, Hertford, Buckingham and Northampton. Bedford's strategic value had been underlined during the previous century: in 915 Edward the Elder had fortified the southern burh and taken over the existing fortification of the northern burh; in 1010 Danish raiders found the town worth attacking and burning.

The barony of Bedford was probably granted by William II to Hugh de Beauchamp in 1087, succeeding Ralf de Tailleboosc, who had acquired a major estate at the Conquest. Succession must have continued in the Beauchamp family until the first direct reference to the castle occurs in the 1130's. The foundation of the castle has been ascribed to the Beauchamps, probably in William II's reign (Godber, 1969, 21), but there is at least the possibility that Bedford was a sufficiently important centre to have required subjugation at the Conquest by the familiar means of placing a castle athwart an existing urban boundary, whatever physical form this fortification may have initially taken.

DEVELOPMENT

Bedford Castle is first mentioned in the 1130's. Milo de Beauchamp held it in 1138 against Stephen, lost it to him, and recovered it again shortly afterwards. At that time it was 'completely ramparted around with an immense earthen bank and ditch, girt about with a wall strong and high, strengthened with a strong and unshakeable keep.....' (Rolls Series, 1886, 30 – 32). This seems a purely formal description, giving no indication of size or plan. There may also have been sieges in the mid-1140's, when the Earl of Chester took the Castle, and in the early 1150's, since the Pipe Roll for 1157 – 8 records a payment of 20 marks due to the king from the burgesses of Bedford 'who were in the castle against the king'.

It is possible that the disturbances of Stephen's reign provided a context for the expansion or re-ordering of an early Norman castle, but there is no positive evidence. There were other periods of disorder in the second half of the 12th century which might also have been the occasion for major works. But the only references are to the expenditure of small sums by the sheriff in routine repairs, £4 10s 1d in 1180, £12 0s 0d in 1183, and £4 6s 0d in 1188 for work on the bridge and the postern towards the river (Colvin, 1963, II, 558). The Pipe Roll for 6 John 1205 – 6 records the expenditure of 13s 9d on repairs to the prison.

In 1215, after a brief siege, Falkes de Breaute took Bedford Castle from an absent William de Beauchamp. Ralph de Coggeshall records in convincing detail the refitting which followed. 'Falco strengthened and expanded the castle at great expense, fortifying it with towers and outworks and a variety of warlike machines. He pulled down to the foundations the great church of St Paul which from antiquity had stood next to the castle, and

the church of St Cuthbert, and with the stones of the churches he built towers, walls and outer walls, and surrounded it on all sides with deep paved ditches.....' (Rolls Series, 1875, 205).

SIEGE AND DESTRUCTION

The events of 1224 – 5 produced two descriptions of the castle refortified by Falkes de Breauté for his brother William, who was left to defend it against Henry III. Both Ralph de Coggeshall and the Dunstable Chronicler give an order of siege, the detailed preparations for which have been fully discussed elsewhere (Fowler, 1920, 117 – 32; Allen Brown, 1976, 191 – 4). Firstly the barbican was taken and the outer bailey occupied; next the wall near the old tower was breached by mining so that the inner bailey was taken; finally, the keep or tower was successfully mined, causing the surrender.

The Close Rolls record the royal commands for the dismantling of the fortifications. The tower was to be laid even with the ground, and the fosse that encircled it with the pavement was to be made level with the earth. In the same way the outer bailey was to be entirely thrown down, its fosse and all the fosses of the Castle filled up, together with their pavements, and restored to the common level of the earth. The walls of the lesser bailey were to be partially lowered and to remain plain and uncrenellated. Three-quarters of the ancient tower towards St Paul's church was to be demolished (Rot. Lit. Claus. 1, 632, 654).

These accounts relate to the Castle at its fullest extent, with boundaries approximately represented by the river, High Street, Ram Yard and Newnham Road. But they tell little more than that Bedford Castle included the familiar elements of keep, inner and outer baileys and barbican. There are only two distinctive items. The 'old' or 'ancient' tower 'towards St Paul's' might be a major building retained from the earlier Norman plan in later expansion, though there are no indications as to whether it was free-standing, a part of the latest inner bailey defences, or on the outer perimeter. The paved ditches are mentioned by both chronicles and royal papers, and have been confirmed in excavation.

AFTERMATH

William de Beauchamp objected to this emasculation of his primary stronghold (Rolls Series,

1862, 236). He was told that he might retain an unfortified dwelling within the site, but it is not known whether he took advantage of the offer. By 1361 it was described as a 'void plot of old enclosed by walls' (Ch. Inq. P.M. 35 Ed III pt II no 10).

There is little documentary evidence for the site being used significantly before the 19th century expansion of Bedford. Camden described ruins overhanging the river on the east side of the town (VCH, 1912, 11). Speed's Map of 1610 shows an empty site, with the motte and a length of ruined wall. In 1644 – 45, a Captain Hudson was using the 'Mount', presumably the motte, as a refuge and prison which was subsequently further slighted (HMC 8th Rpt, 1881, App 1, 7b, 8a), perhaps improving its utility for the sportsmen of Bedford as a bowling green. Three-quarters of the site was redeveloped in the 1840's with the construction of the Higgins Brewery, and the Higgins house in the north-east corner of the enclosure, followed by houses and sheds lining Castle Lane, Ram Yard and Ginn's Yard.

RECORDED REMAINS (Fig 3)

Deeds, maps and early antiquarian literature give some information, almost entirely about the perimeter of the latest phase. The following summary concentrates upon vanished features, excluding the motte and the small earthwork at the north-east corner of the site.

On the east side, the 1841 Reynolds Map shows a ditch running along what was to become Newnham Road, discharging out into the river at the south-east corner of the castle (a). This is also shown more crudely on the Speed Map. Goddard described this muddy ditch as open until recently (1906, 50). Foundations were discovered after 1804 during the construction of the hexagonal Militia Depot on the earthwork at the north-east corner of the Castle, and in the 1840's when the Higgins house (b) was built. Blyth thought this represented a 'sally-port' (1868, 29), but some kind of defensive point or angle tower may have existed here on the outer curtain.

On the north perimeter, Hurst (1851, 390), asserted that the outer ditch ran east along Ram Yard for 600 feet from the north-west corner. The western length of this (c) is corroborated by a deed of 1800 which shows the line of the largely filled ditch (CRO R/4/534/13). This ditch is also mentioned in 16th century deeds as a southern limit to properties on the south side of Mill Street (CRO CRT 130 Bedford 7).

The western limit of the castle seems to have been represented by the rear of properties fronting High Street, rather than by the present building line on High Street. Hurst (*ibid*) noted a length of moat (d) 675 feet long from the Swan Hotel northwards to Ram Yard, where it turned eastwards. Farrer cited the remains of a south-west tower found when the embankment was built in the 1870's (1926, 57). Several deeds from the 16th century onwards give the Castle ditch as a boundary eastwards for properties on the east side of High Street. An example is that of 12 August 1563, describing 'a messuage or Inn called the Ramme between ... the Rose ... and the Red Lion ... abutting High Street west and on le Castle ditch east ...' (CRO CRT 130 Bedford 7, no 6). Hurst's reference, repeated by others, to cellar and other excavations fronting High Street continually turning up quantities of human remains 'showing the sanguine nature of the conflicts in contending for the castle' may partly or entirely be a misinterpretation of the large rubbish pits, filled with animal bone, which often appear in Bedford excavations (1851, 390).

The southern limit of the castle was the river, itself a natural moat, which may have needed no more reinforcement than a wall, perhaps that shown on Speed's Map of 1610. There are no references to ditches found during 19th or 20th century building. Hartshorne (1861, 12) noted that 'a small portion of a little mural tower on the south side still existing' might have been original, but there is no other information on this feature. Suggestions that the cellars and other walls of the Swan Hotel (e) contain castle walls probably derive from the frequent assumption that limestone walls must be castle walls, though the reuse of material is more likely.

Connected with the question of moats forming the outer perimeter of the Castle are several references to a wall across the river, south of the castle site. These were recently reviewed in the magazine *Lockgate* (No 4, July 1962, 66 - 68). Hurst (1851, 390) mentioned a stone wall 10 feet wide built across the river, acting as a dam to keep up a head of water for supplying the Castle moat. This was partly visible at low water, and more could have been seen before 1774 when some of the stone had been used to build the Howard Chapel in Mill Street. Elwes saw it as a causeway (1864, 256) and Farrar as a device both for raising the level of water in the King's Ditch south of the river and for working a mill on the Castle moat.

Another major feature of the outer perimeter, the barbican, is mentioned in contemporary and 19th century documentation. The Pipe Roll of 34 Henry II (1187 - 88) records £4 6s 0d spent upon 'the bridge of the castle of Bedford and of the postern towards the water'. Neither need be the barbican, let alone that which existed in 1224, but Elwes (1864, 245) was encouraged to make the strange suggestion that the main entrance to the castle was south of the river, the northern part merely being the outer bailey. Blyth noted that the remains of the 'barbican' had been removed from Castle Lane in 1851 when cottages were erected (1868, 29). He did not however give a precise location for this find, nor indicate why this interpretation should be applied to rough stones comprising a wall less than 1.0m thick. There is a long standing tradition that the modern Castle Lane preserves the location of this barbican, with the slight bend (f) 30m from the High Street entrance being an indication of where the outer bailey actually began.

MODERN TOPOGRAPHY (Fig 4)

The Castle developed on land sloping gently but unevenly towards the north bank of the River Ouse, immediately east of the bridge site, which it dominated. The limited work undertaken so far has indicated considerable changes in ground level during and after the life of the Castle, making reconstruction of the 11th century ground surfaces difficult. At its fullest extent it occupied an approximate rectangle 200m x 150mm or 3.36ha.

The northern perimeter of the latest castle coincided with a terrace marked by Ram Yard, extending at least from St Cuthbert's Church to the High Street. To the south the ground falls away to the river, and rises northwards to Mill Street. The changes in level are most clearly visible along the track northwards from Ginn's Yard by way of Castle Lane to Ram Yard.

To the north of Castle Lane (Area C), the lower edge of the terrace has been built up artificially about 1.60m against a wall at the edge of Ram Yard. This may be partly explained as the northern limit of the castle, though no direct evidence has been found. In any case, it was definitely accentuated by 19th century cottages built in the angle at the junction with Castle Lane, lining its north and west sides.

To the south of Castle Lane (Area B), extensive Post-Medieval dumping and some quarrying has created a raised plateau, but lowered the ground to the east between the 1970 excavation sites and the motte. There is a significant drop in level on the east and south sides of this plateau, into Ginn's and Swan Yard respectively.

The northern limit of the castle is that most clearly reflected in existing ground levels. The north-east earthwork and the motte, with its almost filled ditches, provide a clear indication on the east. The levels in the vicinity of the motte have been affected by 19th century building in Castle Close, the filling of the eastern watercourse or ditch when Newnham Road was laid out, and by the landscaping of the (now) public gardens. Where the east side of the motte pushes out the line of Newnham Road, the ground to the west of the retaining wall is much higher on the Castle than on the pavement side. It is not clear whether this is a relic of the Castle or of later works.

The Embankment has been built up over the south limit, and any significant levels have been obscured. The same has happened on the west side as a result of building on the east side of the High Street. However, the ground level running from High Street through a passageway into Ram Yard does show a dip running north-south at about the point where a main ditch might be expected.

Despite its truncation in the 13th century and alteration in subsequent years, the motte continues to be an impressive tree-covered feature on the east side of the town. The present day approximate measurements of diameter at 46m on the top and 70m at the base, together with height above modern ground surface not exceeding 6m, are those of a slighted stronghold. Traces of ditches can be seen on the eastern and northern sides, and have been landscaped into the municipal gardens.

The north-east earthwork shows clear slopes on its northern and eastern sides, but all evidence for slopes internal to the Castle perimeter has been destroyed or concealed by 19th century building. Early antiquarians described it as a lesser motte, but it could equally well represent a length of fortuitously surviving rampart, strengthened at a corner.

AREA A: THE MOTTE

(BC72 48; Figs 5, 6)

by EVELYN BAKER

SUMMARY

A trial trench ran east from Ginn's Yard across the line of the ditch in front of the motte and about half way up its west side. The failure to find a pre-Norman ground surface might be explained by some evidence for an earlier, smaller motte, whose ditch had been filled to accommodate an expansion, presumably in the early 13th century. The ditch which was filled after the siege of 1224 was stone-lined on its east face, the west side having been destroyed by a Post-Medieval disturbance.

Trench Phase	Castle Site Period	Activity
A	3	11/12th century, construction of primary motte and ditch
B	3	?post-1216, stone lining of inner ditch face, following possible expansion of motte
C	4	c1224 - 25; slighting of motte and filling of stone-lined ditch
D	5	Post-Medieval gravel extraction west of motte
E	5	Post-Medieval, continued reduction of motte, ?Civil War and bowling green use
F	5	Mid-19th century, Ice House cut into north side (not represented in this excavation)
G	5	20th century (municipal) paths and pits

THE EXCAVATION

Introduction

The west side of the motte was examined by the writer assisted by David Devereux, as part of the work in Ginn's Yard during the summer session of 1972. It was intended to investigate the ditch, faint surface traces of which are visible on the north and east sides, and to define the original profile of the motte. Only a limited exploration of the body of the motte was made due to limitations of time and working space on the tree-covered slope.

A section 2.0m wide was taken through the surface of the motte slope. The top 0.20 - 0.30m was removed by machine and work continued by hand until the appearance of the stone revetting for the east side of the ditch, when further machinery was employed. The trench was widened at the base of the existing mound to 4.70m and

BC 72 Motte

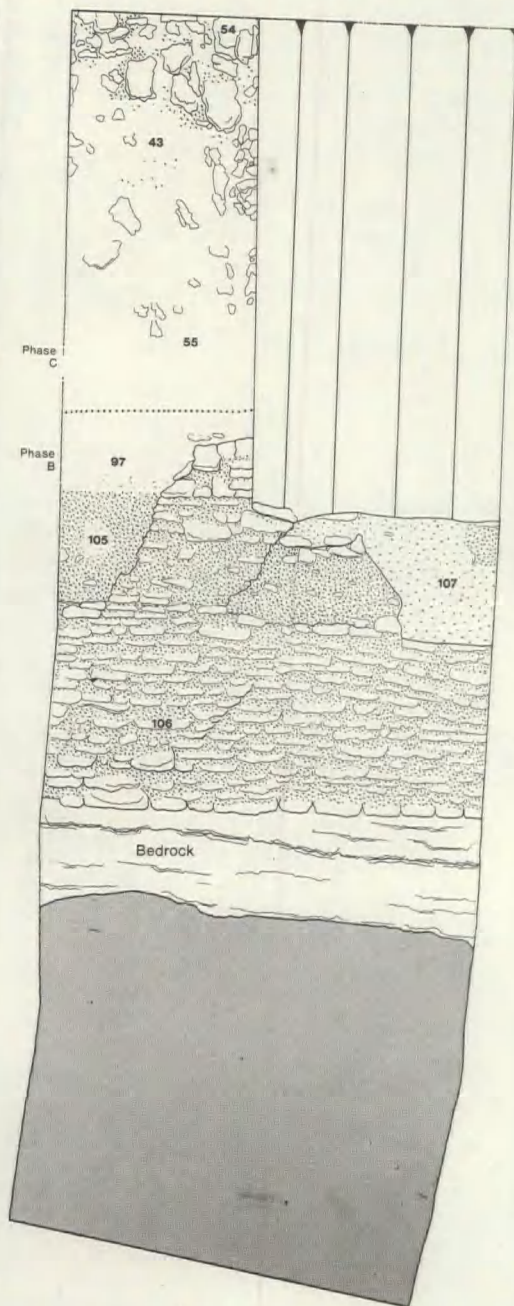
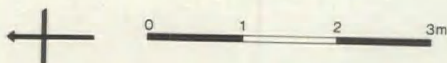


Fig 5 Bedford Castle: area A: plan of motte excavation.



Pl 1 Bedford Castle: area A: BC72 48, west side of motte.

lengthened in an unsuccessful attempt to locate the west side of the ditch. The bottom part of the ditch fill and the layers immediately over the stone-lined slope were removed by hand (pl 1).

Phase A

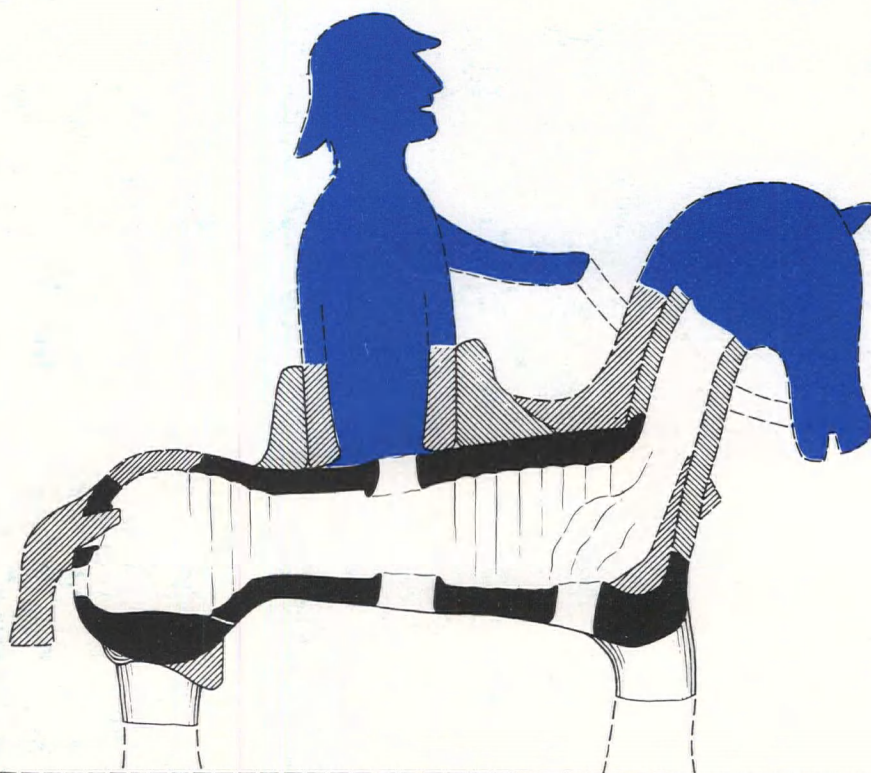
Only a small part of the body of the motte could be examined, largely due to the thick accumulation of post-Castle material over its surface, and restrictions by existing tree cover on the width of trial trench. Two sondages (fig 6) showed a clear difference of attitude and composition between inner and outer layers of the motte itself. The inner had been laid down, rammed solid, at a much steeper angle than the outer, sloping steeply downwards both to west and south. They consisted of rammed layers of sandy clays and pebbly loam with the possibility of deliberate turf spreads (104).

Phase B

The upper and outer levels of the motte consisted of irregular tips of clay and clay mixed with gravel. The latest surface of the motte slope appeared to have been turf revetted (55). Possibly the bottom part of the turf line had been cut away when the surrounding ditch was revetted with mortared limestone on the motte side (pl 2).

Back Cover Drawing

Longitudinal section through 15th century Knight
Finial roof fitting (Catalogue **1076**), drawn by
Gerald Dunning, to whose memory this volume is
dedicated, and originally published by him in
Volume 9 (1974) 113 of the Bedfordshire Arch-
aeological Journal.





Pl 2 Bedford Castle: area A: BC72 48, stone lining on east face of motte ditch.

The stone lining (106) on the east side of the ditch was similar to that of the ditch in BC71 25. It was composed of rough limestone blocks set in a solid layer of yellow mortar (105) over 0.40m thick, which still stood proud between them. The slope was fairly gentle, about 30 degrees. There was a slight berm between the stone revetting and the contemporary turf slopes. The lining consisted of a single course of limestone not set very deep into its mortar, and had been completely destroyed in places, perhaps by some of the mangonel shot (see catalogue 1131) which lay in the silt at its foot. The lowest limestone blocks sat on bedrock, which was cut a further 0.25m deep to give a total depth of the ditch below modern ground surface of 3.80m, or 2.20m below the lip of the ditch. The bedrock levelled out for nearly 2.0m, giving a flat bottom to the ditch, before the Post-Medieval disturbance was reached. Thick blue clay about 0.30m deep was seen under the mortar. If this had been puddled it would have afforded a good protection for the underside of the lining from water. The water table appeared at 1.30m below the level represented by the end of the turf slope (55) and the beginning of the berm belonging to the stone lining (106).

Quantities of limestone lay against the lower slope of the ditch and on the bedrock bottom, sitting in the dark silty water-sorted material which formed the primary ditch fill (110). A few finds, including the fippleflute (1514) were retrieved from this silt, but the general impression was given that the ditch had not been open for

long, at least in its stone-lined phase, or had been recently cleaned out before its final filling.

Phase C

Over the possibly enlarged motte surface (55) was a heavy build-up of mortary loam and large limestone rubble (43) (53) (54), spilling down into the ditch itself. These rubble layers contained sherds of Lyveden ware. They also included a turfy layer (32), and a thick deposit of mixed loams and gravel lower down the slope (36). At the base of the motte, and slipping over the lip of the ditch was a spread of yellow mortar. This generally mixed build-up was sealed by a turf layer down in two stages (21) (22).

Phase D

The west edge of the ditch has been destroyed by a large silt-filled disturbance, similar to that seen in the mechanically excavated trenches in Ginn's Yard (BC72 35, 36), and suggestive of Post-Medieval gravel extraction breaking out from the west side of the motte ditch where it had cut natural subsoil.

Phase E

Over this filled feature and over the turf line (22) was a further deposit probably derived from levelling operations at the top of the already reduced motte. At the top of the excavation, this secondary overburden was only 0.30m thick, but had deepened to about 1.0m by the base of the 13th century motte.

BC 72 Motte

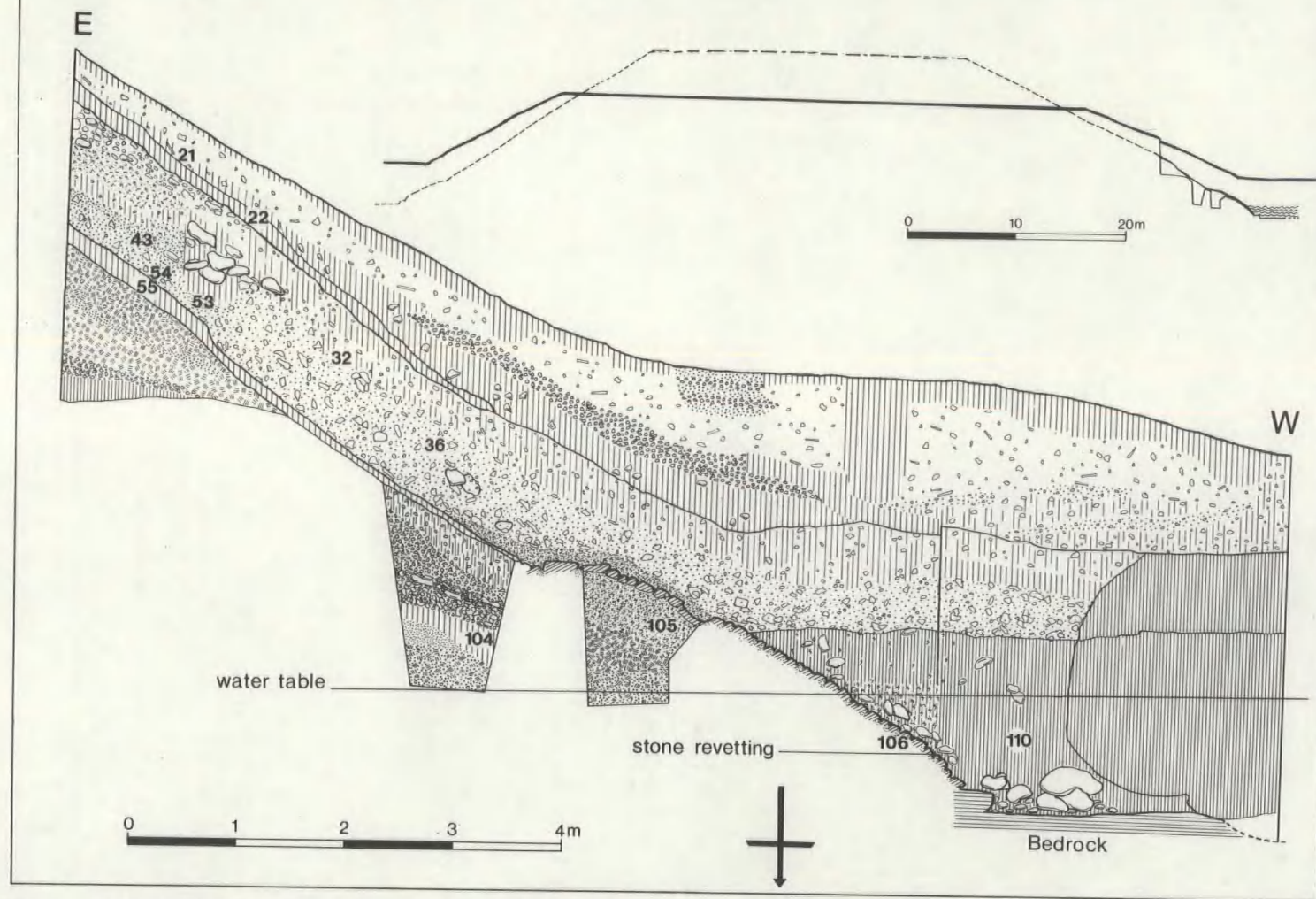


Fig 6 Bedford Castle: area A: south section of motte excavation.

THE FINDS

Phase A: Pottery fabrics represented in layers of the motte underlying the stone lining included B1, B4, B5, B6, C2, C3.

Catalogue: (109) B6, 347.

Phase B The latest layers of the motte and ditch construction contained examples of fabrics A6, B4, B8, C3, C22, C34 (intrusive?), C35, C36.

Catalogue: (55) Roof tile E3, 1103. (110) Roman pottery, 7; A6, 37; C3, 508; fipple flute 1514; mangonel shot, 1131.

Phase C Five contexts associated with the slighting of the motte, presumably in 1224 – 25, contained sherds of Lyveden ware. Pottery fabrics included B1, B5, B8, B9 (Lyveden) and C39 (intrusive?).

Catalogue: (30) architectural fragments, 1119, 1129; (31) copper alloy pin, 1311; (32) iron strip, 1442.

Phase E While the stratigraphy suggests two distinct phases when material was added to the side of the original motte, the dating evidence for the later of the two is more blurred than for the earlier. Pottery includes both residual Medieval and a wide range of Post-Medieval fabrics such as stoneware, Chinese porcelain and china.

Catalogue: (38) Roman pottery, 10.

DISCUSSION

One small section has not explained the sequence of construction and destruction of the motte and its ditch, but questions for future work can be more easily defined. It is not known what structures stood on top, nor how many times in the life of the Castle the motte itself was modified. Perhaps the earliest buildings were made of timber, preceding a shell keep. Considerable quantities of stone debris point to a stone structure. However, there is no record or tradition of the stone foundations required for an early donjon built on the original ground surface with an earthen motte piled around its base.

There is an intriguing possibility that the Bedford motte was built in two stages. (55) with (106) clearly represent the outer surface before slighting in 1224. The turf layer with (104) might represent the outer surface of an earlier motte, with the deposits underneath (105) being material in an earlier ditch, filled to receive the stone lining. Alternatively, the fills seen in both sondages could be part of the primary ditch deliberately packed to accommodate a raised motte and stone revetted ditch. The main ditch was filled in the early 13th century, so at the least had been cleaned out shortly beforehand for the construction of the stone lining, and could also have replaced an earlier ditch lying under the tail of the later motte.

It is not known how much has been shaved off the top of the motte, and what was its original

height and diameter. The stone-lined ditch and the 13th century motte slope have been tentatively extrapolated in figure 6. Only further excavation will show whether there were two mottes, each with its own ditch.

The stone lining to the ditch face can only be dated within the castle period by analogy with the similar feature in BC71 25 (see below p31), both perhaps the work of Falkes de Breauté. The lower part was in a good unweathered condition, protected by the substantial building debris resting upon its slope. Mangonel shot was found in its primary fill. This is consistent with military conflict followed by the dismantling of stone structures on the motte top.

At this point on the circumference of the motte and its ditch, there are at least two phases of mound reduction and ditch filling. The later post-dates the gravel extraction, but can only be ascribed by inference to the use of the 'Mount' in the 17th century Civil War and as a bowling green.

AREA B: CASTLE LANE SOUTH

Figs 7 – 19

by DAVID BAKER and EVELYN BAKER

SUMMARY

During 1970 – 72, 24 trial trenches and areas were excavated south and east of Castle Lane. Some residual Roman material was found. Four large post-in-trench timber structures associated with pottery of probable early Middle Saxon date were sealed by a black occupation layer whose gradual accumulation certainly predated and may also have been contemporary with the early Castle. Castle period structures included a multi-phase range of buildings incorporating a possible hall or chamber with an apsidal foundation on its north-east corner. It lay south of a substantial recut ditch, in its later phase having a stone-lined inner face and a stone abutment for a bridge. This ditch ran east towards the motte, across Ginn's Yard, where traces of a possible timber abutment were seen on the inner face, probably of the earlier period.

GENERAL INTRODUCTION

by DAVID BAKER

After an explanation of the strategy governing the positioning of trenches, the more significant

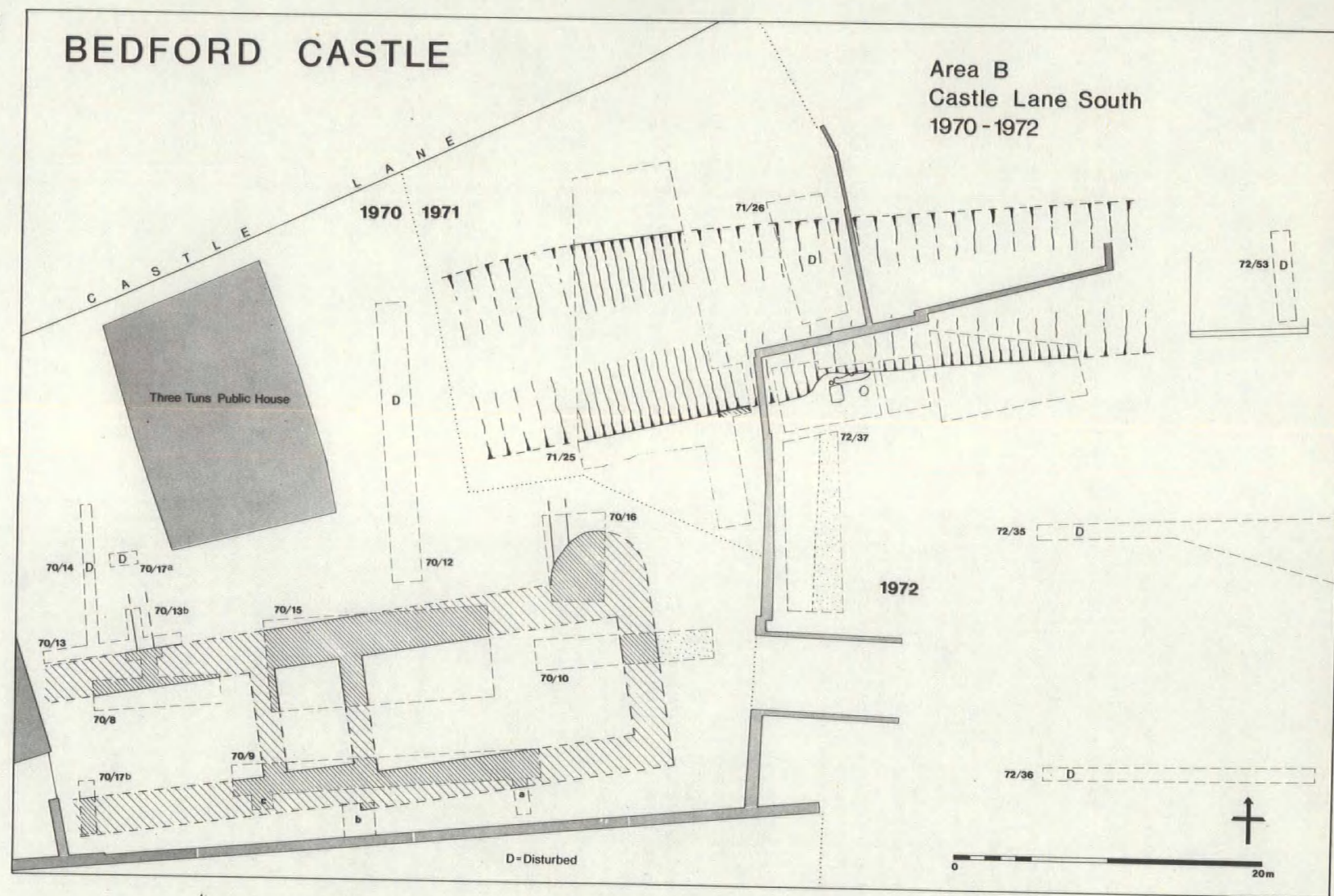


Fig 7 Bedford Castle: location of trenches south of Castle Lane.

AREA PHASING AND SITE PERIODS

Trenches	Castle Site Period	Period	Activity
70/10, 12, 15; 71/25	1	Early Middle Saxon	Timber buildings
All except 70/14, 17a; 71/26; 72/35, 36, 53	2	Middle/Late Saxon to early Norman	Black occupation layers
Buildings: 70/8 - 10, 12 - 17	3	c1100 - c1225	Castle structures
70/12; 71/25, 26; 72/37	3	c1100 - c1225	Stone-lined ditch
70/12; 71/25, 26; 72/37	4	Post-c1225	Fill of Castle ditch
All	5	Post-Medieval	Spreads, etc.

results are presented in chronological order. Three separate areas were made available for periods totalling twelve weeks in 1970 - 1972, during the intervals between site clearance and the progressive spread of surface car parks. Trenches were designed to test each area and follow up initial results within the limits of time and resources.

We are most grateful to all those who assisted with this work, mostly local senior school pupils on holiday, together with a group of trainees from H M Borstal at Gaynes Hall. Trench supervisors were William Annan (trench 9), Anthony Couchman (25, 37), Peter Cottrell (8), Jane Hassall (15), David Hill (16), Kate Nicholls (25), Susan Linger (10, 12) and Geoff Summers (25).

EXCAVATION STRATEGY *Fig 7*

The main obstacles on the site which was cleared for 1970 included the Three Tuns Public House (demolished 1973), some areas of thick concrete, and a semi-basement along the south boundary. A preliminary mechanically excavated trial trench on the east side of the site had located a probable Medieval footing and BC70 10 was designed to cut across both sides of it. BC70 9 was placed within the semi-basement and BC70 8 was intended to continue the sequence of west - east trial trenches. All three trenches revealed substantial Medieval footings.

Following from these, BC70 13 was intended to check that the footing in BC70 8 did not turn north, and BC70 13b to establish its width at that point. BC70 9a, b, c attempted with mixed success to determine the width of the parallel wall in the south of the site and to resolve some difficulties of phasing presented by the badly robbed remains. BC70 16, which could not be excavated until BC70 10 had been backfilled, was originally intended to find the corner of the footings in BC70 8 and BC70 10,

though its intended shape was altered by obstructions to the east and subsequent discovery of the apsidal robber trench. The junction between the walls immediately to the east of BC70 16 could not be investigated due to overlying dumps and modern footings. With BC70 9 backfilled it was possible to open BC70 15 as an area excavation, to show more of the north wall and to seek further undisturbed pre-Saxo-Norman evidence, such as had appeared in the west end of BC70 10. Previously, BC70 17b had been excavated mechanically, to check that the footing or robber for the south wall continued to the western limit of the land then available.

Other trenches, BC70 12 and 14, were designed to test the areas on each side of the Three Tuns public house. The former was over the deep Post-Medieval fill of the stone-lined ditch, though this fact could not be appreciated until 1971, and the latter excavation was abandoned owing to impenetrable modern footings.

By summer 1971, the garage forming the north-east limit to the 1970 area, then a surface car park, had been demolished, together with other buildings further east along the south frontage of Castle Lane. Two preliminary trial trenches showed nearly 2.0m depth of Post-Medieval build-up. One, BC71 25, was expanded into a small square and BC71 26 was opened by machine on the north-east side of the available area. BC71 25 in its original form encountered a battered footing, which upon further excavation was recognised as the top of a stone-lined slope. This was presumed to be one side of a substantial ditch running east - west, thereby accounting for the confused evidence in BC71 26, which, having been unwittingly placed directly over its fill, was consequently abandoned, while BC71 25 was expanded.

By summer 1972, the 1971 site had also become a surface car park, and the warehouses around Ginn's Yard had been demolished, making available for excavation a site at a lower level, sandwiched between the two previous areas and the Castle motte (Area A). It also extended south towards the river to include the site of the recently demolished County Library on the Embankment (Area E).

The Ginn's Yard site gave an opportunity to tackle two problems. The L-shaped group of trenches, BC72 37,

was intended in its northern arm to follow the stone-lined ditch to the east, at least as far as the entrance to the Yard, which had to be kept unimpeded, and see if any relationship could be established with the ditch around the motte. BC72 53 was excavated in the garden of Castledene, immediately adjacent to the motte, in the hopes of seeing some relationship between the stone-lined and motte ditches. The southern arm of BC72 37 was intended to sample the occupation evidence south of the line of the ditch, and, specifically, to look for evidence of the north wall belonging to the main Medieval building range in BC70 8, 15 and 16 going further east beyond the east wall in BC70 10.

The second problem was the nature of forebuildings west of the motte; BC72 35 and 36 were mechanically excavated trial trenches which cut into ground which had been deeply disturbed, perhaps by gravel extraction breaking out from the west side of the motte ditch, later filled and levelled with Post-Medieval dumping. Consequently, no further examination of the central yard area was made, except that BC72 35 was extended east and broadened to link up with the motte trench, BC72 48 (Area A).

EXCAVATION RESULTS

ROMAN (Castle Site Period 1) by Evelyn Baker

Residual sherds of Roman pottery and flue tile were found, but no features of this date could be positively distinguished. It is possible that some of the features cut into natural subsoil in the Castle area may be Roman, but it would seem that activity in this period was slight. In this context should be remembered the repeated antiquarian tradition that a Roman villa existed near Castle Lane, though there is every likelihood that the suggestion was based upon a misinterpretation of Medieval material. It should also be remembered that Roman and Iron Age settlement evidence has been found extensively along the length of the Ouse valley.

SAXON (Castle Site Period 1) by Evelyn Baker

Introduction (Fig 8)

Over 100 features of this period were found in a contiguous grouping of trenches BC70 10, 12, 15, and 25. Many of them indicate the presence of structures, with both slot and post-hole foundation evidence. The closely related trenches BC70 10, 12 and 15 contained a total of 78 features cut into natural subsoil, spanning four or possibly five phases of building, indicating a lengthy period of settlement. The structural evidence from BC70 15

is described in some detail on account of its importance for the early history of Bedford.

The other main area of occupation was seen in BC70 25, where the stone-lined Medieval ditch had cut through two phases of building comprising 26 features. There was only residual pottery in BC72 37.

The ceramic evidence which is discussed in the finds report is fundamental to the suggestion that these features date to the early part of the Middle Saxon period in Bedford. The particular groups of pottery fabrics (A1 – A7) found in these features have only been found in this part of the town. Many sherds belong to fabric A6 (see Pottery Report below), which includes the sherds identified as early in date, and associated with the majority of the Roman finds. This pottery is quite different from the other, Middle Saxon, pottery types (A8 – A12) which occur far less frequently in this restricted area and are generally stratified above the features or in their disturbed top fills.

Many of these features were sealed in a rich black loamy spread (Period 2), sometimes as thick as 0.50m, but containing few discernible layers or features. This might be explained as a result of extensive cultivation which not only laid down humus, but also churned up the later phases of underlying occupation.

Structures in BC70 15 (Figs 9, 10)

About 50 square metres unaffected by later features was available for examination, mainly in the north and west parts of the trench. Earliest features, *Structures 1, 2 and 3*, were revealed in the final clearance of the natural sandy clay on the last official day of the excavation. Only a further 48 hours could be made available, and this constraint inevitably affected the amount of evidence that could be recovered and the detail possible in recording. The early features consisted of intercut slots and post-holes with varied fills. The recognition of individual phases on the basis of limited information is problematical, but four structures can be suggested, with their elements re-combinable should adjacent excavation produce further evidence. All features belonging to *Structure 1* were completely excavated; those of *Structures 2 and 3* were planned and partly excavated; those of *Structure 4* were completely excavated, though some had been contaminated by Medieval and Post-Medieval disturbances.

STRUCTURE 1

Structure 1 was probably the earliest building. The evidence for it consisted of 11 post-holes running east – west in two parallel lines approximately 10m apart for a length of 6.50m. The larger post-holes, *F48, F54, F59 and F44* were straight-sided and had rounded bottoms. Depths varied between 0.50m and 0.80m, and the fill was brown or orange-brown clay. They contained straight-sided post

Saxon Features

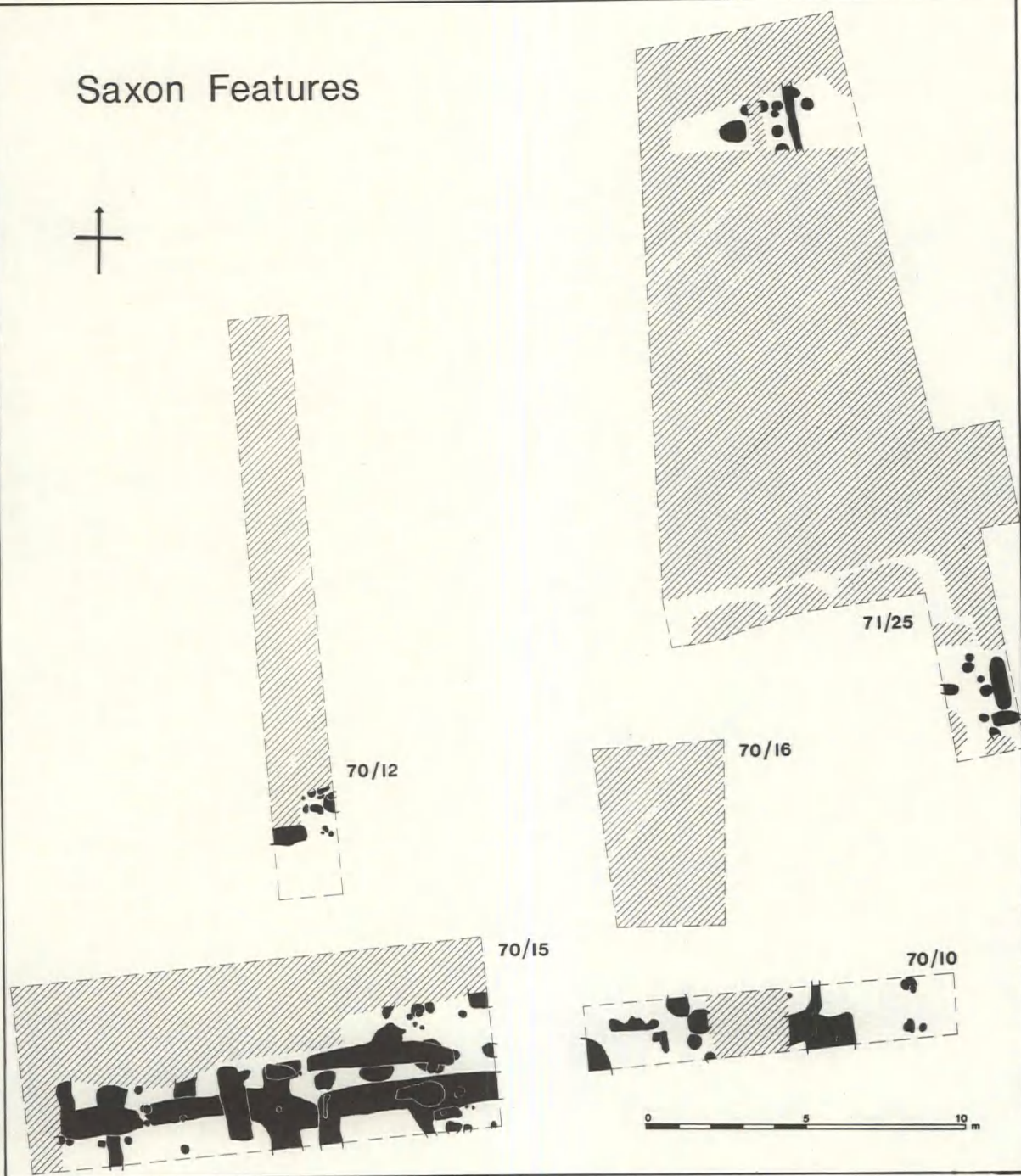


Fig 8 Bedford Castle: underlying Saxon features. (Later disturbances shaded)

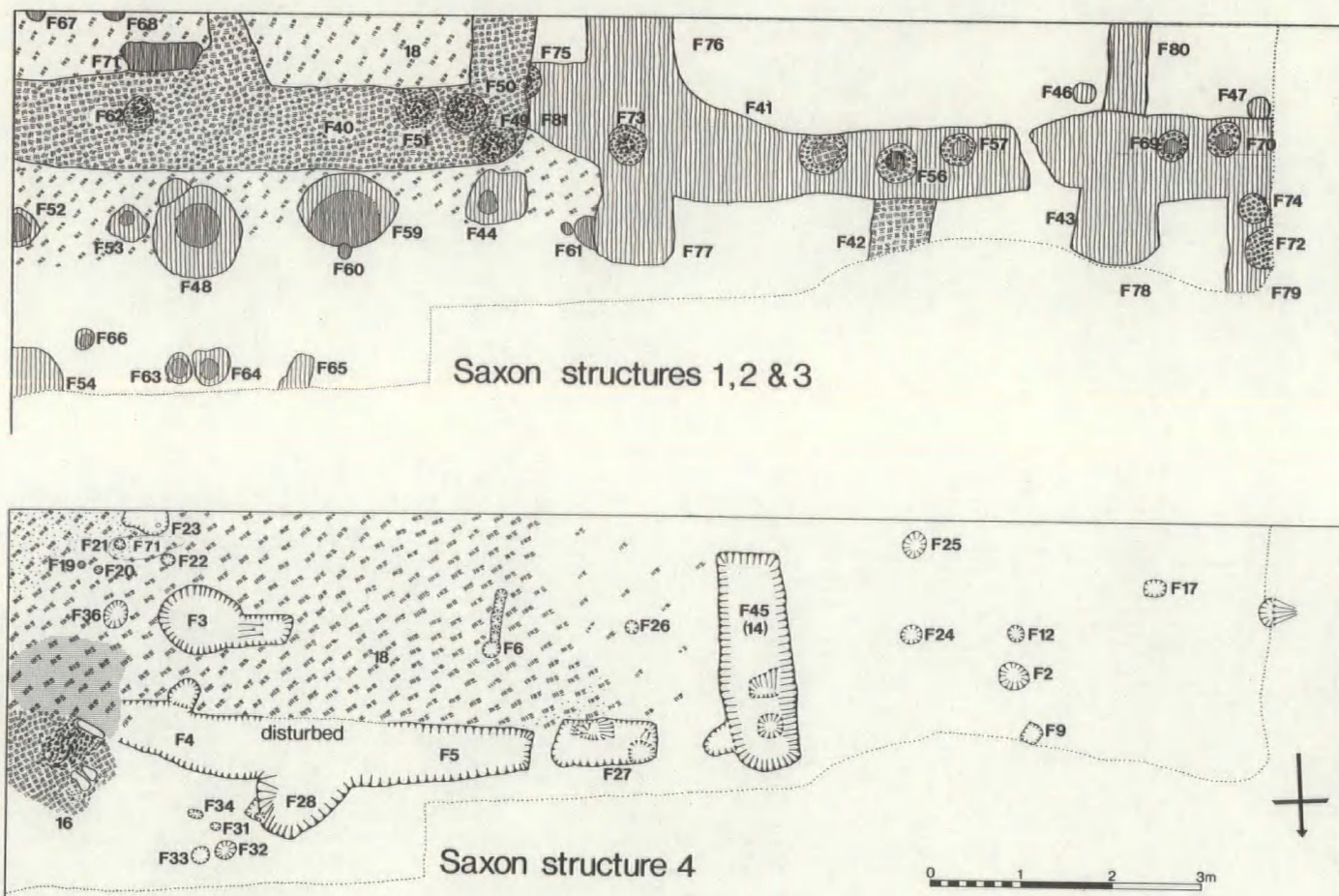


Fig 9 Bedford Castle: area B: Saxon structures 1 – 4 in BC70 15.

voids 0.50m to 0.80m deep filled with darker loam. The smaller post-holes *F52*, *F53*, *F61*, *F63*, *F64*, *F65* and *F66* contained dark brown loam. Since they were surrounded by discoloured clay, it is conceivable that they were post voids set in larger post-holes.

The structure could not be securely located in the stratigraphical sequence. Its constituent features were all cut into natural clay, and the westernmost (*F61*) was cut by the north-east support post of *Structure 2*. It certainly predated *Structure 4* which overlaid it, and in some places cut it. There is the possibility that some of the south run of post-holes were external support posts for *Structure 3*, but their fill suggested that the post-holes were contemporary with each other. If that was true, they predated *Structure 2* which in turn had been cut by *Structure 3*. *F48* contained in its lower fill a decorated sherd with a probable date of early 5th century (see catalogue 42).

STRUCTURE 2

Features of *Structure 2* were in the south-west corner of the trench, going into the south section and cut to the west by the Medieval robber trench *F1*. The main elements were two slots running east – west, *F41* and *F43*, making a length of 8.40m until destroyed by *F1*. The north-east corner of the building was formed by a turn into the south section *F76*, and two external support posts *F77* and *F81*, which had apparently been cut and filled simultaneously with the slots. *F78* was a third support post which came off *F43*. A further feature *F79*, possibly part of a slot rather than a support post, jutted north from *F43*, but was cut to the north and west by Medieval features, and might possibly represent one side of an entrance. *F80* might represent an internal division. All these features were about 0.50m deep with slightly sloping sides and flat bottoms, and were filled with clay loam. Another feature, *F42* possibly a slot, was seen to the north of, and was cut by, *F41*.

The slots were punctuated by a series of post-holes filled with loamy clay flecked with charcoal. A notable feature was that each post-hole was packed with a lining 0.10m thick of dense grey clay. Not all of these post-holes went to the base of the slots, and there is a possibility that they were a modification of the building. The general matrix of the soil fill of *Structures 1* and *2* was similar, which may indicate some degree of contemporaneity. *Structure 2* was cut by several features belonging to or contemporary with *Structure 4*, such as *F27*, *F45*, *F24*, *F2* and *F12*.

STRUCTURE 3

Structure 3 presented a pattern of features similar to *Structure 2*, but in the east part of the trench. It had no external supports unless some of the post-holes assigned to *Structure 1* belong with it. The slots appeared to form the north-west corner of a building which cut *Structure 2*, or possibly formed an east extension. The main slot *F40* had a minimum length of 5.90m. Two arms, *F76* and *F80*, the latter a probable partition, formed the east part, and disappeared into the south section. The features had slightly sloping sides and flat bases. Depths varied between 0.40m and 0.60m. Fill was brown loamy clay capped with a 0.10m thickness of dense grey clay which sealed post-holes. These were of a similar nature to those in *Structure 2*, having clay packing and comparable fill. They

did not reach the base of *F40*, being between 0.30m and 0.40m deep, and could represent a modification or rebuild. Discontinuous patches of grey clay elsewhere in the slot fill might be interpreted as the remains of further post-holes. Depressions in the bottom of *F40* may have been earlier uprights. The whole structure was surrounded by dark discoloured clay (*18*) which may have been the product of activity associated with *Structure 4*. It was cut by several features belonging to *Structure 4*, *F3*, *F6*, *F36* and *F71*.

STRUCTURE 4

This fourth structure was another trench-constructed building. It was on the same alignment as *Structures 2* and *3*, but came further into the trench. Slots represented the north-west corner of a building with a minimum length of 9.0m. The west limit illustrated (fig 9) was formed by *F45*. Site notes suggest that there may have been another slot *F35*, contemporary with *Structure 4*, running a minimum of 3.0m further west. It had a similar grey capping to that seen in *Structure 3*, and recognised in places in parts of *Structure 4*. Thus, *F45* may have been an internal partition in a larger building. If this was so, the discoloured loamy clay (*18*) seen only in the east might represent a different function in the east part of the building. *F3* and its associated post-holes may have represented a partition, but possibly a later, flimsier construction. This internal division was cut into (*18*) which was probably an occupation spread enclosed by *F4*, *F5*, *F27* and *F45*. *F28* may represent an external support post.

This structure had been considerably disturbed by later activity, and the upper parts of some features had been contaminated with Saxo-Norman finds. (*14*) which was cut into *F45* contained Post-Medieval pottery.

It is likely that a further phase of Saxon activity is indicated by the hearth (*16*). It cut through the east part of *F4*, *Structure 4*, and apart from animal bones contained only sherds of *A2*, *A3*, *A5* and *A6* pottery. It was formed by an area of yellow sand and fragments of charcoal. Over this was a layer of charcoal with a limestone surround, covered with a layer of burnt stones. The whole was covered by an oval patch of yellow clay 0.20m thick. Surrounding the hearth and sealing it was the black occupation material (*12*), some 0.40m deep.

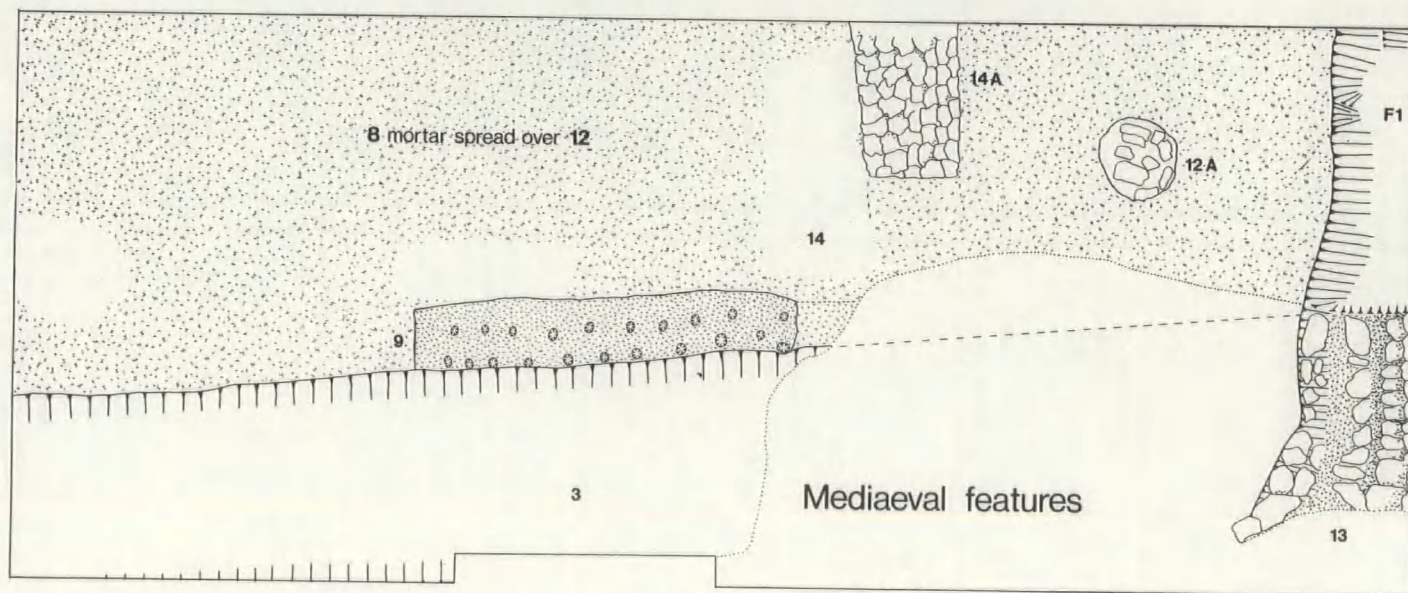
Saxon Features in BC70 10, 12 (Fig 8)

These fragmentary features were identified by their stratigraphical position cut into natural subsoil, sealed by the black occupation layers, and by pottery finds in some of them. Slots and post-holes can be recognised, but no further interpretation seems possible given the limited evidence.

Finds: BC70 10 (28) A4 29
BC70 10 (36b) bone needle 1537

Saxon features in BC71 25 (Fig 8)

Some pre-Saxo-Norman features were seen cut into the small areas of natural surface which survived the digging of the great ditch and of the Post-Medieval pits running along its edge. More features survived to the south of the ditch than to the north and were partly underlying the stone spread for the bridge abutment. Two phases of occupation were distinguished, here being



Saxon features, all phases

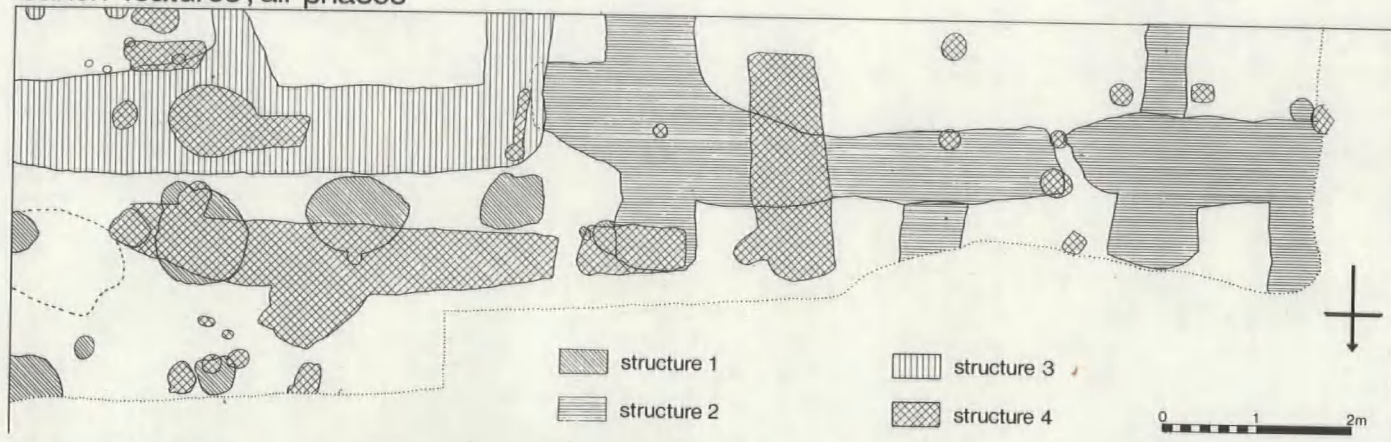


Fig 10 Bedford Castle: area B: all Saxon structures, Medieval features in BC70 15.

Context	Roman	A2	A3	A4	A5	A6	Other Finds	A11	A12
STRUCTURE 1									
F48 post-hole						c 42 as/2	A/bone n/a		
F54 post-hole				2		2			
F59 post-hole	1			1		1	A/bone		
F62 post-hole						as/15			
STRUCTURE 2									
F41 slot	3					as/17	c 1530 A/bone		
F42 slot		1			1	14	A/bone		
STRUCTURE 3									
F40 slot				1 as/5	1 as/9				1
STRUCTURE 4									
(18) occupn	1	1 c 21 c 22		4 c 28 as/16	1	6	A/bone		
(21)	c 16						A/bone		
F3 slot	1	c 23	1			2	A/bone slag charcoal		
F4 slot							A/bone slag charcoal	6	
F6 pit							A/bone		
F28 post-hole							A/bone	2	
F39 post-hole					as/11		A/bone		
?SAXON									
(16) hearth		c 25	1		1	2	Whetstone		

KEY

c Catalogue No

as/ Analysed Sherd, see Pottery Report below

A/bone Animal bone included in analysis by Annie Grant: n/a not analysed.

Plain numbers refer to quantities of sherds

Fig 11 Finds Table: Four Early Middle Saxon structures, all sherds included.

separated by a turfy spread (70). The earlier features (F72, F73, F74, F84, F89, F90, F91, F142, F143, F144) were mostly sealed by (70), the later being cut into it. These later features (F37, F38, F69, F71) were partly sealed by a second turfy spread (18).

The features seen to the north of the ditch also appeared to fall into two phases. F62 and F95-98 were cut directly into natural, while F64-68 were cut into a clay turf line. There was no other direct stratigraphical evidence to substantiate this.

All the features were slots or post-holes, probably from timber buildings. The most common fill was a loamy clay. Very little pottery was recovered from them. There was only a small amount of Saxo-Norman or Medieval building evidence over them, and Post-Medieval layers had in places cut into them.

Discussion

The features in these trenches, together with their associated pottery, represent a nucleus of

probable early Middle Saxon occupation in the area of the present town, though it is impossible to say whether it represents urbanised settlement. Only the evidence of BC70 15 is sufficiently coherent to bear further discussion at this stage.

There is no doubt that substantial timber framed buildings are represented. Two types of construction are evident, post-hole (*Structure 1*) and post-in-trench (*Structures 2 - 4*). The Bedford buildings have affinities with others found in this general area of the country, at Maxey Northants (Addyman, 1964), North Elmham Building H (Wade-Martins, 1969, 373) and London Newgate GPO site (Webster, 1976), as well as further afield at Chalton Hants (Addyman and Leigh, 1973) and Thirlings Northumberland (Webster, 1975).

Such a typology, parallels and comparisons have only become possible as a result of relatively

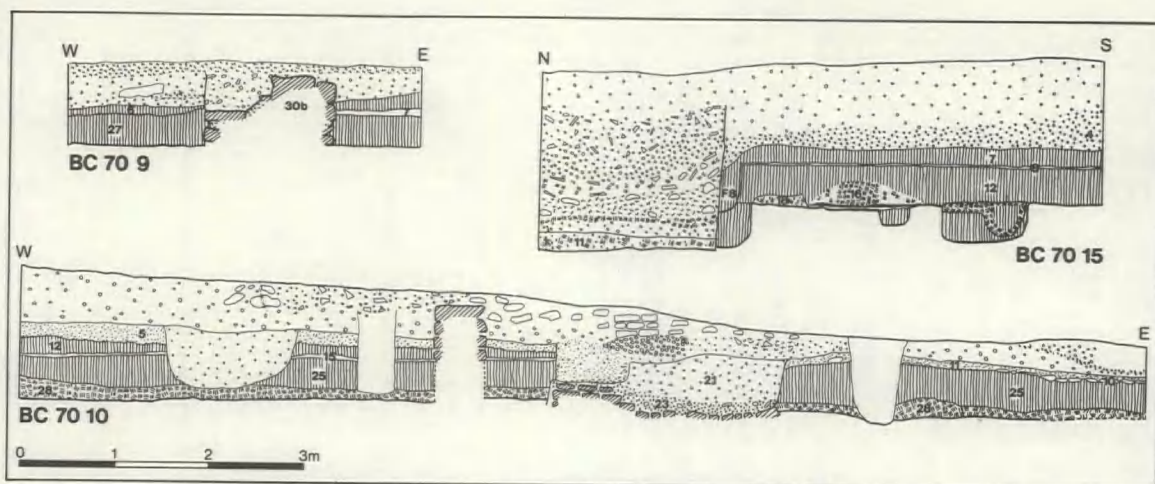


Fig 12 Bedford Castle: area B sections: BC70 9, north; BC70 10, north; BC70 15, east; for location see Fig 14.

recent work (Rahtz, 1976, 49 – 88). The similarities of construction type with some of the late Saxon buildings at Portchester underline the problems still remaining in the devising of a chronology and typology for building types based on often partially recovered plans widely separated in space.

BLACK OCCUPATION LAYERS (Castle Site Period 2; Fig 12) by David Baker

This deposit was seen in all 1970 and 1971 trenches south of Castle Lane where excavation to natural subsoil was possible. It clearly sealed the Saxon features already described and was initially thought to relate to the early Castle until it became clear that presumed Castle walls were cutting it.

The layer was generally not less than 0.50m thick, and in some trenches appeared to be interrupted horizontally by a layer of gravel or mortar.

Thus (15) lay between (12) and (25) in BC70 10. (7) between (6) and (27) in BC70 9, and (8) between (7) and (12) in BC70 15. Clearly these interfaces represent activities nearby on the site, though they can be neither dated nor characterised with certainty.

The pottery finds could not clarify dating. The layers contained many residual sherds in A fabrics, doubtlessly churned up from deeper deposits, perhaps by the cultivation process which a consistent texture might indicate. An analysis of B and C fabrics from five trenches was made by Alison Allden, covering all pottery including body sherds. This confirmed the dominance of B1 (St Neots) and B4 (local shelly) wares. However, their distribution above and below the interface in the black layer, and their presence in a pit, 70 8 (20) (fig 14), clearly dug against a Castle footing, must blur their usefulness as diagnostic of early pre-Conquest occupation, even though the latter finds

Context Ref & Type		Fabric								Total
		B1	B4	B5	B6	B8	C1	C3	C22	
8(14)	Black layer	77	10			3	1		1	92
8(20)	Pit	44	4							48
9(27)	Lower black layer	2	1							3
9(6)	Upper black layer									—
10(25)	Lower black layer	6	1							7
10(12)	Upper black layer									—
12(21)	Black layer	3			1					4
15(12)	Lower black layer	111	20	1		4	6	3	1	146
15(7)	Upper black layer	24	2			2				28
Total		267	38	1	1	9	7	3	2	328

Fig 13 Table showing distribution of sherds in black occupation layers by trench context and fabric type.

might have been residual. Fabrics must still be generally dated in the range 9th to 12th centuries, so the black occupation cannot be demonstrated to be exclusively pre-Castle, nor can a date be put to the appearance of deposits relating to the Castle on this particular site.

Catalogue

8(20) A12 86; B1 117. 12(21) B6 351. 15(7) B1 227. 15(12) A2 241; B1 202, 216; copper alloy hook 1338.

MEDIEVAL: BUILDINGS IN BC70 8-10, 12-17

(Castle Site Period 3; Fig 14, Pl 3)

by David Baker

The main phase of Norman activity was represented by substantial foundations for a range of buildings, possibly long and rectangular in plan, on an east – west axis. The south wall showed two building periods and was less regular and substantial than the north wall: both had been severely robbed. A probable east limit was seen, together with part of an apsidal footing at the north-east corner. Two lateral north – south walls were found, but no evidence for a west limit within the area available for excavation.

The north wall was seen in BC70 8, 13, 15 and 16. In BC70 8 and 13, about six courses survived of a footing 2.25m wide, with roughly shaped limestone facing blocks and a core of limestone rubble. The lower courses were sandwiched between layers of gravel, a constructional technique also visible at the west end of BC70 15 where a robbed section across the footing showed some attempt to lay the foundation courses in rough herring-bone fashion. The remainder of this wall in BC70 15 had been totally robbed (3). In BC70 13, a narrower wall (0.75m) ran north from the north side of the main wall. This survived to a much greater height, but its lower courses showed the same sandwiched layers of gravel and stone, perhaps indicating a similar period. Later disturbances thwarted attempts to trace this wall further north in BC70 17a.

Adjacent to the south side of the robbed wall in BC70 15 was a double row of small post-holes or large stake-holes (9), cut into the black occupation layer (12). The rows were nearly 4.0m long and contained 11 (north) and 10 (south) holes. Some were circular and some square in section, with diameters ranging from 0.10 – 0.18m, and depths of 0.33 – 0.66m, mostly 0.40 – 0.60m from level of detection. Their fill was mortar-flecked loam. The excavated shafts indicated slight slopes in all directions. Limits to the group of post-holes were clearly seen on three sides. The post-holes were relatively slight and so localised that it is difficult to see them as part of primary construction or final dismantling: they may have been associated with some repair works to the robbed wall or to the upper floors which it supported.

BC70 16 was originally designed to test whether the postulated junction of walls in trenches 8 and 15 was a true corner or a T-join, with the north wall from BC70 15



Pl 3 Bedford Castle: area B: BC70 9, foundations for Medieval buildings.

continuing further east. The robber trench seen in BC70 15 was also seen here, but with a curving outer edge suggestive of an apse. In two places on the outer edge, a few facing stones remained in position, while in the centre of the curve, a deeper robbing indicated a more substantial footing of which parts survived on the north side. At the top of the curve, an associated but shallower robbing of rectangular shape might have represented a pilaster buttress footing.

On the outside of the external curve, a footing of about 1.20m width abutted the surviving apse edge-stones. It consisted of a flat bed of many small pieces of limestone and may have been a foundation for a drain to take water away from this corner.

The east wall was represented in BC70 10 by a robber trench nearly 2.50m wide with two courses of facing stones surviving on the west side, the remainder filled with loose rubble. Immediately east of the wall position, overlying the black occupation layer, was a substantial area of cobbling, seen all across the remaining 3.5m of the trench further east.

Evidence for the south wall of this complex was seen mainly in BC70 9. A footing of small rammed blocks (33) ran over most of the east end of the trench: its width of 2.0m was established by an extension BC70 9a at the east end of the trench. Its north edge ran parallel with the south edge of the robber trench in BC70 15, but on the top of the footing was the line of a robbed superstructure diverging south from a surviving corner in the middle of BC70 9.

On the east side this wall showed two periods. The earlier, which related to Wall (33), ran north under the later, and consisted of stones also laid at a diagonal pitch. The later, on top of it, related to the above-mentioned

robbed superstructure. Taken with the evidence of the extension BC70 9b, this appeared to give either a staggered T-junction, or perhaps the foundation for a south-east corner clasping buttress. This later period wall continued to the west but had been deeply robbed in places, destroying any evidence of earlier period footings underneath it. Another junction was seen 17.5m from the east end of the trench, and the footing continued beyond it to the west end of the trench, its north face now on a convergent alignment with the north wall in BC70 8 and 15, its south face and thickness not known.

No western limit for this building complex was seen. The continuation westwards for at least another 10.0m of a major wall appeared to be confirmed by BC70 17b which was mechanically excavated. The foundations had been entirely robbed, and only the north side of the robber trench was seen in the excavation, giving a minimum width of 2.25m.

Both lateral walls running north from the footing in BC70 9 should have crossed BC70 15, but the evidence was disturbed and indeterminate. The east wall may have been represented by robber trench (14), a tumble of limestone loosely packed with gravel. The west wall was represented by the feature *F1*, initially interpreted as a pit. Its most southerly part was completely robbed out, but the northern still had some surviving courses of rough limestone blocks bonded in coarse yellow mortar. The relationship of the end of this feature to the robber trench (3) for the north wall was obscured by later disturbances.

Finds

There were no comprehensive assemblages exclusively associated with these buildings. Contexts with finds listed in the Catalogue include:

BC70 8 (16) spread: B8 411.

BC70 9 (32) spread: C4 514.

BC70 15 (12a) ? stone-packed post-hole: architectural fragments 1125, 1127.

BC70 15 *F1* pit: B1 121, 128, 141, 155, 223.

BC70 16 *F1* wall footing: panels of tracery in Totternhoe clunch 1112, 1113, 1115, 1121.

See also the Finds Table with Black Occupation Layer, above.

Discussion

These buildings were described in preliminary summaries as a range including a first floor hall with access by means of a newel staircase in a stair turret at the north-east corner. In a fuller consideration of somewhat fragmentary evidence, this interpretation must be hedged with qualifications, and alternatives should be considered.

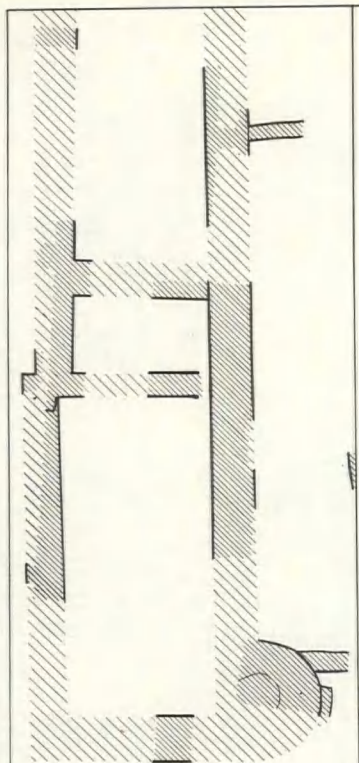
The apsidal footing and related wall junction in BC70 16 are key elements. Site limitations prevented eastward extension of BC70 16, so the existence of an L- as opposed to T-junction with the foundation running north from BC70 10 could not be verified. A simple corner is preferred, due

to the existence of cobbles east of the footing in BC70 10 and the lack of any wall evidence in BC72 37 III, though the latter could have been destroyed by the Post-Medieval lowering of the ground surface.

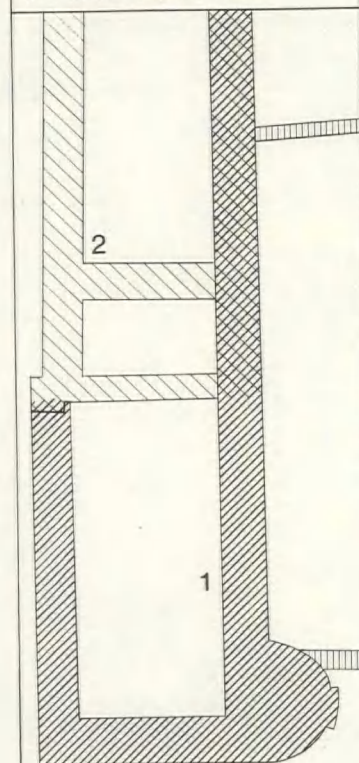
If a T-junction had been proved, the apse might have been alternatively interpreted as a bastion on a curtain wall separated from the ditch to the north by a berm of about 8.0m. This would be consistent with a wall running at least 40.0m to the west without any apparent turn to the south, though perhaps not with the lack of evidence for any further bastions along that length.

Whether the north wall was a curtain wall with structures against it to the south, or the north wall of a free-standing building complex, problems of interpretation remain for the other walls. At least two periods are represented in BC70 9 and its extensions. Various alternative and conflicting interpretations can be offered. The east unit of the whole complex could have been an earliest building, replaced by a west building whose south-east corner had a clasping buttress found in BC70 9 and 9B. The east unit of the range measures about 17m x 8m, had walls thick enough to support two storeys, and could be seen possibly as a two-bay first floor hall or chamber. Yet the north-south walls in BC70 9 were much slighter than those running east – west. The most problematic wall is that running east – west in BC70 9 and 17b. It was found close to a modern retaining wall before a drop of 1.5m south into the Swan Hotel yard. Consequently, the south face of the Norman wall was only seen in a few places. Therefore there is scope for there to have been ranges going south from junctions with this wall, though further evidence for them will probably have been destroyed by the reduction in ground level to the south.

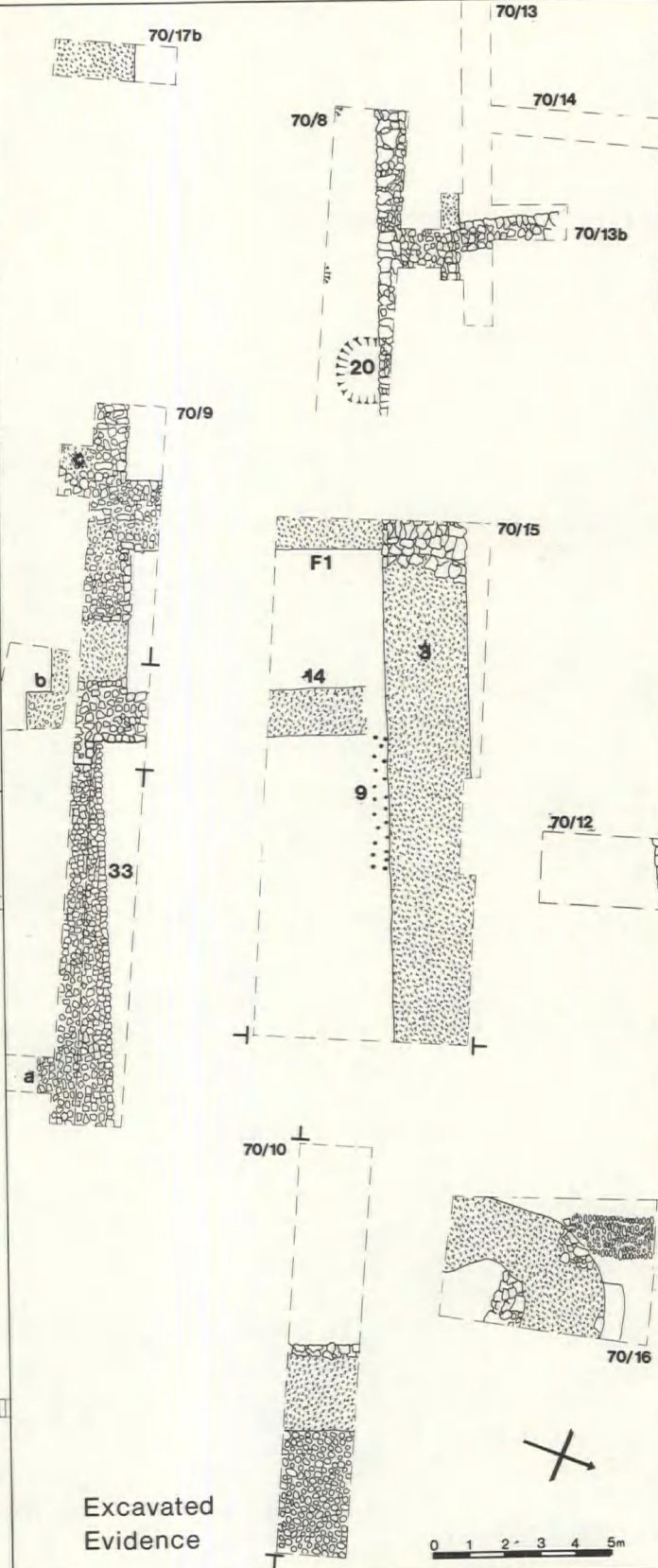
Opposite: *Fig 14* Bedford Castle: area B:
Medieval buildings;
location of sections in *Fig 12.*



? Reconstruction



? Phasing



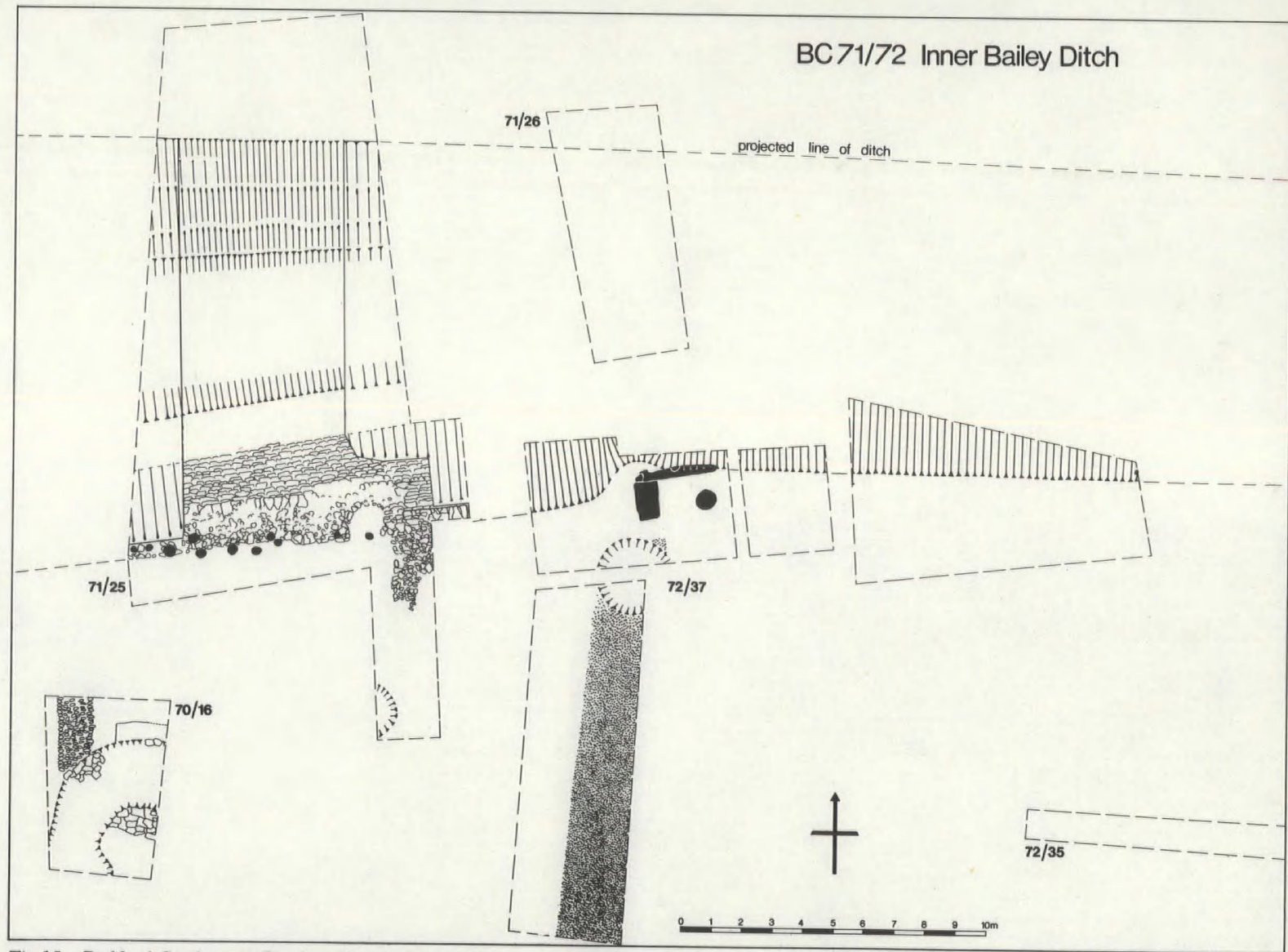


Fig 15 Bedford Castle; area B: plan of inner bailey ditch.



Pl 4 Bedford Castle: area B: BC71 25, west section across inner bailey ditch.

INNER BAILEY DITCH (Fig 15)

by Evelyn Baker

Summary

A substantial ditch, interpreted as the inner bailey ditch at least in the final phase of the Castle, was discovered in BC71 25. The trench was expanded to provide a complete section across it. An earlier ditch cut into bedrock had been widened in a later phase, with its south face stone-lined and its north face probably originally timber-revetted, giving a maximum width of 11.5m. There was a stone abutment for a bridge on the south side. The south side of the ditch was followed to the east in BC72 37, albeit at about a level 2.0m deeper: while the line was clear, robbing and other disturbances made it difficult to see whether it had been stone-lined or even recut. There was evidence for a slight change of alignment and a possible timber abutment on the south side. The ditch could not be traced further east towards the motte.

BC71 25 (Figs 16, 17; Pls 4 – 7)

INTRODUCTION

Mechanical trial trenches west of BC71 25 had indicated an accumulation of modern and Post-Medieval layers to a maximum depth of 1.20m. The original limited trench was mechanically excavated to this depth where a mass of earth and rubble was encountered, and further south to a shallower depth where features cut into the natural gravel were discovered. The southern edge of a stone-lined ditch face running east – west across the site was found; realisation that the disturbed evidence in BC71 26 was probably ditch fill allowed the position of the north face to be estimated. BC71 25 was extended

mechanically to prepare the excavation of a complete section across the ditch and beyond to the layers over undisturbed natural subsoil. When it soon became clear that the excavation could not be completed manually within three weeks, further mechanical plant was hired and a complete section cut, stepped inwards as a safety precaution. The sides and bottom of the secondary ditch, and the primary ditch were excavated by hand. It had been cut through pits and post-holes which were seen on both sides of it. These included some features with early Middle Saxon and Saxo-Norman pottery. Work was directed by Evelyn Baker, assisted by Antony Couchman, Geoff Summers and Kate Nicholls.

THE EARLIER DITCH

The earlier ditch was 5.0m wide at about 4.0m below modern ground surface. This would give a maximum projected width of 7.5m at the top of the natural subsoil, below modern ground surface. The bottom appeared to be flat, and probably respected the horizontal layers of natural limestone. The sides were sharply cut, and the south slope was nearly vertical. The silty fill was only partly excavated since the whole feature was below water table, which was 3.60m below modern ground surface at the time of excavation in August 1971. The bottom of the ditch was 1.50m lower. The fill consisted of smooth black silts (124) (137), a few lumps of limestone which may have dropped from the layers above, some steeply sloping patches of black stained gravel, and areas of very fine blue-black silt saturated with charcoal fragments. The upper part of the silt appeared to have been displaced by the weight of heavy material thrown in on it when the later ditch was filled.

THE LATER DITCH

The ditch was recut to a profile of greater width and possibly sloping sides cut at a wider angle. The central part which had formed the bottom of the earlier ditch was allowed to silt up. On the south side, which was stone



Pl 5 Bedford Castle: area B: BC71 25, stone lining on south face of inner bailey ditch.

revetted (16) and therefore stable, there was a cut back at the bottom of the slope of about 0.80m. At the base of the north side, the profile of bedrock suggested a cut back of about 0.90m, though the latest slope stretched back irregularly for nearly 3.0m northwards, giving a total width of ditch at lip level of 12.6m. This face may have been revetted in some way because it had to be cut into unstable natural subsoil. There was no evidence for robbed stone. (48) was initially thought to represent turf revetting, but would represent a ragged and militarily unsatisfactory profile. It seems more logical to think in terms of a timber-revetted slope originally continuing the north angle of the natural limestone, but destroyed by repeated slumping (57) of the natural subsoil on removal of the timber supports and during the deliberate filling of the ditch. The later ditch might then have measured about 11.5m between lips, an increase of about 4.0m from the earlier defence.

The south face of the later ditch (16) was stone-lined with blocks of roughly dressed limestone set in yellow sandy mortar: a possible junction of work along the face was seen. The blocks were cut flat on their upper and lower surfaces to make a horizontal fit for the stones immediately above and below. The lower plane was made larger than the upper to allow a fairly consistent angle of about 45 degrees. The lowest course sat upon a thick slop of yellow mortar in turn placed upon bedrock 4.0m below modern ground surface. The lower two-thirds of the face, protected by deliberate infilling of the ditch, was in excellent condition, with the mortar standing proud between the blocks of stone. The upper third was considerably more eroded, and at a slightly less steep angle. The badly robbed top of the lining ended on the south side with a single course of rough limestone blocks

set on a slop of mortar spread on the natural clay (20). This was probably a weather-sealing device rather than a load-bearing structure, though there was a series of ten post-holes constructed in it (76-78) (40) (42) (83) (86-88), and another three cut into the mortar and clay immediately behind it (79) (80) (82). These post-holes varied in size from 0.14 – 0.20m in diameter and 0.27 – 0.55m in depth. They ran in an uneven line across the top of the lining, and may represent more than one period of work. Their fill was mainly mortar light earth, and the wooden posts may have been deliberately removed.

On the upper part of the stone-lined slope near the east face of the trench, several blocks jutted out to form a vertical face (pl 6). This feature (93) was an abutment 2.20m long, formed from four courses of dressed stone with dressed quoins at each end. It had been robbed more extensively at the west than at the east end.

The fill of the ditch on the south side was mostly massive rubble tips with large loose mortar-filled areas between the stones (112). Against the lower two-thirds of the stone lining was a very thick layer of yellow mortar and large rubble (114). This coincided with, and doubtless explains, the well-preserved part of the stone face since the stonework was badly eroded above the level of this rubble fill.

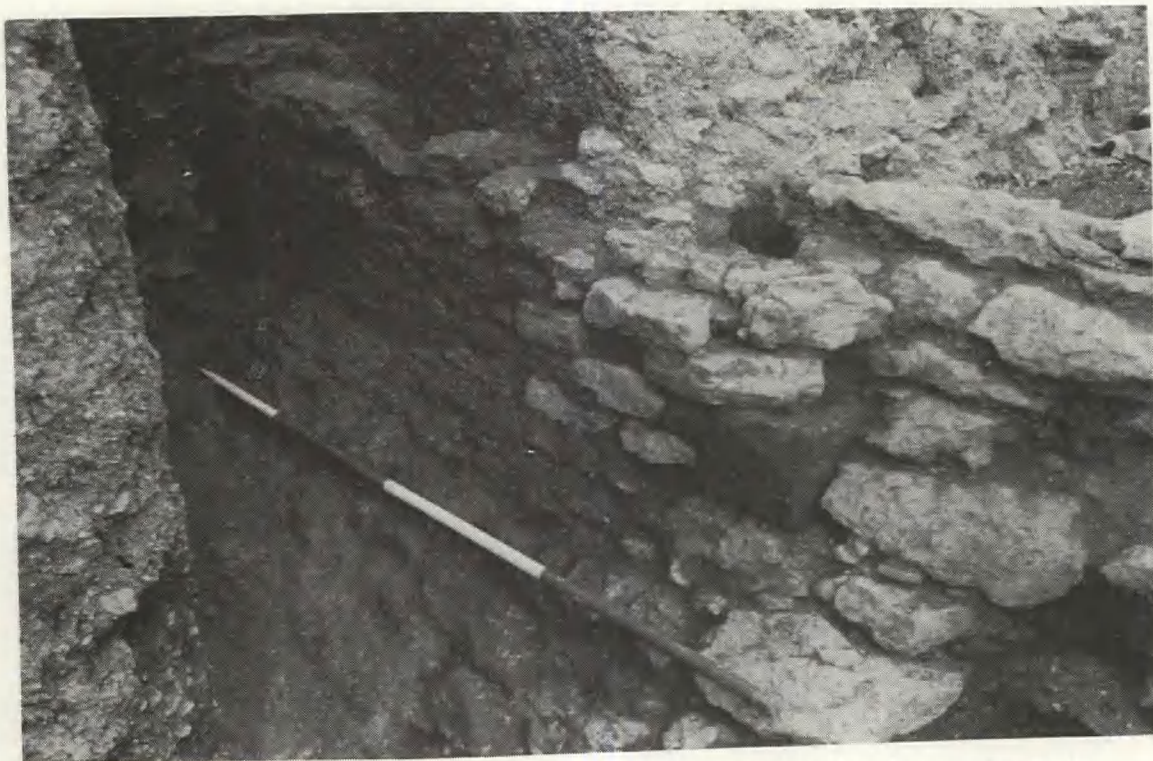
Associated with the bottom of this rubble, at the top of the fill of the original ditch, was a horizontal line of fallen limestone blocks. With them were substantial timbers (122), and a number of smaller wood fragments were attached to the bulkier pieces. These might have come from the wooden structure represented by the post-holes on the south edge of the ditch or could have been part of the filling of the earlier ditch.

The north part of the later ditch appeared to have been filled from the north with the tip lines diving at a steep angle from the top north to the bottom south. Against the slumped natural gravel was a mixed layer of clayey earth and gravel (57) (59). Over this, and partly over the turf line (48) had been tipped a substantial thick area of burnt daub and charcoal (47) becoming mixed with clay at the base of the layer. This contained three fragmentary timber stains lying north – south, of maximum length 1.60m. These remains might represent debris from the removal of timber revetting, or, in view of the daub, parts of a timber structure used to help fill the ditch. Further south the tips became amorphous mixtures of brown earth and gravel with a little rubble. Under the tails of these tips was a brown earth and pebble layer (133) which lay directly over the black silts (124) (137) of the primary ditch fill. The ditch fill finds included a half silver penny of William the Lion (1165 – 1214).

Filling the triangular space remaining when the latest material had been tipped in to the ditch from both north and south sides was an area of brown earth sealed by a turf line (103), extending for 3.0m, and a gravel spread (102) which went northwards to the north lip of the ditch. Over this was a thin layer of limestone fragments which stretched across the full width of the ditch, though it became much thinner and more pebbly to the north.

BC71 26 (Fig 15)

This trench was originally opened by machine at the same time as BC71 25. Excavation had reached a depth of 1.5m when it became clear that the trench lay over the



Pl 6 Bedford Castle: area B: BC71 25, stone bridge abutment on south side of inner bailey ditch.

ditch, so it was abandoned, and the space used for dumping.

BC72 37 (Figs 15, 19; Pls 7, 8)

Ginn's Yard provided another opportunity to examine the south face of the ditch. Despite extensive modern disturbances, and a modern ground surface some 2.0m lower than for trench BC71 25, the lower part of the slope cut into natural gravel could be seen continuing eastwards for about 20m, with an apparent slight change of alignment southwards, close to the position of a possible timber tower or bridge abutment.

Examination of the redeposited natural subsoil in the ditch slope about halfway along the trench revealed traces of slots and post-holes in an area of natural gravel projecting slightly forward over the line of the ditch, yet clearly related to it. These formed a rectangle and consisted of two slots (46) and (48) at right angles to each other. The opposite, south-east, corner, was indicated by a post pit (50). Within the space contained by these features was a floor level or construction spread (51), made up of dirty gravelly sand, mixed with patches of grey clay, laid on a compacted natural gravel surface.

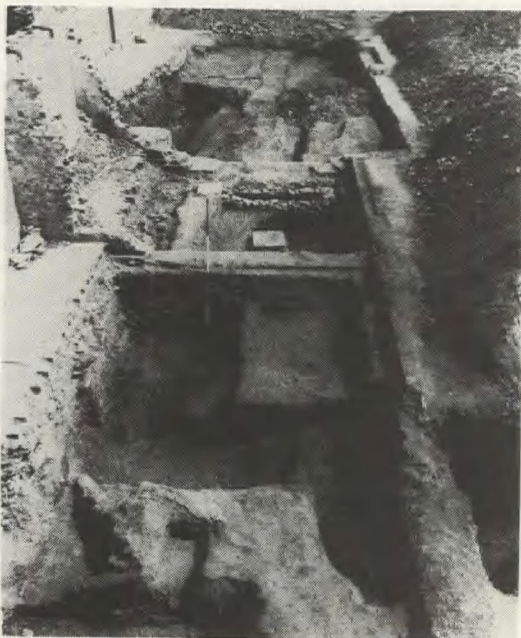
Slot (48) was a substantial feature which ran north – south, but survived only to a depth of 0.15 to 0.20m. It had three horizontal fills: 0.15m of dark grey loam and gravel under a thin layer of hard yellow clay was capped

with a mixture of compacted black loam, chalk and pebbles. Slot (46) was laid across the northern limit of (48), butting up to it and thereby forming an angle of about 85 degrees. Only about 0.10m of soft light brown sandy loam fill was left. It was cut by two postholes, (47) and (49). (47) was filled with loam similar to that found in (46), but was surrounded by discontinuous patches of darker loam, possibly a post pit. (49) was cut across the junction of the slots, (46) and (48), and into both features. It also had a light sandy loam fill. The large circular post pit survived to 0.30m deep and was filled with dark mixed gravel and loam.

It is possible that the structure may have extended further to the south and east. It covered an area of 3m by 2m. Most of the surfaces to the west, and part of the southern were disturbed. A small part of the later sealing tip layers (37) was not fully excavated. There was no indication of any continuation in the remaining space. Insufficient ditch slope was available for excavation to ascertain whether there had been timber supports within the ditch itself.

The whole structure was sealed by a series of sloping tip layers (37). Some of these layers were redeposited natural; all of them tipped towards the ditch from the south. They contained several sherds of pottery tentatively dated to the early Middle Saxon period, together with Medieval finds, and appeared to have been deposited rapidly, possibly as the result of rough shovelling of the southern berm to fill an earlier feature.

The tip layers were cut by the lip of the ditch. The



Pl 7 Bedford Castle: area B: BC72 37, view eastwards along south edge of inner bailey ditch, on left hand side.

features appeared to be under and slightly to the north of the upper edge of the ditch which appears to have post-dated them, and which may therefore represent the secondary ditch slope while the timber features belong to the primary ditch.

BC72 53 (Fig 15)

A trial trench was excavated at the eastern edge of the garden attached to 'Castledene', on the line of the ditch produced eastwards towards the motte. No Medieval evidence was found within the depth to which excavation could safely be carried out by hand.

The Finds

The extensive use of machinery in the excavation of BC71 25 inevitably hampered the recovery of material and of complete assemblages from contexts relating to the Castle period. Catalogue entries include:

Period 3: c1100 – c1225

(3) spread: A6 27, 35, (55) pit: C8 568, 569, (57) spread: A4 33, (69) pit: mortar fragment 1151, (78) posthole: copper alloy spoon 1330.

Period 3: including immediate post-Castle destruction (10) spread: B8 410; B9 416, (16) posthole: copper alloy plate 1343, (17) spread: architectural fragments 1116, 1118, 1123; B9 423; C4 523, 524, (41) spread: C4 522.

In BC72 37, Period 4 (post-Castle Medieval) tip layers contained the following finds included in the Catalogue. 37B/B1 A6 36, 37D/D1 A5 32, 37C A4 31; A6 44, 37E A6 45, 37F A11 77.

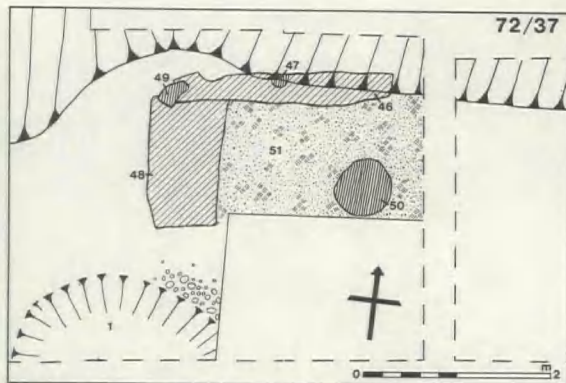


Fig 19 Bedford Castle: area B: possible timber bridge abutment on south face of inner bailey ditch.

Discussion

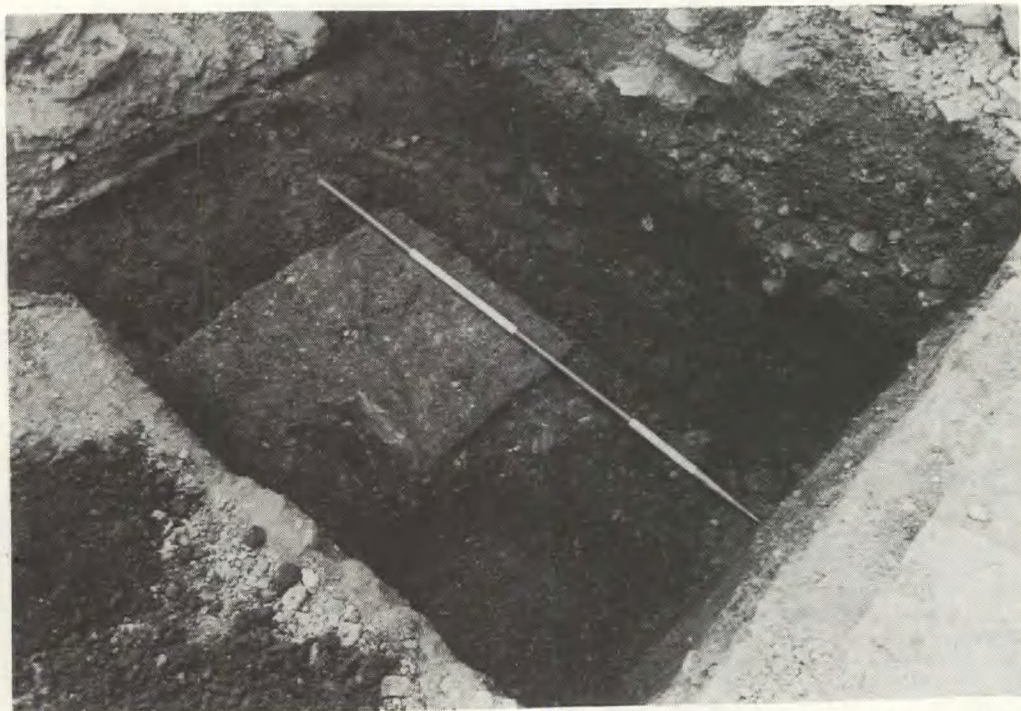
The existence of a major ditch has been established, but many problems remain unsolved, including its relationship to the overall plan of the Castle and the dating of its earlier phase.

Stone lining was only seen in position on the south or interior face of the ditch in BC71 25. It could be argued that it had been confined to the area immediately adjacent to the stone bridge abutment, but limestone debris found especially in BC72 37 may suggest that it had been more extensive. The lining seen around the motte ditch shows that the technique was used in more than one part of the Castle.

The ditch had been cut into unstable gravel and sand, which might have required the north face to be revetted in some way. There was no evidence of robbed stonework in the fill of the section across the ditch in BC71 25. More probably some form of timber lining was employed, part of which might be identified with the wood found in the slumped material from the extensive collapses of slope.

The post-holes on top of the stone-lined face are difficult to interpret because no further evidence could be obtained to the south of them. They might represent a fence line or defensive structure.

No clear relationship can be demonstrated between the two abutments, the definite example of stone in BC71 25, and the possible timber one in BC72 37. S. E. Rigold has tentatively classified the latter as a Type IIIa all-timber outer abutment



Pl 8 Bedford Castle: area B: BC72 37, timber features on south side of inner bailey ditch.

in his recent study (Rigold, 1975, 82). Cobbling or metallised surfaces were seen apparently pointing in their direction, but could not be shown to be contemporary. If they are not, the timber structure might be associated with the first phase of the ditch, and the stone with the second, both reflecting a convenient crossing place for the ditch in terms of the overall Castle plan.

The ditch itself appeared to change alignment and narrow in BC72 37 immediately west of the possible timber abutment, which seemed to project northwards over it. Disturbance and limited excavation opportunities prevented full investigation, but it is possible that the abutment had been strategically placed on the line of the primary ditch, to be partly destroyed by the widening of the second period and further eroded by its destruction.

The stone-lined phase of the ditch cannot be dated by artefacts, but there are two pointers towards an early 13th century context. The first is the chronicle reference to 'fossata pavimentata', repeated in the royal papers, ascribed to the work of Falkes de Breaute after 1216. The second is the condition of the stone-lined face itself. That which

had been covered by the bulky stone debris, indicative of deliberate filling, was in extremely good condition, showing little sign of having been exposed to seasonal weathering for many years before it was covered, presumably in 1224-25. Nor was there any evidence that this was an earlier defence merely repointed for the last phase of the Castle's existence.

POST-CASTLE (Castle Site Periods 4, 5) by David Baker

Excavation policy was generally directed at the early Medieval period. Upper levels, which for much of the area were extensively disturbed by various features, were usually removed by machine. The excavation records contain notes on features of specific interest, such as brick drains, foundations and pits, largely isolated from each other, and not providing a coherent picture.

Limited explorations on the south frontage of Castle Lane on either side of the Three Tuns showed extensive Post-Medieval foundations overlying several metres of dumped material levelling up the ground over the line of the inner bailey ditch. This was demonstrated most clearly in the section obtained through BC71 25. There

was a definite horizon between the immediate filling of the ditch, presumably in response to royal command during the later 1220's, and a further accumulation of up to 2.40m in thickness, dating from the Post-Medieval period. Pits had been dug through this latest fill, clearly in ignorance of what lay underneath, since (20) had attempted to penetrate the top of the stone lining for the ditch, shaving off the top of post-hole (83) in the process. On the other hand, other pits south of the ditch edge appeared to respect its line (23) (37) (54). Pits (5) (11) and (27) were also cut into the softer gravels and clays to the south of the ditch, destroying much of the evidence for pre-Medieval activity in the process. On the north side, a large Post-Medieval disturbance (60) had cut its way through more pre-Saxo-Norman occupation.

Further south, along the edge of the terrace before the drop into Swan Yard, the latest site use, some kind of warehouse or factory, had included a semi-basement cutting through the layer of Post-Medieval accumulation virtually on to Medieval levels. Generally, the 1970 area of excavation included evidence of light industrial activity, such as inspection pits and metal stanchions bedded in concrete blocks.

In contrast, the 1972 excavation area to the east, Ginn's Yard, had been shaved away to accommodate the group of warehouses which formed the latest use on the site. The surface of undisturbed natural subsoil was only a few centimetres from the modern surface, with the Medieval layers correspondingly destroyed. Buildings had been standing around all sides of the Yard, which could be approached from both north and south ends, to Castle Lane and the Embankment respectively. The Yard was disturbed by the footings trenches and drainage arrangements for the warehouses.

The major feature disruptive of Medieval deposits belonged to an earlier part of the Post-Medieval period. Most of Ginn's Yard seemed to have been affected by what appeared to have been quarrying of the natural sand and gravel to a depth of up to 2.0m below the modern ground surface. It extended from the west side of the motte ditch in the east, to the east side of BC72 37 II in the west, and from BC72 36 in the south at least nearly up to BC72 37 III in the north. The mechanical excavations of BC72 35 and 36 showed disturbed layers containing some Post-Medieval pottery and brick.

The Finds

Material was recovered from Post-Medieval contexts throughout Area B. Unless otherwise stated below, these were spreads. No contexts or assemblages seemed to be of sufficient importance to warrant printing, though full details are available in the excavation archive. The following list covers Catalogue items, and includes much residual material selected for its value to artefact type-series. Contexts producing good Post-Medieval assemblages are indicated with an asterisk.

BC U/S: bone apple corer 1518. BC70 8 U/S B2 236. (2) B1 114. (7) clay pipe dec 13 1061; 16th - 17th century Medit. import 918. (8)* 17th - 18th century: C6 549; glazed earthenware 812, 824, 930, 966. (10)* E3 785; glazed earthenware 815; glass type 60 1159; iron key 1424. BC70 9 (21) iron fragment of lock 1429; iron nail 1454.

BC70 10 (1) C27 689. (36) A6 39. BC70 12 (3) clay pipe N 1031. (4) B6 353. (10) lustreware 980; glass type 34 1212, type 45 1258; textiles 1563-68. (13)* soakaway: clay pipe E 1016, C 1025, N 1031, dec 31 1068; button fastener 1556. BC70 13a U/S C11 584; yellow glaze 941, 957, 963; unglazed earthenware 806; Medit. imports 913, 917; Delft 967; copper alloy boss 1396; glass type 7 1162, type 58 1165, 1166, type 13 1195, type 22 1200, type 23 1206. BC70 15 (1) B1 142; yellow glaze 956; Chinese porcelain 991. (2)* A12 87; B8 377; yellow glaze 922, 931, 937, 944; spindlewhorl 996; copper alloy brooch 1373. (2a) glass type 69 1193. (3)* robber trench: yellow glaze 938. (4)* pottery female bust 1000. (6a) B9 418; glass 31 1194. (11) robber trench: local glazed slipware 856. (14) robber trench: B1 181. (15) ?iron bolt socket 1428. BC70 16 (1) glazed earthenware 821. (2) glass type 21 1199, type 44 1247. (5) glazed earthenware 978, 979, 981. BC71 25 U/S B8 412; C5 529, 538; C8 692; coarseware 772; clay pipe dec 37 1074; architectural fragment 1128; glass type 58 1157; copper alloy ring 1382. A C8 570; C33 712. B E2 767. (2) E2 775. (5) pit: A6 41. (6)* lustreware 983; Jews harp 1364. (8) A12 95; C24 677. (13) copper "Lennox" farthing of James I, possibly c1620 (not illustrated). (23) (29) (30) (33) (54) produced Post-Medieval assemblages of note. (21) C21 658, 659. (25) glass type 80 1264; copper alloy roundel 1339. (37) pit: glazed earthenware 924; iron buckle 1433. (47) copper alloy ring 1386. (51)* E2 762, 776; E3 787; lustreware 984; stoneware 893; Chinese porcelain 990; clay pipe N 1029; floor tile fabric E 1088, fabric M 1089; roof tile fabric F 1094; glass type 8 1254, type 80 1255, 1257. (53) B1 163; clay pipe G 1006. (60)* 17th - 18th century: Cistercian 854; glazed earthenware 865, 954; clay pipe K 1012, dec 35 1075; glass type 53 1263; copper alloy strap end 1377, mounts 1401, 1406. (61)* 17th - 18th century: copper alloy fish hook 1333. BC71 26 (10)* C15 641; copper alloy plate 1356; bone point 1533. (22) stone-packed pit: copper alloy buckle 1375. (25) C7 563; copper alloy needle 1340. (27) C3 509. (36) C5 532; copper alloy buckle 1351. BC72 37 U/S C12 623. (1) A4 30; C4 528; stoneware bottle 899; copper alloy ring 1381. (17) copper half-penny of George III, 1799 issue (not illustrated). (18) iron sickle blade 1414. (20)* iron staple 1435. (25) pit: A12 82; B1 145, 176; B6 346; iron nail 1455. (27) pit: glass type 5 1201. (33) pit: B8 376. BC72 53 (15) glass type 4 1224.

AREA C: NORTH and WEST of CASTLE LANE

by DAVID BAKER with sections by JANE HASSALL and ANGELA SIMCO

GENERAL SUMMARY

14 trenches were excavated piecemeal between Ram Yard and the two arms of Castle Lane as land

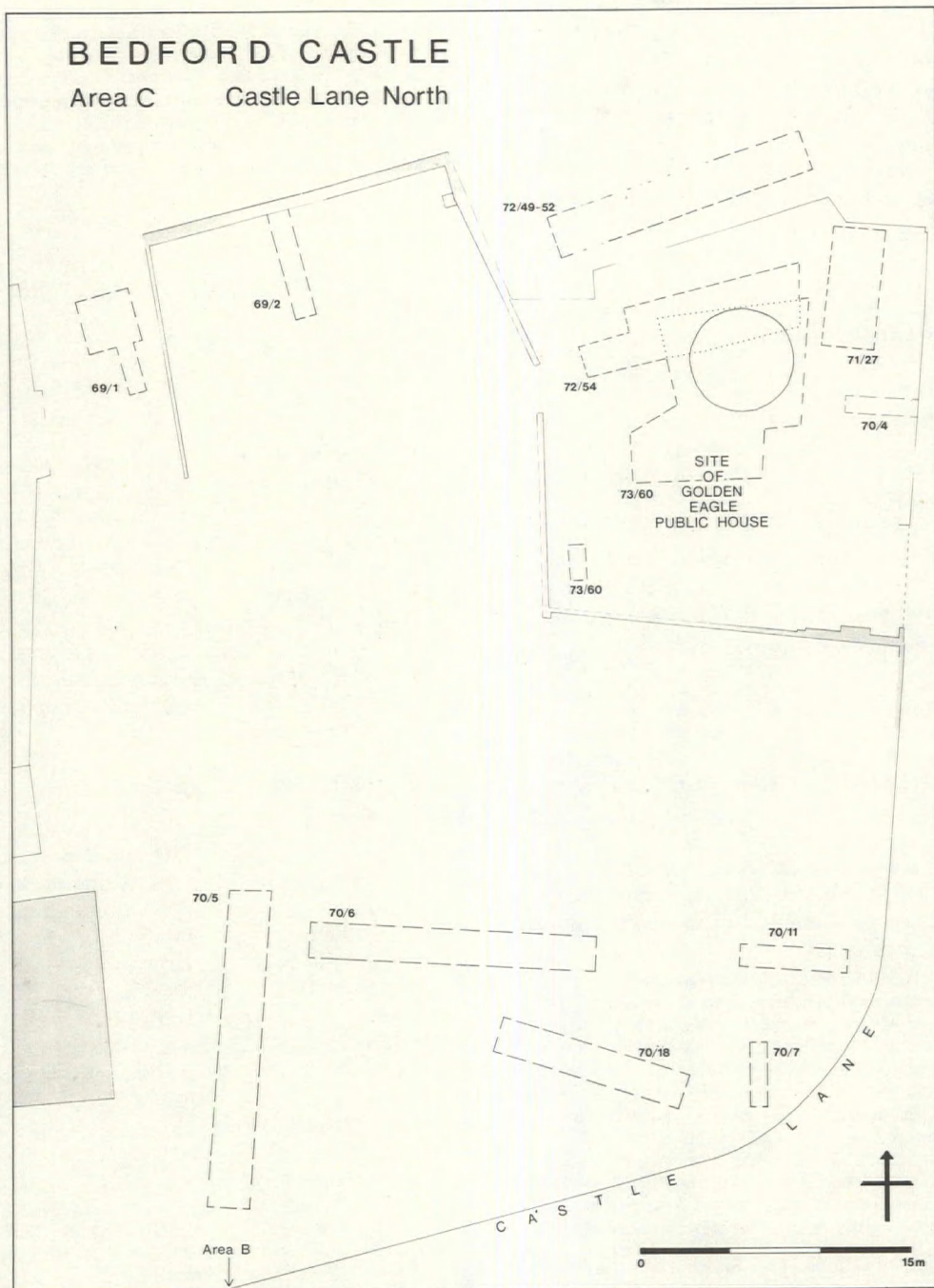


Fig 20 Bedford Castle: area C: location of trenches north of Castle Lane.

became available in the period 1969 to 1973. Most contained the black occupation layers of Saxon to Saxo-Norman date described above (Area B). Castle period evidence was disjointed. South of the Golden Eagle public house it included pits and cobbled surfaces suggestive of courtyard areas. To the west, the present wall bounding Ram Yard had a Post-Medieval superstructure on the line of an earlier Medieval footing. To the north, substantial stone buildings were represented by robber trenches. These were cut by a large lime kiln which may have supplied material for the early 13th century refortification of the Castle.

Castle Site Period	Activity
1 Middle Saxon	Represented by residual sherds only
2 Middle/Late Saxon to Early Norman	Black occupation layers
3 Castle: c1100 – c1225	Pits and cobbled surfaces, substantial buildings, lime kiln.
4/ Medieval (post-c1225)	Various features and spreads, including fill of lime kiln.
5 and Post-Medieval	

GENERAL INTRODUCTION *Fig 20* by DAVID BAKER

Results are reported in three groups of trenches, following an account of the circumstances which dictated their positioning. Acknowledgements are made with each group.

In early 1969, Mr Richard Wildman drew attention to the proposed demolition of walling on the south side of Ram Yard in advance of constructing a ramp for a new surface car park. Local tradition held that this wall was a relic of Bedford Castle. The two trenches consequently excavated, BC69 1, 2, though disproving the theory, established for the first time the existence of stratified Medieval material on the site of the Castle.

During August 1970, five trial trenches, BC70 5, 6, 7, 11 and 18 were excavated under the direction of the writer on the southern part of the land south of the Golden Eagle public house, before its conversion into further surface car parking. A trial trench, BC70 4, was also excavated on the raised platform north of the Golden Eagle. This led to the examination by Angela Simco of a larger adjacent area, BC71 27. She excavated four more trenches, BC72 49 – 52, further north on the present lower ground level at the south edge of Ram Yard, and BC72 54 back in the north part of the Golden Eagle garden. This located the large lime kiln which was more fully examined by Jane Hassall (BCL73 60) following the demolition of the Golden Eagle.

The area remains undeveloped at the time of writing (March 1979), except for the lime kiln. It was consolidated by Bedford District Council in 1975 with the aid of grants from Bedfordshire County Council and the Department of the Environment, being surrounded by a safety barrier and set within a landscaped area. In 1976, on account of its exceptional size and early date, it was scheduled as an Ancient Monument by the Secretary of State for the Environment.

SOUTH OF THE GOLDEN EAGLE PUBLIC HOUSE (BC70 5, 6, 7, 11 and 18)

SUMMARY

Five trial trenches must be considered in two groups. There was a greater depth of deposit in the north-west of this area: BC70 5 and 6 sectioned interlocking Medieval pits cut into subsoil up to 4.5m below modern ground surface. Post- and stake-holes of Castle period were located. Phases observed stratigraphically were not clearly differentiated by pottery finds. In the south-east, BC70 7, 11 and 18 revealed fewer pits, the first two showing a Castle period metal surface apparently running north – south.

Trench Phase	Castle Site Period	Activity
A		Pits and post-holes cut into natural subsoil
B	2	Black occupation layer
C	12th 3 – 13th century	Pits and layers
D		Layers
E		Metalling in BC70 7 and 11
F	4 ?post-c1225	Mixed orange clays, stones and gravel in BC70 5 and 6
G	5 Post-Medieval	Layers

BC70 5, 6 (*Figs 21 – 24*) *The Excavations*

The trenches were supervised by Antony Couchman with Susan Linger and Andrew Cooper respectively. Six phases were distinguished above natural subsoil, which had been extensively cut by pits in the south end of BC70 5 and the eastern half of BC70 6 (*fig 22*). It became clear in the light of the deposits revealed that trial trenches, though the only feasible type of excavation possible in the circumstances, was not the most effective way of tackling such a complex thickness of stratification. The following description is illustrated by reference to the south section drawing of BC70 6 (*fig 21*).

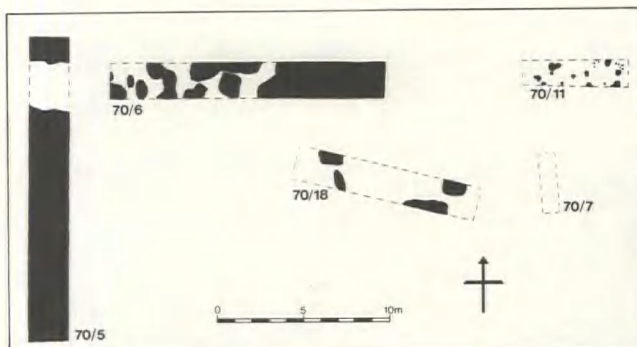
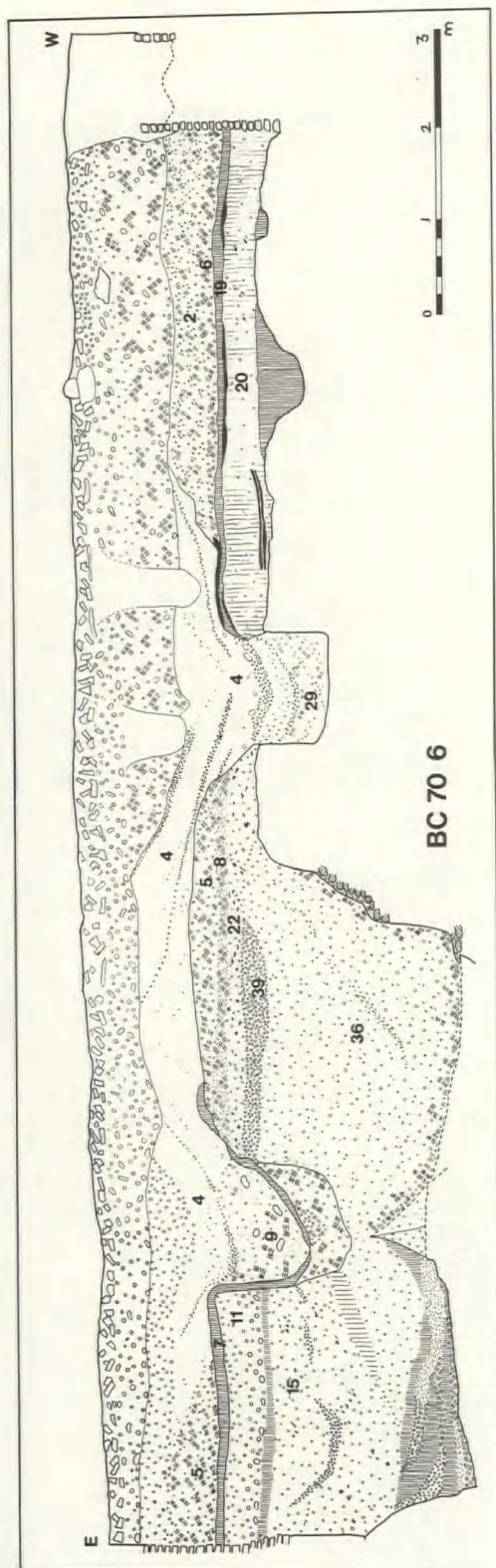


Fig 22 Bedford Castle: area C: pits cut into natural subsoil, south of Golden Eagle public house.

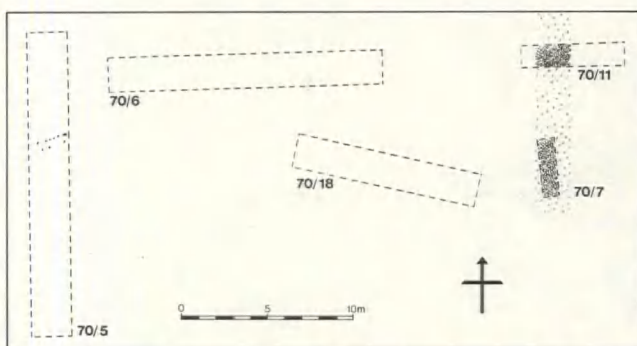


Fig 23 Bedford Castle: area C: cobbled areas and stakeholes, south of Golden Eagle public house.

Phase A consisted of features cut into natural subsoil (fig 22), but sealed by the black occupation layer of Phase B. In narrow trial trenches their full extents and depths could not always be ascertained. In BC70 5 the southern 13.0m of natural subsoil had been cut away by a large feature or complex of features whose horizontally bedded fill was bottomed on limestone in one trial sondage at the south end, 4.5m below modern ground surface. Neither the lower part of this fill nor the only recognisable pit cut into it produced dating material. In BC70 6 individually identifiable pits had been cut into natural subsoil at the west end. The eastern 7.0m was cut by a massive feature

Fig 21 Bedford Castle: area C: south section of BC70 6.

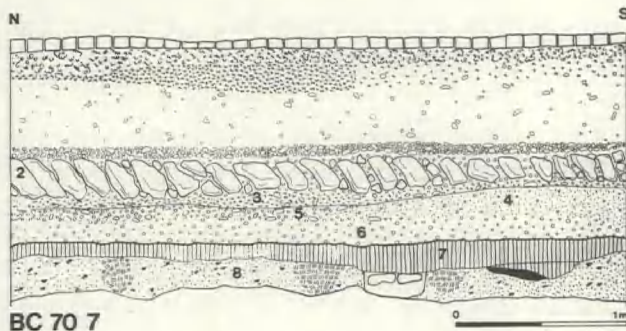


Fig 24 Bedford Castle: area C: east section of BC70 7.

involving at least two intercut pits (15) and (36), with sloping layers of fill, going more than 2.0m below the level of natural subsoil. Some rough limestone lining was seen on the west face. Its size and extent, no east limit having been seen in the trench, initially suggested a ditch rather than a complex of pits, but no evidence for a linear feature was seen in the two adjacent trenches, BC70 5 and 18. Pottery dating from up to the 13th century was recovered.

Phase B was represented by (20), a black occupation layer, sealing the pits of Phase A, and producing a similar range of fabrics. It was seen in both trenches with thicknesses up to 0.5m. It was cut by a few Medieval pits of Phase C, such as (9), which contained the lead seal matrix (1504), and (29). These may have been broadly contemporary with Phase D, an accumulation of Medieval layers including (5) (6) and (11) which sealed Phase B and produced pottery fabrics up to the 14th century. Cut into layers of Phase D were two parallel lines of stake-holes running east – west about 6.0m from the north end of BC70 5 (fig 23).

In both trenches, Medieval pits and occupation layers were sealed by Phase F, a layer of up to 1.0m thickness, consisting of orange gravels, clays and stones (2) and (4), containing only Medieval pottery. The upper 1.0m of both trenches was Phase G, Post-Medieval layers excavated by machine.

The pottery evidence from contexts belonging to Phases A – D and F in both trenches included fabrics ranging up to the 12th and 13th centuries. There may have been some contamination due to the difficulties of dealing with intercutting pits in a narrow trial trench. Phase F in both trenches was tentatively recognised as a sealing layer at the top of Medieval layers, and consequently associated with the end of the Castle. The validity of this is to some extent dependent upon the dating of fabrics such as B9, C4, C20 and C29 (see Pottery Report) occurring within Phases C and D, within the range 13th – 14th century.

The Finds

PHASE A: 12th – 13th century.

Pottery fabrics B1–8, 10, 11, C1–6, 10, 22, 27 present. BC70 5 (41) B2 243; B7 367; C10 605; whetstone 1135. (44) B6 350. (45) copper alloy fastening 1344. (50) B10

431; C1 467. (51a) spindlewhorl 1145. (53) C1 447; C3 493; B7 356; C22 669; carved bone disc 1528. (53a) B6 345; whetstone 1138. (54) B6 344; C5 530; C22 662. BC70 6 (15) B3 260; B10 429; iron hook 1439. (34) whetstone 1136. (35) A2 81, 92; B4 281. (36) B1 166; B4 314; B5 336; B6 343; B7 363; iron nails 1451.

PHASE B: 12th – 13th century.

Pottery fabrics B1, B8, B9, C1, C3, C6, C12b, C22, C27, C29 present.

BC70 5 (36) leather shoe sole and strap 1557.

BC70 6 (13) B9 420. (19) B11 434. (22) B9 422.

PHASE C: 12th – 13th century.

Pottery fabrics B1 – 11, C1 – 6, C10, C22, C27 – 9, C35, E4 present.

BC70 6 (9) lead seal matrix 1504. (28) C10 599. (29) C29 703. (33) C6 548, E4 792.

PHASE D: 12th – 13th century.

Pottery fabrics B1, B4 – 9, B11, C1, C3 – 5, C8, C14, C20, C22, C24, C27 – 29, C35, E4 present. Sherds of Cistercian ware and stoneware in 5 (13) are intrusive.

BC70 5 (8) silver short cross penny, John or early Henry III, c1205 – c1218 (not illustrated). (11) B8 402. (12)

silver short cross penny, first half 13th century (not illustrated). (13) B8 401, 407; B11 432; B5 325; C1 450; C3 493, 498, 499, 500. (13a) glazed earthenware 967. (14) A2 20; B9 424; C4 521; C20 652. (23) C28 694, architectural fragment 1126. (38) iron nail 1493.

BC70 6 (5) B5 323; C28 698; C29 705; iron nail 1457.

(6) B8 384. (11) B5 322; B8 405; C4 513, 527. (16) B5 324; B8 395, 398.

PHASE F: ?Post-c1225

Pottery fabrics present included B11, C29 and C39, suggesting a 13th – 14th century range.

BC70 5 (6) A6 34; B11 435, 437.

BC70 6 (2) Roman pot 11. (3) B5 328. (4) B8 374.

PHASE G: Post-Medieval

BC70 5 (2) B7 354.

BC70 6 U/S B1 123, 146. (1) B1 184; B5 333.

BC70 7 (Fig 24) 11, 18

The Excavations

Five phases were distinguished. Their description is illustrated by reference to the east section of BC70 7 (fig 24). Natural subsoil was only disturbed by small pits and post-holes of Phase A (fig 22). They were overlaid by a layer of black occupation material (7), common to all three trenches, representing Phase B.

Various layers and features of Phases C/D (4) (5) (6) covered the black occupation. They were sealed by limestone metalling of Phase E, (2) in BC70 7 and also in BC70 11. This consisted of a layer of large limestone chunks, up to 0.50m in length, laid pitched and compacted, with a worn surface. A western limit was seen in BC70 11, and the existence of the same material further south in BC70 7, but not in BC70 18, might suggest a linear rather than an area feature (fig 23). The upper 0.50m of these trenches, Phase G, consisted of Post-Medieval layers mechanically excavated.

The Finds

Phases A – E: 12th – 13th century.

BC70 7 (6) iron horseshoe 1422.

BC70 11 (6) B1 152, 221. (9) A1 19.

WEST OF THE GOLDEN EAGLE PUBLIC HOUSE

(BC69 1, 2; Figs 20, 25)

SUMMARY

The existing stone wall forming the southern limit to Ram Yard was shown to be Post-Medieval, though it had been rebuilt over a Medieval footing. Pre-Castle and Castle period occupation layers were seen.

Trench Phase	Castle Site Period	Activity
A	2/3 Middle/Late Saxon to	Features cutting natural
B	2/3 Saxo-Norman	Black occupation layer
C	3 c1100	Wall and Construction level
D	3 to	Black occupation layer
E	3 c1225	Layers with stone
F	4/5 Post c1225	Accumulated layers

The Excavations

BC69 1 was a hand dug square of 3.0m side, later extended by machine. BC69 2, further east, ran up to the stone wall allegedly associated with the Castle. The upper 1.0m of Post-Medieval accumulation in this trench was removed by machine. The excavations were supervised by William Annan, Evelyn Baker and Andrew Cooper.

Six phases were distinguished, common to the two trenches. They are illustrated here by the east section of BC69 2 (fig 25) unless otherwise stated. Natural subsoil was cut by the sole feature of Phase A, BC69 1 (10), probably a pit, partly in the south end of the trench, with a fill of limestone rubble. This pit and natural subsoil were sealed by occupation layers of Phase B, which included black earth and burning (38) with a layer of white plaster (40) lying face down upon it.

Phase C included an accumulation of earth and mortar about 0.70m thick, (36) and (37). Contemporary with it was a stone footing (44), under the existing stone wall, with (37) continuing as the fill of a construction trench in front of it. All were sealed by Phase D, a second sequence of dark earth and burning layers seen in both trenches, (35), in turn overlaid by Phase E, further layers with stone content, including (23) and (31).

The upper 1.2m of both trenches, Phase F, consisted of various Post-Medieval layers and features, including (41), a deep feature with an edge 1.5m from the south end. This edge appeared to line up with BC69 1 (10), parallel with the probable northern limit of the Castle, but the two features were observed to belong to different stratigraphical phases. To this latest phase belonged the existing wall on the north limit of the site, with brick used in its foundations.

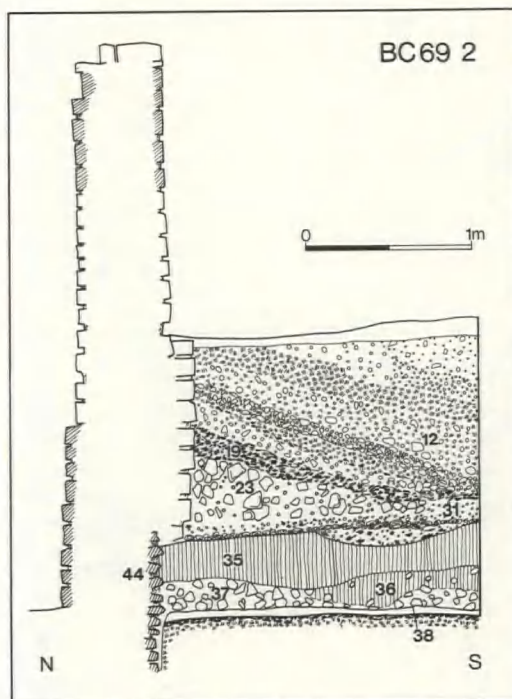


Fig 25 Bedford Castle: area C: east section of BC69 2.

The Finds

BC69 1 (10), a pit of Phase A, contained pottery in fabrics B1 (143, 195) and B4. BC69 2 (35), the upper of the two black layers, contained pottery in fabrics B1, B4 and B8. Other published material from Phase F contexts in BC69 1 includes:

U/S B1 134. (2) smithing fuller 1418. (6) Roman pot 15; A11 73; B1 137, 201.

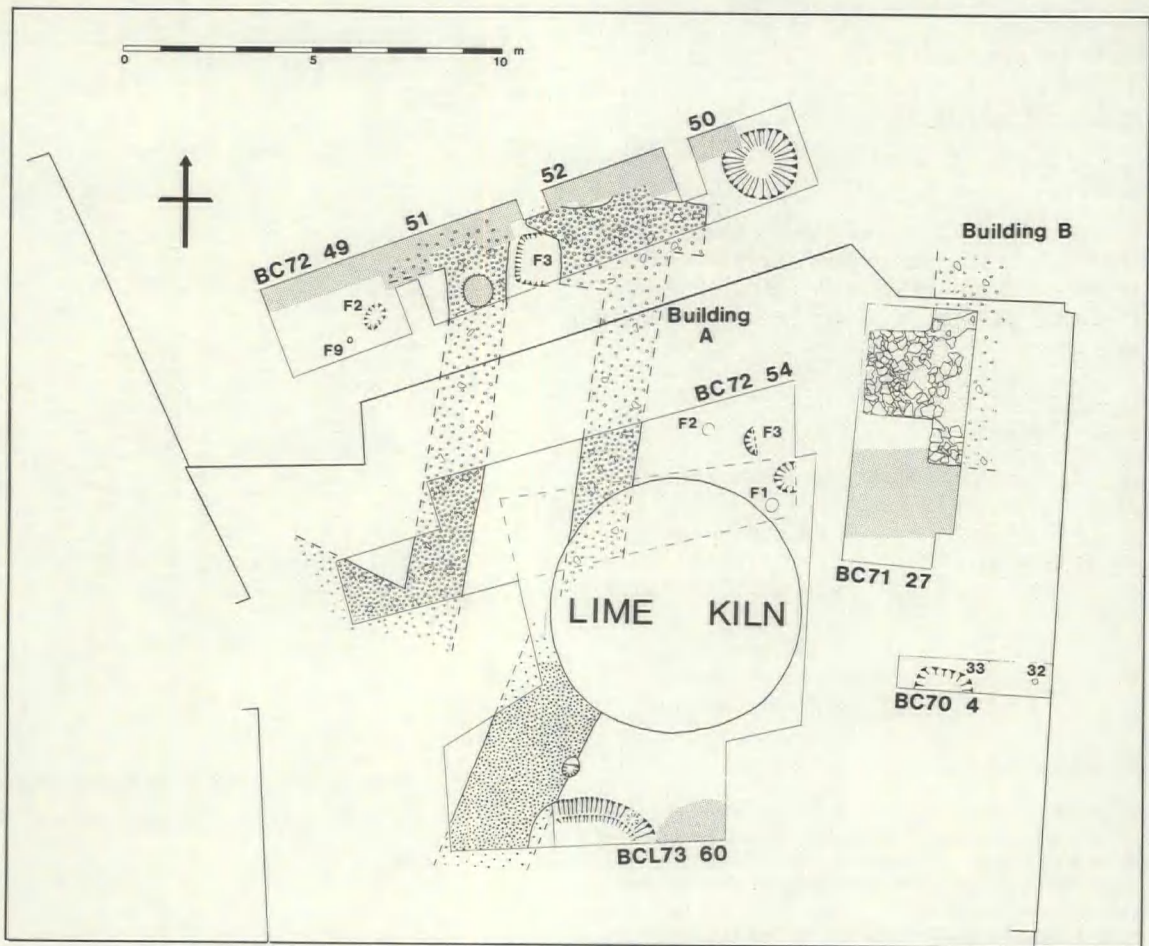


Fig 26 Bedford Castle: area C: general plan of trenches north of Golden Eagle public house (Post-Medieval disturbances shaded).

NORTH OF THE GOLDEN EAGLE PUBLIC HOUSE

(BC70 4, BC71 27, BC72 49-52, 54; Fig 26)

by ANGELA SIMCO

SUMMARY

The area was examined piecemeal over three years. Medieval and Post-Medieval occupation phases were found in seven trenches, but could not be interrelated to make a single sequence. Medieval structures mainly represented by robber trenches presumably belonged to the Castle, but could not be identified as specific buildings.

Castle Site Period

Trench Phases

	4	27	49-52	54
2 Middle/Late Saxon –				
Early Medieval	A	A	A	A
3 Castle: c1100 – c1225	BCD	BC	BC	BCD
5 Post-Medieval	E	DEF	Post-Medieval	

BC70 4

The Excavation

Phase A consisted of two features cut into natural subsoil. These were a pit (33), about 0.60m deep, with a covering layer (30), and a post-hole (32).

Occupation layers (28) (29) of Phase B were separated from those of Phase D (13) (14) by deposits of Phase C. These included a possible turf line (26) under a layer of red burning (23) and a layer of yellow mortar with pebbles (21). Phase E, the upper 0.60m of the trench, consisted of Post-Medieval layers.

Phase A: B1 and B4 fabrics were found. Catalogue: (33) B1 131; B3 261.
Phase B: B1 fabric.
Phase C: Catalogue: (22) B1 168, 177. An intrusive sherd of glazed earthenware was found.
Phase D: B4 fabric was found.

BC71 27

The Excavation (Fig 27)

Weathered natural subsoil, a relatively stone-free brown loam about 0.15m thick (45) was sealed by two layers of Phase A. These were a thin spread of gravel and small limestone fragments (44) (77) probably laid down as a yard surface, over which accumulated 0.40m of a rich black occupation deposit (12) (67).

Cutting this occupation level in the north-east of the trench was the corner of a substantial stone structure, Building 'B' (Phase B). It consisted of a 4.1m stretch of wall at least 1.1m wide, running north-south and turning east at the south end, and a large rectangular footing 2.3m by 1.9m to the west. Except in the north-east of the trench, only one course of stonework was preserved, consisting of limestone blocks up to 0.40m across; the bottom of the footings lay at 2.96m below the modern ground surface.

Associated with this structure, in the north section, was a construction trench 0.25m wide (66) (69) (70). This was in turn sealed by a spread of sand and crushed stone, the debris from construction work on the above ground structure 65). Subsequently, Phase C, a further black occupation deposit of 0.45m accumulated (9) (12), capped by gravel and clay sealing layers (8) (10).

The beginning of the Post-Medieval sequence, Phase D, was marked by a soakaway trench running east-west immediately to the south of the building, the stonework of which must have been preserved to at least ground level at this stage because the soakaway respected the south-west corner. Following this, and cutting the soakaway trench, was Phase E, which involved extensive robbing, when much of the stonework was removed, and the robber trench backfilled with a complex sequence of tip layers. Finally, levels of mixed earth, brick, concrete and mortar, about 0.60m thick, were associated with Phase F, the latest Post-Medieval building on the site.

The Finds

Phase A: Large quantities of B1 and B4 fabrics, and over 4,500g of iron slag, identified by Leo Biek as including both smithing and smelting slag. Catalogue: (12) B1 164. (45) bone point 1534. (67) B1 122, 136.

Phase B: Construction trench for Building B contained B1, B4 and C5 fabrics. The presence of C5 implies a date in the later part of the B1/B4 range. Catalogue: (66) B1 190.

Phase C: B1 and B4 fabrics, and 1,220g of smithing and smelting iron slag. Catalogue: (10) B1 157.

Post-Medieval Phases: Catalogue: (1) Staffordshire slipware 869. (2) Delft 955; worn copper halfpenny of George III 1770-5 issue or William, III (not illustrated). (3) glass phial type 28 1197. (5) A2 26. (6) clay pipe dec 25 1064. (11) glass type 29 1169. (19) B5 316, 321. (41) B1 125. U/S clay pipe dec 15 1046.

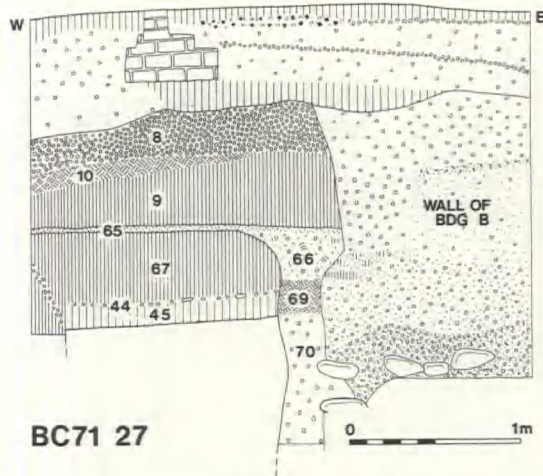


Fig 27 Bedford Castle: area C: north section of BC71 27.

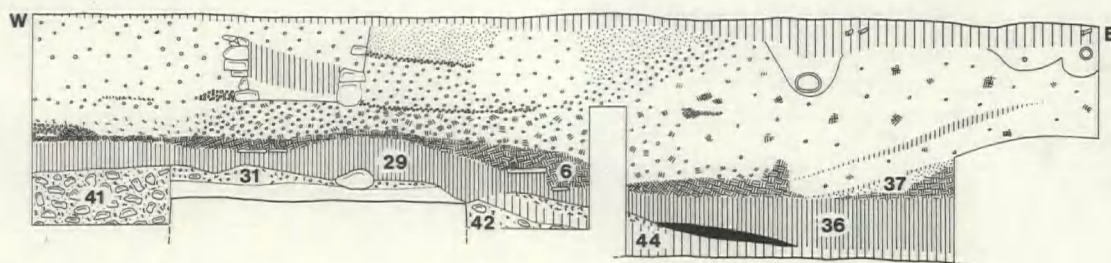
BC72 49 - 52

The Excavations (Fig 28)

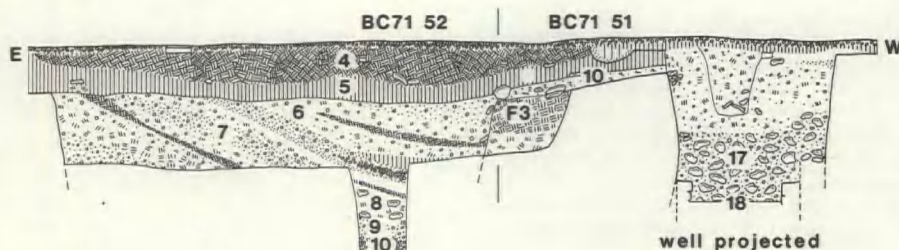
The stratification in these trenches was much shallower than in those on the plateau immediately to the south, and it is possible that some upper layers were removed during construction of the 19th century cottages formerly on the site.

The only probable early feature of Phase A cut into natural subsoil was sub-rectangular, 0.50m deep, and filled with orange-brown clayey loam over reddish-brown clayey loam, BC72 51 F3 (19). Three sides were preserved, giving it dimensions of 1.40m by at least 0.90m. Other depressions in natural subsoil at the western end of the excavation were sealed only by the recent building destruction debris and may well have been associated with the latest domestic garden use of the land.

The existence of a Medieval building 'A' (Phase B), was deduced from the surviving somewhat inconclusive stratification and from comparisons with Trench BC72 54 to the south, although no wall footings were located. The line of the western wall was preserved in a Post-Medieval robber trench, 1.60m wide, which had been utilised for a stone-lined well, BC72 51 (18). This well was sealed by 0.50m of robber fill, loose limestone rubble and sand BC72 51 (17) which underlay 0.80m of a mixed deposit of clayey loam, sand and yellow clay with some stone. A soakaway pipe trench had been inserted into the top of this fill. The robber trench was excavated to a depth of 1.60m below the modern ground surface. The eastern wall could not be easily defined. On its probable alignment projected from BC72 54 was a large sub-rectangular feature, 3.80m wide, filled with sand, loam and gravel tip layers, sloping down to the west, BC72 52 (6) - (10). This does not constitute a typical robber fill, and the shape of the feature is somewhat problematical, but perhaps extensive robbing was followed by extraction of sand or gravel.



BC72 54



BC72 51, 52

Fig 28 Bedford Castle: area C: north sections of BC72 54, 51, 52.

A small sondage excavated to 2.0m below the modern ground surface failed to locate the bottom of the feature. Between these two robbing features a spread of loose cream sandy mortar mixed with brown loam, BC72 51 (10) (11) 0.10m thick, overlay both natural subsoil and BC72 51 F3 (19), and is interpreted as a building construction spread.

Phase C was a continuous loam spread, up to 0.50m thick, covering much of the area excavated, BC72 50 (4), 51 (7), 52 (5). To the west it was light brown in colour, but towards the east became blackened by a large quantity of charcoal and burnt material, and formed the latest fill of a refuse pit, 1.50m deep, BC72 50 (9) – (13). This occupation level sealed the larger robber feature BC72 52 (6) – (10) but was cut by the Post-Medieval robbing of the western wall, BC72 51 (17). It was in turn sealed by a 0.35m deposit of clean orange-brown clay, BC72 52 (4), presumably laid down for hygiene purposes.

The latest phase of use for this site, before being laid down for car parking with a gravel surface, was as small rear gardens for a row of 19th century cottages, the south wall of which lay along the north edge of the excavated area. These footings were of limestone, presumably reused

Castle material, and incorporated three privies. A soak-away pipe trench was connected to the central privy. Apart from a small amount of destruction debris from these buildings, there was no Post-Medieval build-up.

The Finds

The shallow stratification on this site appears to have resulted in contamination of some Medieval deposits.

Phase A: Roman, A11 and B3 fabrics.

Catalogue: 51 (19) Roman pot 3. 50 (5) A11 79.

Phase B: B1, B8, C5, C29, C36 fabrics. C29, C36 and a sherd of glazed earthenware in 51 (10) are intrusive.

Phase C: B1, B4 and C30 fabrics. A sherd of stoneware in 51 (7) must be intrusive. 50 (4) produced 4,450g of iron slag.

Catalogue: 50 (4) B1 116, 147, 171, 213; iron nails 1458, 1459, 1471, 1495; incised bone 1531. 50 (12) B1 154, 173; C30 708.

Post-Medieval Phases: Catalogue: 51 (17) A6 40; iron bucket fragment 1412.

Phase A consisted of only one feature, *F1*, cutting natural subsoil. It was a possible posthole 0.35m in diameter and 0.17m deep, containing limestone fragments.

Phase B was Building 'A' (see BC72 49 – 52, fig 26). Two parallel robber trenches (41) and (42), each 1.50m wide, ran approximately north – south and were filled with limestone rubble and mortar with some loam. They were excavated to a depth of 2.0m below the modern ground surface and no footings were located. A possible return for the west wall was located within the trench, but this feature could not be examined beyond its surface plan.

Construction spreads associated with this building were represented by a layer of mortary loam up to 0.20m thick (31). This was capped by some limestone fragments laid roughly flat, but which did not have the worn appearance of a floor surface.

The walls were robbed during the Medieval period, and layers of loam accumulated over them as Phase C. The lower layer (35) (44) occurred only in the east of the trench, sealing the eastern robber trench, and consisted of clean light brown loam, probably a turf line. It was cut by two circular features, *F2* and *F3* (47), 0.25m and 0.80m in diameter respectively. The upper deposit was very black, containing much burnt material and occupation debris, and was up to 0.50m thick (16) (17) (29) (36). It was sealed by a layer of clean orange clay (6) and sand (8) (37).

The occupation deposits of Phase C were cut by two further Medieval features, of Phase D. The lime kiln (5) extended approximately 1.80m into the southern edge of the trench, but could not be satisfactorily examined at this stage, other than to remove some of the top-most fill, (11) (12) (18) (19). A pit (13) (33) (34) in the eastern edge of the trench was 1.20m in diameter and 1.65m deep; it was filled with gravelly loam, and did not seem to have been used for refuse.

The Post-Medieval phases are more difficult to reconstruct due to the removal of upper levels by machine, though there does seem to have been considerable dumping on the site. A recent, probably 19th century wall ran along the east edge of the trench.

The Finds

Phase B: B1 fabric.

Phase C: The lower turf line contained B1 and B4 fabrics, while the black occupation deposit also produced B8 sherds, implying a date in the later part of the B1/B4 range, and 7730g of iron slag. Catalogue: (16) B1 119, 226, (36) B4 298.

Phase D: The pit produced B1 and B4 fabrics, the lime kiln fill B1, B9 and C17. Catalogue: (34) B1 167, (11) copper alloy buckle 1372.

Post-Medieval Phases: Catalogue: U/S B8 400; C5 535; C29 701; stoneware 897; glass bottle type 8 1227; egg soda bottle type 36 1228, (7) window glass 1272, 1273, 1287, 1288, 1290, 1307, 1308, a mixture of Medieval and Post-Medieval glass which may have been derived from the demolition of a building. (9) painted plaster 1111. (28) B11 436.

DISCUSSION

The area of excavation was insufficient to make any particular sense of features cut into natural. Those in BC72 49 were probably of recent date, leaving only four scattered features which definitely belong in, or before, the Medieval sequence.

The two buildings of the Castle period (Buildings 'A' and 'B') could not be fully understood because of later disturbance and because they lay mostly (especially Building 'B') outside the area available for excavation. Building 'A' was the more problematical, and its plan must remain conjectural; the robber trenches were clear in BC72 54, but in BC72 49 – 52, only the western robber could be positively identified. Building 'B' was a very substantial structure. The part excavated seems to have consisted of a south-west corner with a large integral buttress footing. A building of this size and in this position would arguably be of defensive significance, and if the present line of Castle Lane has its origins in the Castle period could even be related to some sort of gate works.

The main problem of these seven trenches lies in the correlation of occupation levels and structures in trenches 49 – 52 and 54 with those in trenches 4 and 27. A Post-Medieval brick foundation divided trenches 27 and 54, with the result that the two sequences can at no point be firmly keyed together. It is assumed that the two occupation phases which occurred in trench 4 are the same as those for trench 27, and were separated chronologically by the construction of Building 'B'. Similarly it is clear that the robber trenches and occupation levels are continuous between trenches 49 – 52 and trench 54. However it is not possible to correlate precisely occupation deposits between 27 and 54. One possible interpretation is that the single deposit in trench 54 sealing Building 'A' was laid down over the same period of time as the two levels in trench 27, the latter being interrupted at some time by the later construction of Building 'B'. It could of course be argued that the single deposit in trench 54 is equivalent to the second deposit in trench 27, and therefore the two buildings were contemporary, though it is felt that this explanation is less likely.

No contexts could be closely dated from the finds. Most Medieval phases contained a high proportion of B1 and B4 pottery fabrics, and overall assemblages are consistent with a date within the life-span of the castle.



Pl 9 Bedford Castle: area C: BCL73 60, lime kiln, general view facing west (March 1979).

NORTH OF THE GOLDEN EAGLE PUBLIC HOUSE: LIME KILN

(Figs 29 – 32)

by JANE HASSALL

SUMMARY

A lime kiln and immediately adjacent areas were excavated in 1973. The kiln was 5.80m in diameter at the top, reducing to an oval shape 4.10x4.50m at the base, 2.80m in depth, with four quadrant-shaped platforms and opposed stoke-holes. Some lime was still in the bottom. It was probably used at the end of the castle period (3) and may have been associated with the re-fortification after 1216. Its function and some other examples are discussed. The lime kiln was scheduled as an Ancient Monument in 1976.

METHOD AND ACKNOWLEDGEMENTS

Bruce Induni, Andrew Mimmack and John Moore assisted with the excavation and amongst many who helped, Les Speed of the Bedford Archaeological Society was of particular value for his unfailing energy and enthusiasm in the project. Engineering advice was provided by Tony Plunkett, and survey assistance by Simon Greenish, both of Bedford Borough. Brian Dix made many valuable comments on the working of the kiln during the preparation of this report, and some of his ideas are incorporated in the discussion section.

A trench was laid out adjacent to BC72 54 which had initially located the lime kiln, and its edge was uncovered. Its examination was complicated by the depth of the bottom of the kiln from modern ground surface, 3.50m, problems of access

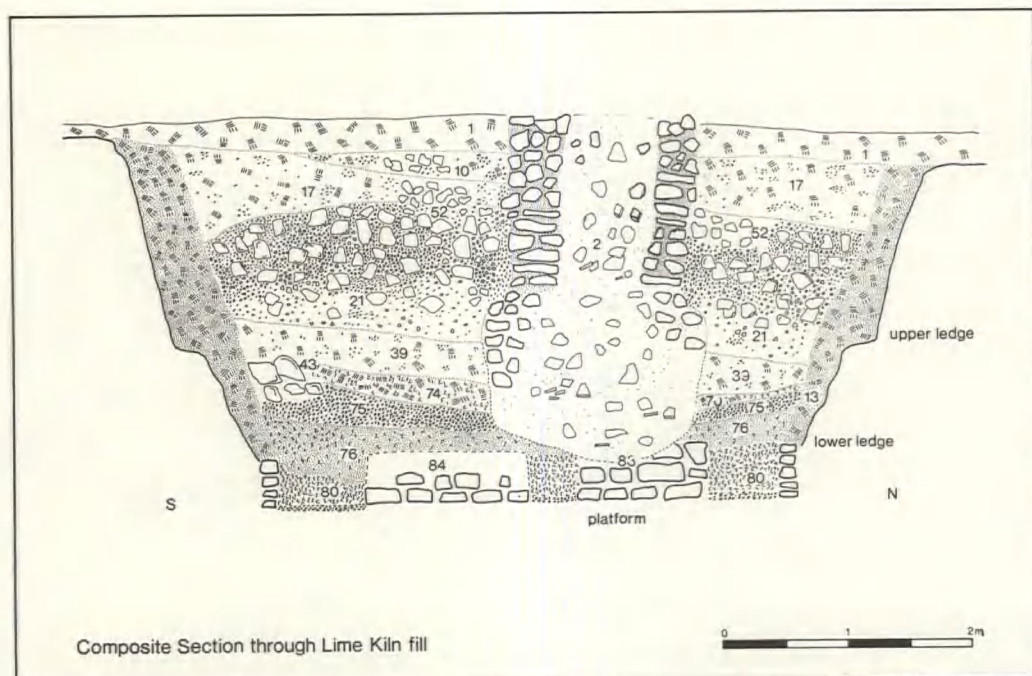


Fig 29

for mechanical plant and the removal of soil, and the need to retain existing boundary walls. It was planned to uncover the full extent of the lime kiln and to investigate its immediate surroundings. The trench was dug mechanically to a depth of 1.50m approximately, the overburden consisting of loams and gravels of made-up soil forming the foundations of the Golden Eagle. Work continued by hand until the narrow stone walling of the top of the kiln itself, or the mortar that bonded it, was uncovered. An area to the south-west of the kiln was also excavated, but, when it became obvious that one segment of the kiln wall was running out of the trench on the north — east side, this was backfilled to allow machine access for the removal of overburden to the north. Further trial trenching to the south and west edges of the site showed the ground to be disturbed by cellarage and other modern interference, to a depth of at least 2.0m, and in consequence this end of the site was abandoned.

Once the overburden had been removed, and the top of the kiln had been uncovered for most of its diameter, excavation continued by hand to remove the layers of fill. The kiln was half-sectioned from north to south, and a running section was recorded at every metre's depth before the standing half of the kiln was removed.

THE EXCAVATION

Figure 29 shows a composite section through the kiln. Layer (1) was the topmost spread, 0.30m thick at maximum, formed of a brownish-black loamy clay soil. Large amounts of Medieval detritus were recovered, including the partial remains of a horse (24) with vertebrae articulated. Through layer (1) and all subsequent layers was cut the only Post-Medieval feature (2), a limestone well typical of the 17th and 18th centuries. It was built of limestone blocks and measured 1.50m in diameter and was nearly 30m deep.

Beneath layer (1) the top of layer (13) appeared. It was a sticky reddish-brown clay loam about 0.40m thick, which acted as a lining to the stonework down to the upper ledge (fig 29). Other layers below (1) were (10) (17) (21) and (39). All these layers produced Medieval debris in some quantity and much limestone. The small amount of soil between the stones was loamy with occasional patches of sticky clay or gravel. Layer (10) in particular contained odd mixed patches of tumbled limestone and many animal bones. In the top of layer (21) which was very stony, was a mass of larger limestone blocks (52).

Below these predominantly stony layers the fill became more mixed, with bands of clay loams (70) and (74) which contained small burnt patches and occasional fragments of lime. Beneath this came a band of gravel (75) into the top of which a few tumbled limestones (43) were set. The gravel rested on a mixed sand and lime layer (76) giving a mortary appearance and occurring just above the upper ledge, overlying the base structures of the kiln. The bottom of the kiln was formed by the natural river gravels.

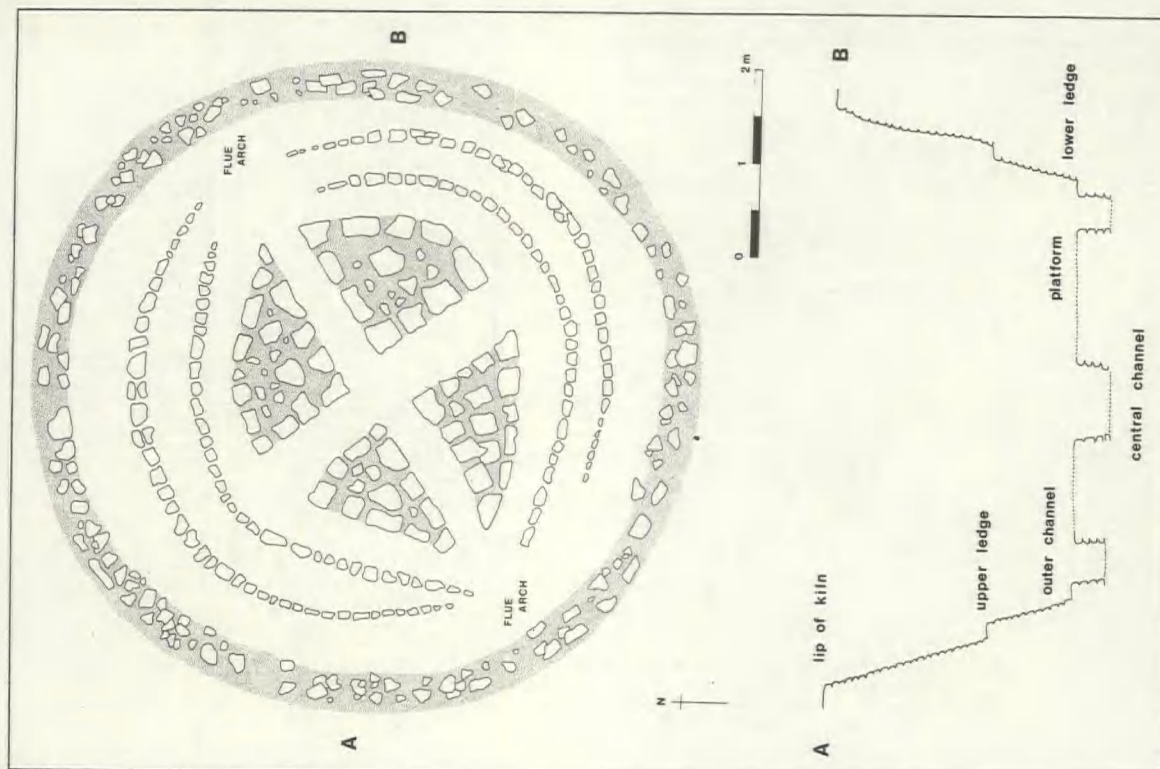


Fig 30 Plan and section of Lime Kiln.

The lime kiln structure: Fig 30

When emptied the structure of the kiln itself could be clearly seen. It was circular at the top with the sides sloping inwards to a more oval shape at the bottom. It had a maximum diameter of 5.80m at the top, reducing to 4.10 x 4.50m at the base. The depth as excavated was 2.80m.

The walling was of coursed facing stones backed by rubble giving an average width at the top of 0.40m. The limestone courses were well-laid and bonded with a reddened mortar. The stonework was generally in good condition when excavated but deteriorated when exposed to the atmosphere, and several stones started to flake off and lost their surfaces. From the upper ledge down to the bottom, there was a patchy layer of lime coating the stones.

The sides of the kiln fell steeply to a ledge about half-way down. This varied from 0.20m wide to nothing. Below this the sides continued to slope down a little more gently, to a lower ledge some 0.15m wide and standing four courses from the base of the kiln. Standing to the same height as the lower ledge were four quadrant-shaped platforms built of large limestone blocks three or four courses deep. These occupied most of the base of the kiln. A cruciform pattern of channels divided them from each other, while on the outside a circular channel separated them from the lower ledge.

Of the four platforms (83) and (84) were partly destroyed, (83) having been cut by the well disturbance (2). The channels surrounding the stonework (78) (81) and (82) were 0.22m deep and were filled up with pure white lime. This was in a creamy consistency with the

exception of one or two extremely solid lumps which blocked the channels.

The east - west channel led to two small arched openings or stoke-holes in the kiln wall. These were surrounded by a lining of fire-reddened sticky clay loam (73) similar to the wall lining (13). The arches were 1.20m high and 1.50m wide at the base. They were integral with the wall of the kiln and had long narrow limestone voussoirs forming the curve of each arch.

Area Excavated outside the Kiln: Fig 31

A small area to the south and west of the kiln itself was also excavated. Below the modern overburden was a series of Medieval loams and gravels and a few pit features. A length of cobbled pathway was also uncovered. Excavation of this part of the site was necessarily incomplete due to lack of time and resources. The decision was made to backfill this area so that the rest of the kiln structure could be examined. Consequently, it was not possible to reach any firm conclusions regarding the excavated features and layers. Figure 31 shows a plan of the features at the lowest excavated level.

The cobbled pathway was the only structural feature in this area and was made up partly of small cobbles (31), and partly of larger limestone pieces (30). It led from the south - west corner of the excavation to the edge of the kiln, and was bedded on gravelly clay layers (46) and (51). This path was exposed for a little over 5 metres in length and it stopped on a level with the surviving top of the kiln. It varied in breadth between 1.0m and 1.50m and was up to 1.0m deep. This path may well have been used in connection with the kiln, possibly in the transporting of the necessary charge and fuel.



Pl 10 Bedford Castle: area C: BCL73 60, west stokehole arch and features at base of Lime Kiln.

FUNCTION OF THE KILN AND DISCUSSION

The kiln was used for burning lime and would have been loaded and emptied from the top. The cobbled surface might have provided a useful area for receiving the carts or barrels used in transporting materials. The limestone or chalk to be calcined would have been carefully laid in a vaulted fashion, presumably at the level of the lower ledge and platforms, to provide a stable base on which further lumps of stone could be laid to fill the kiln.

Such a setting is typical of a 'flare' kiln in which material is calcined by radiant heat. The absence of ashes, or ash-pit or discoloration in the lime noted in the base of the kiln, similarly imply that there was no direct contact between fuel and charge. The channel system, in addition to facilitating initial heat production by permitting a through-draught, would therefore ensure that all parts of the charge were evenly heated.

Although it was not possible to examine the areas immediately around the kiln down to base level, it is likely on analogy with other historic examples that two stoking areas lay behind the

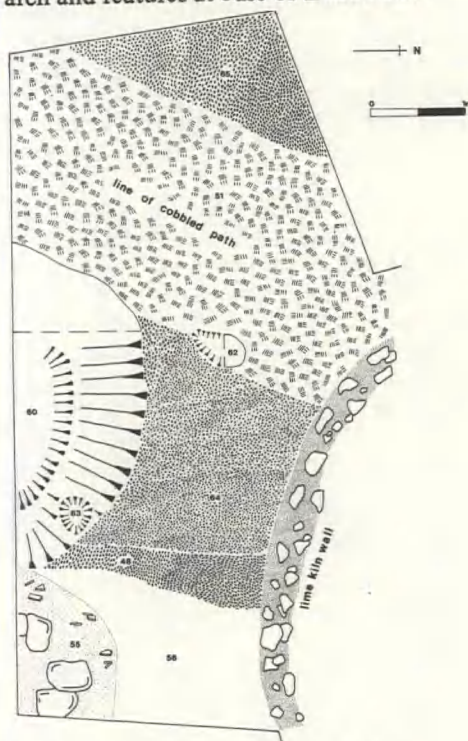


Fig 31 Area excavated outside Kiln.

Context	Bone +	Slag	Tile	Shell	Pottery	Other
1		—	Roof — types 2, 6	—	C5, C8, C15, C20, C29, C14 — 525 g C14 — cat 637	2 iron objects
10	A	450g	Roof — types 2, 3, 4	Oyster snail	B1, B5, B8, C5, C15, C29, C35 C36 — 2, 150g C35 — cat 713	5 iron objects 2 copper alloy objects Fragments of vessel glass and leather.
13	A	25g	—	Snail	B1 — 550g. B1 — cat 230	—
17	A	270g	Roof — types 1, 6	Snail	B1, B4, C5, C20, C22 — 825g C20 — cat 653	Iron keys — cat 1426, 1427
21	A	835g	Roof type 1	Snail	B1, B4, B5, B8 — 675g	—
39	A	75g	—	—	B1 — 125g	—
43	A	50g	—	—	B1 — 75g	—
52	—	—	—	—	B1, B11, C39 — 50g	—
74	—	25g	—	—	B1, B4, C3 — 325g	—
75	—	25g	—	—	B and C sherds — 50g	—

+ Animal bone present in every context: 'A' indicates bones included in Annie Grant's analysis.

Fig 32 Finds Table: Lime Kiln

two stoke-holes which open into the kiln. The fuel supply, likely to be timber or charcoal (Davey, 1961, 101) could have been stacked at the far end of these whilst the fire itself was set in the throat or stoke-hole. In Roman kilns the throat was usually 1.50 to 2.00m long, but could have been up to 2.60m (Dix, 1973, 5). It was advantageous to use two throats as firing could be carried out from each alternately, thereby allowing time for clearing away the ashes. Cato had previously considered this in classical times: 'if you burn with two stoke holes, there will be no need for a pit; when it becomes necessary to clear out the ashes, clear through one stoke-hole while the fire is in the other'.

Access to the stoking areas can only be postulated. The whole kiln structure seems to have been built into a bank of rising ground, around the east side of which present-day Castle Lane runs. The stoking area behind the eastern stoke hole could have extended back as far as the roadway, with easy access at this lower level. The western stoking area, however, must have had a specially made entrance from the top of the bank, possibly a stepped one, such as was discovered at the Cuckoo Lane lime kiln in Southampton (Coleman-Smith in Platt, 1975, 289, 294-5). This kiln seems to be of similar date and construction to the Bedford kiln, even though its precise details are not clear from the published account where a somewhat fanciful reconstruction is offered.

The lime produced in the Bedford kiln probably had an immediate use. It has already been suggested that the kiln was functioning around the time of the siege of the Castle, and a date in the

first quarter of the 13th century is reasonable. Documentary evidence suggests a rebuilding and refortification of the Castle during the period 1216 — 1224 and excavation results have tended to support this. The most obvious usage for the lime therefore, is in the making of mortar for bonding the Castle stonework. It was common practice in antiquity to construct such kilns on site. An analogous instance can be shown from Roushill, Shrewsbury, where a small lime pit was discovered, set into the town bank to provide slaked lime for mortar for the making of the Medieval stone town wall (Barker, 1961, 181 — 210). This lime pit was dated to c1230, comparable with the date of the Bedford kiln.

When no longer required, the Shrewsbury lime pit, though still half-filled with unused lime, was backfilled with earth. There can be no doubt that lime pits and kilns were extremely hazardous features and would not have been left open once they were no longer required. The Medieval debris and part of the bone evidence from the Bedford kiln indicate that backfilling probably occurred around the time of the siege. In addition, several bones seemed to be in poor condition, as though they may have been of greater antiquity, and were shovelled into the kiln from elsewhere.

THE FINDS

Some 82 contexts were excavated of which 78% produced finds. A detailed table has been drawn up, of which an abstract is published here, (fig 32), dealing with the significant Medieval contexts discussed in this report.

Recovery of material did not include sieving, but the collecting policy at the time of excavation was to keep all finds except tiles, of which only a sample was collected.



Pl 11 Bedford Castle: area D: BC70 3, earthwork at north-east corner of Castle, facing south-west (March 1979).

Those contexts which produced tiles were noted in the records.

Nearly 70% of the excavated contexts produced bones and pottery. Slag was present in 43% and tile and shell were both found in 20% of the contexts.

About 20kg of slag were recovered, much of it coming from the layers of fill within the kiln. Material from (16) and (22) had characteristics which suggested to Mr Leo Biek that it might have been smelted in Saxo-Norman times. Both smithing and smelting slag were found indicating that iron-working took place in the vicinity before the lime kiln was built.

Published material from contexts not detailed in the finds table is as follows:

B1, (U/S) - 133, (9) - 193, (12) - 196, (14) - 120, (53) - 172;

B2, (U/S) - 248; B3, (53) - 251; B5, (22) - 335;

C3, (U/S) - 511; C11, (U/S) - 579; C14, (16) - 631,

632. E1, U/S - 743, (16) - 750, 751.

Vessel glass, (2) - 1225, 1226, 1234.

Copper alloy object, (U/S) - 1402; bone button, (19) - 1540.

Three coins were recovered from (10) and have been identified by H. J Turner. They include two 14th century French jettons and a silver halfpenny of Edward III. Identification of the latter was confirmed by Marion Archibald who suggests a currency range of c1350 - 75 (see Coin Report).

AREA D: NORTH-EAST DEFENCES

(BC70 3; Figs 33, 34; Pl 11)
by EVELYN BAKER

SUMMARY

A trial trench excavated in advance of a proposed road scheme encountered Medieval stratification severely disturbed by modern services. The earthwork at the north-east corner of the Castle perimeter was shown to have had two Medieval phases and an external ditch; reconstructions are offered as hypotheses for testing by future work. An 18th century cottage existed at the foot of the earthwork, which was further degraded by the construction of the hexagonal Militia building on the top after 1804.

BC70 3 NE EARTHWORK

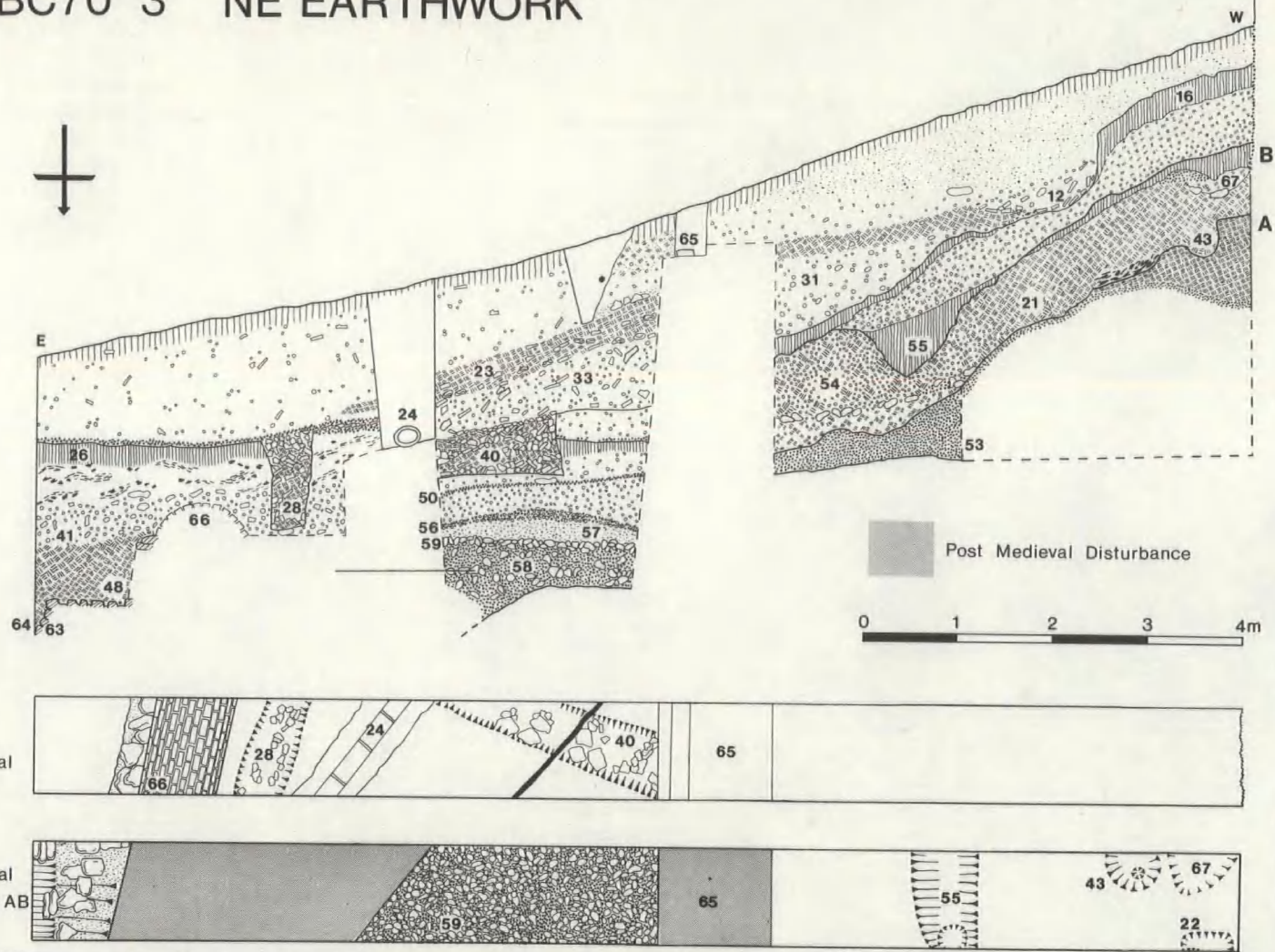


Fig 33 Bedford Castle: area D: plan and section of excavation at north-east earthwork.

Trench Phase	Castle Site Period	Activity
A	3	Primary earthwork: c1100 – c1150?
B	3	Secondary earthwork and possible stone-lined ditch: post-1216?
C	4	Slighting of earthwork c1225, inferred from documentary evidence
D	5	Building at foot of earthwork, probably 18th century
E	5	Construction of hexagonal Militia building after 1804

THE EXCAVATION

Introduction

A road scheme proposal current in 1970 (but subsequently abandoned) included the widening of Castle Lane and the removal of the lower slopes of the earthwork at the north-east corner of the Castle perimeter, under the hexagonal Militia building which now forms part of the Cecil Higgins Art Gallery. A trial trench was excavated with the intention of examining the state of preservation of any Castle features, under the direction of the writer with the assistance of Kate Nicholls.

The cutting had to test the earthwork at the most intact threatened point where a clear line could be taken up through the trees on its slopes. The south-west limit of the trench was determined by the upstanding wall of the hexagonal building cut into the top of the mound, and the north-east limit by the public footpath through Castle Gardens at its base. The trench width had to be limited to 1.0m. A power cable, a sewer and a storm culvert, all in use, ran across it, and shoring had to be used in the later stages of excavation. Stratigraphical relationships were therefore disrupted at crucial points, and have had to be reconstructed in order to provide a description and interpretation of the earthwork.

Phase A

Figure 33 shows the remains of the earthwork as initially constructed. They are fairly slight, some 2.80m above the natural ground surface. It is difficult to tell whether or not use was made of any pre-existing natural eminence. This does not represent the full height of the corner mound, which was probably truncated by the early 19th century construction of the Militia Depot. The earthwork was composed of redeposited gravel, clay and sand. Two post pits, (43) and (44), 0.20 – 0.25m deep, were cut into the upper surface at the top of the earthwork (53). The level of the natural gravel dropped about 1.30m to the south-west, on the other side of the power cable baulk (65). This gravel surface continued for 0.80m before it again dropped sharply into what may have been the beginning of a ditch (58) with a wet fill. The sewer baulk (24) prevented further excavation.

Phase B

The earthwork was raised by 0.80m to an overall height seen in this trench of about 4.20m, presumably continuing to rise where the Gallery extension now stands. A uniformly thick deposit (54) of hard-packed reddish-brown clay and gravel was laid upon the previous earthwork surface, and was covered with a turf layer. The western part (21) was packed around the rotted stump of the timber (22) belonging to Phase A. This may suggest that the second stage was erected over the partially dismantled timbers of the first. Cut into the body of the earthwork was a slot (55) which survived for a depth of 0.50 – 0.60m in an eroded surface. It had contained posts, and a shallower post-hole (67) cut at an angle further up the slope. The relationship between the surface of the earthwork (55a) and the cobbled surfaces (5) (56) (57) and (59) seen on the other side of the power cable baulk could not be established. If they were of a similar period, there must again have been a sudden drop of level. A mass of gravel and rubble (58) filled the earlier 'ditch', and the series of horizontal metal and cobbled surfaces lay at the base of the earthwork.

The north-east end of the trench was partly excluded from examination by a brick culvert (66), but excavation of the final metre did show indications of a stone surface (63) running horizontally and then dipping into significantly damper soil (64). The public footpath prevented further investigation, and in 1970 this evidence was merely noted. The culvert (66) conspired with the sewer (24) to remove the possibility of substantiating a relationship between the ditch and cobbled surfaces. If they had been contemporary, there would need to have been some kind of division between the lip of the ditch and the greater height produced by the cumulative road surface.

Phases D and E

The Post-Medieval history of the earthwork is shown by several layers comprising an accumulation of up to 2.0m thickness. The main structural feature of this period was an 18th century building nestling into the base of the earthwork, represented by two robber trenches (28) and (40) which ran at right angles to each other. A building is shown in this position on the 1841 Reynolds Map of Bedford. A turf line (26) lay over the culvert (66) to the east of the building; another (16) ran up the slope: both were probably contemporary with the building. A mass of destruction debris (31) (33) from this structure filled in the angle at the base of the earthwork. This was sealed by a clay layer (23) which was cut by a 19th century pit (12). More mixed layers stretched further out over the base. Some of these may have been deposited after 1804 as downcast from construction work for the Militia Depot on the top, seeking to provide it with a larger space.

THE FINDS

No pottery was found in the significant Medieval contexts of Phases A and B. Published material was entirely derived from later deposits.

(4) C1 469. (9) B1 174; silver plate 1392. (12) iron strip 1446. (24) Delft 977. (46) iron buckle 1432.

Possible Earthwork Reconstructions

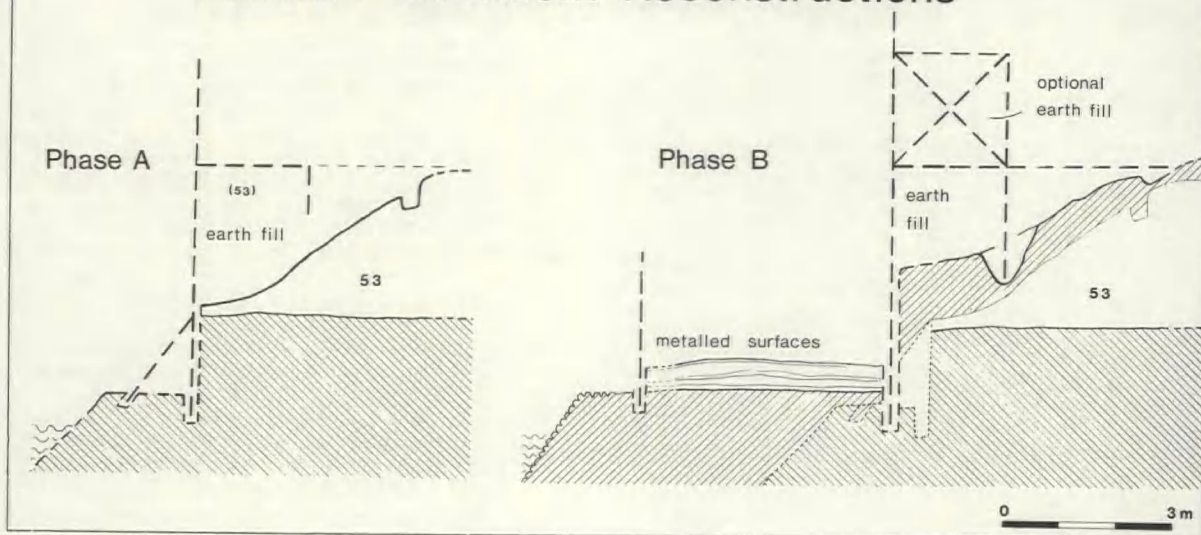


Fig 34 Bedford Castle: area D: reconstructions of Phases A and B at north-east earthwork.

DISCUSSION (Fig 34)

One narrow trial trench has not explained the nature and development of this earthwork. Traditionally described as a mound, or even as a lesser motte, it must have been part of the Castle's outer defensive perimeter. It is possible that it represents a fortuitously surviving length of rampart, though there are no surface indications of a ditch. The slope visible at the corner continues for a short distance west along Castle Lane towards the Bedford Gallery, but south towards the main motte peters out by the front block of the Cecil Higgins Art Gallery.

Whatever its Medieval identity, the earthwork must have supported some kind of superstructure in wood, stone, or both materials, at this important corner site. No Medieval foundations were discovered in these excavations. The new evidence consists of post-holes and post pits, and inferences about earlier profiles of a much eroded earthwork. Despite the dangers of extrapolation from the features which happened to fall within a narrow and arbitrarily chosen section cut on one side of the earthwork, it seems worthwhile offering a reconstruction, if only as a hypothesis to be tested by future work.

Reconstructions of a possible timber superstructure are shown in *figure 34*. I am most grateful to Brian Davison for extensive discussions about this, providing many helpful suggestions about reconstructions and parallels. The need for a fighting platform at this corner site is envisaged in both phases, whether it rested on a rampart turning a corner or on a mound forming special defences at this point. The posthole evidence is used as the foundation for a braced structure, whose hypothetical nature is underlined by the requirement for posts to have existed where modern disturbances would have destroyed the evidence.

In *Phase A* the platform virtually overlooked the probable ditch. The constructional explanation offered below is the simplest given the limited evidence, and used least timber while increasing the flat surface area. The inner lip of the ditch was cut down and given a vertical scarp about 1.0m deep as part of the seating for vertical timbers. This increased the apparent height of the obstacle. The vertical timbers were given a timber plinth and tied back by 4.0m ties jointed either to 1.0m piles or to a ring beam set in a slot. The vertical timbers could have been carried up as a breastwork, or, if they were too short, as a separate breastwork

jointed in and back-braced to horizontal ties. The space between (53) and the revetment may have been filled with more (53). When the revetment collapsed or was slighted, (53) would slide into the ditch, perhaps as (58). (43) may not have been part of the platform since it lies so far back, but could have been part of a building.

In Phase B, a 'concentric' form of defence is indicated by the layers (57) and (58), which look like 'intervallum' roads. However, concentric defence is not supposed to have come in before the 1280's, and Bedford Castle, though refurbished after 1216 by a mercenary likely to be aware of the latest military developments, was undoubtedly slighted in the mid-1220's.

There must have been a revetment of (57) and (58) to account for the difference in levels. This would need to be carried 2.0m high as a breast-work to prevent the disadvantage of turning the roadway into dead ground. An outer, battlemented, palisade on the lip of the stone-lined ditch could have been set in post-holes or on a sunk cill. (Figure 16 shows a fence line on the top of the stone-lined ditch in trench 25.) Neither would have needed much in the way of bracing, and could have risen to 2.0m above the road. In turn this would have necessitated the inner wooden curtain being carried high enough to overtop the outer revetment.

This inner curtain wall would be a replacement on the same line as the earlier one, but carried higher. It could take the form of a simple tier as in Phase A, or as two tiers giving an earth and timber wall. The only evidence for the latter is the depth of (55), but militarily it would be a much better proposition.

This reconstruction is suggested not only by the rather fragmentary evidence from excavation, but also by a wide distribution of generally contemporary sites embodying elements of it. The timber plinth device was also used at Tamworth (*burgh* defences), Lismahon (County Down) to the west, and Fyrkat and Trelleborg to the east. The revetted platform was used at Huntingdon, Tamworth Castle, Aldingham, Lismahon and Ulvholm (Denmark), the latter being a particularly good example of a concentrically defended revetted platform, with the scarping and down-cutting of the inner lip of a ditch running round a natural mound.

AREA E: THE EMBANKMENT

(BC72 55, 40 - 47)

by DAVID BAKER

SUMMARY

Castle period foundations, largely robbed, were found cut into a black occupation spread overlying natural subsoil in an excavation on the site of the former County Library building. A wall-tower or gate, possibly a water-gate, had been inserted into an east-west wall presumed to have been the south curtain.

Trench Phase	Castle Period	Site	Activity
A	2	Middle/Late Saxon to	Features cut into natural subsoil
B	2	Early Medieval	Black occupation spread
C	3	c1100-	South curtain wall of Castle
D	3	c1225	Inserted wall-tower or water-gate/postern
E	4/5	Post-c1225/ Post-Medieval	Robbing of Phases C and D/Post-Medieval activity
F	5	1885	Construction of former County Library

INTRODUCTION

Demolition of the County Library building, formerly the Town and County Club, provided an opportunity to seek the south perimeter of the Castle, though the full scope of the site could not be realised due to the almost immediate creation of a rose garden on the south part of it. The excavation was supervised by Antony Couchman and, in the final stages, by Evelyn Baker. A few months previously, Susan Linger had observed the pile trenches for an extension to the Swan Hotel, but no positive Medieval structural evidence was seen.

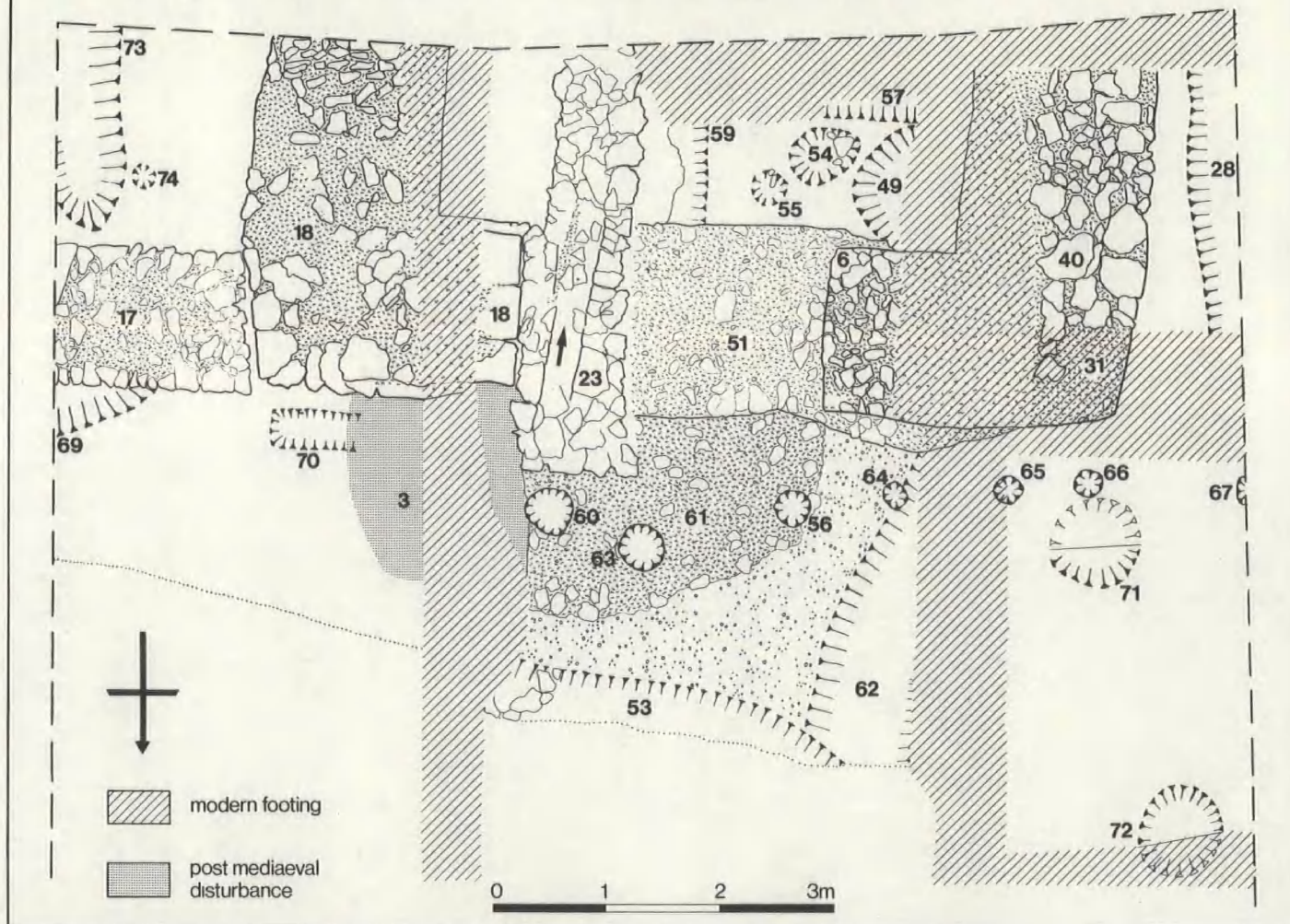
BC72 55 (Fig 35; Pls 12, 13)

THE EXCAVATION

Concrete footings and disturbances relating to the demolished County Library obscured at least a quarter of the area, an excavation 7.4 x 10.6m, designed to locate evidence for the southern limit of the Castle. Demolition rubble and upper layers were removed by machine.

Phase A evidence consisted of post-holes, pits and slots cut into the sandy clay which overlay natural gravel. There were no clearly recognisable structures, though slots (73) (70) (59) (57) and (28/29) had been dug at right angles to each other and square to the alignment of the river edge. The earliest associated pottery was of Saxo-Norman date.

BC 72 55 South Curtain Wall and Watertgate or Tower



35 Bedford Castle: area E: plan of south curtain wall and wall-tower or gate.



Pl 12 Bedford Castle: area E: BC72 55, south curtain wall, facing south.

The same general date range applied to Phase B, a layer of black occupation material (42). This was cut by many later features and sealed those ascribed to Phase 1.

Phase C was the earliest stone wall on the site (17), a rough limestone footing 1.20m wide, running 1.80m west into the trench from the east section before being cut by the footings of Phase D, which had been more deeply robbed. Its continuation to the west of the Phase D walls is uncertain due to disturbance by robbing and 19th century footings.

In Phase D, the wall of Phase C was replaced by three sides of a large structure (18) (6) (40) (31) partially seen in the southern 3.20m of the trench (pls 12, 13). It had been severely robbed and obscured by concrete footings, but an overall width of about 1.60m survived. Its north wall had a clearly defined entrance 2.70m wide through it, with the main foundation (51), which could have been reused from an earlier phase, continuing underneath as a sleeper wall. To the north of this entrance was a construction spread of mortar and rubble (61) through which the east end of a line of post-holes (56) (60) (63) (67) had been cut.

Built against the east side of the entrance was a stone drain (23) running down towards the river. It had survived to a higher level than had the adjacent robbed sleeper wall and other walls of Phase D. The channel, which was found uncapped, had a width of about 0.22m. The northern edge of the drain substructure was clearly defined, but its southern edge ended raggedly in a modern disturbance just short of the south section of the trench. There was a layer of black earth between it and the construction spread (61), which might suggest that it post-dated the useful life of the Phase D stone structures, though no further evidence can be shown.

In Phase E the Medieval walls were robbed, probably over a period of time even into the Post-Medieval period. Phase F consisted of levelling the ground for the construction in 1885 of the County Library building, whose concrete footings occupied much of the trench.

THE FINDS

Phase A: Pottery finds were few, but (29) included 575g of sherds with fabrics B1, B4 and B8 present.

Phases C, D: Catalogue. (3) Delft 964. (23) architectural fragments 1122, 1130. (48) B3 255; B6 342.

Phases D, E: Catalogue. (47) A12 105.

Phase E: Catalogue. (11) A6 38. (12) B1 175; C1 459. (16) C33 711.

Phase F: Catalogue. (1) German stoneware 889. (9) Glass type 72 1171, 1174, 1175, type 71 1266, 1267. (68) architectural fragment 1114.

DISCUSSION

The timber structures of Phase A could have belonged to or predated the Castle. Though no direct link can be established between this site and other parts of the Castle it seems likely that the south curtain wall ran across it. A simple wall, possibly broken for an entrance at the west side of the trench, was replaced by a major entrance, either to a wall-tower, postern or water-gate: insufficient of the side walls could be seen to show whether they turned inwards to make a square or



Pl 13 Bedford Castle: area E: BC72 55, south curtain wall, facing west.

apsidal ended bastion, or whether the south end was a mirror of the north, with another opening in the far side of a square gatehouse. The proximity of the river and the fact of definite rebuilding point towards a gate, but only further excavation can settle the matter. If it was a gate, there is also the question as to whether it was accessible from the water, and therefore a true water-gate rather than merely a postern on the south curtain wall. The rebuilding cannot be dated: care must be taken to avoid ascribing every definite modification to the sole documented refurbishment by Falkes de Breauté between 1216 and 1224. Changes to this tower or gate included the insertion of a drain, followed by the apparent blocking of its inner entrance by a row of posts which might have formed part of a longer fence line.

BC72 40-47

An extension on the east side of the Swan Hotel was built in May 1972, immediately west of the former County Library building. The excavated holes for its supporting grid of square concreted piles were observed and recorded by Susan Linger.

No structural evidence was seen, nor were any finds recovered. The layer of black occupation was seen in places above the sandy clay capping over natural gravel. There were many Post-Medieval disturbances and several Medieval pits.

A trench plan, excavation notes and section drawings have been deposited in the excavation archive.

THE ANIMAL BONES

by ANNIE GRANT

INTRODUCTION

Some 11,000 animal bone fragments were recovered during the excavations at Bedford Castle, of which nearly 8,000 were identified. Over half the bones identified came from pits, features and occupation layers contemporary with the occupation of the Castle and were thus dated to the period c1100 – c1225. Included with these bones was a group found inside the lime kiln, which was used as a rubbish dump after it had been abandoned as a kiln. This was possibly at the time of the siege of the Castle in 1224.

Other bones found during excavation were less precisely dated, but are nonetheless certainly of Medieval date. Detailed analysis of these less well-dated bones was not undertaken.

The bones were divided into three groups, relating to the locations from which they were recovered. These locations were the lime kiln, Area C (north and west of Castle Lane) and Area B (south of Castle Lane). A small number of bones was recovered during the excavation of the small north-east earthwork (Area D), the main motte (Area A) and the wall-tower or water-gate (Area E). The lime kiln is here treated separately from Area C in which it was located.

The bones were generally in good condition, but a small percentage were in significantly worse condition than the rest. The majority of these badly eroded bones were found together with bones in good condition in the lime kiln (10), (17) and (49). This might imply that deposited in the lime kiln was not only "fresh" rubbish, but also rubbish that had been lying about the site for some time.

The spoil from the excavation was not sieved and so an analysis of the fragmentation of a sample of 1,000 bones was made (Watson, 1972). There was a considerable fall-off in the frequency of bone fragments smaller than 50 – 70mm. This suggests that the chance of recovery of any bone or bone fragment smaller than 50mm is likely to have been poor. The recovery of the bones of the smaller species such as sheep, dogs, cats and birds is likely to have been worse than the recovery of the bones of the larger species such as cattle and

horse. I am grateful to John Watson who discussed the analysis of the fragmentation of the bones from this site with me.

THE ANIMALS REPRESENTED

Identification of the bone fragments showed the presence of the following species at the site—cattle, sheep and goat, pig, horse, dog, bird, cat, red deer, roe deer, fallow deer, hare and/or rabbit and fish. The methods used for calculating the percentages of species represented and their relative merits have been discussed elsewhere (Grant, 1975). Table 35a gives the numbers and percentages of bones recovered from the well-dated locations. Table 35b gives the numbers and percentages of bones recovered from the less well-dated locations. The following discussion generally uses the results of the "epiphyses only" method of percentage calculations.

The results suggest that there are significant differences between the bones from the three main Castle contexts. In Area C cattle and sheep are more or less equally represented, each forming approximately 30% of the total number of bones recovered. Pig bones are less common, but there is a fairly high percentage of bird bones. Horse, dog, cat and deer bones are rare. In Area B, cattle bones form almost half the total, sheep bones approximately a quarter and pig bones are rather less common. In contrast to Area C, there were very few bird bones but the other species are as poorly represented as they were in Area C. In the lime kiln, 28% of the bones were from cattle, sheep bones were less common and pig bones were the least common of the three main food animals. The bones of horses and dogs were much more common in the lime kiln than in Areas B and C—nearly a quarter of the lime kiln bones were dog bones and horse bones were as common as pig bones. Very few bird bones were found.

"Minimum numbers of individuals" figures (Grant, 1975) are given in Table 35c. The differences in the percentages of horses and dogs in the lime kiln and in the main Castle areas are emphasised using this method of calculating percentages. The "minimum numbers of individuals" figures calculated for pigs suggest the number of pig bones recovered may not truly reflect the importance of this animal at the site. Very commonly at sites studied by the writer, the percentages of pig bones calculated by the "epiphyses only" and "total fragments" methods are much lower than those

calculated from "minimum numbers of individuals" figures. This has been discussed in detail elsewhere (Grant, 1976).

The majority of meat eaten at the site is likely to have been beef, with lamb or mutton and pork forming significant but less important parts of the meat diet. Birds are likely to have contributed more to the variety than to the bulk of the diet. The bird bones found included a range of species from sparrow size to swan size. The very small numbers of deer bones found suggests that venison was not a very important part of the diet. However the small number of fish bones found almost certainly gives a false impression of the contribution of fish to the diet. Fish bones have a very poor chance of both recovery and survival. Given the proximity of the site to the river, it would seem to be not at all unlikely that fish was fairly commonly eaten at the site.

There is no certain evidence to show whether or not dogs and horses were eaten, but the fact that the majority of the bones of these species were found in the lime kiln and not among the general food refuse of the area excavations together with the fact that many of the horse and dog bones were complete, suggests that these species did not normally contribute to the Castle diet.

THE REPRESENTATION OF SKELETAL PARTS

(Detailed analysis of the representation of skeletal parts is given in a fuller discussion of the bones from Bedford Castle lodged with the excavation archive. Only a general discussion is included here.)

The analysis of the cattle bones from the main Castle Areas showed a typical pattern of representation, with those bones best represented that fuse early and are formed of compact and dense bone and those bones least well represented that fuse late and are thin-walled or are small. This suggests that survival and recovery affected the representation of the bones far more than butchery practices or other human activities. However, the bones recovered from the lime kiln have a rather different pattern. High percentages of horn cores and metapodials suggest that a high percentages of the bones in the lime kiln were "waste" bones.

Analysis of the pattern of representation of the sheep and pig bones also showed very markedly the effects of survival and recovery rather than of any human activities. The small size of the sample made detailed comparisons between the lime kiln

Epiphyses only

Species	Area C		Area B		Other areas		Castle Total		Lime Kiln		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Cattle	194	27	190	49	4	22	388	35	123	28	511	53
Sheep	211	30	101	26	5	28	317	28	81	18	398	26
Pig	108	15	55	14	3	17	166	15	55	12	221	14
Horse	5	1	16	4	—	—	21	2	56	13	77	5
Dog	3	—	7	2	—	—	10	1	104	23	114	7
Bird	173	24	15	4	6	33	194	17	15	3	209	13
Cat	6	1	—	—	—	—	6	1	12	3	18	1
Red Deer	1	—	—	—	—	—	1	—	—	—	1	—
Roe Deer	—	—	1	—	—	—	1	—	—	—	1	—
Fallow Deer	2	—	3	1	—	—	5	1	—	—	6	—
Hare	2	—	—	—	—	—	2	—	—	—	2	—
Fish	2	—	—	—	—	—	2	—	—	—	2	—
Total	707	—	388	—	18	—	1113	—	447	—	1560	—

Total number of fragments

Species	Area C		Area B		Other areas		Castle Total		Lime Kiln		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Cattle	531	39	462	59	4	17	997	46	360	42	1357	45
Sheep	417	31	166	21	6	26	589	27	152	18	741	25
Pig	186	14	103	13	5	22	294	14	77	9	371	12
Horse	15	1	25	3	—	—	40	2	101	12	141	5
Dog	7	—	9	1	—	—	16	1	136	16	152	5
Bird	173	13	13	2	8	35	194	9	16	2	210	7
Cat	15	1	—	—	—	—	15	1	9	1	24	1
Red Deer	1	—	—	—	—	—	1	—	—	—	1	—
Roe Deer	1	—	1	—	—	—	2	—	—	—	2	—
Fallow Deer	5	—	3	—	—	—	8	2	2	—	10	—
Hare	2	—	—	—	—	—	2	—	—	—	2	—
Fish	2	—	—	—	—	—	2	—	—	—	2	—
Total	1355	—	782	—	23	—	2160	—	853	—	3013	—
Skull fragments	70	—	62	—	1	—	133	—	77	—	210	—
Ribs	494	—	309	—	12	—	813	—	254	—	1067	—
Total	1919	—	1151	—	36	—	3106	—	1184	—	4290	—

Fig 35a Animal bones from Bedford Castle: well-dated contexts.

and the main Castle Areas impossible, although there were relatively high percentages of sheep metapodials in the lime kiln deposits. Sheep horn cores, however, were not especially common in the lime kiln.

Many of the bones found at the site had been gnawed, almost certainly by dogs. In some instances this gnawing had entirely destroyed the epiphysis of the bone and thus is likely to have had an effect on the representation of bone elements.

BUTCHERY

Evidence of butchery practices was seen in cut marks on many of the bones, indicating the use of

both choppers and fine, sharp knives. The most commonly used tool seems to have been a heavy chopper and many bones had been chopped through their epiphyses and into their shafts. Knife marks were somewhat rarer.

Chop marks were seen frequently on horn core and skull fragments suggesting that horns were commonly removed from the skulls. In BC70 5 (28) nine very large goat horns were found. They all had chop marks around the base of the core.

One fairly large fragment of cattle skull appeared to have been pole-axed. Evidence of the practice of pole-axing cattle was seen at the Roman site of Portchester Castle, Hants (Grant, 1975A).

Vertebrae were chopped both at right angles

Epiphyses only

Species	Area C		Area B		Other areas		Castle total		Areas around Lime Kiln		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Cattle	172	15	11	31	14	17	197	15	79	33	276	18
Sheep	276	23	13	37	39	48	328	25	82	35	410	27
Pig	139	12	8	23	6	7	153	12	11	5	164	11
Horse	10	1	—	—	—	—	10	1	4	2	14	1
Dog	7	1	—	—	1	1	8	1	2	1	10	1
Bird	523	44	3	9	13	16	539	42	53	22	592	39
Cat	13	1	—	—	6	7	19	1	5	2	24	2
Red Deer	1	—	—	—	—	—	1	—	—	—	1	—
Roe Deer	3	—	—	—	—	—	3	—	—	—	3	—
Fallow Deer	13	1	—	—	2	2	15	1	—	—	15	1
Hare	5	—	—	—	—	—	5	—	1	—	6	—
Fish	14	1	—	—	—	—	14	1	—	—	14	1
Total	1176	—	35	—	81	—	1292	—	237	—	1529	—

Total number of fragments

Species	Area C		Area B		Other areas		Castle total		Areas around Lime Kiln		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Cattle	472	25	36	49	30	22	538	26	149	31	687	—
Sheep	539	29	28	38	69	50	636	30	208	43	844	—
Pig	260	14	5	7	19	14	284	14	44	9	328	—
Horse	14	1	1	1	—	—	15	1	10	2	25	—
Dog	11	1	—	—	1	1	12	1	5	1	17	—
Bird	532	28	2	3	14	10	548	26	62	13	610	—
Cat	8	—	—	—	4	3	12	1	4	1	16	—
Red Deer	1	—	—	—	—	—	1	—	—	—	1	—
Roe Deer	3	—	—	—	—	—	3	—	—	—	3	—
Fallow Deer	14	1	1	1	1	1	16	1	—	—	16	—
Hare	9	—	—	—	—	—	9	—	1	—	10	—
Fish	14	1	—	—	—	—	14	1	—	—	14	—
Total	1877	—	73	—	138	—	2088	—	483	—	2571	—
Ribs	666	—	25	—	65	—	756	—	249	—	1005	—
Total	2543	—	98	—	203	—	2844	—	732	—	3576	—

Fig 35b Animal bones from Bedford Castle: less well-dated contexts.

to the line of the spine and split longitudinally in an anterior-posterior direction. For sheep bones at least, the latter seems to have been the more common practice.

Certain evidence of butchery was not seen on either horse or dog bones, adding further weight to the suggestion already made, that these animals were not generally eaten. A dog humerus and ulna found together in the lime kiln had knife marks on them, but examination of these marks indicated that they resulted from an abandoned attempt at tool manufacture rather than from the butchery of the carcass.

THE AGE OF THE ANIMALS

The cattle bones were generally speaking those of mature animals. Very few of the early fusing bones were unfused and the majority of the late fusing bones were fused. This suggests that the majority of the cattle were over four years old at death. Only a few mandibles were found where the tooth wear could be assessed (Grant, 1975). None of the mandibles was from a very young animal, one was from a juvenile animal and the rest were from mature animals.

Similarly, there were very few bones from

young sheep, but only about a third of the late-fusing sheep bones were fused, suggesting that the sheep were generally killed at a younger age than cattle, mostly between one and a half and three and a half years. The youngest mandible aged was from an animal of about two to three years—the rest were from animals of three to six years.

The age structure of the pigs was entirely different from that of the sheep and cattle. There was little evidence for fully mature animals at the site. The bone fusion evidence suggested that pigs were generally killed either at their first or second year of life. The tooth wear evidence to a large extent supports the picture given by the bone fusion evidence. Many of the mandibles are from young animals, but a few are from mature animals.

DISEASE AND INJURY

Several of the bones showed evidence of disease. The most common disease affecting the bones seems to have been a degenerative joint disease affecting the cattle. The most commonly affected joints were those between the metapodials and the first phalanges.

A horse spine was found, partly articulated, with a large amount of extra bony growth on the ventral side of the vertebral body.

DISCUSSION AND CONCLUSIONS

There are obvious dangers in concluding too much from a relatively small sample of bones from a partial excavation of a site, especially when that site is in an urban environment and has an occupation period spanning some 150 years. This site is discussed in relation to other sites in Bedford in a separate paper in this volume. Some points of particular interest are, however, worthy of discussion.

There was a significantly higher percentage of bird bones recovered from the excavation of Area C than from the excavation of both Area B and the lime kiln. Differences in the dietary habits of occupants of different parts of the site or differences in rubbish disposal practices might be possible explanations.

There were also significantly higher percentages of dog and horse bones found in the lime kiln than in the main Castle Areas. The suggestion has already been made that these animals were not generally eaten. It is thus possible that when

Species	Castle Total		Lime Kiln		Total	
	No	%	No	%	No	%
Cattle	18	30	13	37	31	32
Sheep	22	36	6	17	28	29
Pig	18	30	4	11	22	23
Horse	2	3	4	11	6	6
Dog	1	2	8	23	9	9
Total	61		35		96	

Fig 35c Minimum numbers of individuals.

horses or dogs died or were killed, their bodies may not have been usually disposed of with food refuse. The practice of separate disposal of dog carcasses is known in Medieval times. Houndsditch in London came by its name because dog carcasses were commonly thrown into it (Sabine, 1933).

The analysis of the bone elements found in the lime kiln suggested that the rubbish found in the kiln was slightly different from that found on the rest of the site. It is not certain when the kiln ceased to be used and was turned into a rubbish tip, but Hassall has suggested that this is most likely to have happened by the time of the siege in 1224. It is possible that the kiln could have been used as a dump during clearing-up operations after the siege. This might explain the large number of very eroded bones found in the kiln. However, the possibility that waste from a hornier and from animal butchery formed a significant proportion of the bones from the kiln is suggested by the analysis of bone elements. If this is the case, it is likely that the kiln filled up with rubbish while there was still occupation and industrial activity on the site.

Evidence of industrial activity based on animal products is only slight and consists mainly of the cattle, sheep and goat horn cores mentioned above. Some bone tools were found, but there was no evidence of bone tool waste in any quantity.

In conclusion, this collection of bones seems to consist largely of food refuse of people whose main source of meat came from cattle, but who also ate sheep and pigs and varied their diet with birds fairly frequently but with venison only occasionally.

CONCLUSION

(Fig 3)

by DAVID BAKER

Work at Bedford Castle from 1969 to 1973 has largely invalidated earlier reconstructions while failing to provide a coherent and more soundly based replacement. This is a measure of the size of the site, its complexity, and the relatively small investigations that were possible.

The Castle was imposed upon a part of the town with a long history of settlement, going back perhaps to the earlier part of the Middle Saxon period, conventionally dated 650 – 850 A.D. In BC70 15, insufficient was seen of the early timber buildings and their immediate environment to show whether they were related to an urban, suburban or rural settlement. The black occupation layer overlying these features and natural subsoil on both sides of Castle Lane presents problems: it is cut by walls belonging to the Castle, perhaps in its earlier phases. The ceramic evidence also points to an early date in the Saxo-Norman continuum. But there is no certainty, either about the dating of the pottery or about the stages by which major Castle structures spread out from the motte. The date at which the black layer ceased to accumulate could lie anywhere between 1070 and 1120 if this is to be equated with the construction of the Castle in this area. It could be even later if the black layer represents a pre-Castle deposit which continued to accumulate as part of a courtyard or bailey. It was found on several, widely separated, sites in the Castle area, and was of apparently similar composition on all of them. This may point to its interpretation as evidence of cultivation, presumably on an intensive domestic scale, within the settlement limits rather than as a part of a rural field system outside the settlement.

In any event, the impact of the Castle upon the pre-existing town must have been considerable, but it cannot be precisely gauged until problems of late Saxon urban limits have been resolved. There are some topographical indications that the Castle was placed upon or athwart the boundary of the north-east quadrant of the northern *burh*.

Figure 3, which summarises the evidence gained by this campaign of work, shows how no overall plan of the Castle can be proposed for any period of its existence. Early 13th century limits are broadly known, and there are some indications of an inner bailey. The range of buildings south of

the stone-lined ditch might have stood at the end of the Castle, but the lime kiln seems to have succeeded at least some of the buildings on the northern perimeter. The motte is presumably an early feature, but it is not yet possible to chart either its development or that of associated systems of baileys and outer defences.

The two definite glimpses of stone-lined ditches are most tantalising. If they are Falkes de Breauté's "fossata pavimentata", how extensively was this technique applied to the rest of the Castle? The ditch running due west from the motte poses major problems of plan: if it is the inner bailey ditch, it is likely to enclose an unusually shaped court, since it seems to run most of the way towards the High Street before there is a chance for it to turn south towards the river. As a form of construction, these stone-lined ditches are of great interest. They were constructed at an angle which would make ascent by an attacking force difficult for lack of the secure footholds which might more easily have been cut in an earthen grass covered slope. Constructionally they are strong, both examples here sectioned being carried down on to the top of bedrock, thereby providing a firm base, anchor and seal against internal pressure from water or soil. Militarily they must have been a fairly formidable obstacle, water-filled either from the existing water table and streams, or from the river. It is difficult to comment upon the question of water levels and their ability to fill ditches during the Castle period, using modern observations as evidence. The Ouse has changed its character, flow and level considerably. Moreover, localised springs in the gravel subsoils can be misleading. Some doubt on the extent or military efficiency of water in the ditches is raised by the chroniclers' description of a siege successfully prosecuted by means of mining.

It is important to distinguish technically between stone-lined ditches cut into loose soil or drift deposits, and rock cut ditches where the natural stone has been removed to create an immensely stable ditch defence. Examples of the latter are plentiful, but relatively few of the former are known, perhaps because timber revetment was more commonly adopted. A further distinction could be made between stone-revetted ditch faces and the rarer fully stone-lined, or paved, ditches, as well as the use of either technique for the full run of a ditch or for only part of it. English parallels are few. At Skenfrith (Renn,

1968, 311-12) there is an example of stone revetment to the motte ditch though it is not known how far down it extends. We are grateful to Dr. A. J. Taylor for a reference to building stone "*ad fossatum circa castrum de Flint inde pavandum*" in 1278 (Pipe Roll 6 Edward I; E 372/122 28d).

The situation regarding internal buildings is one of piecemeal and rather unsatisfactory information, due to later disturbance and limited opportunities for excavation. Several fragments of buildings were seen about mid-way along the northern perimeter (*Area C*), west of where modern Castle Lane comes into Ram Yard. As robber trenches they suggested fairly massive constructions though little could be seen of their overall form. It was, however, clear that, together with the lime kiln, they represented several periods of development on this part of the site. The lime kiln appears to be late in the Castle sequence, since it cuts some of these walls, and since its fill is similar in date to that of the main ditches: a kiln of that size will also fit with the massive refortification ascribed to the early 13th century. Whether or not the easternmost structure is the Old Tower of the siege documentation must be pure speculation. Equally hypothetical would be its identification as a structure forming part of a gatehouse defending an entrance whose location is preserved by the course of Castle Lane. It can be noted that the Lane itself points in the general direction of the two bridge abutments on the inner bailey ditch, either side of which were cobbled areas, though the contemporaneity of all these features cannot be demonstrated.

The interpretative difficulties presented by the buildings south of Castle Lane have already been discussed. Identification of the main range as including a hall or chamber with access to the first floor by means of a newel staircase remains the preferred interpretation, though its tentative nature should be underlined in view of the incomplete evidence both at the north-east corner

and along the south wall.

The excavations have raised, but not solved, the problem of post-Castle, Medieval, occupation on the site. No positive traces have been found of an undefended Beauchamp mansion. Some of the pottery evidence could be interpreted as extending into the 13th or 14th centuries, but it is not clear whether this represents actual occupation or rubbish dumping upon the "void plot" mentioned in 1361. In this context, Annie Grant's comments on possible industry in the neighbourhood of a disused, half-filled lime kiln should be noted.

The Castle report must conclude with a recommendation that further work be undertaken. Important questions remain unanswered, and opportunities must be seized for rescue excavation before redevelopment entirely sweeps away the evidence. The traditional complaint of the rescue archaeologist, that resources were inadequate for the task in hand, has special force here, since work on the Castle was completed before the creation of the full organisation which has undertaken Bedfordshire rescue archaeology from 1974, including the preparation of this monograph. Only small parts of the available land were examined, and obstacles mainly in the form of derelict public houses imposed further limitations. Effective examination requires large-scale open area excavations, uninhibited by the need to store spoil dumps on site. It is to be hoped that such work can be undertaken on the Castle Lane area, if necessary enfolding trenches already excavated, so that all the fragmentary evidence for the Castle and preceding settlement on its site can be recovered. It is also clear that the solutions to several key problems of plan and development may lie within ground which is unlikely to be disturbed by modern building. There is a case for limited excavation in order to establish a clearer framework for the results from those areas whose evidence must be rescued, thereby making the nature of their Castle generally clearer to the people of Bedford.

Cauldwell Street
EVELYN BAKER and ANGELA SIMCO
with a summary by DAVID BAKER

SUMMARY

Three street frontage sites were excavated in the west section of the main east-west street in the town south of the river. Work at Nos 8 – 10 in 1967, in advance of redevelopment for the National Westminster Bank has already been reported (BSJ67 6). In 1971, the site of No 9 was examined (BCS71 24). Two years later, following the demolition of St Mary's Vicarage opposite, the most fruitful project was carried out (BCS73), though its chief contribution was to Post-Medieval Bedford archaeology.

8 – 10 CAULDWELL STREET (BSJ67 6) (Baker, 1970)

SUMMARY by David Baker

The Excavation (Fig 36)

A trial trench was excavated at right angles to Cauldwell Street. A large pit (17) with 12th century pottery was found close to the street frontage. It was sealed by occupation layers including a hearth. The implication was that either there were no Early Medieval structures fronting Cauldwell Street, or later widening of that street had destroyed them. An 18th century cellar of at least three periods, with walls incorporating re-used clunch stone, and a stone and brick cesspit were found in the north and south ends respectively of the trench, which were expanded to allow fuller investigations.

Finds republished in Catalogue

(4) German stoneware 892; chimney pot in A1 fabric 1082; roof ventilator in A1 fabric 1083 (Early Medieval context with Post-Medieval disturbance). (5) C1 470; Delft 958. (7) B8 380. (17) B2 245; C1 457; C6 557 (12th century context).

9 CAULDWELL STREET (BCS71 24) Fig 37
by ANGELA SIMCO

A small area, 6m x 6m, was opened mechanically on the site of a 19th century building. Constraints were imposed upon excavation by adjacent buildings, recent wall footings, and the problems of spoil disposal.

THE EXCAVATION

Medieval

Parts of two Medieval pits (B, C) were located 4m back from the street frontage, containing typical occupation deposits of fine black silty loam with much evidence of burning, with occasional tip layers of cleaner gravelly loam. They were 2.60m and 3.30m deep respectively. Their relationship was not conclusive, though Pit C was possibly later than Pit B.

Post-Medieval

The rest of the site was thoroughly disturbed by recent Post-Medieval activity. A series of pits and tip layers up to 1.40m deep contained much 19th century debris, demonstrating their contemporaneity, including large numbers of ferrous suspension components from dormitory furniture.

The concrete and brick footings from the latest building on the site were still in position, and a sequence of sewage pipe trenches ran north-south along the west edge of the area.

THE FINDS

Medieval: Pit B

(7) B8 373, 403; B1, B2, B4, B5, B11 not illustrated; bone whistle 1538; painted window glass, carved bone handle with bronze rivet, not illustrated. (21) B1, B4, B5, not illustrated. (33) B4 not illustrated.

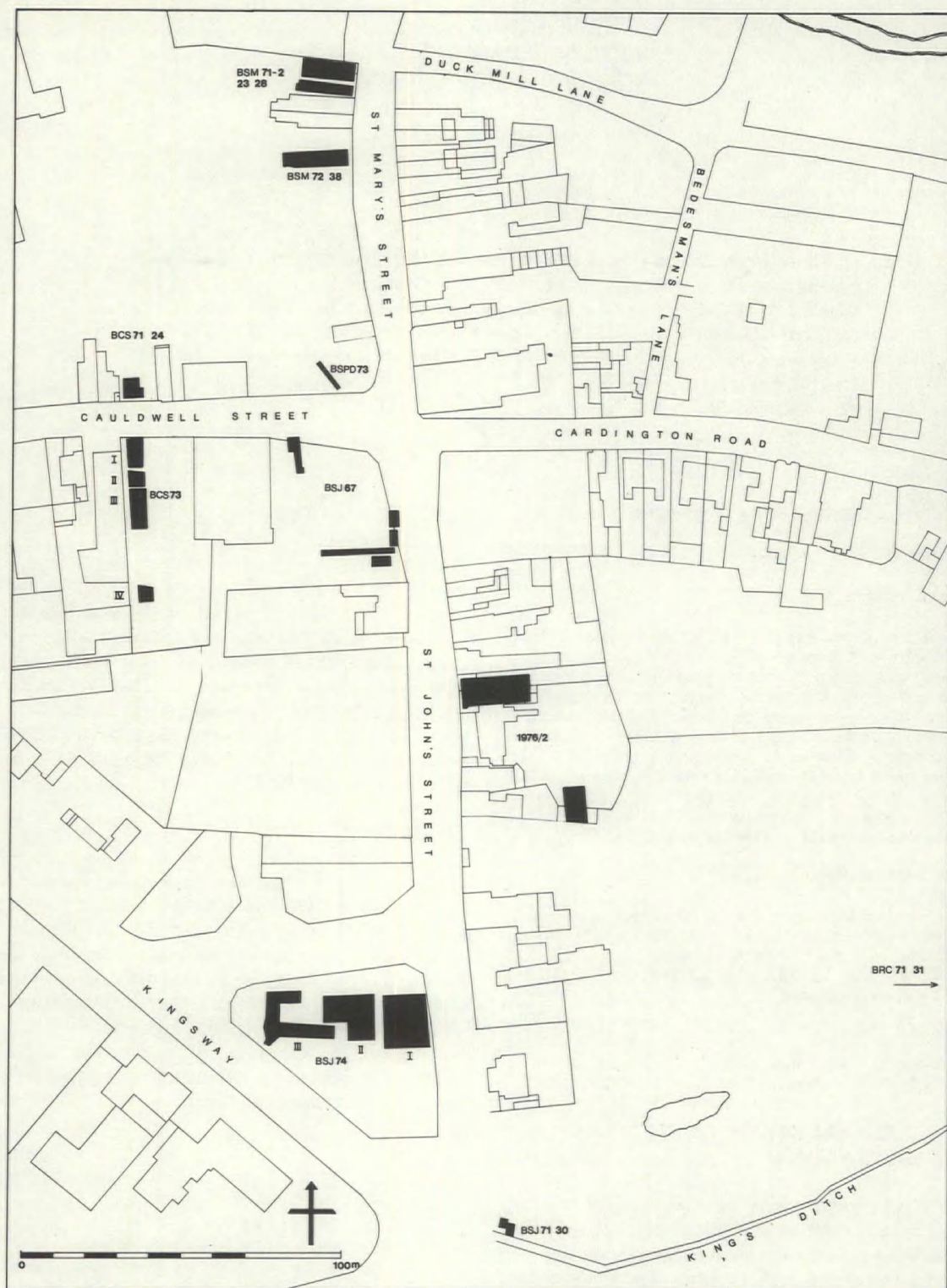


Fig 36 Excavation areas and sites south of river.

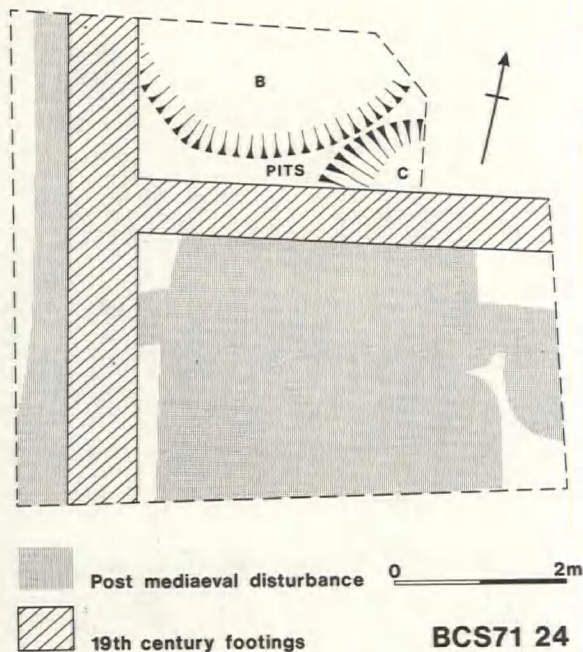


Fig 37 Cauldwell Street: plan of BCS71 24.

Post-Medieval

U/S glass bottle 1215. (13) clay pipe 1024; glass bottle 1191; iron handle-mount 2400; iron patten 1437; iron bucket handle 1411. (17) stoneware ink-bottle 895. (20) clay pipes 1005, 1006; millstone fragment 1120. (22) painted window glass 1285, 1286; lead strip 1507. (26) painted window glass 1274. (43) glass phial 1205.

ST MARY'S VICARAGE (BCS73) Figs 38 – 44 by EVELYN BAKER

SUMMARY

Period 1 – 10th to 12th centuries

Saxo-Norman and Early Medieval occupation mainly took the form of ash and rubbish pits. Remains of timber buildings were set well back from the street front, and the site is apparently on the fringe of minor industrial activity.

Period 2 – Trench IV only. 13th to 14th centuries

Lime pit.

Period 3 – 17th to 18th centuries

Early activity was largely destroyed by a series of rubbish pits which yielded a profusion of high quality artefacts.

INTRODUCTION

This was one of six concurrent excavations organized by David Baker during the summer season of 1973. The objective of a three-week session on the site of St Mary's Vicarage and its garden, was to establish the nature and date of occupation in this area more systematically than in earlier smaller sites. Trenches were designed to come as close as possible to the modern street frontage to see whether there were any indications of it having been built up during the late Saxon and Medieval periods. The remainder of the site was sampled by trenches dug along the west edge. These were subdivided into three by massive modern footings. A fourth trench was located at the rear of the garden, some 48m back from the present street building line. Dumping and excavation were restricted to the western part of the site.

Permission to excavate was kindly given by Hurford Properties (Petham) Ltd, and I am grateful to Nicholls Garage for their co-operation in allowing one half of the site, then used for vehicle storage, to be occupied by archaeologists. Work was chiefly carried out by pupils of Harpur Trust schools. Thanks are due especially to Krycia Biliowski, Felicity Collett, Gary Price and Karen Sinfield. David Devereux assisted with section drawing.

Excavation Method

Excavation was commenced mechanically with the original intention of rapidly removing the Post-Medieval deposits in order to have sufficient time to deal with earlier levels. Natural subsoil, clay over gravel, appeared at 0.10m below modern ground surface in the north, Trench II, and at 0.80m in Trench III. Trench IV was so distanced from the main excavation that it is treated separately. Mechanical excavation was halted when

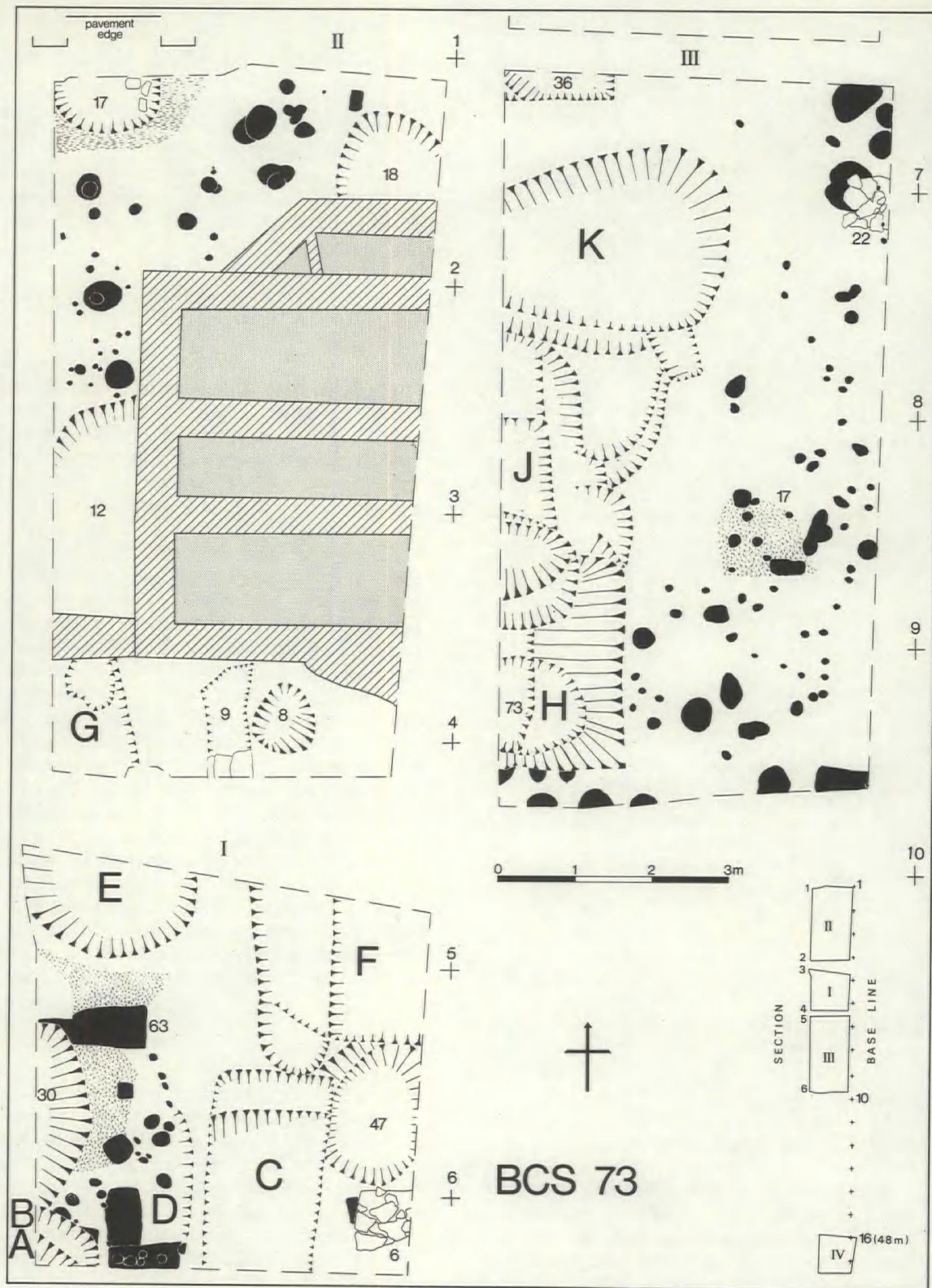
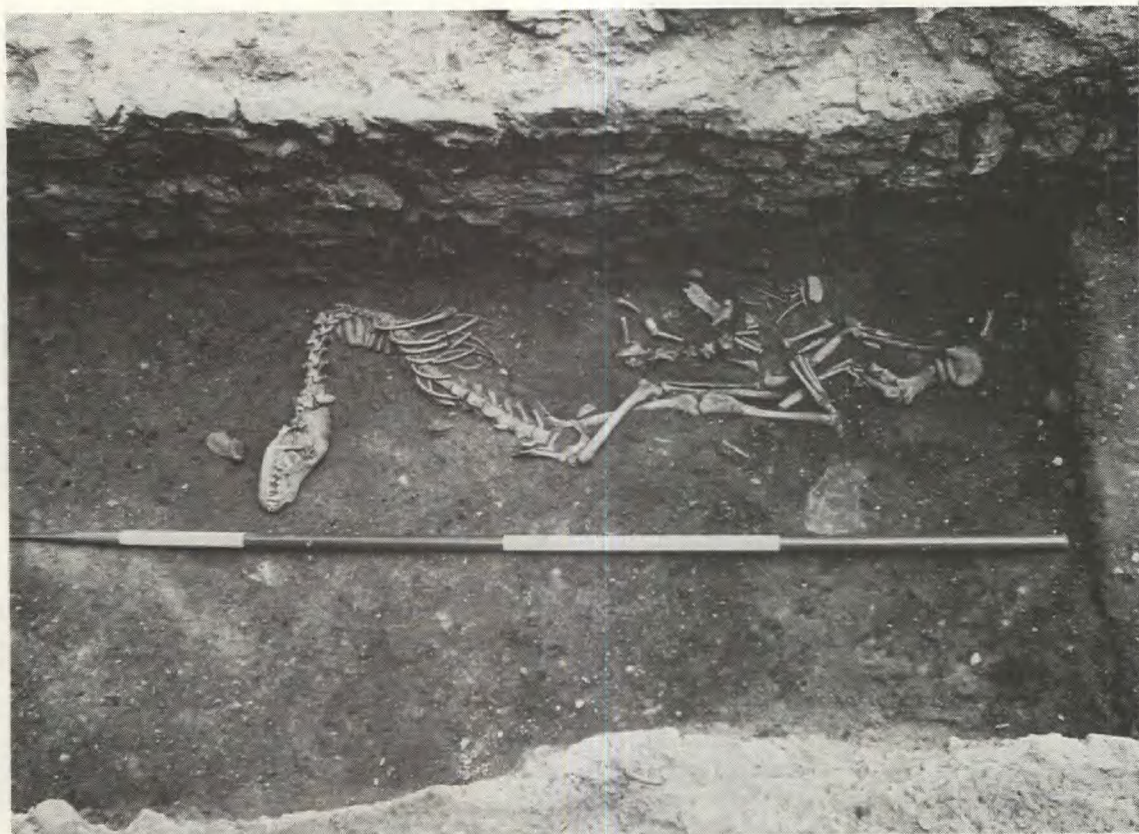


Fig 38 Cauldwell Street: plan of trenches BCS73 I – III.



Pl 14 Cauldwell Street, BCS73 II, Medieval dog burials.

it became apparent that exceptionally rich, stratified, Post-Medieval deposits were occupying most of the area available. These constituted the principal results from this site, and the following report is chiefly concerned with the assemblages recovered from them.

BCS73 I – III

Medieval: Period 1 (Figs 38, 39)

BCS73 II. Most of the area had been disturbed by Post-Medieval activity, including the Vicarage footings and cellar. Structural evidence was restricted to a series of post-holes, some of which were re-cut, some with indications of posts within them, and stake-holes. They could not be interpreted as a discrete structure and could have been fencing or a dwelling. Four pits were the most substantial features. (17) and (18) in the north were filled with layers of loam and ash with some limestone rubble. Leo Biek has identified smelting and smithing slag

together with iron ore from (18). (12), in the west section, also had ash as its principal fill, and contained the complete or partial articulated skeletons of several animals. The bone report, by A. Grant, follows below. (8) was circular with a wedge-shaped bottom that may have held a rectangular timber. Its fill was loose, sandy, brown loam and pebble with a thin capping of mortar. Pottery fabrics recovered were: (8) B1 and B4; (12) B1 and B2; (18) B1.

BCS73 I. Only a small area was unscathed by Post-Medieval activity. A timber structure in the south-west corner consisted of three loam-filled slots and at least two post-holes linking the slots. They were associated with a thin mortar and clay spread, probably a floor level. The post-holes seen in slot (63) may indicate a post-in-trench building, but they, and other small post- and stake-holes, could represent different periods of construction. Only B1 pottery was recovered. Since they were cut by a pit (30) which contained B1 and B2, they are likely to be 12th century or earlier. (30) was filled with black and orange ash with slag identified by Leo Biek as being smithing slag with furnace lining. A second pit (47) was filled with gravels and sandy loams with a greenish hue and was perhaps a cesspit. It contained B1 and B4 fabrics.

BCS73 III. Most of the western part of the trench had been deeply disturbed by Post-Medieval pits *K*, *J*, *H*. At the bottom of these pits were the remains of two deep Medieval features of similar fill. (74) contained clay loam under silty black loam. (75) to the north had layers of orange clay loam and sticky black loam, and may have continued as (67) to the north of *Pit J* which cut both deposits. (62) could be a further continuation of the same feature. Limestone blocks seen in (67) might have been some sort of lining or structure, but limited space against an already deep section precluded further investigation of what was certainly only the eastern limit of one or more large features. The pottery fabric recovered was B1. Many post-holes and stake-holes were cut in the natural surface further east. Some contained no dating evidence, but most are Medieval. An area of clay and mortar similar to that found in BCS73 I may also have been a floor level, but the associated features were too varied in proportions, fill and distribution to make any structural sense.

FINDS

BCS73 II (12) B3 256.

BCS73 III (74) C4 518; C12 626.

DISCUSSION

Most of the features described above are likely to be 12th century or earlier. The pits in BCS73 II may indicate that the street frontage may not have been built up at this particular point. They may relate to the structure in BCS73 I, which is apparently set well back from the street. The number of ash pits with associated slag point to industrial activity nearby.

THE ANIMAL BONES (Fig 40) by Annie Grant

704 animal bone fragments were recovered from ?10th – 12th century contexts. 559 bones were identified; the species represented were cattle, sheep, pig, horse, dog, cat and bird. Details of the numbers and percentages of bones for each species are given in *Table 40*. Both cattle and sheep were well represented, but pig bones were not so numerous. Birds were fairly well represented and small numbers of cat and horse bones were found. The particularly large percentage of dog bones found were almost all from the remains of two very small animals and one very large animal, of wolf size. The large animal was found partly articulated—skull, vertebral column, ribs, pelvis and hind limbs were all articulated when found (BCS73 II (12); *pl 14*). The presence of both very large and very small dogs suggests that both guard or working dogs and pet dogs were kept. The presence of dogs about the site is also indicated by the gnaw marks on the bones of sheep, cattle and pigs.

Butchery marks were found only on the bones of cattle, sheep and pigs. No butchery marks were seen on horses, dog or cat bones, and most marks were the result of chopping rather than knife marks. There is no evidence

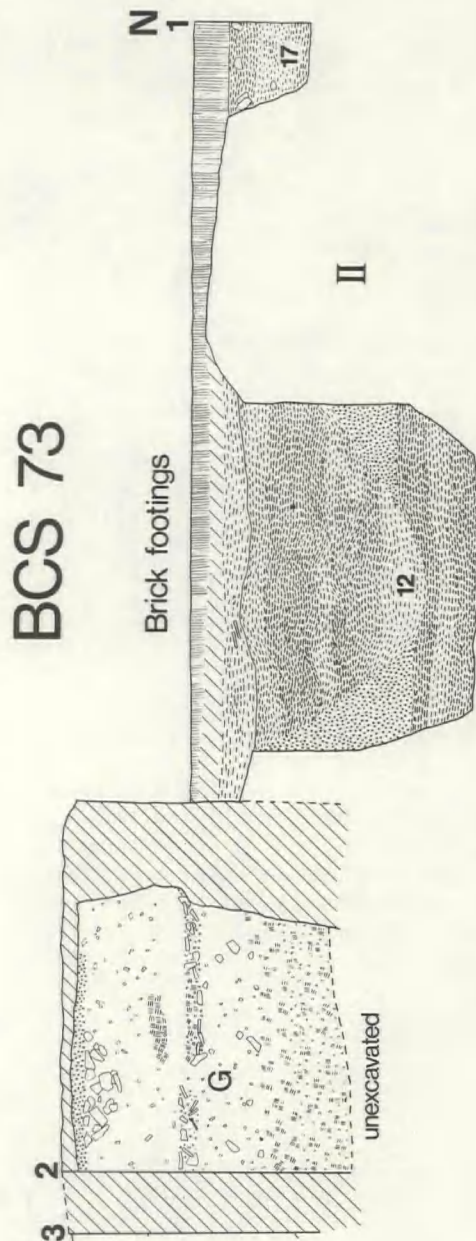
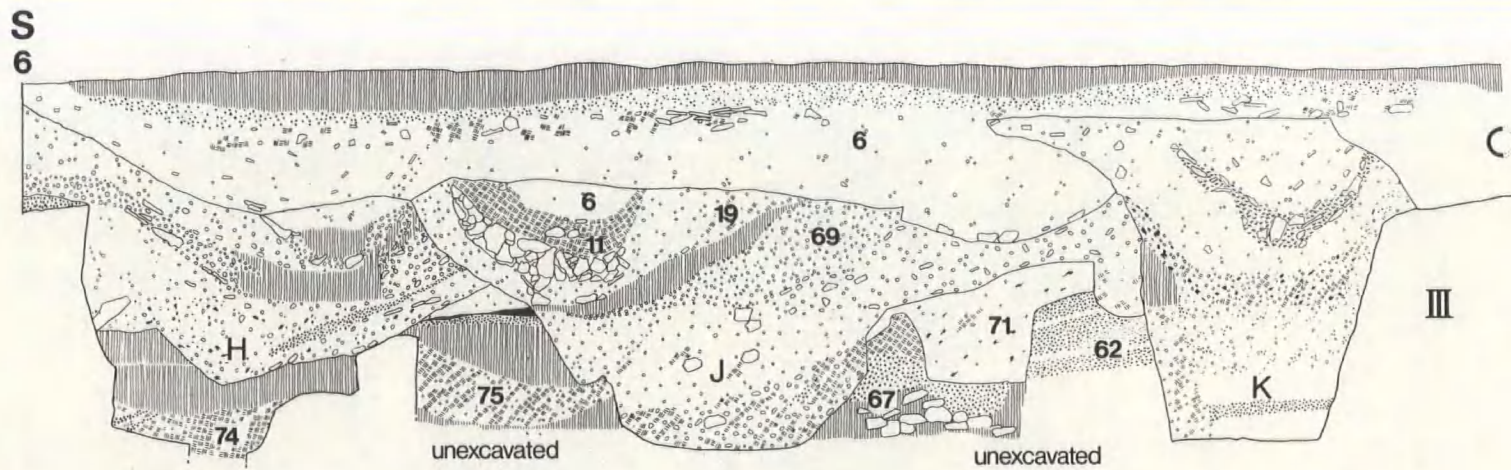
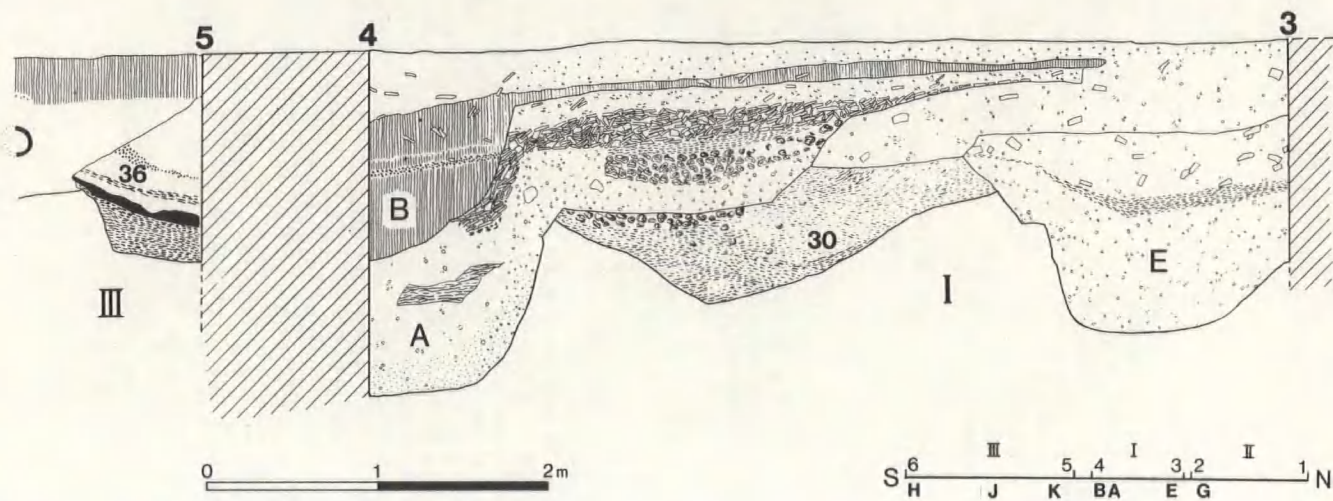


Fig 39 Cauldwell Street: west section of BCS73 I – III.



of any preliminary butchery of carcasses away from the site as all skeletal elements of cattle, sheep and pigs were represented.

There was evidence of both mature and immature cattle and sheep although the majority of the bones of these species were from mature animals. A high percentage of pig bone was immature.

One skull fragment of sheep was clearly from a hornless animal.

	Epiphyses*		Fragments*	
	No	%	No	%
Cattle	48	23	136	33
Sheep	52	25	103	25
Pig	22	11	45	11
Horse	10	5	18	4
Dog	52	25	90	22
Cat	6	3	9	2
Bird	19	9	16	4
TOTAL	209		417	
Rib fragments			122	
Skull fragments			20	
TOTAL			559	

Fig 40 Analysis of animal bones from BCS73.
(*See Grant, 1975)

Post-Medieval: Period 3 (Figs 38, 39)

INTRODUCTION

Post-Medieval pits were found to the south of the 19th century Vicarage footings, with concentrations in BCS73 I and III. They were cut by later foundations running east-west across the site. Structures were otherwise confined to the slight dwarf wall footings seen in both trenches, apparently post-dating the pits. Several pits may be thought of as contemporary, and their assemblages may be considered together. *Pits A, B and C* share contiguous sherds. Dating has been derived from both assemblages and relative stratigraphy. Since these assemblages are outstanding in the context of Bedford, they have been subjected to a vessel count, and a more detailed description is published. Two complementary assemblages have been illustrated (figs 41, 42), showing the range of glass and pottery vessels. In the assemblages below, items similar to, but not the actual vessel in the catalogue, are marked "as".

PIT A EARLY 18TH CENTURY

BCS73 I (6) (13) (14) (15) (16) (17) (18)
Figs 38, 39

Only a portion of this pit was seen in the south-west corner. Its profile was stepped down to the south, but

both parts appeared to have been contemporary. Loosely packed layers of gravel, roof tile, ash, burning and daub mixed with decayed wood suggest that the remains of a timber-framed structure had been dumped there. It cut (30) and Pit B.

Assemblage

Pottery: 20 vessels represented.

Unglazed Earthenware, Green-glazed, Black-glazed, Tyg, Local Slipware, Staffordshire Slipware and Lustreware, 1 vessel each. Glazed Earthenware 2, Stoneware 3. Delft 4 bowls, 2 plates including 919 (with *Pits B and C*), 1 drug jar, 1 chamber pot 945.

Window glass: painted glass type 70, not illustrated.

Bottle glass: 7 vessels represented

3 bottles 1250, 2 medicine bottles 1259, 1 wine bottle as 1156, 1 vessel as 1196.

Clay Pipe: Type L 1011, 2 examples.

Small Finds: 3 iron objects, 1 copper alloy button, 1 copper alloy pin: not illustrated.

PIT B 17TH TO EARLY 18TH CENTURY

BCS73 I (7) (24)

Figs 38, 39,

Part of this pit was also seen in the south-west corner of the trench. It was cut into the final fills of Pit A, and its own top fill sealed both pits. While it has been treated separately, B could be considered as the last, slightly cut-in fill, of Pit A.

Assemblage

Pottery: 38 vessels represented.

Creamware, Lustreware, Chinese Porcelain, Green-glazed, 1 vessel each. Stoneware, 6 cups. Unglazed Earthenware, 2 jars. Black-glazed, 3 vessels. Glazed Earthenware, Pipkin as 823; 2 jars 803, 809; 1 handle 834. Staffs Slipware 3 vessels. Local slipware, 1 bowl 855; 1 chamber pot as 867. Notts/Staffs 1 cup as 907, 3 cups and 4 other vessels. Delft 1 plate (with *Pits A and C*) 919; 1 bowl 934; 1 polychrome 974; 1 Trek 976; 2 other vessels.

Glass: 11 vessels represented.

4 wine bottles as 1156. 1 flagon 1179. 1 spout as 1180. 1 wine bottle as 1181. 2 wine glasses 1237, 1238. 1 handle 1251. 1 vessel 1253.

Clay Pipe: 15 bowls, 2 bases. 4 illustrated stems: dec 12 1004, as 1007, as 1015, dec 19 1059; 132 stem fragments. 1 stamp 1059.

Small Finds: 4 iron objects including scissors 1415, copper alloy pins 1319, 1 bone button.

PIT C EARLY 18TH CENTURY

BCS73 I (12) (33) (34)

Figs 38, 39, 41

This rectangular, straight-sided pit was situated at the southern edge of the trench and was cut by the modern footing 4-5. The maximum depth was 1.31m. The fill was redeposited gravels and clay mixed with very large quantities of clay pipe fragments, copper alloy pins, pottery and wine bottles.

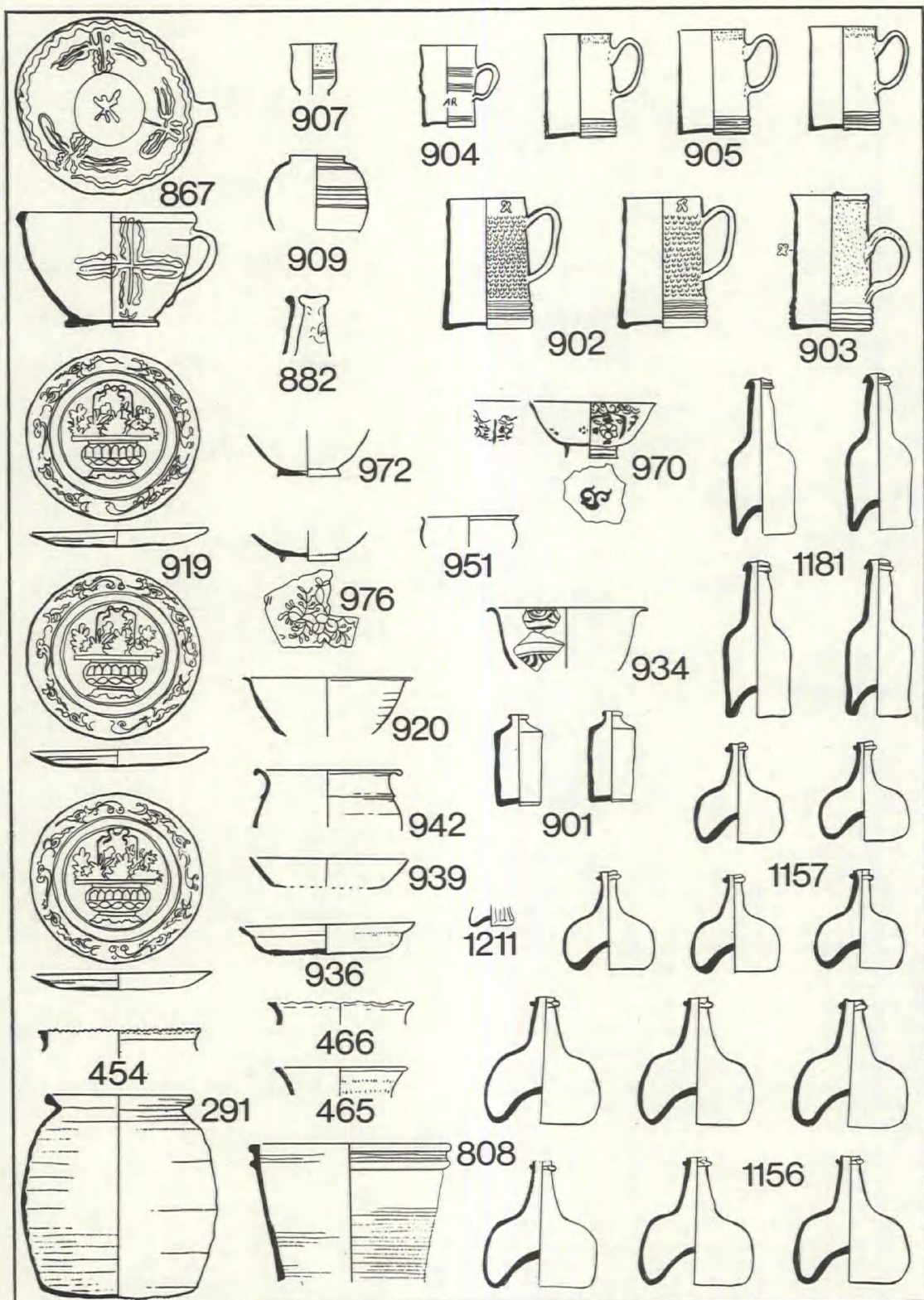


Fig 41 Cauldwell Street: assemblage from Pit C, BCS73.

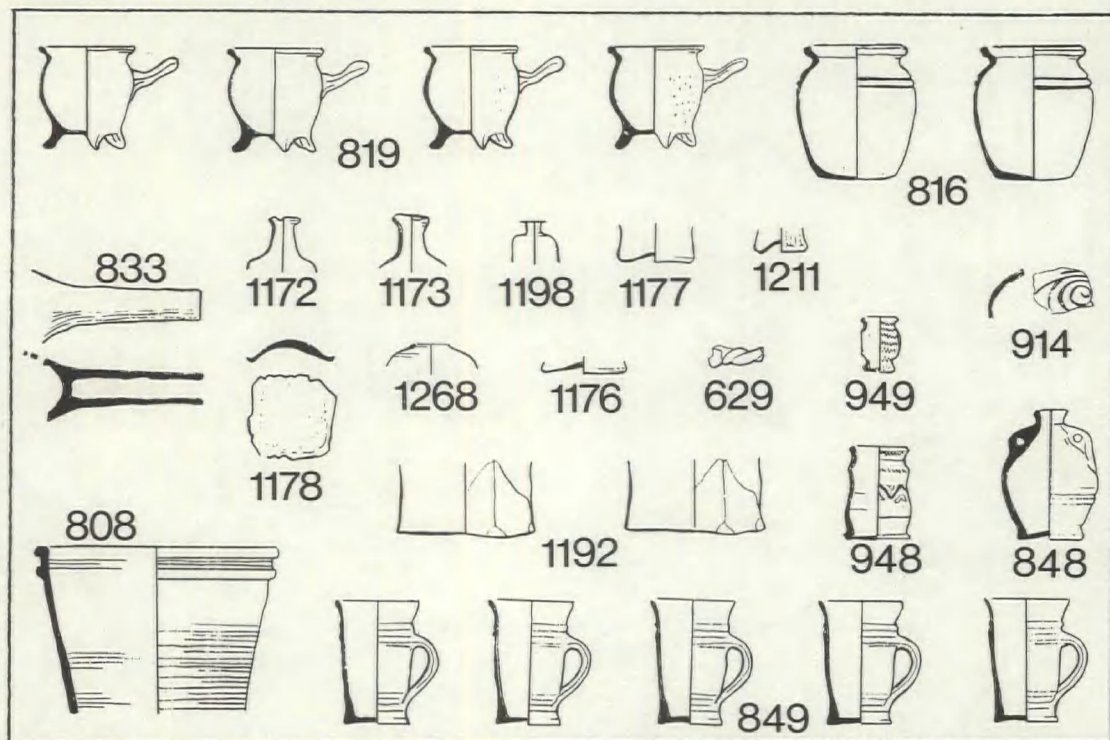


Fig 42 Cauldwell Street: assemblage from Pit F, BCS73.

Assemblage

Pottery: 55 vessels represented.

Glazed Earthenware, 2 jars, 1 as 808, and 1 side handle. Green-glazed 1 vessel, Black-glazed 3 vessels. Local Slipware 1 vessel and 1 chamber pot 867. Staffordshire Slipware 1 plate and 1 cup. Other Slipware 1 spout 882. Westerwald 1 vessel. Stoneware 3 vessels, 1 cup as 907, 3 mugs as 905, 1 bottle 901. Notts/Staffs 1 quart and 1 pint tankard, 2 tankards 902, 903, 1 cup 907, 1 bowl 909. Chinese Porcelain 3 vessels. Delft 14 bowls including 920 934 939(x2) 951 970 972 976 (with Pit B), 4 plates including 3 (with Pits A and B) 919 and 1 as 936, 3 chamber pots 942. Residual Saxo-Norman wares: Jars or Cooking Pots, B4 291, C1 454 465 466.

Glass: 22 vessels represented.

1 bottle type 30 not illustrated. Wine bottles: 2 1197, 4 1181, 11 1156, 2 1157. 2 bottles 1198.

Clay pipes: 36 bowls with stems including 1008 1107, 14 bases, 35 bowls, 376 stem fragments including 1013, 1 stamp 1052.

Small Finds: Illustrated, bone comb 1519. Not illustrated: 2 iron objects, 4 copper alloy objects including pins, 1 sawn bone object. (12) contained a damaged coin or token, possibly a gaming counter made from a 1/- or 6d of Charles I issued 1663 – 1685, or alternatively a Nuremberg counter dating between 1660 and 1700.

PIT D 18TH CENTURY

BCS73 I (10) (76)

Only the bottom of this pit, situated between A and C, remained after mechanical excavation. It cut slightly into the natural surface, partially sealing the evidence for the Medieval structure in this trench.

Assemblage

Pottery: 3 vessels represented, 1 each of Stoneware, Unglazed Earthenware, Notts/Staffs, the latter a bowl 911. **Clay Pipe:** 3 stems.

PIT E 17TH CENTURY

BCS73 I (26) (28)

The modern footing 2 – 3 separates this sub-circular pit from Pit G, which is an independent feature. It appears to be stratigraphically earlier than A and B; this is corroborated by the finds.

Assemblage

Pottery: 9 vessels represented.

Unglazed Earthenware 2; Glazed Earthenware 3 including 1 pipkin 823; Black-glazed 2 including 1 butterpot 836; Tyg 2 tankards as 849.

PIT F 17TH CENTURY

BCS73 I (8) (21) (31) (35)
Figs 38, 39, 42

Seen in the north-east corner of the trench, this pit appeared to have been cut in two stages. The east part was dug first, but the principal fill (8) was in both.

Assemblage

Pottery: 32 vessels represented.

Unglazed Earthenware 2 pipkins as 819, 1 jar 816, 1 not illustrated. Glazed Earthenware, 5 jars including 1 as 816 and 1 as 808; 1 fuming pot; 2 pipkins 819; 1 handle 833; 1 other. Cistercian, 2 vessels including 1 costrel 848. Tyg, 6 vessels including 5 tankards 849. Staffordshire Slipware 1 vessel. Delft 3 vessels including 2 albarellos 948 949. Yellow-glazed, 3 vessels. Green-glazed 1 vessel. Medit. import 1 jug 914. Fabric C12 1 handle 629.

Glass: Bowl 1266; 2 flagons 1176, 1177.

Small Find: Copper alloy buckle 1363.

PIT G 17TH CENTURY

BCS73 II (4) (10)
Figs 38, 39

This northernmost pit was partially mechanically excavated. It was disturbed by the footings of the Vicarage, and by the concrete footing 2 - 3 which separated it from Pit E.

Assemblage

Pottery: 2 vessels each of Glazed Earthenware, Cistercian and Stoneware, 1 of latter illustrated as 917. 1 Delft bowl.

Glass: 1 wine bottle as 1156, 1 flask 1260.

Clay Pipe: 1 stem.

PIT H 17TH CENTURY

BCS73 III (10) (24) (72) (73)
Figs 38, 39

Pit H was in the southern part of the trench, and went into the west section. It was cut by Pit J and cut into the Medieval pits (74) (75).

Assemblage

Pottery: 15 vessels represented, 1 illustrated.

Glazed Earthenware, 1 chamber pot, 3 jars, 1 other; Black-glazed 1 bowl, 1 dripping pan 839; Notts/Staffs 2 tankards; Stoneware 2; Salt Glaze 1; Chinese Porcelain 1 cup; Delft 2 bowls, 1 lead glaze and 1 other.

Glass: Window, 1 type 91. Vessel, 2 wine bottles as 1156, as 1181.

Clay Pipe: 2 bowls 1010, 8 stems.

PIT J 17TH TO EARLY 18TH CENTURY

BCS73 III (6) (11) F1 (19) (69)
Figs 38, 39

This pit cut the north edge of Pit H, and is presumed to have been later. It also cut the Medieval deposits (67) (75), and was the largest pit excavated. The shape was irregular and it went into the west section. The later fills occupy the southern part of the pit and include concentrated layers of clay and rubble.

Assemblage

Pottery: 11 vessels represented.

Black-glazed 1 jar, 1 dripping pan as 839; Green-glazed 1; Stoneware 1; Notts/Staffs 1 quart tankard; Glazed Earthenware 1 fish dish 827; Yellow-glazed 1 side handle 842; Staffs Slipware 2 dishes, 1 875; Local Slipware 1 vessel as 857; Tyg 1 vessel.

Glass: 3 wine bottles, 2 1156, 1 1181.

Clay Pipe: 2 bowls, 1006, as 1007; 19 stems, 1 1054.

Small Finds: iron object, copper alloy button.

PIT K 17TH TO EARLY 18TH CENTURY

BCS73 III (23) (61) (62)
Figs 38, 39

Pit K was cut from a higher level than H and J, but is likely to be of similar date. It cut through the straggled north end of Pit J, and had clean-cut straight sides. The pit was notable for the large number of wine bottles it contained.

Assemblage

Pottery: 29 vessels represented.

Unglazed Earthenware 1 Jar as 808, 1 other; Glazed Earthenware 1 fish dish 825, 1 other; Black-glazed 1; Tyg 2; Local Slipware 2 bowls; Staffs Slipware 1 dish 872, 1 bowl 877, 1 other; Notts/Staffs 5 tankards, 1 being 905, 1 jar; Chinese Porcelain 1 bowl 987; Delft 2 chamber pots 945, 2 plates 1 being 936, 4 bowls 1 being 961, 1 other; Saxo-Norman fabric B1 1 jar 182.

Glass: 14 vessels represented.

Type 87 not illustrated; 2 wine glasses 1243 1244: 11 wine bottles, 10 1156, 1 as 1181.

Clay Pipe: 1 base; 4 bowls; 13 stems; 3 bowls and stems as 1012.

ANALYSIS

The pits fall within two general date ranges, though with some cutting others, few of them can be considered discrete. There is no hard dividing line between the two groups—vessel type 808 was found in Pit C and Pit F. Group 1 is 17th century and includes Pits E, F, G and H. Group 2 is later 17th to early 18th century and consists of Pits A, B, C, D, J and K. Table 43 shows the number of vessels in each ware in each pit group. For direct

Ware	Vessel Total	Group 1 17th Century		Group 2 17th to 18th Century	
		No of Vessels	%	No of Vessels	%
Unglazed earthenware	11	6	55.5	5	45.5
Glazed earthenware	34	19	55.9	15	44.1
Green glaze	5	1	20.0	4	80.0
Black glaze	14	4	28.5	10	71.5
Yellow glaze	4	3	75.0	1	25.0
Cistercian	4	4	100.0	0	0
Tyg	12	8	66.7	4	33.3
Local slipware	8	0	0	8	100.0
Other slipware	1	0	0	1	100.0
Staffordshire slipware	12	1	16.7	11	83.3
German stoneware	1	0	0	1	100.0
Stoneware	27	4	14.8	23	85.2
Notts/Staffs	24	2	8.3	22	91.7
Salt glaze	2	2	100.0	0	0
Creamware	1	0	0	1	100.0
Delft	52	8	15.4	44	84.6
Lustreware	2	0	0	2	100.0
Mediterranean Import	2	1	50.0	1	50.0
Chinese Porcelain	4	1	25.0	3	75.0
TOTALS	220	64	29.1	156	70.9

GROUP 1: E, F, G, H.

GROUP 2: A, B, C, D, J, K.

Fig 43 Analysis of Post-Medieval pottery assemblages.

comparison it shows the totals of vessels by wares in both groups. Although Group 1 is smaller, some useful comparisons can be made. Figures are also given for percentages of the total found in all pits.

Group 1, 17th century, contained only 3.2% of slipwares, 14.8% of stonewares, 28.5% of black-glazed earthenwares, 8.3% of Notts/Staffs, 15.4% Delft (mostly early types) and no Lustreware. It did have 55.5% unglazed and 55.9% glazed earthenwares, 66.6% of Tyg, and all of the Cistercian wares.

Group 2, 17th to 18th century, produced 96.8% of all slipwares, 85.2% stonewares and 71.5% of black-glazed earthenwares. Notts/Staffs with 91.7% was clearly taking over from Tyg, 33.4%. There were no Cistercian wares.

The glass is more difficult to date, Group 1 contained more of the early types 71 and 72, with 10 of 1156.

BCS73 IV

Summary of Periods

- Period 1 – Residual material only 10th to 12th centuries.
- Period 2 – Lime-slaking or tanning pit, 13th to 14th centuries.
- Period 3 – Late Medieval to Post-Medieval garden.

Introduction and Methods

BCS73 IV was the final excavation on this site. Its results appear to be completely unconnected with the other three in date and type.

Only the top turf layer was removed by machine. There was insufficient time to empty the fill of the main feature F30, which was half sectioned.

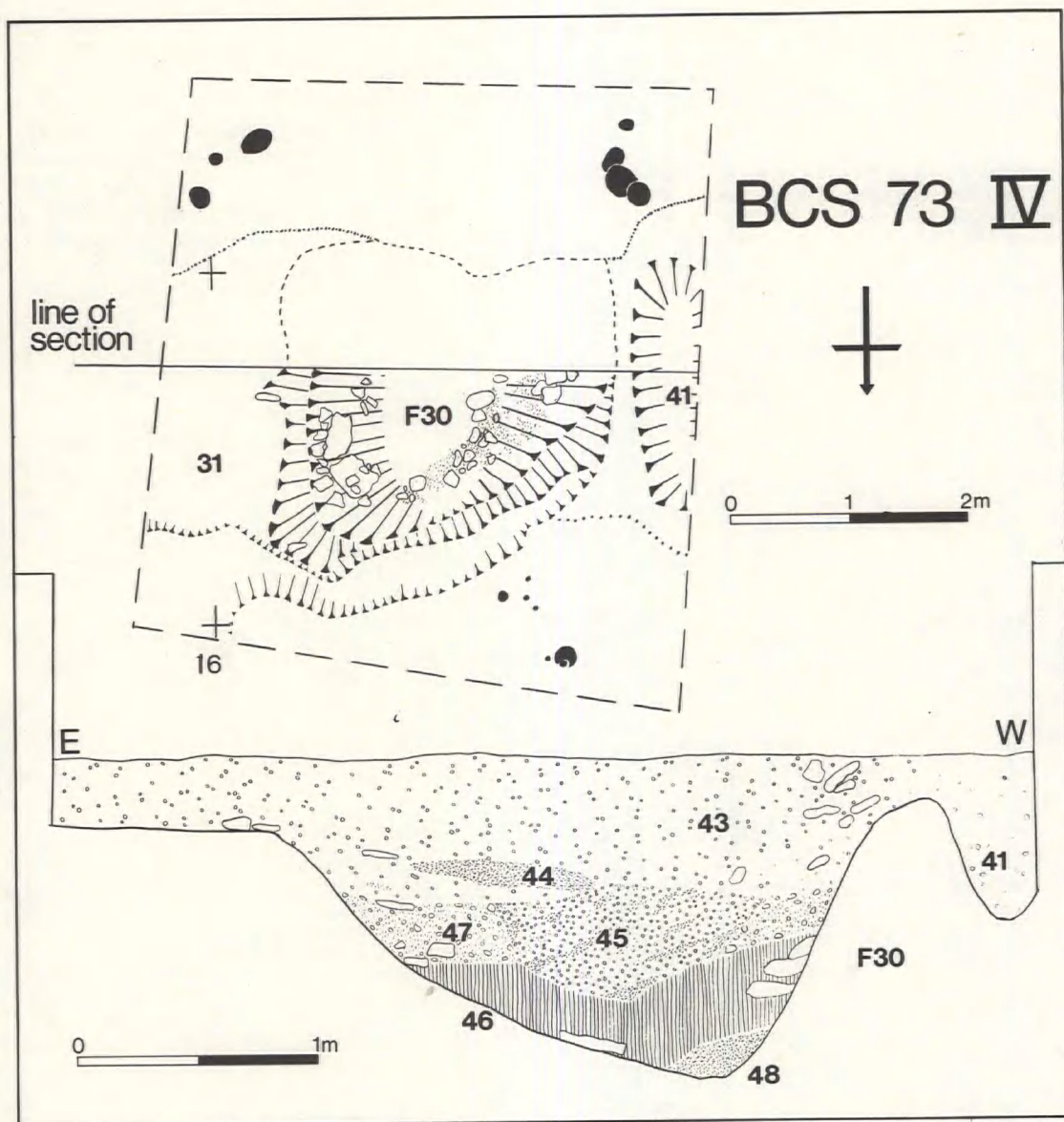


Fig 44 Cauldwell Street: plan and section of BCS73 IV.

The Excavation (Fig 44)

PERIOD 2

A strip of dark pebbly soil (31) ran across the trench. Cut into it were two features, a pit F30 and a pit or slot (41). To the north and south of (31) were three clusters of small post- and stake-holes which may have formed the base of a cover for F30.

The fill of F30 was particularly interesting because of its high lime-like content. The bottom fill (48) was hand packed. It had been covered by a thick silt or turf layer (46) and limestone slabs. Above this were (45) and (47) which were deposits of pebbly loam and limestone mixed with much lime-like material. An area of the latter (44) stretched partly across the upper fill, and the whole was topped with a thick spread of loam and limestone rubble which appeared to form the fill of (41) also.

Possibly the pit was lined with limestone, some of which were roughly shaped and lay around the sides. Pottery was B5, B8 and B11.

PERIOD 3

Above the pit was an accumulation of 0.80m of humus (15). Cut into this, at various levels was a series of amorphous features associated with Late Medieval and Post-Medieval finds. These were almost certainly horticultural rather than structural.

Discussion

Lime-like material within F30, together with an absence of burning indicate that its function

may have been that of a lime-slaking pit. An alternative function might be connected with tanning, whereby the raw hides were initially soaked in a lime solution to loosen fur or hair. Whatever its function the pit was used in the 13th and 14th century. Thereafter, the site appears to have been used as a garden, though the possibility that some of the later features were functional in a structural manner should not be completely dismissed.

The Finds

PERIOD 2 (15) E2, 771; (16) C7 562; (35) E7 799; (37) B8 391.

PERIOD 3 (4) C6 551.

Midland Road JANE HASSALL

INTRODUCTION *Fig 45*

Midland Road and the streets running from it afford an area of considerable archaeological interest. The line of the road itself appears on John Speed's map of Bedford in 1610 and its position within the roughly rectangular street layout north of the river suggests that it once occupied a significant position in the Saxon-Medieval town.

Initial trial work carried out by David Baker in 1972 (Trenches 33 and 34) produced negative results, but the opportunity was taken in 1973 of trying a larger site fronting the south side of the street (BMR73). Despite considerable disturbances sufficient evidence was recovered to indicate that a Medieval timber structure had once stood here. This and the finding of further occupation debris indicated the desirability of investigating other sites along the frontage as they became available.

The development of the three acre site, west of Harpur Street and bordered by Midland Road and Horne Lane, for the Harpur Centre shopping precinct in 1974, meant that all archaeological remains would be totally destroyed. It was planned to investigate three trenches — BMR74 I, II and BMod 74 in advance of this project.

Work started on an additional development, the Honeylove Centre to the south-west of the Harpur Centre in 1977, and once again archaeological investigations were arranged before the major earth shifting programme began. Excavations in the form of a series of trial trenches, backed up by small excavated areas, were undertaken on the site of the former Peacock's auction yard and the Salvation Army building off Horne Lane.

Time has precluded the preparation of a report on the trenches 1977/1 and 1977/2, but the finds have been treated in the corporate study of material remains from Bedford. It is hoped to present details of the excavations in a subsequent volume of the *Bedfordshire Archaeological Journal*. A summary may be found in *CBA 9 Newsletter* 8, 1978, and it is necessary to make the following points here:

1 The Saffron Ditch which appears on John Speed's map of Bedford in 1610, was uncovered on the site, and 17th century finds were retrieved

from the silting. There was no evidence to suggest that this formed a possible western boundary to the Saxon town as had once been thought.

2 Several stone wells and well-houses of the type seen at St John's 1976 were found, as well as rubbish pits, indicating Saxo-Norman/Early Medieval occupation.

3 A boundary ditch was discovered on the 1977/2 site, running north-south and sealed by 12th century layers. No further signs of Saxo-Norman settlement were found to the west of this feature.

The following finds have been included in the catalogue:

1977/1

Middle Saxon Pottery, A9 54; A10 65, 67, 69; A12 104. Saxo-Norman/Medieval Pottery, C5 531, 542; C16 645; C20 660; C29 696; C35 721; C36 719; C38 724; C49 737; E7 802; Chinese Porcelain 989. Bone Comb piece 1516.

1977/2

Saxo-Norman/Medieval pottery, B4 293, 294; B6 348; Bone object 1550.

TRENCHES 33 and 34

Two mechanically excavated trial trenches were observed by David Baker early in 1972 at the corner of River Street and Midland Road adjacent to the new 'Co-op' building. The intention was to sample the stratigraphy and see if any evidence could be found for early urban limits or boundaries. Both trenches were laid out on a west-east alignment.

The north trench, 33, was 3.6m long and was excavated to a depth of 2.0m. Under the old turf line sealed by demolition debris, four horizontal layers, each composed of variously mixed dark earth, clay lumps and pebble were found. These lay over natural gravel and no features were seen cut into it. No finds were recovered.

Trench 34 was 15m to the south, 5m long and 0.8m deep. Above natural was an old turf line 0.26m thick, occurring under demolition rubble. There were no features or finds.

The results from this particular area of Midland Road were obviously inconclusive but more informative remains were uncovered nearby the following year.

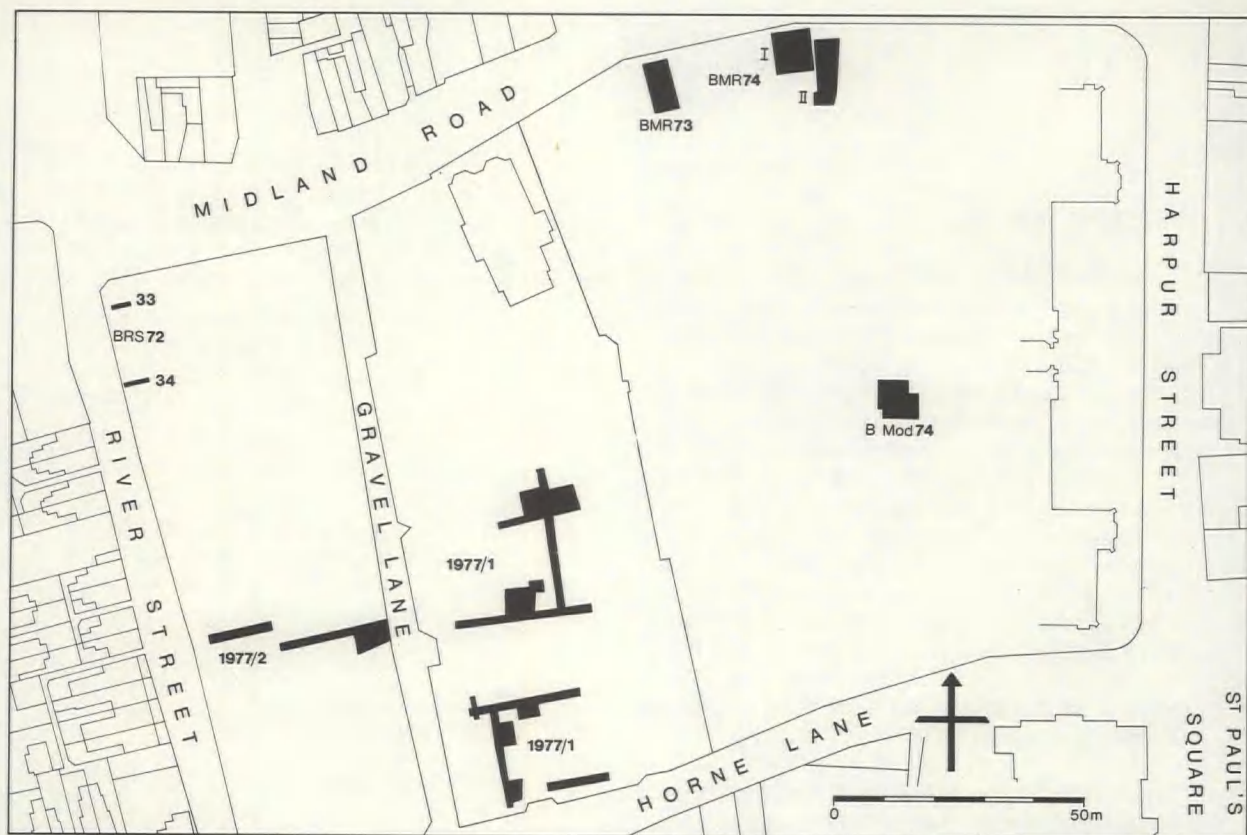


Fig 45 Midland Road Area: Excavated sites.

BMR73

SUMMARY

The existence of early Medieval occupation from 12th to 14th centuries was established in preliminary work on the south frontage to Midland Road. It included parts of a timber beam slot and four pits, extensively disturbed by Post-Medieval foundations.

INTRODUCTION

Impending redevelopment of the Bedford Modern School as the Harpur Centre with an extensive basement, led to preliminary trial excavations in a small site formerly occupied by the Shoulder of Mutton public house. The intention was to establish the nature and date of the archaeological deposits in order to decide

whether more extensive rescue excavations should be undertaken when demolition and redevelopment commenced in 1974.

The excavation was one of six organised by David Baker during a volunteer session in July-August 1973. Work on site was supervised and recorded by Andrew Cooper assisted by Tony Barley. This report has been prepared from his notes and plans.

THE EXCAVATION

Following a preliminary sondage, the top 0.30 – 0.35m of soil and rubble in a rectangular trench 11.5 x 4.5m was removed mechanically as close to the street as modern foundations allowed. Extensive public house footings occupied much of the area and could not be removed. It was decided nevertheless to continue with the site at least until the presence or absence of Medieval occupation had been established.

Two periods of occupation could be defined and six phases are suggested, as follows:

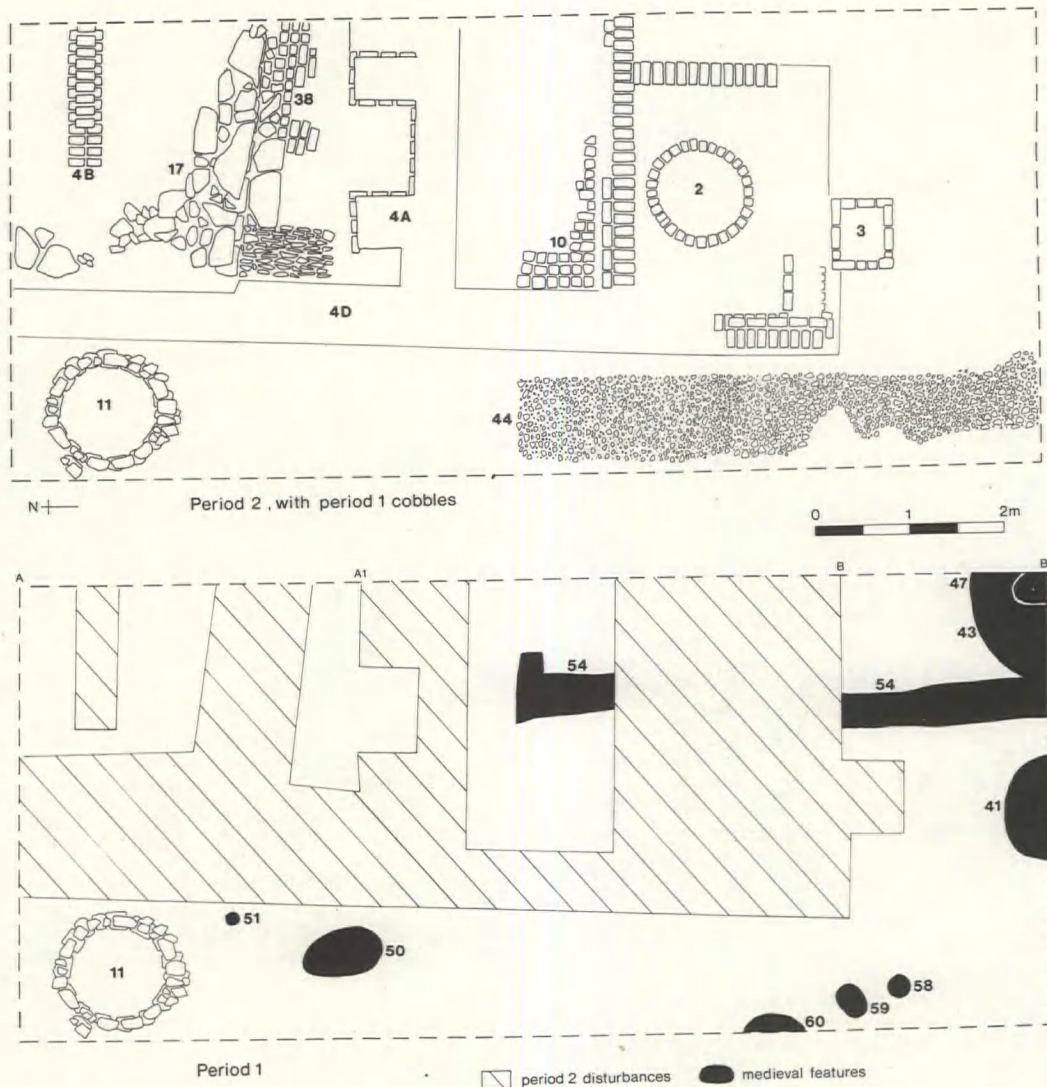


Fig 46 Midland Road: BMR73, periods 1 and 2.

- Period 2 – Post-Medieval features, 17th – 20th centuries
- phase A – features associated with the Shoulder of Mutton
 - phase B – 17th – 18th century building footings
- Period 1 – Medieval features 12th – 14th centuries
- phase C – occupation layers
 - phase D – cobble spread
 - phase E – pits and beam slot features possibly representing more than one phase
 - phase F – underlying occupation layers

Period 2, 17th – 20th centuries (Fig 46)

The first phase of occupation encountered relates to

the 19th century Shoulder of Mutton public house. It includes wall footings (4A, B, C, D) and associated chimney (3) and soakaway (2) as well as built up layers forming floor levels.

The building represented by the limestone wall footing (17) was the chief feature of phase B. It was dated by late 17th – early 18th century pottery found mainly in the sealing layer (36). It had a paved area (10) to the south, and included a floor level (38) and a hearth (16).

The well (11) cannot be accurately dated. It may have been contemporary with the building, and appears to have been filled in during the late 18th – early 19th centuries. It was built of unmortared limestone slabs and was excavated to the water table 1.2m below modern ground surface.

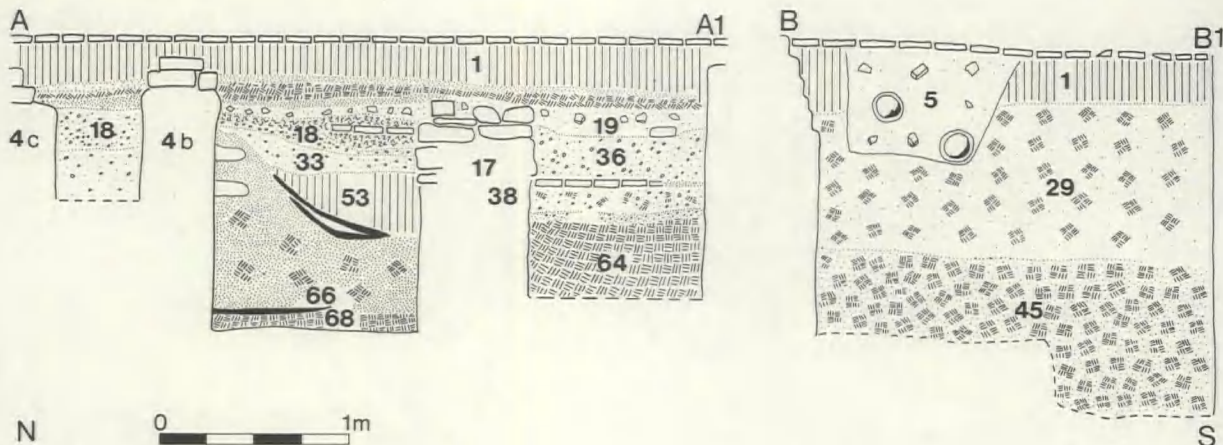


Fig 47 Midland Road: BMR73 East Section, position of A – A1, B – B1 shown on Fig 46.

Period 1, 12th – 14th centuries (Figs 46, 47)

PHASE C – OCCUPATION LAYERS

All that survived from the later Medieval phase was a series of occupation spreads, including (7) (29) (30) and (33) which sealed the features of phase E. Another layer (48) sealed the cobbles of phase D.

PHASE D – COBBLED SPREAD

A cobble spread (44) appeared under layer (48) in the southern half of the trench. It may represent a courtyard area west of wall 4D or a side alley west of the building line of this plot. An alley is shown here on the 1841 Reynolds Map. The cobbles did not appear to extend as far north as well (11) which might have been a later insertion.

PHASE E – MEDIEVAL PITS AND BEAM SLOT

A small number of Medieval features were discovered below the occupation layers of phases C and D. Four pits were found, and one in the north of the trench was composed of layers (53) (60) and (68). The clay layer (68) at the bottom could be the remains of a clay lining to the pit. In the south-east corner two features (43) and (47) may have been part of another pit. The third (41) was against the south section and had two small post-holes dug into it, and the fourth (50) was uncovered a little to the south of well (11). One shallow post-hole (51) was excavated nearby.

In the middle and to the south of the trench, below the Medieval spread layer (29) (phase C), parts of a slot-like feature (54) were discovered, cut into an underlying layer (45). This slot may well represent a 5.5m length of wall from a timber building, running north-south. At its north end, the slot turns eastwards at right angles and

terminates abruptly. This suggests that the building was set back some 5m from the Midland Road street frontage.

PHASE F – UNDERLYING OCCUPATION LAYERS

The phase E features were cut into two underlying occupation layers, (45) and (48). (45) was found to be at least 0.80m thick at the south end of the trench. These layers can probably be dated to the 12th – 13th centuries. Their existence having been established in the relatively small undisturbed part of the trench, they were not fully excavated due to lack of time and the height of the water table.

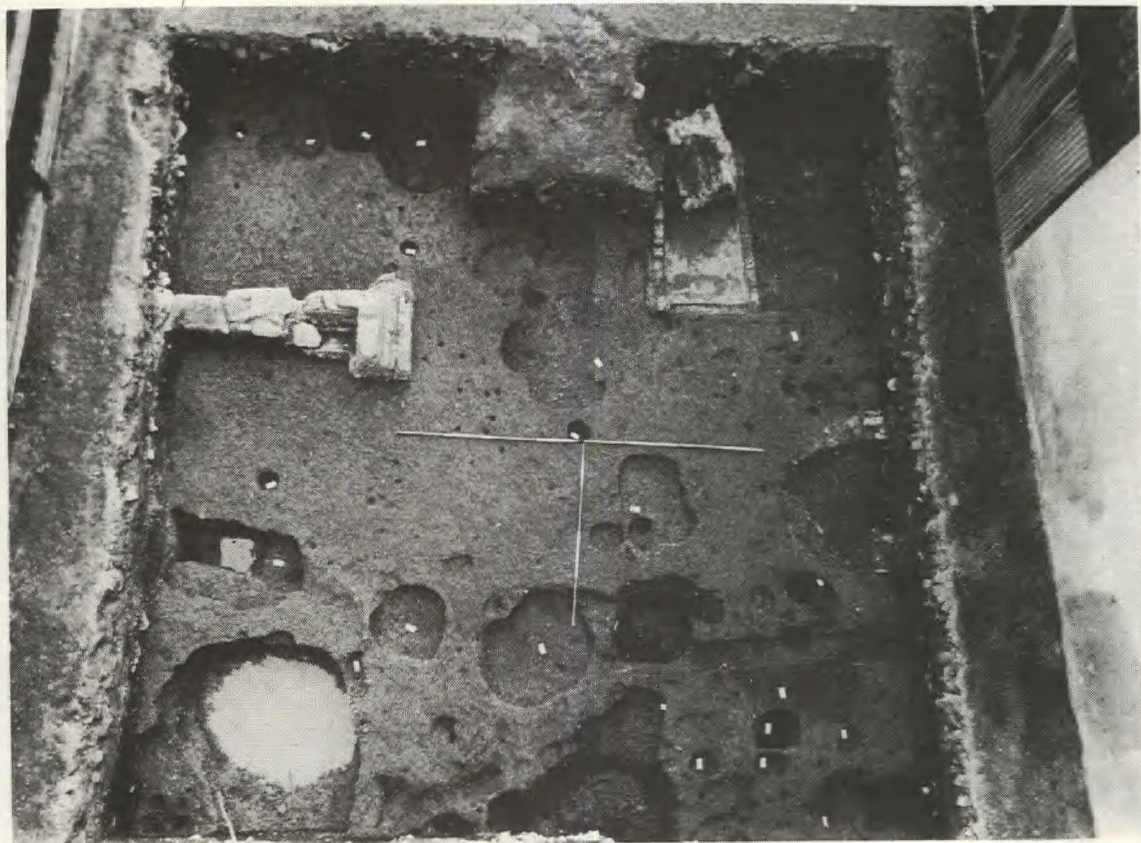
THE FINDS

Period 2: Post-Medieval finds illustrated in the catalogue.

- Well (11) 891 German Stoneware; 908 Notts/Staffs Stoneware;
1023, 1026, 1028, 1034, 1048, 1067, clay pipes;
1218, 1229, 1236, 1240, 1245, 1249 vessel glass;
1555 leather sole;
(36) 857 Local Slipware; 1036 clay pipe;

Other Post-Medieval or Unstratified contexts:

- (2) 1230, 1231 vessel glass;
(19) 1208, 1209 vessel glass; 1017 clay pipe;
(22) 841 black glazed earthenware; 1071 clay pipe;
(27) 874 Staffs combed ware;
U/S 837, 838 black-glazed earthenware;
1181, 1246 vessel glass; 1010, 1019, 1033, 1065 clay pipes.



Pl 15 Midland Road, BMR74 I, general view facing south.

Period 1: Medieval

PHASE C

Pottery sherds in B and C fabrics were recovered in some quantity, and one sherd of residual Middle Saxon pottery was found in (30). Published examples include:

- (7) 187 B1 fabric; (30) 94 A12 fabric; (33) 559 C6 fabric; 665 C22 fabric; (24) 624 C12 fabric.

PHASE E

- (50) 239 B2 fabric; (52) 740 C54 fabric; (64) 685 C27 fabric.

Very few material remains were found in the phase F occupation layers and there were only 75g of B and C ware body sherds from both (45) and (48).

In general, collecting policies involved the sampling of brick, tile, bone and shell, and the keeping of all Post-Medieval ceramics. All earlier pottery finds were kept and a total weight of B and C wares of 4,985g was recorded. Animal bones from (29), (43), (52) and (66) were included in Annie Grant's analysis of bones from Midland Road.

BMR74 I

(Fig 45)

SUMMARY – TRENCH I

Rescue excavations uncovered four main settlement periods. Beneath the Post-Medieval layers limestone wall footings of the 15th – 16th centuries were found. These in turn sealed Medieval features which indicated that the site had been used for refuse disposal rather than for domestic dwelling. The underlying Saxo-Norman period was represented by pits and post-holes indicating two phases of a timber building or boundary fence.

ACKNOWLEDGEMENTS

Thanks are due to all those who helped on site, and especially to Christopher Guy who acted as Site Assistant. The Harpur Trust kindly gave permission for the excavation to take place whilst the

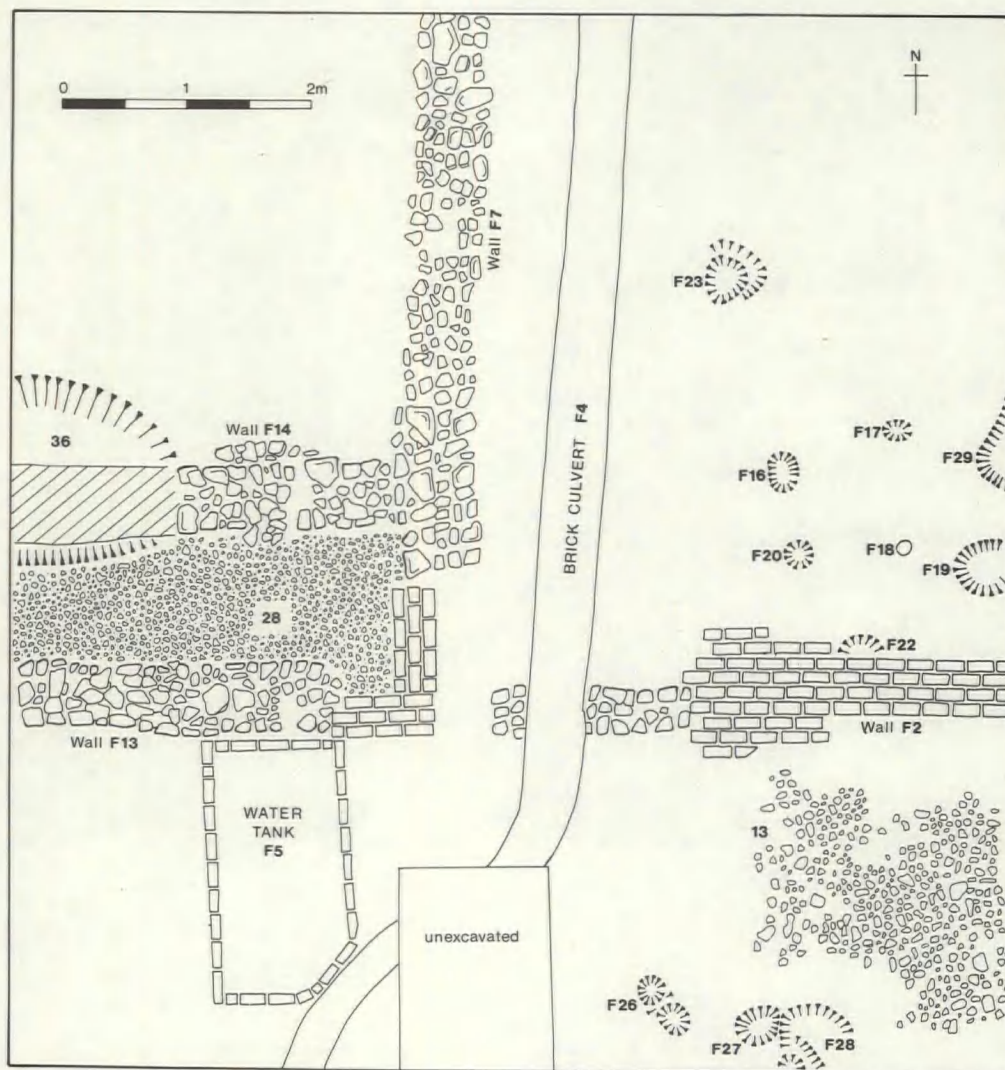


Fig 48 Midland Road: BMR74 I, late Medieval and Post-Medieval features.

school was still in session. The writer is particularly grateful to Wards for allowing access to their backgarden for use as a spoil-dumping area. Mr Andrew Underwood with a group of boys from Bedford Modern School provided valuable assistance with the finds processing.

EXCAVATION METHOD

Owing to restricted access, it was not possible to use a machine for shifting the top layers of modern debris, and consequently the trench was

dug entirely by hand. It was placed close up to the pavement edge so as to take maximum advantage of the available length of street frontage. It was planned to excavate all deposits in the trench down to, and cut into, the natural subsoil.

TRENCH I Pl 15

A trench of approximately 64 square metres was opened on the Midland Road frontage in January 1974. The site occupied a corner of the Bedford Modern School playground and was sandwiched between the School buildings to the east and Ward's shop the the west.

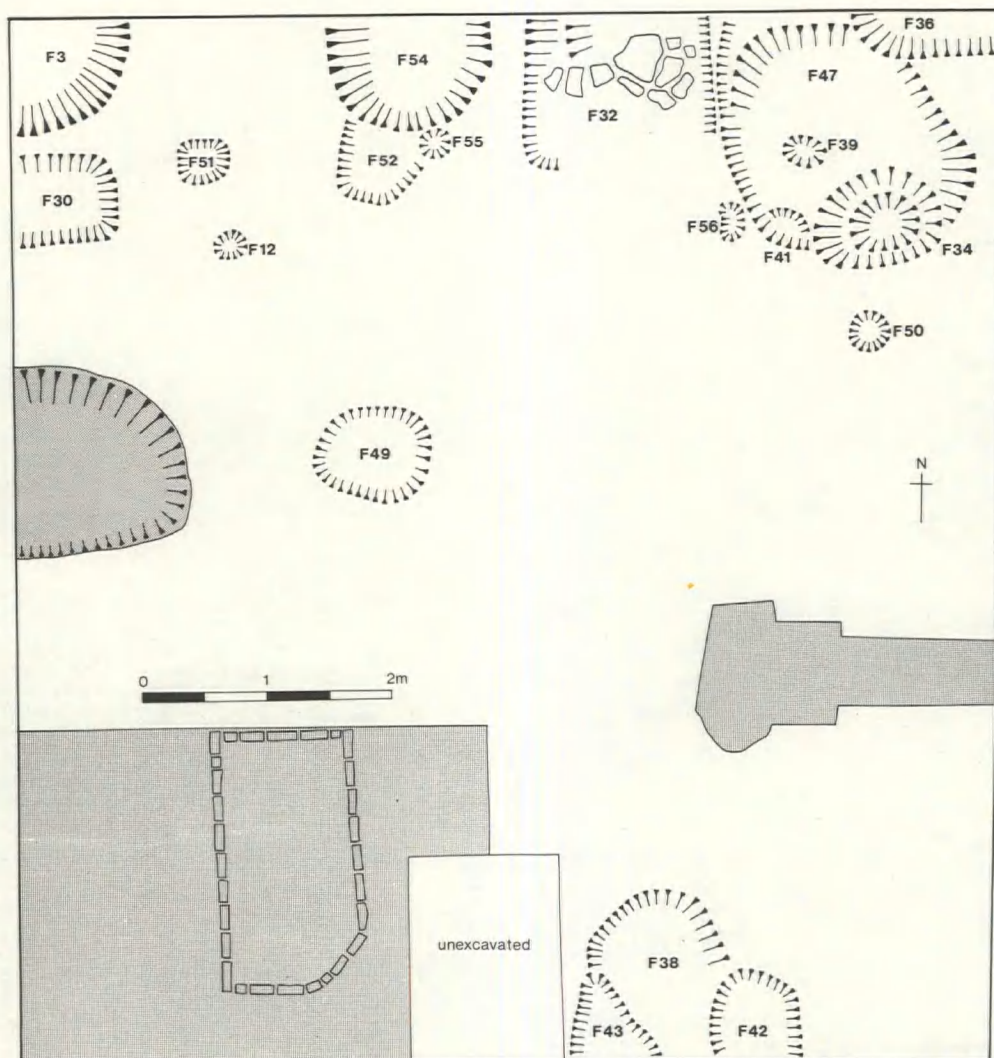


Fig 49 Midland Road: BMR74 I, Period 2 Medieval features. (Post-Medieval contexts are shaded.)

Phases of occupation relating to four main periods were recognised during the course of the excavation, and they are summarised as follows:

- Period 4 – Post-Medieval features, 17th – 19th centuries
 - phase A – mixed layers and modern features
 - phase B – brick wall footings
- Period 3 – Late Medieval features, 15th – 17th centuries
 - phase C – limestone wall footings, associated layers and cobbling
 - phase D – sundry post-holes
- Period 2 – Medieval features, 12th – 14th centuries
 - phase E – spread Medieval layers
 - phase F – sundry post-holes
 - phase G – hearths, pits and post-holes
 - phase H – rubbish pits

- Period 1 – Saxo-Norman – Early Medieval features, pre-12th century
 - phase I – spread Medieval layers
 - phase J – pits and post-holes
 - phase K – pit complex
 - phase L – occupation layers, post-holes, beam slots, pits
 - phase M – small pit and post-hole

Period 4 – Post-Medieval (Fig 48)

Once the top 0.80 cm or so of brick rubble had been removed, features relating to the most recent occupation of the site were uncovered. Sundry sewer pipes and other 20th century service trenches disrupted the Post-Medieval

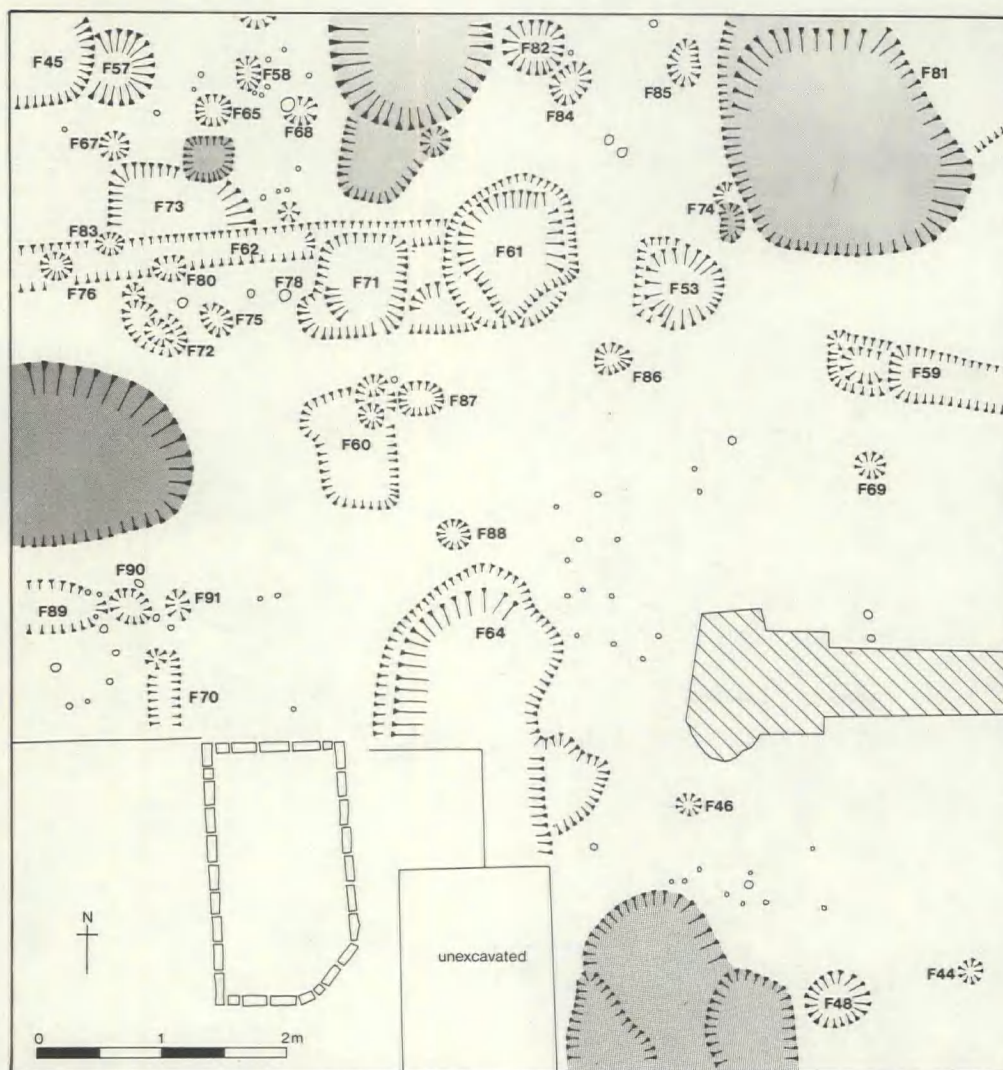


Fig 50 Midland Road: BMR74 I, Period 1 Saxo-Norman/Early Medieval features. (Later contexts are shaded.)

layers.

19th century features included a brick culvert *F4* and water tank *F5*. Various brick footings, against walls *F7* and *F13*, and *F2*, were found on a similar alignment. Post-holes *F19*, *F26*, *F27* and *F28* seem to relate to the same phase.

Period 3 – Late Medieval (Fig 48)

Walls *F7* and *F14*, partly indicated by robber trench, and *F13* form the foundations of part of a building. A small stretch of limestone walling to the east abutted by *F2*, may represent a continuation of *F13* but the evidence for such a liaison was destroyed by the Period 4 rebuilding. The area bounded by walls *F13*, *F14* and the south end of *F7* had a cobbled surface (*28*), which may repre-

sent a larder at the back of the building.

The small patch of cobbling in the south-east corner of the trench may indicate the back yard area of the adjacent property.

There were no hearths or rubbish pits associated with the building, and it is probable that any such features would have been removed by Period 4 rebuilding and by more modern disturbances.

Period 2 (Fig 49)

Various spread Medieval layers separated Period 2 features from those of Period 3 above.

Along the north edge of the trench, nearest the street, were clustered several hearths or fireplaces, *F3*, *F30*, *F32* and *F34*. The post-holes (*F12*, *F39*, *F41*, *F50*, *F51*, *F55*,

F56) seemed to be randomly placed with no structural significance. Rubbish pits F52, F54, F36 and F47 were excavated against the north section, whilst F38, F42 and F43 were found against the south edge. With the exception of F49, there were no features in the central area.

The hearths or areas of burning were features distinct from one another. F3 was made from broken edge-set clay roof tiles. There was some indication that these had been laid in a semi-circle though no positive shape remained. Various clay and ashy layers filled in a small pit below.

A rectangular fireplace F30 was found to the south, consisting of a few re-used clay and limestone roof tiles set in a pit of ashy loam. Despite their proximity these two features were separate and were in use during the same phase.

F34 was uncovered in the top of F47 and appears to be the remains of some rubbish burnt in situ. The fireplace F32 was a more solid affair set against the north section. It had a floor of limestone slabs placed on top of a pit filled with ashy clay and bands of charcoal.

Period 1 (Figs 50, 51 and 54)

The earliest features on the site consisted chiefly of pits and post-holes cut into the natural subsoil. Separated from Period 2 by several patchy spreads, these inter-cutting features reflect more than one phase of occupation.

THE PITS

F64 was the only large rubbish pit, having an irregular shape as a result of various recuts. F61, roughly circular and due north of F64, had an irregular profile, but its clay loam fill flecked with charcoal is typical of many pits found in Bedford.

F53 was a small pit situated to the west. The remains of F81 were found in the north-east corner and contained burnt daub fragments.

To the west of F61, the pit F71 was found, cutting 0.70m into natural subsoil. Further west, F73 was rather shallow in comparison, being only 0.20m deep.

THE STRUCTURAL FEATURES

The main feature was slot F62 in the north-west area, containing a number of irregularly spaced post-holes. It was about 0.20m deep and its east end terminated in pit F61. Various post-holes were found to north and south, but no obvious wall line can be traced.

Another slot F59 runs out of the trench on the north-east side. At 0.60m deep it is considerably larger than F62 and is therefore unlikely to belong to an associated structure. Towards the middle of the site near the west section, features F70, F89, F90 and F91 are grouped together, possibly forming the corner of a structure. Several small stake-holes were encountered across the trench.

No obvious house plan emerges from the building evidence in this trench, but the results are discussed in relation to the excavated features from Trench II described in the following report (see fig 45).

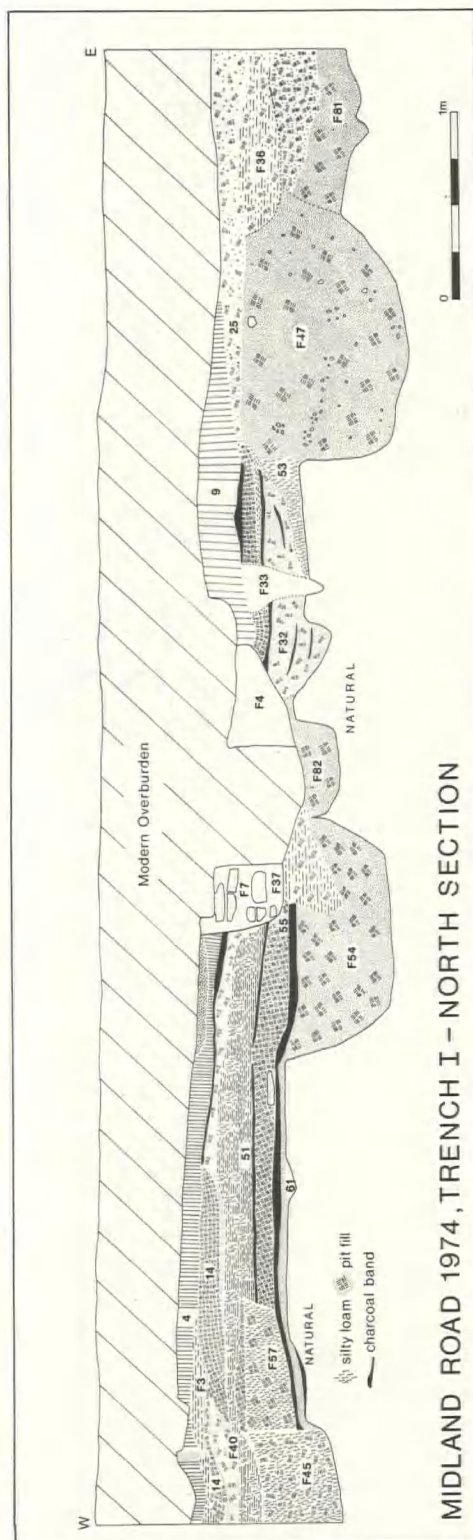


Fig 51



Pl 16 Midland Road, BMR74 II, general view of excavations facing south.

BMR74 II

SUMMARY – TRENCH II

Rapid rescue excavation of another trench, east of Trench I, uncovered traces of occupation from Saxon to Post-Medieval times. Saxo-Norman features, including rubbish pits cut into natural, were investigated as well as two phases of a timber building or boundary fence. Smithing slag remains indicated the existence of a nearby forge.

INTRODUCTION

At the end of July and the beginning of August 1974, following the demolition of Bedford Modern School, rescue excavations were carried out immediately to the east of Trench I. Deep excavation by the contractors was already under way on this 3 acre site, and the archaeological trench, some 50 square metres in area, was mechanically cleared by the contractor's plant. I am

extremely grateful to Kiers Limited and their sub-contractors for supplying the Hymac and for allowing us the use of canteen and other facilities on site.

The excavation was undertaken by some members of the digging team already at work on the St John's Street excavations. I should like to thank all the team for their help and forbearance under trying working conditions.

EXCAVATION METHOD

The rectangular trench was mechanically excavated to a depth of between 0.80 and 1.20m. This effectively removed all modern debris including material associated with building foundations of the Modern School. It was planned to excavate by hand the remaining build-up of Medieval soil layers and to investigate any features cut into the natural subsoil. The excavation period could only last for 9 working days, so it was necessary to follow a policy of sampling and half-sectioning features rather than to aim for total excavation.

TRENCH II Fig 52; Pl 16

Features from different phases were recognised and an attempt was made to relate them to those defined in Trench I. Since the most recent layers had been removed mechanically, the only Post-Medieval features to be investigated were those which cut into the natural subsoil. There were insufficient remaining spreads or occupation layers to allow for all the stratigraphical relationships of the Saxo-Norman and Medieval features to be determined. Only some produced any dating evidence, but on the whole it could be shown that the majority of features belonged to Period 1. The following table summarises the main stratigraphic groupings and direct comparison may be made with the Period structure in Trench I.

- Period 4 – Post-Medieval features 16th – 18th centuries phases B and C, rubbish pits chiefly
- Period 2 – Medieval features, 12th – 14th centuries phase G, pit F24
- Period 1 – Saxo-Norman to Early Medieval, 9th – 12th centuries
 - phase X (equivalent to phases I – L, Trench I) pits and post-holes, 10th – 12th century (carbon-14 dating)
 - phase Y – beam slot, post-holes, pit 9th – 10th century (hand-made pottery evidence)

Period 4

Running down the centre of the site was a sewer pipe which cut through several features, including three Post-Medieval rubbish pits. Pit 51 was left largely unexcavated, but pits F30 and the lower part of F17 were investigated. A late 17th – mid 18th century date is suggested by the pottery finds for F30, whilst F17 belongs somewhere in

MIDLAND RD TRENCH II

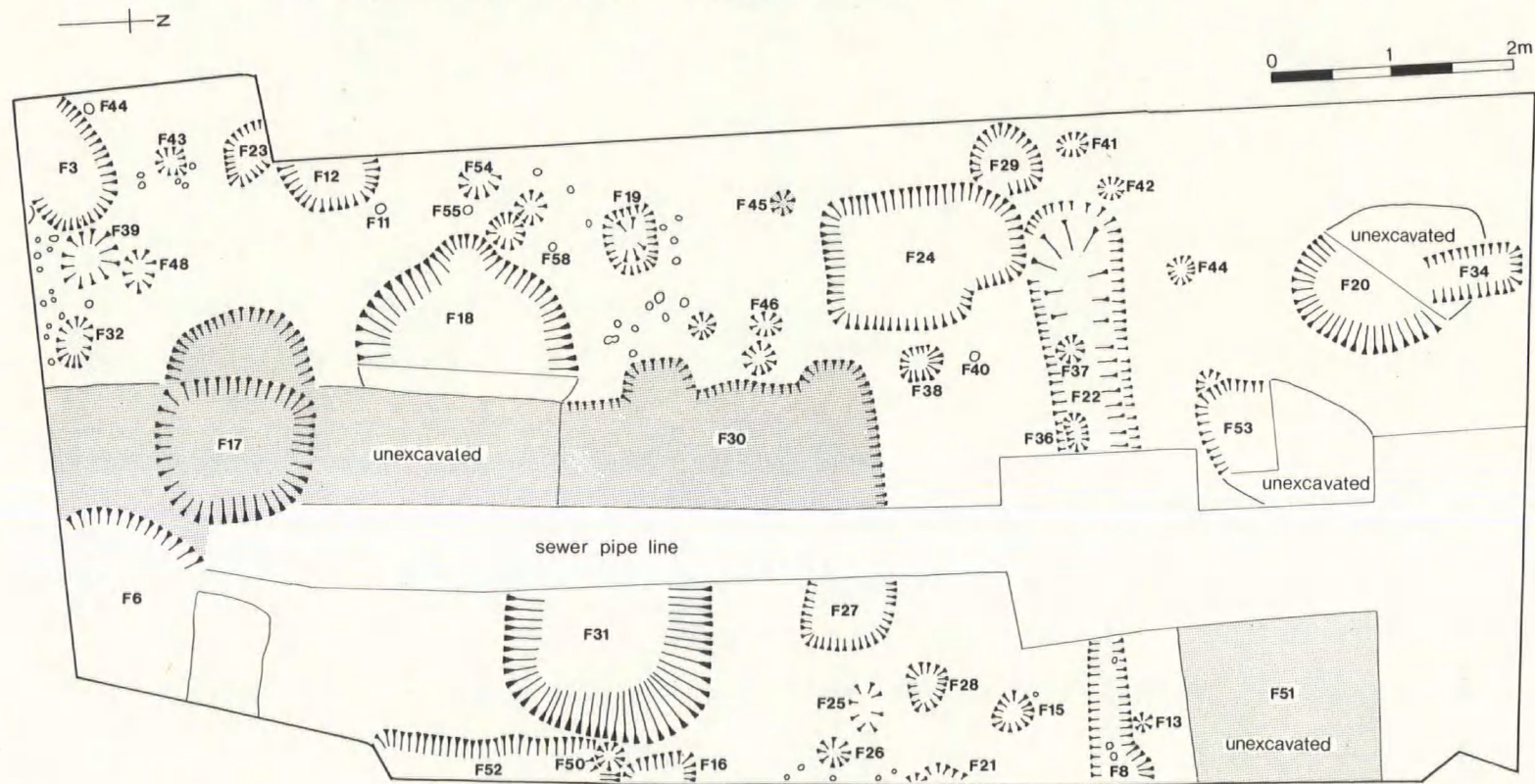


Fig 52 Midland Road: BMR74 II Features cut into natural subsoil. (Post-Medieval contexts are shaded.)

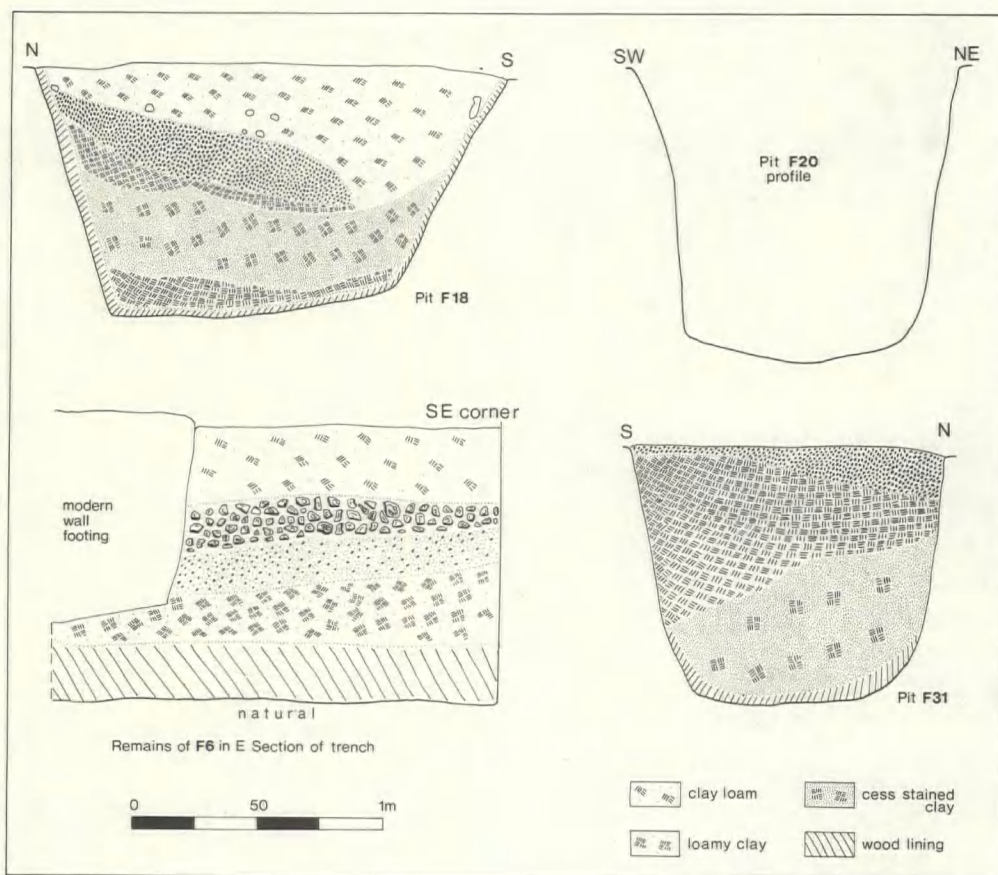


Fig 53 Midland Road: BMR74 II Pit Sections Period 1.

the late 16th – mid 17th century range. *F45*, a small post-hole of similar date was also found.

The rubbish pits could possibly be associated with the building represented by the limestone wall footings, phase C, in Trench I.

Period 2: Trench II evidence and discussion from both trenches.

Only one feature, pit *F24* was discovered relating to the Medieval period. This large, roughly rectangular pit was cut about 0.30m into the natural gravel and pottery finds suggest a 13th – 14th century date.

The pits and hearths from Trenches I and II cannot be related to any particular building, as there is a noticeable lack of any structural features belonging to this period. Similarly, there is little in

the way of occupation layers, the existence of which might have indicated some sort of dwelling.

Very little slag was found in or near any of the hearths and there was no sign that they had been used in any iron-working process. However, considerable amounts of slag were recovered from other features, particularly Trench I pit *F47* suggesting that some sort of industrial activity was being carried out close by.

It seems therefore, most likely that the site was open during Period 2, and used for rubbish disposal rather than for habitation.

Period 1 (Figs 52 – 54; Pl 17)

The majority of excavated features belong to this period but the quality of the evidence has only allowed 2 phases to be defined.



Pl 17 Midland Road, BMR74 II, pit *F18* half-sectioned (mid-10th century).

The phase X features consist of rubbish pits and structural remains. The rubbish pits are of two basic types, either large, deep and steep-sided (*F6*, *F18*, *F20*, *F31*, *F53*) or small and shallow and generally subrectangular (*F12*, *F27*, *F29*). *F18* and *F30* were the best preserved.

F18 was of interest because it appeared to have been deliberately lined with clay and wood and had been used as a cesspit. An oak stake was found driven into the west side of it. A sample was sent to Harwell for radio-carbon dating, HAR 976. The result was 1000 ± 100 years B.P. giving a date of a.d. 950 ± 100 .

F31 was another large pit similar to *F18* and containing some cess. *F20* had also been used as a cesspit. Only a small portion of *F53* could be excavated and the full extent of *F6* is not known. A layer of slag dominated this feature and Leo Biek has identified smelting slag and smithing rubbish with hammerscale fragments from it. He suggests therefore that a forge may have existed nearby. Beneath the slag and gravel, a wedge of clay loam sealed a mass of organic material including fragments of wood and straw, resting on natural subsoil. Two small oak objects, 1559 and 1560 were recovered from this layer.

STRUCTURAL REMAINS – TRENCHES I and II (Fig 54)

With the exception of the broad slot feature, *F22* and its post-holes *F36* and *F37*, for which pottery evidence suggests a 9th – 10th century date (phase Y), all other slots and post-holes in figure 54 belong to structures of the 10th – 12th centuries (phase X). They are shown here together with the evidence from Trench I and all other later ground disturbances are drawn in outline.

Despite the fact that a fair number of post-holes and lengths of beam slot have survived, the structures that they represent remain frustratingly incomplete. In Trench II the slot *F22* is the earliest feature and is 0.15m deep. Its west end is apparently terminal, and there are no other features of similar date to indicate the building to which it belonged.

TRENCHES I and II
PERIOD 1
STRUCTURAL FEATURES



Fig 54 Midland Road: BMR74 Trenches I and II.

The alignment of *F22* is followed in phase X by a shallower and narrower slot *F8*, similar in shape and size to slot *F52* which approaches it at right angles along the east edge of the trench. Thus the corner of one building can be postulated respecting the alignment of Midland Road. However, the absence of a westerly return wall and the positions of the large rubbish pits *F18* and *F31* to the west of *F52* indicate that any structure must lie eastwards of *F52*, outside the trench limits. If *F52* and *F8* are part of the same building, then it would be L-shaped.

There are no obvious alignments amongst the post-holes or between them and the beam slots in Trench I.

The situation in Trench I is no more explicit. Again, short lengths of slots survive and a corner is formed by *F70* and *F89*. This is on exactly the

same line as slot *F8* in Trench II, situated some 8m away. A little to the north and running parallel is slot *F62*. There is some possibility that post-holes *F72*, *F67* and *F57* could form a line with slot *F70*, but there is considerable variety in their shape and depth which argues against their belonging to the same structure. The other excavated post-holes and the many stake-holes appear to have a random distribution in the trench.

It may be that the alignment of the slots *F8* in Trench II, *F89* and *F62* in Trench I running parallel, may represent some sort of boundary line or fence, rather than buildings. However, it is doubtful that a slot trench would be necessary to maintain a boundary fence, and with so much evidence of occupation coming from the pit features one would expect to find traces of domestic structures on this site.

Period	Context	Bone	Slag	Tile	Shell	Pottery	Other
4	<i>F17</i>	A	500g	—	Oyster Mussel	A12 — 99; B1 — 159 total weight — 800g Cistercian; green-glazed earthenware; coarseware	Wood — fragment of ash
	<i>F30</i>		25g	—	Oyster	Local slip; Cistercian: Delft; Chinese porcelain; glazed earthenware; Notts/Staffs stoneware	Vessel glass type 83
2	<i>F24</i>	A	250g	—	Oyster	B4, B6, C6, C10, C11 — 425g	Wood — fragments of blackthorn
1	Pits	<i>F6</i>	A	1670g smithing	—	A12, B1, B2, B4 — 100g	Wood, shaped — 1559, 1560 Various wood fragments
	<i>F18</i>	A	3,225g	—	—	B4, C22 — 300g	iron fragments wood fragments moss
	<i>F20</i>	A	—	Tegula	Oyster	A12 — 110	Wood, shaped — 1561, 1562 various wood fragments
	Slot	<i>F22</i>	50g	—	Oyster	A12 — 50g	blackthorn fragments

Fig 55 Material Assemblages from significant contexts, BMR74 II.

Animal bone occurs in each context, 'A' signifies analysis in bone report.

TRENCH I: THE FINDS

Tile, shell and clay pipe finds were sampled but all bone, pottery and slag was kept. Animal bones from significant contexts have been analysed. 52kg of slag were recovered but no structural material was recognised. The slag may well relate to the iron-working area suggested at Trench II. Over 27kg of B and C wares were recovered.

Other finds include 28 iron objects, a bone awl 1532, and a bodkin, a baked clay spindle whorl 1001, a bone fragment and a flint flake.

Period I

With the exception of F64, the rubbish pits were unusually small during this period, and there were not many useful assemblages of material. Middle Saxon pottery was recovered from at least 10 identifiable contexts and often occurred with B1 and B4 fabrics. It must be regarded as residual material for the most part, but helps to show settlement on the site in the 9th century.

The following finds are illustrated in the catalogue:— (45) A8 47; A11 74, 75; (51) A9 56; pottery spindle whorl 1001; iron ?arrowhead 1443; bone point 1532; (53) A12 88, 103, 106; (54) A8 53; A12 109; (56) A8 48; A12 85, 91, 108; (57) B4 268; (60) E1 752; (61) A6 43; F61 A11 80; F64 C12 621; F72 A12 100;

Animal bones from F45, F60, F61 and F71 have been included in Annie Grant's analysis given below.

Period 2: published finds

(25) B7 359, 364, 369; B8 385; (26) B11 441; F38 C14 633; F47 B1 198; F50 A12 84;

Bones from pits F47 and F54 were analysed.

Period 3: published finds

(11) C37 727; (13) iron tool 1419; (17) C12 610; (22) C10 604; (24) A8 49, 50; A12 97, 102; iron knife 1416; (36) B5 329; C3 510; Chinese Porcelain 922; vessel glass 1160; F7 C20 656.

Period 4: published finds

U/S C5 540; Delft 927, 929; Chinese Porcelain 986; vessel glass 1216, 1217; (1) C22 663; (21) vessel glass 1183, 1256; (47) C12 620; F4 Roof tile 1105; F6 vessel glass 1204; F19 Staffordshire slip 873.

TRENCH II: THE FINDS

A table of finds has been prepared and an abstract of the more significant assemblages is published here.

The following pottery finds appear in the catalogue: (1) A11 76; (2) A12, 83, 101; B3 257; B8 382; E2 773; F4 A12 112; F32 C12 613; F36 A12 107; F59 A8 52

Small amounts of pottery were recovered from several of the structural features in Period 1. B1 sherds (less than 75g in all cases) were found in F8, F13, F15 and F28. B4 and C12 sherds occurred together in F19 and F32. Shelly body sherds came from F21, F34, F37, F42 and F48.

Other finds which appear in the catalogue are as follows:

U/S clay pipe 1009; bone object 1527; (2) vessel glass 1219, 1223; F3 wooden object 1558;

Leo Biek very kindly examined some of the slag finds and was able to identify a certain amount of smithing slag from F6, suggesting that some form of iron-working may have been taking place nearby.

A sample of the tiles found was kept and examples from tile fabric groups 1, 2, 3, and 4 were noted.

Animal bones from F3, F6, F17, F18, F20, F24 and F31 have been analysed and the results are included in the synthesis by Annie Grant which follows below.

Only 13 'small finds' were recorded at the time of excavation, of which most were iron nails. The others were fragments of glass and what proved to be modern coins.

Wood Remains

The majority of the Saxo-Norman pits produced wood fragments, sometimes from pit lining and sometimes from general organic layers. Richard Thomas has identified 96 fragments, representing oak (*Quercus sp.*) hazel (*Corylus avellana*) box (*Buxus sempervirens*) blackthorn (*Prunus spinosa*) elm (*Ulmus sp.*) and ash (*Fraxinus excelsior*). In addition there were fragments of moss, species unknown, and apple pericarps. Miss P. Paradine (Ancient Monuments Laboratory consultant) identified some blackthorn stone.

THE ANIMAL BONES

by ANNIE GRANT

The bones examined from these trenches were all recovered from rubbish pits of 9th to 13th century date. Over a thousand bone fragments were examined, of which 869 were identified. The species represented were sheep and goats, cattle, pigs, horses, dogs, cats, birds and roe and fallow deer. Details of the bones identified for each species are given in table 56.

Sheep bones were by far the most common bones found at the site. Cattle bones were also reasonably common, but pig bones were far less frequently found. A fair number of bird bones were found, while cats and horses were represented by only a few bones each. Roe and fallow deer were each represented by one bone. All the dog bones were from a single individual, of large and slender proportions.

The presence of goat at the site was indicated by several horn cores.

All parts of the skeleton of cattle, sheep and pigs were represented. There were particularly large numbers of sheep, goat and cattle horn cores found, which suggests the presence of a horn-working industry at or near the site. A goat and a cattle horn core had each been sawn through, and sheep and cattle horn cores had been chopped from the skull.

Chop marks were found on other bones, including a sheep skull, which had been split along the frontal suture and a sheep metacarpal had been split longitudinally, perhaps to enable the marrow to be removed. The butchery of the animal carcasses at this site seems to have been carried out with choppers rather than with knives. The use of saws may have been reserved for horn-working purposes rather than for normal butchery purposes.

Many of the bones had gnaw marks on them, suggesting that dogs were kept at the site and allowed to chew the bones when they had been discarded.

The majority of the cattle bones were from mature animals although some immature individuals were represented and one mandible was from a neo-natal animal.

Many of the sheep bones and mandibles were from mature animals although young and juvenile animals were also represented. The vast majority of the pig bones were from juvenile animals, but one pig mandible was from a fully mature animal.

	Epiphyses*		Fragments*	
	No	%	No	%
Cattle	58	19	160	29
Sheep	108	35	222	40
Pig	29	9	57	10
Horse	2	1	4	1
Dog	29	9	49	9
Cat	8	3	5	1
Bird	70	23	58	10
Roe deer	1		1	
Fallow deer	1		1	
Total	306		557	
Ribs	276			
Skull fragments	36			
Total identifiable fragments	1145			

Fig 56 BMR74 I and II: identified animal bone fragments. (*see Grant, 1975.)

BMod74

(Fig 45)

It has always been assumed that settlement evidence in the town is to be found in the form of buildings along the street edges with rubbish pits and wells etc. in the back yard areas behind. An opportunity to test this hypothesis occurred when permission was given to investigate an area within the gardens of Bedford Modern School. A trench of approximately 50 square metres was opened in February 1974, situated at TL 04874974 well back from both the Harpur Street and Horne Lane frontages.

It was not possible to use a machine on site and so the trench was dug by hand. Work was carried out with the assistance of the boys of Carlton House School and a group of Police Cadets, under the supervision of Alison Taylor.

Below the good garden topsoil was a layer of mixed brown loam, some 0.70m thick occurring right across the trench. This contained considerable amounts of mixed Medieval and Post-Medieval pottery and tiles. It sealed several layers of mixed rubbly material including mortar patches, possibly indicating a floor surface. There was also a drain pipe and a sewer trench within these mixed soils.

Excavation continued to a depth of 2m below the modern ground surface, where it was found that modern mixed debris was still going down. It was then decided to abandon the site for archaeological purposes, and to concentrate resources on the trench BMR 74 I.

It seems likely that this site did not contain any Medieval or earlier features and that the Early Medieval pottery recovered from the trench resulted from clearance of the surrounding areas. Because of the lack of archaeological features it has not been thought worthwhile to publish a plan or section of the trench. Its size and location may be seen on the area plan, figure 45.

THE FINDS

A wide range of pottery types was found during the excavation. B1, B4, B7, B8 and B11 occurred along with C2, C3, C4, C5, C9 and C20. Illustrated examples include 480 - C2; 541 - C5, 657 - C20. Numerous Coarsewares and Post-Medieval wares were found and samples of Delft, glazed and unglazed earthenware, Cistercian and green-glazed wares were kept, including 779 - E3; 801 - E7; 932 - Delft; 832 - glazed earthenware; 843 - green-glazed ware.

Other published finds in the catalogue are as follows: clay pipe fragments - 1021, 1022, 1027, 1035, 1055 vessel glass type 64 - 1182, 1185; type 28 - 1196; type 80 - 1252.

copper alloy bell - 1389; bone bobbin - 1543.

Mill Street

SUMMARY by DAVID BAKER (Fig 2)

THE EXCAVATIONS

Four sites in the area of Mill Street, examined during the 1971 summer season have already been published in full (Baker, 1974). No structural evidence earlier than the Late Medieval period was found, though Saxo-Norman pottery was recovered.

At 43 Mill Street (BMS71 19), three or more buildings with stone footings had occupied the site from the 15th century onwards, to which date can be ascribed a knight-on-horseback roof finial and an important pottery assemblage from (32). 14th century line-impressed tiles were also found re-used in a hearth of 16th – 17th century date.

THE FINDS: CATALOGUE

12th – 14th century

(42) copper alloy fasteners 1345, 1353.

(56) C12 617; copper alloy boss cap 1407.

(62) A12 113.

?13th century

(35) B10 428.

14th – 15th century

(34) C10 603; copper alloy belt chape 1354.

15th – 16th century

(32) E1 747; E2 764; E3 778; copper alloy stud 1336; copper alloy spurs 1390, 1391; copper alloy ring 1379; copper alloy rivetted plate 1355.

(32a) E1 744, 745.

16th – 17th century

(21) line-impressed floor tiles 1077-81; pavilion fabric N4 1087.

(22) Roman pot 18.

(27) C16 647; copper alloy belt fitting 1383.

(30) lamp in B4 fabric 303.

(31) C33 710; E2 760; E3 782; E5 795, 798; glazed earthenware 840, 844; German stoneware 886, 887.

18th century

(38) glazed earthenware 921.

Other Post-Medieval Contexts

(5) glazed earthenware 950.

(7) German stoneware 885; glazed earthenware 822, 962, 969; bone domino 1539.

(9) iron buckle 1434.

(12) roof tile fabric P3 1104.

Excavations at the south end of the former Litson's Timber Yard (BCL71 22) produced footings for a Post-Medieval cottage, sealed in the mid-19th century by the dumping of earth from the excavation of the adjacent Bunyan Meeting House basement. Small trenches at the north end of the Yard (BMS71 20, 21) produced no coherent evidence.

THE FINDS: CATALOGUE

Late Medieval – Post-Medieval

(10) E3 788; whetstone 1134.

(11) B8 410, 411; E3 780.

Post-Medieval

(2) clay pipe dec 21 1070; copper alloy strip 1404.

(5) B1 129; clay pipe H 1003.

(9) C4 517.

A small trial trench (BHS71 29) in Howard Street to the north of Mill Street revealed stratigraphic evidence suggestive of cultivation previous to the Post-Medieval period.

THE FINDS: CATALOGUE

?Medieval

(5) copper alloy strip 1341.

St John's Street
JANE HASSALL
with summaries by **DAVID BAKER**

INTRODUCTION *Fig 57*

St John's Street forms the southern end of the main north-south road through Bedford south of the river. It is presumed to be the main road of the southern *burh* of the Saxon town (Hill, 1970, 96-98; Hassall and Baker, 1974, 79) which may have been delimited by the King's Ditch (see Discussion: Urban Development, below).

It was partly to test the theory that the development of south Bedford began in the early 10th century as a result of Edward the Elder's visit, and partly to assess the nature and quality of the archaeological evidence, that excavations were planned. In addition, there were many questions to be answered concerning the origins of the street plans and the growth of Saxon and later occupation. In consequence, rescue excavations were undertaken on several sites where proposed redevelopment threatened to destroy archaeological deposits.

The first investigations took place in 1967 on the site of Nos 7-9. David Baker carried out these excavations and has published the results (Baker, 1970, 67-100).

BSJ67 - SUMMARY
by David Baker

A line of trial trenches was excavated at right angles to the street and limited areas were opened along the street frontage. Apart from one residual Roman sherd, no pre-Saxo-Norman occupation evidence was seen. Numerous pits had been cut into natural subsoil, mainly of Saxo-Norman and Early Medieval date, right up to the modern pavement edge, indicating either a lack of early structures fronting the street, or, more probably, the later expansion of the street over the sites of early buildings. Fragments of wall footings and occupation spreads of the Medieval period were found on top of these pits. Later pits, of 15th or 16th, 5(14), to early 18th century 5(6)=(13) dates, the latest containing a good assemblage of Post-Medieval pottery, stretched back from the street frontage, with the later at the rear. Adjacent to the street in the north-east corner of the site was the foundation for a back-to-back hearth with one end against a wall to the west, presumably the back of an early Post-Medieval timber-framed building with its long axis parallel to the street.

The Finds

Medieval: 11th - 13th century

1(12) C12 628. 7(7) C2 485; C4 520; C6 558. 8(13) Roman pot 14. 8(16) B8 411; C2 484.

Late Medieval: 15th - 16th century

7(5) C9 588; C41 729. 5(14) C16 648; E7 803.

Early 18th century:

5(6)(13) Glazed slipware 867, 870; Mediterranean import 915; glazed earthenwares 926, 933, 943, 946, 947, 952, 953.

Post-Medieval:

1(9) Floor tile M3 fabric 1085. 2(18) C8 574. 3(3) E2 770. 4(6) Purbeck mortar 1155. 5(4) floor tile fabric M3 1084. U/S glazed earthenware 830.

As part of the 1971 summer season, several small sites were tested in Bedford, organised by David Baker. These included an area near Willmers Corner (south end of the east side of St John's Street) following the demolition of houses to make way for a roundabout.

BSJ 71 30 - SUMMARY
by David Baker

The excavation of a double trench much impeded by modern footings and a rising water table was carried out by William Annan. No clear sequence of occupation could be established in the small area that was undisturbed by various modern features. A circular pit (8) containing early pottery had been cut into natural subsoil. Layers of silt and other materials (6A, 7, 11, 14) were seen tipping downwards and southwards. They may have been related to the King's Ditch, whose course ran just to the south of this trench. No features which could be associated with a crossing over the Ditch were seen. A length of the King's Ditch was preserved open across the roundabout when it was constructed in 1972.

The Finds

1(1) C5 545. (14) fragments of lava quernstone 1124.

BRC71 31 - SUMMARY
by Jane Hassall

Another trench, opened in the same area as BSJ67, was taken across the King's Ditch in 1971, at Rays Close. Excavations were undertaken by Jane Hassall and David

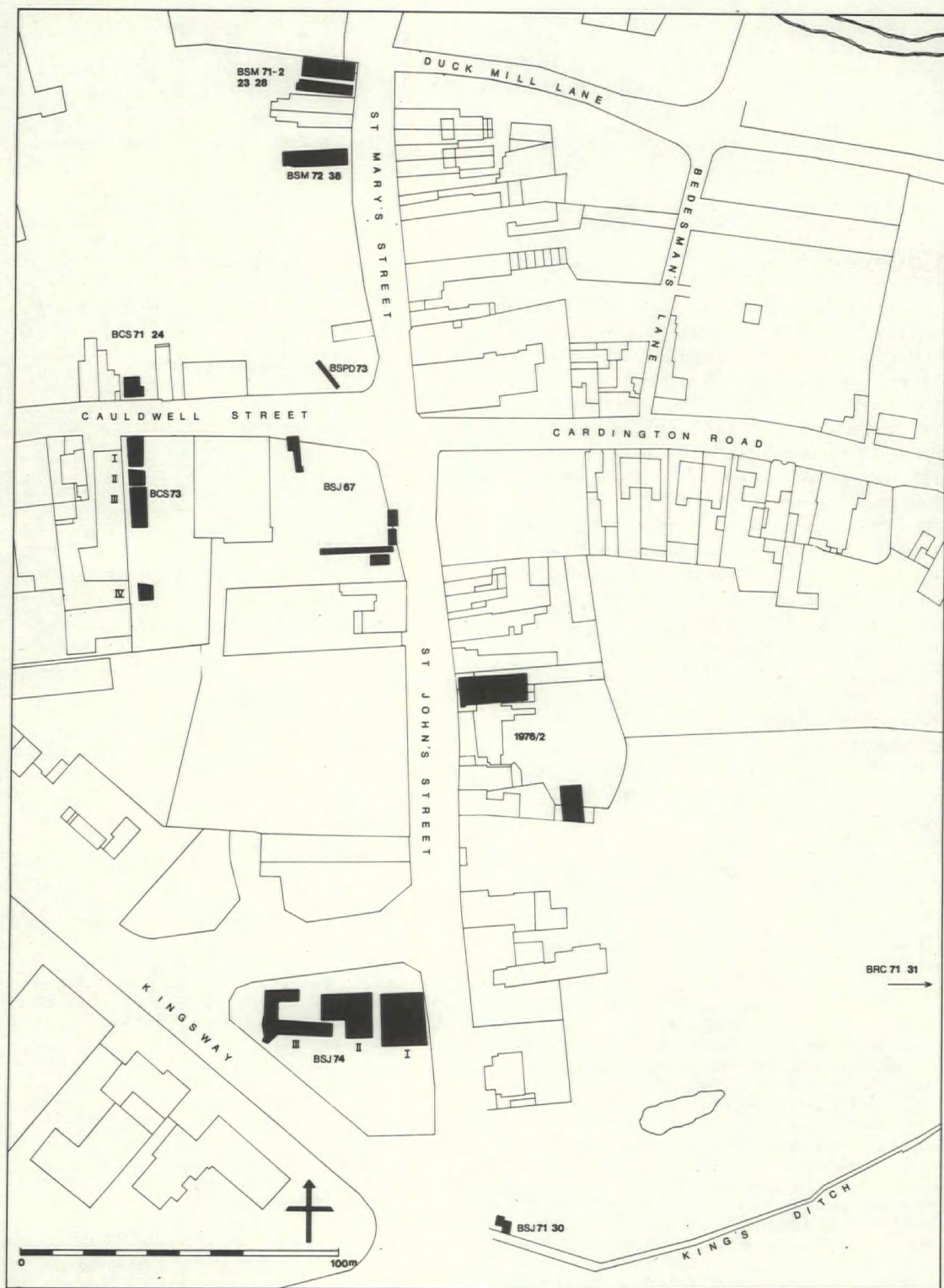


Fig 57 Excavation areas and sites south of river.

Hill. A section 2m wide was excavated through the earth bank running up to the open ditch. The bank had been constructed with a core of clay and faced with layers of loam and gravel. It was 8.4m wide and rose up 3m above the bottom of the wet ditch. There was evidence for the ditch having been cleaned out from time to time during the Medieval period. Apart from a few sherds of B1 and B4 pottery, there was no dating evidence for the construction of the bank. It might represent a rebuilding in the 12th century of the bank built by Edward the Elder or it may have been a Medieval flood prevention work (Hassall and Baker, 1974, 79-80).

The only published find is a vessel glass fragment, (4) 1232.

From these small trials it became apparent that whilst Saxo-Norman settlement evidence did exist, a single house plot did not yield a coherent archaeological picture. Consequently when redevelopment was proposed in 1974 for the site once occupied by 39 – 43 St John's Street, the opportunity was taken for the first 'open area' excavation in Bedford, BSJ74 trenches I, II and III. Two years later, with the demolition of Nos 20 – 24, this time on the east side of the road, another area became available (1976/2). The results of both excavations reported below, indicate considerable activity from the 9th – 10th centuries, and help to provide a context for the small trial trenches.

29–39 ST JOHN'S STREET (BSJ74 I, II, II)

SUMMARY

Two large open areas and one linear trench were excavated, a total of 580 square metres approximately stretching from St John's Street across to Kingsway. Settlement evidence from the Saxo-Norman period onwards was uncovered, with traces of timber buildings along the St John's Street frontage. Many rubbish pits were found in all three trenches. The Medieval period was best represented in the central area and included such features as a stone-built kiln, possibly for lime burning, and a small oven. Post-Medieval features predominated on the west side of the site.

INTRODUCTION AND ACKNOWLEDGEMENTS

The excavations were carried out over a three month period during May-August 1974 and were

financed jointly by Bedford District Council, Bedfordshire County Council and the Department of the Environment. Many volunteers and several members of the growing archaeological Field Team assisted on site, and thanks are due to all who helped, especially those who acted in a supervisory capacity. I am particularly grateful to David Devereux, Janet Dowling, Andrew Mimmack, Ian Pant-er, Gary Price, Penny Roberts, Les Speed and Richard Thomas. Wilverley Securities kindly gave permission for the excavation to take place.

EXCAVATION METHOD

It was planned to investigate as much of the site as time and resources would allow. Initial trial work located areas of modern disturbance and building foundations, and trenches were limited accordingly. Trench I was designed to investigate the St John's Street frontage. Trench II was opened subsequently to discover the extent of Saxo-Norman and later occupation, away from the modern street plan. Trench III was then opened running west towards the Kingsway frontage.

TRENCH I *Fig 58 Pl 18*

Modern overburden, varying in depth from 0.20 – 0.60m was removed by machine, exposing a trench of 220 square metres. Excavation continued by hand and beneath a series of spread Medieval layers a large number of features cut into the natural gravel subsoil were encountered and examined. The following broad phase plan has been devised:

- Period 1 – Saxo-Norman/Early Medieval 10th – 12th century
 - phase A – pits
 - phase B – structural features and pits
 - phase C – rubbish pits
 - phase D – pits
- Period 2 – Medieval 12th – 13th century
 - phase E – occupation layers
 - phase F – occupation layers
 - phase G – pits and post-holes
- Period 3 – Post-Medieval 17th – 19th century
 - phase H – pits 17th – 18th century
 - phase J – wall footings 18th – 19th century
 - phase K – sewer, occupation layers 19th century.

Period 1 Figs 58 and 59

Whilst a few scattered pits (phase A: F18, F36, F100, F55, F68, F19, F34, F59) might represent the earliest occupation on site, the first substantial settlement evidence can be identified in phase B. The structural features and associated rubbish pits are probably 10th – 11th century in date and are summarised in figure 59. No complete ground plan of a building could be determined, chief

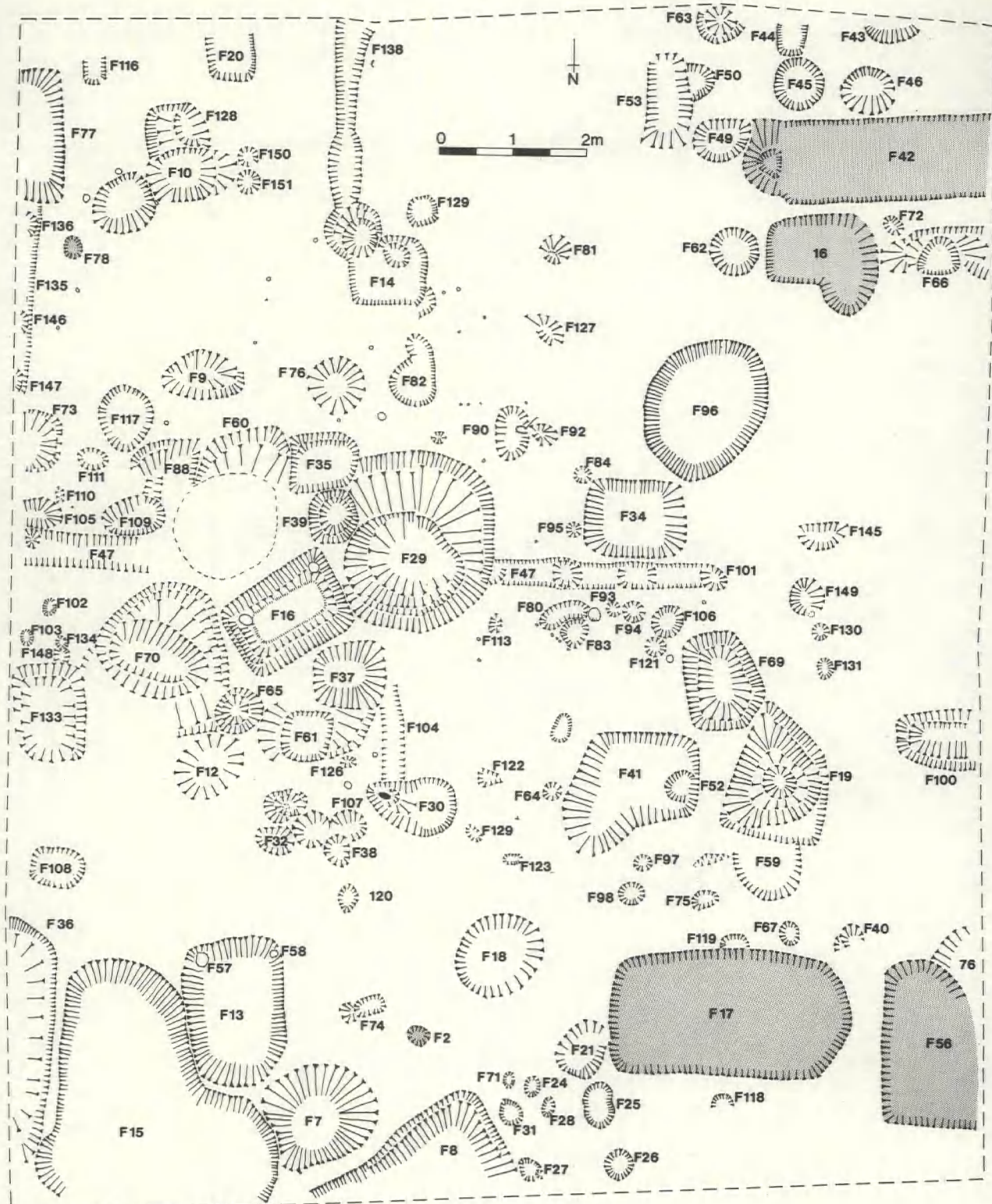


Fig 58 St John's Street: BSJ74 I, features cut into natural subsoil. (Post-Medieval contexts are shaded.)

chiefly because of the disturbance caused by the pits of phase C. However, the slots, running parallel with or at right angles to each other, suggest that buildings were placed close to and alongside St John's Street. There is little order to be seen amongst the many associated post-holes although some alignments are evident. They may represent room divisions, rebuilding or enclosures of some sort. The building evidence is considered further in relation to Trench II features discussed below.

Rubbish pits *F7, F8, F13, F15* and *F36* may be associated with the structures. Analysis of their material assemblages shows that they are contemporary, and a comparison of their remains is tabulated in the finds section.

The mass of inter-cutting pits spread across the centre of the trench (phase C) is problematic. Because they are only related by horizontal stratigraphy it is not a simple task to associate one group of pits with another. Phasing has been achieved by using stratigraphical evidence where possible, but is also dependent upon the comparison of ceramic assemblages.

Consideration has been given to the nature of the pits. Their shape in plan may be seen in *figure 58*, and they can be grouped according to the seven profile types defined as follows and illustrated in *figure 60*:

- type 1 – bag- or bell-shaped; upper parts having sloping sides, lower parts bellling out or undercutting.
- type 2 – straight sides, with one or both sides near vertical.
- type 3 – sloping sides
- type 4 – stepped sides
- type 5 – predominantly straight sides, flat base, with post-holes cut in.
- type 6 – irregular profile
- type 7 – shallow, irregular 'scooped-out' pits.

This typology has been devised as a means of grouping features with similar shapes, to avoid repetition in their descriptions. Full details of every pit profile can be found amongst the site records. Types 1 to 5 have been deliberately shaped, but types 6 and 7 have very little form. Undercutting and consequent collapse of the walls of some pit features may account for the irregular profile of type 6. The gravelly subsoil is not always stable, particularly around the roughly dug features such as type 7. The stability factor must be born in mind when considering any of these profiles.

Whilst variety in shape and size might suggest different functions, there were few indications from the pit fill as to what these might be. Soil samples were tested and pH values were obtained, ranging from 5.5 to 7.2, thus falling around the neutral mark. The soil colours were also very similar, all occurring within the Munsell hue 10YR, varying from black to dark brown. Greater variation was noted amongst the soil textures which consisted of silts, sands and gravels and clay loams. Typical material assemblages were composed of animal bone, shell, slag and pottery, suggestive of domestic refuge. Some pit fills were cess-stained and *F16* was undoubtedly used as a cesspit.

Period 2 Fig 58

Three phases were assigned to the 12th – 13th centuries. The first two were represented by spread layers which occurred across the trench and sealed the period 1



Pl 18 St John's Street, BSJ74, general view facing west across trenches I and II.

features below. The later phase (phase G) consisted of six small unrelated post-holes cut into the spread layers, and the small pit *F30* which cut through the period 1 slot *F104* into natural.

There were no substantial features in any of these phases. The spread layers produced considerable quantities of pottery, in some instances more than 3kg per layer is recorded. No structures were uncovered to which they could relate, although a timber building constructed on the surface might leave no traces. It is possible that they might have resulted from the clearance of the site at a later stage. There is a gap in the occupation sequence from the end of the 13th century and the start of the 17th century, apart from a few stray pottery finds.

Period 3 Fig 58

Despite the evidence from John Speed's map of 1610, suggesting that St John's Street might have been built up by the early 17th century, there was little evidence of Post-Medieval occupation on site.

Only three rubbish pits of 17th – early 18th century date were discovered, all with straight sides and flat bases. Their material remains are tabulated below (*fig 62*) and residual Medieval pottery occurred in all three. *F17* was 1.50m deep and *F42* only 0.70m, but a profusion of Post-Medieval rubbish was recovered from both. *F56* reached a



Fig 59 St John's Street: BSJ74 I. Structural features and pits from earliest settlement phase.

depth of 1.22m but its full extent could not be determined, as it lay partly under the west edge of the excavation.

Drains and areas of ground disturbance were encountered in the south, west and central areas of the site. A brick sewer and associated pipes cut into features in both trenches I and II.

THE FINDS

Large amounts of pottery, particularly of Saxo-Norman/Early Medieval date, were recovered. All pottery finds along with animal bones and slag were kept, whilst tile, shell and clay pipes were sampled. 15kg of slag were found, but there was no evidence of any furnace or pits to suggest iron-working actually on site.

Period 1 10th – 12th century

The bulk of the finds belong to features of this period. There were approximately 35 pits or pit complexes, which yielded finds in quantity, and a number of pits have been selected to illustrate the types of material assemblage encountered.

It can be seen in table 61 that pottery from the phase B pits is predominantly shell-tempered, and only a tiny proportion of the total is formed by C wares. Types B1 and B4 occur together in fairly equal amounts.

In the later phase C pits however, there are far more sandy wares present, indicating the main 'overlap' period before the sandy fabrics predominate and shelly wares (except for B9 Lyveden type) cease to be made.

Animal bones were recovered from most features, and have been analysed from every pit in period 1. Their significance is discussed by Annie Grant. In addition to the beef, mutton and pork eaten at the site, oyster and mussel shells show that fresh-water shellfish were supplementing the diet. A large number of horn cores have been identified, suggesting the possibility of a horn industry nearby, but no other signs of this activity have been discovered.

Finds from period 1 published in the catalogue are as follows:

PHASE A

F100 B4 282. F18 B2 237; B10 430.

PHASE B

F8 B1 204; B8 375; C3 504; iron strip 1444. F47 B3 253; C34 715.

PHASE C

F16 C4 519. F20 C41 733. F45 B1 148. F53 B10 427. F64 B8 386. F69 B1 219. F73 B4 272, 299; iron stirrup and buckle 1421. F77 C22 664, 672; bone objects 1523, 1536. F129 B8 378; C12 627.

PHASE D: (72) B4 295.

Period 2: published finds

(4) B1 220; B2 233, 240; B4 283, 312; B5 332; C1 446, 448, 452, 456, 461; C2 481. (11) B4 288; iron nails 1466, 1502. (41) iron nails 1467, 1492. (57) copper alloy object 1397. (60) A12 96; stone object 1154. F30 iron nails 1470, 1491.

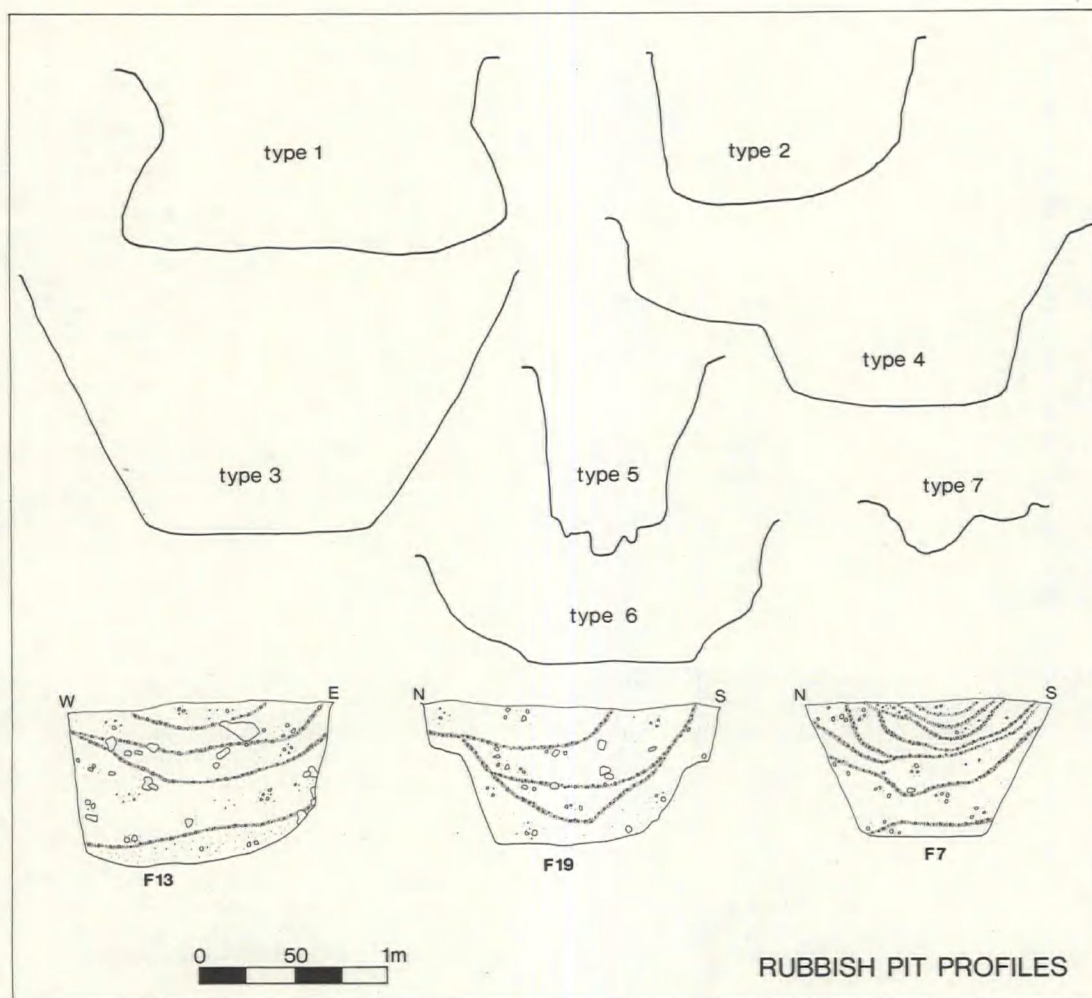


Fig 60 St John's Street: BSJ74 I, classification of pit profile types.

Period 3: the assemblages from the three pits *F17*, *F42* and *F56* are tabulated and include the published artefacts. The following are also included in the catalogue: *U/S* Roman pottery 13; B4 301; C2 472; C11 593; C12 618; C14 635; C24 686; stoneware bottle 894; grinding stone 1146; bone scoop 1517. (1) B1 170, 199; B7 366; C2 490; C5 544; C15 643; C23 675, 676; E1 749; pottery kiln bar 997; spindle-whorl 998; copper alloy pin 1312; copper alloy off-cuts 1394, 1395. (2) B11 438. (17) C7 561. (28) iron nail 1482. (29) C5 539. (34) iron nail 1483. (64) C11 581. *F124* E2 769; stone object 1152.

Coins

From all three trenches only 5 coins were recovered. They were in unstratified or Post-Medieval contexts and include: 1 Nuremburg and 1 English jetton, 2 Richmond farthings of Charles I, and 1 George III farthing.

THE ANIMAL BONES by ANNIE GRANT

Animal bones were recovered from refuse pits and post-holes on all three trenches. The bones were dated by their pottery associations to the 11th to 13th centuries. Just over 5,000 bones were identified – a further 1,600 small fragments could not be positively identified.

The bones of cattle, sheep and goats, pigs, horses, birds, cats, dogs, foxes, frogs and fish were found at the site. Two human neonatal bones were found with animal bone refuse in Trench I. Table I gives the number and percentages of the bones of each species represented. Frog and fish bones were not included in the percentage calculations because their very small size makes direct comparisons with the larger animals meaningless.

Just over 40% of the bones were from sheep. Cattle

	Type	Depth	Pottery	Other Finds
Phase B				
<i>Pit F7</i>	3	0.81m	1,525g B wares, B1, B2, B4, B5 150g C wares, C1 cat: 207 - B1; 232 - B2	Animal bone, oyster shell, slag 450g
<i>Pit F13</i>	5	0.98m	2,800g - B wares, B1, B4, B7, B8 650g - C wares, C1, C2, C3, C44 cat: 315 - B4; 496 - C3	Animal bone, oyster shell, slag 2,480g
<i>Pit F15</i>	4	0.83m	2,120g - B wares, B1, B2, B4, B5, B11 325g - C wares, C1, C12, C22 cat: 115 - B1; 295 - B4; 478 - C2	Animal bone, mussel shell, slag 125g bone spindle-whorl
Phase C				
<i>Pit F29</i>	4	1.04m	1,050g - B wares, B1, B4, B5, B8 950g - C wares, C1, C2, C29, C43	Animal bone oyster shell, slag 75g, iron key
<i>Pit F96</i>	1	0.95m	5,200g - B wares, B1, B2, B4, B5, B7, B8, B10 2,550g C wares, C1, C2, C3, C6, C11, C27 cat: 284, 306 - B4; 340 - B5; 352 - B6; 360, 365 - B7; 462 - C1; 473 - C2	Animal bone oyster shell, slag 175g iron nail - 1475

Fig 61 Table of Finds Assemblages from Saxo-Norman pits; weights given for pottery include body sherds.

	<i>F17</i>	<i>F42</i>	<i>F56</i>
Pottery	B1, B4 - 300g C5, C10, C24, C29, C34 - 400g Vessels represented: 1 each ungl. black-gl. earthenware, Delft, Staffs. Slip, Tyg; 2 - Cistercian; 3 - Notts/Staffs. stoneware; 6 - gl. earthenware. Total weight 900g	B1, B5, B8 - 50g B8 - cat: 389 C1, C3, C5, C6 - 200g Vessels represented: 1 each Stoneware, Cistercian Coarseware, Staffs. slip. Total weight 150g	B1, B5 - 275g C1, C3, C4, C5, C6, C18, C27 - 500g C3 - cat: 502 Vessels represented: 1 each - gl., ungl., yellow-gl. earthenware, stoneware, Cistercian, Isnik, coarse ware. Total weight 175g <i>Isnik</i> cat. 916
Animal Bone	present, not analysed	present, not analysed	present, not analysed
Tile	Roof - types A, B gl, E, M, N	Roof - types B, G	Roof - types B gl, N
Slag	Iron - 50g	-	-
Brick	type F	-	-
Shell	oyster	oyster	oyster
Glass	type 18 cat: 1163	type 74 cat: 1262	-
Clay pipe	Stem fragments	stem fragments	stem fragments
Iron	Nails - cat: 1463, 1473, 1484, 1487, 1498, 1500	Two objects	-
Other	Pewter spoon handle cat: 1505	-	-

Fig 62 Table of Finds Assemblages from three Post-Medieval pits.

were the next best represented animals, with pig and horse bones rather less frequent. Bird bones were not uncommon, but only a few dog and cat bones were found. Comparison with the results of the bone analysis for the 1967 St John's Street excavations (Grant, 1970) is interesting. During the earlier excavation more cattle bones than sheep bones were found and there were fewer horse and bird bones found than in the 1974 excavations. During neither excavation were any deer bones found. At the 1967 site no fish bones were found, but 86 fish vertebrae were found in a single pit. The horse bones from the 1974 excavation were also unevenly distributed – all but 49 were found in a single pit. This pit *F34* was rather unusual in that it was large, square and contained little pottery. Found in it were over 300 horse bones and 13 bones representing cattle, sheep, pigs, dogs and birds.

Analysis of the skeletal element representation showed that a particularly high percentage of horn cores were found at the site. 126 fairly complete cattle horn cores and many more small fragments were found. Sheep and goat horn cores were also well represented. This suggests that there may have been a horn industry at or near the site and that the horn cores were waste from manufacturing activities. A high percentage of horn cores were also found during the 1967 excavations at the St John's site.

The representation of the individual horse bones found in *F34* was rather unusual. There were no skull fragments apart from four loose teeth, no phalanges and only one metapodial. The other limb bones were well represented (fig 64): 17 carpals and tarsals, 1 patella, two atlases, 112 vertebrae, one sacrum and many rib and vertebrae fragments were also found. It would appear that the heads and feet of the horses were cut off before the rest of the carcasses were disposed of. They may have been removed with the hide. There was the same absence of skull or mandibular bone in the horse bones recovered from the rest of the site, but several phalanges were found. Approximately 60% of the limb bones were from the right side of the animal. Expressed slightly differently, a minimum of 5 animals were represented by the bones of the left hand side, while a minimum of 9 individuals were represented by the bones of the right-hand side. Vertebrae fragments were underrepresented.

The majority of the horse bones found in *F34* were fairly complete and had no evidence of butchery marks on them. However, a scapula, a femur and several carpals and tarsals had knife marks on them and one tibia had heavy chop marks on the side of its shaft. Several of the vertebrae had been chopped through at right angles to the line of the spine. It is clear from the uneven representation of the individual horse bones in this pit that there must have been some dismembering of the carcasses of the horses before they were thrown into the pit.

Butchery marks were seen on the bones of most other species represented at the site. On the cattle bones most of the butchery marks had been made by a fairly heavy tool, although fine knife marks were seen on some of the bones. Many of the horn cores had clear chopper or knife marks around their bases. On the sheep bones, both chopper and knife marks were seen but knife marks were most common. The sheep and goat horn cores too frequently had knife and chopper marks around their bases. Butchery marks were seen on the bones of pigs and also occasionally on the bones of dogs and cats.

Species	No	%
<u>Epiphyses only</u>		
Cattle	366	24
Sheep and goat	654	42
Pig	135	9
Horse	134	9
Bird	215	14
Dog	13	1
Cat	36	2
Fox	3	—
Total	1556	
<u>Total fragments</u>		
Cattle	1051	30
Sheep and goat	1523	44
Pig	336	10
Horse	291	8
Bird	210	6
Dog	16	—
Cat	26	1
Fox	2	—
Total	3455	
Frog	16	
Fish	86	
Total	3557	
Skull fragments	284	
Ribs	1061	
TOTAL	4902	

Fig 63 Animal bone Table I.

Many of the bones had been gnawed, probably by dogs.

Analysis of the state of fusion of the long bones (Silver, 1969) and the mandibular tooth wear (Grant, 1975A) suggested that the majority of the cattle were killed when they were in their third or fourth year, although some of the bones were from older animals and a few from animals in their first year.

Few of the sheep bones were from fully mature animals, but there were even fewer very young animals. The majority of the sheep seem to have been killed when they were in their second, third or fourth years of life.

Analysis of the pig bones showed that these animals were generally killed at a younger age than either cattle or sheep. The majority of the animals seem to have been killed when they were between one and two and a half years old. A significant number of the bones were from animals of less than one year of age, and a few from animals of approximately 2½ to 3½ years.

Evidence of disease and ante-mortem injury was seen on some of the animal bones. The most common disorders seen were osteo-arthritic conditions, affecting especially the first phalanges of cattle.

Full details of the diseased bones from St John's, and

Bone	Cattle		Sheep		Pig	
	No	%	No	%	No	%
Horn core	126	100	86	83	—	—
Skull fragments	126	—	121	—	38	—
Orbit fragment	10	8	23	22	4	14
Upper jaw	16	13	32	31	25	89
Mandible	12	10	104	100	28	100
Scapula D.	10	8	33	32	5	19
Humerus P.	3	2	4	4	3	11
D.	13	10	45	43	10	36
Radius P.	27	21	51	49	7	25
D.	4	3	28	27	6	21
Ulna P.	25	20	25	24	16	57
Metacarpal P.	27	21	67	64	14	50
D.	20	16	47	45	9	32
1st Phalange	51	10	23	6	3	11
2nd Phalange	9	2	2	1	1	4
3rd Phalange	13	4	1	1	—	—
Pelvis with acetabulum	21	17	48	46	6	21
Femur P.	15	12	7	7	2	7
D.	9	7	8	8	4	14
Tibia P.	11	9	2	2	6	21
D.	15	12	39	38	9	32
Calcaneum	14	11	11	11	7	25
Astragalus	11	9	4	4	4	14
Metatarsal P.	17	13	67	64	18	64
D.	20	16	32	31	10	36
Atlas	9	14	8	15	3	21
Axis	2	3	4	8	—	—
Vertebra	99	—	96	—	33	—
Teeth	63	—	140	—	40	—

P = Proximal

D = Distal

Fig 64 Animal bones Table II

of the other aspects of the analysis of the bones from this site are given in a more detailed report lodged with the rest of the excavation archive at Bedford Museum.

CONCLUSIONS

Although the majority of the animal bones found during the 1974 excavations of the St John's site were from sheep, when the differences in carcass size of sheep and cattle are taken into account it is clear that cattle must have provided the bulk of the meat eaten by the occupants of the site. The ratio of beef, lamb/mutton and pork eaten at the site is likely to have been in the region of 6:3:1.

The horns of cattle, sheep and goats seem to have been used in some sort of manufacturing activity that must have taken place at or near the site. However, the age structure of the three most common domestic animals found at the site

suggests that the animals were raised primarily for meat.

The precise significance of the strange collection of horse bones found in pit F34 is not clear, but it suggests that there was some special and deliberate disposal of the remains of some of the horses associated with the site. If all the horses whose bones were found in the pit died at approximately the same time, it would suggest that there were a very large number of horses being kept in the vicinity of the site. There may have been a stables in the vicinity — the main north-south and east-west routes through south Bedford cross just to the north of the site, so it would not have been an unreasonable place to have a stables. Alternatively, the uneven representation of the individual bones in the pit might be explained if the horse carcasses had originally been disposed of elsewhere, and after the carcasses had rotted some of the bones were collected together and put into the

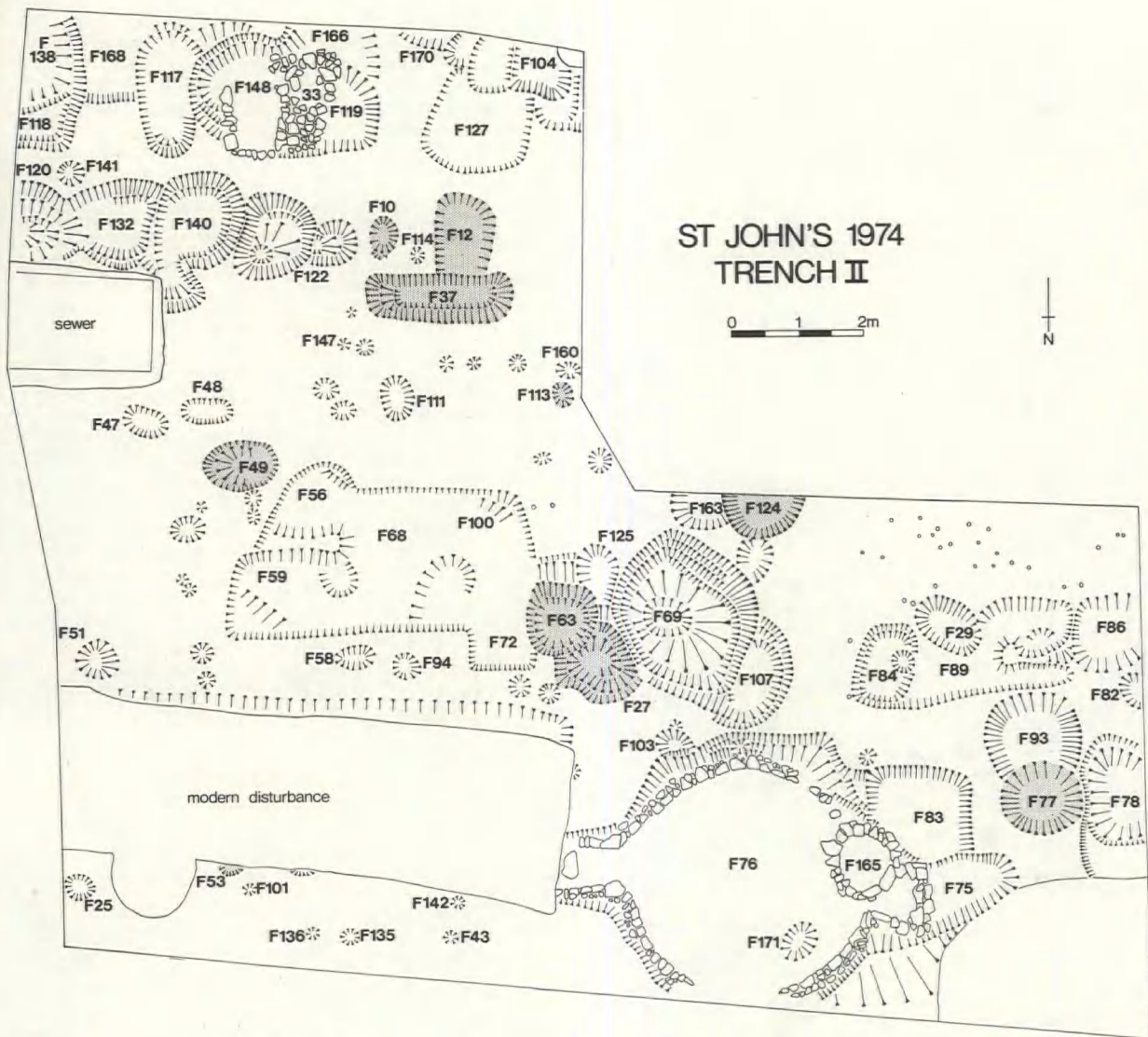


Fig 65 St John's Street: Features cut into natural subsoil. (Post-Medieval contexts shaded.)

square pit. Why this might have happened is more difficult to explain.

The cat and dog bones found at the site are probably the remains of strays, pets or guard animals. The incidence of gnawed bones suggests that dogs may have been more common at the site than the number of bones of these animals recovered at the site indicated. A few cut marks found on the bones of both cats and dogs suggests that they may have provided an occasional meal.

Fish and birds would both have provided extra meat and variety to the diet of the inhabitants of

the area. They might have been especially useful in the winter months.

TRENCH II *Fig 65 Pl 18*

The second area was opened immediately west of Trench I, separated from it by a narrow baulk. Some 0.50 – 0.80m of overburden was removed by machine and an L-shaped area of 160 square metres was then excavated by hand. Evidence from the features subsequently uncovered did not allow for detailed phasing, but an overall plan of

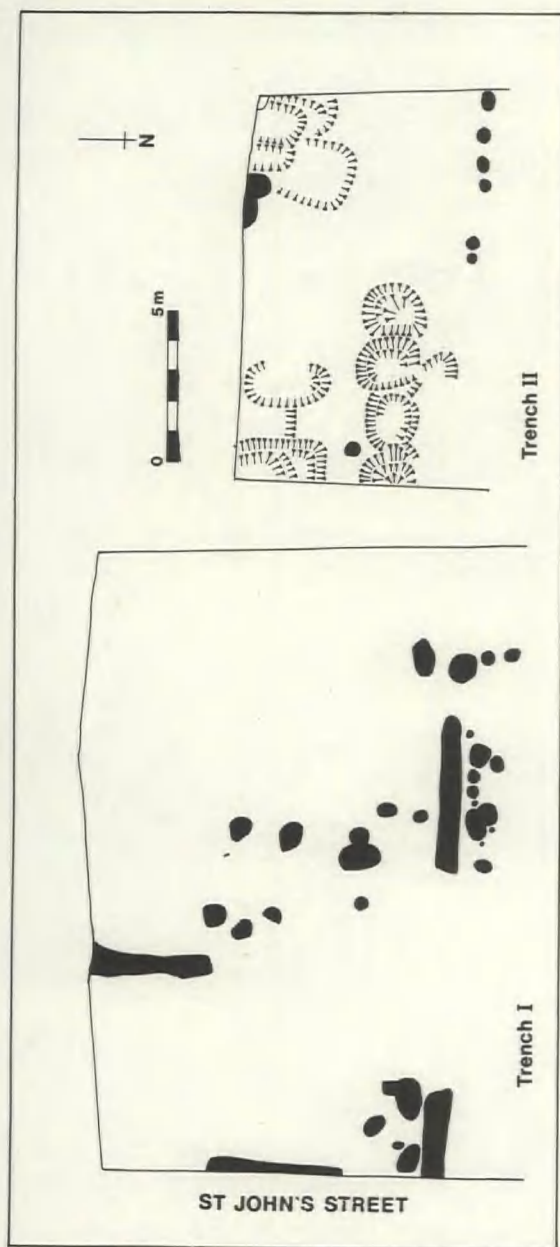


Fig 66 St John's Street: BSJ74 I and II, alignments of period 1 structural features, and pits.

the periods of occupation could be devised, comparable with Trench I.

Period 1 — Saxo-Norman/Early Medieval 10th — 12th century

Period 2A — Medieval, 12th — 13th century

B — Medieval, Late 13th century

Period 3 — Post-Medieval, 17th — 19th century

Period 1

Three groups of pits cut into natural at the south end of the trench belong to the earliest settlement phase. The group in the south-east corner comprises *F118*, *F138*, *F168* and *F117*, cut into by Period 2 features *F148* and *F119*. Immediately north of these is a line of pits *F120*, *F132*, *F140* and *F122*. In the south-west corner is another cluster of inter-cutting pits *F170*, *F127* and *F104*.

On the whole, these pits are smaller and less regular in shape than the Period 1 pits in Trench I. They are, however, noticeably linear and the first two groups appear to have been dug deliberately in strips. Very few of the many scattered post-holes nearby have any dating evidence, but they are more likely to belong to Period 1 than 2. They are not respected by Period 2 pits and in some cases are cut by Period 2 features. A string of post-holes (*F147* to *F160*) runs parallel with, and just north of, the pits and also lines up with slot *F47*, trench I. Perhaps this alignment represents a property boundary and the Trench II pits are contained by it and relate to the building suggested by *F47* in Trench I (fig 66).

All the post- and stake-holes are shown in figure 67, where they may be seen in relation to the structural remains from Trench I. Apart from general alignments no building plan has emerged and there are no beam slots in Trench II. The post-holes show considerable variety in shape and size so that they cannot be linked to form a structure with any great certainty.

More than one building is indicated by this varied evidence. The buildings suggested by the Trench I slots, along with their accompanying rubbish pits in both trenches, may represent the earliest settlement phase. The rest of the post pits and post-holes do not offer a straightforward interpretation, and there is an absence of associated occupation layers. The post-holes could be the remains of either boundary fences or dwellings, and if the latter, are set well back from the road. Annie Grant's finding of unusually large numbers of horse bones on site led her to suggest that this was a likely area for stables, which might serve as an alternative explanation of the features.

Period 2A

There were very few spread layers relating to Medieval occupation but a large number of rubbish pits and the stone feature *F148* can be dated to the 12th — 13th centuries. The rubbish pits were spread out across the centre of the trench, north of the sewer and south of the kiln and disturbed area. Whilst the usual pattern of inter-cutting features may be seen, with pits *F78* (type 4) *F69* (type 4) and *F83* (type 2) according with the defined profile types (fig 60), the nature of the groups *F68* (with *F56*, *F59*, *F72*, *F100*) and *F89* (with *F29*, *F84*, *F86*) is not so common.

In the group centred on *F68*, individual pit fills could be recognised, yet it appears that the whole area was formalised possibly into one large rubbish dump, with



Pl 19 St John's Street, BSJ74 II, Medieval stone oven, facing north.

straight sides to north and south. Pits were cut into natural to a depth of up to 0.65m and the average depth of the whole complex was 0.50m.

The various pits around *F89* form a rather amorphous area of average depth 0.30m with some pits over 0.60m deep. The soil fill and the finds are typical of refuse pits and there is no indication of an alternative function. The pottery assemblages from both groups of pits are outlined in the finds section.

The stone structure *F148* (fig 65; pl 19) and its associated pit *F119* were cut into the Period 1 pits along the south section. Built from roughly shaped limestone slabs, this rectangular chamber measured approximately 1.20m x 0.60m. Three sides of it survived to a height of about 0.50m, formed by 7 courses of stonework. It was set into a pit in which traces of burning (charcoal, burnt clay etc.) were obvious. On the west side was a paved area set on top of natural gravel. A flat, broken slate was discovered inside the chamber.

Its precise function is unknown, but one suggestion is that it was an oven, possibly used for baking bread. It could have functioned by setting a fire in the pit around the chamber and placing loaves etc. on the slate inside. There are no indications to show how it was roofed. Placing a bread oven outside a dwelling was apparently common practice in Medieval times, partly because of the fire hazard if it was included inside a timber building.

Godber quotes an instance where 'the oven seems to have been outside in the courtyard' of a building at Elstow in 1272 (Godber, 1969, 69). There is no excavated evidence for the house or dwelling to which the Bedford oven belonged. Stratigraphically, and from pottery evidence, the oven must post-date the Period 1 pits, and belongs to the 12th – 13th centuries.

Period 2B Fig 68, Pl 20

The kiln *F76* probably belongs to a slightly later phase than the rubbish pits. It was a circular stone structure, approximately 3.5m in diameter, uncovered against the north section in the north-west corner of the site. A construction trench had been dug into natural gravel for the stone walling to a depth of 1m. The kiln was built of coursed limestone blocks, some of which were faced and which survived to a maximum height of 0.90m along the north side. Two opposing stoke-holes were situated to the east and west. The east end was destroyed by a large area of modern disturbance, whilst the west stoke-hole was only 0.75m long. A circular well *F165*, of slightly later date than the kiln had been constructed against its wall, covering most of the west stoke-hole entrance.

Figure 68 shows the layers of kiln fill. The remains of a clay lining (24) and (25) could be seen in places against the kiln wall. Successive bands of clay and gravelly loam



Fig 67 St John's Street: BSJ74 I and II, period 1 structural features.

filled the structure which was sealed beneath (13), a Medieval spread layer. At the bottom (31) was composed of sandy gravel immediately overlying the natural gravel sub-soil. It was red in colour, possibly as the result of being subject to intense heat. A narrow band of sand and mortar (29) was found just above it. Small patches of a white lime substance occurred within (29) and may provide a clue to the function of the kiln. If it had been used to burn lime, it was extremely well cleaned out once it had ceased to operate. The stone walls were robbed and the kiln pit was filled with Medieval detritus.

If it had been a flare kiln, similar to the Castle Lane example (discussed in the Castle report section) traces of base structures and channels should have been found, as well as signs of firing behind the stoke-holes. It is possible that the dismantling of the kiln could have removed all such traces. From the surviving stonework there were no indications that the stoking areas were separated from the main pit, as in the Castle lime kiln. Neither was the kiln set into a bank to catch the prevailing wind. It seems likely therefore, that the alternative method of lime-burning, involving the mixing of the fuel and charge in successive layers in the kiln pit and firing them together, might have been adopted. However, little evidence of this process has survived. Ash and the discolouration of the lime are the usual indicators and no sign of either was discovered.

It was felt at the time of excavation that the structure might have been a pottery kiln (Webster, 1975). Subsequent analysis of the pottery finds has shown no trace of kiln bars or wasters, and a wide variety of fabric types in both B and C wares. Whilst being similar in plan to some pottery kilns (Musty, 1974, 45) the St John's Street kiln is considerably larger. Its use as a lime kiln seems a more likely though still uncertain interpretation. It is not typical of maltings or corn-driers, but it could have been

associated with tanning, where lime was a necessary commodity.

Having fallen into disuse, the kiln appears to have been stripped of much of its stonework. The central pit was probably filled in with detritus fairly rapidly and Medieval sherds were present in most layers. The ceramic assemblages would suggest a 12th – 13th century date on the whole, but the occurrence of fabrics such as C24 in layer (22) indicates the second half of the 13th century as the time of infilling of the kiln.

The well F165 appears to have been built about the time the kiln went out of use, and the stonework has survived to much the same height as the kiln walls.

Period 3 Fig 65 (shaded features)

No significant Post-Medieval occupation was apparent in Trench II. Time and resources precluded the systematic excavation of the most recent layers which were removed by machine. Two areas of modern activity seriously interfered with Medieval features, including the kiln, along the north edge of the trench. A brick sewer and pipe trenches also caused some disturbance.

A number of small pits, F12, F37, F49, F63, F27, F124 and F77 along with post-holes F10 and F53 were found cutting into natural gravel. Residual Medieval sherds were recovered with Post-Medieval wares in most features, and a late 17th – early 18th century date is suggested for the majority of the pits. Their distribution across the trench has no obvious significance.

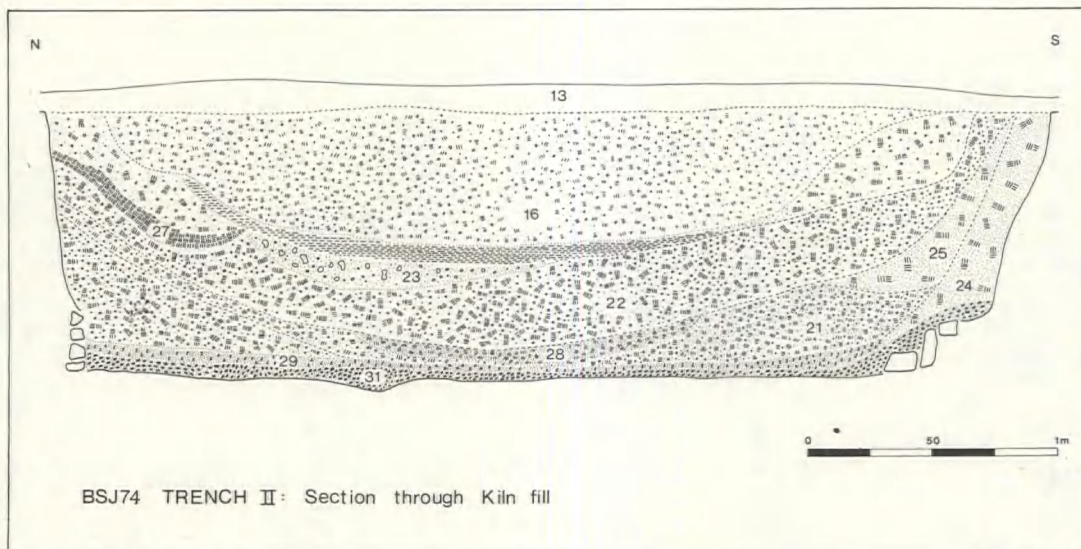


Fig 68 St John's Street: BSJ74 II.



Pl 20 St John's Street, BSJ74 II, Medieval kiln and well, facing west.

THE FINDS

The same sampling policies were followed as with Trench I. Slag was again recovered but in much smaller quantities, only 5.7kg in all. Animal bones from Period 1 and Period 2 pits were analysed.

Period 1 10th – 12th century

The pits were generally smaller than those of Trench I and the number of finds recovered was consequently less. Pottery from the three main pit groups showed a fairly small range of fabric types, as follows:

PIT GROUP F118 (F138, F168, F117) B1, B4, B5, B8, C1, C6, C22.

Catalogue: C1 464.

PIT GROUP F120 (F132, F140, F122, F139) B1, B2, B3, B4, B5, C1, C2, C3, C22.

Catalogue: B1 160, 169; B2 235, 249; B4 265; B5 334; C1 444; C6 556; C2 667.

PIT GROUP F104 (F127, F170) B1, B5, B8, C1, C2, C5, C8, C22.

Catalogue: C1 449; C5 – 534; iron nails 1479, 1486, 1489.

F47: C1 445.

Period 2A

PIT GROUP CENTRED ON F68: B1, B4, B5, B6, B8, B9, C1, C2, C3, C5, C6, C9, C12, C22, C29, C36, C38.

Total B wares 3,275g; Total C wares 2,975g.

Catalogue: C22 661; E3 790; local slipware 866
copper alloy fitting 1410; stud 1327; mount 1346;
bone object 1544.

PIT GROUP CENTRED ON F89: B1, B4, B6, C1, C9, C10, C28.

Total B wares 525g; Total C wares 325g.

POTTERY FROM STONE OVEN F148: B1, B5, B8, B10, B11, C1, C3, C27, C36.

Catalogue: (34) B8 379, 381, 383, 399.

OTHER CATALOGUE FINDS:

F18 iron object 1413. F54 B9 421. F98 pottery spindle whorl 1002. F107 C2 486. F126 B5 330.

Period 2B

Kiln F76 and associated contexts – B1, B2, B3, B4, B5, B6, B8, B9, B11, C1, C2, C3, C5, C14, C22, C24, C28, C36.

Total B wares – 6,790g; Total C wares 4,860g.

Catalogue: F76 B5 320; C6 550; C14 636. F81 C22 674. F99 C3 501; C5 533. (21) B5 319. (22) B4 278. (27) B8 408.

Well F164, F165 Roman pottery 6; copper alloy rim 1332. (11) C2 475; C15 642; vessel glass 1170, 1184, 1239; copper alloy buckle 1366.

Period 3

(1) C4 515; glazed earthenware 826; Cistercian 851; Potterspur 879; clay pipe 1057; copper alloy pin 1320; copper alloy nail 1326; copper alloy star 1398;

iron nails 1461, 1462, 1477, 1480, 1481, 1485; bone point 1554.

(2) copper alloy pin 1315; iron nail 1488.

(3) B2 250; B7 361; B8 397.

(10) die 1144.

F1 E2 759; copper alloy lace end 1324. F2 C27 684. F4 B4 274; copper alloy lace end 1325. F6 B4 267. F10 copper alloy lace end 1322; iron nails 1478, 1497. F12 copper alloy lace end 1331. F20 B1 183. F23 C28 690. F27 iron nails 1469, 1496, 1496, 1503. F37 iron nails 1464, 1494, 1499. F40 C35 717; copper alloy object 1316. F42 C2 491. F43 C32 709. F53 vessel glass 1189; iron nail 1472. F57 C9 587. F63 lava quernstone 1148; iron spike 1445. F77 vessel glass 1164.

Unstratified contexts:

B7 357; C2 474: U/S C9 592; chinese porcelain 985; E3 781, 783; local slip 859; Delft 975; copper alloy buckle 1376; fitting 1408; ring 1385; pin 1313; iron nail 1452. (6) local slip 862. F2 iron nail 1476. F5 iron nail 1474. F31 iron nail 1490. F70 lead strip 1510. F87 C2 479; C3 497. F150 C3 506. F153 B8 370.

TRENCH III Figs 69, 70

The third trench was opened west of trench II. It was intended to excavate another area, reaching over to the Kingsway frontage. However, this plan was modified because of extensive modern disturbances, and a narrow 3 – armed trench was mechanically opened, giving an area of approximately 200 square metres. All overburden was removed down to the natural subsoil and the features cut into it were subsequently examined. They could be grouped according to the outline period plan:
Period 1 – Saxo-Norman/Early Medieval, 10th – 12th century
Period 2 – Medieval, 12th – 13th century
Period 3 – Post-Medieval, 18th – 19th century

Period 1

Features F6 (with F18) F7, F16, F24 and F200 can be assigned chiefly by pottery evidence to this first period of occupation. F6 (with F18) is the largest, consisting of a roughly circular pit complex. F6 itself is comparable in shape and size with many of the Trench 1 pits and can be described as a type 3 pit. Large quantities of pottery and animal bone were recovered from it, with fabrics B1 and B4 chiefly represented, with some B5 and B8. A total weight of 7.5kg was recorded for the shelly wares. A few sherds of C12, Stamford ware, were also found. The bottom layer of fill was waterlogged, at a depth of 1.17m, and in the silt was found a strip of wood. A sample was sent to Harwell for Carbon-14 dating and the following result was obtained:

HAR 987 – 790 ± 80 years B.P. giving a date of a.d. 1160. F200, half-sectioned at the east end of the north arm of the trench was the only other early rubbish pit

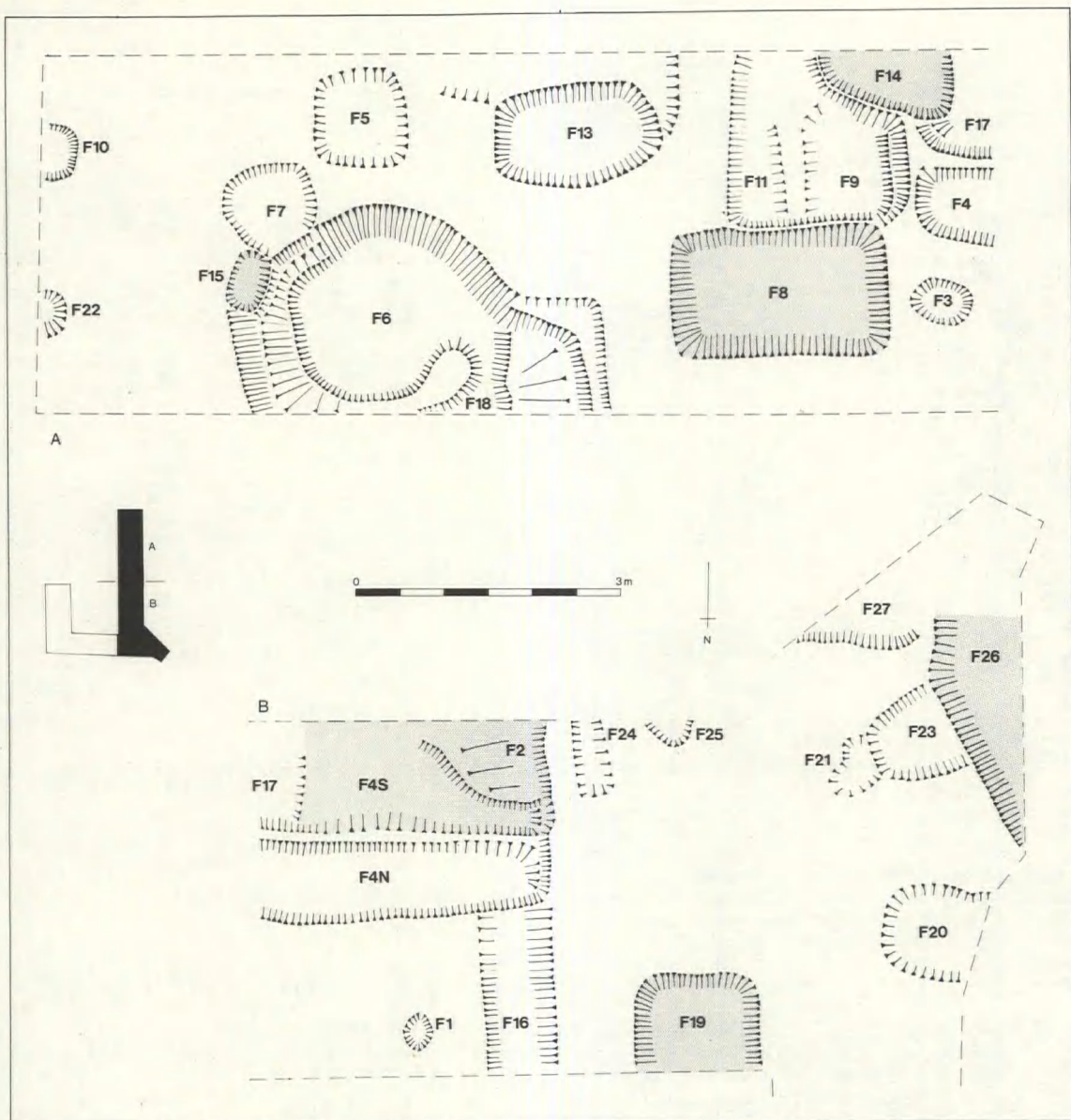


Fig 69 St John's Street: BSJ74 III, features cut into natural subsoil, south end. (Post-Medieval contexts shaded).

example, and 500g of B1 pottery were found in it.

F16 was the only possible structural feature. Running north-south and cut by F4 (in area B in fig 69) this slot was 0.80m wide, 0.25m deep, with steep sides and a flat base. There were no indications in the north arm of the trench that it continued northwards, though it is worth noting that the line of post-holes, F202, F208 and F209, runs parallel with it. Lack of dating evidence for these features, however, precludes any firm associations.

Period 2

F4, F5, F13, F23 and F203 relate to the 12th – 13th centuries. At least two features could be seen within F4 (identified as F4N and F4S) but they had been disturbed by Post-Medieval interference. About 1kg each of B and C wares were recovered.

F203 yielded remarkably few finds. It was a large steep-sided pit sectioned against the west edge of the

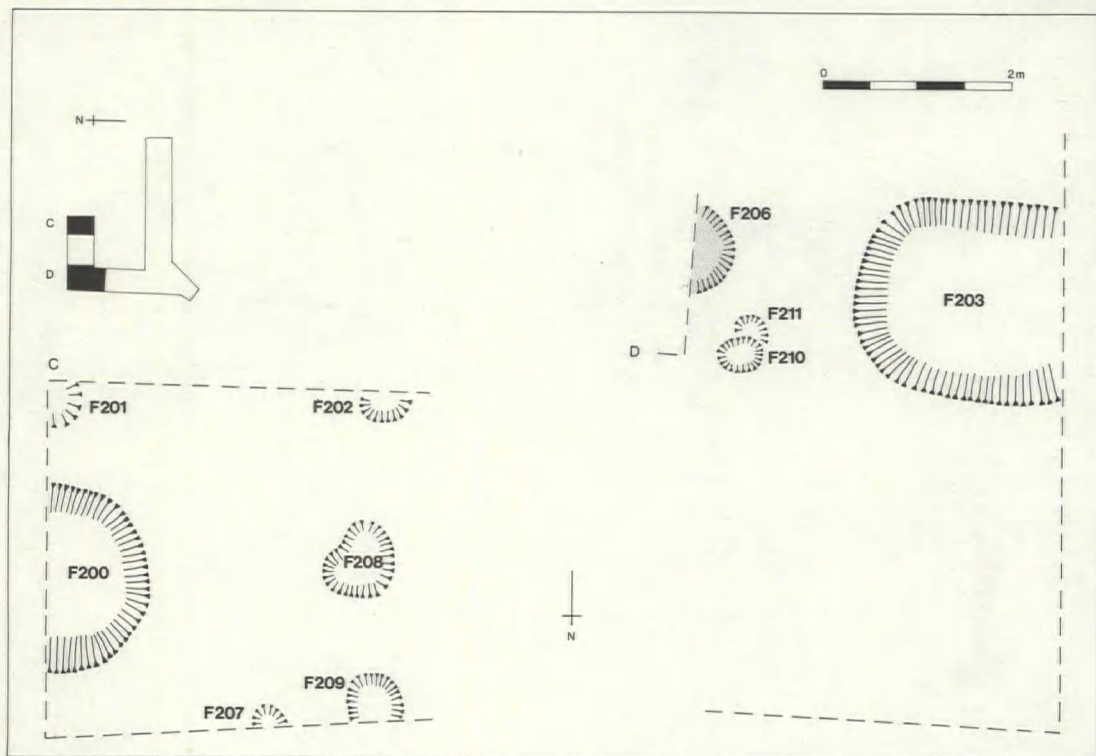


Fig 70 St John's Street, BSJ74 III, features cut into natural subsoil, north end. (Post-Medieval contexts shaded)

trench, containing B4 B8 and C5 pottery (150g each of B and C wares). A few animal bones and slag fragments occurred, but apart from a little Post-Medieval disturbance, this pit had a uniform black loamy fill.

Period 3

The Post-Medieval features are shaded on the plans. It can be seen that several large squarish pits, F2 with F4S, F8, F19 and also F14 and F26 occur towards the west end of the excavated area. It would seem from the pottery finds that they all relate to the 18th – early 19th centuries.

THE FINDS

In contrast with Trenches I and II, there are few finds from Trench III. As the overlying layers had been mechanically removed, only the finds from the excavated features were kept, along with the more interesting unstratified material. Animal bone from pit F6 was analysed and the results are included in Annie Grant's report after the Trench I finds section.

The following finds have been included in the catalogue:

Period 1

F6 B4 273, 307. F7 C2 477.

Period 2

F4 C3 505; C4 516; C29 699, F13 C3 492; clay pipe 1047.

Period 3

F2 vessel glass 1210. F4S B5 331; Delft 923; Chinese porcelain 982; copper alloy mount 1399; iron ring 1438; iron nails 1460, 1465. F8 copper alloy plate 1329. F14 clay pipe 1038. F15 copper alloy lace end 1323; copper alloy nail 1328; iron nails 1468, 1501.

Others

(4) iron nail 1456. U/S unglazed earthenware 807; local slipware 861; Notts/Staffs stoneware 910; vessel glass 1269; bone object 1535.

BSJ74 I, II, III: DISCUSSION

The earliest settlement evidence on site dates to around the 10th century and Saxo-Norman activity has been seen to occur right across the area from St John's Street to Kingsway, but more concentrated in the east.

Traces of timber buildings occurred along the St John's Street frontage apparently aligned with the present road. This might suggest that the line of the road has not altered much in the last thousand years. There were no indications of any other track or road behind the buildings, or running east-west across the site. The buildings in Trench I may have had plots of land behind them, marked by property boundaries in Trench II, in which rubbish pits etc. were dug. How far west these extended is unclear, and modern disturbances prevented the examination of the Kingsway frontage.

The 12th – 13th centuries are best represented in Trench II. The kiln and various rubbish pits might suggest that the site was used for industrial purposes and refuse disposal rather than for dwellings at this time.

From the 14th – 17th centuries there is little evidence of occupation, in contrast with sites in nearby St Mary's Street, such as BSM72 38. The nature of the excavation may have removed Post-Medieval footings, but the late Medieval evidence, if it existed, should have been found. Rubbish pits cut into natural are all that survived relating to the 17th – 19th centuries. These were found right across the area excavated, but no Post-Medieval building plans were encountered.

20 – 24 ST JOHN'S STREET

SUMMARY

Ten phases of occupation dating from the 9th to the 19th centuries were identified on the street front site. Timber buildings and rubbish pit remains were found, apparently respecting the line of the modern street. A second trench opened in the St John's Hospital area yielded some indication of Medieval settlement.

INTRODUCTION AND ACKNOWLEDGEMENTS

The area available for excavation was L-shaped and included the house plot Nos 20 – 24, and the garden of No 26, The Cedars, an early 19th century timber building. The questions to be answered by archaeological investigation were twofold. Firstly it was hoped to establish the sequence of occupation and to see whether this side of St John's Street was built up during the Saxon period. It was planned to excavate as much of the street frontage as possible, in the hopes of tracing building plans and to examine the backyard areas

behind. Secondly, the garden of No 26 was of interest because of its proximity to St John's House and the church, the only visible remains today of St John's Hospital, thought to have occupied this area from the 13th century. Medieval foundations had been noted in mechanically dug trenches to its rear during restoration work in the late 1960s.

Excavations were carried out for North Bedfordshire Borough Council, Bedfordshire County Council and the Department of the Environment. Various members of the archaeological Field Team assisted on site under the direction of the author, who would like to express her thanks to them, the volunteers and the Job Creation employees for all their hard work. S and S Holdings kindly gave permission for the excavations to take place.

RECORDING SYSTEM

In order to facilitate recording and to reduce confusion, it was decided to adopt the single sequential numbering system for all contexts and finds (all observed phenomena). Because it had been agreed by prior arrangement that any finds and records would be deposited in Bedford Museum, a museum Accession Number was used as a trench code. Thus all the finds, and subsequently site drawings and photos, were marked as follows—1976/2/ context number.

EXCAVATION METHOD

Following clearance and preliminary work on site by the developers, only an 8m length of street frontage was available for excavation and a trench of 8 x 21m was opened mechanically. The site was then excavated down to natural subsoil by hand. Resources would not allow for the use of further machinery so Trench II, an area of 6 x 12m in the garden of the Cedars, was dug entirely by hand.

TRENCH I Fig 71

The three main periods of occupation are described and interpreted below, each with a number of phases. The suggested date range is based on stratigraphy, pottery and Carbon-14 evidence.

Period 3 – Post-Medieval

phase A – 18th – 19th century

phase B – 17th – 18th century, pits and well

phase C – 16th – 17th century, pits

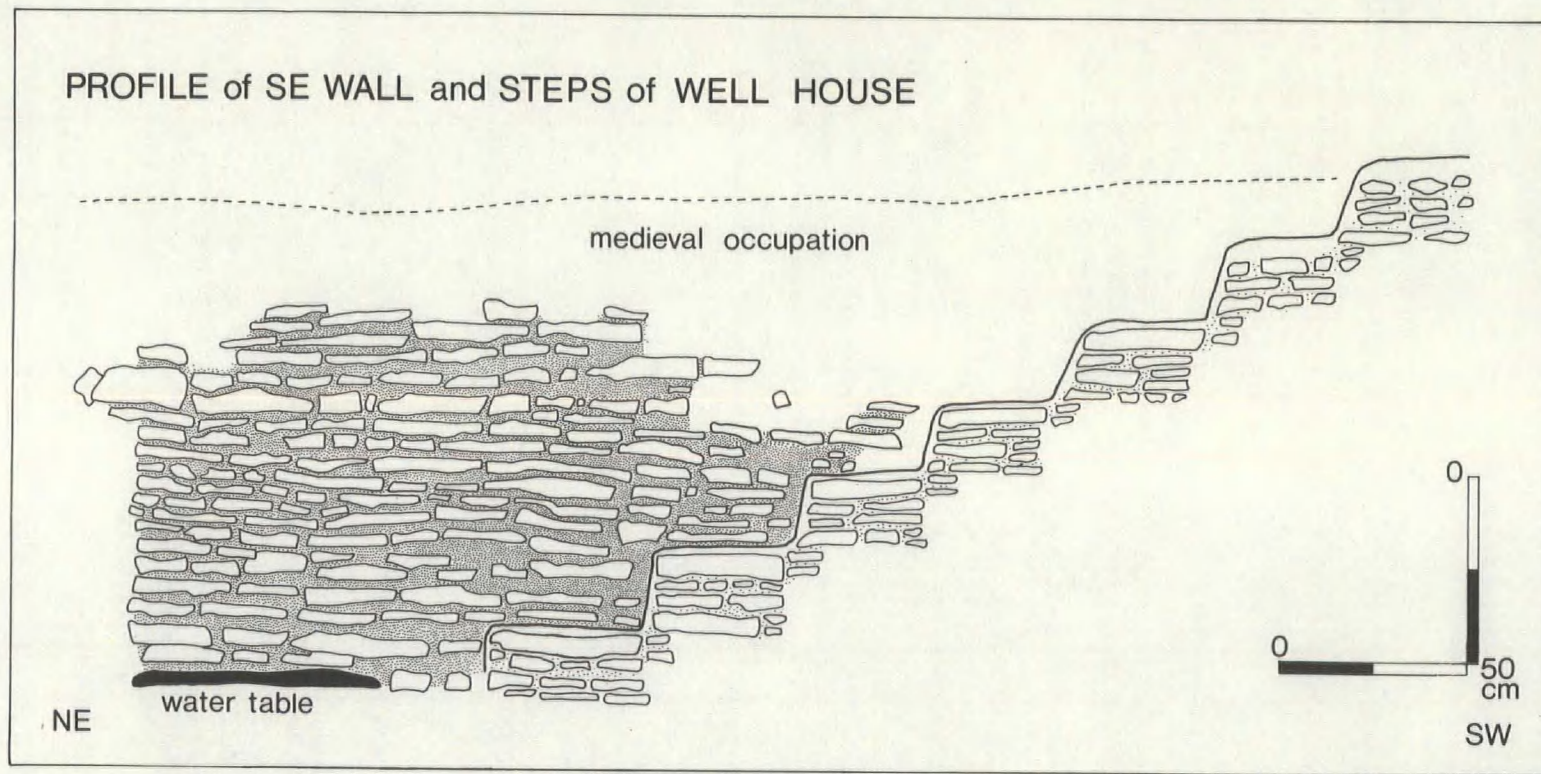


Fig 72 St John's Street: 1976/2.



Pl 21 St John's Street, 1976/2, Medieval stone well-house: views (a) up steps and (b) down steps.

Period 2 Medieval

phase D ?14th – 15th century, features cut into phase F

phase E 13th – 14th century, well-house

phase F 13th – 14th century, occupation

Period 1 Saxo-Norman/Early Medieval

phase G 12th – 13th century, rubbish pits

phase H 11th – 12th century, rubbish pits

phase I ?10th century, rubbish pits

phase J ?9th century, structures and pits

Period 3 – Post-Medieval

Machine clearance of between 0.70m and 1m of overburden occurred right across the trench and took away much brick rubble and modern debris. It is likely that any Post-Medieval building footings would have been removed by this process. The time allowed for excavation was extremely limited and the decision was taken to clear all overburden to the top of recognisable Medieval layers.

However, a number of Post-Medieval contexts did survive, and pits chiefly from phases B and C are represented, dated by pottery assemblages. Two pits are worthy of further comment. *Pit 1* (phase C) with undercut edges was dug into the gravel subsoil. If it is assumed that this pit and the wells (18 and 40) were situated in the yard behind the building with which they were associated,

then this building would have occupied the 5m area running west to the main road.

Pit 25 (phase B) is of interest, cut very square with a flat base and having the remains of a stone lining. Lumps of ironstone were found apparently laid on the bottom, and many large flat pieces of limestone were noticed in the fill. It seems likely from the green sticky clay loam soil inside that this may have served as a cesspit.

Period 2 – Medieval (Figs 71 – 73)

Spread layers of general 13th – 14th century date were uncovered below the Post-Medieval levels, and these varied from between 0.10 – 0.35m in thickness. This occupation material was encountered right across the trench. A few amorphous features, chiefly shallow pits, were found cutting in, (phase E), and only one of these was substantial, *pit 22*. This can be seen in *figure 71* to the east of centre, cutting down into the natural gravelly subsoil. It is difficult to suggest any detailed phasing for the occupation layers and no structural remains were found to which they might relate. It is possible that they represent clearance from nearby, prior to the Post-Medieval settlement.

PHASE F

With the removal of these occupation spreads an interesting stone feature was uncovered, cutting through Period 1 layers into natural. This was a well-house built of

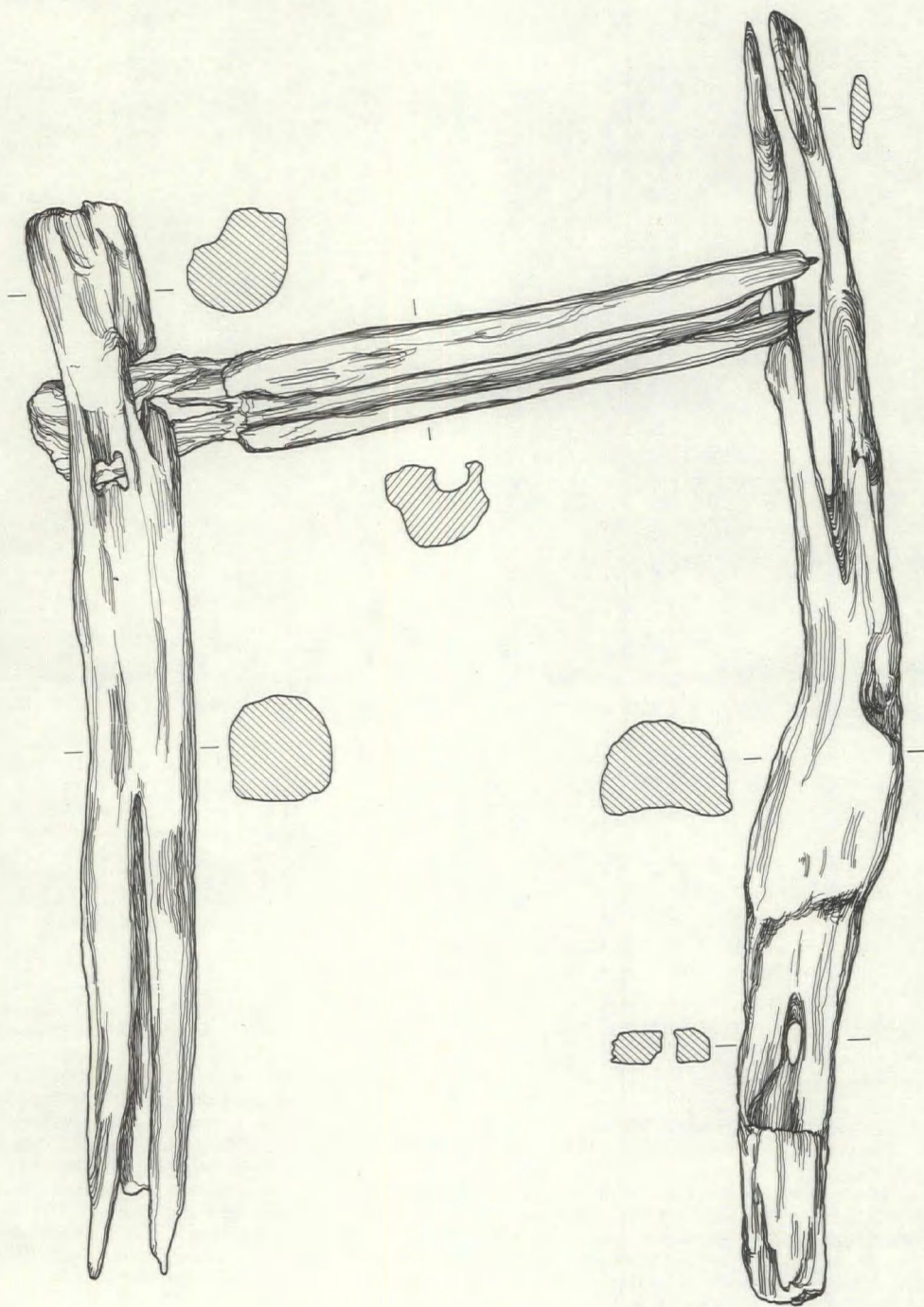


Fig 73 St John's Street: 1976/2 well timbers, scale 1:4.

limestone, consisting of a flight of seven steps walled around on three sides and leading down to a square well head outlined in timber. It was orientated north-east/south-west and figures 72 and 73 and plates 21 (a) and (b) illustrate the details of its construction. It occupied a rectangular area of approximately 3m x 1.5m and was dug to a maximum depth of 24.11m O.D., 1.5m below the Medieval ground surface. The steps themselves were made from laid limestone rubble and each was capped with a large stone slab. The walls survived to a height of a little over 1m, above which they had been robbed. Although no evidence survived it is probable that the whole structure might have been roofed.

The square timbers at the bottom were well preserved in a water-logged state just below the present day water table. Part of the stone walling was demolished at the end of the excavation and the four lengths of timber were removed. It could be seen that they had been carefully notched near the corners to fit into one another, thus forming the square shape. Samples from the north-east and south-west timbers, both of oak, were sent for Carbon-14 dating at Harwell and two rather different dates were obtained:

HAR 1930 – 480 ± 70 years BP (1950) giving a date of 1470 A.D. ± 70 years.

HAR 1929 – 650 ± 70 years BP (1950) giving a date of 1300 A.D. ± 70 years.

Stratigraphical evidence suggests a 13th – 14th century date, as does the pottery recovered from various layers of soil fill found in the well and filling the steps area. The presence of Lyveden ware (B9) and Oxfordshire/Buckinghamshire type (C9) both substantiate this date, and consequently the second of the two Harwell dates seems more likely. There is no evidence to suggest that the well-house was still in operation during the late 15th – early 16th centuries.

The Medieval period, then, would seem not to be very well represented in this trench. The well-house was obviously quite a substantial feature and one would have expected it to have been used by one or more households. No building has been found to which it might relate, either because such evidence was destroyed in later times, or because it lay outside the area occupied by the trench. Either way, the well-house was situated well back from the road.

Period 1 – Saxo-Norman/Early Medieval (Figs 71 and 74)

By far the largest number of excavated features belong to this 9th – 12th century period. These features were mostly rubbish pits, as can be seen in figure 71, forming complex intercutting groups. A certain amount of phasing has been possible but it should be emphasised that some of the pottery evidence should be treated with caution. Pits cut into one another, often with no clear differentiation between them, will displace pottery finds, and

thus a proportion of each pit fill is likely to be residual. The details of the nature of the pits may be found in the Level III archive.

PHASE G

The main features of this phase are pit 47, in the south-west corner, pit 131, against the south section, and pit 155 towards the east end of the trench. The remains of pits 104, 107, 109 and 153 can be seen along the north edge of the trench. A 12th – 13th century date range is suggested by the pottery finds. Table, figure 77A, shows a typical assemblage from pit 131 where C wares are predominant. Only a small amount of pottery was recovered from pit 155, despite its large area.

The pits have a random distribution across the site, and no structural remains were uncovered.

PHASE H

Most of the pit complexes belong to phase H for which an 11th – early 12th century date seems likely. These features are related stratigraphically as they are cut into natural subsoil and sealed by Period 2 material. It is the pottery evidence which groups them in one phase, and typical ceramic assemblages are shown in the table. In almost every case, the shell-tempered B wares far exceed the C wares with mineral inclusions.

A consideration of the physical characteristics of each feature shows wide variation in the shape and size of the pits. Yet there are no noticeable differences in their contents and thus no indication that they fulfilled any function other than that of rubbish disposal. Once again there were no post-holes or slots to suggest a building to accompany these pits.

PHASES I and J Pl 22

The earliest phases of occupation on this site date back probably to the 9th and 10th centuries respectively, and are represented firstly by the structural features of phase J. These were situated near the street front and running back from it, on a roughly similar alignment to the present day St John's Street. Figure 74 summarises their situation.

Slot 58 yielded much charcoal and C. Keepax of the Ancient Monuments Laboratory identified the fragments as chiefly oak (large) with some ash (branch) hazel (twiggy) hawthorn type (large) and maple (large). A sample was taken for Carbon-14 dating and the following result was obtained:

HAR 1897 – 1110 ± 70 years BP (1950) giving a date of 840 A.D. ± 70 years.

As slot 58 meets 69 and 113 at right angles, it seems probable that they form a corner of one building. Slot 36 runs at right angles to 117 and 41, and most likely these also refer to one structure. Both sets of structural features are cut by the large circular pit 39 and must therefore pre-date it. All the slots are set on a similar alignment (either parallel or at right angles) and it is therefore likely that they belong to the same phase. (There is however always the possibility that more than one phase is represented.) Evidence from the pottery finds helps to bear out this

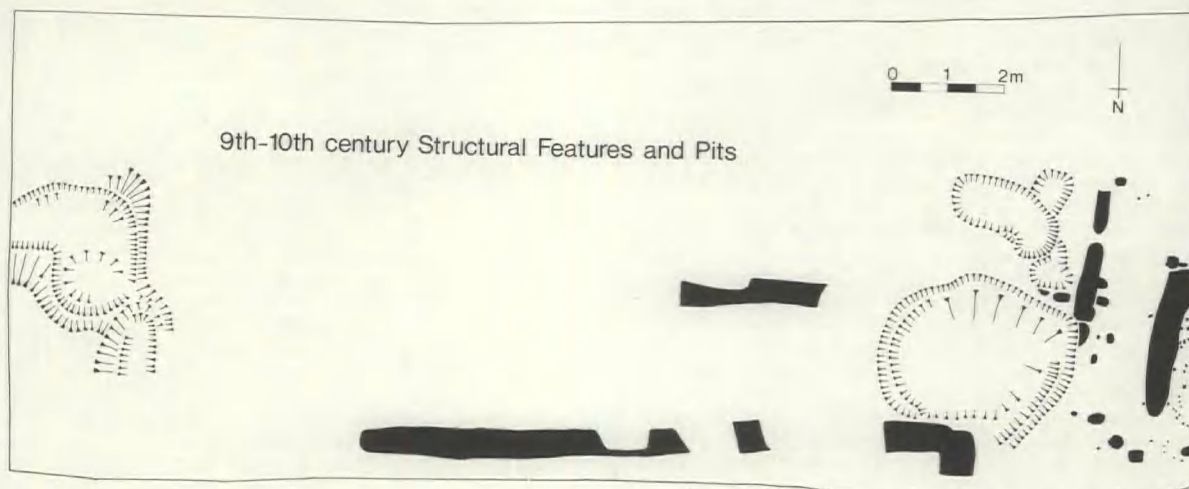


Fig 74 St John's Street: 1976/2.

thesis. There are a considerable number of post- and stake-holes associated with the slots particularly near the street frontage but there is insufficient evidence to interpret their precise function.

The east end of the building or buildings represented by the slots could not be located in the trench, no doubt because it had been destroyed by the large pit complexes (155, 54 and 128) of phase H. There is no further trace of slot 113 beyond 78 which cuts it. This would give the length of the north wall of the building thus represented as approximately 9m.

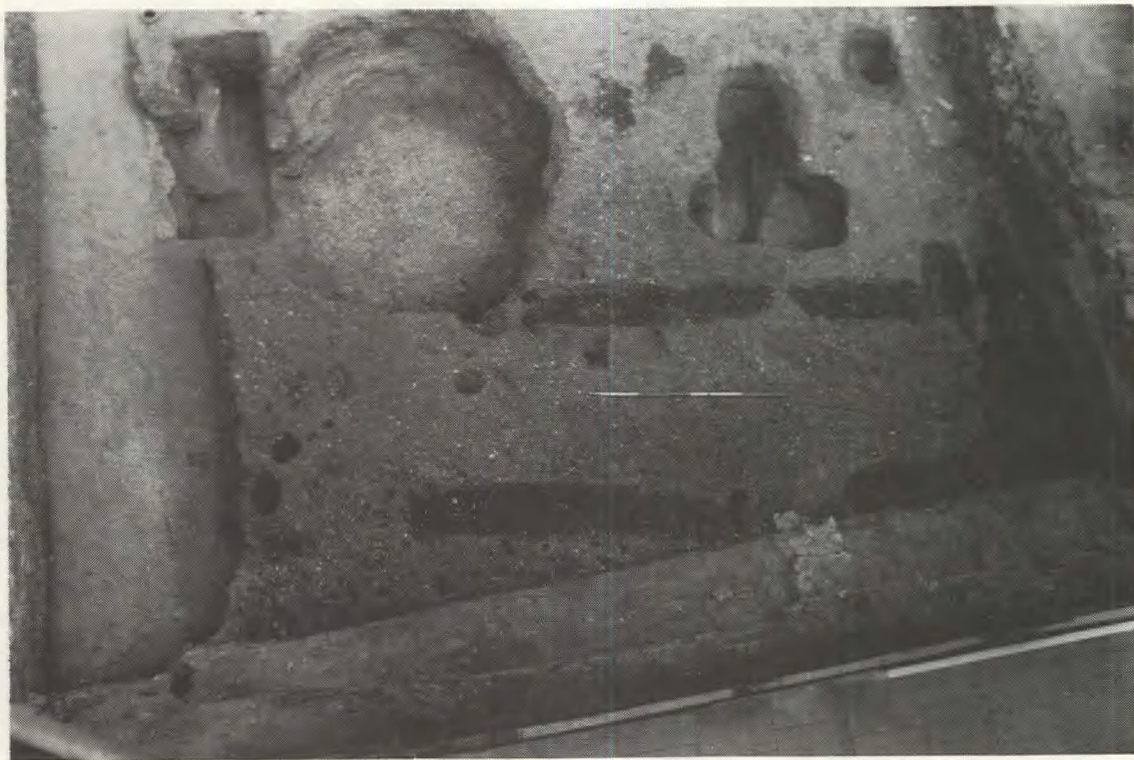
It seems likely that the rubbish pit complex 133 and 146 may belong to the same phase as the buildings. The evidence for this comes from their situation outside the back of the building, and from their pottery assemblages of B1 and B4 types, the St Neots and Local Shelly wares.

The interpretation of the slots and post-holes as parts of buildings rather than fences or enclosures is based on their situation in respect of the road, the evidence of occupation from the rubbish pits, and the finding of building material, chiefly in pits of the later phases. The amount of daub in pits 52 and 83 (phase H) is especially worthy of comment. The slot 36 was obviously destroyed by the digging of these pits and the daub could well have come from here. Some examples of daub are illustrated in figure 162 and 1107 was found in pit 83. The fine range of Middle Saxon bowl fragments, 63, 64, 66, 68, 69, 70, 71 and 72 are also from pit 83, but may once have been associated with the occupation of the 9th century building.

Phase I is another 'rubbish pit horizon' and must post-date phase J for several reasons. Firstly pit 39 is cutting into the slots, and its situation, along with pits 111, 127 and 34, does not respect the building line. Secondly charcoal samples, identified as mainly of oak with a few fragments of hazel and hawthorn type by C. Keepax, Ancient Monuments Laboratory, yielded another Carbon-14 date – HAR 1896 1010 $\pm$ 70 years, giving a date of 940 $\pm$ 70 years a.d. In addition it is noteworthy that the pottery assemblages in pits 39, 111 and 34, all contain Thetford ware, probably from large storage vessels, and which would be commensurate with a 10th century date.

Material assemblages from the phase I pits are detailed in the table, figure 77A. Pit 39 is perhaps worthy of further comment because of its exceptional dimensions. It was straight-sided, flat-bottomed and densely packed with finds of bone, pottery, slag etc. There was nothing in it to suggest that it might have been used for an industrial purpose such as lime-burning or iron-smelting, so it was most likely to have been an outsize rubbish pit.

In conclusion it is worth noting that the dating of phases I and J must still be regarded as tenuous. The features of phase J were demonstrably earlier than those of phase I by virtue of their stratigraphical relationship. In addition the two Carbon-14 dates suggest that the two phases relate to the mid-9th and mid-10th centuries respectively. However, single Carbon-14 dates should not be taken as necessarily absolute and need to be confirmed by supporting evidence before they are acceptable as wholly reliable indicators of date.



Pl 22 St John's Street, 1976/2, structural features and pits (?9th – 10th century) facing east (slots dampened).

TRENCH II *Figs 75 and 76, Pl 23*

THE EXCAVATION

Both Medieval and Post-Medieval features were discovered below the topmost layers, but there was insufficient evidence on which to base a detailed phase plan. The features are therefore described here as they occurred in the course of the excavation.

Beneath the topsoil various intermingled layers of garden soil and gravel were uncovered which obviously related to the cultivated area of the club-house garden. These varied in thickness and extent, but generally occupied the top 0.50m below modern ground level.

Several Post-Medieval features were found cut into these soils. *Figure 75* shows the positions of pits 511, 512 and 537, three rectangular rubbish pits against the south and west sections. These contained ashy, loamy soils and a range of pottery finds indicates a late 18th – 19th century date for their infilling. Immediately south of the pits was a ditch, 509, nearly 2m wide, 1m deep and with a U-shaped profile. It ran east-west across the trench, curving

slightly. It presumably functioned as some sort of drainage or boundary ditch.

0.30 – 0.50m of brown loamy soil were removed from beneath these features. Finds included plenty of 18th – 19th century pottery along with mixed Medieval sherds. At a depth of approximately 0.50 – 0.60m a spread of tumbled limestone fragments, 521, was uncovered all along the east side of the trench occupying roughly half the excavated area (not illustrated). Apart from three or four limestone slabs found together with a piece of lava quernstone, 524, (1150) there was no sign of anything structural in the spread. Mixed pottery finds suggest a date in the mid-late 17th century. If, as seems likely, these stones indicate the former presence of a wall rather than a cobbled area, it was most probably situated at some distance to the east of the trench.

Section *figure 76* shows that layer 529 was uncovered beneath the Post-Medieval features. 529 may well represent a Medieval occupation layer, as it was found over most of the site, just above natural, and contained a considerable quantity of Medieval sherds. These cover a wide range of types and a 13th – 14th century date seems likely overall.

Cut into natural, and in some cases through 529 into natural, were several Medieval features, illustrated on the plan. Of these, the earliest appears to be 532, a narrow

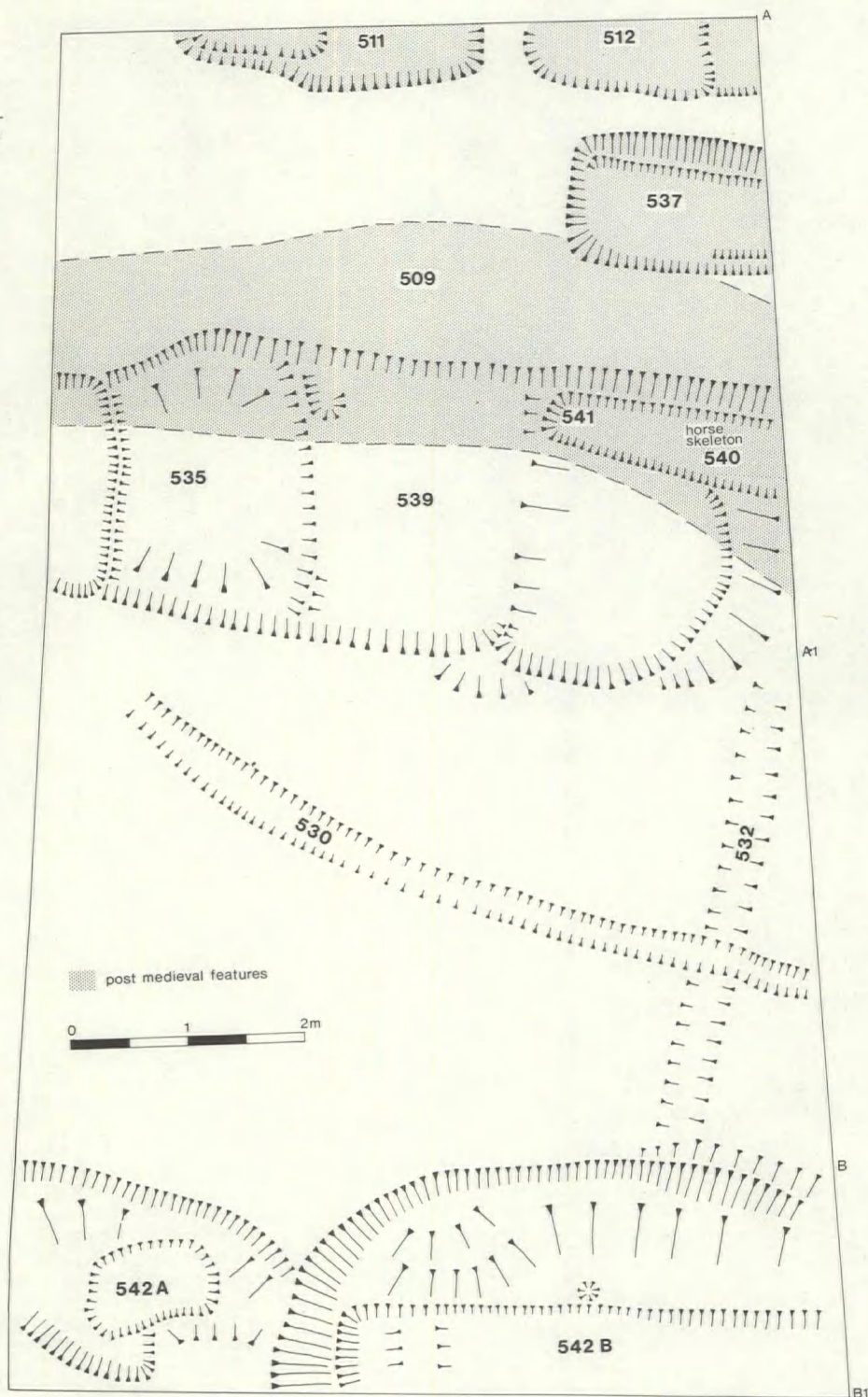


Fig 75 St John's Street: 1976/2, trench II features cut into natural subsoil. (Post-Medieval contexts shaded.)

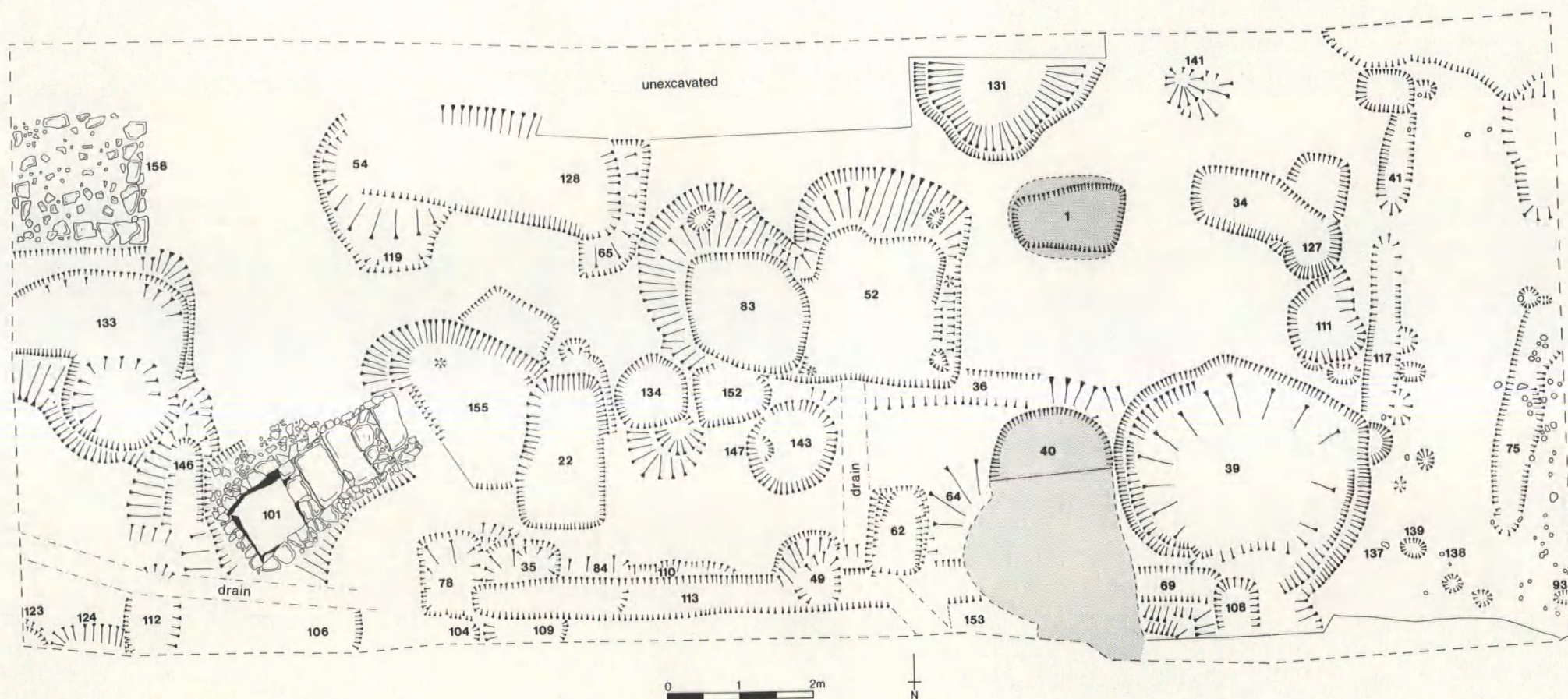


Fig 71 St John's Street: 1976/2, features cut into natural subsoil, trench I. (Post-Medieval contexts shaded.)

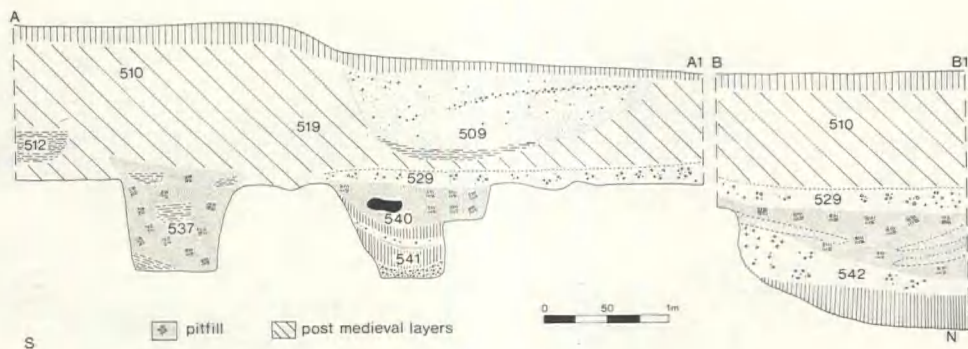


Fig 76 St John's Street: 1976/2, trench II west section.

channel or slot, about 0.15m deep and running more or less north-south near the west edge of the trench. Its width, about 0.40m, and its comparative straightness are both features one would associate with a timber building slot. No other building features were uncovered so if 532 does represent the remains of a structure, it must lie to the west of the trench. The channel which crosses and cuts it, 530, is noticeably narrower and uneven, curving from north-west to south-east, perhaps a drainage channel rather than a structural feature.

Against the north section two large pit-like features were excavated, 542A and B, their fills being identical. Each contained a considerable amount of Medieval debris. 542B was much deeper than A, cut a little over 1m into natural to a depth of 2.20m below modern ground level. Its sloping sides tapered to a rectangular channel near the bottom. As may be seen on the plan the shapes of these two were irregular and it is possible that they may have been dug as quarry pits and were subsequently filled with Medieval rubbish.

A similar interpretation might be advanced for the remaining group of features, the shallow pits or troughs found in an east-west strip across the centre of the site. 535 and 539 were not substantial and had the appearance of scoops cut out of the natural gravelly clay. Near the west section, 541 was a deeper rectangular pit containing the articulate skeletal remains of a horse with its legs missing (pl 23).

THE FINDS

COLLECTING POLICY

All pottery finds were kept along with total assemblages of finds from pits and other defined features. Animal bones, particularly from 9th – 13th century contexts were analysed and the results are reported below. Tile, brick and shell were sampled. Recovery of organic remains from rubbish pits was limited as no sieving or flotation occurred. All slag was kept.

Amongst these pieces Leo Biek has identified smithing and smelting slag, and some fragments of furnace lining material. However these pieces represented iron-working refuse and there was no intact structural evidence.

Over 400 small objects were recorded, which included many copper alloy pins and iron nails. Only those which make a significant contribution to the overall type series from Bedford are included in the catalogue. Only 6 coins were found, all Post-Medieval, including two tokens (one from Bedford) three jettons (two from Nuremberg) and one Charles I Richmond farthing.

TRENCH I

Period 3: Post-Medieval

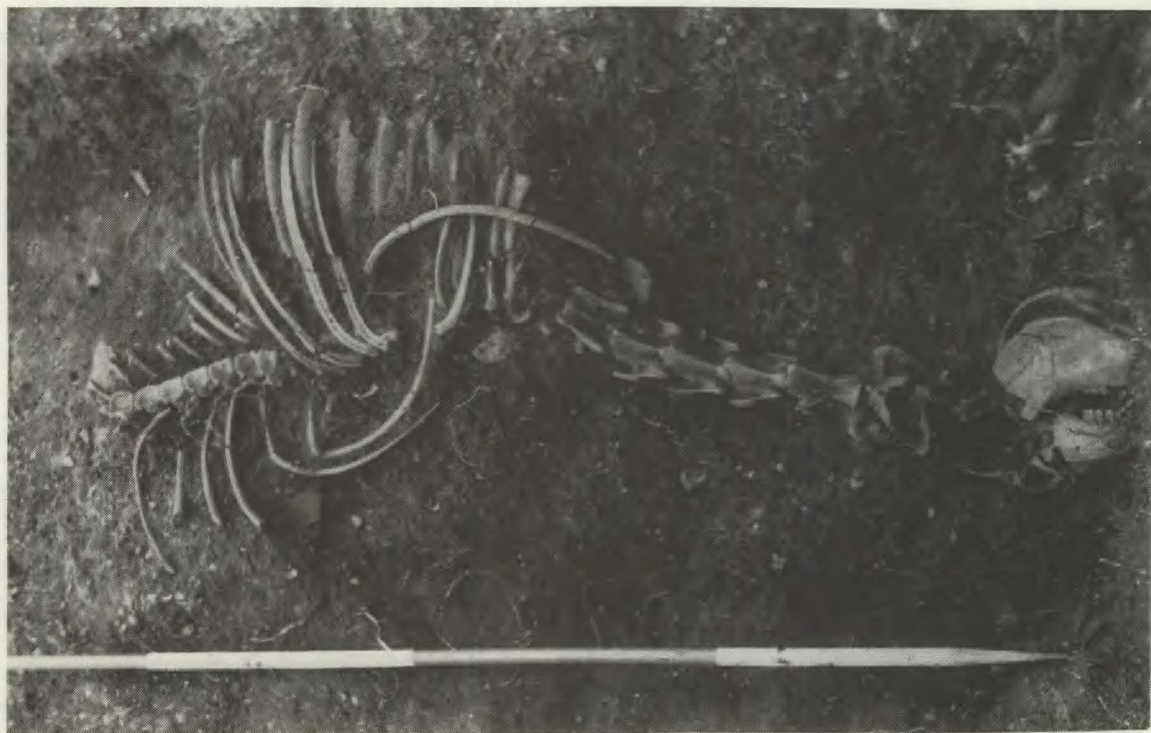
The finds from the pits and wells are not detailed here. Total finds assemblages were not recovered as only the bottom parts of features remained after the mechanical removal of the overburden. However, the following finds have been included in the catalogue:

PHASE A: (5) C6 554. (9) B1 153. (15) copper alloy buckle 1374. (16) grinding stone 1149. (21) green-glazed earthenware 846; B4 286. (26) C2 482; glazed earthenware 818. (74) Chinese Porcelain 993, 994; clay pipe 1045.

PHASE B: (25) copper alloy pin 1321. (27) B12 442. (38) B8 387; C8 576; C52 – 732; Cistercian 850; earthenware 804; iron key 1425. (81) earthenware 810. (86) copper alloy pin 1318. (120) copper alloy object 1393.

PHASE C: (1) copper alloy pin 1314. (97) C3 507; green-glazed earthenware 845, 847; Staffs slipware 871; local slipware 880; Delft 928, 935, 940; clay pipe 1004; copper alloy objects 1348, 1352; iron pin 1436.

UNSTRATIFIED: A12 111; B1 180; B5 327; B8 388; C1 455; C7 565; C9 585; C34 714; E5 – 796; roof tile 1102; lead strip 1509. (3) B9 415, 425. (9) local slipware 863. (154) clay pipe 1049.



Pl 23 St John's Street, 1976/2, trench II, Medieval horse skeleton.

Period 2: Medieval

PHASE D: (17) A12 89; C43 730. (77) A9 58 (22) C8 567; C36 – 723. (61) Roman pot 17; C12 609.

PHASE E: (11) C1 463; C5 546; C9 596; E2 768; clay pipe 1040, 1066; copper alloy objects 1310, 1342, 1361.

PHASE F Finds from the well-house and associated layers: B4 285; C5 547; C9 582; C23 679; C28 693; C39 728; E1 755; ridge tile 1092.

Period 1: Saxo-Norman/Early Medieval

Features not included in phase plan: (75) window glass 1309. (89) E2 774. (148) daub 1108.

Characteristic assemblages for pits in phases H, I and J are given in the table below. Other finds from Period 1 included in the catalogue are as follows:

PHASE G: (37 + 131) C40 741; E1 748; E2 758, 761; E3 763; glazed earthenware 829; copper alloy ring 1387. (103) Roman 8. (104) B5 326. (107) B4 305; C3 494; C22 670; C28 695. (153) B4 296, 297. (155) B3 259.

PHASE H: (35) C6 555; E2 766. (35 + 105) bone skate 1512. (46) B11 439. (49) B4 302; C2 489; C12 612; C14 638. (54 + 66 + 128) B2 244; C12 608, 616; C22 668. (106) C7 564; C12 615; grinding stone 1147. (110) B2 238. (142) daub 1110. (147) daub 1109. (152) E3 784.

PHASE I: (123) C8 577.

PHASE J: (36) C2 487. (69) C12 622. (108) B1 179, 228; B2 247; B3 258; B4 271, 289; B6 349; C8 571. (146) B1 162.

TRENCH II

The following finds have been included in the catalogue.

Medieval Occupation

(540) 404 B8; 1515 bone skate. (542) 718 C36; 337 B5.

Post-Medieval Occupation

In the absence of significant material assemblages from pits etc. the finds are grouped here according to type rather than to context in the first instance.

Vessel Glass: (502) 1207, 1221, 1222, 1233; (503) 1188, 1214, 1235; (505) 1186, 1187, 1190, 1202, 1203, 1213, 1220; (510) 1158; (526) 1242. Clay Pipe: (505) 1018, 1020, 1043; (507) 1053, 1056; (513) 1073; (518) 1050; (519) 1041, 1042, 1051, 1063; (520) 1030; (526) 1013, 1015, 1062. Delft: (513) 965; (521) 959; (537) 960. Unglazed Earthenware: (506) 814; (508) 805; (537) 813. Glazed Earthenware: (505) 820; (508) 835; (537) 817, 828. Stoneware: (502) 912; (505) 896, 900; (510) 888; (519) 906. Local Slipware: (505) 860; (537) 858. Staffs Slipware: (510) 868, 876. Coarseware ES: (537) 793. C Wares: (505) C10 606; (521) C10 607; C11 595; C24 680; C35 716; C36 722; C44 735; (529) C3 503; C24 681. B Wares: (521) B8 390; (529) B1 206, 210; B4 308; 138 409. Roman Pot: (521) 5. Tile: (521) 1093, 1101.

Pottery		Other Finds
Phase G 131	.250kg B wares, B1, B4, B8 1.675kg C wares, C4, C5, C9, C11A, C15, C17, C25, C40	Animal bone, oyster and mussel shell Slag 275g, daub 75g
Phase H 52	3.850kg B wares, B1, B2, B4, B5, B6, B8, B11 .275kg C wares, C1, C4, C9, C29, C361 Cat: B1 - 127, 135, 158, 218; B2 - 242; B4 - 304; B8 - 393, 394; C36 - 725	Animal bone, oyster shell, slag 275kg daub 1,750g, iron, lead and copper alloy objects lead ingot - 1511; bone skate - 1513
83	13.400kg B wares, B1, B2, B3, B4, B5, B6, B7, B8, B11 3.95kg C wares C1, C2, C3, C4, C5, C6, C9, C11A, C20 C22, C36 Cat: Roman pot - 4; A9 - 59; A10 - 63, 64, 66, 68, 70, 71, 72; A12 - 93; B1 - 224; B3 - 264; B7 - 358; B8 - 371, 406 C1 - 451, 460; C22 - 666, 673	Animal bone, oyster shell, daub 3.5kg, slag 925g, some of 'Saxon' type iron, copper alloy, stone objects daub - 1107; bone plate - 1525
Phase 1 34	8.625kg B wares, B1, B2, B3, B4, B6, B8, B11 .250kg C wares, C8, C9, C11A Cat: A9 - 61; B1 - 156, 197, 222; B3 - 262; C98 - 566 C19 - 655	Animal bone, slag 375g, daub 125g iron fragments bone objects - 1542, 1551
39	11.75kg B wares, B1, B2, B4, B6, B7, B8 0.550kg C wares, C5, C8, C10, C51 Cat: A9 - 57, 62; B1 - 149, 185, 186, 203, 211, 217; B4 - 269; C8 - 573, 575; C28 - 697; C51 - 731	Animal bone, oyster shell, slag 450g daub 100g iron, copper alloy, stone objects bone toggle - 1547 iron object - 1430 lead disc, possible seal (poor condition)
127	7.90kg B wares, B1, B4 0.850kg C wares, C5 Cat: B1 - 124, 126, 140, 208, 209, 214, 215; B4 - 310 E1 756	Animal bone, slag 1.050kg, daub 50g iron and bone objects bone items - 1552, 1553

Fig 77 1976/2 Trench I: table of material remains from period 1 rubbish pits.

Bone Objects: (506) 1548; (519) 1546; (521) 1522.
Stone Objects: (524) 1150; (529) 1137, 1139. Lead
Objects: (527) 1506. Copper Alloy Objects: (506) 1378;
(510) 1362; (520) 1409; (537) 1388. Iron Objects: (508)
1420, 1441; (513) 1453.

THE ANIMAL BONES

by P. G. Duke, summarised by Annie Grant

The majority of bones found at this site were recovered from Saxo-Norman/Early Medieval contexts, but a few were dated to the Post-Medieval occupation of the site. The animals represented at the site were cattle, sheep, pigs, horses, birds, dogs, deer, rodents, fish and hare. Full details of the numbers and percentages of bones recovered for each species are given in Table 77B.

There are no significant differences between the representation of the various species in the two main periods studied. In both, the most frequently represented species was sheep, with cattle the next most common. Pig bones were not very frequently found at the site and very few horse bones were found. The majority of dog bones found in the Medieval deposits were from a single complete dog skeleton found in Pit 107. A fair number of bird bones were found, but fish and deer bones were very rare.

Although more sheep than cattle bones were found, when the relative meat yields of these two animals is considered, it would appear that cattle provided the majority of the meat at the site. Pork and bird would have added variety, if not much quantity.

There was no evidence from the analysis of skeletal element representation of there having been any preliminary butchery of the carcasses before they were brought to the site, as almost all skeletal elements were represented. In contrast to the 1967 and 1974 excavations in St John's Street, there was no great number of horn cores found to suggest the presence of a horn industry.

The bones were examined for butchery marks. Many of the long bones showed signs of having been subject to knife cuts and heavy chops, although in many cases it was difficult to decide whether a bone had been deliberately cut or accidentally broken. More specifically, one cattle metatarsal had been split longitudinally, possibly to remove the marrow.

There was little evidence on the bones for any disease, although the proximal ends of the first phalange of cattle seemed to be particularly susceptible to an osteo-arthritis condition which, in some cases, would have impeded movement of the joint.

It was possible to analyse some of the long bones and mandibles for age at death. No cattle bone could be aged positively as being over four years, whilst there appeared

	<i>Medieval</i>				<i>Post-Medieval</i>			
	Epiphyses		Fragments		Epiphyses		Fragments	
	No	%	No	%	No	%	No	%
Cattle	399	24	876	33	48	25	102	31
Sheep	577	33	1119	42	67	34	170	52
Pig	114	7	182	7	10	5	14	4
Horse	17	1	23	0.8	2	—	5	1.5
Bird	467	28	325	12.3	59	30	31	9
Dog	78	5	91	3.5	6	—	5	1.5
Hare	21	1	12	—	—	—	—	—
Rodent	4	—	5	—	3	—	3	—
Fish	—	—	2	—	—	—	—	—
Deer	12	—	9	—	—	—	—	—
Total	1669	—	2644	—	195	—	330	—

Fig 77b 1976/2 The Animal Bones

to be a concentration of age at death between 1½ and 3½ years old. The examination of the sheep bones suggested a preferred killing of animals in their third year and possibly also in their fourth year. Of the small number of pig bones that it was possible to age, more than 50% were from animals of less than 2 years old. Very few mandibles were found suitable for analysis, but 2 year cattle mandibles were found and 4 second year mandibles. The majority of sheep mandibles and the 4 pig mandibles were from animals in their second year.

The bones from Trench II, the St John's Hospital area, were analysed separately in order to accommodate any possible variation in economic practices. Very few bones were found in this area but the general proportions of species represented were similar to those in the main trench discussed above. An apparent increase in dog in the Post-Medieval levels is due to the presence in *layer 513* of most of a dog skeleton. Of interest also is Medieval *Pit*

540 where a full skeleton of a horse, apart from its limbs, was found. The reason behind the absence of the limbs remains unclear.

A number of small artefacts made of animal bone were found during the excavation and are discussed under the appropriate finds section.

All working tables have been deposited in Bedford Museum, together with the complete identification register and measurements etc. for all the bones analysed in this report.

Acknowledgements

I would like to express my gratitude to Mrs A. Grant for her advice on the preparation of this report. Also my sincere thanks are due to Miss Jane Hassall and Mr John Turner, both of Bedford Museum, for their help and encouragement.

St Mary's Street
DAVID BAKER and JANE HASSALL

SUMMARY

Excavations took place on the west side of the street, on three sites which became available after clearance for comprehensive redevelopment, most of which had not taken place five years later. The excavations are described separately, and the results are summarised together with some general conclusions in a final discussion.

5 – 11 ST MARY'S STREET
(BSM71/72 23; BSM72 28)
(Figs 78 – 82)
by DAVID BAKER

SUMMARY

Evidence of three main periods of activity was recovered from two trenches, though detailed correlation between them was not possible.

1 Saxo-Norman timber structures on a west – east axis lay close to the street with pits behind to the west.

2 During the 14th/15th centuries, ovens and hearths were frequently built and rebuilt, inter-cutting each other, in two main complexes, one in each trench with little evidence for enclosing structures.

3 Post-Medieval activity disturbed much of the earlier levels: a hearth and an oven of this period were found at the west end of the north trench.

INTRODUCTION

The site of Nos 5 – 11 St Mary's Street lies close to the south end of the Town Bridge, and was the first of three plots to become available on the west side of the street. Its stratification was perhaps the most complex yet encountered in Bedford. The need for stepped safety baulks to protect existing adjacent flank walls cut down the area available for examination. A substantial east – west sewer entirely separated the two trenches. Deep modern foundations, cellars and service pipes made further disturbances. The detailed definition of clear overall phases of activity was correspondingly hampered (fig 81).

The two trenches are reported separately. Despite the similarities of the occupation in each

period, the lack of direct correlation remains. Consideration of the site as a whole is therefore confined to the final discussion.

This is a summary report which draws upon the preliminary interpretative essays by the trench supervisors. Their more detailed descriptions of the complex evidence from this site can be found in the archive. The published drawings show some details not discussed in the text, which itself mentions some that are not illustrated.

Evelyn Baker assisted with publication preparation and made the final drawings.

THE EXCAVATIONS: BSM71/72 23

INTRODUCTION

The northern trench was commenced in the summer of 1971 under the supervision of Andrew Cooper, and completed by him during the summer session of 1972. The trench was opened by machine.

The main periods and phases of activity seen within this trench were as follows, dating being indicated by pottery evidence.

Period 1 A	Slots and pits:	Saxo-Norman
B	Spreads and pits:	13th/14th century
C	Spreads and slag:	13th/14th century
Period 2 D	Hearths and ovens:	14th/15th century
E	Hearths and ovens:	14th/15th century
Period 3 F	Hearth, oven and building:	Post-Medieval

PERIOD 1

Phase A (Fig 78)

Phase 1a included an east-west beam slot (129) cut about 0.20m into natural subsoil, two shallower features (100) and (112a), and three small post-holes, (98), (107) and (108). Part of a deep pit (101), filled with rich black earths, clays and large stones, was excavated to about 1.08m below the surface of natural subsoil.

Phase B (not illustrated)

Phase 1b consisted of various spreads of gravel, clay and earth, as well as pits (135) (137) and (147), at the west end of the trench.



Pl 24 St Mary's Street, BSM71 23, general view facing east at Periods 2 and 3.

Phase C (not illustrated)

Phase 1c was represented by clay spreads, mainly of green clayey soil, but with some limestone rubble (74). (142) consisted of layers of multi-coloured burning and burnt clay, with a slag content. Leo Biek has identified both smithing and smelting slag from the contexts of this period.

PERIOD 2 (Figs 79, 80) (Pls 24, 25)

Phase D

The earlier phase of Period 2 included layers of clay and burnt material, underlying a sequence of three hearths and ovens. The earliest (178) was a circular oven constructed of pitched limestone pieces. It had been damaged by the stoke-hole on the north side of (42), another oven, also circular in shape, which had been built over its remains. (42) was made of limestone blocks, with two or three courses of wall surviving, and a floor of well-fitting flat stones. The stoke-hole was a pit cut deeply relative to the rest of the oven, with a solid wall on either side, joined to the oven itself. The fill of the oven consisted of layers of clay and burnt material. Adjacent spreads of gravel, ash and burning (10) (5) and (37) (not illustrated) were probably related. (42) was the only oven or hearth of this period which showed any evidence of structural attachments (fig 80). There may have been another hearth (42a) intermediate between (178) and (42), which had destroyed all of it except a layer of blackened clay.

Cut into (42) was (4), consisting of a flat stone base burnt black with some surviving border stones, surrounded by circular areas of burnt clay and earth. This was associated with an oven which lay under the north baulk of the trench. A contemporary feature, also disappearing into the north section was (30), a large pit mainly filled with green clay, having a substantial stone wall lining it on the west and a bottom of rough but well-laid stones. Another possible hearth or oven was (8a), a small feature against the south side of the trench.

Phase E

A later stage of apparently continuous hearth activity included (5), a large free-standing hearth. This was constructed with limestones, many laid upon their ends, and cobbles. Its original shape had probably been oval, but its south side and base had been destroyed. At the west end of the trench was a complex of intercutting pits (16), (17) and (27), possibly dug at a later stage in Period 2 through accumulated clay and burning layers associated with the hearths and ovens.

PERIOD 3 (Fig 79) (Pl 24)

Phase F Post-Medieval

A layer of yellow clay (9) over most of the north-west part of the trench sealed the complexes of Medieval hearths and ovens. Two Post-Medieval features seen immediately after the initial machine clearance deserve mention. (2) was an ovoid brick oven with two to four courses of brick surviving. It was filled with loose ash, earth and charcoal, together with some brick rubble. To the east, and probably contemporary with (2) was an H-shaped foundation Wall A (7). Two or three surviving courses of large limestone blocks were bonded in yellow sandy mortar. The only possible evidence for the outer walls of the building in which it might have been placed was (8), which ran along the south section and would have been largely destroyed by the sewer trench under the baulk.

FINDS

PERIOD 1

Phase A: pottery fabrics included B1, B3, B4, B5, B8 and C2.

Catalogue: (97) B1 212. (100) B1 194. (101) B1 139.

Phase B: pottery fabrics included A11, B1, B3, B4, B5, B6, B7, B8, B9, B10, B11.

Catalogue: (105) B5 339. (106) A12 90. (117) B7 355. (137) B1 130. (138) B11 440.

Phase C: pottery fabrics included B1, B4, B8, B11, C1, C2, C3, C5, C6, C27, C29, C30, C36.

Catalogue: (72) B1 spout 144; C27 688. (84) C30 707. (121) Roman pot 9; C1 468; C36 726; bone spindle-whorl 1529; bone handle 1545. (150) C2 471.

PERIOD 2

Phase D: pottery fabrics included B1, B3, B4, B5, B6, B8, B11, C1, C2, C3, C4, C6, C12, C13, C22.

Catalogue: (4) C6 560. (56) copper alloy stud 1337. (57) C4 526; copper alloy knob 1403. (59) B5 338. (63) C13 644. (77) B3 263; decorated loom-weight 1143.



Pl 25 St Mary's Street, BSM71 23, Period 2D: ovens (42) in centre, (30) below left: view facing south.

Phase E: pottery fabrics included: A12, B1, B2, B4, B5, B6, B8, B11, B12, C1, C2, C3, C4, C5, C6, C9, C10, C11, C25, C28, C29, C36, C54.
Catalogue: (3) B2 341. (6) spindlewhorl 1142. (10) C1 453. (12) B5 317; C5 543. (17) Roman pot 2. (18) A12 98; B4 276; C2 483; C3 495; C54 738. (27) B12 443; C2 488; C6 553. (34) C3 512; Roman pot 1. (37) C25 687. (49) B4 279; 309.

PERIOD 3

Catalogue: (1) B11 433; C10 602; copper alloy fastening 1347; copper alloy brooch 1371.

THE EXCAVATIONS: BSM72 28

INTRODUCTION

The south trench was excavated during the summer of 1972 under the supervision of Susan Linger. It was opened by machine. The main periods and phases of activity seen within the trench were as follows, dating being indicated by pottery evidence.

Period 1 A	Slot, post-holes, pits and burning:	Saxo-Norman
B	Slot and pits:	12th/13th century
C	Spreads and slag:	13th/14th century

Period 2 D)		
E)	Hearths and ovens:	14th/15th century
F)		
Period 3		Post-Medieval

PERIOD 1 (Fig 78)

Phase A

Phase 1a included an extensive spread of ash and burning (144) with much charcoal and a possible burnt beam, lying above natural clay, into which had been cut a few stake-holes. A possible slot (172) with three post-holes cut into it, and a post pit (174), were cut by the main beam slot of Phase 1b, and may therefore belong to this first phase.

Phase B

Phase 1b consisted of a substantial beam slot (138) with a rectangular profile about 0.35m deep, filled with clay and slag. There were three possible associated post settings to the south. Other less distinct features had the same fill, but their relationship to the main slot was less certain: they included a possible slot (87) at the east end of the trench and three post-holes (86) (89) (173). Refuse pits contemporary with this building were concentrated at the west end of the trench, in a sequence from earliest to latest of (178) (177) (168) (156) (162) (164) (165) (166) (not illustrated).

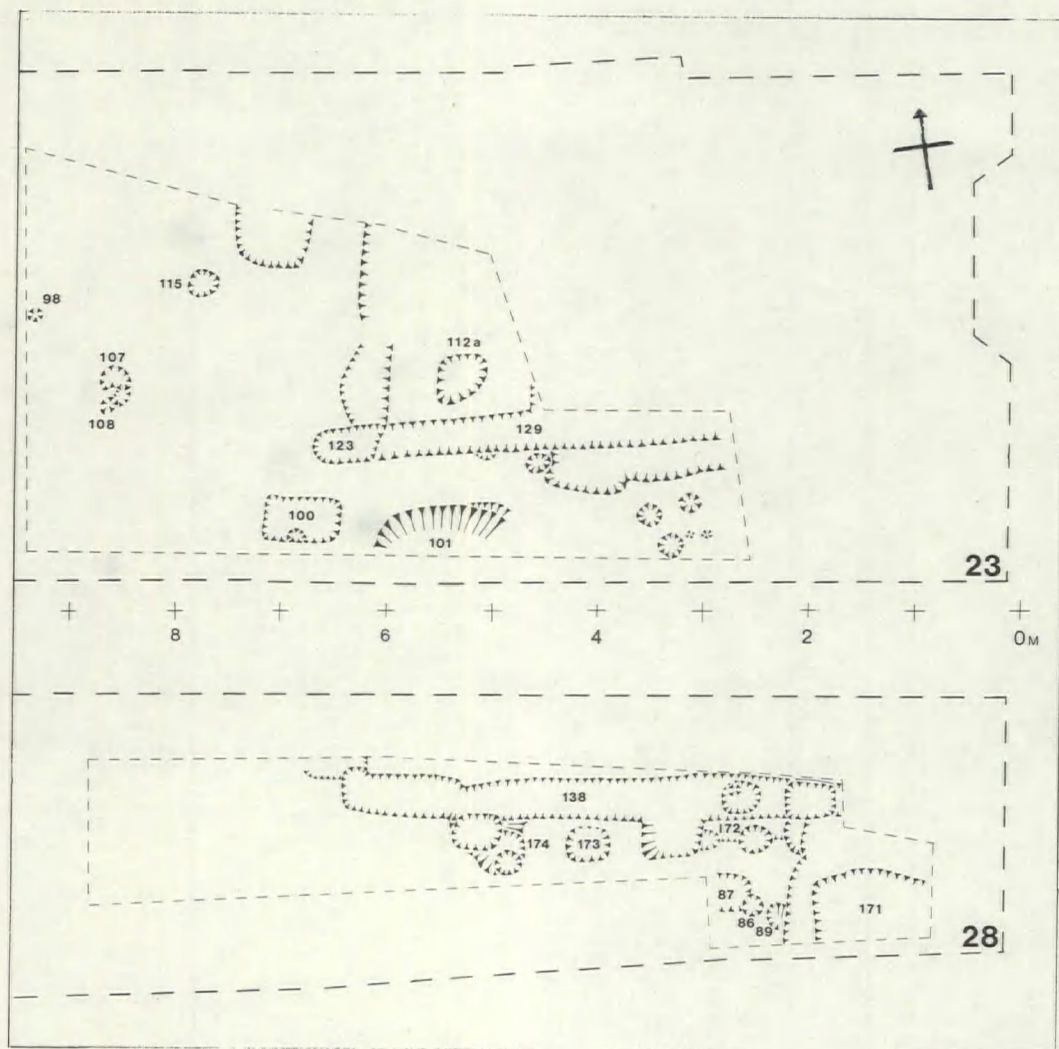


Fig 78 St Mary's Street: trenches 23 and 28, Saxo-Norman features cut into natural subsoil.

Phase C (not illustrated)

Phase 1c overlaid this evidence of early timber buildings. It consisted of spreads with some post-holes cut into them, and a quantity of slag was recovered, suggesting some iron-smelting. (17) was a compacted, almost metallised surface seen in three discontinuous areas. It was cut by several pits or shallow depressions filled with iron-stained earth and slag. The most notable was (18), a large rectangular pit containing very large lumps of smithing and smelting slag with molten pipes (identified by Leo Biek). It was also cut by four stake-holes in an arc around a slag-filled depression (56). Occupation spreads for this area were of greeny-brown clayey earth, one of which contained iron traces (141). West of the iron slag area was a firm surface of yellow clay (151) cut by two possible slots (154) (152) and several post-holes (153) (159) (160)

(161).

PERIOD 2 (Figs 78, 79) (Pl 26, 27)

Phase D

This phase included a series of burnt clay surfaces stratified over each other. They consisted of five approximately circular patches of yellow and red clay with soft grey and harder cream ash on top of them. They included (50) (121) (126) (129) (131) (not illustrated) and (106) (pl 26) in the west end of the trench. On top of these was a circular stone hearth (112), comprising two courses of large flat limestone blocks set in yellow clay. Its centre was filled with soft pink sandy clay under a layer of burning, and it had been laid upon a circular patch of clay which was about 0.15m thick.

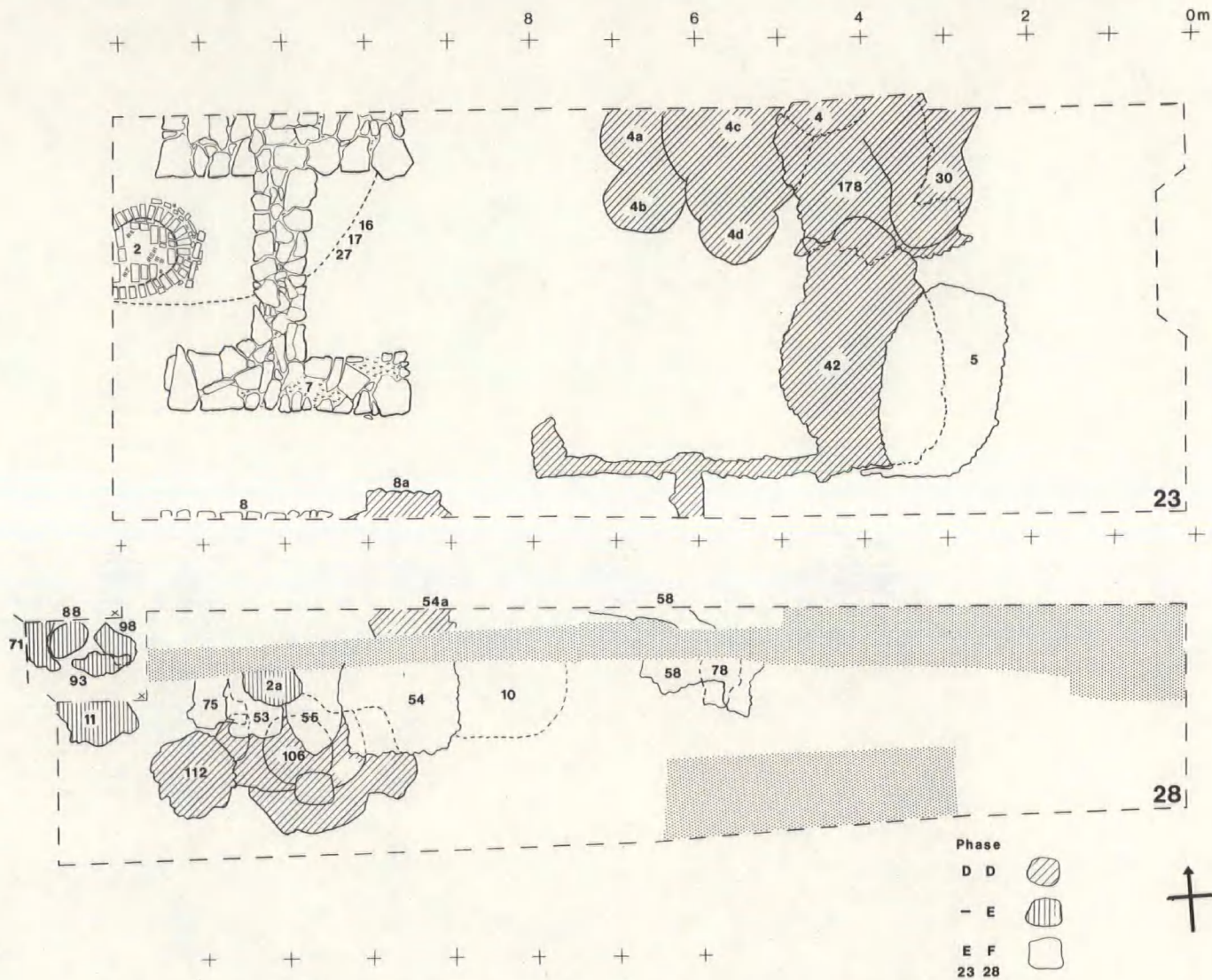


Fig 79 St Mary's Street: trenches 23 and 28, Medieval and Post-Medieval ovens and hearths, locations.

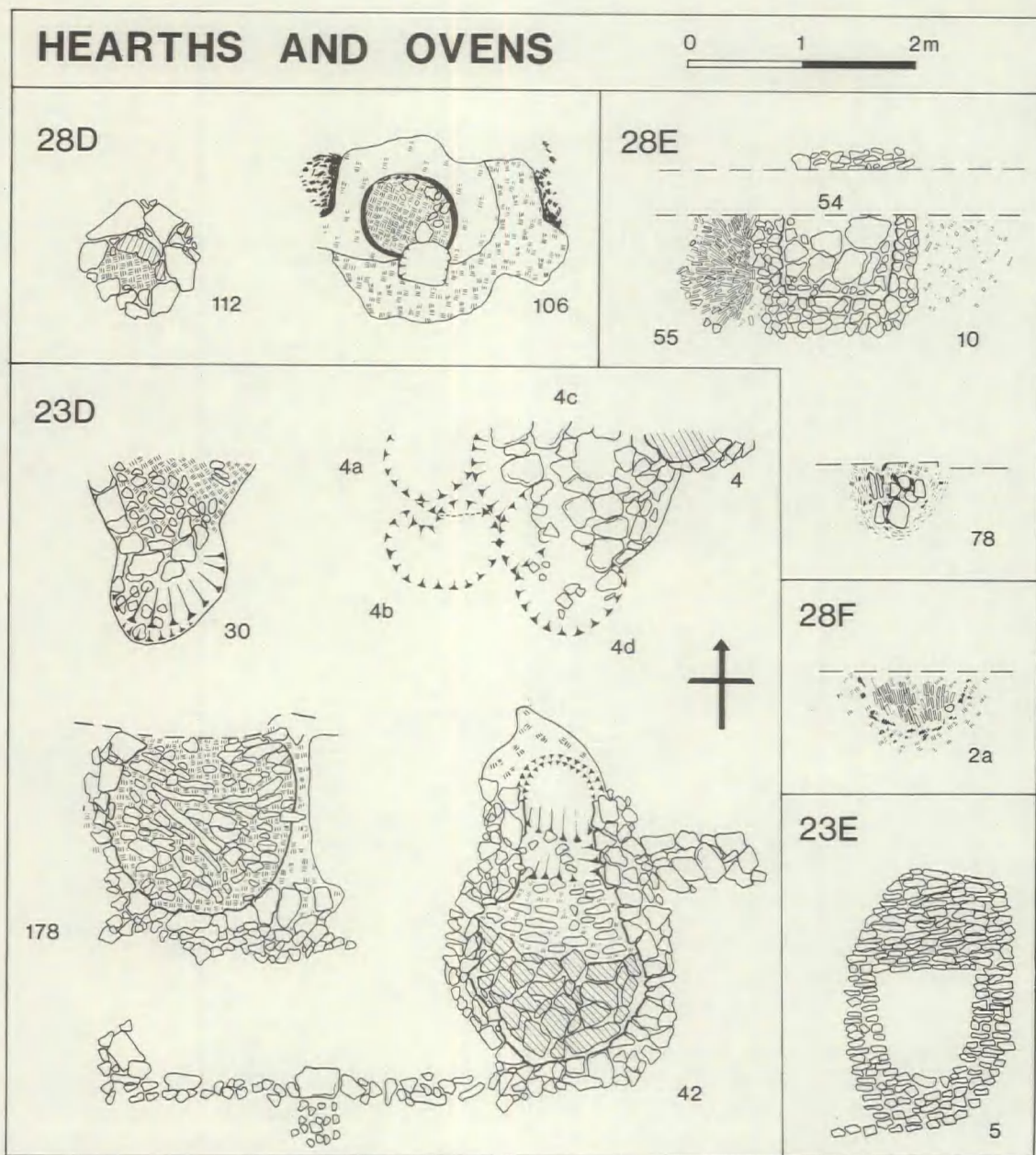


Fig 80 St Mary's Street: trenches 23 and 28, individual Medieval hearths and ovens.

Phase E

The second phase included two compact burning surfaces. (75) was a roughly square area of hard burnt red sandy clay enclosed by a few large partially burnt stones; it was followed by (53), a roughly square surface comprised of decayed clunch blocks and hard red clay. Both

were surrounded by spreads of burnt material.

They were followed by the rectangular stone oven (54) (pl 27) which had a flat base of large limestone blocks, and a wall-like limestone surround of one to two surviving courses set in orange clay. The oven itself was filled with orange clay, a layer of soft burnt material lying

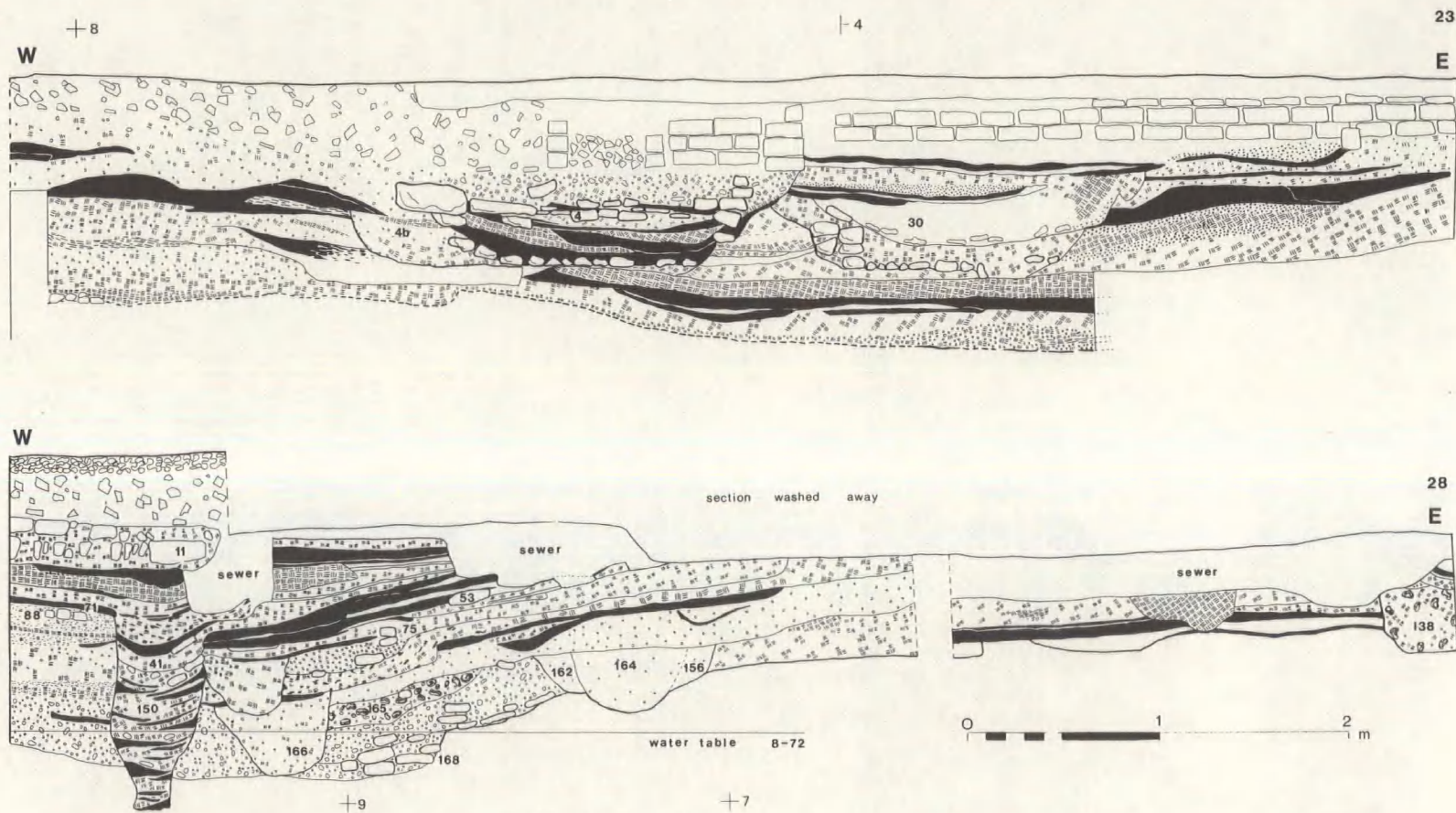
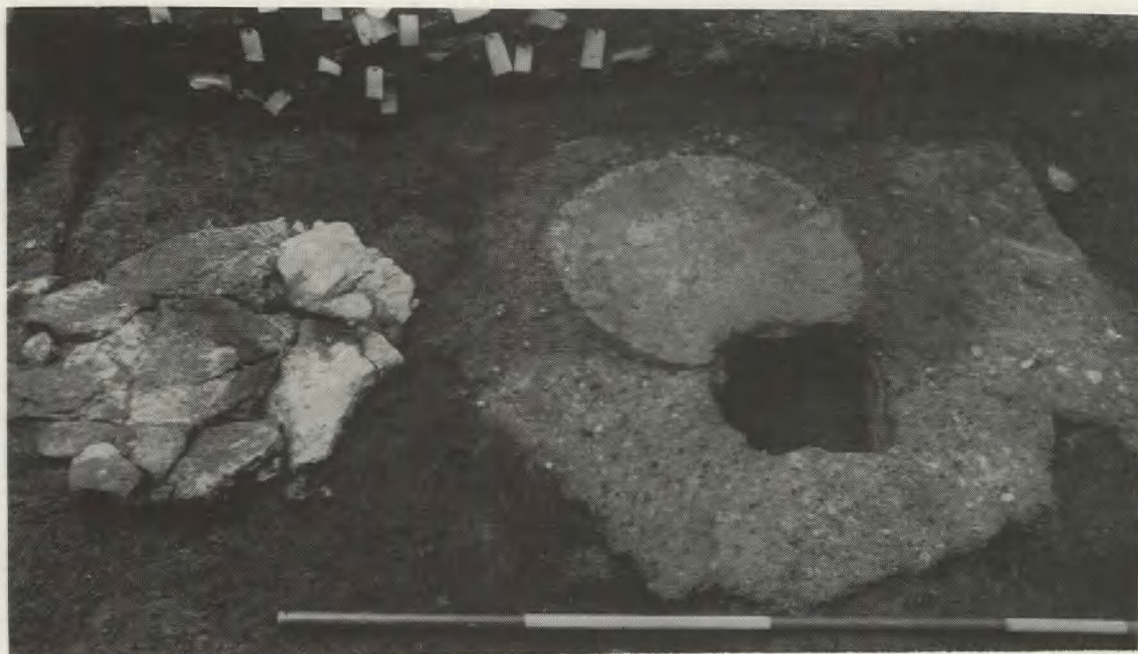


Fig 81 St Mary's Street: north sections of trenches 23 and 28.



Pl 26 St Mary's Street, BSM72 28, Period 2D: hearth (112) left, (106) etc. right: view facing north.

immediately on the stones. The north edge of this oven had been cut by a modern sewer trench. A small fan-shaped tile hearth (55), with vertically laid tiles set in red sandy clay, had been built against the west side of the oven. A spread of crushed tile (10) and red sandy clay on the east side of the oven probably represent the remains of a similar hearth on that side. A complex series of burning layers was associated with the oven and the hearth, consisting of patches of hard red clay and very thin layers 1 – 2mm thick, presumably representing successive firings. They were only seen to the west of the oven complex, suggesting material was only thrown out on this side, where there was also a pit about 0.80m deep filled with clay, burnt material and burnt stone.

To the east of (54) and contemporary with it was another hearth or oven base (58) consisting of burnt stones set vertically and horizontally in orange clay, but much mutilated by later disturbances. Under it was another stone feature (78). Both (54) and (58) could have continued in use into Phase F, but this could not be conclusively shown.

Various spreads or occupation layers were seen, consisting of interleaved layers of yellow clay and burning, but their discontinuous nature made it difficult to associate them with particular ovens or hearths. Evidence of the whole phase was sealed by a layer of dirty yellow clay (41), effectively separating it from the next series of activity.

Phase F

This consisted of fragmentary evidence for five successive stages of probably circular hearths, surrounded by very thin patchy layers of burning and clay both burnt and unburnt. (98) was a fragmentary hearth constructed

over the clay spread (41): it consisted of vertically laid burnt stones set in yellow sandy and burnt red sandy clay. (93) was a similarly constructed hearth, a roughly formed arc of burnt stones, surrounded by unburnt stones. It had been cut by the construction for (88), a small hearth consisting of roof tiles laid on edge in burnt red sandy clay, with a layer of yellow sandy clay contained within it. Next in sequence was (71), the extreme edge of a stone hearth, seen as a rough curve of three or four courses of limestone blocks, some burnt, all set in yellow clay.

The latest features in this sequence were two more hearths. (11) consisted of a foundation surface of vertically laid irregular limestone blocks below a surface of burnt stones, also laid vertically but at right angles to the lower stones, and set in orange clay. Contemporary with it and 2m further east was a small tile hearth (2a) consisting of clay roof tiles set on edge in red crushed tile, and soft and hard red burnt clay.

Several spreads were seen, but were mostly removed mechanically with the opening up of the trench, and could not be associated with particular hearths.

PERIOD 3

Post-Medieval stratification had been entirely removed either by the last use of the site or by the process of mechanical top-stripping, during the course of which no structures were observed.

FINDS

PERIOD 1

Phase A: pottery fabrics included B1 and B4 only.

Phase B: pottery fabrics included A11, B1, B2, B4, B6, B8.

Catalogue: (134) B1 150. (163) A11 78; B2 234. (168) whetstone 1133.

Phase C: pottery fabrics included B1, B2, B4, B5, B8, C1, C3, C5, C24, C26, C27, C30.

Catalogue: (18) bars with smithing slag 1447. (120) B ware spindle-whorl 999; C30 702.

PERIOD 2

Phase D: pottery fabrics included B1, B4, B8, C1, C28.

Catalogue: (61) roof tile fabric C1 1095.

Phase E: pottery fabrics included B1, B4, B5, B6, B7, B8, B9, B10, B11, C1, C2, C5, C22.

Catalogue: (27) B1 225; C22 671. (28) roof tile fabric B 1091; Purbeck marble architectural fragment 1153. (104) B10 426. (150) C2 471.

Phase F: pottery fabrics included B1, B4, B5, B6, B8, B9, B11, C12, C15, C19.

Catalogue: (16) C15 640; C19 651 654. (108) B6 341.

PERIOD 3

Catalogue: (1) C35 742; E3 777 789.

THE ANIMAL BONES

by ANNIE GRANT

895 bone fragments were examined from this site, of which 590 were identified. The species represented were cattle, sheep, pigs, horses and birds. One goat horn core was also found. The material had been assigned to six phases of occupation but there is little evidence for any change in the kind of bone refuse that was deposited at the site in the various phases. Slight differences in the percentages of species from phase to phase are not regarded as significant because of the small size of the sample.

Table 82 gives numbers and percentages of bones found for each species in all phases. Sheep bones were the most numerous in all phases of occupation, followed, in order of frequency, by cattle, then pig bones. Only a few horse bones were found and only in Period 1 layers. Their absence from the deposits of the other phases may merely be related to the small numbers of bones dated to the other phases. A few bird bones were found but none of dog or cat.

Despite the complete absence of dog remains at the site, gnaw marks were found on bones dated to all phases of occupation. This suggests that dogs were present at the site but that their remains were disposed of elsewhere.

All skeletal parts of cattle, sheep and pigs were represented. Evidence of butchery was seen in chop marks on several bones, especially those of cattle and sheep, and in occasional knife marks on sheep bones.

The available evidence for the age of the animals suggests that the majority of the cattle and sheep were mature when they died, although there were some bones of young and juvenile animals of both species. In contrast, the majority of the pigs were immature.

A sheep mandible from a Medieval context exhibited evidence of severe periodontal disease, with a localized infection below the second cusp of the second molar and the first cusp of the third molar. The mandible was from an old animal.



Pl 27 St Mary's Street, BSM72 28, Period 2: hearths and ovens at west end of trench, view facing east.

Epiphyses*	All Phases	
	No	%
Cattle	37	21
Sheep	110	63
Pig	18	10
Horse	3	2
Bird	6	3
TOTAL	174	
Fragments*		
Cattle	97	24
Sheep	241	60
Pig	45	11
Horse	3	1
Bird	15	4
TOTAL	401	
Ribs	159	
Skull fragments	30	
TOTAL	590	

Fig 82 St Mary's Street, trenches 23 and 28, analysis of the animal bones. (*See Grant, 1975).

DISCUSSION

Any overall consideration of activity on this site must be preceded by observations on the problems of correlation between the two trenches. In

1971/2, three periods with sub-phases were distinguished stratigraphically in the process of excavation. Detailed study of the pottery has however blurred these distinctions chronologically and made the comparison of phases and periods between the trenches more problematical.

In both trenches, pottery evidence extends Period 1 into the 13th – 14th century, which overlaps with the 14th – 15th century date range of Period 2. The slots, post-holes and pits of Period 1 are shown on one plan in figure 78, though the pottery evidence from Phase 1a in Trenches 23 and 28 suggests Norman and early Saxo-Norman dates respectively. It is idle to speculate whether Trench 28 contexts contained only residual material and Trench 23 included some intrusive sherds. Certainly, the two longitudinal slots running east-west cannot be seen clearly as either two walls of a single structure or single walls of two adjacent structures. One apparent correlation exists between the last phase (c) in each trench, with evidence for iron-smelting and smithing.

Period 2, dated to the 14th/15th century, saw intensive light industrial activity, as shown by a complex series of hearths and ovens with associated throw-out pits and spreads, built and rebuilt over each other. In Trench 23 these were found 2 – 7m from the modern street frontage, and 9 – 14m in Trench 28. No definite enclosing buildings were found. The term 'oven' has been applied to those features with indications of walls enclosing a central burning area, and 'hearth' to those where only a flat surface was evident.

The lack of slag in any quantity associated with these structures suggests baking or processes connected with brewing. If, as might be expected, sales were made from the place of manufacture, then the location at the south end of the bridge was undoubtedly strategic. If brewing processes were involved, proximity to a riverine water supply would have been important though it is difficult to be certain of its quality compared with that from any adjacent wells outside the excavation limits.

Hearths and ovens seemed to be disappearing under the trench edges to north and south, without any indication of structural walls for a building which enclosed them. This raises two questions: was the area in fact largely open at this period? Had it then been divided into the two plots which presumably existed by the Post-Medieval

period? There is no evidence to bear upon the first problem unless features like *BSM71 23 (8)* (fig 79) are interpreted as footings for main walls. On the second, the excavators suggested *BSM71 23 (8a)* might be part of *BSM72 28 (54a)* divided by the baulk and sewer between the two trenches. The latter is however more likely to be part of *BSM 72 28 (54)*, divided by another sewer trench, so the main baulk could still be coincident with a long-standing property boundary giving characteristically long narrow plots fronting on to the main street.

The excavated evidence of Period 3 is slight. Little from the 15th to 17th centuries was found, and it seems likely that 19th century construction activity disturbed or removed Post-Medieval remains, apart from the two features in Trench 23. There is some map evidence. The Reynolds Map of 1840 shows buildings going back from the street frontage on the site of Trench 23: only a small structure is shown on the south part of the site, and this may be represented by the alley paving over the sewer trench, providing access through the street front south of the main building. Though earlier maps, including the earliest by Speed in 1610, are insufficiently accurate for such detail, it may be that the situation shown in 1840 and preserved in the modern street numbering represents the existence of two urban plots for many centuries.

Building evidence only came from the northern trench, 23. If (7) was a back-to-back stone hearth foundation and (8) a related south wall footing, then another footing might lie under the north baulk, adjacent to the wall of the Anglers Inn/Bridge Hotel. Perhaps a three-unit town house with gable end to St Mary's Street can be suggested, with an unheated front room, and two heated rooms at the rear, the west end of the range probably represented by the east wall of the extant 19th century building at the rear of the site. Presumably this building was timber-framed. (7) might represent an insertion in an earlier single storey structure of late Medieval date, but there is no positive evidence. The brick oven (2) placed almost within the west side of the double hearth foundation, seems too far away from it to have used that chimney, and is presumed to be later, possibly representing an intermediate stage at the rear of the plot between the 3-unit timber-framed house and the 19th century shop whose brick bay foundation was evident on the street front.

17 – 19 ST MARY'S STREET (BSM72 38)

by JANE HASSALL

with a note on the timber-framed building by David Baker

SUMMARY

Trench 38 was long and narrow, occupying a single house-plot. At least four periods of occupation, covering the 11th – 18th centuries, were distinguished, each with separate phases. A late 17th – early 18th century building was recorded on the site prior to demolition in 1972. Excavation uncovered a 14th – 15th century stone building below on a different alignment. Another structure, probably of 11th – 12th century date, was represented by post-holes cut into the natural subsoil.

INTRODUCTION

Early in 1972 the partially timber framed building which occupied Nos 17 – 19 St Mary's Street (TL 05074945) was demolished in advance of proposed redevelopment of the site by the County Council for Mander College. As little archaeological work had been carried out south of the river at this time, and as this site provided a good opportunity to investigate back from the street frontage, excavation was considered worthwhile. In addition it was felt that useful material for comparison with Trenches 23 and 28 to the north might be obtained. The fact that the timber building had been recorded (see David Baker below) meant that there was a chance of establishing a below and above ground sequence of occupation.

Site 38, a narrow, rectangular trench occupying some 90 square metres was opened by machine and excavated over a three-week period in July and August 1972. Excavations were jointly funded by Bedford Corporation, Bedfordshire County Council and the Department of the Environment.

Thanks are due to all those who assisted on site. Bedfordshire County Council gave permission to excavate and Mander College kindly provided facilities for tea breaks and the storage of equipment.

EXCAVATION METHOD

The trench was opened by machine and modern overburden was removed to a depth of between

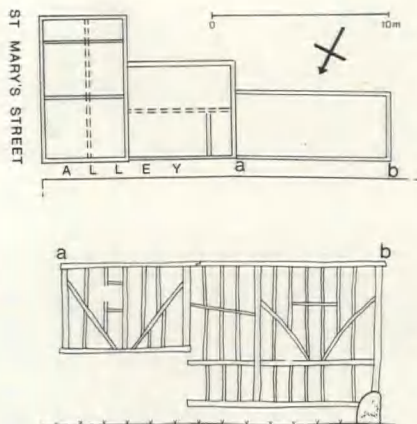


Fig 83 St Mary's Street: 17 – 19 (above trench 38), part-elevation and reconstructed ground plan of timber-framed building.

0.40 – 0.70m. Below this, excavation continued by hand down to natural subsoil over three-quarters of the area, the east end (nearest the street) being abandoned for archaeological purposes due to various modern disturbances. The extreme west end of the excavation was also left, after the heavy stone wall footings (32) discovered there had been recorded. Further interruptions were caused by the inevitable service trenches which crossed the site.

THE POST-MEDIEVAL TIMBER FRAMED BUILDING AT 17 – 19 ST MARY'S STREET by DAVID BAKER

In the latter stages of the demolition of this building, some recording of the few surviving early details was possible. *Figure 83* shows a simple reconstructed ground plan and the only intact elevation of timber-framed walling.

An alley way from St Mary's Street ran along the outside of the north wall of the building. Elements of timber-framing were present in three blocks running back from the street. The front portion had its axis parallel to the street. Its north gable end had been replaced by the south wall of 13 St Mary's Street, against which a steep pitched roof line was visible. Most of the other outer walls had been replaced up to wall plate level. Two blocks with axes at right angles to that of the front unit ran back westwards. The first had been heightened at some stage, probably in the 19th

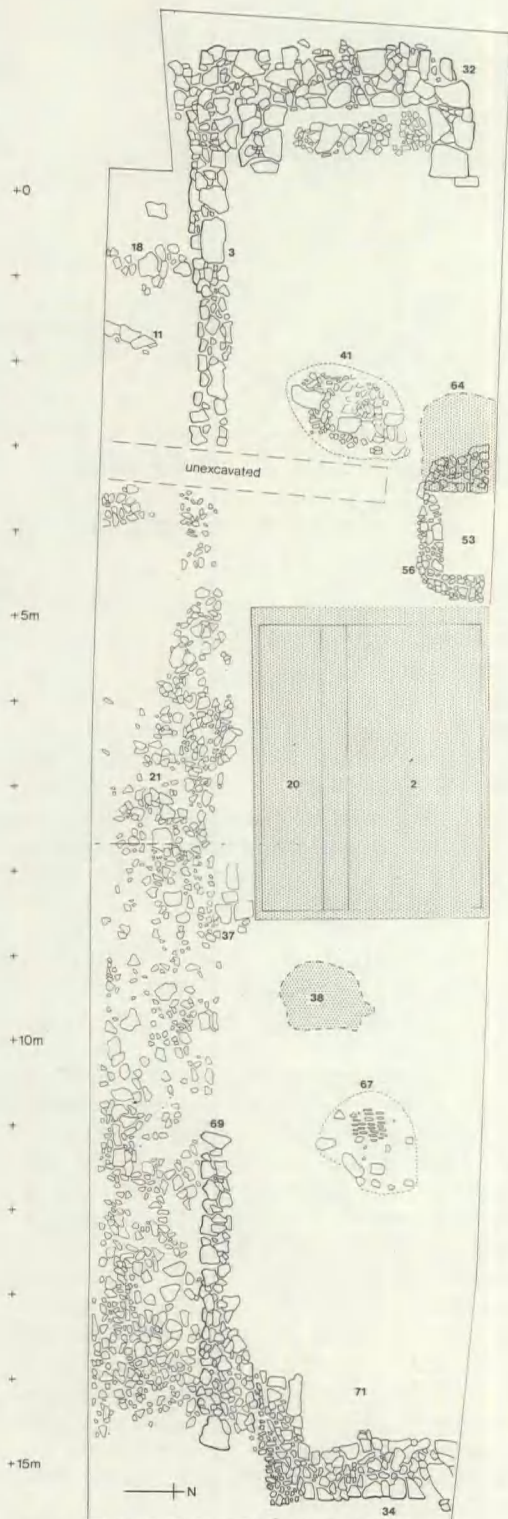


Fig 84 St Mary's Street: trench 38, periods 3 and 4. (Post-Medieval contexts shaded.)

century. The second, which was of single bay width had most of its north elevation surviving in timber-framing with brick infill (*fig 83, a-b*).

Dating these buildings is difficult in the absence of evidence for roof structure and the location of chimneys. Assuming that the major timbers had not been re-used from an earlier structure, their size and spacing, together with the pitch of the front unit roof, might suggest a sequence of construction from the road westwards in the later 17th and earlier 18th centuries.

Photographs taken during demolition and the original site sketches are stored in Bedfordshire County Council Sites and Monuments Record as PRN 1869.

THE EXCAVATION *PI 28*

by JANE HASSALL

Four periods of occupation were distinguished, each having various phases. They are summarised as follows:

Period 4 – phases A – D	Post-Medieval features, some relating to the timber framed building extant until 1972.
Period 3 – phases E – G	Late Medieval features – 14th – 16th century
Period 2 – phases H – L	Medieval features – 12th – 14th century
Period 1 – phase M	Early Medieval features – 11th – 12th century

Period 4 (fig 84) Post-Medieval

Cleaning the site after machine excavation produced a variety of 17th – 20th century material and uncovered several modern intrusions including service trenches (phases A and B). These disturbances occurred right across the site, thus obscuring various associations which would have been necessary in order to link excavated features with the former standing building. However, it seems likely that features from phases C and D were connected with this structure before its modification in the 19th – 20th centuries. A brick half-cellar (2) probably of mid-18th century date appears to respect the north and east walls of the most westerly of the three blocks of building described by Baker. In addition, two hearths, (38) and (64) may be associated. (64) lies against the north wall and to the west of cellar (2), in the western building, whilst (38) is in the middle building against the west wall. There was no indication that these fire places were intended for any purpose other than domestic use.

Period 3 (fig 84) 14th – 16th centuries

This period was characterised by stone wall footings and large areas of tumbled building stone. The structures thus represented predate the Period 4 building and are unrelated to it. Large areas to the east and west of the brick cellar were covered with limestone rubble (phase E).

Below this, lengths of walls (3) and (69), were distinguishable (phase F). Wall (3) was traceable for approximately 4.5m, being cut through to the east by a service trench. It appeared to stop just short of the west trench edge, and to be abutted by another stone feature (32).

This ran north-south and was approximately 2.8m long by 0.70m wide, with eastward projections, 0.90m long, at each end. Patches of ash, charcoal and burnt clay were found to the east of it, and in consequence it was interpreted as a large stone hearth.

Wall (69) did not connect with wall (3) but it was discovered to be on a similar alignment some 7.5m to the east. It ran for a length of 3.5m, and against its east end was an L-shaped wall, (34), running south-north out of the trench. Its shape and size indicated that it could well be a similar hearth to (32). Excavation within its area uncovered considerable layers of ash (71) and large amounts of smelting slag were found.

Another hearth was excavated, (41), towards the west end of the trench. This was formed on a bed of gravel set into a pit and topped with bands of ash, clay and charcoal. On top were a number of re-used roof tiles and pieces of limestone laid together to form a base for a subsequent fire.

The remains of one more stone feature came to light against the north section immediately north of the brick cellar (2). One end of this feature (53), protruded into the trench. It had been built in two sections, with an L-shaped piece running south and west, abutting a short north-south wall. Its function is difficult to determine. It was filled with a moist black loam in which was found a quantity of painted window glass (see finds section below) and other 14th century debris. Its shape suggests that it might have formed the end of a stone well-house, of the type noted at St John's 1976/2 and at Peacock's Yard 1977/1. However, the stone steps which are a feature of such structures, would have been situated under the line of the present day alley way, a boundary which was respected by the late 17th – early 18th century timber framed building (Baker above).

It is difficult to relate these structural remains to one another. There is no clear evidence to link the walls (3) and (69), but their similar nature and alignment suggest that they might have been part of the same structure, dating to the 14th – 16th centuries. The hearth (32) is reminiscent of the end stacks which appear usually in buildings of the 17th century and later (Bedfordshire County Council, 1975, 13). It could, therefore, have been a later, inserted feature, although there was no excavation evidence for this. Insufficient of wall footing (34) was recovered to determine whether or not it was a similar end stack. It could represent a separate phase of building construction at the street front. If a structure is suggested, formed by walls (69) and (3) and possibly (34), then the fireplaces (41) and (67) might be associated. The stratigraphy for the central area of the trench, which might have provided evidence of partition walls etc., was destroyed by the imposition of the brick cellar (2) and (20).

Walls (69) and (3) appear to have formed the south wall of a building. This position is in contrast with that of the timber-framed building recorded by Baker. The stone wall footings continue north out of the trench at the street end and obviously ignore the alley way. The axis of the front block of building has also shifted from Period 4



Pl 28 St Mary's Street, BSM72 38, general view of trench facing east.

(fig 83) to Period 3 (fig 84), where it appears gable-end on to St Mary's Street.

Finds associated with the building (69), (3) and the possible well (56) are of good quality, and include the remains of well-glazed jugs in the Oxfordshire fabrics C9 and C11. The painted window glass in the excavation suggests that the building had a wealthy owner.

Period 2 12th – 14th centuries

A series of narrow occupation layers separated Periods 3 and 2. These sealed a number of patchy features including areas of scattered limestone and thin indeterminate layers (phase I). No structures were revealed and it seems likely that this phase represented a time of clearance preparatory to the building construction of Period 3.

During phase K the site seems to have been put to a little more use. The only possible structural feature was the trace of a slot (102) some 2m long, 0.30m wide and barely 20mm deep (not illustrated). This was situated below the area of the west end of the brick cellar (2), at a depth of 1.2m and ran approximately north-south across the site. In addition a hearth with burning layers was found close by. Despite the occurrence of smelting slag in the phase K layers, there was no reason to suppose that the hearth had an industrial use. There was no sign of a smelting pit and the burnt area was small and patchy. The remains of three rubbish pits also confirms a certain amount of activity here, although considerably less than was noted in Period 3. There appear to be no structures

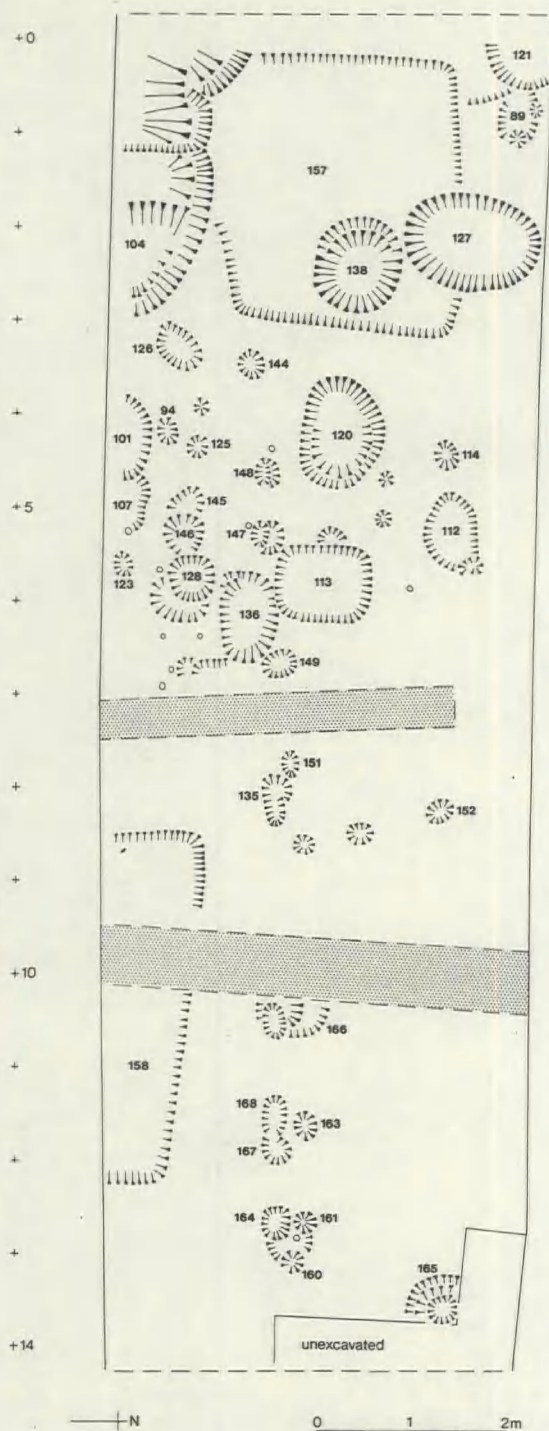


Fig 85 St Mary's Street: trench 38, period 1 features cut into natural subsoil (un-excavated areas shaded.)

on site from the 12th – 14th centuries, although occupation debris was recovered (see finds section below).

Period 1 Figs 85 and 86 11th – 12th century

The pits and post-holes of Period 1 obviously relate to more than one phase. However, there is insufficient evidence to group them significantly, so they are treated here together.

With the exception of (158) there were no large pits at the east end of the trench. Pit (158) was unusually long and straight-sided, not typical of other Early Medieval rubbish pits in Bedford (see St John's 1974 fig 60). A number of post-holes were uncovered right across the trench and towards the west end these and other pit features were found to be much more dense and inter-cutting. Not enough post-holes survived to indicate a complete structure, but some appear to be on the same alignment (shown black in figure 86). These form a line nearly 10m long and could well represent the remains of an Early Medieval building or a fence line. This seems to have been placed in much the same position as the subsequent structure of Period 3 (fig 84). More than one phase may be represented by the double or re-cut post-holes (167/168) and (135/151) for example.

A shorter row of post-holes, 3.5m long, immediately south of the 10m line, at the west end, might have formed part of another structure abutting the main one, or be part of another building phase. There might be an entrance indicated by the lack of a post-hole between (135) and (166). Post-holes to the north of the line are too randomly set to merit further interpretation.

If, as seems likely, the long row of post-holes represents the south wall of a building, then this has a bearing on the rubbish pits. Numbers (104), (138), (127) and (157) may belong to the same phase as the building, occupying a conventional spot in the backyard area. In contrast pits (120), (113), (136) and (112) would not have been contemporary with the structure because of their positions lying inside or athwart the wall.

In conclusion it may be seen that there are indications of occupation on site from the 11th – 12th centuries. Evidence of much activity from the 12th – 14th centuries is slight, but there is an abundance of material remains indicating several settlement phases from the beginning of Period 3 onwards. It has not been possible to draw very firm conclusions regarding the nature of the various structures uncovered. This is one of the inevitable inadequacies of small-scale work on single house-plot sites. However, the possible changes in property boundaries, and the shift in building axis, seen particularly in Periods 3 and 4, are both interesting results from this excavation.

THE FINDS

Collecting policies involved keeping all pottery, bone, slag and small finds. Shell, tile and brick finds were sampled.

Over 70kg of pottery was recovered. Occasional residual finds of A fabrics were noted, but there were no

9 coins were discovered of which 3 were illegible and 4 Post-Medieval. The two remaining were Medieval silver pennies (see Marion Archibald - Coin Report, below). One cut farthing, found in the phase G occupation layers below wall (69), dates to the first half of the 13th century. The other clipped penny (c1400 A.D.) was found in an unstratified context.

Period 4 Post Medieval

(1) B1 205; local slipware 864; stoneware 890; copper alloy pin 1317. (2) stoneware 898; copper alloy button 1349. (12) C5 536; C25 683; C35 720; C44 739. (13) A8 51; C12 619; C14 634. (14) E7 800; copper alloy stud 1335. (20) copper alloy strip 1357. (35) C9 578. (38) C44 736. (64) Cistercian 852. U/S vessel glass 1248.

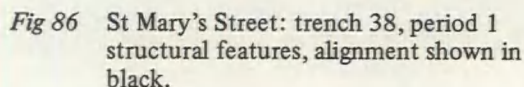
Noteworthy accumulations of late 13th – early 15th century material were associated with the building (3) and (69) etc., and the well (56) including C9 and C11 pottery, and many pieces of fine window glass. (31) C9 598; C17 649; E5 797; bone point 1541. (37) ridge tile 1098. (54) C25 678. (56) C10 600; window glass 1270, 1271, 1275 – 1284, 1292 – 1306. (61) C16 646; copper alloy object 1359. (63) B1 189; C25 691; E1 757; E2 765. (69) C9 597; roof tile 1096. (71) copper alloy mounts 1350, 1358; iron horseshoe 1423; bone plate 1520. (130) B4 270.

(17) B1 200. (30) B1 192; C5 537; ridge tile 1090. (45) C29 700; copper alloy brooch 1380. (57) spindle-whorl 1141. (58) B1 151. (60) C9 580, 583; C29 706; copper alloy objects 1369, 1405. (68) E1 754. (75) C9 586. (84) B1 165, 231 (87) B1 132; B3 254. (97) bone point 1549. (98) B1 191. (104) B8 372; C29 704; E3 786. (105) B7 362. (106) B7 368. (124) copper alloy object 1365. (143) B1 138.

(89) C15 639. (91) B9 419. (101) iron shears 1417. (113) B8 392. (120) B9 417; C9 590, 591, 601; vessel glass 1265; copper alloy brooch 1370. (121) B1 229. (127) A9 60; bone plate 1524. (158) B1 188.

by ANNIE GRANT

Just over 1,000 animal bone fragments were analysed from the 9th to 12th century rubbish pits excavated at this site. 833 of these bone fragments were identified. The identification of the bones revealed the presence at the site of the remains of sheep and goats, cattle, pigs, birds, horses and cats. Full details of the numbers and percentages of bones found for each species are given in *Table 87*. Sheep bones were by far the most common, followed



by cattle bones and then pig and bird bones which occurred in almost equal numbers. Horses and cats were represented by only a few bones each. The presence of goat was indicated by the find of a single, large goat horn core.

Despite the complete absence of dog bones in the rubbish pits, the presence of this animal at the site is suggested by the large number of bones that had been gnawed, almost certainly by dogs. We may assume that the carcasses of these dogs were disposed of elsewhere.

Amongst the cattle bones both mature and juvenile animals were represented and there was evidence of at least one animal that was less than one year old. Of the six mandibles that were aged by their tooth wear (Grant, 1975A), five were from mature animals and one was from a juvenile animal.

Mature and immature sheep bones were found, although the majority of the mandibles were from animals of at least three years of age. There was no evidence of any animals that were in their first year.

Although some of the pig bones were clearly from mature animals, the majority of the bones were from juveniles and a few were from animals of less than one year of age.

There was no evidence to suggest that there had been any preliminary butchery of the animals away from the site as for each of the three main food animals, all skeletal elements were represented. Evidence of the actual butchery techniques used was revealed by examination of the chop and knife marks on the cattle, sheep and pig bones. Choppers seem to have been generally used in preference to knives. Sheep and cattle vertebrae were found that had been split longitudinally. This may indicate that the carcasses were hoisted and split down the spine into two halves.

Knife marks on cattle skulls, around the base of the horn cores, suggest that the horns may have been removed and made into tools, ornaments and other objects.

On one sheep mandible there was evidence that the animal had suffered from periodontal disease. No other evidence of disease was seen.

	*Epiphyses		*Fragments	
	No	%	No	%
Cattle	80	26	173	32
Sheep	140	46	230	43
Pig	33	11	66	12
Horse	2	1	4	1
Cat	2	1	2	
Bird	50	16	63	12
Total	307		538	
Rib fragments			259	
Skull fragments			36	
TOTAL			833	

Fig 87 St Mary's Street, trench 38, the animal bones. (*See Grant, 1975A)

BEDFORD ST MARY'S: Trenches 23/28 and 38

GENERAL DISCUSSION

These trenches have provided considerable evidence of Medieval activity in this area of the town. Several phases of occupation were discovered on each site but, despite their proximity, direct correlation was not possible. In general, the evidence from single-plot sites, whilst giving some indication of the archaeological sequence, is almost always tantalisingly incomplete.

The earliest occupation evidence on both sites dated to the 11th – 12th centuries. It consisted of slots, pits and post-holes at 23/28, and post-holes of a timber building, or possibly a boundary fence, with many large rubbish pits at 38. There is no way of showing whether or not these features represent structures contemporary with each other: indeed, it is not possible to correlate those in 23 with those in 28.

The 12th – 13th centuries were poorly represented in 38. There was very little structural evidence and only three rubbish pits surviving. The remains of a hearth and some slag were encountered, but there is no reason to suppose that they represented industrial use. In 23/28 there were also spreads of earth and slag without the structural evidence noted in the preceding and succeeding periods.

On both sites, there was more positive evidence of activity in the Late Medieval period. The succession of hearths and ovens in 23/28 testifies to much light industry during the 14th and 15th centuries, probably in connection with baking or brewing, though little indication of upstanding buildings was found. 38 located a building which had stood from the 14th – 16th centuries: it had had stone foundations, and had been decorated with painted window glass and glazed roof tiles.

From the 17th century at least, both sites had dwellings stretching back from the street frontage, broadly respecting its present-day alignment. That on 38 was certainly timber-framed, though it was modified extensively in the last century or so; a similar constructional method might be inferred for the predecessor of the 19th century buildings on the site of 23/28.

These two sites can thus be related to each other in broad terms, and together represent the best Medieval and Post-Medieval sequence available

south of the river, the Cauldwell Street and St John's Street sites being more informative for the later and earlier periods respectively. They suggest activity and perhaps prosperity in Saxo-Norman and late Medieval times, divided by an interval where the nature of the occupation left less conspicuous traces in the archaeological record. This hypothesis should be treated with caution, not only on account of the quality of the evidence and the small size of the excavations, but also because it flies in the face of the conventional account, which stresses an economic crescendo up to about 1300 followed by over a century of decline. The observed pattern, if substantiated by further excavation in St Mary's Street, need only reflect local economic variations within Bedford, rather than the fortunes of the town as a whole.

ST PETER de DUNSTABLE (BSPD73 65)

by JANE HASSALL

with a report on the human remains by
T. P. O'Connor

SUMMARY

A trench was dug archaeologically, in advance of its use for electricity cables, across the churchyard area of St Peter de Dunstable. Bones from 52 individuals of probable Medieval date were uncovered and studied for details of their age, sex, stature and pathology.

INTRODUCTION (see fig 57 for location)

Little is known of the church of St Peter de Dunstable. It is likely to have been founded in Norman times when it was built opposite St Mary's Church, on the corner of what is now St Mary's Street and Cauldwell Street. Its relationship with St Mary's is uncertain and in fact the best recorded event in the church's history concerns its destruction in 1545-6 (Godber, 1969, 185, 194-5, 200). It was taken down on the command of the Bishop of Lincoln and its stones were used for various purposes including repair of the town bridge walls, and to construct a bear-baiting arena. Its Norman doorway is said to have been transferred to the church of St Peter de Merton, Bedford.

In 1973, restoration of St Mary's House for use

by Mander College necessitated its connection to various essential services (gas, water, electricity etc.). The siting of the electricity cable trench across the open area to the south of the house meant that some disturbance of the site of St Peter de Dunstable or its graveyard, was inevitable. Observations by David Hall in 1971, of construction trenches in this area showed a considerable extent of the graveyard, although no signs of the church building were found (Hall, 1971, 75-77). It was decided therefore to dig the trench on behalf of Eastern Electricity and to record the archaeological evidence in the hopes of tracing the site of the church.

THE EXCAVATION Fig 88

The trench was dug by hand, 1m wide and 12m long. Beneath the top 0.20 - 0.40m of mixed topsoil and rubble which formed layer 1, a reddish brown clay loam, layer 2, was found throughout the trench. Into this and into the gravelly loam of layer 5 below, were set several graves and parts of many skeletons. Although from the layout there seemed to be a general east-west orientation, it soon became clear that the skeletons were jumbled one on top of another. This may have resulted from clearance of an adjacent area of graveyard.

It was not possible to identify many individual burials and the skeletons have been studied subsequently in groups, with one or two exceptions. F8 was unusual in that the grave appeared to be outlined with small limestone blocks. Skeleton 14 was found in a coffin and the timber staining from this showed clearly in the section. Apart from these, there were very few traces of grave cuts or coffins.

At the north end of the site, a robber trench, F1, was found, with a few stones, F7, being all that remained of a wall footing. At the extreme south, a small pit F14 was uncovered below layer 2, but it contained no finds. The ground was found to slope away at this end of the trench.

A number of stake-holes (F5, 6, 10, 11, 12, 13, 14, 16, 17, 18 not illustrated) were uncovered, cutting into layers 5 and 6, and these were noticed mainly below the skeletons. They were all fairly shallow and indeterminate, and therefore unlikely to have any structural significance. They may have been connected with marking out the graves originally.

THE FINDS

Apart from the human remains, there were very few finds from this excavation. Very small amounts of slag, animal bone and a fragment of bronze were recovered from layer 2, along with a few sherds of B1 pottery, the St Neots-type ware. The skeletons which cut through this layer are therefore likely to be post-12th century in date. A little B1 pottery was also found close by the skeletons of group 3, but there was otherwise no dating evidence.

One residual Roman coin was found, and has been

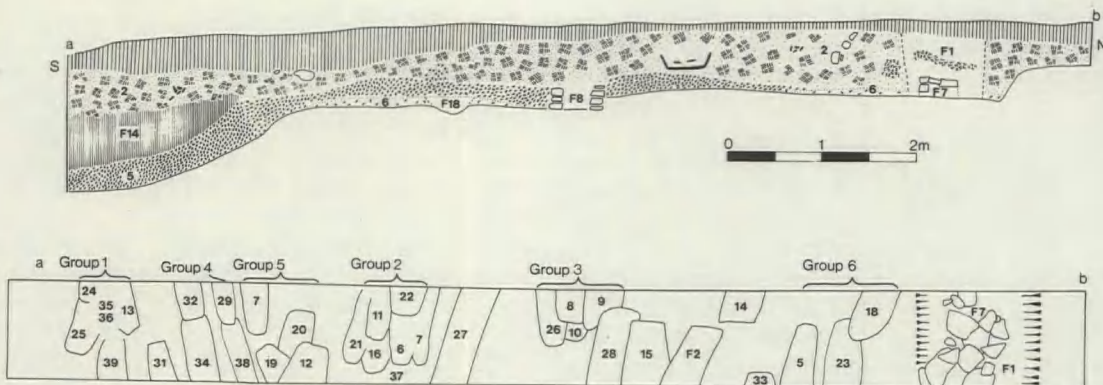


Fig 88 St Mary's Street: St Peter de Dunstable, plan and section of trench 65.

identified by H. J. Turner as a copper antoninianus of CARINUS (283 – 285) of the Roman Imperial Coinage.

THE HUMAN REMAINS

by T.P. O'CONNOR

On examining the bones it was obvious that there had been widespread mixing amongst closely adjacent burials. Seven groups of burials were identified which warranted examination en masse.

Group 1 (burials 13, 24, 25, 35, 36, 39 and F14)

A minimum of six individuals was represented.
3 adults, age and sex unknown
1 adult, aged 16–20 years
1 juvenile, female, aged 5 – 6 years
1 infant, aged 0 – 6 months.

Group 2 (burials 6, 11, 16, 17, 21, 22, 37 and F9)

Ten individuals were represented.
3 adults, aged 18 – 25, one male
2 adults, aged 35 or over, both male
2 adults, age and sex indeterminate
1 adolescent, aged 12 – 15 years
1 juvenile, aged 6 – 7 years, probably male
1 juvenile, aged 18 months – 2 years.

Group 3 (burials 8, 26, 28, 30 and F8)

Eight individuals were represented.
2 adults, aged 20 – 25
3 adults, aged 35 – 45, two male
2 juveniles, aged 3 – 4 years and 7 – 8 years
1 perinatal infant.

Group 4 (burials 29, 38)

Three individuals were represented.
2 adults, aged 35 – 40 and 40 – 45
1 juvenile, aged 3 – 4 years.

Group 5 (burials 7, 19, 20)

Four individuals were represented.
1 adult, male, with traces of Paget's disease
1 adult, aged 17 – 20
2 juveniles, aged 5 – 7 years, one female.

Group 6 (burials 5, 18, 23)

Seven individuals were represented.
2 adults, aged 25 – 30, one female
1 adult, aged 30 – 35 years
2 juveniles, aged 3 – 4 years
1 juvenile, aged about 2 years
1 infant, aged 6 months – 1 year.

Group 7 (burials 1, 2, 3, 4)

Five individuals were represented.
1 adult, aged 20 – 25, female
1 adult, aged 40 – 50, male
1 adolescent
2 juveniles, aged 3 – 4 years and 5 – 6 years.

In addition to these groups, parts of another 11 adults and 5 children were recovered. These were identified from amongst the burials 14, 27, 31, 32, 33, 34, F2 and from some unstratified bones.

DISCUSSION

A total of 52 individuals were recognised and details of their age, sex, stature and pathology were noted. General comments are given here.

The age distribution shows the usual 3-peaked pattern. There is a very high mortality amongst infants and children, probably under-represented in the excavated material due to non-recovery of the relatively tiny bones. The two other peaks come at 20 – 25, probably mainly women dying in childbirth, and at 35 – 45, comparatively old age. The lack of really ancient individuals is not unusual.

The sex distribution is severely affected by the large proportion of individuals of indeterminate sex, an inevitable result when fragmentary bones are considered. Sex could be ascribed to less than half the total, and of these 62% were male and

38% female.

The small sample size is a major consideration when dealing with stature. Overall, the mean height was 165.56 (± 3.45 cm) or 5' 5 $\frac{1}{4}$ ". Men (167.79 ± 1.52 cm), 5' 6", were only slightly taller than women (162.215 ± 2.43 cm), 5' 3 $\frac{3}{4}$ ".

Osteoarthritis, particularly of the spine, was fairly common amongst adult individuals, its frequent occurrence at an apparently early age being a reflection of the short lifespan of these people. Only one healed fracture was noted, that being of the femoral neck. Today this is often an injury of elderly women and it is interesting to note, therefore, that this case occurred in a woman of 40 – 45 years, although there was no evidence

of associated osteoporosis. A probable case of Paget's Disease was noted, in an arthritic male. Of the discontinuous hereditary traits, Wormian bones in the coronal and lambdoidal sutures were common. Perforate olecranon fossae were noted in two closely adjacent skeletons out of Group 1. This is quite interesting as this trait is far from common, and does tend to 'run in the family'. Dental health was no better or worse than could be expected in a Medieval population, with the usual occurrence of caries cavities, abscesses, and teeth lost ante-mortem. No serious case of dental calculus was noted, although several jaws had appreciable accumulations around the mandibular incisors.

THE FINDS

INTRODUCTION

Published finds have been numbered consecutively throughout this report, including some material which has not been illustrated. Finds have been generally grouped by material rather than by function: thus, spindlewhorls may be found in the reports on Objects of Bone, Pottery and Stone. Objects of all periods have been treated together within their class of material, and some dates have been given. Those derived from the date of the context have been placed *after* the context number: in the few cases of intrinsically dateable objects, the date has been placed after the description and *before* the context number, for example

1054 (Clay Pipe) Dec. 22, WA in oval stamp. ? William Arthur 1719-45.
BCS73 III (19), Pit J. 17th - early 18th century.

The derivation of context dates can be seen in the relevant sections of the excavations reports. Where no context date is given, it may be assumed that the object is residual and/or the context is Post-Medieval.

Context references in the Catalogue may be located in the Excavation Reports Finds Summaries through page numbers given in Appendix A, p 299 below.

The Pottery *Figs 90 - 146*

by EVELYN BAKER and JANE HASSALL

INTRODUCTION AND METHOD

The increasingly detailed and sophisticated nature of pottery studies is opening a gap between desirable analysis and that which is practicable in terms of available manpower and resources. This applies especially to groups of pottery, such as that from Bedford, comprising large amounts of material with a wide date range. With the exception of the specialist report contributed on the early Middle Saxon ware by David Williams, the analysis of the Bedford pottery was carried out without the benefit of a petrologist. However, the guidelines produced by D.P.S. Peacock and circulated through the Medieval Pottery Research Group have been closely followed. All analytical work was undertaken by the authors, assisted by Alison Alden, and we are grateful to many colleagues for stimulating and encouraging discussions of methodological problems.

The pottery studied includes all the ceramics from more than 30 sites in the historic centre of Bedford, dug over a ten year period, including those already published. The excavations varied widely in size, depth, method and content. Whatever the resources put into any single trench, the general policy was always to collect all pottery, although no sieving was undertaken. This resulted in 1,125 kg of pottery of varied quality, coming from discrete pit groups, general spreads and disturbed layers. The bulk of the sherds relates to the Saxo-Norman to early Medieval period, though the full range extended from residual Roman to the present century.

It is hoped that this work will provide a secure foundation for future Bedford pottery studies by including all ceramics from excavated contexts in the town. In this way the only natural biases in the results should be those caused by the pattern of excavation and by the particular analytical methods which are described in the appropriate parts of this report.

Dating is one of the major problems. There is not much stratigraphical evidence that would place

an assemblage firmly within a century or two, and little in the way of independent dating methods, such as C14, coins and other artefacts. No pottery kilns have been found in Bedford though there are local and regional imports from known kiln sites. The material from these sources forms only a small percentage of the whole.

Very little analytical work has been done on local ceramics with the notable exception of various papers chiefly by D.H. Kennett on chance finds from Bedford now in Bedford Museum. This material includes groups of shelly wares and glazed Medieval sherds from various findspots in the town such as High Street and St Peter's Street, though many locations are not recorded. Some sherds of imported pottery were noted amongst the finds from the town bridge widening in 1939, including fragments of a South Netherlands maiolica altar vase (Kennett, 1969, 84). A handful of sherds was recovered from salvage work carried out by D. Hall on the site of St Peter de Dunstable (Hall, 1971, 75 - 77). In addition preliminary studies were undertaken on the 1967 St John's Street and 1971 Mill Street assemblages (Baker, 1970 and 1974). Our research on the excavated material has provided the opportunity to construct a ceramic pattern for Bedford and thus to suggest a framework for these earlier papers.

Our analysis began with a basic division into broad date categories. For each context all sherds were noted and weighed and checked through for sticking. The facilities provided by Bedford Museum included the use, for long periods of time, of an exceptionally large, well-lit room that enabled whole ranges of pottery to be examined together. It allowed us to study the pots by excavation area, form and fabric.

The Roman material was sparse and sherds have been treated individually. Selected sherds from the probable early Middle Saxon wares were sent for petrological examination and the remainder was fitted into the resulting groups by visual inspection. The Middle Saxon material was examined visually and according to feel. The Saxo-Norman and Medieval ceramics were composed of a very large range of wares and forms, spanning perhaps 600 years. The first basic division was into calcareous or mineral tempered wares which were treated to an elaborate analysis. This was based primarily on fabric type determined by binocular microscope, and also by form and decoration. Optical coincidence cards were used to store and retrieve information.

The Later Medieval coarseware was selected by

visual inspection, form and feel, whilst the Post-Medieval pottery was divided into known wares and analysed accordingly.

All pottery assemblages are detailed on an assemblage sheet for each context by site. The sherds are stored in Bedford Museum by ware. Together these form an archive of material from which data is easily retrievable.

PRE-SAXO-NORMAN WARES

Figs 90 - 94

There were no prehistoric pottery finds from Bedford, with the exception of one early Iron Age sherd from BSM72 23 (34). Only 27 sherds of Roman pottery were recovered, ranging from the 1st to the early 4th century, and a representative selection is illustrated.

Of the Saxon period, two concentrations of quite different types of pottery have been recognised. The first group of 154 sherds are virtually exclusive to the Castle area, and are tentatively ascribed to the early part of Middle Saxon times. The second group of 133 sherds was found mostly north of the river (99 sherds), of which 62 were concentrated in Midland Road. These are assigned to the Middle Saxon period.

ROMAN

Fig 90

The Roman sherds were all residual and the majority were from coarseware vessels. Some pieces were found which may have come from local sources, such as the Mile Road kilns at Elstow (Dring, 1972, 81) or the Harrold kilns (Brown, 1974, 9). Since shell-tempered pottery has been made in the Ouse Valley from early prehistoric times, it is extremely difficult to date a sherd by fabric alone. Some indication of form is essential. The number of Roman shelly pots in Bedford may be larger than indicated. Only those which have been positively recognised have been included.

The coarseware sherds are likely to represent local or regional imports. The only exotic imports are a handful of Samian sherds. The dearth of both pottery and other occupation evidence corroborates the theory that Bedford was not a site of concentrated settlement in Roman times (Hassall and Baker, 1974, 77).



Fig 89 Pre-Saxo-Norman pottery: amounts and distribution.

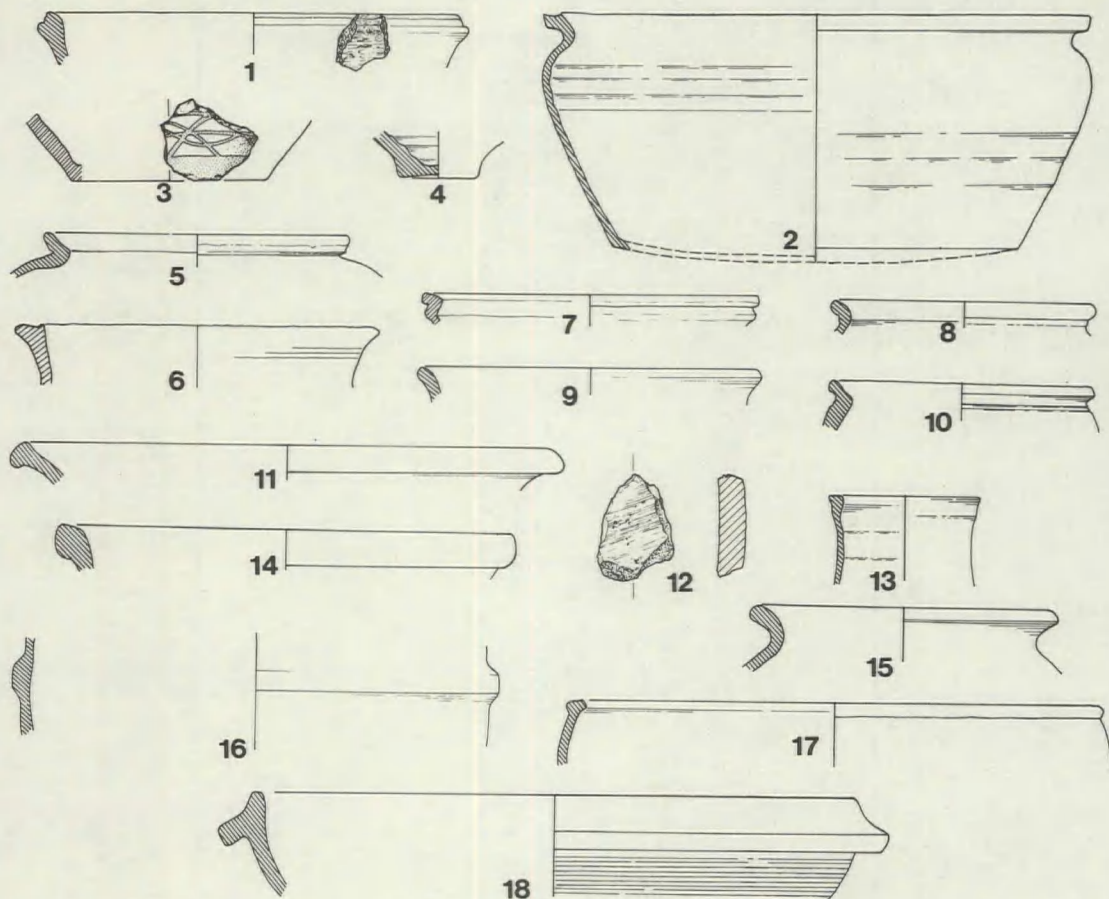


Fig 90 The Pottery: Roman Wares, scale 1:4.

PRE SAXO-NORMAN POTTERY

Fig 90 ROMAN WARES, 1 – 18

Probably residual in all contexts.

- 1 Rim, hard reduced ware, crushed limetone temper, smoothed surfaces. *BSM71 23 (34)*.
- 2 Profile of bowl, hard sandy ware, grey core and brown margins, lower part smoothed outside. B. Dix suggests late 3rd early 4th century date. *BSM71 23 (17)*.
- 3 Base, black-burnished ware, sandy fabric. *BC72 51 (19)*.
- 4 Base, hard sandy ware, buff-grey sandwich core. B. Dix suggests late 3rd early 4th century date. *1976/2/83*.
- 5 Rim, hard gritty fabric, rough grey surfaces, light grey core. *1976/2/521*.
- 6 Rim, gritty fabric, grey core, smooth buff slip. *BSJ74 II F165*.
- 7 Rim, sandy fabric, grey core, brown surfaces. *BC72 48 (110)*.
- 8 Rim, shell-tempered, reduced ware, smooth surfaces. *1976/2/103*.
- 9 Rim, mixed gritty temper, light grey core, buff smooth surfaces. *BSM72 23 (121)*.
- 10 Rim, smooth fabric, dark grey core, buff slip, soft feel. *BC72 48 (38)*.
- 11 Rim, hard gritty fabric, grey core, orange margins, grey surfaces. *BC70 6 (2)*.
- 12 Body sherd, mixed temper in thick fabric, grey core and buff surfaces, probably from storage vessel *BC70 15 (18)*. Probable early Middle Saxon context.
- 13 Rim, fine smooth sandy ware, grey core, orange-buff surfaces with remains of light slip, probably from top of flagon. *BSJ74 I U/S*.
- 14 Rim, abraded, gritty fabric, dark grey core, buff surfaces, probably from storage jar or bowl. *BSJ67 8 (13)*.
- 15 Rim, shell and limetone temper, orange throughout. *BCH69 1 (6)*.

- 16 Body sherd, sandy fabric, grey throughout, with cordon, probably Belgic. BC70 15 (21). From *Structure 4*, probably early Middle Saxon.
- 17 Rim, rough gritty fabric, dark grey core, dull orange surfaces. 1976/2/61.
- 18 Rim, very mixed inclusions, black core, black to buff surfaces, smoothed, part of flanged bowl. BMS71 19 (22).

EARLY MIDDLE SAXON

Fig 91

Pottery types A1 – A7 make a distinctive assemblage of sherds, 153 of which came from a small area underlying Bedford Castle. Nineteen samples were sent to David Williams, University of Southampton, for petrological analysis, and the remaining sherds were subsequently fitted into the fabric groups he defined.

PETROLOGY OF PRE-SAXO-NORMAN POTTERY FROM BEDFORD

by David Williams

From an initial macroscopic examination, followed in each case by thin sectioning and study under the petrological microscope, seven divisions could be made on the basis of aplastic inclusions. These are listed below following the description of the sherds. Munsell colour charts are referred to together with free descriptive terms.

DESCRIPTION OF SHERDS

(Sherd numbers refer to David Williams' analysis. Where sherds are illustrated, the catalogue number is given.)

SHERD 1 BC70 5 (14) 20 (A2 fabric)
Medium thick, moderately hard sandy fabric, very dark grey (5Y 3/1) throughout. Impressions of grass or chaff can be seen on the surfaces.

SHERD 2 BC70 15 F48 42 (A6 fabric)
Medium thick, hard, slightly micaceous fabric, dark grey (5YR 4/1) throughout. Both surfaces have been well burnished.

SHERD 3 BC70 11 (9) 19 (A1 fabric)
Medium thick, moderately hard fabric, light brown (7.5YR 6/4) outside surface, dark grey inner surface and core. Impressions of grass or chaff can be seen on the surfaces.

SHERD 4 BC70 10 (37) (A5 fabric)
Medium thick, moderately hard fabric, dark grey (10YR 4/1) throughout. Moderate inclusions of limestone and shell occur throughout, and impressions of grass or chaff can be seen on the surfaces.

SHERD 5 BC70 15 F40 (A4 fabric)
Medium thick, moderately hard fabric, very dark grey (2.5Y N3) throughout. Inclusions of limestone occur throughout.

SHERD 6 BC70 10 (36) 39 (A6 fabric)
Medium thick, moderately hard sandy fabric, dark greyish-brown (2.5Y 4/2) outside surface, black inner surface and core.

SHERD 7 BC70 10 (36B) (A6 fabric)
Fairly thick, hard sandy fabric, black throughout.

SHERD 8 BC70 10 (39) (A6 fabric)
Medium thick, moderately hard sandy fabric, dark grey (2.5YR N4/) outside surface, very dark grey inner surface and core.

SHERD 9 BC70 15 F40 (A6 fabric)
Medium thick, moderately hard sandy fabric, dark grey (10YR 4/1) throughout.

SHERD 10 BC71 25 (7) (A4 fabric)
Similar to sherd 5.

SHERD 11 BC70 15 F39 (A5 fabric)
Thin, moderately hard fabric, very dark grey (2.5Y N3/) throughout. Numerous inclusions of shell can be seen in fracture.

SHERD 12 BC71 25 (64) (A4 fabric)
Fairly thick, moderately hard fabric, dark grey (2.5YR N4/) outside surface, very dark grey inner surface and core. Frequent inclusions of sand and limestone can be seen in fracture.

SHERD 13 BC71 25 (70) (A7 fabric)
Thick, hard sandy fabric, grey (10YR 5/1) outside surface, dark grey inner surface, black core.

SHERD 14 BC70 15 F42 (A6 fabric)
Thin, fairly hard sandy fabric, strong brown (7.5YR 5/6) outside surface, very dark grey inner surface and core.

SHERD 15 BC70 15 F62 (A6 fabric)
Thick, hard sandy fabric, light red (10R 6/6) outside surface, dark grey inner surface, light red/grey core.

SHERD 16 BC70 15 (18) (A3 fabric)
Fairly thick, hard moderately sandy fabric, light yellowish-brown (10YR 6/4) outside surface, very dark grey inner surface and core. Occasional small plates of shell are visible in the fabric, and impressions of grass or chaff can be seen on the surfaces.

SHERD 17 BC70 15 F41 (A6 fabric)
Thick, hard sandy fabric, dark grey (5YR 4/1) throughout.

SHERD 18 BC71 25 (71) (A6 fabric)
Medium thick, moderately hard sandy fabric, light red (10R 6/6) outside surface, light grey inner surface and darker core.

SHERD 19 BC72 37 (37E) 45 (A6 fabric)
Thin, moderately hard sandy fabric, grey (2.5Y N5/) throughout.

FABRIC GROUPS A1 - A7

Group A1 Sherd no 3

Thin sectioning shows abundant quartz grains, average size 0.10 - .15mm, together with a number of elongate voids, in all probability representing grass or chopped chaff.

Group A2 Sherd no 1 (20)

Thin sectioning shows numerous grains of quartz, average size 0.50 - .80mm, a scatter of quartzite and a few grains of sandstone.

Group A3 Sherd no 16

Thin sectioning confirms that the predominant temper is quartz, average size 0.30 - .50mm, but with some up to 1.40mm across, also present are fragments of fossiliferous shell and a few grains of potash feldspar.

Group A4 Sherd nos 5, 10 and 12

Thin sectioning shows inclusions of limestone, together with numerous grains of quartz, average size 0.30 - .40mm, some quartzite and a few grains of potash feldspar.

Group A5 Sherd nos 4 and 11

Fossiliferous shell inclusions predominate in thin section, fragments of (?) bryozoa and limestone are also present. The nature of the inclusions suggest that the temper is a crushed shelly limestone, possibly from the Cornbrash Deposits situated close to Bedford. If the fragments of bryozoa have been correctly identified, there may be some connection between these sherds and the beginnings of St Neots type ware, as the occurrence of this particular fossil-type seems to be characteristic of that pottery (Hunter, forthcoming).

Group A6 Sherd nos 2(42), 6(39), 7, 8, 9, 14, 15, 17, 18 and 19 (45).

Thin sectioning shows numerous inclusions of ill-sorted grains of subangular quartz, some up to 1.40mm across, but the average size, 0.40 - .80mm, together with a scatter of quartzite. Also present in the majority of sherds are one or two grains of feldspar (usually potash), while no 8 contained a large fragment of flint and a piece of fossil shell.

Group A7 Sherd no 13

Thin sectioning shows abundant quartz grains, average size 0.20 - .30mm.

Conclusions

Due to the common nature of the inclusions in Groups 1, 2 and 7, it is difficult to be precise about likely areas of origin. These vessels could have been made fairly locally, possibly from the superficial Boulder Clay deposits which cover much of Bedford and the surrounding area; on the other hand a source further afield cannot be ruled out. In Group 6, the odd grain of feldspar in the majority of sherds, in what is essentially a fairly sandy

fabric, suggests the use of Boulder Clay, and therefore these sherds may well represent locally made wares. The presence of a few potash feldspar grains together with fossiliferous shell in Group 3 and limestone in Group 4, suggests an admixture of Boulder Clay with the local Jurassic material (Oxford Clay and Cornbrash). As mentioned above, the shelly limestone in Group 5 could represent the local Cornbrash.

DISCUSSION

by Evelyn Baker and Jane Hassall

The greatest concentrations come from the closely related trenches BC70 10 and 15, BC71 25 and BC72 37, with a slight scatter from other Castle excavations. A great deal of the area was completely destroyed by Castle and later activities. This especially affected BC72 37 where all the pottery must be considered residual. Of the other three trenches where sherds were associated with features, 79 sherds from a total of 98 can be assigned to pits or timber structures. In some instances several periods of building can be demonstrably associated with the pottery either directly or stratigraphically, indicating that the Saxon activity in this part of the town was not short lived.

Half the total of Roman finds came from this area, and while 8 fragments are unassociated, another 7 are related to the earlier phases of timber buildings or pits. Only 37 of the total of 133 Middle Saxon sherds appear here, 23 of which are residual. The 14 other sherds came from later or disturbed contexts.

The range of early Middle Saxon pottery includes 28 rims, 2 bases, 124 wall sherds and a loomweight. Nine of the sherds are decorated, and of these 6 are assigned to Group 6 as defined by Williams. These sherds are generally fairly thin-walled, black and sometimes burnished. The decoration is limited to parallel lines and dimples, with one slashed boss. One of these decorated sherds, 42, was identified by Myres and Dunning as being fifth century, with Hurst suggesting that it could be near 400 A.D. Group 6 is by far the largest comprising 48% of the total. The other decorated sherds, 44 and 45, belong to Group 4. They are in a light brown-grey sandy ware, with squared-off rims and knife decoration, and account for 13%

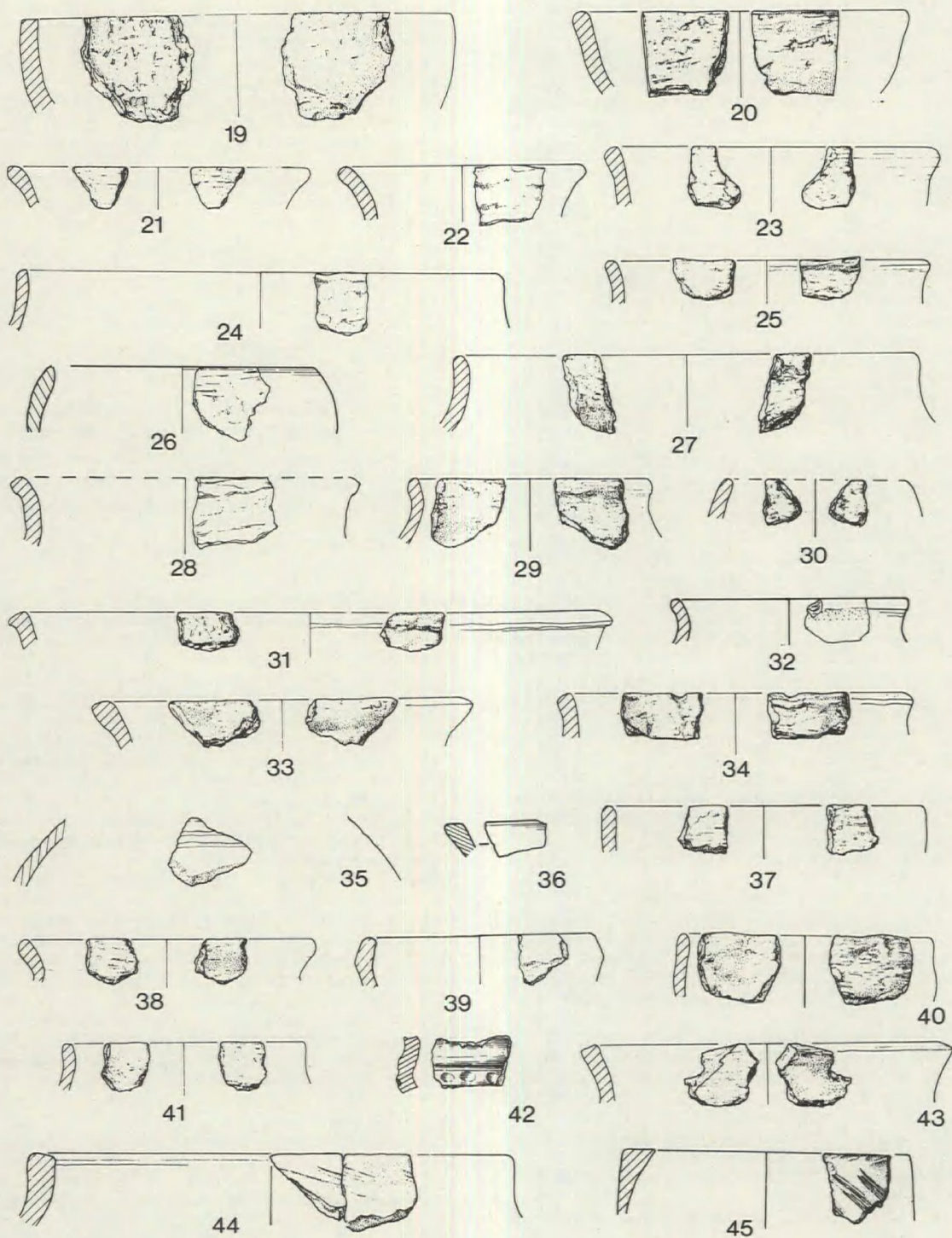


Fig 91 The Pottery: Early Middle Saxon fabrics A1 – A6, scale 1:3.
A1 19; A2 20 – 26; A3 27, 28; A4 29 – 31, 33; A5 32; A6 34 – 45.

of the total. Several vessels appear to have been burnished, and these mostly belong to Group 6. Grass tempering was also noted in Group 2, 3 and 5, and particularly appearing in Group 1. David Williams' analysis suggested that the pottery was locally made rather than imported. All the pottery is hand-made, and although there are some fine decorated sherds which are perhaps of higher quality, most sherds are from coarse domestic vessels.

This pottery as a group is likely to relate to the early part of the Middle Saxon period, but it is acknowledged that there is great difficulty in dating hand-made domestic pottery. The forms do not show much stylistic change over a long period of time, and the fabrics appear in great variety.

Fig 91 EARLY MIDDLE SAXON FABRICS, A1 – A6, 19 – 45

- 19 A1, Analysed sherd no 3, see Williams. *BC70* 11 (9).
- 20 A2, Analysed rim no. 1, see Williams. *BC70* 5 (14).
- 21 A2, Rim black inside, buff outside, possibly burnished. *BC70* 15 (18). Early Middle Saxon occupation level. *Structure* 4.
- 22 A2, Rim, grey core, black burnished surfaces, grass-marked inside. *BC70* 15 (18). Early Middle Saxon occupation level. *Structure* 4.
- 23 A2, Rim, grey core, black burnished surfaces. *BC70* 15 F3. Early Middle Saxon *Structure* 1.
- 24 A2, Rim, grey core, grey inner surface, black burnished outer surface. *BC70* 15 (12). Probably early Middle Saxon, post dating *Structure* 4.
- 25 A2, Rim, black throughout, outer surface burnished. *BC70* 15 (16). From probable early Middle Saxon hearth, post-dating *Structure* 4.
- 26 A2, Rim, black throughout, outer surface burnished. *BC71* 27 (5).
- 27 A3, Rim, black throughout. *BC71* 25 (3).
- 28 A3, Rim, black throughout, outer surface burnished. *BC70* 15 (18). Early Middle Saxon occupation level. *Structure* 4.
- 29 A4, Rim, black core, black to buff burnished surfaces. *BC70* 10 (28). Probable early Middle Saxon occupation level.
- 30 A4, Rim, black throughout. *BC72* 37 (1).
- 31 A4, Rim, black throughout. *BC72* 37 37C.
- 32 A5, Rim, black core, black to buff surfaces. *BC72* 37 D/D1.
- 33 A4, Rim, black throughout. *BC71* 25 (57).
- 34 A6, Rim, black throughout, burnished surfaces, cut hollow on rim. *BC70* 5 (6).
- 35 A6, Body, black throughout, burnished inside. *BC71* 25 (3).
- 36 A6, Rim, predominantly grey with outer surface buff. *BC72* 37 B1.
- 37 A6, Rim, black throughout. *BC72* 48 (110).
- 38 A6, Rim, black throughout. *BC72* 55 (11).

- 39 A6, Rim, analysed sherd no 6, see Williams. *BC70* 10 (36).
- 40 A6, Rim, black throughout. *BC72* 51 (17).
- 41 A6, Rim, dark grey throughout. *BC71* 25 (5).
- 42 A6, Body, analysed sherd no 2, see Williams. *BC70* 15 F48, *Structure* 1.
- 43 A6, Rim, orange-brown core, black surfaces, outside burnished. *BMR74* 1 (61).
- 44 A6, Rims, grey core, grey to orange-buff surfaces. *BC72* 37 37C and (10).
- 45 A6, Rim, analysed sherd no 19, see Williams, *BC72* 37 37E.

MIDDLE SAXON

Figs 92 – 94

Five groups of pottery of Middle Saxon date have been identified, types A8 – A12. The distinctions between each fabric type have been made purely by visual examination, and it is hoped that these will be confirmed by petrological analysis at a later stage.

A8 IPSWICH WARE

46 – 53

14 sherds have been recovered, accounting for 10% of the Middle Saxon pottery finds. The pottery was made on a slow wheel and the sandy or gritty fabric was fired to a hard uniform grey colour. Examples of all four variations noted by Hurst and West (Hurst, 1976, 299) have been found at Bedford. The basic forms are represented, consisting chiefly of lugged and spouted pitchers (5 or 6 vessels) and 2 or 3 cooking pots. 46 illustrates the spouted pitcher found at Horne Lane and originally published by Kennett (1966, 58). There are no examples of the decoration typical of some Ipswich ware pitchers, except for a little thumbing on one handle, 50. Knife trimming on sagging base sherds has been noted.

With the exception of single sherd finds at St Mary's and St John's, all the Ipswich ware has been recovered from the Midland Road area. This group of sherds at Bedford makes an interesting addition to the distribution pattern described by Hurst (1976, 303). They represent a westward spread of the fabric and presumably indicate the widening trading links of East Anglia by the 9th century. There are no independent dating criteria at Bedford, although by association with types A9 – A12, a date towards the 9th century end of the 650 – 850 A.D. range of Ipswich ware seems likely.

A9 SANDY FABRIC

54 – 62

This fabric group is distinctive amongst the Middle Saxon wares through its lack of shelly inclusions. It accounts for about 13% of the total. Amongst its tempering can be found grog, quartzite, sand, grit and calcite, and this range suggests that more than just one fabric is present. However, without the benefit of petrological analysis it was not possible to differentiate, and so these sherds have been treated as a group.

Much of the ware is reduced and, apart from some examples of surface smoothing, there are no decorated sherds. The forms include large and medium-sized bowls, some quite finely potted, and the majority appear to be wheel-finished if not fully wheel-made. Small cooking pots also appear with simple everted and more sharply angled rims 60 and 57.

The A9 ware has been found in more or less equal quantities on Castle sites and in Midland Road. A Middle Saxon date can be suggested both from stratigraphical associations and the relationship with A8 at Midland Road. The sherd from St Mary's must be residual, but the finds from St John's 1976 are more significant. Here A9 occurs with B1 and B4 types in 10th century rubbish pits (Carbon-14 dating), for example 1976/2/39. Therefore a 9th – 10th century range for A9 is suggested.

A10 SMOOTH SHELLY FABRIC 63 – 72

15% of Middle Saxon wares were of this fabric type. It is characterised by large shell inclusions, many of which appear on the surface, and small grit and grog fragments are also present. It is usually smoothed inside and out to give a soapy or burnished surface. The majority of examples are in hard reduced ware, and some have a red-grey-red core. The vessels appear to be hand-made, probably finished on a slow wheel. The only forms are bowls, mainly large (over 35mm diameter) and in a variety of rims forms. Only one has any decoration, a pie-crust thumb rim, 63.

A10 has an interesting distribution, being found predominantly at St John's 1976. One context in particular, Pit 83 is significant as 6 different A10 bowl forms were found in it. The association with Saxo-Norman wares would suggest an 11th – 12th century date for the whole assemblage. There is no other dating evidence and it seems that either these bowls are residual here, or that they are of Saxo-Norman origin. Further light may be shed on this pottery type when the trench at Peacock's Yard 1977 is studied in depth, as the only other concentration of A10 comes from this site.

A11 PROTO-ST NEOTS TYPE 73 – 80

This group has been defined from a number of sherds reminiscent of St Neots type but coming from coarse hand-made vessels. These account for 16% of the Middle Saxon pottery. The fabric is shell-tempered mixed with grit and grog. The ware is predominantly reduced with oxidised surfaces usually pinkish in colour. Both rims and sagging bases have been found indicating a range of small cooking pots. No decoration apart from a strip of thumbing, presumably from a large storage vessel, has occurred.

These forms are similar to vessels illustrated and discussed by Addyman (1973, 78 – 79) from St Neots. Approximately half the finds come from Bedford Castle, the rest from Midland Road and then St Mary's. A 9th – 10th century date is indicated from contexts in Midland Road where it occurs sometimes with other Middle Saxon types and sometimes with the classic St Neots type, B1.

A12 LOCAL SHELLY FABRIC 81 – 113

Nearly 46% of the total was formed by this group and by far the largest proportion of it was recovered from Midland Road. There are considerable similarities between it and the Saxo-Norman fabric B4, but the chief difference is that it is hand-made and much coarser than the B fabric.

A12 is predominantly shell-tempered, often with well-

pounded shell as well as sundry grits and grog. On the whole the cores are reduced with considerable variety of colour on the surfaces, from black through pink to deep orange.

Bowl forms predominate, chiefly with thick, simple rims and there is also a range of plain everted cooking pots. Part of a lamp or candlestick may be indicated by 83, while the large handle 91 is unusual and may have been attached like a lug to the top of a bowl. Two examples of applied thumbled strip decoration were the only decorative elements found. There were several pieces of upright or bar lugs, but the sherds were usually too small to give much indication of shape.

A12 occurs in most of the 9th – 10th century assemblages at Midland Road. A little has been found at St John's 1974 and 1976, and here, as at St Mary's and Bedford Castle, it is likely to be residual.

DISCUSSION

Middle Saxon pottery has been recovered from over 40 contexts throughout the town, with particular concentrations at Midland Road. Only 6 of these contexts are totally discrete and 3 of these are associated with the structural features of BMR74 trenches I and II. These represent the earliest settlement evidence in this part of Bedford and must relate to the 9th or possibly the 10th centuries.

In a further 7 contexts, Middle Saxon material occurs with B1 (St Neots type) B4 (Local shelly) and C8 (Thetford type), Saxo-Norman fabrics which have their origins in the 9th century. It has been noted that A11 and A12 give way to B1 and B4 and some overlap is to be expected.

As can be seen in figure 89, A12 finds predominate. In all the fabric types there is great variety of form, which is inevitable as most vessels are hand-made. With the exception of the imported Ipswich ware pitchers, cooking pots and bowls predominate and these are all plain, domestic vessels. A local source seems likely for the materials and manufacture of fabrics A10 – A12 and may be also for A9.

Taken as an indication of settlement in the 9th century, these pots show that Midland Road, the Castle area and St John's must all have been occupied. The stray finds at St Mary's could also be a pointer to habitation. Thus activity both north and south of the river is demonstrated which, during the second half of the 9th century, might be associated with the Danish occupation of Bedford.

Fig 92 MIDDLE SAXON FABRICS, A8 – A10, 46 – 66

- 46 A8, Spouted pitcher, *Bedford Museum 3954*, found at Horne Lane.
- 47 A8, Base from spouted pitcher or cooking pot. *BMR74 I (45)*.
- 48 A8, Handle from spouted pitcher. *BMR74 I (56)*.
- 49 A8, Handle from spouted pitcher. *BMR74 I (24)*.
- 50 A8, Handle from spouted pitcher. *BMR74 I (24)*.
- 51 A8, Base from spouted pitcher. *BSM72 38 (13)*. Residual.
- 52 A8, Pierced rim. *BMR74 II F59*.
- 53 A8, Lug from spouted pitcher. *BMR74 I (54)*.
- 54 A9, Rim of bowl. *1977/1/243*.
- 55 A9, Rim of bowl. *BSJ74 II F99*.
- 56 A9, Rim of bowl. *BMR74 I (51)*.
- 57 A9, Rim of cooking pot, grass marked outer surface. *1976/2/39*. Probably 10th century.
- 58 A9, Rim of cooking pot. *1976/2/77*.
- 59 A9, Upright vessel, rim thickened at one side, hand-made. *1976/2/83*. Saxo-Norman.
- 60 A9, Rim of small cooking pot. *BSM72 38 (127)*.
- 61 A9, Rim of bowl. *1976/2/34*. Probably 10th century.
- 62 A9, Upright rim of small vessel. *1976/2/39*. Probably 10th century.
- 63 A10, Bowl with thumb and pinched-up rim. *1976/2/83*. Saxo-Norman.
- 64 A10, Bowl with inturned rim. *1976/2/83*. Saxo-Norman.
- 65 A10, Bowl rim. *1977/1/149*.
- 66 A10, Bowl rim. *1976/2/83*. Saxo-Norman.

Fig 93 MIDDLE SAXON FABRICS, A10 – A12, 67 – 92

- 67 A10, Bowl rim. *1977/1/48*.
- 68 A10, Bowl with line of carination. *1976/2/83*. Saxo-Norman.
- 69 A10, Bowl rim. *1977/1/48*.
- 70 A10, Bowl rim. *1976/2/83*. Saxo-Norman.
- 71 A10, Bowl rim. *1976/2/83*. Saxo-Norman.
- 72 A10, Bowl rim. *1976/2/83*. Saxo-Norman.
- 73 A11, Body sherd of large storage vessel with applied thumb strip. *BCH69 I (6)*. Post-Medieval.
- 74 A11, Rim of upright vessel. *BMR74 I (45)*.
- 75 A11, Rim of upright vessel. *BMR74 I (45)*.
- 76 A11, Base. *BMR74 II (1)*.
- 77 A11, Bowl rim. *BC72 37 37F*. Early 13th century.
- 78 A11, Base of storage vessel. *BSM72 28 (163)*. 11th – 12th century.
- 79 A11, Base of cooking pot. *BC72 50 (5)*. Saxo-Norman.
- 80 A11, Bowl. *BMR74 I F61*.
- 81 A12, Rim of upright vessel. *BC70 6 (35)*; 12th – 13th century.
- 82 A12, Rim, thickened on one side, hand-made. *BC72 37 (25)*. Post-Medieval.

- 83 A12, Part of candlestick or lamp. *BMR74 II (2)*.
- 84 A12, Small cooking pot. *BMR74 I F50*.
- 85 A12, Rim of hand-made cooking pot. *BMR74 I (56)*.
- 86 A12, Inturned rim of small vessel, raised at one edge. *BC70 8 (20)*. Saxo-Norman.
- 87 A12, Rim of small cooking pot. *BC70 15 (2)*. Post-Medieval.
- 88 A12, Rim of small cooking pot. *BMR74 I (53)*.
- 89 A12, Body Sherd from storage vessel with applied thumb strips. *1976/2/17*.
- 90 A12, Body sherd with applied thumb strip. *BSM72 23 (106)*. 11th – 12th century.
- 91 A12, Handle, for attachment to body or top of vessel. *BMR74 I (56)*.
- 92 A12, Base. *BC70 6 (35)*. 12th – 13th century.

Fig 94 MIDDLE SAXON FABRIC, A12, 93 – 113

- 93 A12, Large Bowl. *1976/2/83*. Saxo-Norman.
- 94 A12, Bowl rim, with pronounced thickening on one side. *BMR73 (30)*.
- 95 A12, Rim of large bowl. *BC71 25 (8)*. Post-Medieval.
- 96 A12, Rim of small cooking pot. *BSJ74 I (60)*. 12th – 13th century.
- 97 A12, Inturned rim of small vessel, hand-made. *BMR74 I (24)*.
- 98 A12, Rim of large bowl, hand-made. *BSM71 23 (18)*. 12th – 14th century.
- 99 A12, Rim, hand-made. *BMR74 II F17*.
- 100 A12, Rim of large bowl. *BMR74 I F72*.
- 101 A12, Thick-walled cooking pot. *BMR74 II (2)*.
- 102 A12, Bowl rim, hand-made. *BMR74 I (24)*.
- 103 A12, Small cooking pot, probably hand-made. *BMR74 I (53)*.
- 104 A12, Rim of bowl, probably hand-made. *1977/1/165*.
- 105 A12, Rim of large hand-made vessel. *BC72 55 (47)*. 13th century?
- 106 A12, Rim of large vessel, finished on slow wheel. *BMR74 I (53)*.
- 107 A12, Large hand-made cooking pot. *BMR74 II F36*. 10th century?
- 108 A12, Rim of hand-made bowl. *BMR74 I (56)*.
- 109 A12, Rim of hand-made cooking pot or bowl. *BMR74 I (54)*.
- 110 A12, Hand-made bowl with lug or side handle. *BMR74 II F20*. 10th century?
- 111 A12, Rim of hand-made bowl with part of lug, probably upright. *1976/2/ U/S*.
- 112 A12, Rim of hand-made bowl with lug. *BMR74 II F4*.
- 113 A12, Rim of hand-made bowl with lug. *BMS71 19 (62)*. 12th – 14th century.

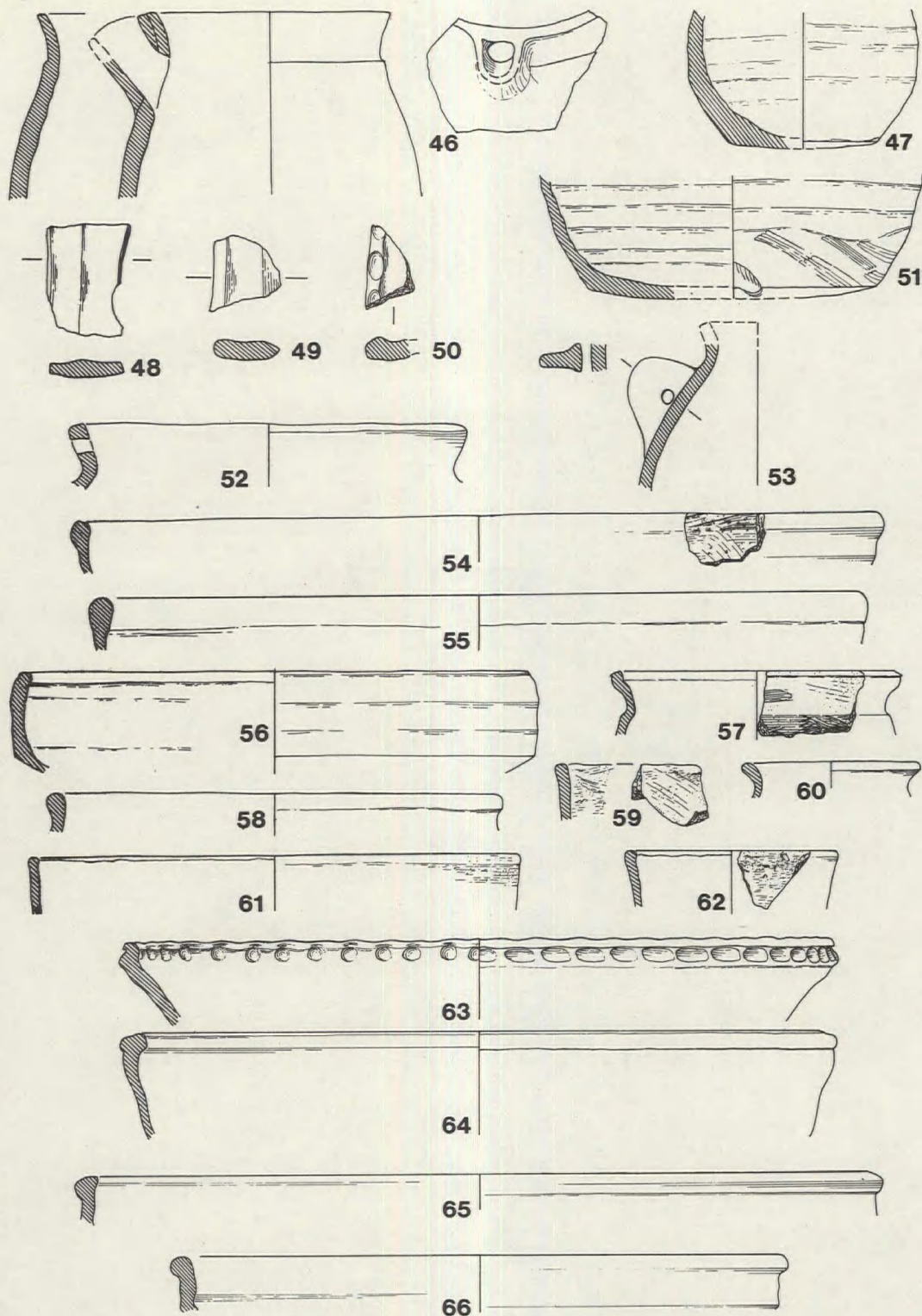


Fig 92 The Pottery: Middle Saxon fabrics A8 – A10, scale 1:4.
A8 46 – 53; A9 54 – 62; A10 63 – 66.

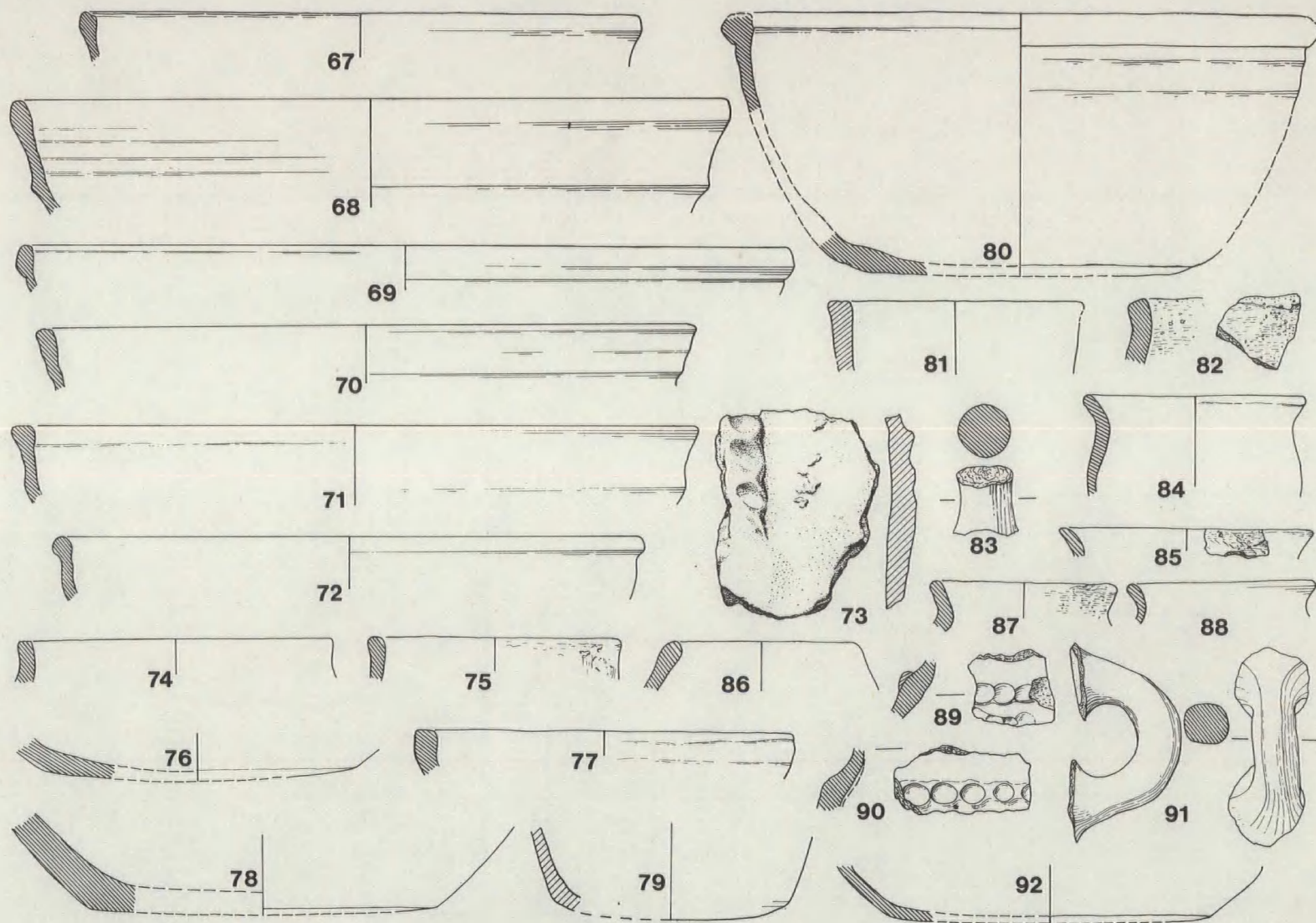


Fig 93 The Pottery: Middle Saxon fabrics A10 – A12, scale 1:4.
A10 67 – 72; A11 73 – 80; A12 81 – 92.

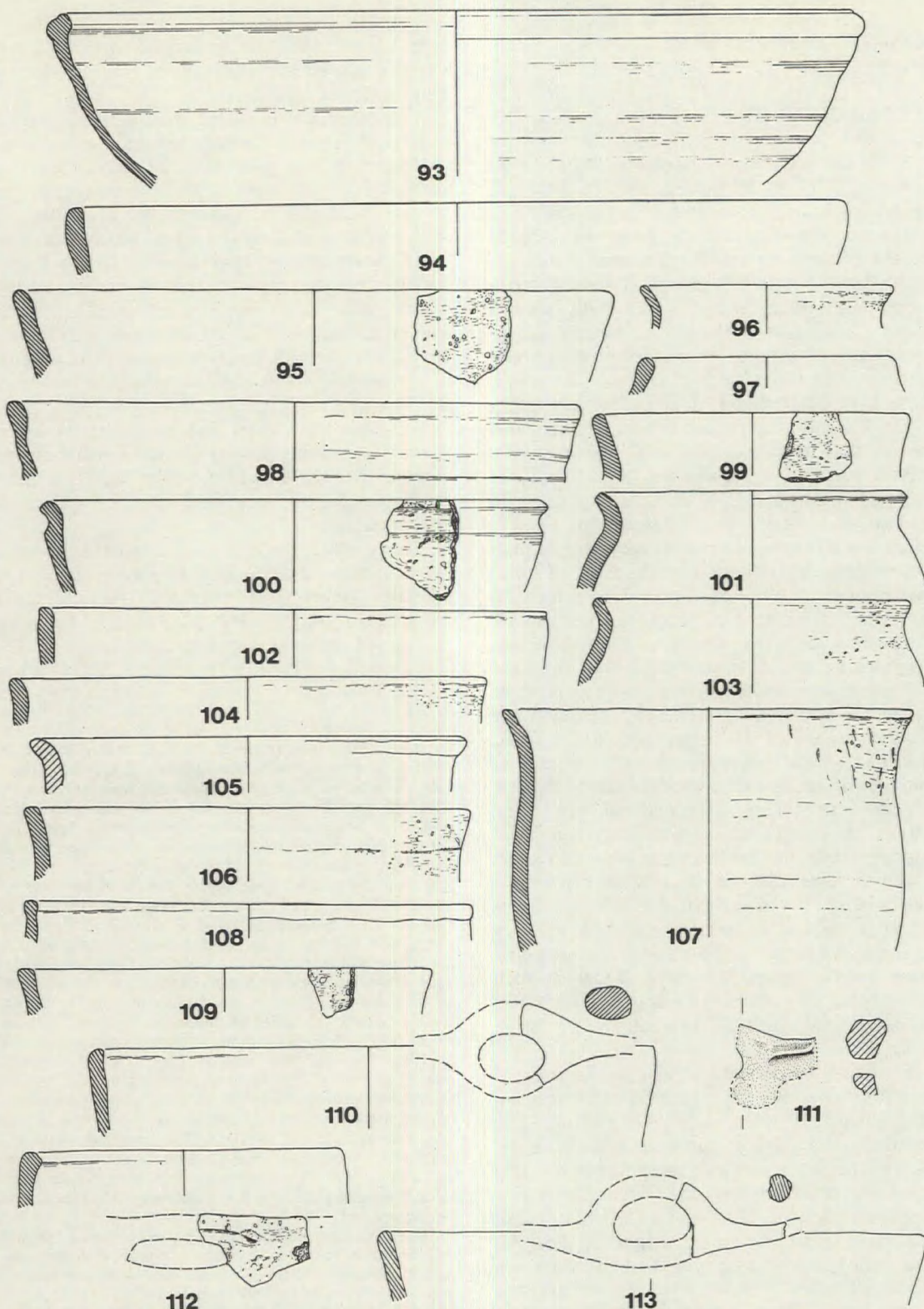


Fig 94 The Pottery: Middle Saxon fabrics A12, scale 1:4.

METHOD OF STUDY

883kg of Saxo-Norman/Medieval pottery were recovered, 78% of all pottery studied here. All sherds were initially checked for contiguity.

The principle of analysis by fabric was adopted and the first step in ordering this mass of material was to divide it into two groups, B types with calcareous inclusions, and C types with mineral temper. About half the weight of material consisted of featureless sherds whose further study could not be undertaken within available resources. These have been stored by site. This left 438kg or 9,950 sherds which apart from their fabric had one or more recordable features. A further subdivision resulting in 66 separate fabric types was made, B1 – B12 and C1 – C54. Storage has been organised according to these fabric groups.

These wares were determined according to their size, shape, amounts and combinations of inclusions present. A binocular microscope with X 20 magnification was used although in most cases it was possible to assign sherds to their respective categories by eye. Shell and fossil shell from the local limestone outcrops accounted for most of the tempering in the B wares. Grog, quartzite and other minerals were also present sometimes. The C wares had a wide variety of mineral inclusions, of which quartz and quartzite were the most frequent. This posed a problem as, without full petrological analysis, they could not be specifically identified. Grog, mica and iron ore fragments were also noted as well as some minerals which could not be recognised at all. It was thought that it would be unhelpful to publish an inclusions table based only on partial evidence. Until such time as these fabric divisions can be supported by detailed analysis, such a table could be extremely misleading. It is hoped that these results will be substantiated by future work.

A method was devised to analyse the form of the pottery without the imposition of a notional vessel function. It was not thought worthwhile or possible at this stage to carry out a vessel count. Many of the rim forms could apply to bowls, cooking pots or jars. Consequently 27 rims and 3 base groups were defined, allowing for variations within each, using a progression of shapes (*fig 95*). All other forms such as lugs, spouts, etc were given a separate category. Handles were divided into rod or strap forms. Sherds from Bedford Castle and St

John's Street were used to devise a form typology, which was applied to the material from all sites, its range widened as necessary.

120 decorative elements were defined relating to 15 basic groups (*fig 96*). Any other notable aspect such as the positioning of decoration, the method of manufacture etc was also recorded.

This system of analysis was then applied to all 9,950 significant sherds, each of which was identified by its own separate number. The analysed details were recorded on feature cards, each of which could hold 10,000 sherd numbers. Each card represented a different characteristic and could be punched to register its presence in any sherd. The information thus stored could be retrieved in any combination.

An assemblage sheet was made out for every context containing pottery so that associations of ceramic material could be clearly seen. This complemented the retrieval function of the optical coincidence cards.

This method was chosen for its flexibility and continued usefulness in analysing subsequently excavated pottery from Bedford. An additional advantage is that the information could be easily transferred for computer usage if desired.

ANALYSIS

Information was retrieved from optical coincidence cards in the form of numerical counts, either from a single card, for example the number of sherds of one fabric, or by using the system to combine factors, for example the instances of a certain decoration within one fabric. This detailed information was recorded in tabular form and is available in the archive. A further refinement was provided by the original grouping of the sherd numbers by location on the feature cards. Each one was divided into two parts to indicate the areas north and south of the river, every site having an allotted space. Counts for each site or area made local distributions immediately evident.

Archaeological excavation in Bedford has not provided suitable samples of pottery for detailed statistical analysis, since too many variables are involved. The basic division of the pottery into fabric groups does not provide standard samples; they range in quantity from 1 to 3450 sherds and all but 19 of the 66 fabrics are represented by less than 100 sherds. However, from basic numerical analysis of data retrieved from the optical coincidence cards, certain observations can be made. The insufficiency of the samples for numerical analysis should be kept in mind, and a table (*fig 97*) is provided giving an idea of the numerical elements from which the following information has been extracted.

The table also provides a running order, down the first column, of the fabrics from the most common to the least. It should be noted that while plain body sherds are considered insignificant in the context of this study, undecorated body sherds which are glazed are included and therefore

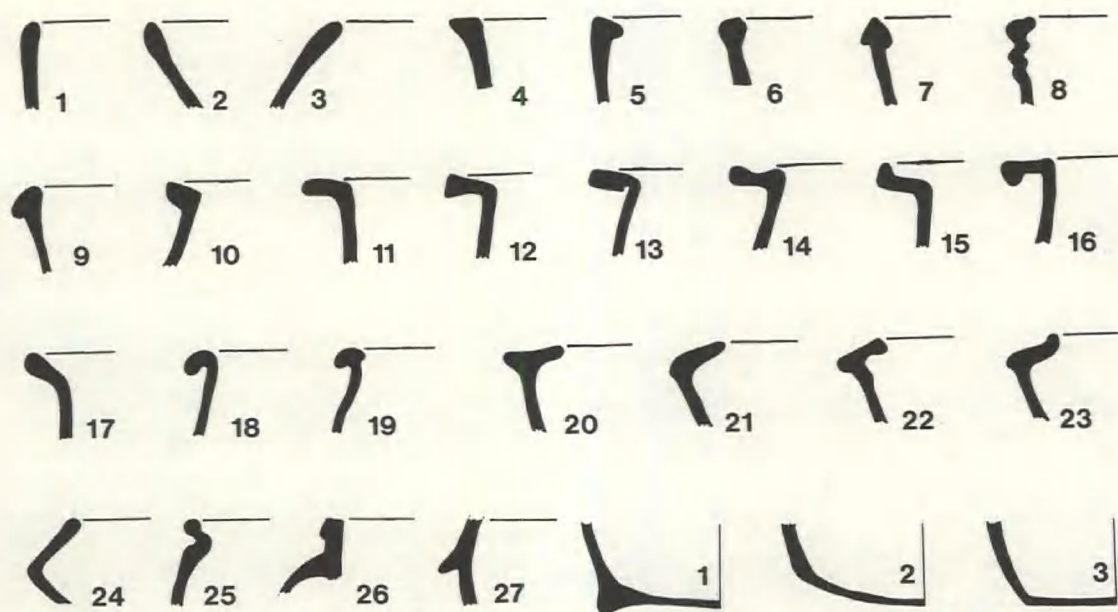


Fig 95 Main rim and base forms used in the analysis of Saxo-Norman and Medieval fabrics.

may give a 'weighted' total to glazed fabrics (C9, B9, C11, C12 etc). In the following six columns the total number of sherds of each fabric are divided according to their distribution in each of the six areas of Bedford. These are: 1 – Bedford Castle, 2 – Cauldwell Street, 3 – Mill Street, 4 – Midland Road, 5 – St Mary's Street, 6 – St John's Street. The next two columns show the totals of rim and base sherds for each fabric. The other columns are self explanatory except for the final column headed 'Other Forms' which includes: lips, spouts and sockets, lugs, skillets, feet, lids, basket handles, lamps and colanders.

The fabrics are described separately below. B1 is the most common fabric and with the shelly wares B4, B8 and B5 makes up the bulk of the 'significant' sherds processed. It is noteworthy that the two most common B ware fabrics, B1 and B4, are similar in composition, just as the three most common C wares, C1, C3 and C5, also form a related fabric group.

Only two fabrics in the D range were recognised. They did not fit happily into either the B or C ranges because of the proportion of calcareous to mineral inclusions.

B wares are predominantly shell-tempered and C wares mainly sandy but the D types appear to have mineral and calcareous inclusions in equal quantities. They have therefore been segregated as a separate category. D wares have slightly stronger affinities with the later B wares such as B11, but were sufficiently far removed from the mixed end of the range to merit being separated.

In order to compare the distribution of each B and C fabric throughout the six areas, a percentage of the total sherds per area was taken and results for the 22 most common fabrics drawn up graphically. In figure 98 the six separate graphs illustrate the similarities in distribution of groups of fabrics. From the vertical axis it is possible to

compare the relative amounts of each fabric in each of the six areas marked off along the horizontal axis. The fabric groups in graphs A and B, which contain the greatest percentages of the sherds found, complement each other in their distribution patterns, while a similar phenomenon is observed between the fabrics in graphs C and D. Graph A illustrates the similarity in distribution of the most common B ware and most common C ware, and graph B picks out the comparable distribution of C1 and C22 – two related fabrics. Graph C shows all the main glazed C wares which tend to be less common in areas 1, 3 and 6. Much the same pattern is seen amongst the fabrics on graph E with less in area 1 and 3 but more in area 5 than 4. The fabrics B6 and C29 are remarkably similar in their dispersal, although the latter is more prolific.

The base sherds were analysed in three groups – flat, sagging and foot-ring but the general lack of base sherds made comparisons difficult. In figure 99 it is possible to compare the percentages of flat:sagging:footed bases in the 23 most common fabrics. There do not seem to be any significant factors in the proportion of flat to sagging bases in the different fabrics, so no diagnostic analysis of base forms is suggested except that foot-ring bases are predominantly found amongst the glazed fabrics.

There were 27 rim forms recognised and the most common are Rim Forms 17, 11, 4 and 15. Figure 100 shows the relative occurrence of C and B rim sherds in each rim form. The simple Rim Forms 1 – 3 seem to be both C and B ware forms, but Rim 4 is more commonly a sandy form and found especially in C1 fabric. Rim 11 which is also predominantly a sandy form is found mainly in C3 and C5. It is the most common of the everted rim forms which appear diagnostic of the finer C wares. Those rim forms represented mainly by shelly fabrics tend to be



Fig 96 Decorative elements used in the analysis: 1 – 9 rouletting, 11 – 13 rouletting/stabbing, 19 – 24 stabbing, 29 – 33 slashing, 38 – 40 knife cuts, 43 – 45 incised line, 51 – 52 excised line, 56 – 66 combing, 71 – 75 direct thumbing, 78, 81 applied strips, 88 – 91 applied motifs, 93 – 95 stamps.

the earlier forms. Rim Form 15 is almost exclusively shelly and also the bowl Rim Forms 20 – 24. The jug Rim Form 8 is proportionately more common among the sandy fabrics, although well represented by the shelly fabrics B5, B8 and B9. Approximately one third of all the rim sherds processed belong to the group Rim Form 17, in which there is perhaps a greater variety of shapes than in other forms. It is four times more common among the shelly fabrics, especially B1, than the sandy fabrics.

In the analysis of the decorative elements, including manufacturing techniques such as wheel marking, every different class of decoration is recorded. A single sherd may well display several decorative features.

Decorations observed on sandy wares are almost twice as numerous as those on shelly wares. In *figure 101* it is

possible to compare the proportional occurrences of decorations on sandy and shelly wares within each decoration group. Although C wares tend to bear more decoration, direct thumbing and applied thumbed strips appear more frequently on the shelly sherds. This is also the case for stab decoration and can be explained by the large number of highly decorated handles found mainly in fabric B8. The most recurrent decorations found on sandy wares are the result of manufacturing finishes, and straight or wavy combing. These appear most commonly on the fabrics C1, C5 and C3 in that order. Direct thumbing also occurs frequently on sandy sherds and rouletting, which is associated with applied slips on glazed C ware sherds. Only about one tenth of all the glazed sherds is shelly and the number of glazed sherds of any fabric is shown in the table.

Fabrics	Total sherds of each fabric	Totals in Area 1	Totals in Area 2	Totals in Area 3	Totals in Area 4	Totals in Area 5	Totals in Area 6	Totals of Rim sherds	Totals of Base sherds	Instances of Decoration	Glazed sherds	Handle Pieces	Totals of 'Other Forms'
B1	3450	1100	104	50	158	756	1282	2690	521	172	—	33	34
B4	1361	250	39	11	127	214	720	1047	236	64	—	5	9
B8	837	195	28	7	80	140	387	541	132	171	—	115	17
C3	515	166	6	5	27	157	154	244	87	201	—	26	3
B5	511	94	14	5	69	98	231	340	137	47	—	17	6
C9	429	4	31	8	80	156	150	34	25	161	407	18	6
C1	407	71	17	4	36	57	222	289	70	72	—	10	4
C5	399	16	19	2	37	138	187	217	82	118	—	35	5
C22	176	29	10	2	26	10	99	93	30	68	—	3	1
B11	140	41	5	3	15	27	49	89	34	15	—	2	3
C29	139	46	3	—	13	47	30	59	29	50	—	7	1
C4	126	36	6	3	12	28	41	72	15	46	—	19	4
C10	119	34	4	2	20	19	40	27	22	20	52	8	1
B2	116	29	6	3	4	26	48	96	15	6	—	2	—
C6	115	17	5	1	9	33	50	59	34	14	—	9	—
B6	110	32	1	—	8	29	40	95	7	10	—	—	—
C2	108	11	4	1	6	25	61	55	17	47	—	6	2
B9	105	46	—	4	11	19	25	23	3	38	83	8	1
C11	105	4	2	—	29	33	37	10	10	30	89	9	—
C12	98	13	4	1	25	8	47	15	7	8	91	3	3
B7	96	21	3	—	17	18	37	76	10	17	—	2	—
C27	49	16	1	—	3	9	20	21	13	15	—	1	2
C36	47	3	1	1	8	5	29	30	12	11	1	2	—
B3	33	5	4	—	4	4	16	31	2	1	—	2	—
C28	31	9	1	—	1	10	10	14	9	12	1	1	—
C8	29	7	1	—	1	—	20	5	10	16	—	6	1
C25	25	4	—	—	3	8	10	14	3	3	—	7	—
C15	24	12	—	—	4	4	4	4	1	1	19	4	—
C17	24	2	—	1	6	6	9	2	—	11	22	1	—

Fig 97 Table of Sherd Totals for Saxo-Norman and Medieval Fabrics.

Fabrics	Total sherds of each fabric	Totals in Area 1	Totals in Area 2	Totals in Area 3	Totals in Area 4	Totals in Area 5	Totals in Area 6	Totals of Rim sherds	Totals of Base sherds	Instances of Decoration	Glazed sherds	Handle Pieces	Totals of 'Other Forms'
C20	22	11	-	-	8	1	2	3	3	5	22	1	-
C24	21	8	-	-	-	2	11	11	4	6	-	4	1
C7	20	1	1	-	5	2	11	12	2	1	2	4	-
C16	15	3	-	6	1	2	3	7	-	-	15	1	-
C21	15	13	-	-	-	1	1	6	1	7	15	1	1
B10	12	2	-	1	-	3	6	10	3	-	-	-	1
C14	12	5	-	-	2	2	3	6	2	4	1	1	2
C35	12	4	-	-	2	5	1	7	1	5	-	1	-
C44	12	-	2	-	1	3	6	10	1	1	-	-	1
C40	11	3	-	-	4	2	2	11	1	1	-	-	-
C34	9	1	-	-	1	-	7	6	1	1	-	1	1
C30	8	2	-	-	1	4	1	4	1	1	4	-	1
C54	6	-	-	-	1	1	4	6	-	-	-	-	-
C18	5	-	-	-	2	-	3	1	-	2	3	1	-
C39	5	3	1	-	-	-	1	2	1	-	2	1	-
C33	5	3	-	1	-	1	-	4	-	-	5	-	-
C31	4	-	-	-	1	3	-	-	1	-	3	-	-
C23	4	-	-	-	1	-	3	2	-	2	2	1	-
C19	3	-	-	-	-	2	1	3	-	-	-	2	-
C37	3	1	-	-	1	1	-	2	1	-	-	-	-
C42	3	-	-	-	3	-	-	-	1	-	3	-	-
B12	2	-	-	-	-	1	1	2	-	-	-	-	-
C41	2	-	-	-	-	-	2	1	1	-	-	1	-
C43	2	-	-	-	-	-	2	1	1	-	-	-	-
C51	2	-	-	-	-	-	2	-	-	-	-	2	-
C13	1	-	-	-	-	1	-	-	-	-	-	-	1
C32	1	-	-	-	-	-	1	1	-	1	1	-	-
C38	1	-	-	-	1	-	-	-	-	1	1	-	-
C45	1	-	-	-	1	-	-	-	-	-	1	-	-

Fig 97 (continued)

Fabrics	Total sherds of each fabric	Totals in Area 1	Totals in Area 2	Totals in Area 3	Totals in Area 4	Totals in Area 5	Totals in Area 6	Totals of Rim sherds	Totals of Base sherds	Instances of Decoration	Glazed sherds	Handle Pieces	Totals of 'Other Forms'
C46	1	-	-	-	-	-	1	-	-	1	-	-	-
C47	1	1	-	-	-	-	-	-	-	1	1	-	-
C48	1	-	-	-	1	-	-	1	-	-	-	-	-
C49	1	-	-	-	1	-	-	1	-	-	-	-	-
C50	1	1	-	-	-	-	-	-	-	1	1	-	-
C52	1	-	-	-	-	-	1	-	-	-	-	1	-
C53	1	-	-	-	-	-	1	1	-	-	-	-	-
Totals of all fabrics	9950	2375	323	122	877	2121	4132	6413	1599	1486	847	385	112

Fig 97 (continued)

B1 ST NEOTS-TYPE WARE 114 – 231

This is the classic shell-tempered ware of the region. It is a rough fabric filled with much well-pounded shell usually evenly mixed throughout the clay matrix. The fabric is fairly soft and sometimes friable. Many sherds feel soapy to the touch but not all have this characteristic.

The core is always reduced to a grey-black colour whilst there is considerable variation on the surfaces. Here the colours range from pink through purple and brown to black.

2,690 rims, 521 bases, 33 handles and 6 lugs have been analysed and these sherds represent chiefly bowl and cooking pot forms. The vessels are wheel-made and usually have sagging bases, although some flatter examples also occur. At least 9 socketed bowls have been identified and there are several lamps and storage vessels. Some handles and lugs are likely to relate to the latter, and possible jug forms are also implied from some of the strap handles.

Less than 5% of St Neots-type ware has any form of decoration, and this is usually thumbing either directly on to the pot or on applied strips. Very occasional stabbing, rouletting and incised line decoration has been noted.

The St Neots-type forms in Bedford are for the most part virtually identical to the forms noted and described at St Neots (Addyman, 1973, 78 – 87) and elsewhere in East Anglia (Hurst, 1957, 43 – 70) most recently summarised by Hurst (1976, 320 – 323). It has been decided to direct the reader's attention to these references rather than to quote extensive parallels here.

No kiln site is known for the production of this pottery. The ware was most likely fired in clamp or bonfire kilns of which few traces would be expected to survive. Kilns must have existed near Bedford.

The date range for St Neots-type ware has been discussed most recently by both Addyman and Hurst and there is general agreement on a 10th – 12th century

flourit for the distinctive shell-filled fabric. During the 12th century the fabric became sandier and the earlier forms gave way to shapes that were more recognisably Medieval. There is a suggestion that St Neots-type ware is likely to have had its origins in the 9th century (Addyman, 1973, 78) and this may well have been the case in Bedford. A certain amount of overlap between the Middle Saxon hand-made type A11 and the wheel-thrown St Neots type vessels, suggesting a 9th century date, has been noted from the Midland Road 1974 excavations.

There has been a suggestion (Addyman, 1973, 82) that small cooking pots with diameters of less than 150mm occur early in the series and are probably pre-Conquest in date. This may well be so in Bedford where small cooking pots have been recovered, but generally they are found alongside the larger vessels, and the exclusive nature seen at St Neots is not a feature of the Bedford pots.

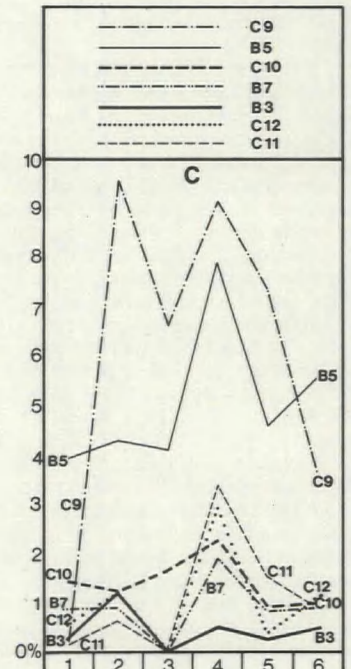
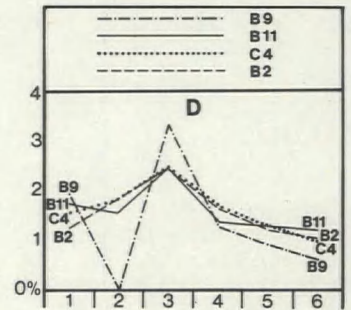
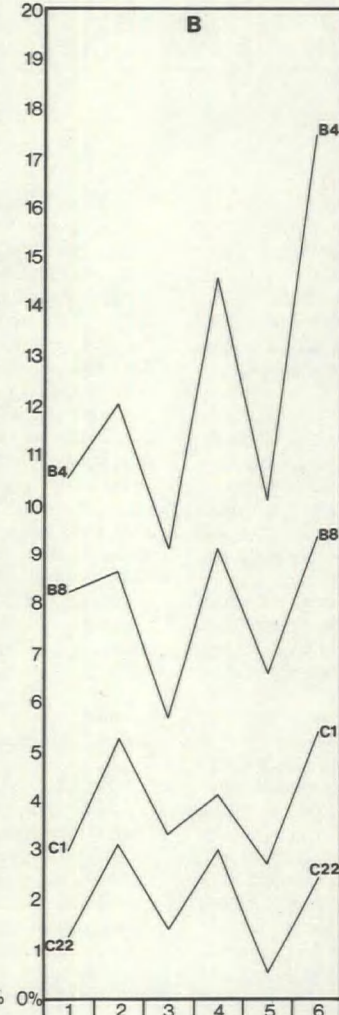
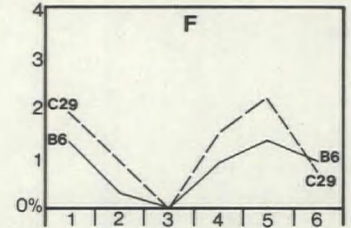
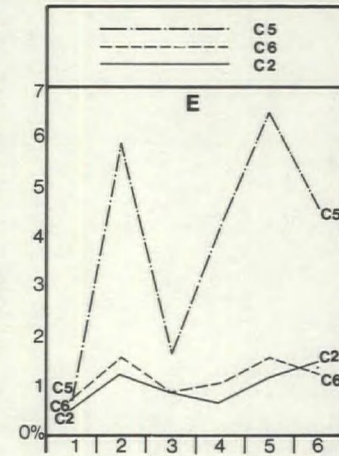
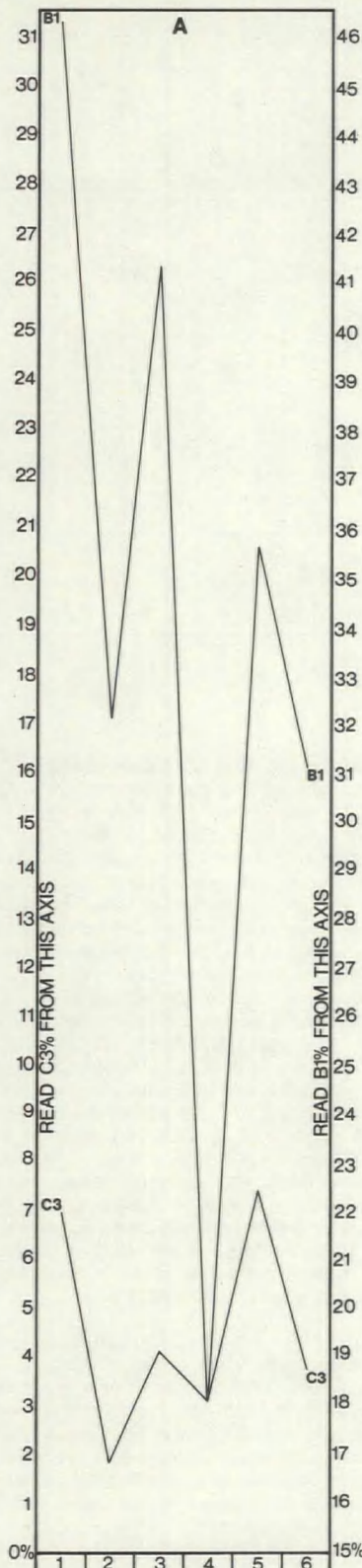
It has still not been possible to define the changes and development of the fabric very clearly, from excavation evidence or from pottery studies. Neutron activation analysis by Richard Hunter (Hunter, 1975) has also proved to be inconclusive. It is therefore still necessary to regard St Neots-type ware in fairly general terms as a fabric spanning 200 – 300 years during the Saxo-Norman period.

B2 FABRIC 232 – 250, 252

Although similar to B1, this fabric contains a shell tempering which was not as well-pounded or as well-mixed as St Neots-type ware. In addition it has many mineral inclusions not normally noticed in B1. The core is always grey-black and the surfaces are reduced to a grey-brown-black colour range. Whilst some vessels have obviously been wheel-thrown, others appear to have been built up by coiling and then finished on the wheel. None of them had been finished off as well as the St Neots-type examples.

FABRIC DISTRIBUTION IN 6 BEDFORD AREAS

- 1 BEDFORD CASTLE
- 2 CAULDWELL STREET
- 3 MILL STREET
- 4 MIDLAND ROAD
- 5 ST MARY'S STREET
- 6 ST JOHN'S STREET



There were not a great many finds of B2 pottery, and only 96 rims and 15 bases were recognised and analysed. The forms are all cooking pots and bowls except 2 strap handles, one with applied thumbled strip decoration suggesting the occurrence of a large handled storage vessel or jug. Very few B2 sherds are decorated.

Firing in bonfire kilns, as for B1, seems probable, and possibly a little more control over firing and cooling processes was exercised in order to achieve the totally reduced ware. The suggested date range is once more comparable with B1 but without a strong continuation into the 12th century.

B3 FABRIC

251, 253 – 264

The shell tempering of B3 consists of roughly pounded and unevenly mixed shell within the clay matrix. The core is grey-black and the surfaces are evenly black all over. Bonfire firing in controlled conditions again seems probable.

The ware is wheel-thrown and has been finely potted. There are only 31 rims and 2 bases all representing cooking pots. These all have small diameters and there are no examples showing any form of decoration. A 10th – 11th century date range is suggested.

B4 FABRIC

265 – 315

The basic temper in B4 is shell and shelly limestone which has not been very well pounded or mixed. Grog and a few mineral inclusions also occur, and there are frequently surface voids making the fabric brittle and rough to the touch. It is noticeably coarser than B1.

The cores are always grey but the surfaces show considerable variation from pink, bright orange or brown shading through to grey. Clamp or bonfire kilns are once more suggested and a site in or near Bedford seems probable.

On the whole the vessels are well potted and often thin-walled, having been wheel-thrown. Some bowl types however are quite thick particularly at the base where they have been roughly cheese-wired from the wheel. The forms are quite varied and are represented by 1,047 rims and 236 bases. Small bowls with inturned rims, in St Neots style, form a distinctive type, and there are many examples of larger bowls with hammer-headed rims. There is a variety of cooking pot forms which towards the end of the range have straight sides and lid seatings. No lids have been found however, so perhaps these were not made from pottery. Some pots have scars for basket handles, and lamps and/or candlesticks also occur, but no jug forms have been recognised. Those vessels which do not show cheese-wire marking tend to have sagging bases. Decoration on B4 sherds is not very common and consists entirely of thumbing, either directly or by applied strips.

This fabric occurs with B1 and is apparently contemporary with and copying B1 throughout the Saxo-Norman period. The vessels are quite well made but do not compare with the generally finer St Neots-type pots, and therefore do not seem to have been exported. B4 seems only to have been used in Bedford and was probably an entirely local product.

B5 FABRIC

316 – 340

B5 has shelly limestone tempering with voids clearly showing on the internal surfaces. Outer surfaces are rough-textured, usually smoothed over, and sometimes show sooting. The vessels are wheel-made, with visible wheel marks. Both surfaces are orange-buff with a light to medium grey core. The pots are well made with fairly thin walls.

This is one of the larger groups likely to be locally imported, and the fourth largest of the calcareous tempered wares found in Bedford. The vessels are mostly jugs of all sizes, cooking pots, and large containers which may be storage jars. The 17 strap handles are from jugs: 8 plain, 5 decorated handles and 5 handle scars. Altogether 340 rims were found. Of the 137 bases, just under half are flat and only 74 definitely sagging. Three footed bases also occurred.

While the majority of the pottery is plain with only 47 instances of decoration, there was thumbing, rouletting and stabbing in small amounts. The incised leaf pattern, decoration number 33 in *figure 96*, 326, is closely paralleled by sherds found at the 13th century Harrold kiln (Hall, 1972). The ware has affinities with that found at Olney Hyde (Mynard, personal communication). The date suggested for this ware is 12th to 13th century.

B6 FABRIC

341 – 353

This ware has as its chief tempering agent a rough mix of coarsely chopped shell and limestone. There is a variety of other inclusions which give the matrix a slightly sandy texture. The surfaces are rough-textured, though sometimes smoothed. The pots are wheel-made and fired hard to a fairly high temperature. The surfaces are light reddish-brown to grey, and the core is grey, sometimes with reddish-brown margins.

This is one of the smaller groups of local imports, and only the seventh largest of the B wares. Cooking pots and bowls were recognised, together with some possible storage vessels. Jugs were noticeably absent. 95 rims and 7 bases were found. Of the 10 instances of decoration, the most common element was the applied thumbled strip.

It has been suggested that B6 is akin to Lyveden B ware, but since none of the Bedford vessels is glazed and the forms bear little relationship to the Lyveden forms (Webster 1975) this can only be a tentative association. The suggested date is 12th to 13th century.

B7 FABRIC

354 – 369

This ware contains ground shell as its principal temper, but it does contain quartzite and other minerals as well as grog pellets. It is generally a coarse fabric, but it does have finer examples. The external surfaces are light brick-red with a very smooth finish. The core is red throughout in thin-walled vessels, but a grey core with red margins is usual with thicker heavier examples. The pots are wheel-thrown, well made and evenly fired.

Fig 98 (Opposite) Fabric Distribution Graphs A – F.

The peaks and troughs express the individual fabric types as a percentage of the total fabric range present within each area. They are connected to facilitate comparison between the different groups.

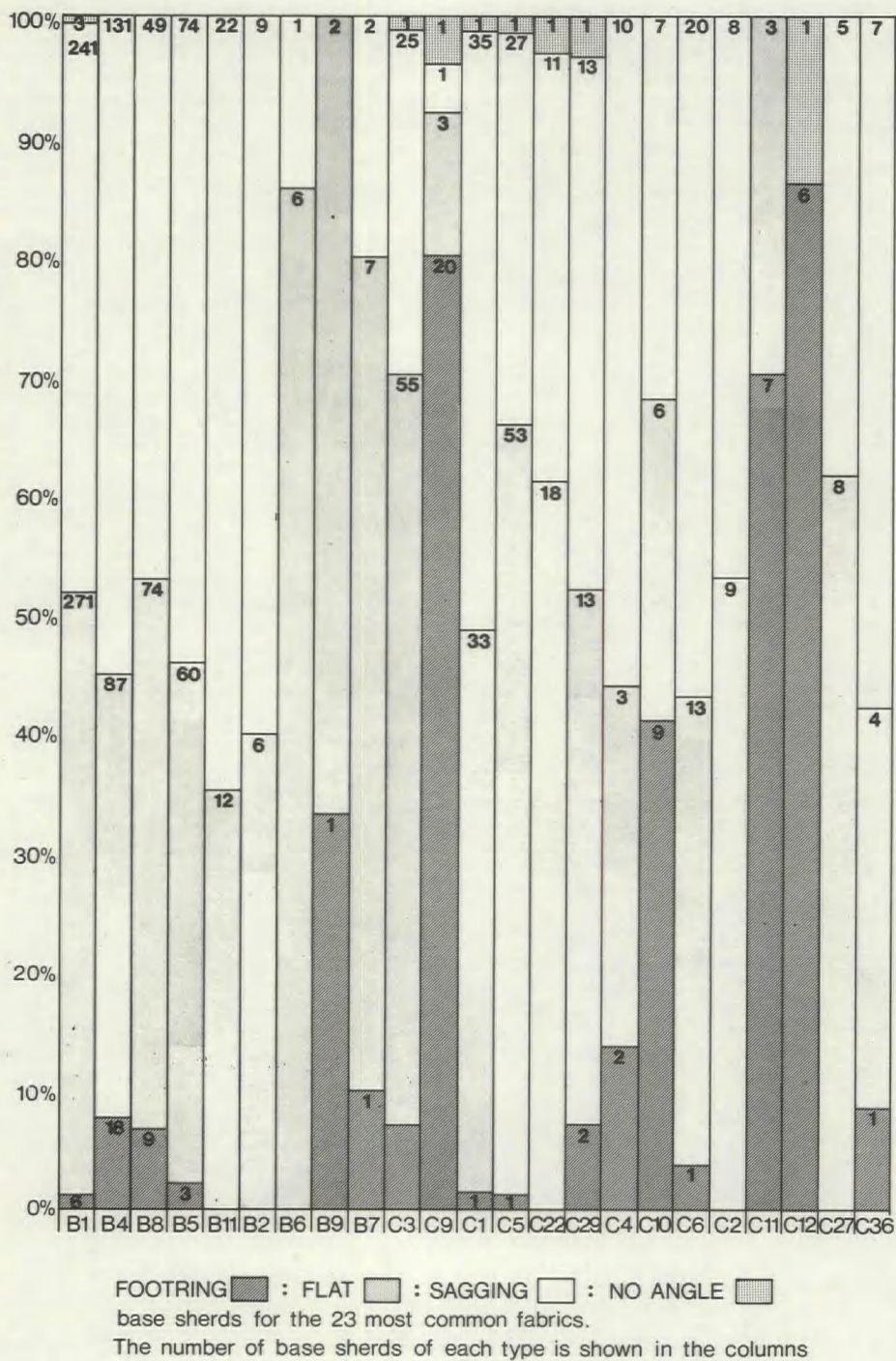


Fig 99 Percentage Occurrence of Base Sherds: proportions of base sherd types, calculated from the total base sherds of each fabric.

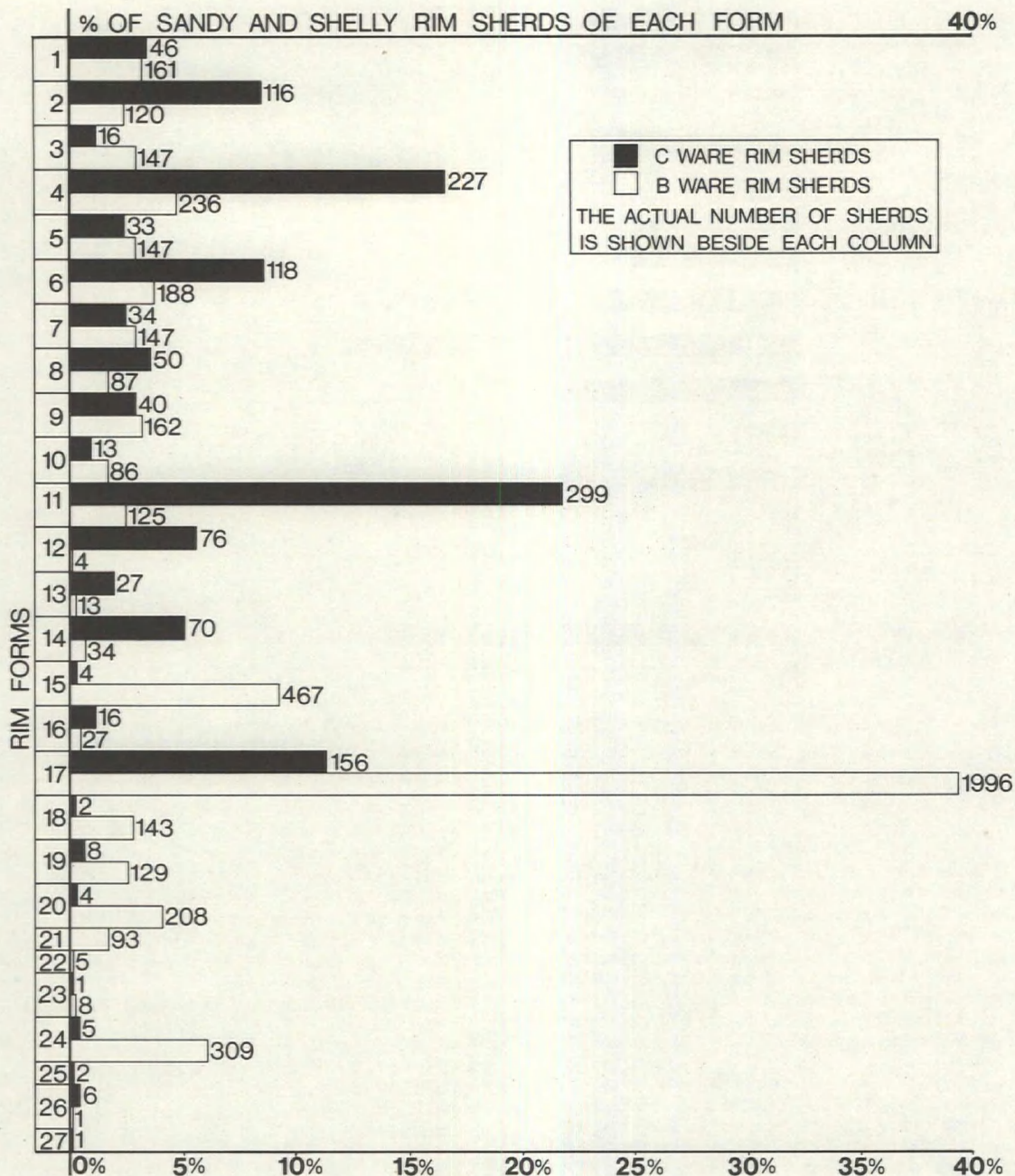


Fig 100 The Proportional Occurrence of Sandy and Shelly Rims of each form; C ware percentage is calculated from the total number of sandy rim sherds, and B ware percentage from the total number of shelly rim sherds.

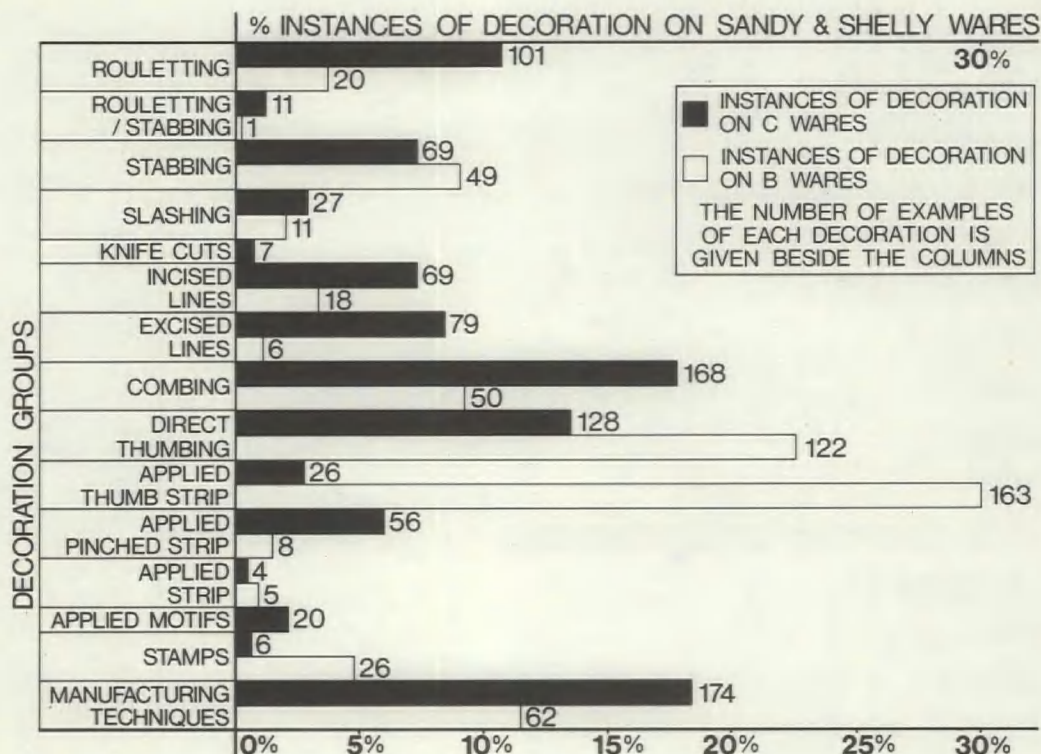


Fig 101 The Proportional Occurrence of Decorations of Sandy and Shelly wares: C and B ware percentages are calculated separately on the total instances of decoration on Sandy or Shelly sherds.

It is a minor local import, the ninth largest of the B wares. The vessels are mostly small cooking pots, large bowls in the St Neots tradition, and jugs. Fish dishes occur also. There are 76 rims, 10 bases and 2 strap handles. Of the 17 instances of decoration the main element is direct or applied thumbing. Stabbing, triangular rouletting and straight incised lines are fairly frequent.

This is possibly a developed form of St Neots ware, and the date range suggested is 12th to 13th century.

B8 FABRIC 370 – 412

This is a shell and calcite-tempered fabric, both tempers being fairly sparse. The vessels are wheel-made and were fired in a well-controlled kiln. This has given them a hard fired, evenly coloured quality. Their surfaces are buff to light red-buff. The core is medium to dark grey with light red-buff margins.

It is one of the principal local imports, the third largest of the calcareous-tempered wares. Most of the pots recovered were jugs, but there were also bowls and some cooking pots together with 5 vessels with basket handles and 1 lamp. There were 541 rims, 132 bases, 11 lips which probably came from jugs, and a single spout. The

171 instances of decoration apply almost exclusively to the jugs, and 115 handles also mostly came from jugs. There was a great deal of thumbing, both applied and direct. Stabbing occurred, together with some rouletting and incised wavy lines. There were single instances of square grid and cruciform stamps.

The ware had affinities with the material produced at the Harrold kiln (Hall, 1972, 23 – 32) and with B5. The pottery has a strong resemblance to that found at Olney Hyde (Mynard, personal communication), and this is the more likely source of production. The suggested date range is 11th to 13th century with a concentration in the 13th century.

B9 LYVEDEN WARE 413 – 425

Lyveden type fabrics as defined by Webster in his report on the pottery from the Lyveden Kilns (1975, 60 – 95), have been recognised at Bedford.

The clay matrix is tempered with much crushed shell and limestone and the inclusions are usually visible on the surfaces. Sometimes they have burnt out leaving voids and giving a corky appearance.

The core is grey but the surfaces are usually oxidised

to give a colour range from pink to orange to buff. Traces of white slip have been noted on some examples and most sherds are glazed. The colour ranges from apple-green to dark olive-green, with applied strips in yellow, and yellow/brownish-red glazes occurring in some cases. The decoration is chiefly in the form of applied strips and circular pads of clay, embellished with a grid stamp in various sizes. A little slashing, rouletting and combed straight and wavy lines have also been noted, and there are 38 instances of decoration altogether.

Only the jug forms (Webster, 1975 fig 21, types H and J) are found in Bedford and these are represented by 23 rims, 3 bases, 8 handles (rod and strap) and 83 glazed body sherds. These jugs, though forming a recognisable regional import, represent only a small proportion of the total B wares. They occur in late 12th – early 13th century contexts at the Castle, and in 13th – early 14th century ones at the Midland Road and St John's Street sites.

B10 FABRIC 426 – 431

This coarse fabric contains shell fragments and small limestone lumps, as well as some mineral inclusions and grog. The core is very black and the surfaces are oxidised giving a dull orange-red colour with black patches. Occasional spots of self-slip were seen on one example.

10 rims, 3 bases and 1 spout were found representing various cooking pot types as well as 1 bowl and part of a candlestick. The vessels are all undecorated, wheel-made and poorly finished. They are individual examples, and this, coupled with the variable nature of the tempering in the clay, suggests that they might be 'one-off' pots rather than belonging to a strictly defined ware.

B11 FABRIC 432 – 441

Shell and limestone pounded fairly small and well mixed with the clay form the tempering of fabric B11. Shell fragments are often apparent on the outer surfaces, and there are frequent voids where shell has burnt out on the inner surfaces.

The core is a medium grey colour and often has pink-buff margins. The surfaces can be anything from pink-buff to dark grey, sometimes with black patches. They always feel smooth to the touch and look as though they may have been treated with a slurry of wet clay before firing.

89 rims, 34 bases, nearly all flat, as well as 3 lips and 2 strap handles have been found. Jugs and cooking pots form the bulk of the types represented, and there are a few large bowls and storage jars in addition. Only a small proportion of the sherds are decorated, 15 instances being noted, consisting of rouletting, combing and direct thumbing.

The pots are wheel-made and probably date to the 12th – 13th centuries. They have affinities with fabrics B5 and B8, and may represent the end of the range of wares of Olney Hyde type. B11 is the fifth most common B ware, but there are noticeably fewer finds than of B8 and B5.

B12 FABRIC 442 – 443

Shell, limestone and plenty of grog fill the clay matrix which forms fabric B12. The core is bright orange-pink and the surfaces are dull brown-buff and smoothed over. There are no decorative elements. Only 2 rims, one from a jug and one from a bowl, have been identified.

C1 FABRIC 444 – 470

This distinctive fabric contains well-mixed white quartz inclusions with occasional fragments of grog, flint and other minerals. The core is always grey whilst the surfaces exhibit considerable variation, within a dull grey-red-brown range, sometimes with sooty patches.

The surfaces have a sandy or harsh touch, and the vessels are wheel-made. They are often poorly finished under the rims where attempts at knife trimming can be discerned.

The most common forms are cooking pots with some jars and bowls. Two sockets or spouts suggest bowl forms to which handles (probably wooden) would have been attached. 6 strap handles were found indicating that a few jugs were also made. There were 289 rims and 70 bases altogether with both flat and sagging examples occurring.

In all, there were 72 instances of decoration recorded on this fabric. Combed wavy lines are characteristic, as well as some rouletting and stabbing. A little finger-tip, thumbing and incised line decoration has also been noted.

On the whole, these pots were well made, functional vessels. They have been found in some quantity and would appear to be locally made and used. Where they were manufactured is not known, and from the variations in surface colour it would seem that the firing and cooling processes were imperfectly controlled.

C1 pottery vessels occur during the 11th – 13th centuries, and are amongst the most frequent C ware finds in Bedford.

C2 FABRIC 471 – 491

C2 is a highly distinctive ware. The principal inclusion is red quartzite, often with an abundance of large grains which show clearly on the surface. The fabric is nevertheless well mixed, and includes other quartzites. The surfaces are very rough and pimply. There is a wide variety of colour, the reduced and oxidised examples ranging from orange-brown to black, always with a grey core. The even colour of the individual vessels indicates controlled firing. The vessels are competently made on a wheel, and are highly decorated.

It is presumed to be a local product, although there is no known kiln source. The ware does not seem to occur in the centres nearest Bedford. It is hoped that the distinctive red quartzite may be an indicator of provenance when it has been subjected to detailed mineral analysis. The quantity found is much the same as C4, with 55 rims and 17 bases closely divided between flat and sagging. There are only 6 handles, strap and rod, one of the latter belonging to a skillet. The chief forms are mostly small and large bowls, with cooking pots and jugs also occurring.

The 47 instances of decoration appear mostly on jugs. Straight and wavy combing predominates, and there is a substantial number of applied pinched strips. There is also stabbing, straight incised and excised lines, and examples of thumbing and finger tipping.

The pottery has a likely date range from the 11th to the 13th centuries.

C3 FABRIC 492 – 512

The C3 fabric probably belongs to the same family as C1. It has a well-mixed mineral inclusion content, consisting chiefly of quartz/quartzite grains which are usually fairly small.

The core is grey-black and the surfaces are always reduced to grey with occasional buff or black patches. The fabric feels sandy and is smooth in contrast to the harshness of C1. The vessels are wheel-thrown and generally finer and better-finished than C1 pots.

The forms are mostly cooking pots and jugs with some bowls including socketed examples, and 510 may be a skillet. 244 rims, 87 bases, often sagging, and 26 mainly strap handles were analysed.

201 instances of decoration were noted, considerably more than on C1 examples. Incised and combed lines, direct thumbing and some applied strips occurred, as well as stabbing and slashing.

This fabric has a purely local distribution and is assumed to have been made in the Bedford region, but no kilns have so far been found. A 12th – 13th century date range is suggested, with the exception of 495 which may be hand-made and pre-Conquest in origin. After the shelly forms B1, B4 and B8, C3 is the most common ceramic type.

C4 FABRIC 513 – 528

This group of pottery has inclusions of large varied quartz grains together with quartzite and flint, all in moderate quantities. The temper is larger than that seen in C1 and C2, and is clearly visible on the surfaces. This gives the pottery a rough pimply texture. The vessels are made on a wheel and are hard-fired. Most of them are fairly heavy with thickish walls, but there are finer examples. The ware is almost invariably reduced with dark grey to buff surfaces, and has a grey core, sometimes with brownish margins.

Like C1 and C2 this ware is likely to be a local product made for the Bedford market. There is no known kiln for the pots, and they do not appear to have been exported to Bedford's near neighbours. Only 72 rims have been found in the town, together with 10 sagging and 5 flat bases. Of the 19 handles, 15 are strap handles which are mostly plain. The majority of the containers are jars, jugs and storage vessels. There are some cooking pots but no bowls.

46 instances of decoration consist mainly of combing and direct thumbing. There is some stabbing and a little applied thumbed strip, slashing and incised straight lines.

While a date range covering the 12th and 14th centuries is suggested, there is a probability that the ware is of 13th century date.

C5 FABRIC 529 – 547

This is one of Bedford's most distinctive and easily recognisable fabrics. The inclusions are quartz and quartzite, moderate to quite large in size. The mix is sometimes random and uneven, but the grains are generally larger than those found in C1 and C3 which may be related fabrics. C5 is a heavier, coarser ware, similar in texture to C3, but smoother than C1. The pots are mostly reduced and frequently have a marked sandwich effect. The surfaces are dark grey to black, with a grey core and red margins. All the vessels appear to have been competently made on a wheel. Handles tend to be roughly plugged in, but the exterior of the pots, usually jugs, has been smoothed off to give a well-finished appearance.

C5 is one of the largest groups of mineral tempered pottery found in Bedford, and is thought to be a local product of some importance, while not apparently being exported beyond the confines of the town. There are 217

rims, 82 bases, 55 of which are flat and 27 sagging. Of 35 handles, 31 are of the strap variety. Most of the vessels are jugs, with a large number of cooking pots together with large and small bowls. 3 fragmented bung-holes may infer the presence of cisterns.

The 118 instances of decoration consist of round thumbing and finger tipping, with straight excised lines. There is a small amount of direct pinching and applied pinched strip, also incised lines and thumb nail impressions.

The suggested date range for this fabric is from the 12th to the 14th centuries with a strong probability that it continued for another century.

C6 FABRIC 548 – 560

A moderate amount of inclusions is present in this coarse fabric comprising chiefly quartz and quartzite, with mica, grog and the occasional flint. The core is usually grey, and sometimes brownish-red margins occur. The surfaces are predominantly grey but there are some oxidised examples which are a dull grey-brown or red colour. The fabric is rather rough to the touch.

There were 59 rims, 34 bases and 9 handles included in the analysis and these represented cooking pots for the most part. Several jugs were also recognised with combed wavy line decoration, and there was one bowl. There were 14 instances of decoration including stabbing, slashing, incised and combed lines, and a little thumbing.

The fabric is usually quite thick and heavy and the decoration fairly elaborate. The vessels have been competently made on a wheel, but no kiln site is known, and the pots have not so far been recognised outside Bedford.

A 12th – 14th century date range seems likely. C6 occurs with much the same frequency as B2, forming a fairly small proportion of the total ceramic finds.

C7 FABRIC 561 – 565

There are small quantities of quartz, quartzite and grog in this fabric and they are well mixed in the clay. A grey core is present in all sherds and sometimes orange margins occur. The surfaces are usually oxidised giving a bright orange colour, but there are occasional grey examples. Patches of olive-green glaze have been noted on two sherds.

Not many sherds of C7 have been found in Bedford, only 12 rims, 2 bases, 3 strap and 1 rod handle. The forms are jars and jugs except for 563 which seems to be a small bowl.

The ware is quite fine and well potted on a wheel, but the kiln source is unknown. The pots are likely to be of 15th century date or possibly later.

C8 THETFORD-TYPE WARE 566 – 577

This is a hard, well-fired sandy fabric, rough to the touch, containing various mineral inclusions, some of these occasionally being quite large. The core is grey and the surfaces are nearly always reduced to a medium-dark grey.

The forms found in Bedford include at least one spouted pitcher, 574, and cooking pots and storage jars. Several body sherds have been found, usually with applied thumbed strips. In addition there are 5 rims, 10 bases and 6 handles. The decoration is chiefly thumbing, both direct and on applied strips, sometimes pinched. Very occasional slashing and one example of rouletting have also been noted. In all, there are 16 instances of decoration.

It is difficult to know from which of the Thetford-type kilns in Norfolk or Suffolk these sherds have come, but

they are typical in form and fabric of this East Anglian ware. From Hurst's most recent discussion (Hurst, 1976, 314 – 330) a date in the 10th – 11th centuries is the most likely.

C9 OXFORD TYPE 578, 580, 582, 583, 585 – 592, 594, 596 – 598, 601

This is an Oxford type-fabric, the ware first recognised at Brill, and it has a strong resemblance to C11. The temper is quartz/quartzite. While the surfaces are always pale orange, the core is usually pale orange also, but can occasionally be light grey. The vessels are well made with smoothed surfaces, and are of very good quality. A distinguishing feature of C9 is that the vessels are almost invariably coated with a thick even application of green glaze which is sometimes oxidised to orange-brown.

34 rims and 25 bases were found, almost all of which represent jug forms. Of the 18 handles, 10 are rod and 8 are strap. Bowls and jars are also present. The ware is highly decorated and there was a total of 161 instances of decoration. These comprised mainly square rouletting on applied slip stripes, applied scales, grid stamps and shallow slashing. There are also incised and wavy lines, and an applied anthropomorphic knob.

No specific kiln source is known, but the ware is not identical to those recognised as Oxford types in the Oxford region by Maureen Mellor. One difference is that the glaze is too good and too lavish. It has been suggested that instead of looking towards the Brill kilns as excavated by Jope (Jope 1953 – 60, 39 – 42), the more likely source for the ware is the area of Oxfordshire and Buckinghamshire between Oxford and Bedford. The date range is from the 13th to the 14th centuries.

C10 POTTERSPURY TYPE 599, 600, 602 – 607

Quartzite, grog and mica have been recognised, well mixed in this smooth fabric. The core is usually a sooty black colour, often sandwiched between pink-orange margins and having pale orange or grey surfaces. The pots are wheel-made and the surfaces have been given a good smooth finish. A thin apple-green or olive-green glaze has been applied in some instances.

27 rims, 22 bases and 8 handles have been found as well as 52 glazed body sherds. 20 instances of decoration were noted, comprising slashing, combed straight and wavy lines and one or two examples of applied strips.

The forms are chiefly jugs with some cooking pots or jars. Both form and fabric have been recognised by Mynard (1970, 49 – 55) as typical of wares from the Potterspury area, and a 13th – 14th century date is likely for the Bedford examples. Potterspury ware figures quite highly amongst the most common ceramics here, but the large number of glazed body sherds accounts for almost half the total C10 finds.

C11 OXFORD TYPE 579, 581, 584, 589, 593, 595

This is an Oxford-type fabric, and unlike C9 is rather more typical of the range first recognised at Brill. The inclusions are mainly quartz and quartz/quartzite with occasional pieces of red iron ore and grog. The colour is buff to pale orange throughout, often with a good quality though patchy green glaze. The glaze is sometimes oxidised to yellow and red-brown. All the vessels are wheel-made to a high standard, and are smooth to the touch.

10 rims and 10 bases were found, together with 6 rod and 3 strap handles. These represent jugs, small bowls and a cup. There are 30 instances of decoration which include

square rouletting, stabbing and slashing. 89 sherds show a copper glaze of the Oxford type.

The vessels found in Bedford date from the late 13th century through to the 15th. While the specific kiln site is not known, they come from the Oxford region, possibly from the Brill source.

C12 STAMFORD WARE 608 – 630

K. Kilmurry has been working on the pottery from the Stamford Kilns, and has very kindly examined the Bedford sherds, identifying the fabrics and glazes. Her preliminary results have recently been published (Kilmurry, 1977 51 – 62) and her classification has been used to describe the Bedford material. The fabric letter A, B or G is followed by the glaze number 0, 1, 2, 3, or 6. When both surfaces are glazes, this is described by an oblique stroke, eg 1/1.

98 sherds have been recovered from the excavations, of which 15 are rims, 7 are bases, 3 are handles, and 3 spouts. The rest of the total is made up of glazed body sherds. There are only 8 instances of decoration – incised lines, straight combed lines and in one case, applied scales. Three of the Stamford fabrics occur at Bedford.

Fabric A: moderately sandy with quartz grains, varying from light to medium grey in colour.

Fabric B: very fine with occasional quartz grains, nearly always oxidised to a pale cream or white.

Fabric G: slightly sandy, more so than B, containing quartz grains. Usually oxidised to a pale pink.

The glazes are simple, lead-based ones. Where no glaze occurs a '0' is recorded.

Glaze 1: the most common glaze, thin, clear and glossy, varying from light yellow to pale green. Date range from late 11th – 12th century.

Glaze 2: the thinnest of the glazes, sometimes leaving unglazed patches. The colours include a mottled blue-grey olive-green. This glaze occurs especially on 12th century sherds.

Glaze 3: thicker than glazes 1 and 2, this is a bright green glaze to which copper has been added. It sometimes appears speckled on a pale yellow background. The date range is from the second half of the 12th to the first half of the 13th centuries.

Certain date ranges can be suggested by the glazes in which a chronological change can be seen. It seems unlikely that the Bedford sherds are earlier than the mid-10th century and, on the whole, they relate to the 11th – 12th centuries. The forms represented are chiefly the cooking pots (Stamford types 2 and 3) and jars (Stamford type 4). There are also bowls (type 1) and several pitchers represented by handles and spouts. Pitcher (type 5) and bowl (types 8 and 13) forms are both spouted, and sherds from Bedford could relate to either form.

C12 was probably the most common regional import in Bedford in the 10th – 12th centuries, occurring with far more frequency than the contemporary Thetford ware C8. They were obviously vessels of very high quality and were a notable contrast to the mundane shelly pots B1 and B4.

C13 FABRIC 644

This fabric has quartz, quartzite and mica inclusions as well as other mineral grains in its tempering. The core is black and so are the surfaces, and some red patches are also present. It has similarities with fabric C2.

Only one example has been found, and this is part of a socketed bowl. It has been competently made, probably

by hand, and the socket or spout has been smoothed and trimmed with a knife. It is a coarse, rough fabric for which an 11th – 12th century date is suggested.

C14 FABRIC 631 – 638

C14 contains small, well-mixed grains of quartzite and mica. The core is grey, sometimes surrounded by pink-orange margins. The surfaces are orange-brown to grey. The fabric is wheel-made and is plain except for one or two examples of finger-tip decoration.

6 rims, and 2 bases have been found and there are various forms represented. The saucepan 636, and the saucer 632, are unique shapes in Bedford and most of the vessels appear to be 'one-off' forms. No kilns are known and the fabric is not recognised outside the Bedford area. The ware probably dates to the 14th – 15th centuries.

C15 FABRIC 639 – 643

The inclusions of quartz, red grog and mica are small and well mixed. The fabric is smooth with a white-grey core and pale buff surfaces. 641 is an exception having a grey core and a coarser feel. There are traces of slip and a lavish copper-green glaze on most sherds.

4 strap handles, 4 rims, 1 base and 19 glazed sherds have been identified. These all relate to jug forms which are highly decorated with trellis patterns of rouletting and applied rosette motifs.

The fabric is of 13th – 14th century date and has affinities both with Yorkshire green-glazed wares, and with Nottinghamshire/Lincolnshire types. This obvious import to Bedford is represented by a maximum of 4 vessels.

C16 SURREY WARE 645 – 648

The main inclusion of C16 fabric is quartz/quartzite, with what is probably black iron ore. They are small, even sized and well mixed, resulting in a fine fabric. The core is pale creamy white with light cream-buff surfaces which are usually covered with bright green glaze. There were 7 rims and 1 handle with several glazed body sherds. No decoration was apparent, and the only forms recognised were cups, a flask and jugs. It should be noted that 646 is coarser than the other examples.

The vessels were wheel-made, of fine quality, and were probably made in Cheam from the late 13th century through to the 15th (Brears, 1971, 23).

C17 LONDON OR HEDINGHAM WARE 649, 650

The principal inclusion of C17 is quartz/quartzite with occasional occurrences of mica and grog. The fabric has a grey core with orange-buff surfaces. Most surfaces show mica glinting quite distinctly, and are often coated with red slip which in turn is glazed green or has spots of orange glaze. Other decoration is in the form of incised lines. The vessels have been well smoothed, and have been wheel-made. They probably date to the 14th century.

24 sherds were found including 2 rims and 1 handle. There were 11 instances of decoration.

C18 GRIMSTON WARE, not illustrated

Only a few sherds of this ware were found in the town. The fabric is slightly sandy and contains quartzite and a few calcareous inclusions. It has a dark grey core with lighter margins, and dark dull grey surfaces. It is wheel-made and covered with a dark green glaze.

This ware is thought to be Grimston ware, and therefore probably comes from East Anglia. The date range is from 13th – 14th centuries (Wade, forthcoming).

C19 PAFFRATH WARE 651, 654, 655

The fabric is sandy and contains quartz and other minerals. The core is either white or light grey, with moderately rough darker grey surfaces. They are probably wheel-made, but show much hand-working, particularly where the handle is applied.

Only 3 of these handled ladles have been found in Bedford, but C41, C51 and C52 may be copies. Both fabric and shape are extremely distinctive, and although the town has not produced any complete profiles the curved handles are unlikely to have come from any other type of vessel. The pots are undecorated.

This is one of the few European imports occurring in Bedford. They are common in the Rhineland from the 9th century to the 12th, but most of the imported examples have been found at castles or in 11th and 12th century contexts. In England they appear mostly in sites on the eastern side of the country and are dated not earlier than the Norman period. They are thought to date from the 11th to 12th centuries.

(See Dunning, Hurst, Myres and Tischler, 1959)

C20 NORTHERN FRENCH IMPORTS 652, 653, 656, 657, 660

A very dense smooth clay matrix is a characteristic of this fabric. It has very few inclusions which consist mainly of sparse small pieces of black grog and even less quartz well mixed with the clay. The colour is pale grey-white. The pots have been made on a wheel and are hard-fired.

Only 3 rims, 3 bases, 1 strap handle and a few wall sherds were found, probably all from jugs. All were covered in a copper glaze, some lavishly. Occasionally there was additional applied red slip under the glaze. Other elements of decoration on this elaborate ware were rouletting, stabbing, incised and combed lines and applied scales.

The vessels are probably from Northern France, and have a date range from the 13th to the 14th centuries.

C21 COVENTRY OR NUNEATON WARE 658, 659

This is a sandy, well-mixed fabric containing a variety of small mineral grains and mica. It has a grey core with dull orange-brown surfaces. Several sherds of one jug were recovered from Bedford Castle, and there are 6 rims, 1 base and 1 handle. At least 4 vessels are represented. Most sherds are glazed and there are 7 instances of decoration.

The two sherds illustrated appear to be the top and bottom of a wheel-thrown jug which shows traces of applied white slip and spots of orange and olive-green glaze. The most likely source is from the Coventry/Nuneaton kilns which date from the 13th – 14th centuries.

C22 FABRIC 661 – 674

This fabric is full of chunky inclusions, mostly quartzite, but there is an abundance of other minerals. They are sometimes very large and give the pottery a marked pimply surface. A grey core is usual, and while there are some reduced examples the colour is mostly dull grey-brown to orange-brown. The vessels are competently made, wheel-thrown, and evenly fired.

This is one of the smaller C ware groups thought likely to have originated in or close to the town. There are 93 rims and 30 bases, mostly flat. Only 3 strap handles were found. The range of forms includes jugs, jars and cooking pots. There are a number of bowls which do not seem to follow closely their shelly counterparts. Of the 68 instances of decoration, most follow the same type of decorative

treatment found on B1. Applied pinched and thumbd strips are the most common, followed by direct thumbing, a little straight and wavy incised line and a small amount of combing. Generally the pots are rather plain.

C22 is often found in association with C1. It probably starts sometime in the 11th century, has a positive presence in the 12th, and is on the decline during the 13th century.

C23 FABRIC

675, 676, 679

This coarse pottery contains large grains of quartz and quartzite in its tempering. The core is light grey and pinkish margins are present in one example. The surfaces, which are pimply and coarse to the touch, are a yellow-brown-buff colour. There are traces of smoothing on the sherds, a treatment which obviously wore off with time.

The pottery is wheel-made and decorated with stabbing and slashing. In addition, red slip occurs and the sherds are glazed a yellow-green colour. There are only 2 rims and 1 handle, representing 3 jugs altogether. The source for these vessels is unknown and they are presumed to be imports, probably of 13th – 14th century date.

C24 FABRIC

677, 680 – 682, 686

Quartz/quartzite and other minerals, pounded very small and occurring in moderate amounts form the basic tempering of this ware. The resulting fabric is quite smooth except for occasional large flint grains.

The core is grey, the margins orange-pink and the surfaces reduced to grey all over. In one instance, 686, an applied bung-hole has been made from smoother, yellow clay. All sherds have received surface smoothing, and have been wheel-made.

11 rims, 4 bases and 4 handles have been found, representing jugs, cooking pots or jars, and a cistern (bung-hole). There are 6 instances of decoration including thumbing, combing and slashing. C24 is not a common find in Bedford, but ranks 21st out of the 54 fabrics in the C ware range. It is not known where this pottery was made, and it is thought to be an import to the town. Typologically it would seem to date to the 14th – 15th centuries with a possible start in the late 13th century.

C25 FABRIC

678, 683, 691

Quartz/quartzite, flint, grog and shell have been recognised in this fabric, ranging from small to quite large grains, giving the surface a gritty feel. Voids where the shell has burnt out are noticeable.

The pottery has a grey core with orange surfaces, except for 691 which is reduced to grey. The remains of a light coating of slip can be seen on most sherds.

The pottery is quite heavy and occurs in jug and bowl forms. There are 14 rims, 3 bases and 7 handles. The jug handles have some slashing but otherwise there is little in the way of decoration.

C25 does not occur frequently in Bedford but it comes 17th out of the 54 C wares. It has been recognised by Mike McCarthy and Mary Gyspeerdit as very similar to their fabric W29 at Northampton which has a date range from 1350 – 1600. The Bedford finds would seem to agree with this dating. As no kilns are known locally, and comparatively few sherds have been found, it is probable that C25 was imported to Bedford from the same source which supplied Northampton.

C26 FABRIC

This pottery was thought at first to be an early Medieval fabric, but analysis of subsequent sherds indicated a late Medieval date was more accurate. Consequently C26 has been absorbed into the fabric range E1 – E7.

C27 FABRIC

684, 685, 688, 689

C27 is composed chiefly of small grains of quartz and quartzite mixed quite finely in a fairly smooth clay matrix. The fabric is usually fired grey through to orange across the core. The surfaces are grey but patchy with red-orange-buff areas occurring. The surfaces have a sandy feel and the pottery is wheel-made.

The forms include cooking pots, bowls, a storage jar and an unusual flask base. They are represented by 21 rims, 13 bases mostly flat but some sagging, 1 handle and a few body sherds. There are 15 instances of decoration, including incised and combed wavy lines, straight and random lines, and a little thumbing.

It seems likely that these pots were of local manufacture, but once again the kilns are not known. It is a comparatively common C ware find, coming 13th out of the 54. Its likely date range is from the 12th – 14th centuries.

C28 FABRIC

690, 692 – 695, 697, 698

Quartzite occurs in abundance, along with other minerals in C28 which has been well-fired to make a hard, sandy fabric. The core is white-grey, with red-brown margins. Some examples have a pinkish core. The surfaces are usually reduced to a dark grey, but occasional oxidised examples are found, coloured a dull orange.

The pottery is wheel-made and the girth grooves are sometimes visible. Cooking pots and bowls and at least one jug have been found, and there are 14 rims, 9 bases and 1 handle. Decoration includes stabbing, incised line, combing and thumbing and there are 12 instances. Just one sherd had a copper-green glaze.

Where this pottery was made is not known. It might have been a local product but could just as easily have been a regional import. It is better represented than C25 but is not such a frequent find as C27.

C29 FABRIC

696, 699 – 701, 703 – 706

There is plenty of quartzite, some quartz and other large mineral grains in C29, and mica is also present. The fabric is predominantly reduced, being grey throughout with occasional thin brown margins.

The pottery is wheel-made and is almost certainly local, being the 6th most common of the C wares. Cooking pots and jugs are well represented and there are some bowls. 59 rims, 29 bases, some flat, some sagging and 7 handles have been analysed. The 50 instances of decoration cover combed and incised straight and wavy lines, thumbing and applied strips, stabbing and slashing. 703 is obviously part of a well-decorated jug, and it seems that the other forms were fairly plain.

C29 is most probably a 13th – 14th century fabric. Mary Gyspeerdit suggests that it is similar to the ware W20 at Northampton which has a date range from 1350 – 1600. Future work in pottery studies might reveal that this is a regional fabric produced at more than one centre, but one can only hypothesise until the kilns are discovered.

C30 FABRIC

702, 707, 708

The inclusions in C30 are very small mineral particles and include some mica. 4 rims, 1 base and 3 other sherds

have been analysed. They have a light grey core and grey surfaces, except for one sherd which is dull brown. It has a light glossy self-glaze and is extremely thin and fired very hard almost to stoneware.

702 has a lip and from the form of this and 707 and 708 it would seem that they are bowls or lamps. They were found at the Castle, Midland Road, St Mary's and St John's.

C31 SAINTONGE FABRIC, not illustrated

Only 1 base and 3 body sherds of this fine import from south-west France have been recovered from the Bedford excavations. They occur in the distinctive white fabric containing minute specks of mineral inclusions. They are glazed and characteristically pitted and flecked with copper to give a mottled green colour.

They undoubtedly come from a Saintonge jug and a date somewhere between 1250 – 1300 seems most likely (Platt, 1975, 23 – 26). It is notable that so few sherds of Saintonge or any other continental import of the period have been discovered in Bedford.

C32 AARDENBURG FABRIC 709

One rim of Aardenburg ware has been found. The fabric contains small quartz and other mineral inclusions. It has a brown core and brick-red margins and surfaces. There is a white slip on the outer surface, and it is decorated with cordons and small applied clay pellets, the whole being covered with a mottled green glaze.

This rim sherd represents the neck of a jug and dates to the period 1250 – 1350. Apart from C33 it is the only example of a Dutch import in Bedford.

C33 FABRIC 710 – 712

This is a very smooth fabric containing minute shiny inclusions. The core is dull orange and the surfaces are pale, the outside being coated with a bright orange or olive-green glaze.

Four rims and a body sherd, representing three vessels, have been recovered, and the forms are a small jar, bowl and cup. They are likely to date to the 14th – 16th centuries and it has been suggested that they might be Dutch in origin. They have not been related to a particular kiln or known fabric.

C34 FABRIC 714, 715

This is a smooth fabric containing occasional grains of quartz, quartzite, mica and black iron ore. The colour varies from a light grey core with buff margins and surfaces to a dark grey core with dull brown margins and grey-buff surfaces. Only 6 rims and 3 other sherds were found, with no instances of glaze or decoration other than a thumb impression on the base of a handle. Forms appear to be wheel-made jugs, possibly local imports, and were probably produced at the end of the Medieval period with a date range between the 14th and 16th centuries.

C35 FABRIC 713, 716, 717, 720, 721, 742

C35 contains a variety of inclusions, the principal being small, well-mixed quartz and quartzite. There are other minerals, occasional large fragments of red grog and small pieces of black grog and mica. These inclusions, although many and varied, are not abundant. The fabric has a grey to dull brown core and grey to black surfaces which are sometimes sooted. The vessels are fairly fine and well made on a wheel. There are 7 rims, 1 base, 1 handle and 3

wall sherds showing 5 instances of decoration. The ware closely resembles the V3 fabric at Northampton, and has a likely date of 13th to 14th century.

C36 FABRIC 718, 719, 722, 723, 725, 726

The C36 fabric has an uneven rough mix of inclusions, mainly small grains of quartz, quartzite and quartz/quartzite. It also contains occasional pieces of grog and flint, some of which are very large. The core is very dark grey and sometimes has dark brown margins. Surfaces are dark grey to black and have a sandy feel. This is the fourteenth largest of the C wares, with 30 rims, 12 bases and 2 handles. The 11 instances of decoration include knife cuts, incised wavy lines, straight and wavy combing, applied pinched strips and excised straight lines. While some vessels are plain, others are quite elaborate. Forms include a handled bowl, bowls and jars. It is probably a local ware, and occurs during the 11th to 13th centuries.

C37 FABRIC 727

C37 is a hard, dense fabric with small inclusions of clear quartz and red quartz/quartzite with some grog. It has a grey core, pale buff-brown margins with dark grey surfaces, which, although smoothed, are slightly sandy. Only 3 sherds of this wheel made pottery have been found. It may have been made locally and is likely to date from the 14th century onward.

C38 FABRIC 724

A single example of this highly distinctive ware was found. The fabric is very sandy with tiny well-mixed micaceous inclusions. It has a grey core with brick-red margins and surfaces. The inside surface glints with flakes of mica. Decoration consists of applied white slip stripes and pellets covered with a clear lead glaze, which gives a red and yellow effect. It probably dates to the 14th century and comes from London or Kent.

C39 FABRIC 728

C39 is a dense, sandy fabric with small mineral grains as its principal inclusion, but also containing large pieces of grog, flint and other items. The core is grey, both margins and surfaces are orange. 2 rims, 1 base and 1 handle were recovered, 2 sherds showing traces of glaze. The vessels are wheel-made, and the developed forms include a jar and a jug, both of which appear to be competently manufactured. The ware is probably a local import rather than being a Bedford product, and is likely to have occurred in the 14th century and onward.

C40 FABRIC 741

C40 has affinities with C43 inasmuch as it also contains distinctive red quartzite grains. They are large, coarse and abundant, the matrix also showing many voids. It has a brown-grey core with pinkish-brown margins and pimply dark grey surfaces. It is certainly wheel-finished, could be local, and possibly dates to the 12th century.

C41 FABRIC 729, 733

This fabric has a distinctive dark grey core with abundant large white quartzite showing clearly. It contains other mixed minerals also. With the grey core it has buff margins and slightly pimply smoothed grey surfaces. 1 rim, 1 base and 1 handle were seen. They probably come from handled ladles, perhaps copying the Rhenish type C19, and have an 11th to 12th century date range.

C42 FABRIC not illustrated

C24 is a gritty fabric with small mineral inclusions. Only 3 sherds were recognised, all with a very pale grey core and surfaces, the outer covered with a good quality olive-green glaze. They are wheel-made and very fine, the only decoration being a rouletted strip. It is thought that they are a continental import, possibly from France, and may have a 14th century date.

C43 FABRIC

730

This is a highly distinctive fabric showing large numbers of substantial red quartzite grains. The colour of the matrix is dark brownish-grey, but looks redder because of the number of inclusions. These inclusions show on both surfaces, the exterior being black and the inside a dark brownish-grey. It has affinities with C2. The ware is wheel-made, thin and fine. Only two examples were recognised, a jar or jug form with a noticeably thin squared-off base. It is probably a local import dating from the 12th to 14th centuries.

C44 FABRIC

734 - 736, 739

C44 is characterised by having abundant and quite large inclusions of mixed quartzite and other minerals. It usually appears with a grey core and buff margins, but sometimes has a sandwich effect with darker margins. The surfaces are slightly sandy, but smoothed. They are usually dark grey, but can be lighter. Only 10 rims, 1 base and 1 other sherd were seen, with thumbing being the only type of decoration. It is wheel-made and may be another local import. It would seem to appear most frequently in the 13th century and later.

C45 FABRIC, not illustrated

C45 is a sandy fabric with small, well-mixed mineral inclusions, together with limestone. It has a grey core with pale buff margins. The smoothed surfaces are orange pink with patches of green to orange glaze. The single sherd found in Bedford has affinities with Brill type F and Lyveden type E (Webster, 1975, 60). It is wheel-made and probably dates to the 14th century.

C46 FABRIC, not illustrated

This fabric was represented by a single vessel. It is slightly sandy with quartzite, some grog pellets and mixed minerals. The core is grey and the inner surface is buff-coloured. Its highly distinctive dark red outer surface is extremely smooth and has been burnished. The inner surface shows wheel marks. Hurst suggests that the vessel could be a continental import and is possible pre-Conquest.

C47 FABRIC, not illustrated

C47 is also represented by a single vessel, in this instance by one sherd. The fabric is very smooth with a moderate amount of mixed mineral inclusions. It has a pale creamy-buff core and yellow-buff surfaces. The outer surface shows a good quality pale yellow-green glaze. The ware is thought to be a continental rather than a local import, and probably dates to the 14th century.

C48 FABRIC, not illustrated

A single vessel, possibly the top of a flask, is the only example of this fabric. The fabric is dense and smooth with small mixed mineral inclusions. The core is light grey and the surfaces black with indications of burnishing. This pot was well made on a wheel, and is likely to be late Medieval.

C49 FABRIC

737

Another fabric represented by a single example, C49 has a dense, smooth fabric. The core is unusual, blue-grey with cream margins. The surfaces are cream with a spotted appearance caused by dark-coloured inclusions showing through smoothing. They are slightly micaceous. This vessel is probably from a jug or a jar, is wheel-made, and is thought to be imported, possibly from the Mediterranean area.

C50 FABRIC, not illustrated

This fabric has small, well-mixed inclusions in a fine matrix. The core is pale blue-grey, the surfaces are grey-buff, with the outer covered in bright green-yellow glaze. It is very hard-fired, extremely thin and finely made on a wheel. This single example is possibly a continental import.

C51 FABRIC

731

C51 has distinctive quartzite inclusions. It has a light-grey core, just a trace of narrow orange margins and dark grey to black surfaces. Only two pieces of handle are seen in this fabric. While they may be Rhenish lades like C19, they may be local copies rather than continental imports. It is likely that C51 has a similar date range of the 11th to 12th centuries, but the illustrated example comes from a 10th century context.

C52 FABRIC

732

This fabric is also represented by a handle, probably like C19 from a Rhenish ladle, or a copy of a ladle-like C51. It is coarser than C51 with large, roughly mixed inclusions of quartz/quartzite. The core is grey with marked dull orange margins and grey surfaces. It also is likely to date to the 11th to 12th centuries.

C53 FABRIC, not illustrated

C53 has a very large mineral inclusion with flint and quartzite predominating. It has a dark grey core, light grey margins and patchy grey-buff surfaces, which are extremely pimply. There is a single example of this wheel-made pottery. It is of 12th to 14th century type.

C54 FABRIC

738, 740

C54 is a coarse, open-textured fabric filled with quartzite and other minerals. The inclusions give the ware a pimply surface. A grey core is generally seen, but it sometimes has dull brown or orange margins. Surface colour varies between the oxidised examples which are usually orange-brown with grey patches, and the dark grey reduced vessels.

While the fabrics are quite distinct, C54 has affinities with C1. There are similarities in form and firing, and they both show rough trimming under the rim. This could suggest that C54 is also a local product. The pots are wheel-made and are cooking pots and jugs. A date ranging from the 12th to the 14th century is suggested.

D1 FABRIC, not illustrated

The tempering includes many small black mineral grains, as well as moderate amounts of calcite. Voids where the calcareous material has burnt out are noticeable. The fabric is grey throughout, wheel-made, and the surfaces are pimply, although they had obviously been smoothed over when wet.

Combed wavy line decoration and thumbing on the

base have been noted on the only 2 sherds of this pottery type to be found. A jug form is represented and probably dates to the 14th century.

D2 FABRIC, not illustrated

There is a mixture of quartz, other minerals and calcareous material in the tempering of D2. The core can be generally reddish-brown or sometimes sandwiched grey: brick-red: grey. The surfaces which are sandy are rough to the touch, are generally grey to black in colour.

There are only 3 rims representing 2 vessels, probably jars, and the Rim Forms are nos 9 and 19. Combed wavy line decoration occurs on one rim. The pots are wheel-made and contextual dating suggests the 11th – 12th centuries for their manufacture.

CONCLUSIONS

Pottery research is beset by the temptation of using intuition as well as, or in place of, concrete evidence to support explanations of typological development and manufacturing sources. The major handicap in ordering the mass of excavated pottery in Bedford is that local kiln sites are unknown and there is little independent dating evidence.

The subjective elements in the study include the informative but necessarily unstructured comments of various visiting colleagues. There are also long-established assumptions based on wider geographical researches but not conclusively proved in Bedford, for example that shelly wares are generally earlier in date than most sandy wares.

A more objective analysis was devised to minimise such bias. The form of the pottery was described by shape rather than by pre-determined vessel function. The analysis was applied independently and without reference to contextual information, which was introduced afterwards. The exercise was essential to the definition of associations between fabrics, form and decoration.

The problem of absolute dating of the pottery has not been solved by the analytical work. However, date ranges have been suggested by a study of pottery from stratified groups and sequences, and have also been determined by the association of local wares and known imports. The time spans suggested for the fabric types have to be provisional. Six Carbon-14 results and documentary references to the Castle have been consulted but these are too few and disparate to be of much help. For these reasons it would be misleading to publish a specifically dated time chart of the pottery fabrics at present.

Fabric

However it is possible to make some useful observations about the different fabrics. B1, St Neots ware, has an accepted date range from the 9th – 12th centuries. It is particularly abundant during the 10th and 11th centuries and occurs in quantity in the pre-Conquest contexts at St John's. At the Castle, B1 occurs in both pre-Conquest and 12th century contexts. B2 and B3 are closely related to B1 and this St Neots type is made in kilns presumably situated between St Neots and Bedford, or in Bedford itself. The fabric B4 may have come from the same kilns and is very much a local product since it appears in large quantities and has not been found in neighbouring towns. B1 and this local derivative B4 appear to be more or less contemporary and are found in contexts probably dated from the 9th – 12th centuries. They also occur with some C wares, eg C1 and C22. There are no noticeable variations in the B1 fabric over this wide time span.

Few jug forms have been recognised in B1 and B4, and only a few spouted pitchers have been found – imports of Thetford ware, C8, and Stamford ware, C12. Perhaps some other material, such as leather or wood, was used for holding liquids at this time.

Fabrics B5, B8 and B11 form another shell-tempered group, coming to Bedford from Harrold or the Olney Hyde area. Jug forms do occur, although it is unlikely that they were imported before the Conquest. Fabric B8 may well have been introduced during the 11th century, occurring in association with B1 and B4. It was followed by B5. B11, a harder fired version, comes in at the end of the range continuing into the 13th century.

Thetford and Stamford wares are the only late Saxon/Saxo-Norman sandy fabrics imported into Bedford, and are found chiefly with shelly wares. 68% of all the pottery was shell-tempered. The remaining 32%, the sandy wares, were manufactured in the 11th century or later. C1, C3 and C5 form a group of similar wares ranging from the 11th – 13th centuries, and C22 tends to occur with C1, possibly from the 11th century. These fabrics must have been made locally, as were C4, C6, C14, C27, C36 and C44. Various other coarse wares are felt to have been regional imports because of the comparatively small quantities found in Bedford. The table (fig 102) shows the likely sources and date ranges for all fabric types.

Regional imports from Oxon/Bucks, C9 and C11, and from Lyveden, Northants, B9, have an

Suggested Date	Bedford Product ?	Local Import	Regional Import	Continental Import	Origins Uncertain
Pre-Conquest				C46 ?	
9th – 12th C	B4	B1 B2 St Neots			
10th – 11th C		B3 St Neots	C8 Thetford ware East Anglia		
10th – 12th C			C12 Stamford		
11th – 12th C	C13			C19 Paffrath Rhineland	C41, C51, C52 copies of C19 D2
12th C					C40 ? local
11th – 13th C	C1, C2, C22, C36	B8 Olney Hyde			
12th – 13th C	C3, C5	B5, B11 – Olney Hyde B7 St Neots	B6 ?Lyveden		
13th C		C44			
12th – 14th C	C4, C6, C27 C54	C43	B9 Lyveden		C53
13th – 14th C			C9 Oxf/Bucks C10 Potterspury C15 Yorks/Lincs C16 Surrey C17 London/ Hedingham C18 Grimston C21 Coventry/ Nuneaton C29, C35 Northampton	C20 N.France C31 Saintonge (1250 – 1300) C32 Aardenburg (1250 – 1350)	C23 C28 C30
14th C	C37	C39	C38 London/Kent	C42, C47	C45 ? Local D1
13th – 15th C			C11 Oxford		C24
14th – 15th C	C14				
15th C					C7, C48
14th – 16th C		C34	C25 Northampton	C33 ?Dutch	
uncertain				C49 ? Mediterranean C50	B10, B12 ? local

Fig 102 Table to show suggested date and source of production for B, C and D fabrics.

interesting distribution in the town. A complementary pattern has emerged with Lyveden products occurring chiefly on sites north of the river and Oxfordshire types found in the south. The Castle area was apparently still abandoned and empty in 1361, and may have been so since its slighting in the 1220's. Certainly very few sherds of C9 and C11 were found there, in marked contrast to the comparatively large quantities found at St Mary's (BSM72 38), indicating a flourishing site in the 14th century. At the Castle, Lyveden ware occurred in late phases and the destruction levels. This may be an indication that glazed pitchers were coming into the town at a fairly early date. This distribution pattern may indicate a shift of emphasis to the south part of the town when the Castle became derelict. A contributory factor might be that markets existed both north and south of the river. If, in Medieval times as in the 16th century, there was a toll on the bridge this may have reduced the circulation of vessels. Potterspury ware, C10, has a similar distribution pattern to the Oxon/Bucks types. It is also worthy of comment that very few sherds of any of these imports were found in the Midland Road trenches.

Imports from further afield, spanning the 13th – 14th centuries are represented by only a few sherds each and are summarised in *figure 102*.

Equally small amounts of pottery from abroad have been found, representing no more than 2 or 3 vessels of any fabric. The earliest of these is probably the Rhenish handled ladle C19, and its derivatives C41, C51, C52 probably of 11th – 12th century date. From the mid-13th century vessels from parts of France, Holland and the Mediterranean were reaching Bedford.

The analysis of the pottery has revealed certain relationships between fabrics and forms. Rim Forms 18 – 24 are predominantly found in shelly wares – and the bowl rims 20, 21 and 24 are more specifically B1, St Neots ware forms. Rim Form 15, with a lid seating, is also a shelly ware form found especially in fabric B4 and likely to be of 12th century date rather than earlier. Rim Form 17, although predominantly a shelly ware type and well represented in B1, does occur in sandy fabrics particularly in C1. This might indicate an 11th – 12th century date for the C1 fabric.

The most common type is Rim Form 4 which shows a certain amount of overlap between shelly wares and sandy wares. Rim Form 11 is more predominantly a sandy form, although examples are found amongst some shelly fabrics – possibly dating to the 11th – 12th centuries. However the

St Neots and Derivatives

B1	9th – 12th century
B4	
B2	10th – 11th century
B3	

Related C wares

C1	11th – 13th century
C3	12th – 13th century
C5	12th – 13th century
C54	12th – 14th century

Other Related C wares

C2	11th – 13th century
C22	11th – 13th century
C43	12th – 14th century

Fig 103 Table of related local products.

more sharply defined everted Rim Forms 12, 13 and 14 are almost exclusively made from the finer sandy fabrics, and likely to be 12th century or later in date.

Decoration

Thumbing is obviously the simplest and the most common type of decoration. It is well represented on many of the B and C wares. Although the applied thumb strip is particularly found on shelly sherds, in contrast the pinched strip is more common as a decoration on sandy wares – especially C22. Instances of decoration are almost half as many again on recorded sandy sherds than on shelly – although the latter are more than twice as numerous. The decorative elements tend to become more elaborate with the introduction of more sophisticated manufacturing techniques – especially on the later glazed wares. Many decorations such as rouletting and stamps, are especially found on sandy wares in association with glaze and applied slips. In the related fabric group of C1, C3 and C5, the decorative elements tend to be similar –

combing, incised lines and carination on the bodies. There are very few examples on C1, slightly more on C5, which also has decorated handles, and they are predominantly characteristic of C3.

At present the conclusions have to be fairly general and relative. The analysis has provided a framework which is essentially open-ended and should facilitate the assimilation of pottery from future excavations in Bedford. More information is necessary concerning kiln sources and especially dating evidence before the full potential of the work can be realised.

SAXO-NORMAN AND MEDIEVAL POTTERY

Fig 104 B1 FABRIC 114 – 138

- 114 B1, Bowl. *BC70* 8 (2). Post Medieval.
- 115 B1, Bowl. *BSJ74* I F15. 10th – 12th century.
- 116 B1, Bowl. *BC72* 50 (4). Medieval.
- 117 B1, Bowl. *BC70* 8 (20). Norman.
- 118 B1, Bowl. *BSJ67* I (13). Saxo-Norman.
- 119 B1, Bowl. *BC72* 54 (16). Saxo-Norman.
- 120 B1, Bowl. *BCL73* 60 (14).
- 121 B1, Bowl. *BC70* 15 F1. Norman.
- 122 B1, Bowl. *BC71* 27 (67). Saxo-Norman.
- 123 B1, Bowl. *BC70* 6 U/S.
- 124 B1, Bowl. 1976/2/127. Probably 10th century.
- 125 B1, Bowl. *BC71* 27 (41). Saxo-Norman.
- 126 B1, Bowl. 1976/2/127. Probably 10th century.
- 127 B1, Bowl. 1976/2/52. Saxo-Norman.
- 128 B1, Bowl. *BC70* 15 F1. Norman.
- 129 B1, Bowl. *BCL71* 22 (5). Post-Medieval.
- 130 B1, Bowl. *BSM72* 23 (137). 11th – 12th century.
- 131 B1, Bowl. *BC70* 4 (33). Saxo-Norman.
- 132 B1, Bowl. *BSM72* 38 (87). 12th – 14th century.
- 133 B1, Bowl. *BCL73* 60 U/S.
- 134 B1, Bowl. *BCH69* I U/S.
- 135 B1, Bowl. 1976/2/52. Saxo-Norman.
- 136 B1, Bowl. *BC71* 27 (67). Saxo-Norman.
- 137 B1, Bowl. *BCH69* I (6). Post Medieval.
- 138 B1, Bowl. *BSM72* 38 (143). 12th – 14th century.

Fig 105 B1 FABRIC, 139 – 160

- 139 B1, Spouted Bowl. *BSM71* 23 (101). 11th – 12th century.
- 140 B1, Rim of spouted bowl. 1976/2/127. Probably 10th century.
- 141 B1, Rim of spouted bowl. *BC70* 15 F1. c1100 – c1225.
- 142 B1, Spout. *BC70* 15 (1). Post-Medieval.
- 143 B1, Spout. *BCH69* I (10). Saxo-Norman.
- 144 B1, Spout. *BSM71* 23 (72). 12th – 13th century.
- 145 B1, Spout. *BC72* 37 (25). Post-Medieval.
- 146 B1, Spout. *BC70* 6 U/S.
- 147 B1, Spouted bowl. *BC72* 50 (4). c1100 – c1225.
- 148 B1, Storage vessel. *BSJ74* I F45.
- 149 B1, Storage vessel. 1976/2/39. Probably 10th century.

- 150 B1, Base of storage vessel or cooking pot. *BSM72* 28 (134). 11th – 12th century.
- 151 B1, Storage vessel. *BSM72* 38 (58). 12th – 14th century.
- 152 B1, Rim of storage vessel. *BC70* 11 (6). Saxo-Norman.
- 153 B1, Sherd from lid. 1976/2/9.
- 154 B1, Base of storage vessel or cooking pot. *BC72* 50 (12). c1100 – c1225.
- 155 B1, Sherd with applied thumbled strip, probably from storage vessel. *BC70* 15 F1. c1100 – c1225.
- 156 B1, Base with applied thumbled strip, probably from storage vessel. 1976/2/34. Probably 10th century.
- 157 B1, Sherd with applied thumbled strip. *BC71* 27 (10). c1100 – c1225.
- 158 B1, Base of storage vessel, bowl or jar. 1976/2/52. Saxo-Norman.
- 159 B1, Base of cooking pot. *BMR74* II F17. Post-Medieval.
- 160 B1, Base of cooking pot or storage vessel. *BSJ74* II F139. 12th – 13th century.

Fig 106 B1, FABRIC, 161 – 198

- 161 B1, Cooking pot. *BCS73* I (48). 10th – 12th century.
- 162 B1, Small handled vessel. 1976/2/146. Probably 9th century.
- 163 B1, Cooking pot. *BC71* 25 (53). Post-Medieval.
- 164 B1, Small jar or cup. *BC71* 27 (12). Saxo-Norman.
- 165 B1, Cooking pot. *BSM72* 38 (84). 12th – 14th century.
- 166 B1, Cooking pot. *BC70* 6 (36). 12th – 13th century.
- 167 B1, Small cooking pot or jar. *BC72* 54 (34). c1100 – c1225.
- 168 B1, Cooking pot or jar. *BC70* 4 (22). c1100 – c1225.
- 169 B1, Jar or cooking pot. *BSJ74* II F122. 11th – 12th century.
- 170 B1, Cooking pot or jar with lid seating. *BSJ74* I (1).
- 171 B1, Rim with scar for basket handle or lug. *BC72* 50 (4). c1100 – c1225.
- 172 B1, Small straight sided vessel. *BCL73* 60 (53).
- 173 B1, Cooking pot or jar. *BC72* 50 (12). c1100 – c1225.
- 174 B1, Base of jar. *BC70* 3 (9). Post-Medieval.
- 175 B1, Cooking pot or jar. *BC72* 55 (12). Post-c1225.
- 176 B1, Cooking pot or bowl. *BC72* 37 (25). Post-Medieval.
- 177 B1, Base of small jar or cooking pot. *BC70* 4 (22). c1100 – c1225.
- 178 B1, Base of jar. 1976/2/126. 13th – 14th century.
- 179 B1, Cooking pot or jar. 1976/2/108. Probably 9th century.
- 180 B1, Jar or cooking pot. 1976/2/U/S.
- 181 B1, Inturned rim of vessel. *BC70* 15 (14). Post-Medieval.
- 182 B1, Rim of cooking pot or jar with thickening for handle. *BCS73* III (23). Post-Medieval.
- 183 B1, Cooking pot. *BSJ74* II F20.
- 184 B1, Cooking pot or jar. *BC70* 6 (1). Post-Medieval.
- 185 B1, Pierced sherd, hole cut after firing. 1976/2/39. Probably 10th century.

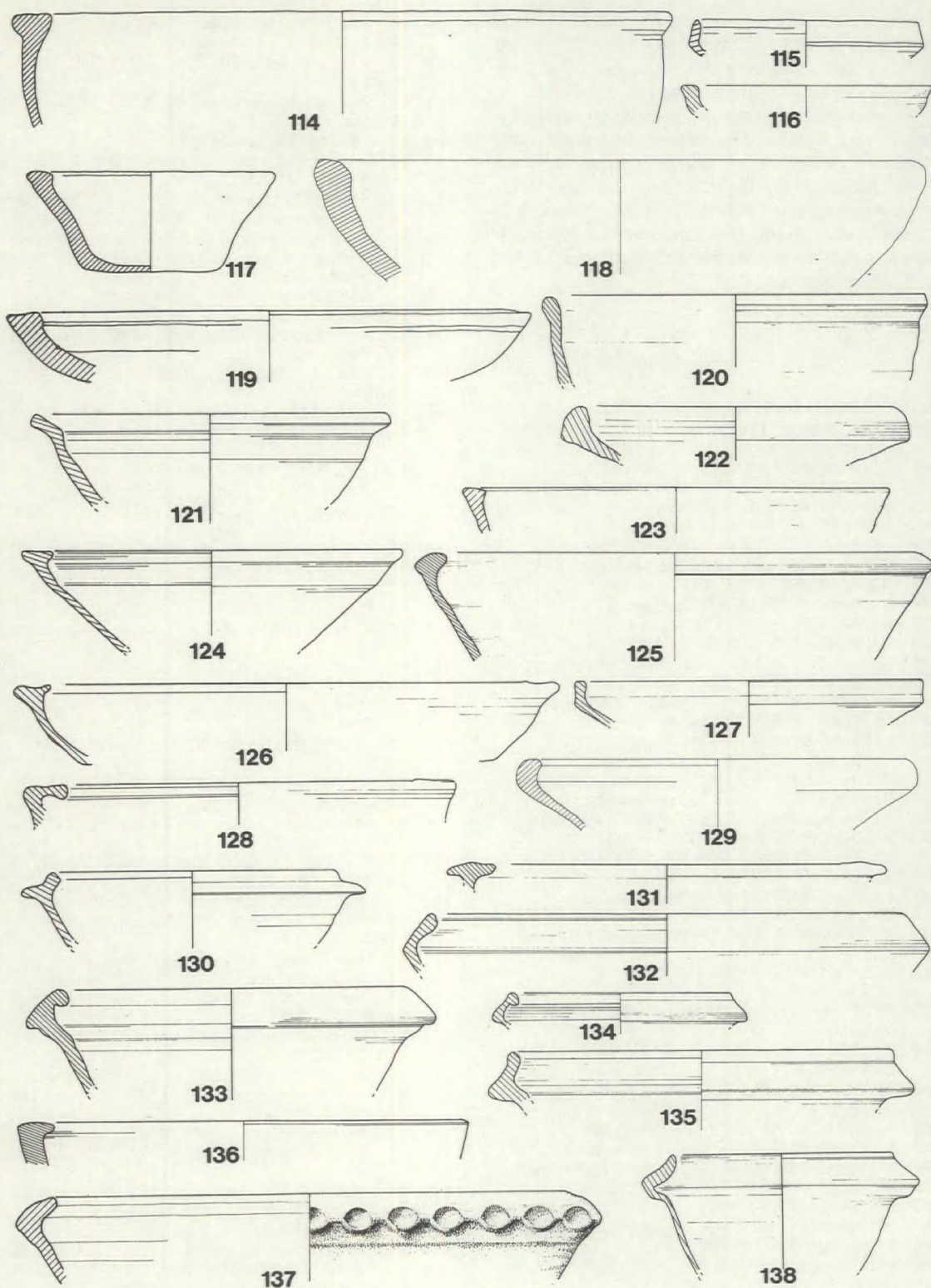


Fig 104 The Pottery: B1 fabric, scale 1:4.

Geological cross-section of the BC7125 site. The diagram shows various soil and rock layers with numbered labels (16, 45, 48, 54, 57, 75, 76, 100, 102, 103, 104, 112, 114, 119, 122, 124, 125, 130, 133, 137, 51, 60). A water table is indicated at 8.71. A scale bar (0-2m) and a north arrow are included.

Fig 17 Bedford Castle: area B: west section of stone-lined ditch in BC71 25.

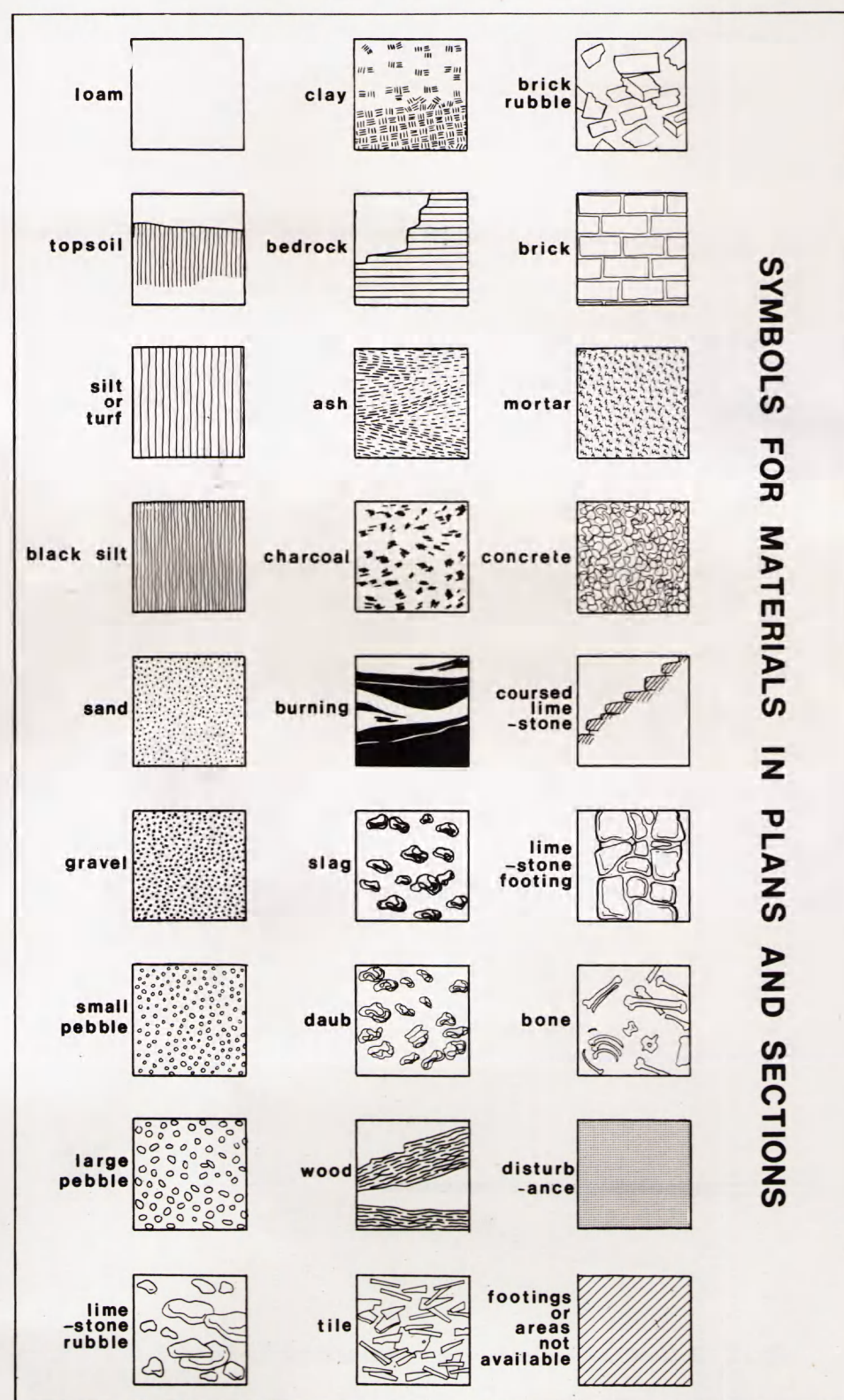


Fig 18 Symbols used for illustrations: additions or variations from these shown on individual figures.

STONE LINED DITCH

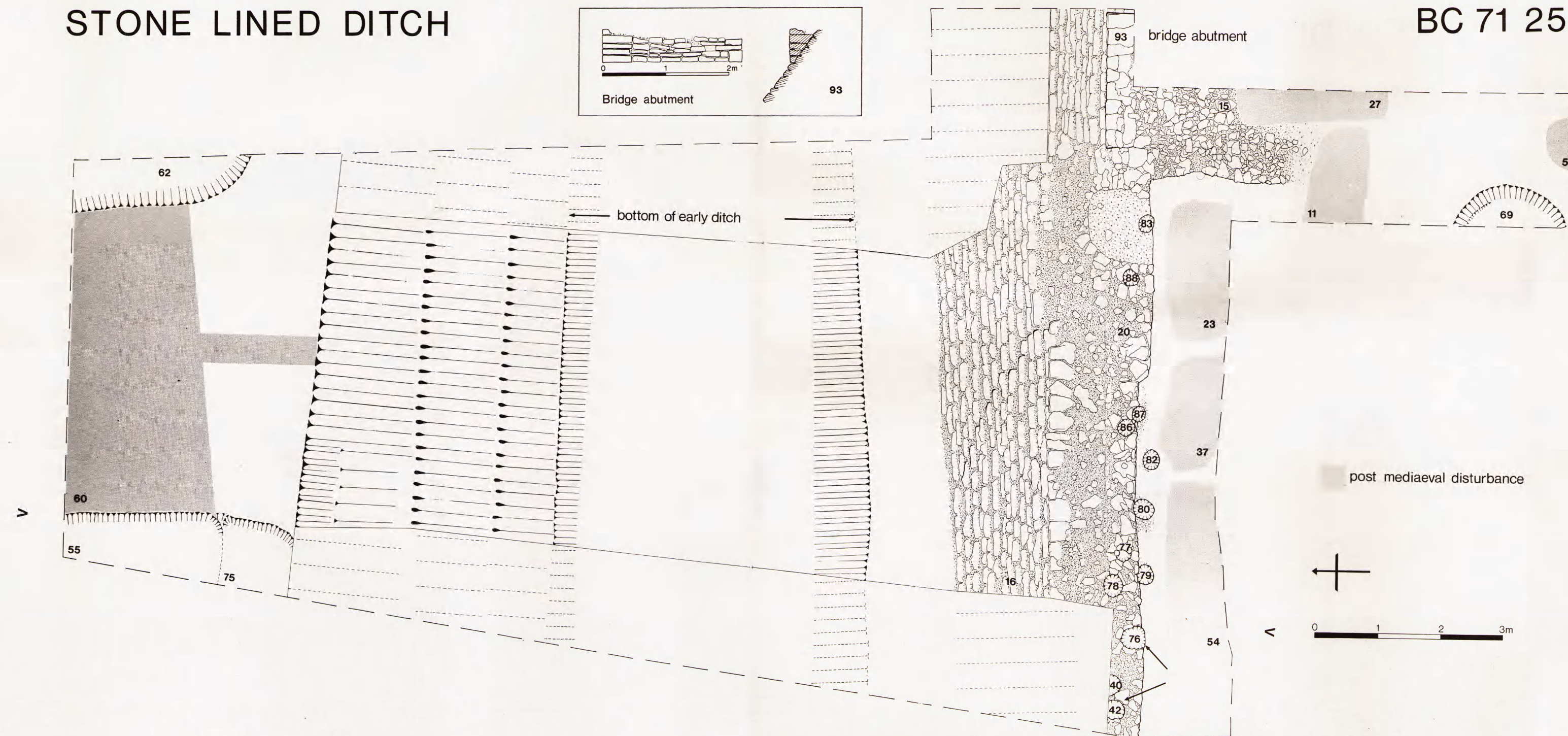


Fig 16 Bedford Castle: area B: plan of stone-lined ditch in BC71 25.

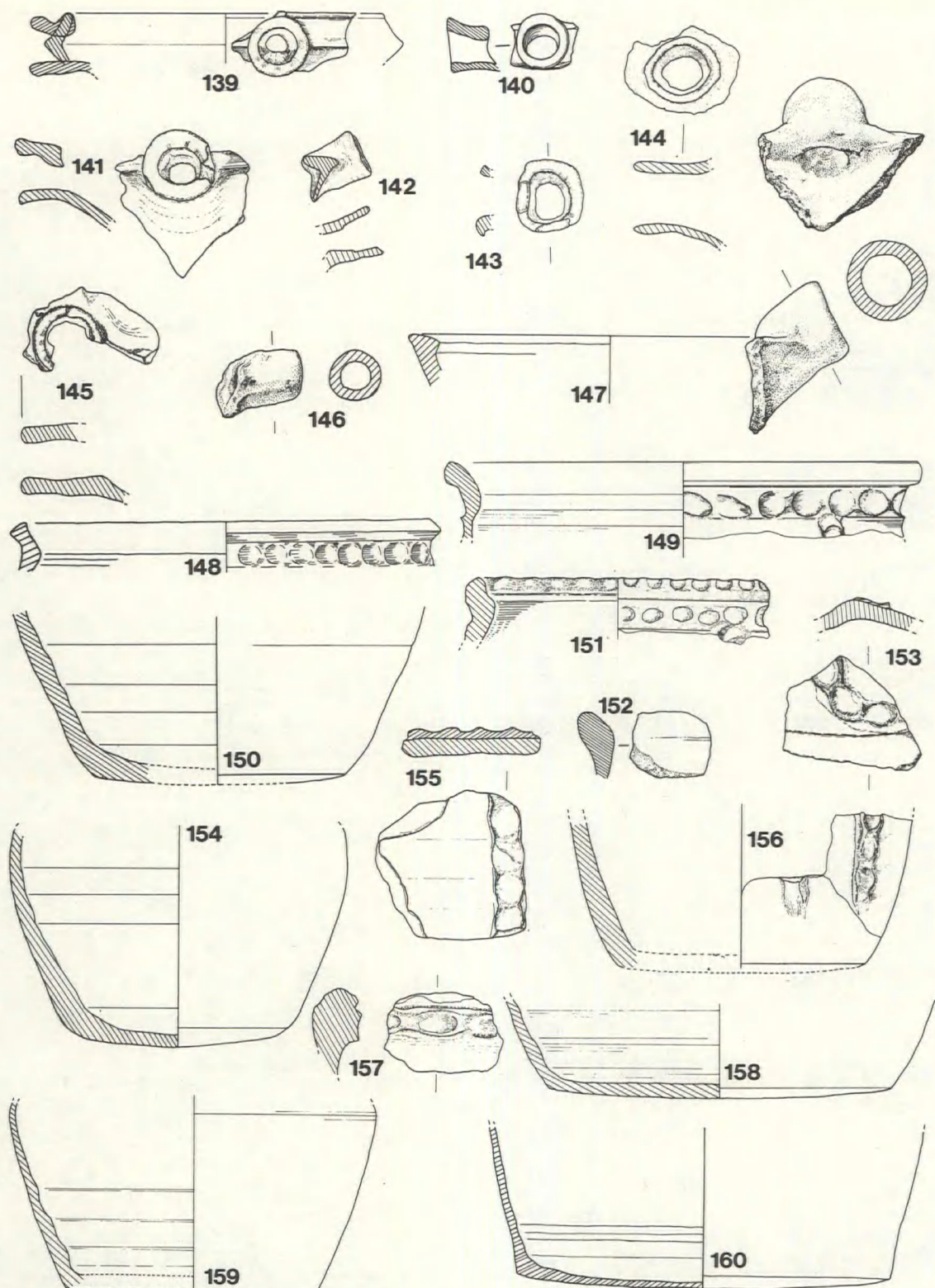


Fig 105 The Pottery: B1 fabric, scale 1:4.

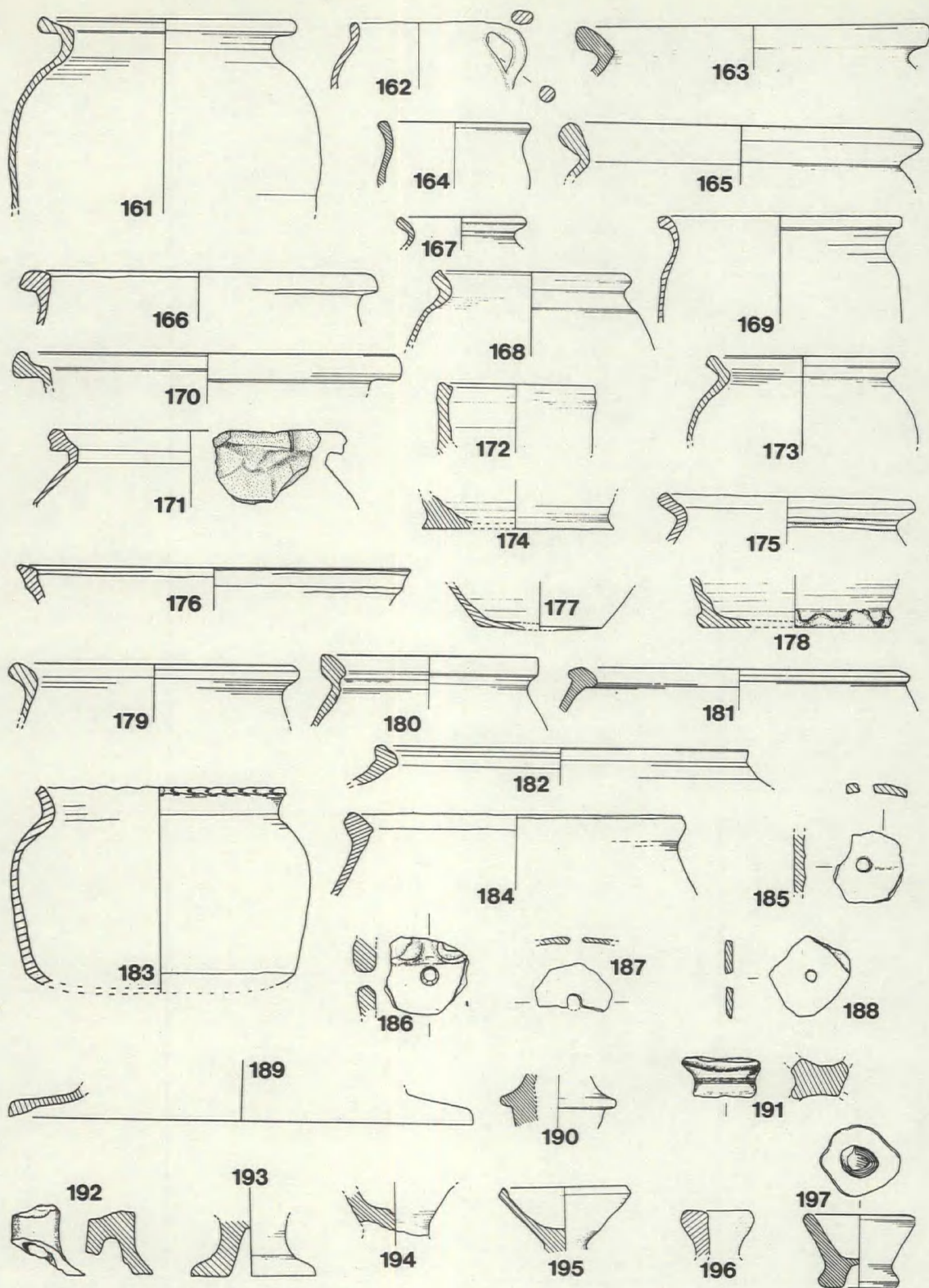


Fig 106 The Pottery: B1 fabric, scale 1:4.

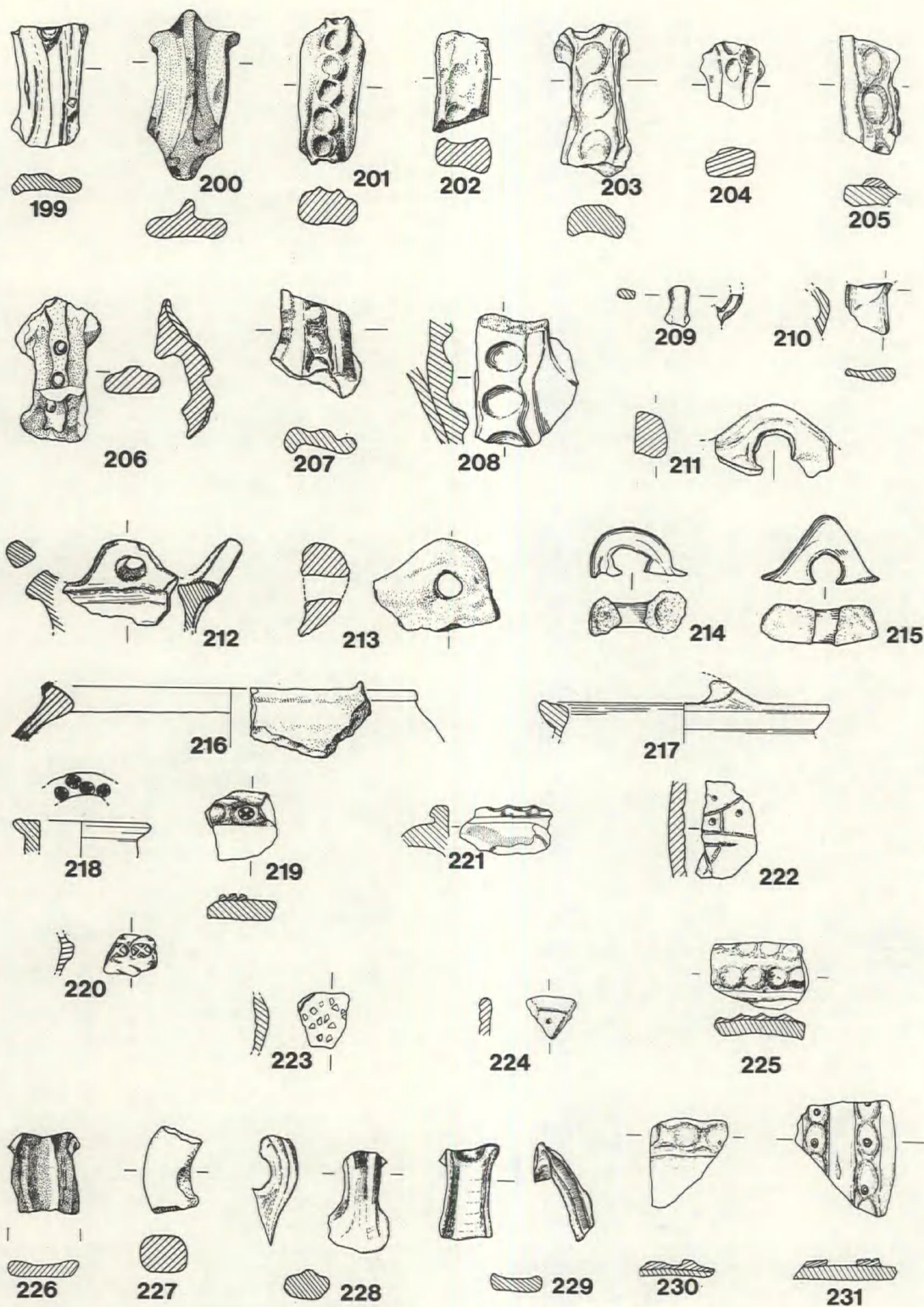


Fig 107 The Pottery: B1 fabric, scale 1:4.

- 186 B1, Pierced sherd, hole cut after firing. 1976/2/39. Probably 10th century.
 187 B1, Pierced sherd, hole cut after firing. *BMR73* (7).
 188 B1, Pierced sherd, hole cut after firing. *BSM72* 38 (158). 11th – 12th century.
 189 B1, Lid. *BSM72* 38 (63). 14th – 15th century.
 190 B1, Fragment from lamp, candlestick or knob. *BC71* 27 (66). c1100 – c1225.
 191 B1, Sherd from lamp or candlestick. *BSM72* 38 (98). 12th – 14th century.
 192 B1, Base of lamp or candlestick. *BSM72* 38 (30). 12th – 14th century.
 193 B1, Base of lamp or candlestick. *BCL73* 60 (9).
 194 B1, Base of lamp or candlestick. *BSM72* 23 (100). 11th – 12th century.
 195 B1, Bowl from lamp. *BCH69* I (10). Saxo-Norman.
 196 B1, Top of candlestick or base of lamp. *BCL73* 60 (12).
 197 B1, Lamp with irregular hollow base. 1976/2/34. Probably 10th century.
 198 Not illus. B1, Base of Candlestick. *BMR74* I F47.

Fig 107 B1 FABRIC, 199 – 231

- 199 B1, Handle. *BSJ74* I (1).
 200 B1, Handle. *BSM72* 38 (17). 12th – 14th century.
 201 B1, Handle. *BCH69* I (6). Post-Medieval.
 202 B1, Handle. *BC70* 15 (12). c1100 – c1225.
 203 B1, Handle. 1976/2/59. (Pit 39) Probably 10th century.
 204 B1, Handle. *BSJ74* I F8. 10th – 12th century.
 205 B1, Part of handle. *BSM72* 38 (1).
 206 B1, Handle. 1976/2/529.
 207 B1, Handle. *BSJ74* I F7. 10th – 12th century.
 208 B1, Handle. 1976/2/127. Probably 10th century.
 209 B1, Handle. 1976/2/127. Probably 10th century.
 210 B1, Handle. 1976/2/529.
 211 B1, Upright lug. 1976/2/39. Probably 10th century.
 212 B1, Pierced lug. *BSM72* 23 (97). 11th – 12th century;
 213 B1, Pierced lug. *BC72* 50 (4). c1100 – c1225.
 214 B1, Upright lug. 1976/2/127. Probably 10th century.
 215 B1, Upright Lug. 1976/2/127. Probably 10th century.
 216 B1, Rim with beginning of lug or handle. *BC70* 15 (12). c1100 – c1225.
 217 B1, Rim with beginning of lug or handle. 1976/2/39. Probably 10th century.
 218 B1, Rim with stamped decoration, probably from candlestick. 1976/2/52. Saxo-Norman.
 219 B1, Sherd with stamped decoration on applied thumbled strip. *BSJ74* I F69. 10th – 12th century.
 220 B1, Sherd with stamped decoration. *BSJ74* I (4).
 221 B1, Thumbled rim with handle. *BC70* 11 (6). 10th – 12th century.
 222 B1, Sherd with sgraffito decoration, applied after firing. 1976/2/34. Probably 10th century.
 223 B1, Stamp-decorated sherd. *BC70* 15 F1. c1000 – c1225.
 224 B1, Rim with sgraffito decoration, applied after firing. 1976/2/83. Saxo-Norman.
 225 B1, Sherd with applied thumbled strip. *BSM72* 28 (27). 12th – 14th century.

- 226 B1, Handle. *BC72* 54 (16). c1100 – c1225.
 227 B1, Handle or lug. *BC70* 15 (7). Saxo-Norman.
 228 B1, Handle. 1976/2/108. Probably 9th century.
 229 B1, Handle. *BSM72* 38 (121). 11th – 12th century.
 230 B1, Decorated sherd with applied thumbled strip. *BCL73* 60 (13).
 231 B1, Decorated sherd with applied thumbled strip. *BSM72* 38 (84). 12th – 14th century.

Fig 108 B2 and B3 FABRICS, 232 – 264

- 232 B2, Cooking pot. *BSJ74* I F7. 10th – 12th century.
 233 B2, Cooking pot or jar. *BSJ74* I (4).
 234 B2, Sherd with applied stamped strip. *BSM72* 28 (163). 11th – 12th century.
 235 B2, Cooking pot or jar. *BSJ74* II F120.
 236 B2, Cooking pot. *BC70* 8 U/S.
 237 B2, Cooking pot or jar. *BSJ74* I F18. 10th – 12th century.
 238 B2, Cooking pot or jar. 1976/2/110.
 239 B2, Cooking pot or jar. *BMR73* (50). 12th – 14th century.
 240 B2, Cooking pot or jar. *BSJ74* I (4).
 241 B2, Rim of ?dish. *BSM71* 23 (3). 12th – 14th century.
 242 B2, Cooking pot or jar. 1976/2/52. Saxo-Norman.
 243 B2, Handle. *BC70* 5 (41). 12th – 13th century.
 244 B2, Handle. 1976/2/66. 11th – 12th century.
 245 B2, Rim of bowl. *BSJ67* 6 (17). 12th century.
 246 B2, Rim of bowl. *BSJ67* 6 (17). 12th century.
 247 B2, Rim of bowl. 1976/2/108. Probably 9th century.
 248 B2, Rim of bowl. *BCL73* 60.
 249 B2, Base of cooking pot or jar. *BSJ74* II F139.
 250 B2, Rim of bowl. *BSJ74* II (3).
 251 B3, Rim with thickening for lug or handle. *BCL73* 60 (53).
 252 B2, Base of bowl. *BSJ67* 6 (17). 12th century.
 253 B3, Part of small cooking pot or jar. *BSJ74* I F47. 10th – 12th century.
 254 B3, Cooking pot or jar. *BSM72* 38 (87). 12th – 14th century.
 255 B3, Cooking pot or jar. *BC72* 55 (48). c1100 – c1225.
 256 B3, Cooking pot or jar. *BCS73* II (12).
 257 B3, Cooking pot or jar. *BMR74* II (2).
 258 B3, Cooking pot or jar. 1976/2/108. Probably 9th century.
 259 B3, Base of small cooking pot or jar. 1976/2/155. 12th – 13th century.
 260 B3, Cooking pot rim. *BC70* 6 (15). 12th – 13th century.
 261 B3, Cooking pot or jar, with handle scar. *BC70* 4 (33). Saxo-Norman.
 262 B3, Base of small cooking pot or jar. 1976/2/34. Probably 10th century.
 263 B3, Rim of bowl. *BSM71* 23 (77). 12th – 14th century.
 264 B3, Cooking pot or jar. 1976/2/83. Saxo-Norman.

Fig 109 B4 FABRIC, 265 – 286

- 265 B4, Cooking pot with lid seating, *BSJ74* II F120. 11th – 12th century.
 266 B4, Straight sided cooking pot with lid seating. *BCS73* I (13). 18th century.

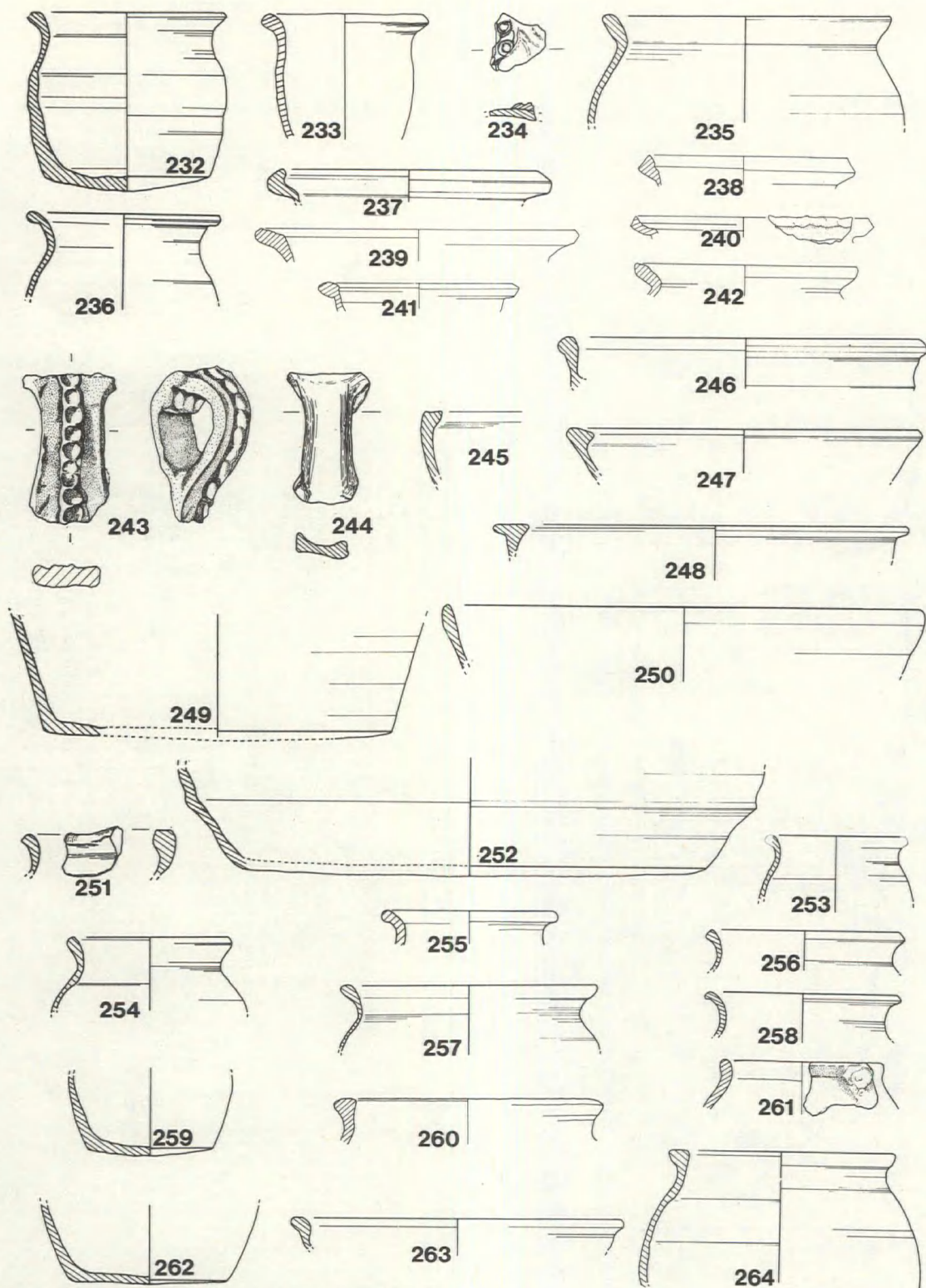


Fig 108 The Pottery: B2 and B3 fabrics, scale 1:4.
B2 232 – 250, 252; B3 251, 253 – 264.

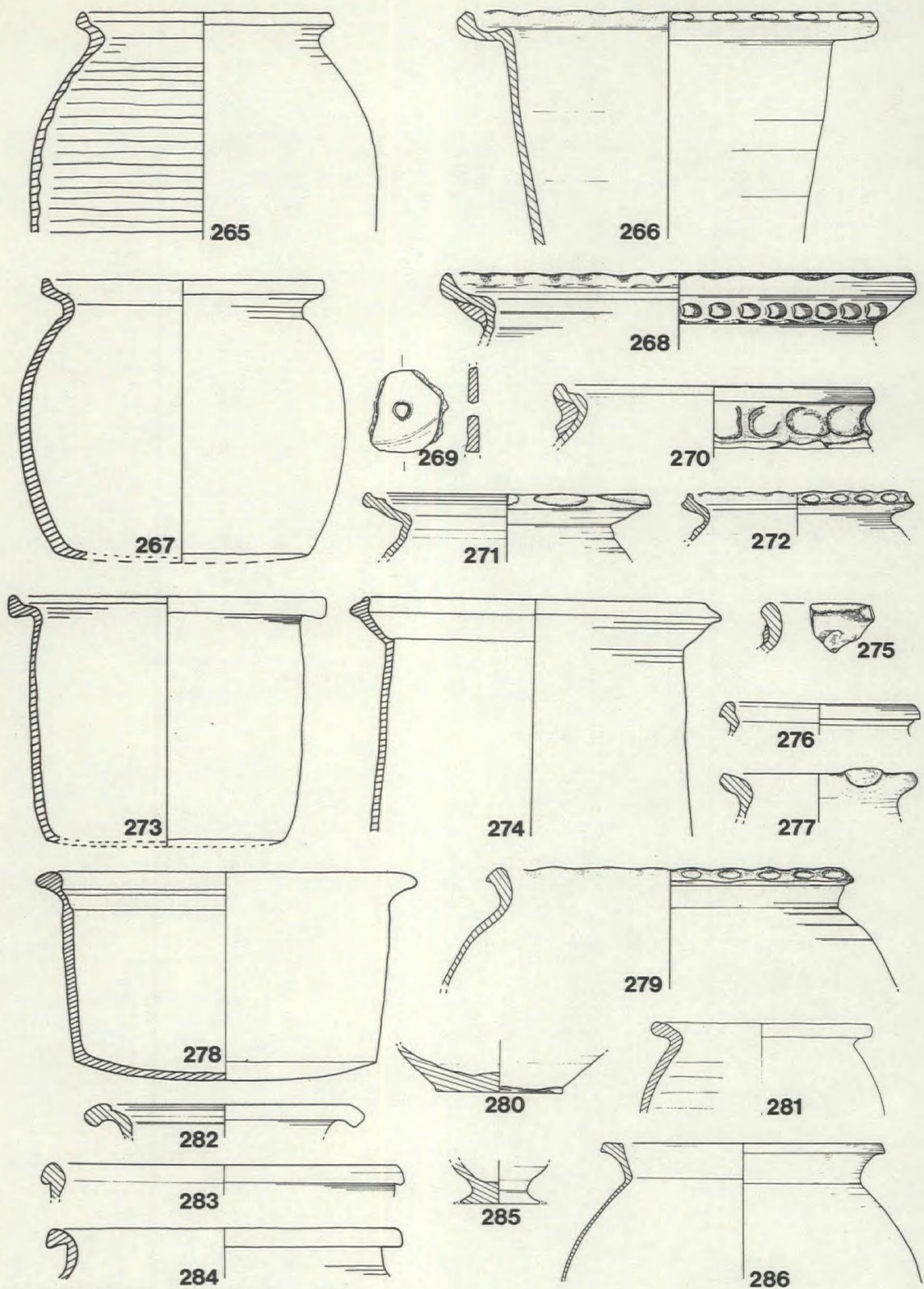


Fig 109 The Pottery: B4 fabric, scale 1:4.

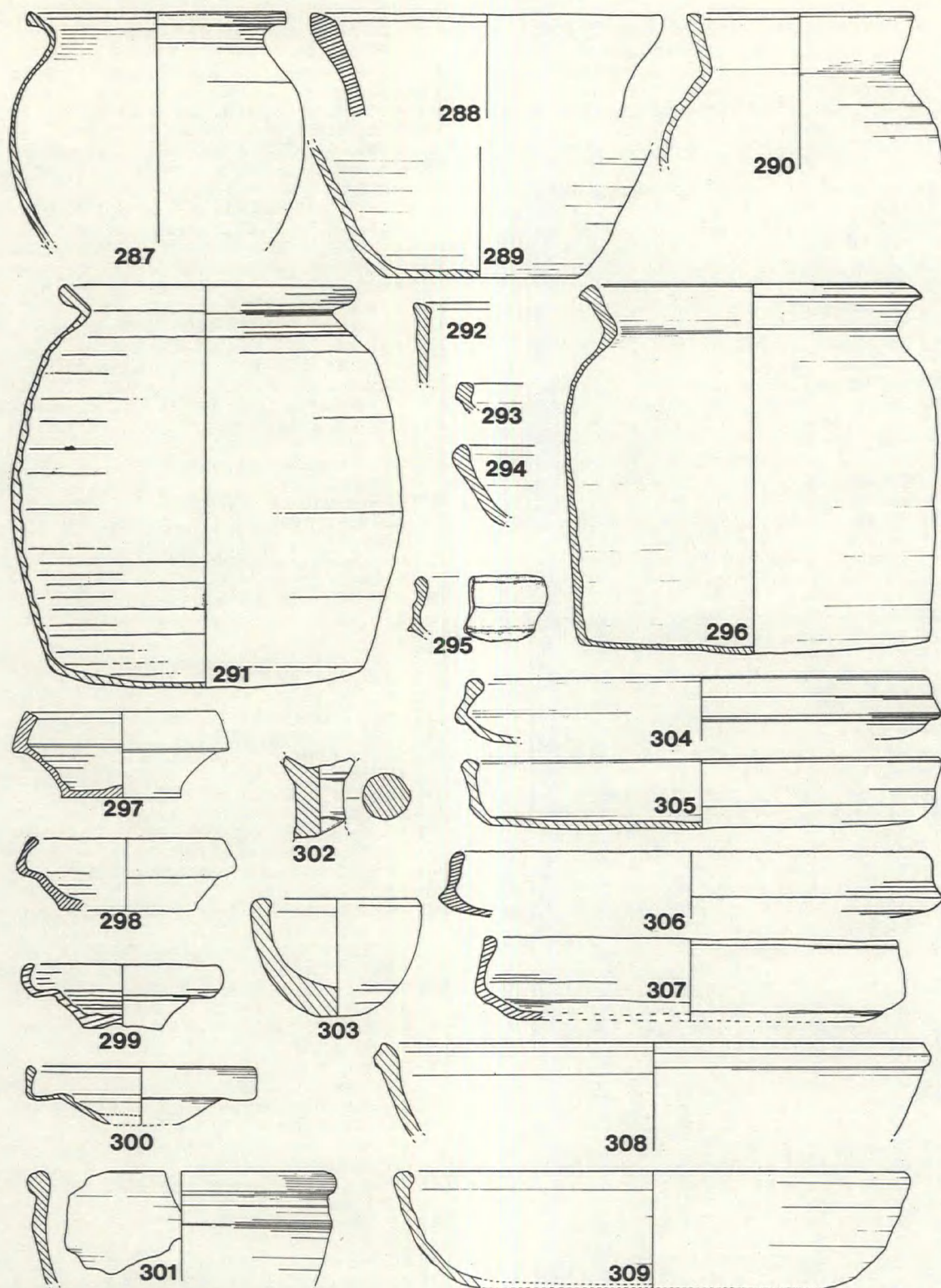


Fig 110 The Pottery: B4 fabric, scale 1:4.

- 267 B4, Cooking pot with lid seating. *BSJ74 II F6*.
 268 B4, Cooking pot with lid seating. *BMR74 I (57)*.
 269 B4, Pierced sherd, hole made after firing. 1976/2/39. Probably 10th century.
 270 B4, Cooking pot with lid seating. *BSM72 38 (130)*. 14th – 16th century.
 271 B4, Cooking pot with lid seating. 1976/2/108. Probably 9th century.
 272 B4, Cooking pot with lid seating. *BSJ74 I F73*. 10th – 12th century.
 273 B4, Straight sided cooking pot with lid seating. *BSJ74 III F6*. 10th – 12th century.
 274 B4, Straight sided cooking pot with lid seating. *BSJ74 II F4*.
 275 B4, Rim of cooking pot with applied thumbled strip. 1976/2/14.
 276 B4, Cooking pot or jar. *BSM71 23 (18)*. 12th – 14th century.
 277 B4, Rim with start of handle or lug. 1976/2/14.
 278 B4, Straight-sided cooking pot. *BSJ74 II (22)*.
 279 B4, Cooking pot or jar. *BSM71 23 (49)*. 12th – 14th century.
 280 B4, Base of bowl. *BCS73 I (46)*. 18th century.
 281 B4, Cooking pot or jar. *BC70 6 (35)*. 12th – 13th century.
 282 B4, Overhanging rim. *BSJ74 I F100*. 10th – 12th century.
 283 B4, Rim of cooking pot. *BSJ74 I (4)*.
 284 B4, Rim of cooking pot. *BSJ74 I F96*. 10th – 12th century.
 285 B4, Base of lamp. 1976/2/100. 14th century.
 286 B4, Cooking pot or jar. 1976/2/21.

Fig 110 B4 FABRIC, 287 – 309

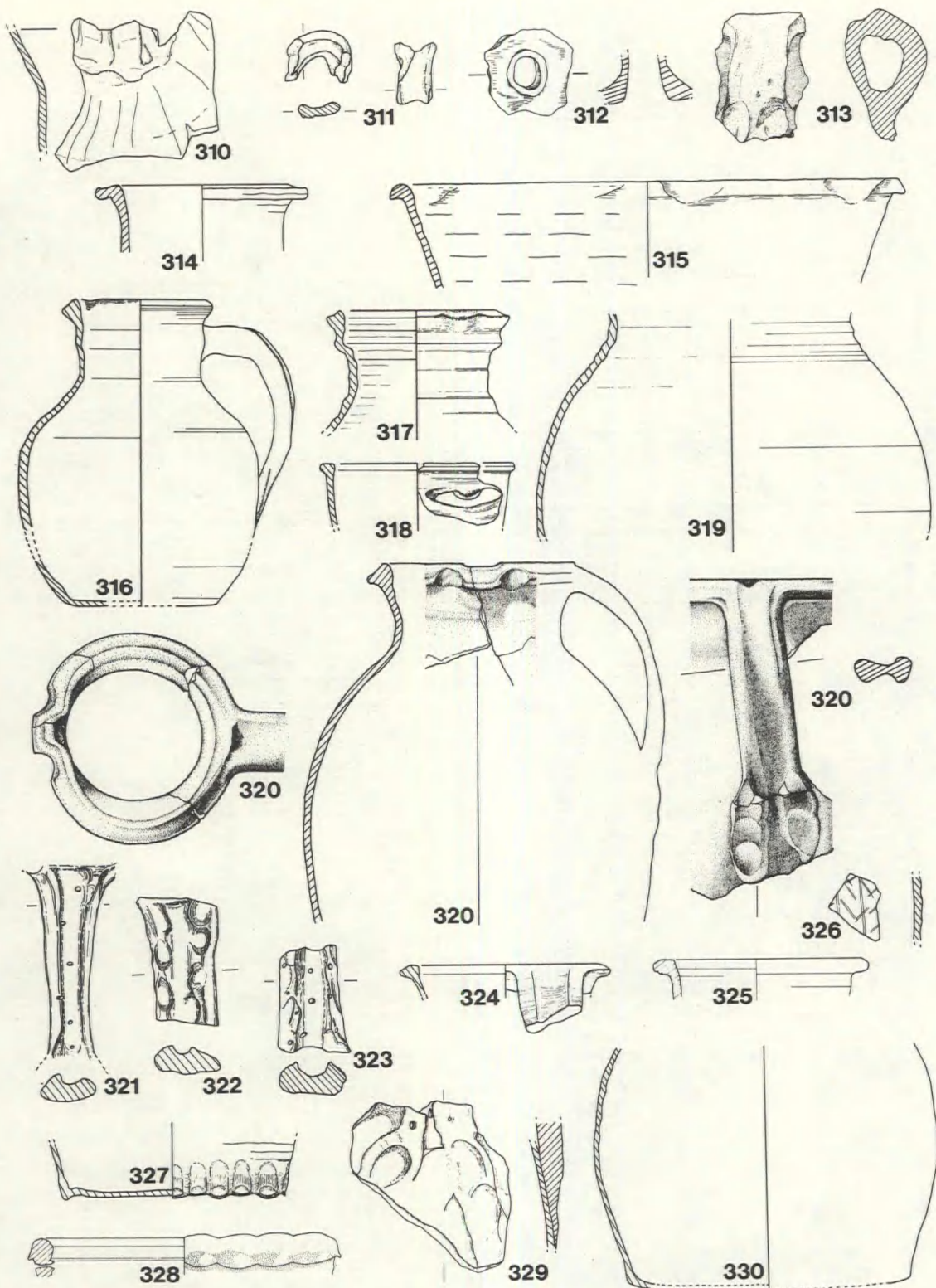
- 287 B4, Cooking pot. 1976/2/14.
 288 B4, Rim of bowl. *BSJ74 I (11)*.
 289 B4, Base of cooking pot. 1976/2/108. Probably 9th century.
 290 B4, Jar. 1976/2/126. 13th – 14th century.
 291 B4, Jar or cooking pot. *BCS73 I (12)*. Early 18th century.
 292 B4, Rim of bowl. *BCL73 60 (24)*.
 293 B4, Rim of bowl. 1977/2/14.
 294 B4, Rim of bowl. 1977/2/14.
 295 B4, Rim of bowl. *BSJ74 I F15*. 10th – 12th century.
 296 B4, Jar. 1976/2/153. 12th – 13th century.
 297 B4, Bowl. 1976/2/153. 12th – 13th century.
 298 B4, Bowl. *BC72 54 (36)*. Post-c1225.
 299 B4, Bowl. *BSJ74 I F73*. 10th – 12th century.
 300 B4, Bowl. 1976/2/126. 13th – 14th century.
 301 B4, Bowl. *BSJ74 I U/S*.
 302 B4, Part of lamp. 1976/2/49.
 303 B4, Lamp. *BMS71 19 (30)*. (Baker, 1974, fig 6, no 42). Post-Medieval.
 304 B4, Bowl. 1976/2/52. Saxo-Norman.
 305 B4, Bowl. 1976/2/107. 12th – 13th century.
 306 B4, Bowl. *BSJ74 I F96*. 10th – 12th century.
 307 B4, Bowl. *BSJ74 III F6*. 10th – 12th century.
 308 B4, Bowl. 1976/2/529.
 309 B4, Bowl. *BSM71 23 (49)*. 12th – 14th century.

Fig 111 B4 and B5 FABRICS, 310 – 330

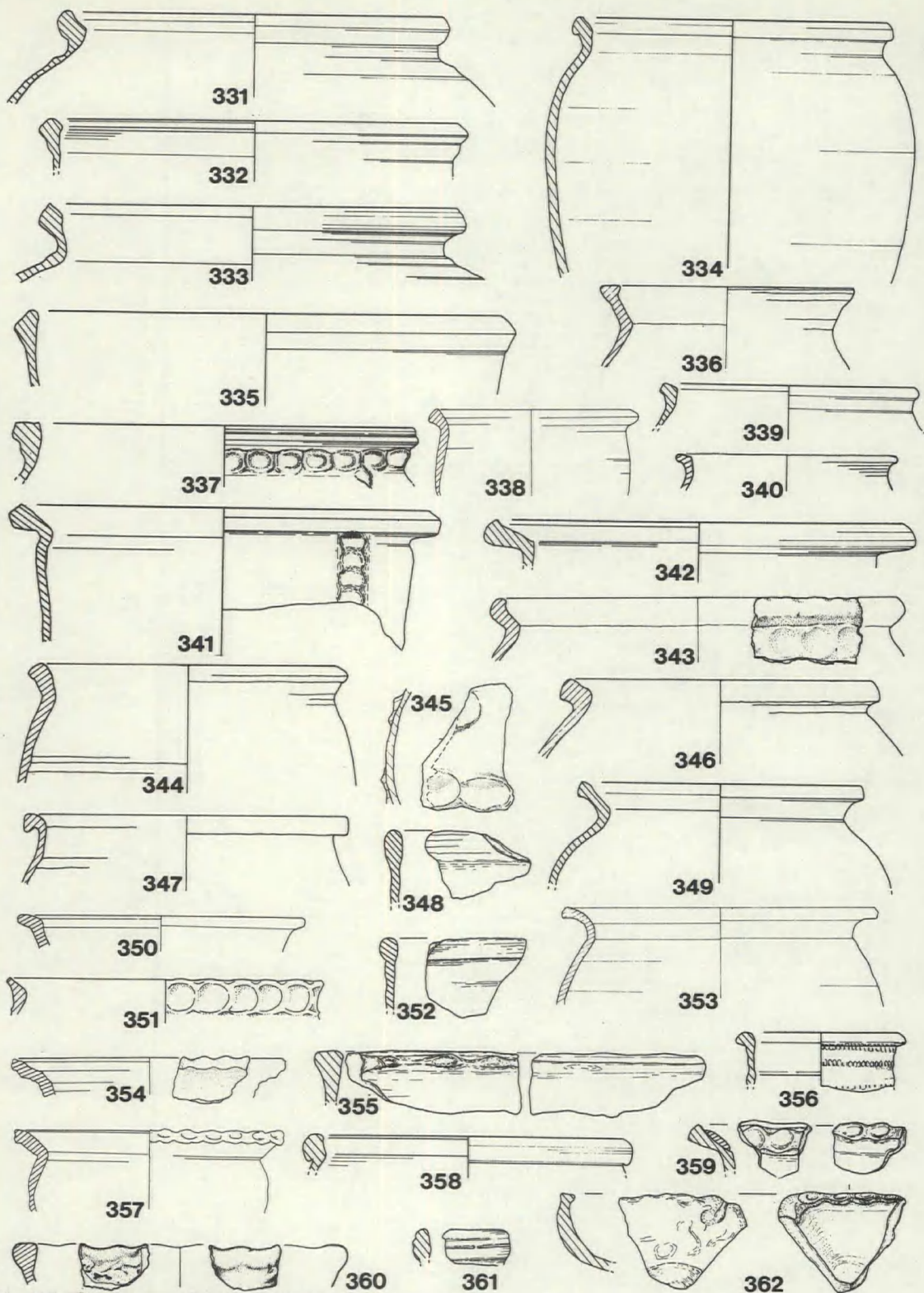
- 310 B4, Body sherd from jug. 1976/2/127. Probably 10th century.
 311 B4, Handle. 1976/2/126. 13th – 14th century.
 312 B4, Spout. *BSJ74 I (4)*.
 313 B4, Handle. *BCS73 I (48)*. 10th – 12th century.
 314 B4, Rim of jug. *BC70 6 (36)*. 12th – 13th century.
 315 B4, Bowl with basket handle scars. *BSJ74 I F13*.
 316 B5, Jug. *BC71 27 (19)*. Post-Medieval.
 317 B5, Jug top. *BSM71 23 (12)*. 12th – 14th century.
 318 B5, Rim and handle of jug. *BMS71 19 (39)*. Medieval.
 319 B5, Body of jug. *BSJ74 II (21)*.
 320 B5, Jug. *BSJ74 II F76*. 13th – 14th century.
 321 B5, Handle. *BC71 27 (19)*. Post-Medieval.
 322 B5, Handle. *BC70 6 (11)*. 14th century.
 323 B5, Handle. *BC70 6 (5)*. 14th century.
 324 B5, Jug rim with handle. *BC70 6 (16)*. 14th century.
 325 B5, Rim of jug or bowl. *BC70 5 (13)*. 14th century.
 326 B5, Decorated sherd. 1976/2/104. 12th – 13th century.
 327 B5, Base of jug. 1976/2/U/S.
 328 B5, Pierced thumbled rim. *BC70 6 (3)*. 13th – 14th century.
 329 B5, Base of jug handle. *BMR74 I (36)*. 14th – 16th century.
 330 B5, Base of jug. *BSJ74 II F126*. 12th – 13th century.

Fig 112 B5, B6 and B7 FABRICS, 331 – 362

- 331 B5, Jar or cooking pot. *BSJ74 III F4S*.
 332 B5, Rim of bowl or jar. *BSJ74 I (4)*.
 333 B5, Rim of jar or cooking pot. *BC70 6 (1)*. Post-Medieval.
 334 B5, Jar or cooking pot. *BSJ74 II F139*.
 335 B5, Rim of bowl. *BCL73 60 (22)*.
 336 B5, Rim of jar. *BC70 6 (36)*. 12th – 13th century.
 337 B5, Rim of storage vessel. 1976/2/542.
 338 B5, Small bowl or jar. *BSM71 23 (59)*. 12th – 14th century.
 339 B5, Rim of jar or cooking pot. *BSM71 23 (105)*. 11th – 12th century.
 340 B5, Rim of jar or cooking pot. *BSJ74 I F96*. 10th – 12th century.
 341 B6, Storage vessel. *BSM72 28 (108)*. 12th – 14th century.
 342 B6, Rim of cooking pot or jar. *BC72 55 (48)*. c1100 – c1225.
 343 B6, Rim of storage vessel. *BC70 6 (36)*. 12th – 13th century.
 344 B6, Rim of cooking pot or jar. *BC70 5 (54B)*. 12th – 13th century.
 345 B6, Sherd with applied thumbled strip. *BC70 5 (53A)*. 12th – 13th century.
 346 B6, Rim of cooking pot or jar. *BC72 37 (25)*. Post-Medieval.
 347 B6, Rim of cooking pot or jar. *BC72 48 (109)*. c1100 – c1225.
 348 B6, Rim of bowl. 1977/2/6.
 349 B6, Cooking pot or jar. 1976/2/108. Probably 9th century.



*Fig 111 The Pottery: B4 and B5 fabrics, scale 1:4.
B4 310 – 315; B5 316 – 330.*



*Fig 112 The Pottery: B5, B6 and B7 fabrics, scale 1:4.
B5 331 – 340; B6 341 – 353; B7 354 – 362.*

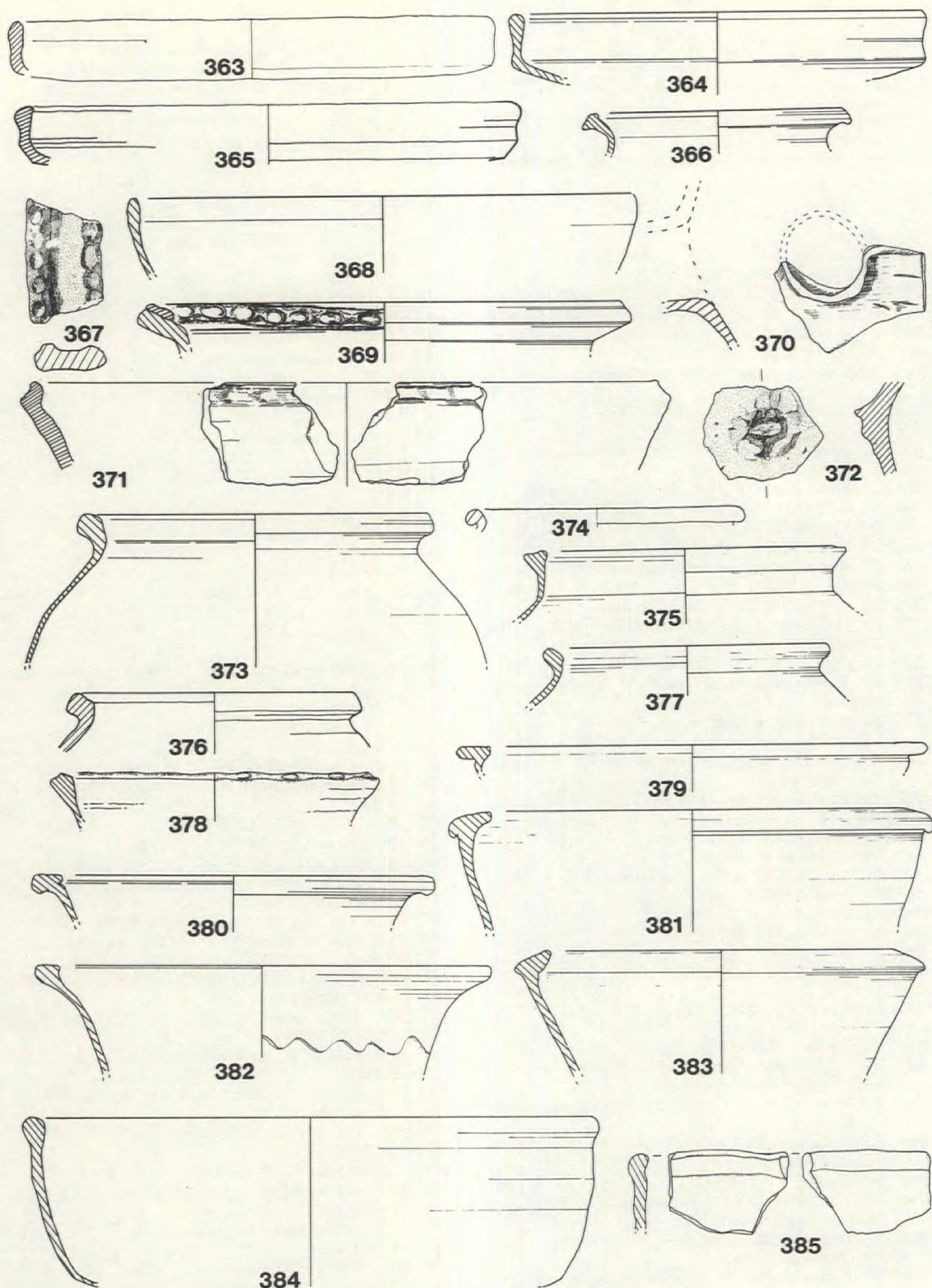


Fig 113 The Pottery: B7 and B8 fabrics, scale 1:4.
 B7 363 – 369; B8 370 – 385.

- 350 B6, Rim of bowl. *BC70* 5 (44). 12th – 13th century.
 351 B6, Rim of storage vessel. *BC70* 12 (21). Saxo-Norman.
 352 B6, Rim of bowl. *BSJ74* I F96. 10th – 12th century.
 353 B6, Cooking pot or jar. *BC70* 12 (4). Post-Medieval.
 354 B7, Rim of jar. *BC70* 5 (2). Post-Medieval.
 355 B7, Rim of bowl. *BSM72* 23 (117). 11th – 12th century.
 356 B7, Jug rim. *BC70* 5 (53). 12th – 13th century.
 357 B7, Rim of jar. *BSJ74* II U/S.
 358 B7, Rim of jar. 1976/2/83. Saxo-Norman.
 359 B7, Rim of storage vessel or bowl. *BSM74* I (25).
 360 B7, Bowl rim. *BSJ74* I F96. 10th – 12th century.
 361 B7, Rim of bowl. *BSJ74* II (3).
 362 B7, Corner of bowl, hand made. *BSM72* 38 (105).

Fig 113 B7 and B8 FABRICS, 363 – 385

- 363 B7, Bowl. *BC70* 6 (36). 12th – 13th century.
 364 B7, Bowl. *BSM74* I (25).
 365 B7, Bowl. *BSJ74* I F96. 10th – 12th century.
 366 B7, Rim of cooking pot or jar. *BSJ74* I (1).
 367 B7, Handle. *BC70* 5 (41). 12th – 13th century.
 368 B7, Bowl. *BSM72* 38 (106). 12th – 13th century.
 369 B7, Rim of storage vessel or bowl. *BSM74* I (25).
 370 B8, Spout. *BSJ74* II F153.
 371 B8, Bowl. 1976/2/83. Saxo-Norman.
 372 B8, Handle scar. *BSM73* 38 (104). 10th – 12th century.
 373 B8, Cooking pot. *BCS71* 24 (7).
 374 B8, Rim of cooking pot. *BC70* 6 (4). 12th – 14th century.
 375 B8, Rim of jar or cooking pot. *BSJ74* I F8. 10th – 12th century.
 376 B8, Rim of cooking pot or jar. *BC72* 37 (33). Post-Medieval.
 377 B8, Rim of cooking pot or jar. *BC70* 15 (2). Post-medieval.
 378 B8, Bowl. *BSJ74* I F129.
 379 B8, Rim of bowl. *BSJ74* II (34).
 380 B8, Bowl. *BSJ67* 6 (7). Post-Medieval.
 381 B8, Bowl. *BSJ74* II (34).
 382 B8, Bowl. *BSM74* II (2).
 383 B8, Bowl. *BSJ74* II (34).
 384 B8, Bowl. *BC70* 6 (6). 14th century.
 385 B8, Bowl. *BSM74* I (25).

Fig 114 B8 FABRIC, 386 – 412

- 386 B8, Jug rim. *BSJ74* I F64.
 387 B8, Rim with beginnings of handle or lug. 1976/2/38. Post-Medieval.
 388 B8, Overhanging rim, probably cooking pot or jar. 1976/2/U/S.
 389 B8, Bowl with basket handles. *BSJ74* I F42. 17th – 18th century.
 390 B8, Jug rim. 1976/2/521.
 391 B8, Rim with start of handle or lug. *BCS73* IV (37). 13th – 14th century.
 392 B8, Thumbed rim of jar. *BSM72* 38 (113). 11th – 12th century.
 393 B8, Basket handle. 1976/2/52 + 83. Saxo-Norman.

- 394 B8, Jug top. 1976/2/83. Saxo-Norman.
 395 B8, Jug top. *BC70* 6 (16). 14th century.
 396 B8, Jug. *BC71* 25 (21). Post-c1225.
 397 B8, Jug. *BSJ74* II (3).
 398 B8, Jug top. *BC70* 6 (16). 14th century.
 399 B8, Handle. *BSJ74* II (34).
 400 B8, Handle. *BC72* 54 U/S.
 401 B8, Handle. *BC70* 5 (13). 14th century.
 402 B8, Handle. *BC70* 5 (11). 14th century.
 403 B8, Decorated sherd of jug. *BCS71* 24 (7).
 404 B8, Handle. 1976/2/540. 14th century.
 405 B8, Handle. *BC70* 6 (11). 14th century.
 406 B8, Handle. 1976/2/83. Saxo-Norman.
 407 B8, Handle. *BC70* 5 (13). 14th century.
 408 B8, Cooking pot base. *BSJ74* II (27).
 409 B8, Handle. 1976/2/529.
 410 B8, Decorated sherd. *BC71* 25 (10). c1100 – c1225.
 411 B8, Decorated sherd. *BSJ67* 8 (16). c1100 – c1225.
 412 B8, Decorated base sherd. *BC71* 25 U/S.

Fig 115 B9, B10, B11, B12 FABRICS, 413 – 443

- 413 B9, Jug top. *BCL71* 22 (11). Late Medieval – early Post-Medieval.
 414 B9, Jug top. *BCL71* 22 (11). Late Medieval – early Post-Medieval.
 415 B9, Rim of jar. 1976/2/3.
 416 B9, Jug top. *BC71* 25 (10). c1100 – c1225.
 417 B9, Jug top. *BSM72* 38 (120). 11th – 12th century.
 418 B9, Decorated sherd. *BC70* 15 (6A). Post-Medieval.
 419 B9, Decorated sherd. *BSM72* 38 (91). 11th – 12th century.
 420 B9, Decorated sherd. *BC70* 6 (13). 12th – 14th century.
 421 B9, Decorated sherd. *BSJ74* II F54.
 422 B9, Decorated sherd. *BC70* 6 (22). 12th – 14th century.
 423 B9, Handle. *BC71* 25 (17). c1100 – c1225.
 424 B9, Decorated sherd. *BC70* 5 (14). 14th century.
 425 B9, Base. 1976/2/3.
 426 B10, Rim of small cooking pot or jar. *BSM72* 28 (104). 12th – 14th century.
 427 B10, Base of lamp or candlestick. *BSJ74* I F53.
 428 B10, Base of lamp or jar. *BMS71* 19 (35). Medieval.
 429 B10, Rim of cooking pot or jar. *BC70* 6 (15). 12th – 13th century.
 430 B10, Rim of cooking pot or jar. *BSJ74* I F18. 10th – 12th century.
 431 B10, Rim of bowl. *BC70* 5 (50). 12th – 13th century.
 432 B11, Rim of cooking pot. *BC70* 5 (13) = (15). 14th century.
 433 B11, Rim of jar or cooking pot. *BSM71* 23 (1). Post-Medieval.
 434 B11, Handle. *BC70* 6 (19). 12th – 14th century.
 435 B11, Rim of jar or cooking pot. *BC70* 5 (6). 12th – 14th century.
 436 B11, Rim of jar or cooking pot. *BC72* 54 (28). Post-Medieval.
 437 B11, Rim of bowl. *BC70* 5 (6). 12th – 14th century.

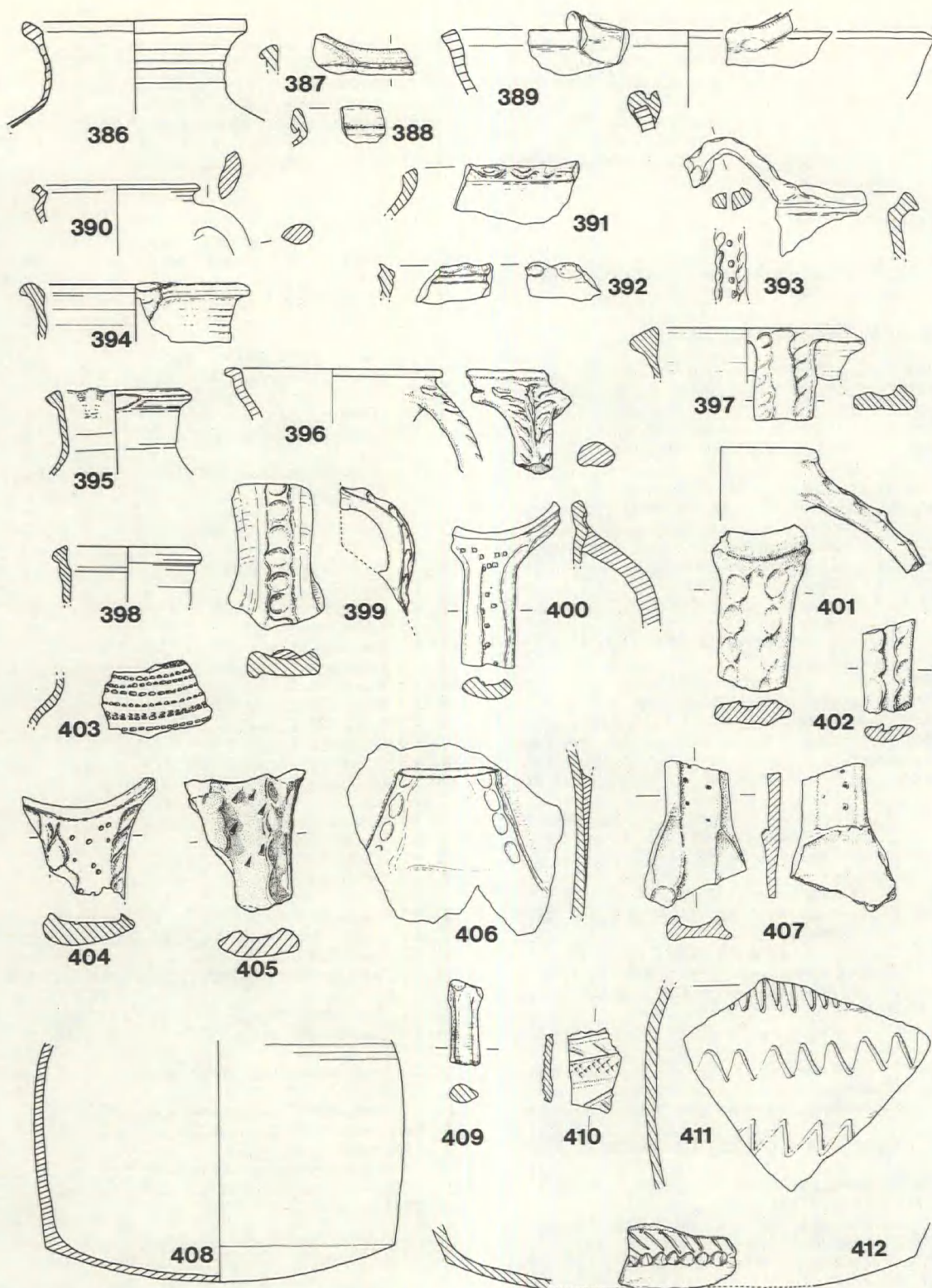


Fig 114 The Pottery: B8 fabric, scale 1:4.

- 438 B11, Base of cooking pot or bowl. *BSJ74 I (2)*.
 439 B11, Bowl. 1976/2/46. 11th – 12th century.
 440 B11, Rim of jar or cooking pot. *BSM72 23 (138)*. 11th – 12th century.
 441 B11, Decorated base. *BMR74 I (26)*.
 442 B12, Small rim. 1976/2/27. Post-Medieval.
 443 B12, Small rim. *BSM71 23 (27)*. 12th – 14th century.

SAXO NORMAN AND MEDIEVAL POTTERY, C WARES, 444 – 742

Fig 116 C1 FABRIC, 444 – 470

- 444 C1, Cooking pot or jar. *BSJ74 II F139*.
 445 C1, Cooking pot or jar. *BSJ74 II F47*. 12th – 13th century.
 446 C1, Cooking pot or jar. *BSJ74 I (4)*.
 447 C1, Cooking pot or jar. *BC70 5 (53)*. 12th – 13th century.
 448 C1, Cooking pot or jar. *BSJ74 I (4)*.
 449 C1, Cooking pot or jar. *BSJ74 II F127*. 11th – 12th century.
 450 C1, Cooking pot or jar. *BC70 5 (13)*. 14th century.
 451 C1, Cooking pot or jar. 1976/2/83. Saxo-Norman.
 452 C1, Cooking pot or jar. *BSJ74 I (4)*.
 453 C1, Cooking pot or jar. *BSM71 23 (10)*. 12th – 14th century.
 454 C1, Cooking pot or jar. *BCS73 I (33)*, Pit C. 17th – 18th century.
 455 C1, Cooking pot or jar. 1976/2/U/S.
 456 C1, Spout or socket. *BSJ74 I (4)*.
 457 C1, Spout or socket. *BSJ67 6 (17)*. 12th century.
 458 C1, Cooking pot or jar. *BC70 5 (4)*. 12th – 14th century.
 459 C1, Jug or cooking pot. *BC72 55 (13)*. Post-c1225.
 460 C1, Jug or cooking pot. 1976/2/83. Saxo-Norman.
 461 C1, Jug or cooking pot. *BSJ74 I (4)*.
 462 C1, Cooking pot or jar. *BSJ74 I F96*. 10th – 12th century.
 463 C1, Cooking pot or jar. 1976/2/11.
 464 C1, Cooking pot or jar. *BSJ74 II F168*. 12th – 13th century.
 465 C1, Jug or cooking pot. *BCS73 I (33)*, Pit C. Post-Medieval context, early 18th century.
 466 C1, Jug or cooking pot. *BCS73 I (33)*, Pit C. Post-Medieval context, early 18th century.
 467 C1, Cooking pot or jar. *BC70 5 (50)*. 12th – 13th century.
 468 C1, Bowl. *BSM72 23 (121)*. 12th – 13th century.
 469 C1, Bowl. *BC70 3 (4)*. Post-Medieval.
 470 C1, Cooking pot or jar. *BSJ67 6 (5)*. 20th century.

Fig 117 C2 and C3 FABRICS, 471 – 494

- 471 C2, Bowl. *BSM71 23 (150)*. 12th – 13th century.
 472 C2, Bowl. *BSJ74 I U/S*.
 473 C2, Bowl. *BSJ74 I F96*. 10th – 12th century.
 474 C2, Bowl. *BSJ74 II U/S*.
 475 C2, Cooking pot or jar. *BSJ74 II (11)*.
 476 C2, Bowl. *BCS73 III (6)*, Pit J. Post-Medieval context, 17th – early 18th century.

- 477 C2, Cooking pot or jar. *BSJ74 III F7*. 10th – 12th century.
 478 C2, Bowl. *BSJ74 I F15*. 10th – 12th century.
 479 C2, Storage vessel. *BSJ74 II F87*.
 480 C2, Decorated sherd. *BMod74 II (2)*.
 481 C2, Cooking pot or jar. *BSJ74 I (4)*.
 482 C2, Cooking pot or jar. 1976/2/26.
 483 C2, Foot. *BSM71 23 (18)*. 12th – 14th century.
 484 C2, Foot. *BSJ67 8 (16)*. Medieval?
 485 C2, Handle. *BSJ67 7 (7)*. Medieval.
 486 C2, Handle. *BSJ74 II F107*; 12th – 13th century.
 487 C2, Cooking pot or jar. 1976/2/36. Probably 9th century.
 488 C2, Handle. *BSM71 23 (27)*. 12th – 14th century.
 489 C2, Decorated sherd. 1976/2/49. 11th – 12th century.
 490 C2, Storage vessel? *BSJ74 I (1)*.
 491 C2, Cooking pot or jar. *BSJ74 II F42*.
 492 C3, Cooking pot or jar. *BSJ74 III F13*. 12th – 13th century.
 493 C3, Cooking pot or jar. *BC70 5 (53)*. 12th – 13th century.
 494 C3, Cooking pot or jar. 1976/2/107. 12th – 13th century.

Fig 118 C3 and C4 FABRICS, 495 – 521

- 495 C3, Socketed bowl. *BMS71 23 (18)*. 12th – 14th century.
 496 C3, Cooking pot or jar. *BSJ74 I F13*. 10th – 12th century.
 497 C3, Cooking pot or jar. *BSJ74 II F87*.
 498 C3, Cooking pot or jar. *BC70 5 (13)*. 14th century.
 499 C3, Jug. *BC70 5 (13)*. 14th century.
 500 C3, Jug. *BC70 5 (13)*. 14th century.
 501 C3, Bowl. *BSJ74 II F99*.
 502 C3, Cooking pot or jar. *BSJ74 I (42)*.
 503 C3, Cooking pot or jar. 1976/2/529.
 504 C3, Cooking pot or jar. *BSJ74 I F8*. 10th – 12th century.
 505 C3, Cooking pot or jar. *BSJ74 III F4*.
 506 C3, Handle. *BSJ74 II F150*.
 507 C3, Handle. 1976/2/97.
 508 C3, Decorated sherd. *BC72 48 (110)*. c1100 – c1225.
 509 C3, Decorated base. *BC71 26 (27)*. Post-Medieval.
 510 C3, Handle. *BMR74 I (36)*. 14th – 16th century.
 511 C3, Handle. *BCL73 60 U/S*.
 512 C3, Decorated sherd. *BSM71 23 (34)*. 12th – 14th century.
 513 C4, Cooking pot or jar. *BC70 6 (11)*. 14th century.
 514 C4, Cooking pot or jar. *BC70 9 (32)*. c1100 – c1225.
 515 C4, Cooking pot or jar. *BSJ74 II (1)*.
 516 C4, Jug. *BSJ74 III F4*.
 517 C4, Bowl. *BCL71 22 (9)*. Post-Medieval.
 518 C4, Cooking pot or jar. *BCS73 III (74)*. 10th – 12th century.
 519 C4, Cooking pot or jar. *BSJ74 I F16*. 12th century.
 520 C4, Cooking pot or jar. *BSJ67 7 (7)*. Medieval.
 521 C4, Jug. *BC70 5 (14)*. 14th century.

Fig 119 C4 and C5 FABRICS, 522 – 547

- 522 C4, Flanged sherd. *BC71 25 (41)*. c110 – c1225.
 523 C4, Handle. *BC71 25 (17)*. c1100 – c1225.

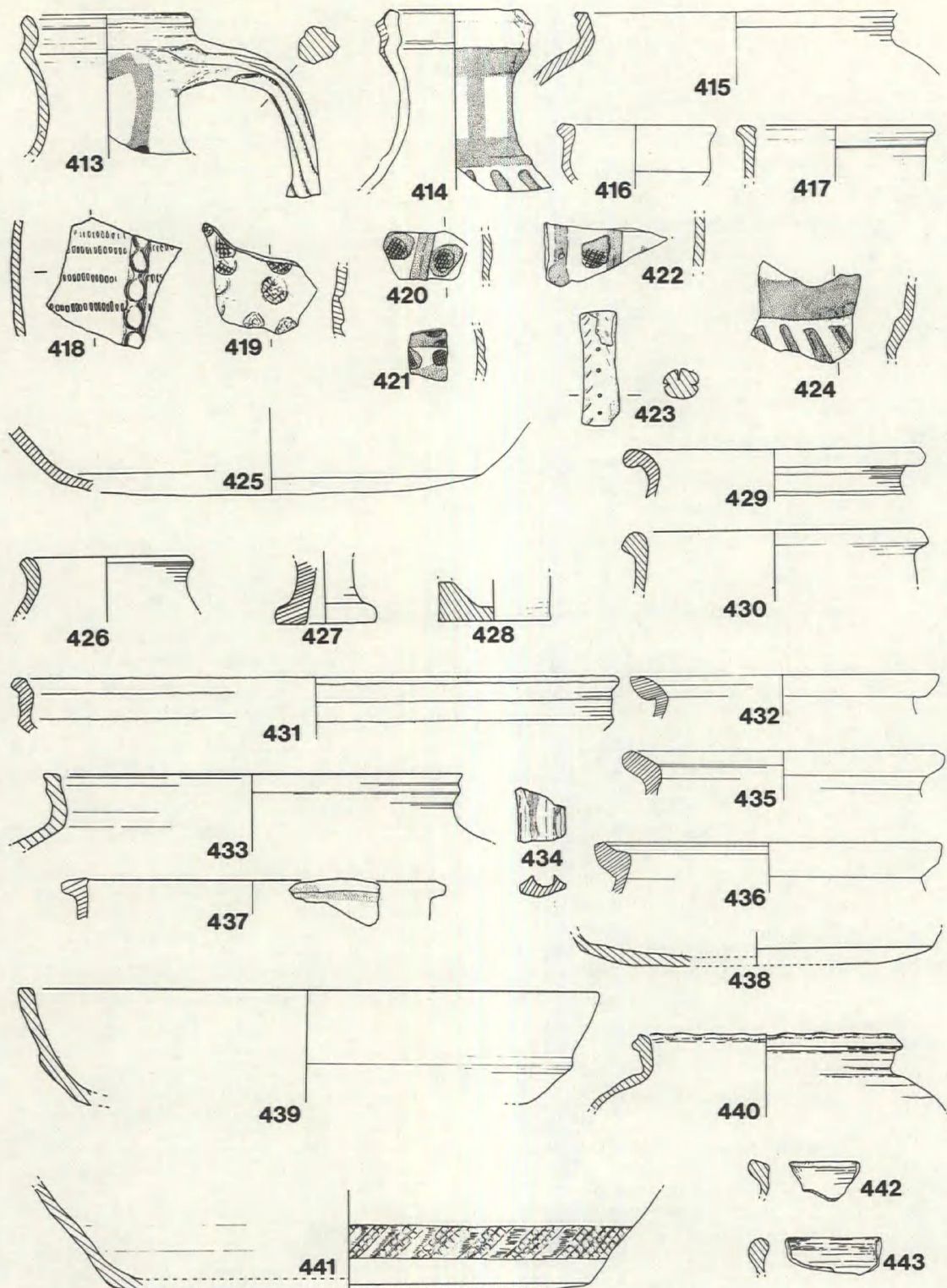


Fig 115 The Pottery: B9, B10, B11 and B12 fabrics, scale 1:4.
 B9 413 – 425; B10 427 – 431, B11 432 – 441; B12 442, 443.

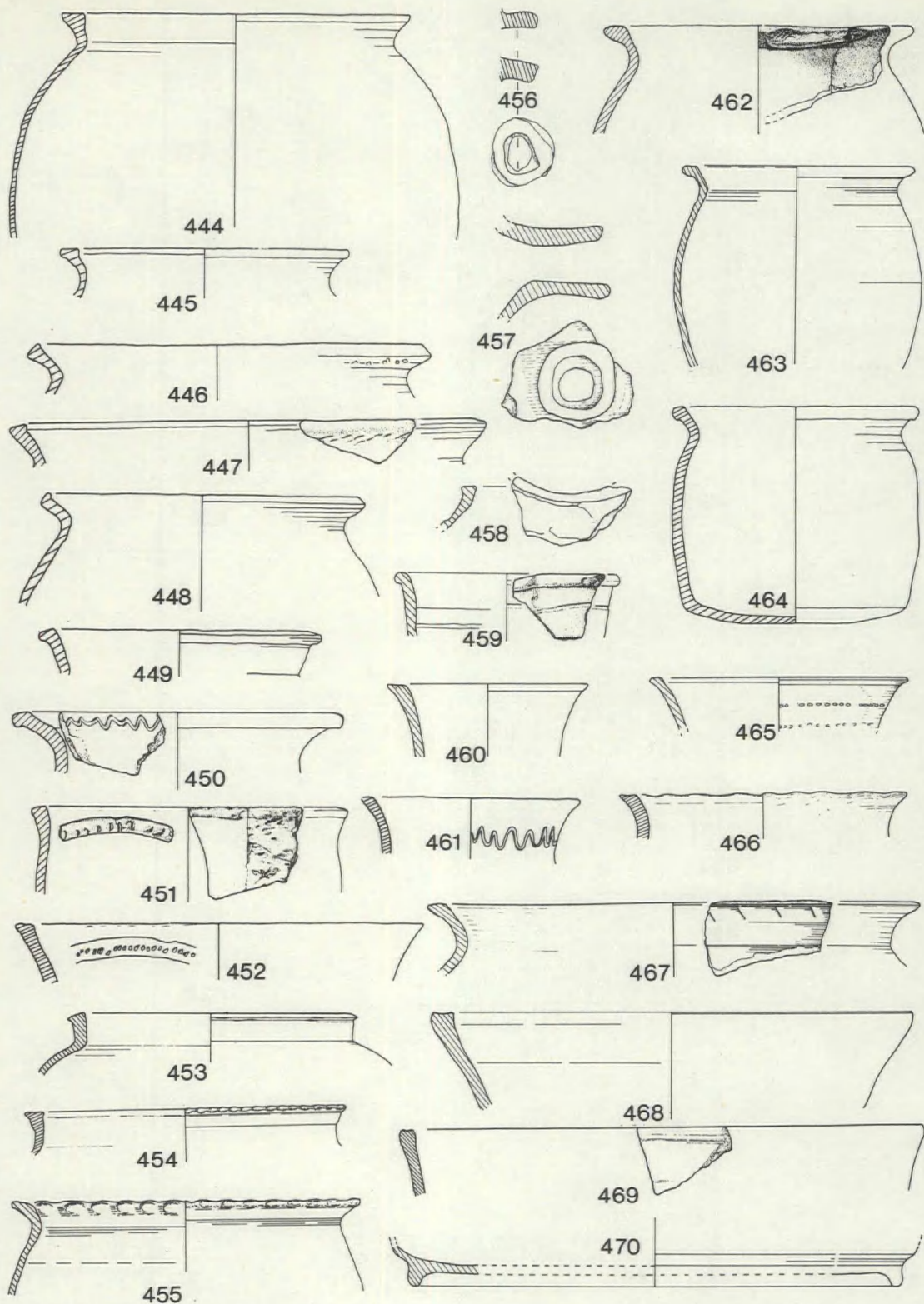


Fig 116 The Pottery: C1 fabric, scale 1:4.

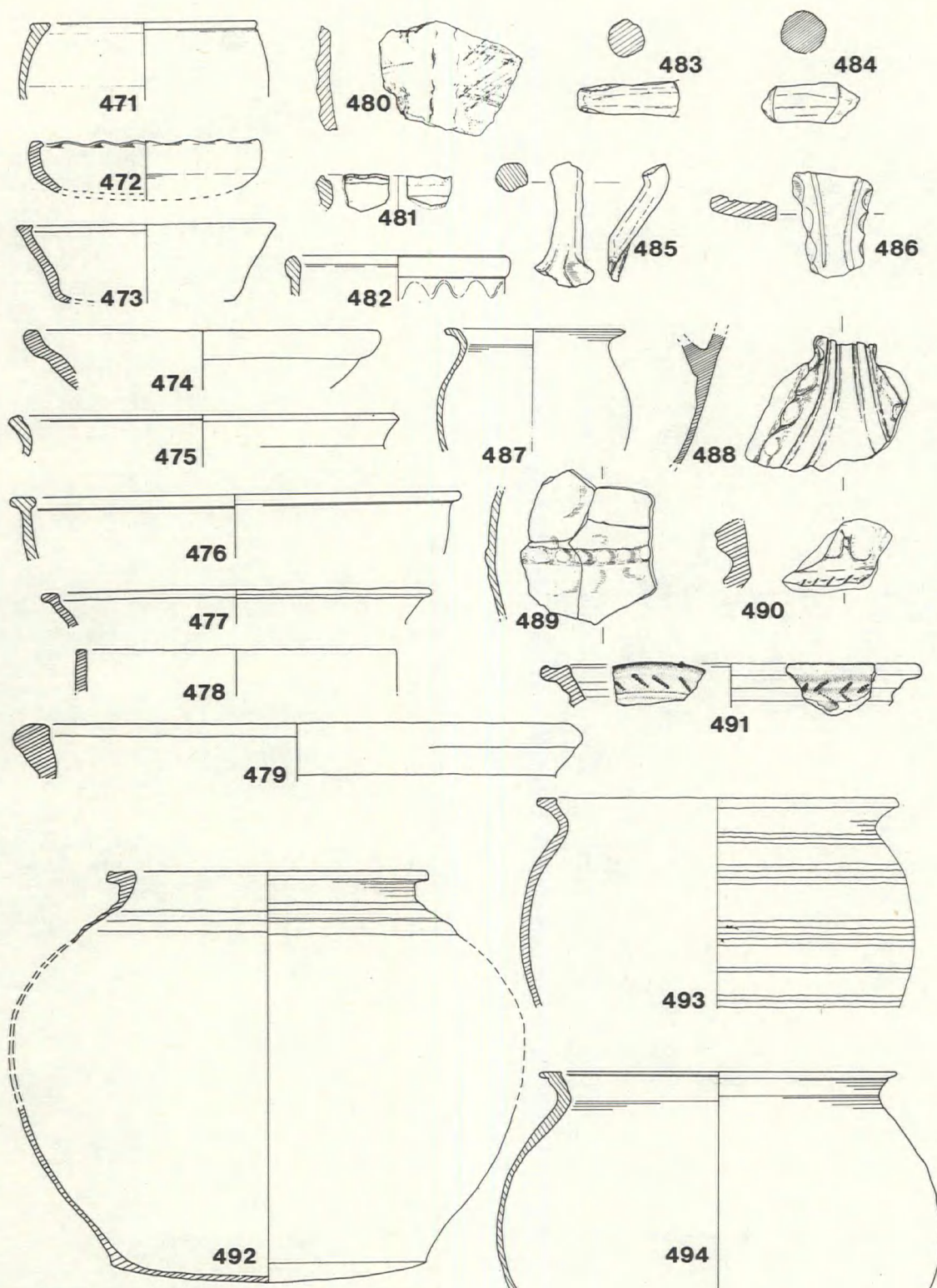


Fig 117 The Pottery: C2 and C3 fabrics, scale 1:4.
C2 471 – 491; C3 492 – 494.

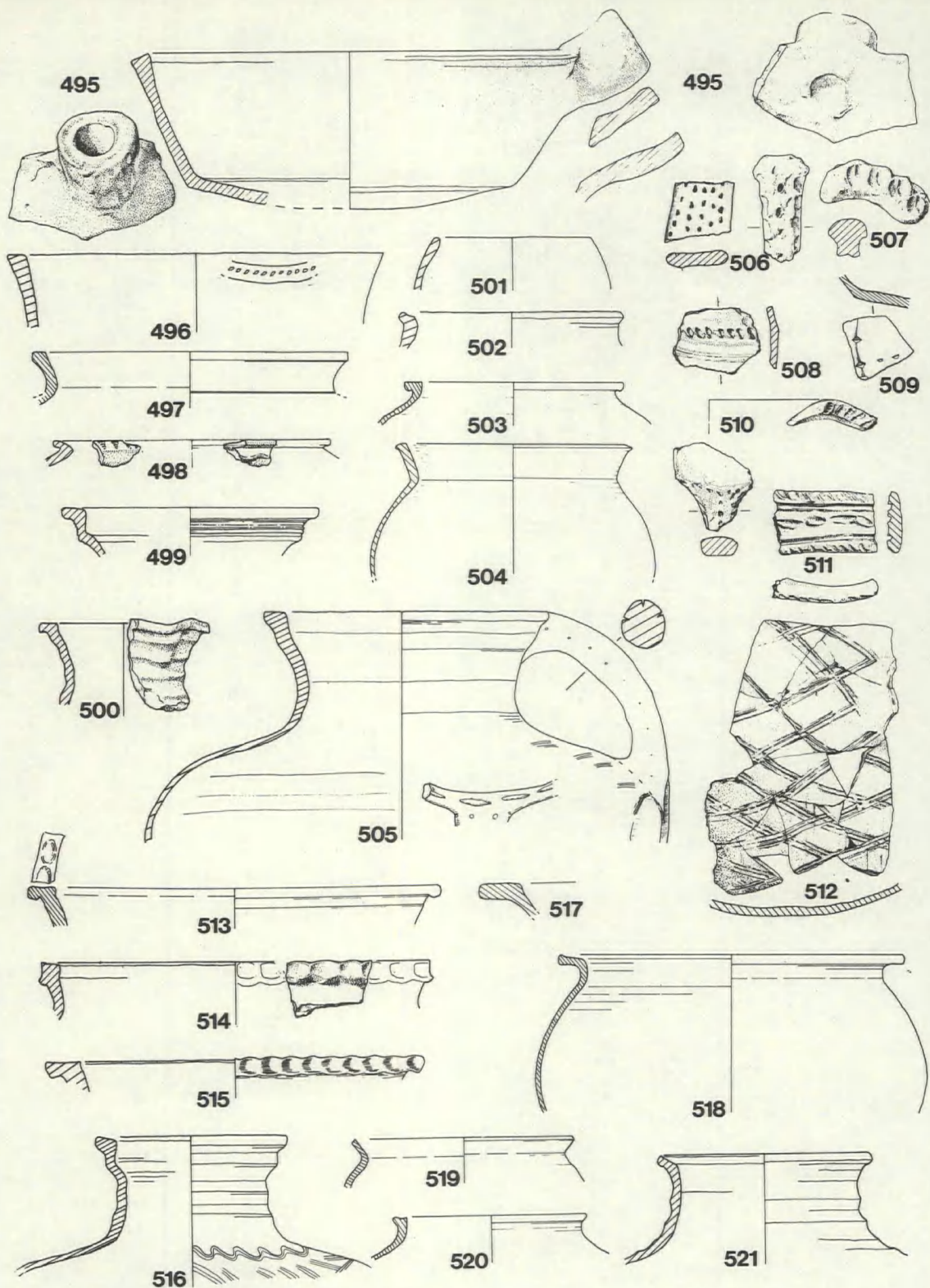


Fig 118 The Pottery: C3 and C4 fabrics, scale 1:4.
C3 495 – 512; C4 513 – 521.

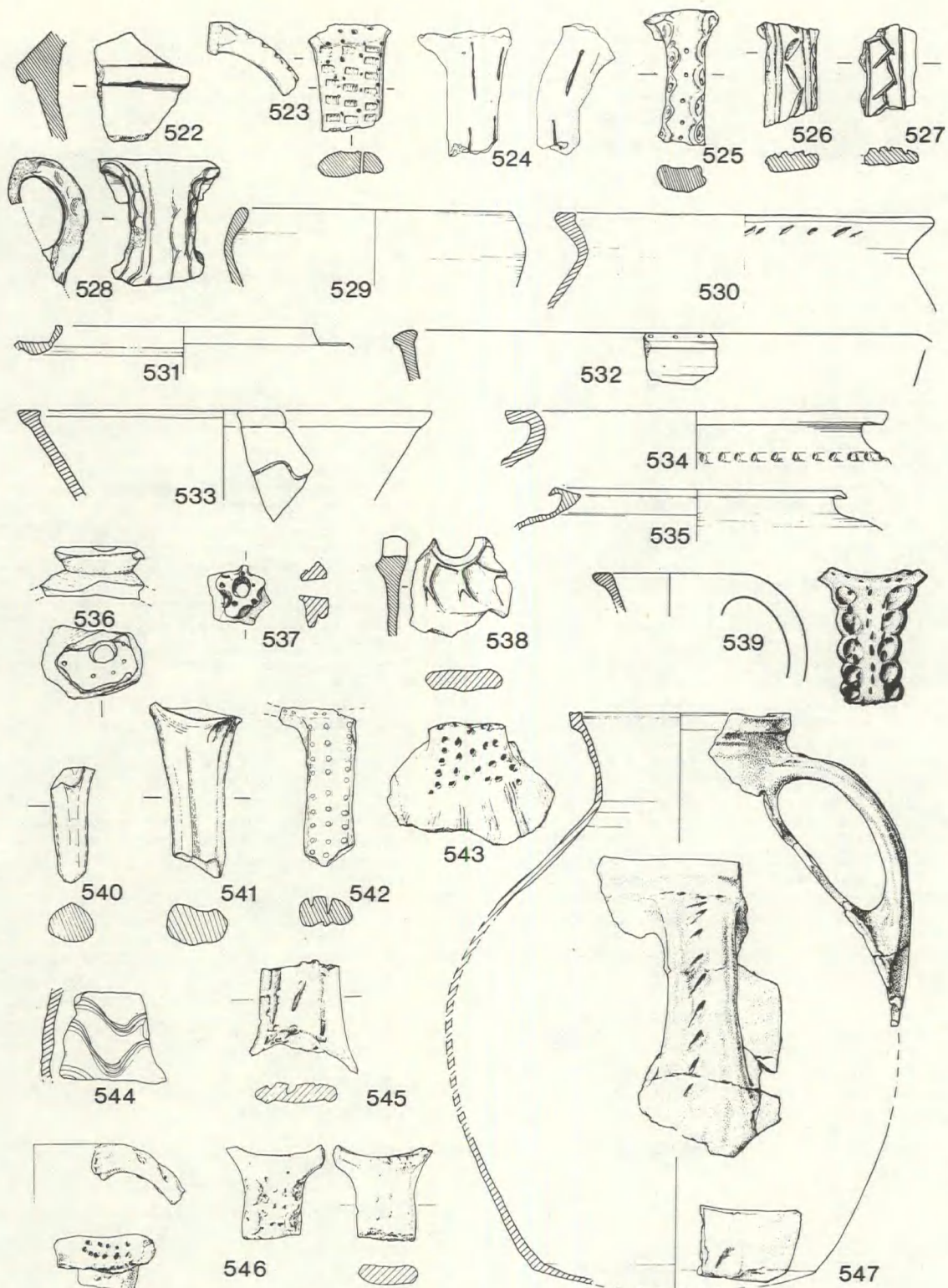


Fig 119 The Pottery: C4 and C5 fabrics, scale 1:4.
C4 522 – 528; C5 529 – 547.

- 524 C4, Handle. *BC71 25* (17). c1100 – c1225.
 525 C4, Handle. *BSJ71 U/S*.
 526 C4, Handle. *BSM71 23* (57). 12th – 14th century.
 527 C4, Handle. *BC70 6* (11). 14th century.
 528 C4, Handle. *BC72 37* (1). Post-Medieval.
 529 C5, Bowl. *BC71 25 U/S*.
 530 C5, Cooking pot or jar. *BC70 5* (54). 12th – 13th century.
 531 C5, Jar. 1977/1/6.
 532 C5, Bowl. *BC71 26* (36). Post-Medieval.
 533 C5, Bowl. *BSJ74 II F99*.
 534 C5, Cooking pot or jar. *BSJ74 II F127*. 11th – 12th century.
 535 C5, Cooking pot or jar. *BC72 54 U/S*.
 536 C5, Bung hole. *BSM72 38* (12). Post-Medieval.
 537 C5, Bung hole. *BSM72 38* (30). 12th – 14th century.
 538 C5, Bung hole. *BC71 25 U/S*.
 539 C5, Jug. *BSJ74 I* (29). Post-Medieval.
 540 C5, Handle. *BMR74 I U/S*.
 541 C5, Handle. *BMod74 II* (2).
 542 C5, Handle. 1977/1/65.
 543 C5, Handle. *BMS71 23* (12). 12th – 14th century.
 544 C5, Decorated sherd. *BSJ74 1* (1).
 545 C5, Handle. *BSJ71 30* (1). Post-Medieval.
 546 C5, Handle. 1976/2/11.
 547 C5, Jug. 1976/2/125. 14th century.

Fig 120 C6, C7 and C8 FABRICS, 548 – 577

- 548 C6, Cooking pot or jar. *BC70 6* (33). 12th – 14th century.
 549 C6, Bowl. *BC70 8* (8). 17th – 18th century.
 550 C6, Cooking pot or jar. *BSJ74 II F76*. 13th – 14th century.
 551 C6, Cooking pot or jar. *BCS73 IV* (4). 13th – 14th century.
 552 C6, Handle. *BSM71 U/S*.
 553 C6, Cooking pot or jar. *BSM71 23* (27). 12th – 14th century.
 554 C6, Cooking pot or jar. 1976/2/5.
 555 C6, Cooking pot or storage vessel. 1976/2/35.
 556 C6, Jug. *BSJ74 II F139*.
 557 C6, Bowl. *BSJ67 6* (17). 12th century.
 558 C6, Decorated sherd. *BSJ67 7* (7). Medieval.
 559 C6, Decorated sherd. *BMR73* (33). 13th – 14th century.
 560 C6, Handle. *BSM71 23* (4). 12th – 14th century.
 561 C7, Cooking pot or jar. *BSJ74 I* (17).
 562 C7, Jug. *BCS73 IV* (16). 14th – 15th century.
 563 C7, Bowl. *BC71 26* (25). Post-Medieval.
 564 C7, Handle. 1976/2/106. 11th – 12th century.
 565 C7, Cup. 1976/2/U/S.
 566 C8, Handle. 1976/2/34. Probably 10th century.
 567 C8, Decorated sherd. 1976/2/22.
 568 C8, Decorated sherd. *BC71 25* (55). c1100 – c1225.
 569 C8, Decorated sherd. *BC71 25* (55). c1100 – c1225.
 570 C8, Decorated sherd. *BC71 25 A*. Post-Medieval.
 571 C8, Rim and handle from spouted pitcher. 1976/2/108. Probably 9th century.
 572 C8, Handle. *BC71 25 U/S*.
 573 C8, Rim from spouted pitcher. 1976/2/60 (Pit 39). Probably 10th century.

- 574 C8, Spouted pitcher. *BSJ67 2* (18). Post-Medieval.
 575 C8, Decorated sherd. 1976/2/59 (Pit 39). Probably 10th century.
 576 C8, Base of spouted pitcher. 1976/2/38.
 577 C8, Base of spouted pitcher. 1976/2/123.

Fig 121 C9, C10, C11 and C9/11 FABRICS, 578 – 607

- 578 C9, Bowl with thick green glaze. *BSM72 38* (35).
 579 C11, Bowl. *BCL73 60 U/S*.
 580 C9, Bowl, with patchy orange glaze. *BSM72 38* (60). 13th century.
 581 C11, Bowl, with sparse green glaze. *BSJ74 I* (64).
 582 C9, Jar. 1976/2/129. 13th – 14th century.
 583 C9, Decorated sherd with patchy green glaze. *BSM72 38* (60). 13th century.
 584 C11, Cup, with thick bright green glaze overall. *BC70 13A U/S*.
 585 C9, Foot, with patchy green glaze. 1976/2/U/S.
 586 C9, Face jug, with thick green glaze. *BSM72 38* (75). 13th century.
 587 C9, Decorated sherd, with thick yellow-brown glaze. *BSJ74 II F57*. 13th – 14th century.
 588 C9, Decorated sherd with mottled green glaze. *BSJ67 7* (5). Late Medieval.
 589 C9/11, Decorated sherd with thick green glaze. 1976/2/13.
 590 C9, Jug, with thick green glaze. *BSM72 38* (120). 12th century.
 591 C9, Jug, overfired, dark green-brown thick glaze. *BMS72 38* (120). 12th century.
 592 C9, Jug with patchy green glaze. *BSJ74 II U/S*.
 593 C11, Jug with thick olive-green glaze in patches. *BSJ74 I U/S*.
 594 C9, Jug with sparse green glaze. *BSJ67 U/S*.
 595 C11, Handle, with sparse green glaze. 1976/2/521.
 596 C9, Handle, with thick green glaze. 1976/2/11.
 597 C9, Handle, with patchy green glaze. *BSM72 38* (69). 14th – 16th century.
 598 C9, Handle, with patches of mottled green glaze. *BSM72 38* (31). 14th – 16th century.
 599 C10, Cooking pot or jar. *BC70 6* (28). 12th – 14th century.
 600 C10, Jug, with thin green glaze. *BSM72 38* (56). 14th – 16th century.
 601 C9, Jug. *BSM72 38* (120). 12th century.
 602 C10, Spout with thick olive-green glaze. *BSM72 23* (1). Post-Medieval.
 603 C10, Cooking pot or jar. *BMS71 19* (34). 14th – 15th century.
 604 C10, Handle. *BMR74 I* (22).
 605 C10, Handle, with patchy green glaze. *BC70 5* (41). 12th – 13th century.
 606 C10, Jug, with thick green glaze. 1976/2/505.
 607 C10, Storage vessel. 1976/2/521.

Fig 122 C12, C13, C14, C15, C16 and C17 FABRICS, 608 – 650

- 608 C12, (BO) Bowl. 1976/2/54. 11th – 12th century.
 609 C12, (G1/11) Bowl. 1976/2/61. 11th – 12th century.
 610 C12, (GO) Bowl. *BMR74 I* (17). 14th – 16th century.

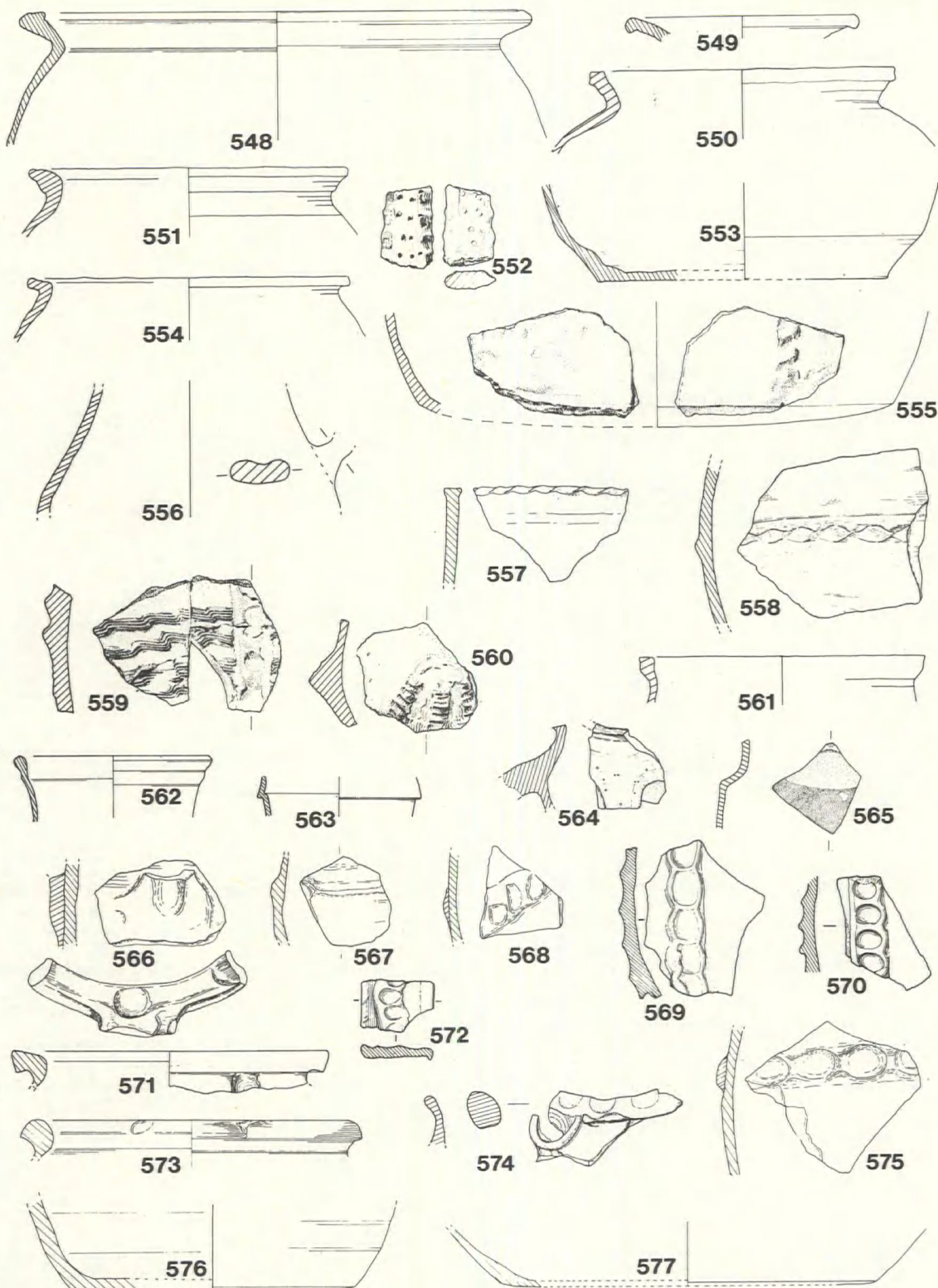


Fig 120 The Pottery: C6, C7 and C8 fabrics, scale 1:4.
 C6 548 – 560; C7 561 – 565; C8 566 – 577.



Pl 30 Pottery: 13th century jug in fabric C9, Cat 601.



Pl 31 Pottery: 13th century face jug in fabric C9, Cat 586.

- 611 C12, (BO) Bowl. 1976/2/14.
- 612 C12, (BO) Bowl or jug. 1976/2/49, 11th – 12th century.
- 613 C12, (G1) Bowl with ? basket handle. *BMR74 II F32*. 10th – 12th century.
- 614 C12, (GO) Jug. *BCS73 I (48)*. 10th – 12th century.
- 615 C12, (G3) Jug. 1976/2/106. 11th – 12th century.
- 616 C12, (G(1)) Rim. 1976/2/57. 11th – 12th century.
- 617 C12, (B3/3) Rim. *BMS71 19 (56)*. 12th – 14th century.
- 618 C12, (GO) Bowl. *BSJ74 I U/S*.
- 619 C12, (G1/1) Bowl. *BSM72 38 (13)*. Post-Medieval.
- 620 C12, (B1) Base. *BMR74 I (47)*. Post-Medieval.
- 621 C12, (GO) Bowl. *BMR74 I F64*. 12th century.
- 622 C12, (GO) Bowl. 1976/2/69. 13th – 14th century.
- 623 C12, (GO) Bowl. *BC72 37 U/S*.
- 624 C12, (B3) Bowl with ?basket handle. *BMR73 (24)*.
- 625 C12, (G6) Jug. *BMR74 I (24)*. Late Medieval.
- 626 C12, (B3) Spout. *BCS73 III (74)*. 10th – 12th century.
- 627 C12, (GO) Spout. *BSJ74 I F129*.
- 628 C12, (G1/1) Handle. *BSJ67 I (12)*. Medieval.
- 629 C12, (G1/1) Handle. *BCS73 I (31)*. *Pit F*. Post-Medieval context, 17th century.
- 630 C12, (B1/1) Bowl with ?basket handle. *BCS73 I (33)*, *Pit C*. Early 18th century context.
- 631 C14, Jar. *BCL73 60 (16)*. 13th – 14th century.
- 632 C14, Saucer. *BCL73 60 (49)*. 13th – 14th century.
- 633 C14, Cooking pot or jar. *BMR74 I F38*. 12th – 14th century.
- 634 C14, Cooking pot or jar. *BSM72 38 (13)*.
- 635 C14, Handle. *BSJ74 I U/S*.
- 636 C14, Saucepan. *BSJ74 II F76*. 13th – 14th century.
- 637 C14, Jar. *BCL73 60 (1)*.
- 638 C14, Cooking pot or jar. 1976/2/49. 11th – 12th century.
- 639 C15, Jug with patches of mottled green glaze. *BSM72 38 (89)*. 12th century.
- 640 C15, Jug with thick green glaze. *BSM71 28 (16)*. 12th – 14th century.
- 641 C15, Handle with green glaze on top. *BC71 26 (10)*. Post-Medieval.
- 642 C15, Decorated sherd with thick green glaze. *BSJ74 II (11)*.
- 643 C15, Decorated sherd with thick green glaze. *BSJ74 I (1)*.
- 644 C13, Spout. *BSM72 23 (63)*. 12th – 14th century.
- 645 C16, Cup with bright green glaze. 1977/1/7.
- 646 C16, Flask with bright green glaze. *BSM72 38 (61)*. 14th – 16th century.
- 647 C16, Jug with bright green glaze. *BMS71 19 (27)*. 16th – 17th century.
- 648 C16, Cup with bright green glaze. *BSJ67 5 (14)*. 14th century.
- 649 C17, Cup with patchy dark green glaze. *BSM72 38 (31)*. 14th – 16th century.
- 650 C17, Jug with spots of orange glaze. *BC72 54 (19)*. Post-c1225.

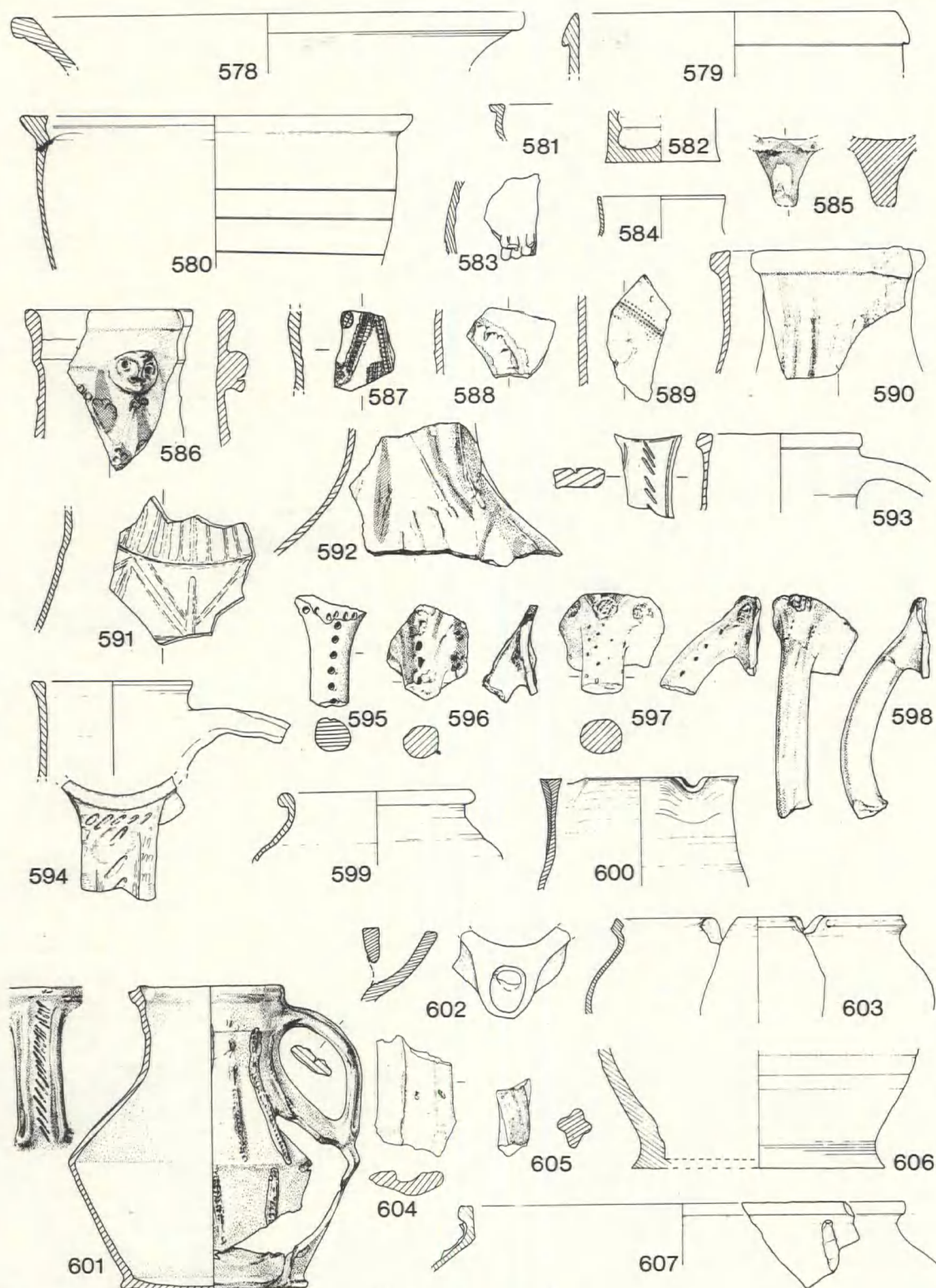


Fig 121 The Pottery, C9, C10, C11 and C9/11 fabrics, scale 1:4.
 C9 578, 580, 582, 583, 585 – 588, 590 – 592, 594, 596 – 598, 601;
 C10 599, 600, 602 – 607; C11 579, 581, 584, 593, 595; C9/11 598.

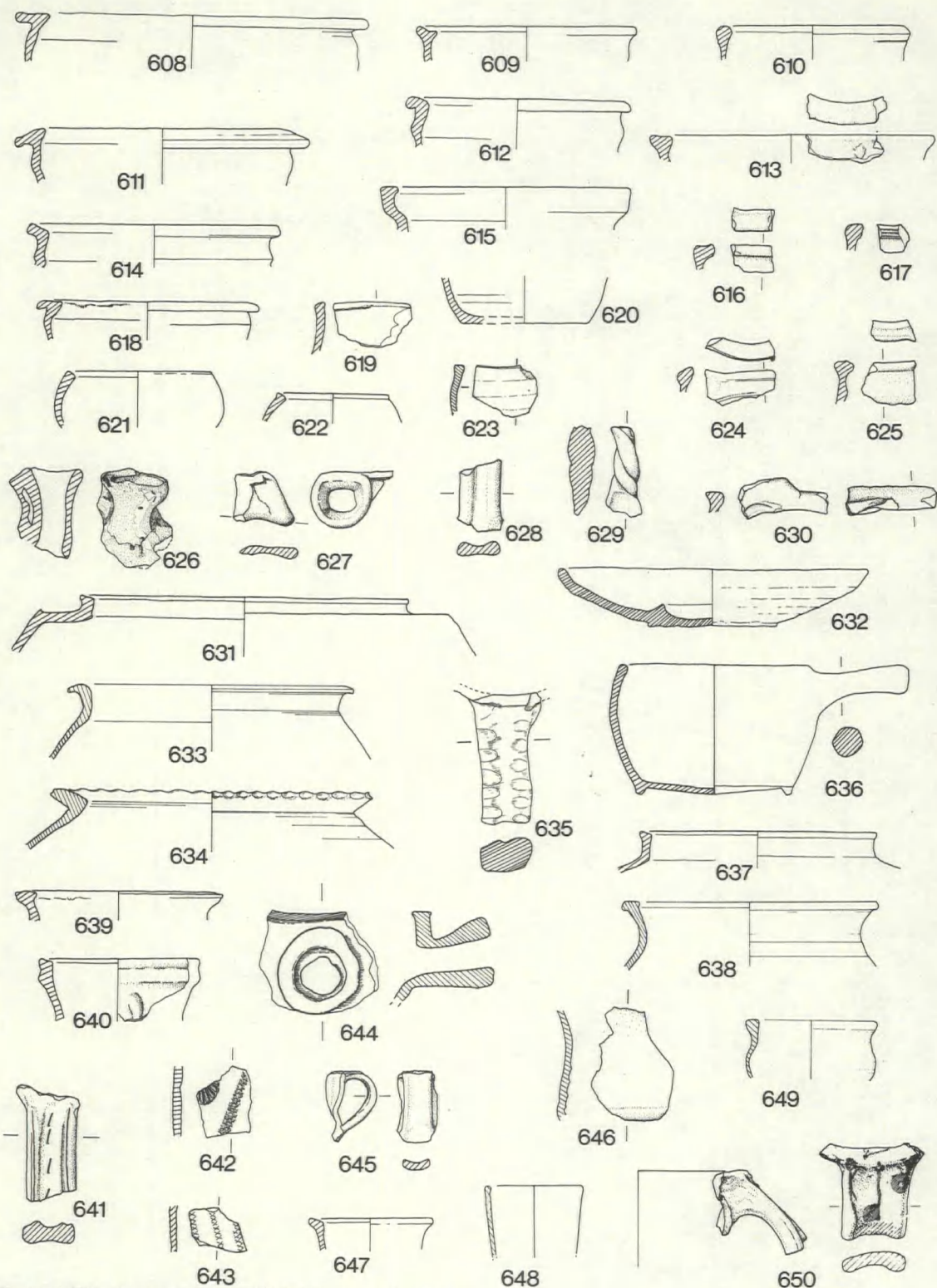


Fig 122 The Pottery: C12 – C17 fabrics, scale 1:4.
 C12 608 – 630; C13 644, C14 631 – 638; C15 639 – 643;
 C16 645 – 648; C17 649, 650.

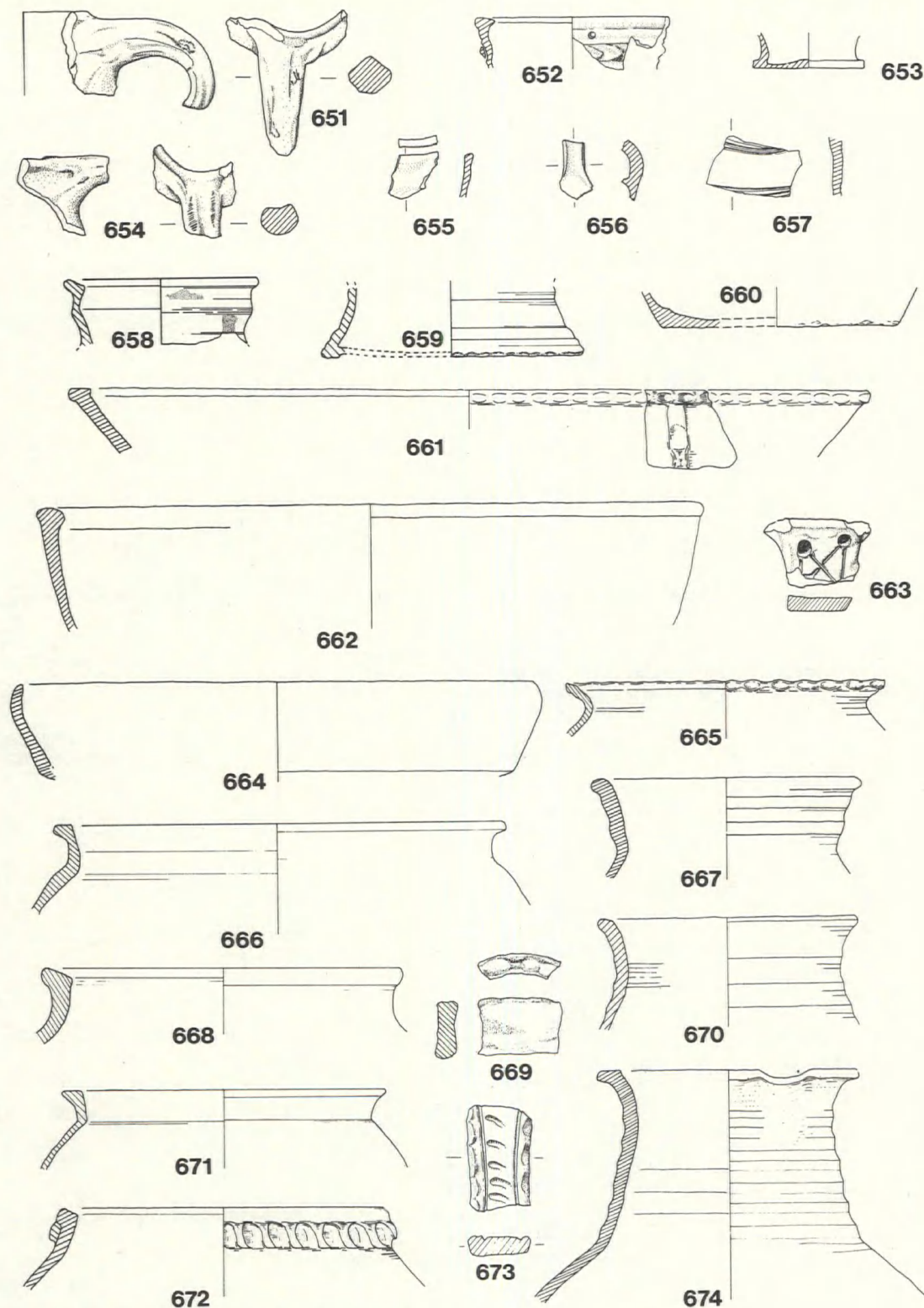


Fig 123 The Pottery: C19 – C22 fabrics, scale 1:4.
 C19 651 – 655; C20 652, 653, 656, 657, 660;
 C21 658, 659; C22 661 – 674.

Fig 123 C19, C20, C21 and C22 FABRICS, 651 – 674

- 651 C19, Handled ladle. *BSM71* 28 (16). 12th – 14th century.
 652 C20, Jug with pierced hole; red slip on rim, overall light green glaze. *BC70* 5 (14). 14th century.
 653 C20, Jug with patches of dark green glaze. *BCL73* 60 (17).
 654 C19, Handled ladle. *BSM71* 28 (16). 12th – 14th century.
 655 C19, Handled ladle. 1976/2/34. Probably 10th century.
 656 C20, Handle with dark green glaze. *BMR74* I F7. Late Medieval.
 657 C20, Decorated sherd with mottled light green glaze. *BMod 74* II (2). Post-Medieval.
 658 C21, Jug, traces of white slip and light green glaze. *BC71* 25 (21). Post-c1225.
 659 C21, Jug, with patches of orange glaze, probably base of 658. *BC71* 25 (21). Post-c1225.
 660 C20, Jar or cooking pot with patches of dark green glaze. 1977/1/60.
 661 C22, Bowl. *BSJ74* II F91. 12th – 13th century.
 662 C22, Bowl. *BC70* 5 (54). 12th – 13th century.
 663 C22, Handle. *BMR74* I (1) and (2).
 664 C22, Bowl. *BSJ74* I F77. 10th – 12th century.
 665 C22, Jar or cooking pot. *BMR73* (33). 12th – 14th century.
 666 C22, Jar or cooking pot. 1976/2/83. Saxo-Norman.
 667 C22, Jug. *BSJ74* II F132. 11th – 12th century.
 668 C22, Jar or cooking pot. 1976/2/128. 11th – 12th century.
 669 C22, Handle. *BC70* 5 (53). 12th – 13th century.
 670 C22, Jug. 1976/2/107. 12th – 13th century.
 671 C22, Jar or cooking pot. *BSM72* 28 (27). 12th – 14th century.
 672 C22, Jar or cooking pot. *BSJ74* I F77. 10th – 12th century.
 673 C22, Handle. 1976/2/83. Saxo-Norman.
 674 C22, Jug. *BSJ74* II F81. 13th century.

Fig 124 C23, C24, C25, C27, C28, C29 and C30 FABRICS, 675 – 708

- 675 C23, Jug, red slip with patches of light green glaze. *BSJ74* I (1).
 676 C23, Jug. *BSJ74* I (1).
 677 C24, Jug. *BC71* 25 (8). Post-Medieval.
 678 C25, Jug. *BSM72* 38 (54). 14th – 16th century.
 679 C23, Handle with thick olive-green glaze. 1976/2/125. 14th century.
 680 C24, Jug. 1976/2/521.
 681 C24, Cooking pot. 1976/2/529.
 682 C24, Cooking pot. *BSJ74* I F17. Post-Medieval.
 683 C25, Jug. *BSM72* 38 (12).
 684 C27, Cooking pot. *BSJ74* II F2.

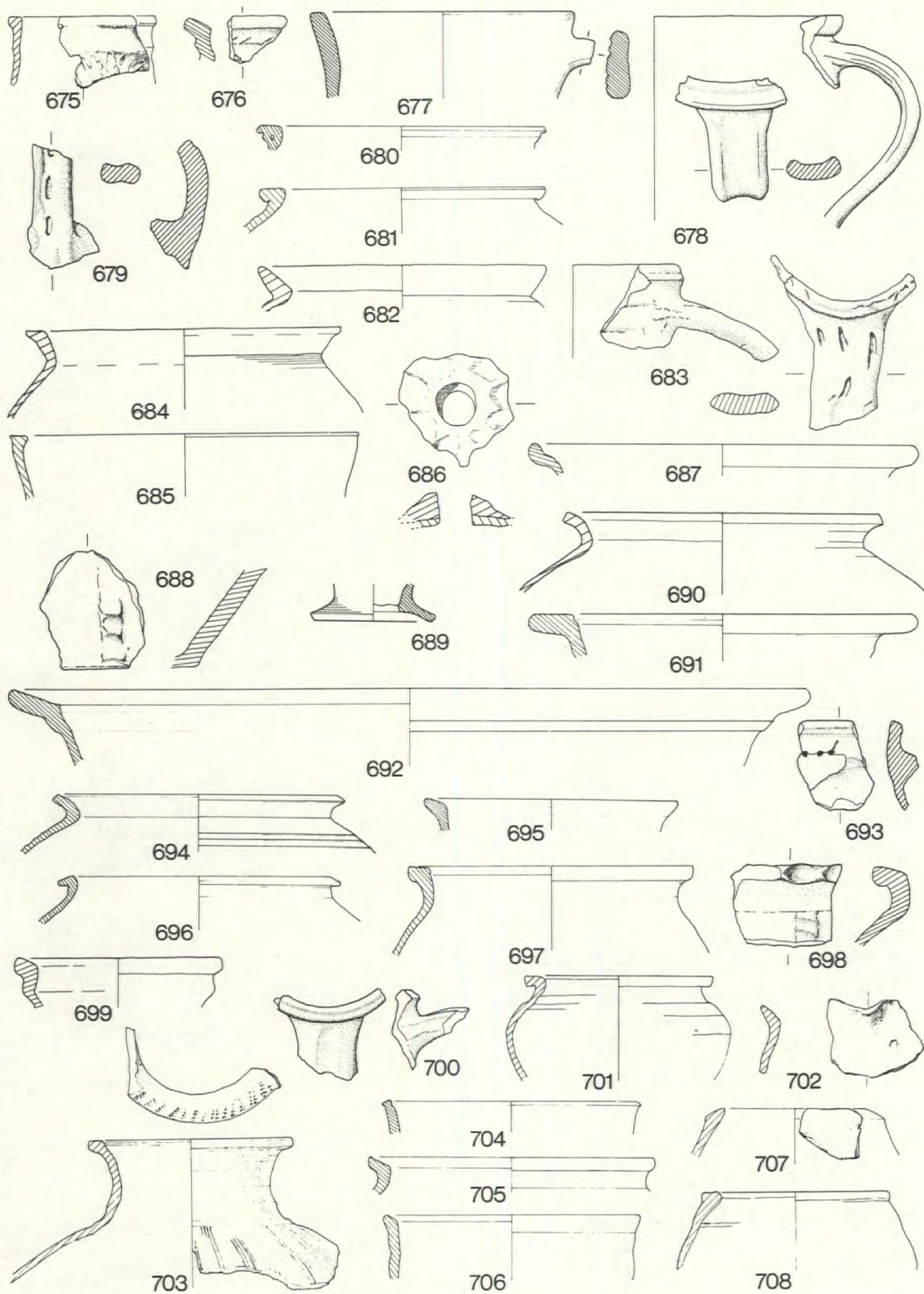
- 685 C27, Bowl. *BMR73* (64). 12th – 14th century.
 686 C24, Bung. *BSJ74* I U/S.
 687 C25, Cooking pot. *BSM71* 23 (37). 12th – 14th century.
 688 C27, Base of storage jar. *BSM71* 23 (72). 12th – 13th century.
 689 C27, Base of flask or small jug. *BC70* 10 (1). Post-Medieval.
 690 C28, Cooking pot or jar. *BSJ74* II F23.
 691 C25, Bowl. *BSM72* 38 (63). 12th – 14th century.
 692 C28, Bowl. *BC71* 25 U/S.
 693 C28, Jug. 1976/2/125. 14th century.
 694 C28, Cooking pot or jar. *BC70* 5 (23). 14th century.
 695 C28, Jug or jar. 1976/2/107. 12th – 13th century.
 696 C29, Cooking pot or jar. 1977/1/84.
 697 C28, Cooking pot or jar. 1976/2/39. Probably 10th century.
 698 C28, Storage jar. *BC70* 6 (5). 14th century.
 699 C29, Jug. *BSJ74* III F4.
 700 C29, Jug. *BSM72* 38 (45). 12th – 13th century.
 701 C29, Jar. *BC72* 54 U/S.
 702 C30, Spouted vessel, possibly a lamp. Traces of burnishing on outside. *BSM72* 28 (120). 2 : 1. 12th – 13th century.
 703 C29, Jug. *BC70* 6 (29). 12th – 14th century.
 704 C29, Bowl. *BSM72* 38 (104). 12th – 14th century.
 705 C29, Cooking pot or jar. *BC70* 6 (5). 14th century.
 706 C29, Jar, jug, or bowl rim. *BSM72* 38 (60). 12th – 13th century.
 707 C30, Small bowl or lamp with burnishing on outside. *BSM72* 23 (84). 2 : 1. 12th – 13th century.
 708 C30, Small jar. *BC70* 50 (12). 2 : 1. c1100 – c1225.

Fig 125 C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C43, C44, C49, C51, C52 and C54 FABRICS, 709 – 741.

- 709 C32, Jug with white slip and mottled green glaze outside, and traces of white slip inside. *BSJ74* II F43.
 710 C33, Small flanged jar with bright orange glaze inside. *BMS71* 19 (31). 16th – 17th century context. 2 : 1.
 711 C33, Bowl with external olive-green glaze. *BC72* 55 (16). Post-c1225.
 712 C33, Cup. *BC71* 25 A. Post-Medieval.
 713 C35, Jug. *BCL73* 60 (10).
 714 C34, Jug. 1976/2/U/S.
 715 C34, Handle. *BSJ74* I F47. 10th – 12th century.
 716 C35, Small jar. 1976/2/521.
 717 C35, Bowl. *BSJ74* II F40.
 718 C36, Handled Bowl. 1976/2/542. Medieval.
 719 C36, Decorated sherd with applied thumbled strip. 1977/1/149. 11th – 12th century.

Opposite: Fig 124 The Pottery: C23 – C25, C27 – C30 fabrics, scale 1:4.

C23 675, 676, 679; C24 677, 680 – 682, 686;
 C25 678, 683, 687, 691; C27 684, 685, 688, 689;
 C28 690, 692 – 695, 697, 698; C29 696, 699 – 701, 703 – 706;
 scale 1:2 – C30 702, 707, 708.



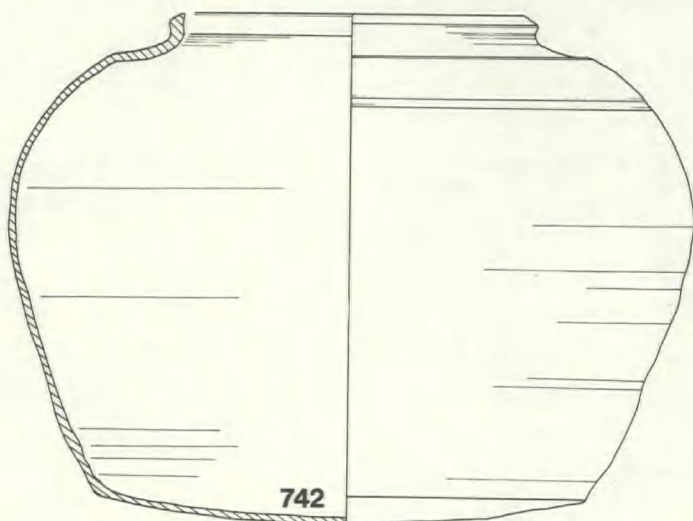
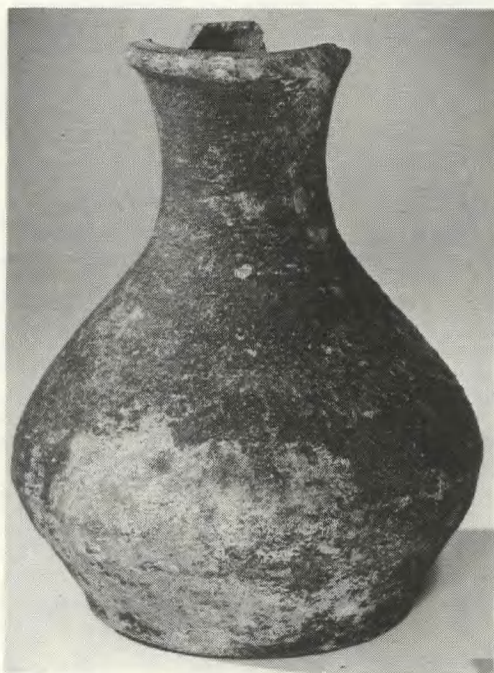


Fig 126 The Pottery: C35 fabric, scale 1:4.

- 720 C35, Jug. *BSM72 38 (12)*.
- 721 C35, Cooking pot or jar. *1977/1/86*.
- 722 C36, Bowl. *1976/2/521*.
- 723 C36, Bowl. *1976/2/22*. 14th – 15th century.
- 724 C38, Decorated sherd with white slip and overall yellow glaze. *1977/1/118*.
- 725 C36, Bowl. *1976/2/52*. Saxo-Norman.
- 726 C36, Cooking pot or jar. *BSM72 23 (121)*. 12th – 13th century.
- 727 C37, Bowl. *BMR74 I (11)*.
- 728 C39, Cooking pot or jar. *1976/2/136*. 13th – 14th century.
- 729 C41, Handle, probably from ladle. *BSJ67 7 (5)*. Late Medieval.
- 730 C43, Base of jar or jug. *1976/2/17*. 14th – 15th century.
- 731 C51, Handle, possibly from ladle. *1976/2/39*. Probably 10th century.
- 732 C52, Handle, probably from ladle. *1976/2/38*. Post-Medieval.
- 733 C41, Flask or bottle. *BSJ74 I F20*. Medieval.
- 734 C44, Bowl. *1976/2/14*.
- 735 C44, Cooking pot or jar. *1976/2/521*.
- 736 C44, Bowl. *BSM72 38 (38)*. Post-Medieval.
- 737 C49, Jug or jar. *1977/1/7*.
- 738 C54, Cooking pot or jar. *BSM72 23 (18)*. 12th – 14th century.
- 739 C44, Jug. *BSM72 38 (12)*.
- 740 C54, Jug. *BMR73 (52)*.
- 741 C40, Jug, jar or cooking pot base. *1976/2/131*. 12th – 13th century.

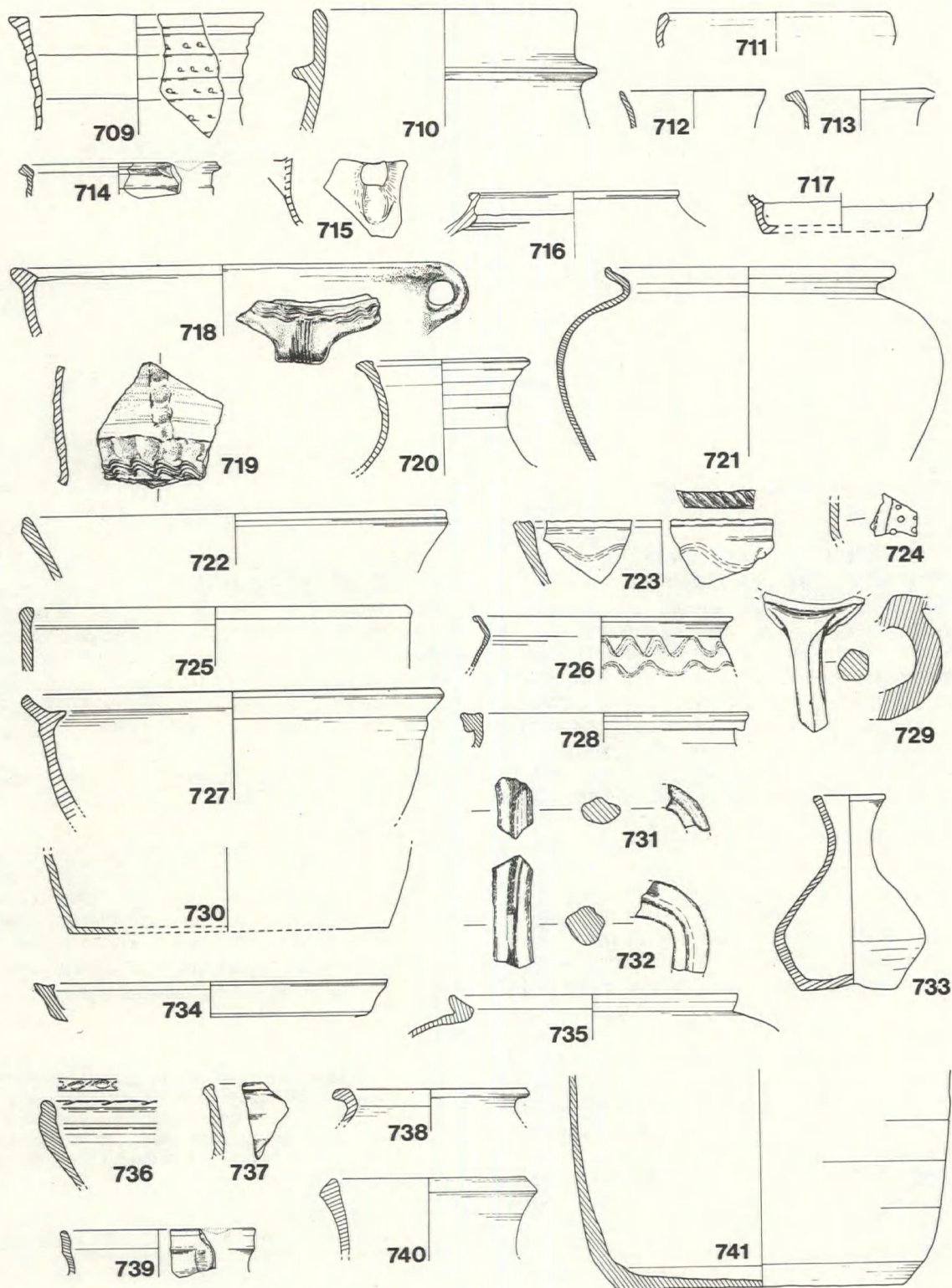


Pl 29 Pottery: Medieval flask or bottle in fabric C41, Cat 733.

Fig 126 C35 FABRIC, 742

- 742 C35, Cooking pot. *BMS71 28 (1)*. Post-Medieval.

Opposite: Fig 125 The Pottery: C32 – C41, C43, C44, C49, C51, C52 and C54 fabrics. scale 1:4.
 C32 709; C33 710 (scale 1:2), 711, 712; C34 714, 715;
 C35 713, 716, 717, 720, 721; C36 718, 719, 722, 723, 725, 726;
 C37 727; C38 724; C39 728; C40 741; C41 729, 733;
 C43 730; C44 734 – 736, 739; C49 737; C51 731; C52 732; C54 738, 740.



	Total	Group E1	Group E2	Group E3	Group E4	Group E5	Group E6	Group E7
Castle	3,115	150	1,685	565	235	370	—	110
Mill Street	4,050	1,345	340	1,605	50	550	150	10
Midland Road	1,425	165	535	325	—	55	170	175
St Mary's	2,400	355	1,525	335	—	50	100	55
Cauldwell Street	2,145	—	210	1,250	—	210	375	100
St John's	7,680	1,905	3,300	1,355	25	380	370	345
	20,815	3,920	7,595	5,435	310	1,615	1,165	795

Fig 127 Late Medieval Coarseware, E Fabrics, table of sherd totals and distribution.

LATE MEDIEVAL COARSEWARE

Figs 127 – 131 (15th – 17th century)

Just over 20kg of coarseware sherds were recovered and have been divided into seven broad fabric groups. Of these, the first six were distinct groups whilst group 7 (only 695g) is composed of individual miscellaneous sherds. The distinctions between each group were made visually and according to feel rather than by microscopic analysis of the fabric temper. *Figure 127* summarises the number and distribution of each group.

The range of pottery types covers wheel-thrown, hard coarse fabrics, both oxidised and reduced, with pimply surfaces. There is a distinctive range of vessels often with broad flanged rims and it is possible that some of them may have been shaped by template. There is some evidence of knife trimming and shaping but little in the way of decoration or glaze. Many examples appear to have been smoothed over before firing. Most of the vessels were large, coarse jugs, jars and cisterns, but various smaller types also occurred.

Fabric 1 would seem to come within the range defined by Moorhouse as East Midlands Reduced ware (Moorhouse, 1974). The other groups are also likely to be related fabrics. Whilst there are no known kiln sites near Bedford, Moorhouse suggests that Bedford occupies a fairly central place in the distribution area. It is possible that some of the material may have come from the Great Brickhill kilns, but a more local source may be inferred from

the closely paralleled material at Hall Place, St Neots (Addyman and Marjoram, 1972). An early 16th century date is put forward for this group. Since Moorhouse's discussion of the Mill Street group (Moorhouse in Baker, 1974), where he suggests a terminal date of c1480, based on the absence of Raeren stonewares, further excavations in Bedford have produced considerably more coarseware. It has been noticeable that there have been very few imports, and the lack of associated material cannot be regarded as a reliable indication of date.

All fabric groups occur in contexts ranging from 16th – 18th centuries, with the Mill Street examples possibly pushing back the date to the late 15th century. In general these contexts have produced very mixed assemblages with coarseware forming a very small percentage. It has not therefore been possible to form a dateable type series.

E1 FABRIC

743 – 757

This is a hard, reduced ware with much sand and grit temper. Forms include large bowls with flanged rims, small bowls and jugs with plain and decorated handles. One fragment of a bung-hole from a cistern was also found. The majority of vessels are undecorated, but some body sherds bear traces of incised lines in a herringbone pattern.

E2 FABRIC

758 – 776

Coarser than fabric 1, this ware occurs in both oxidised and reduced forms. The colour ranges from orange-red surfaces with grey core, to grey wares with an orange-grey-orange sandwich in the core. The forms are mainly large and heavy, including predominantly cisterns or jugs, and bowls with handles. There are also some cooking pots and

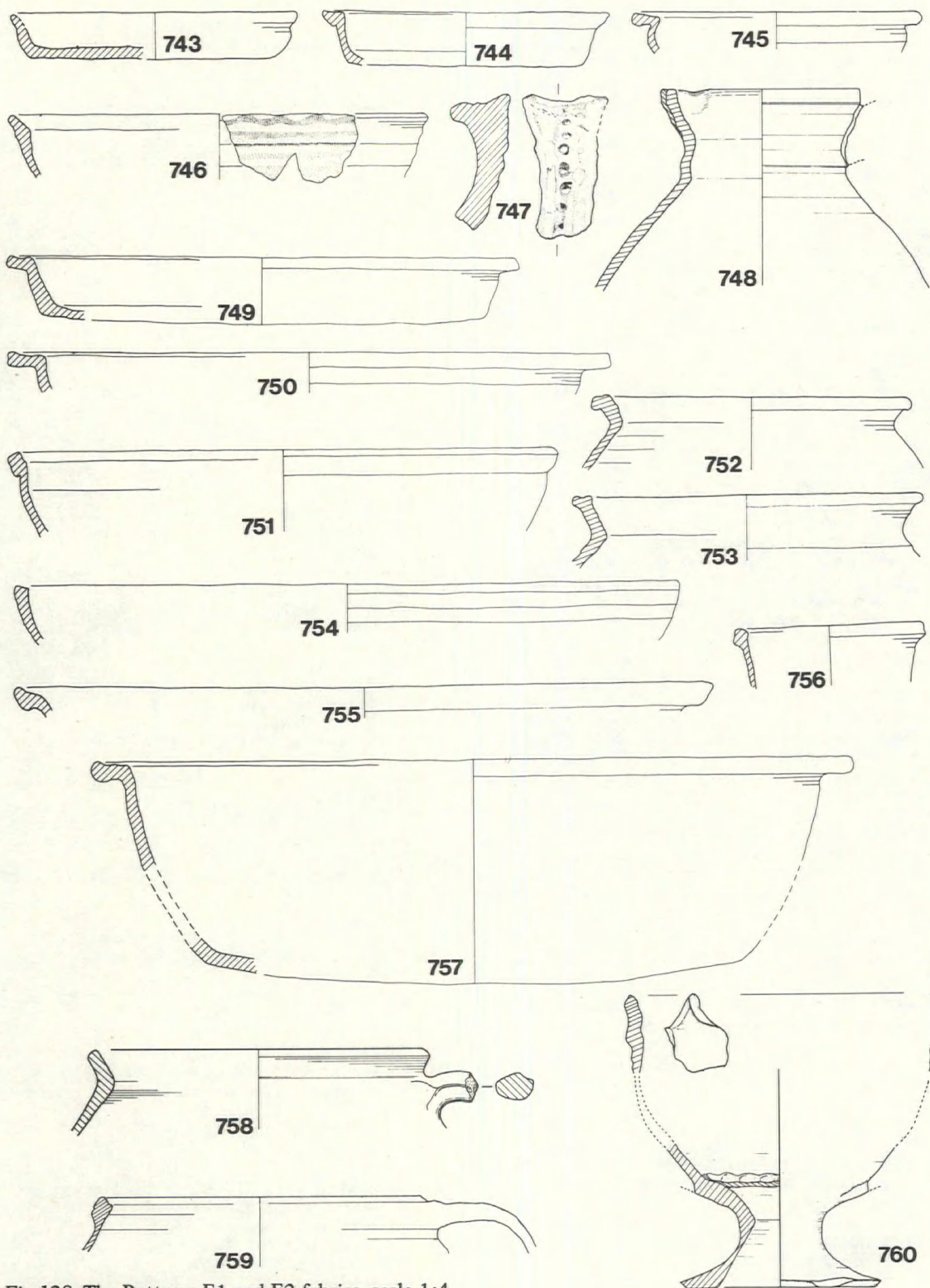


Fig 128 The Pottery: E1 and E2 fabrics, scale 1:4.
 E1 743 – 757; E2 758 – 760.

chafing dishes. Occasional splashes of green glaze occur. Decorative elements include thumbing on the bases of cisterns, applied thumbed strips on the chafing dish, and some knife trimming.

E3 FABRIC 777 – 791

This hard, oxidised fabric is much smoother than 1 and 2, and is more like earthenware. Its colour is chiefly orange all through, with some sherds having a grey core. Occasional spots of orange glaze have been noted. Large flaring bowls and small handled vessels are common, as well as small jars or cooking pots, and large decorated handles. It is likely that this fabric spans a wide date range. Nos 784 and 786 might be Medieval types whilst 791 comes from a 17th century pit group.

E4 FABRIC 792

Characterised by its pimply surface this reduced ware has a very mixed tempering. Only a few examples have been recognised here, and they are mostly unglazed bowl forms. It is possible that these may have come from the Pottersbury kilns.

E5 FABRIC 793 – 798

Only oxidised examples have been recorded, with small amounts of grit tempering and fairly smooth, orange surfaces. Some sherds have an overall grey slip. The forms include jars and bowls, some jugs and a chafing dish. One pierced sherd was found, possibly coming from a colander. Some applied thumbed strip decoration was noted. On the whole vessels in fabric E5 are smaller than those in other fabrics and they tend to be more finely potted.

E6 FABRIC, not illustrated

This is a rough, pimply oxidised fabric, with orange surfaces and a grey core. No traces of slip, glaze or decoration were found. The forms were mostly large, flaring bowls, as occur in fabrics 2 and 3, with a few cooking pots and small jars.

E7 FABRIC 799 – 803

This wide-ranging group covers all coarsewares which do not fit into the previous 6 groups. It includes oxidised and reduced wares and the usual range of vessel form. Published examples are described individually in the catalogue.

COARSEWARE POTTERY, 743 – 803, LATE MEDIEVAL – EARLY POST-MEDIEVAL

Fig 128 E1 and E2 FABRICS, 743 – 760

- 743 E1, Bowl profile. *BCL73* 60 U/S.
- 744 E1, Bowl profile. *BMS71* 19 (32A). c16th century.
- 745 E1, Bowl rim, *BMS71* 19 (32A). c16th century.
- 746 E1, Bowl rim. 1976/2/14.
- 747 E1, Handle. *BMS71* 19 (32). c15th century. (Baker, 1974, fig 6, no 44).
- 748 E1, Jug. 1976/2/131. Saxo-Norman.
- 749 E1, Bowl profile. *BSJ74* 1 (1).
- 750 E1, Bowl rim, *BCL73* 60 (16). 13th – 14th century.

- 751 E1, Bowl rim. *BCL73* 60 (49). 13th – 14th century.
- 752 E1, Cooking pot rim. *BMR74* 1 (60).
- 753 E1, Cooking pot rim. 1976/2/14.
- 754 E1, Bowl rim with splashes of yellow-green glaze. *BSM72* 38 (68). 12th – 13th century.
- 755 E1, Bowl rim. 1976/2/125. 14th century.
- 756 E1, Jug rim. 1976/2/127. Probably 10th century.
- 757 E1, Bowl profile. *BSM72* 38 (63). 14th – 16th century. (See Addyman and Marjoram, 1972, fig 36, no 2).
- 758 E2, Rim with handle. 1976/2/37. 12th – 13th century. (Addyman and Marjoram, 1974, fig 37, no 14).
- 759 E2, Rim with handle. *BSJ74* II F1.
- 760 E2, Chafing dish with olive-green glaze on thumbed decoration inside. *BMS71* 19 (31). 16th – 17th century.

Fig 129 E2 FABRIC, 761 – 776

- 761 E2, Base of cistern with bung-hole. 1976/2/131. Saxo-Norman.
- 762 E2, Base of cistern or jug. *BC71* 25 (51). 17th – 18th century. (Addyman and Marjoram, 1972, fig 36, nos 24 – 27).
- 763 E2, Rim of cooking pot with splash of olive-green glaze. 1976/2/131. Saxo-Norman.
- 764 E2, Base of cistern or jug. *BMS71* 19 (32). 15th – 16th century.
- 765 E2, Base of cistern or jug. *BSM72* 38 (63). 14th – 16th century.
- 766 E2, Rim of cooking pot. 1976/2/35.
- 767 E2, Rim of cooking pot. *BC71* 25 B. Post-Medieval.
- 768 E2, Rim of cooking pot. 1976/2/11.
- 769 E2, Rim of cooking pot. *BSJ74* I F124. Post-Medieval.
- 770 E2, Rim of cooking pot or jar. *BSJ67* 3 (3). Post-Medieval.
- 771 E2, Bowl rim. *BCS73* IV (15). 13th – 14th century.
- 772 E2, Bowl rim. *BC71* 25 U/S.
- 773 E2, Bowl rim with splashes of green glaze. *BMR74* II (2).
- 774 E2, Bowl rim. 1976/2/89.
- 775 E2, Bowl rim. *BC71* 25 (2). Post-Medieval.
- 776 E2, Bowl rim. *BC71* 25 (51). Post-Medieval. 17th – 18th century.

Fig 130 E3 FABRIC, 777 – 791

- 777 E3, Bowl rim. *BSM72* 28 (3). Post-Medieval.
- 778 E3, Jug rim and handle. *BMS71* 19 (32). 15th – 16th century. (Addyman and Marjoram, 1972, fig 38, nos 34 and 36).
- 779 E3, Bowl profile. *BMod* 74 II (2).
- 780 E3, Jug rim and handle. *BCL71* 22 (11).
- 781 E3, Bowl profile. *BSJ74* II U/S.
- 782 E3, Handle. *BMS71* 19 (31). 16th – 17th century.
- 783 E3, Handle or foot. *BSJ74* II U/S.
- 784 E3, Spout or handle. 1976/2/152.
- 785 E3, Jar. *BC70* 8 (10). Post-Medieval.
- 786 E3, Handle. *BSM72* 38 (104).
- 787 E3, Bowl rim. *BC72* 25 (51). 17th – 18th century.

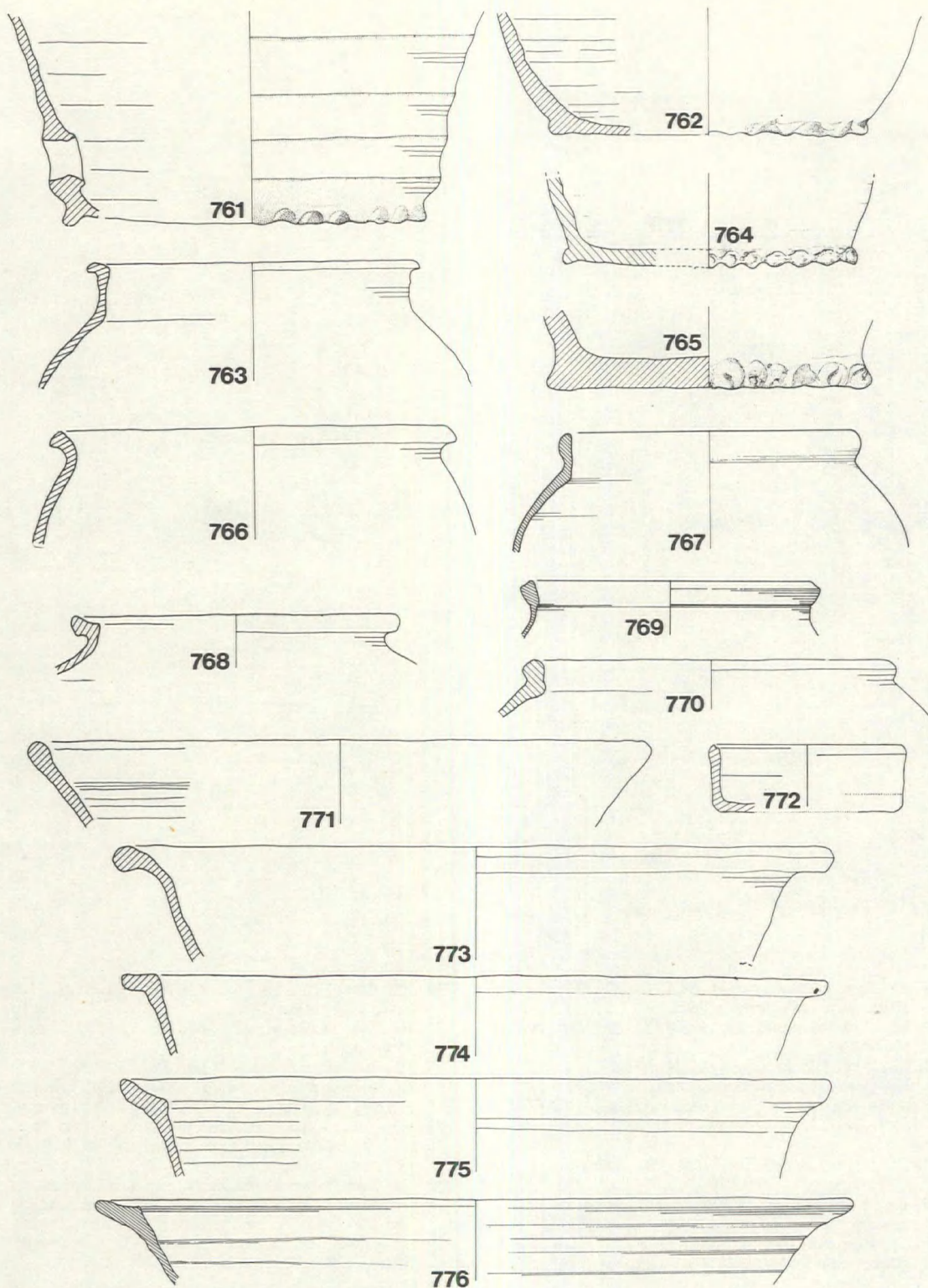


Fig 129 The Pottery: E2 fabric, scale 1:4.

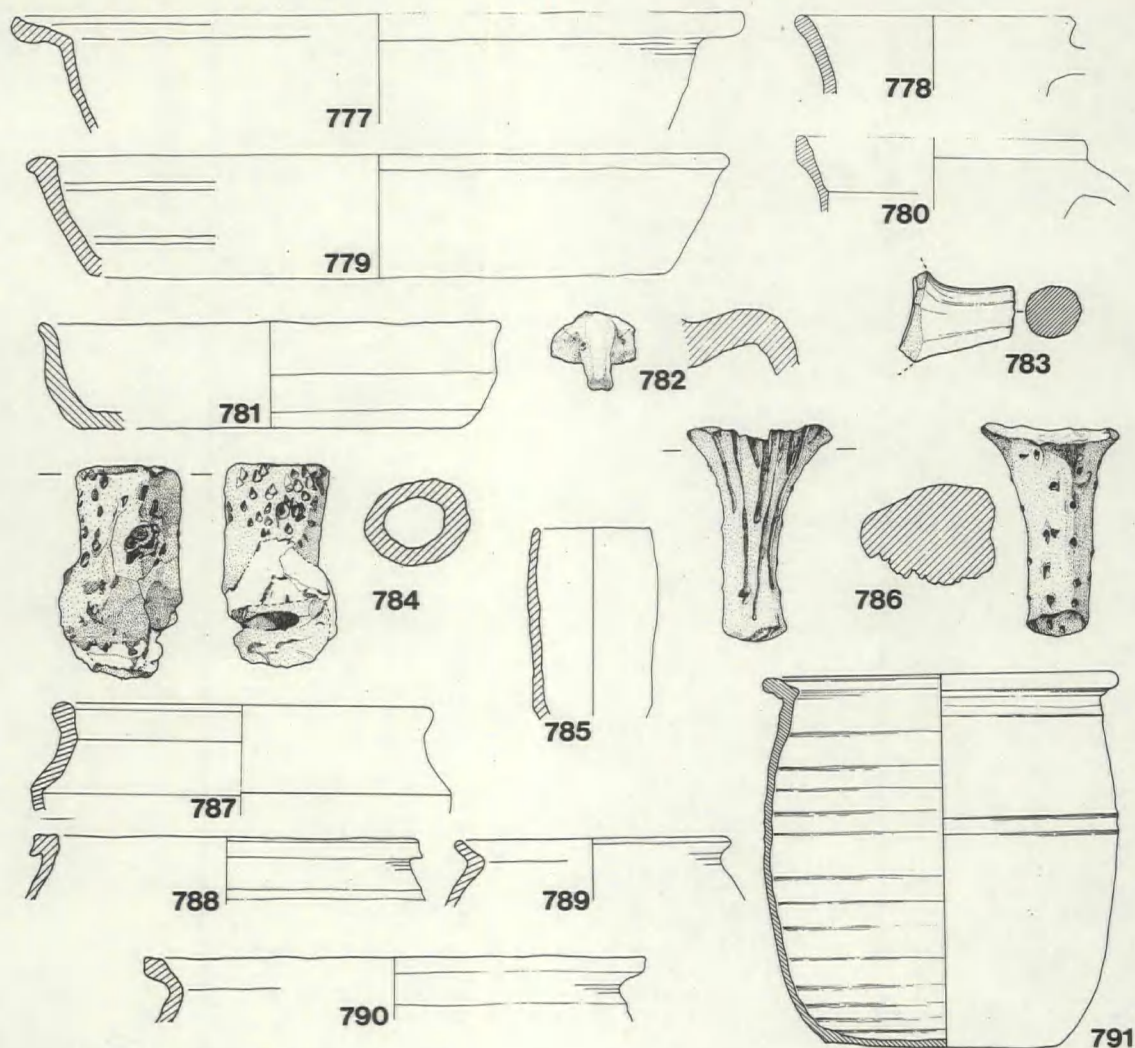


Fig 130 The Pottery: E3 fabric, scale 1:4.

- 788 E3, Rim of cooking pot. *BCL71* 22 (10). Late Medieval – early Post-Medieval.
 789 E3, Rim of small pot. *BSM72* 28 (3). Post-Medieval.
 790 E3, Rim of cooking pot. *BSJ74 II* F68.
 791 E3, Cooking pot with splashes of olive-green glaze under rim and on base. Overall grey slip. *BCS73 I* (28), Pit E. 17th century.

Fig 131 E4, E5 and E7 FABRICS, 792 – 803

- 792 E4, Rim of bowl. *BC70* 6 (33). 12th – 14th century.
 793 E5, Rim with handle, overall grey slip, splashes of glaze inside. 1976/2/537. Post-Medieval.

- 794 E5, Rim of cooking pot. *BCS73 I* (76). Pit D. 17th – 18th century.
 795 E5, Base of chafing dish. *BMS71* 19 (31). 16th – 17th century.
 796 E5, Rim of jar or cooking pot. 1976/2/U/S.
 797 E5, Jug rim. *BSM72* 38 (31). 14th – 16th century.
 798 E5, Jug rim. *BMS71* 19 (31). 16th – 17th century.
 799 E7, Rim of jar. Oxidized outside, reduced core, mixed inclusions and smooth surfaces. *BCS73 IV* (35). 14th century.
 800 E7, Rim of jar or cooking pot, with rim formed by template. Reduced ware with brick-red margins and grey core. Mixed inclusions including calcite, smoothed over surfaces. Possibly Lyveden ware. *BSM72* 38 (14). Post-Medieval.

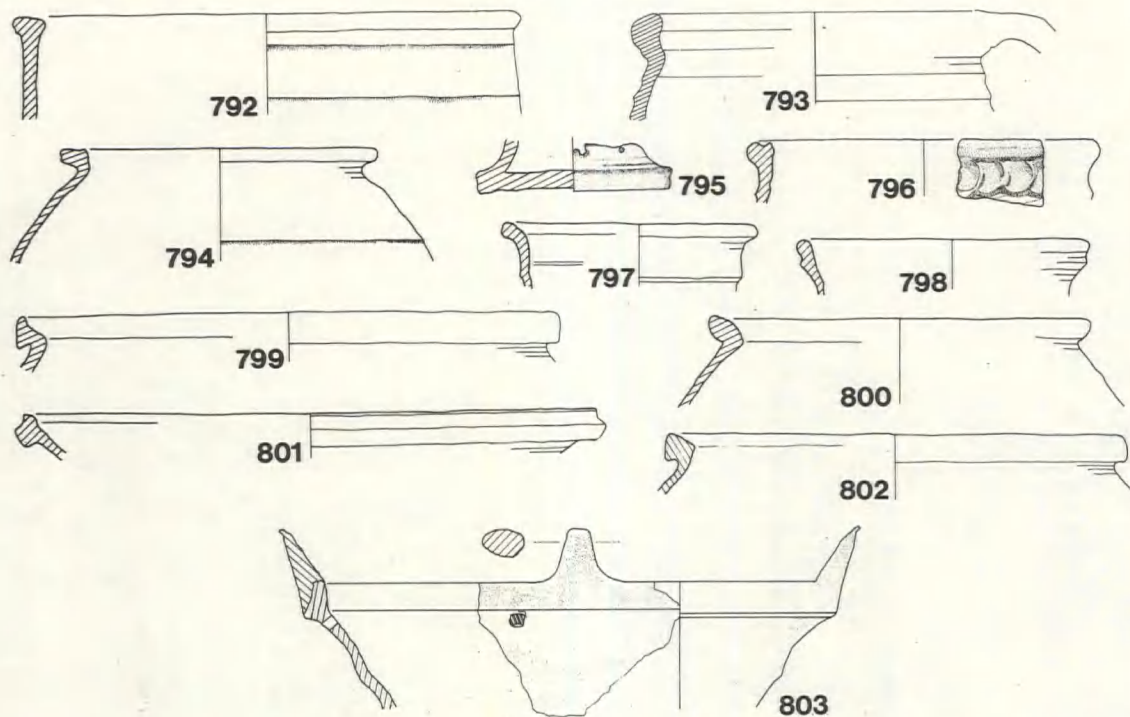


Fig 131 The Pottery: E4, E5 and E7 fabrics, scale 1:4.
E4 792; E5 793 – 798; E7 799 – 803.

- 801 E7, Rim of jar or bowl. Hard-fired reduced ware with thin red core. Smooth matrix, small inclusions and smooth feel. *BMod74 II* (2).
802 E7, Rim of cooking pot. Light buff surfaces and dark grey core. Rough pimply surfaces, mixed inclusions. 1977/1/126.
803 E7, Top of chafing dish with light green glaze inside. Grey core, oxidized surfaces and mixed inclusions. All-over light slip and light green glaze outside. *BSJ67 5* (14). Baker, 1970, fig 8, no 55. 15th – 16th century.

POST-MEDIEVAL

Figs 132 – 146

Sherds of Post-Medieval wares have been recovered from all the excavated sites in Bedford and a policy of keeping all the pottery found on each site was in operation. There have been differences in the quantity and quality in the material from different parts of the town, the St Mary's area for example producing very little. The majority of the trenches excavated, with the exception of

BMR 74 I, BC70 3, 1976/2 second trench, were opened by machine with a consequent loss of some Post-Medieval ware.

Much of the pottery came from general spreads rather than from sealed pits and features. The Cauldwell Street trenches were the main exception. Here a group of pits were discovered, the tops of which had been removed by machine but excavation continued by hand once they were recognised as individual features.

All sherds were counted and weighed and sherds of the same vessel were stuck together wherever possible. Quantification was made in terms of numbers of rims, bases and handles etc per context, rather than trying to establish the minimum number of vessels present. This gave a total of sherds weighing 199.5kg to be processed. The pottery was split into wares for this processing and was subdivided into more specific groups, for example, Raeren and Frechen could be identified in the German Stoneware range. From each group a representative selection has been made for publication. Material from BMS71 and BSJ67, sites al-

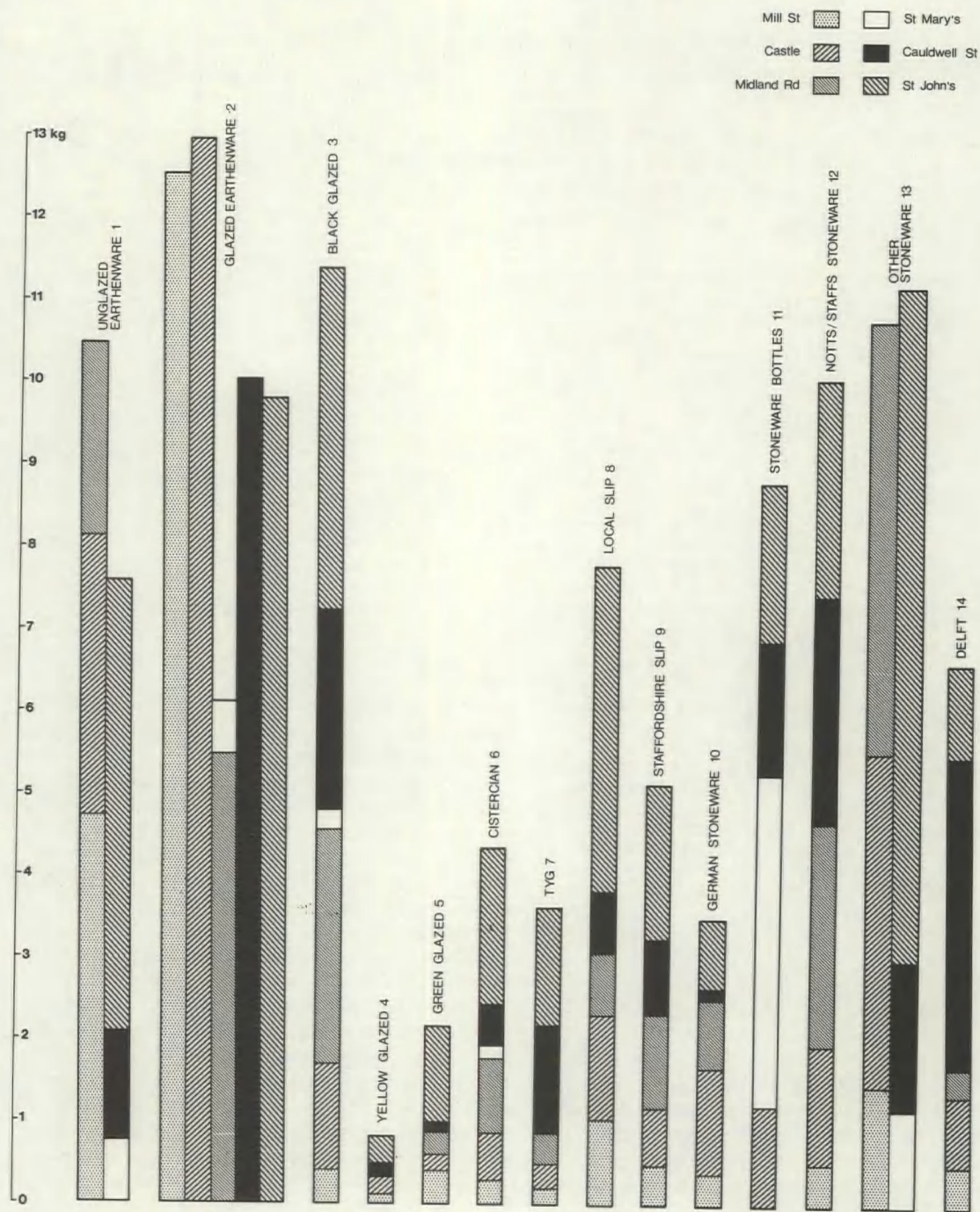


Fig 132 Distribution of types and amounts of Post-Medieval wares.

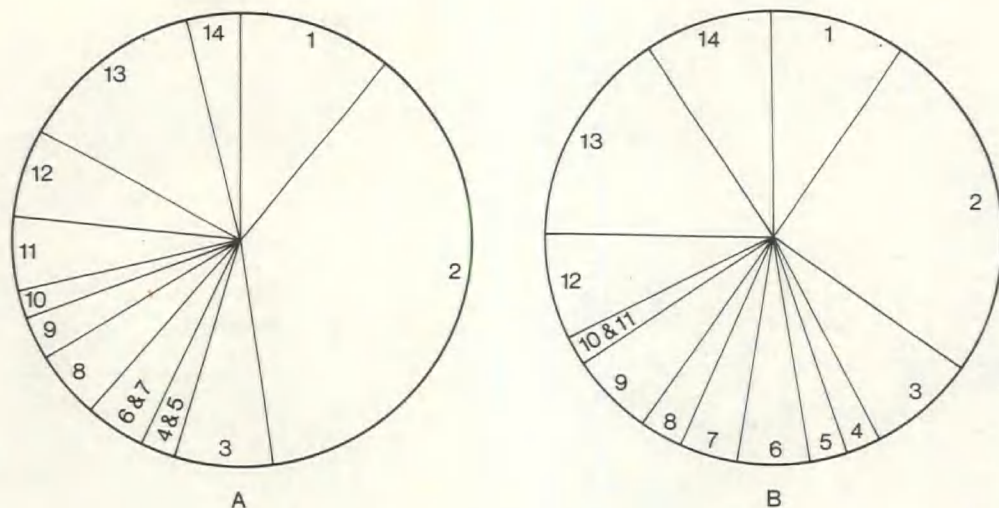


Fig 133 Proportions of Post-Medieval wares, A by weight and B by number of sherds. Numbers refer to wares shown in figure 132.

ready published, has been reconsidered (as anticipated by David Baker in Baker, 1974, 105) and, where it contributes significantly to the total range of wares in Bedford, has been republished.

For the purpose of this study china, creamware, mocha, salt-glazed and black basalt wares have been excluded except where they form part of a pit group.

All unpublished material is stored by ware in Bedford Museum, with sites and contexts easily retrievable. The information is also readily available from context assemblage sheets.

No direct comparison can usefully be made between the amounts of wares recovered from each site because of the different sizes of the trenches. It was decided to group them into areas in order to present the information. Diagrams 132 and 133 give a summary of types and amounts of the wares. Pie diagrams A and B show each ware expressed as a percentage of the total amount of Post-Medieval wares (excluding the 19th – 20th century mass-produced wares). A different emphasis is obtained by quantifying the weight A, and the number of sherds B, and the two methods need to be seen in conjunction.

From these diagrams it is apparent that during the late 16th – 17th centuries, Bedford was dependent on local sources for practically all its pottery. The Potterspury and Paulerspury kilns must

have been producing the bulk of the earthenware, plain and glazed, and the slipware at this time, (see map, fig 134). Harlow may have been supplying a few Metropolitan slipware vessels, and there were occasional imports of glazed earthenware from Holland. It seems likely that another kiln site producing slipwares for Bedford was also in operation, but the site is as yet unknown. There are some high quality imports at this time, but these are few in proportion. They include some Lambeth Delft, Cistercian ware, green-and yellow-glazed wares and some German Stoneware. One or two exotic imports were also found, possibly from Spain and from Isnik in Turkey.

A shift of influence occurs with time so that by the 18th century stoneware from the Nottinghamshire-Staffordshire area is predominating. Fine wares continue to be imported and Lambeth Delft comes in increasing quantities. Cistercian ware is replaced by Tyg types. Chinese porcelain is also found, but only in small amounts and is limited to a few sites. By the 19th century as might be expected, plain earthenware, Staffordshire slip and various stonewares are still being used, but these are outweighed by the mass-produced china, cream and salt-glazed ware.

Thanks are due to all those who gave assistance and advice on the identification of the pottery. Many of their comments have been included in

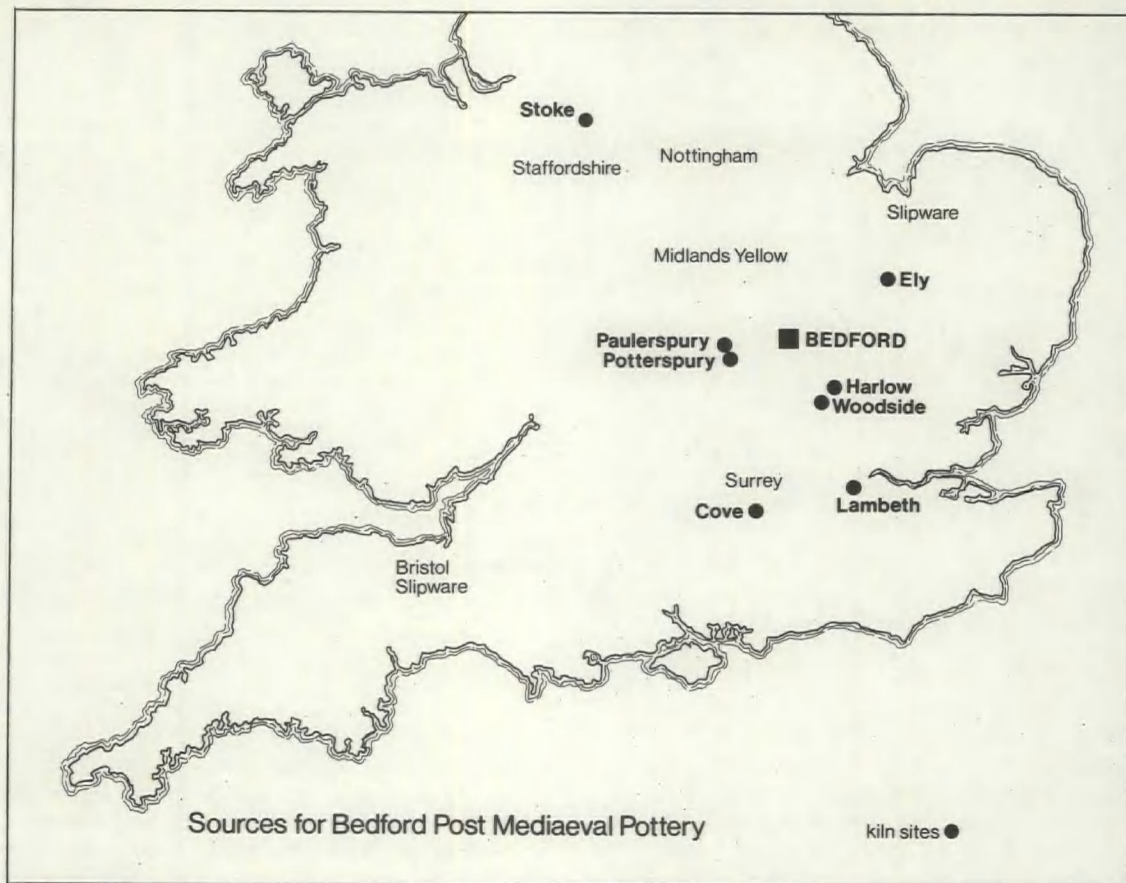


Fig 134 The Pottery: map showing sources for Bedford Post-Medieval pottery

the sections dealing with the individual wares. In particular we are grateful to Dennis Mynard for his guidance in the early stages of preparing this report. We should also like to thank M. Archer, J. Ayres, K. Barton, H. Blake, J. Cherry, D. Hall, J. Hurst, M. McCarthy and S. Moorhouse.

UNGLAZED EARTHENWARE 804 – 807
17th – 19th century

This ware was recovered from all sites. An unusually large amount came from the Mill Street sites, and a very small amount from St Mary's. The ware is usually orange-red, and though roughly finished the surfaces are often smoothed. Occasionally there are large flint or limestone inclusions. Forms are mostly hollow wares, bowls, jars and pipkins, with some dishes and platters. They are mostly completely undecorated, though some have excised lines. 804 and 806 may be 17th century, but since some of the forms survive at least into the 19th century, close dating is not feasible. A local source seems likely.

GLAZED EARTHENWARE 808 – 835
Mainly 17th – 18th century

This ware was found in all the excavated areas, in more even proportions than the unglazed earthenware, although even less was recovered from St Mary's. The ware is usually orange-red to dark red, occasionally mixed with grey, and with no obvious inclusions. A clear lead glaze appears most often on the inside of vessels, and ranges from yellow, bright orange, orange-brown to olive-green. Forms include many hollow wares such as jars, bowls, pipkins and colanders. There are also fish dishes, a bedwarmer, a curfew, dishes and platters. Decoration other than glaze is confined to simple excised lines.

The ware, form and glaze of some vessels, eg 820 and 830, are very close to those described by Mayes, 1968, 70 – 80 and Hall, 1974.

Other vessels, with their light red body and brilliant orange glaze, are reminiscent of Dutch wares (823, 828, 833). The remainder may be yet more local.

GREEN GLAZED EARTHENWARE 836 – 839
Mid 17th – early 18th century

The St John's area produced the largest amounts, with Midland Road and Cauldwell Street also producing higher than average. Very little was found in both the Mill Street and St Mary's areas. The ware is rather coarse, ranging in colour from light orange-buff to red. A dark slip is usually applied prior to coating thickly with black or occasionally brownish-black glaze. A lighter slip is sometimes applied to the unglazed parts of vessels, usually the outside. Forms are mostly dripping pans, bowls and pancheons, but some hollow wares such as butter pots are present.

Since the form and decoration are so similar to vessels excavated at the Paulerspury kiln by David Hall in 1974, it is thought that this must be the likely production source for this ware.

YELLOW GLAZED EARTHENWARE 840, 842
17th century

Very little yellow-glazed ware was found in Bedford and none at all from the St Mary's and Midland Road areas. The ware is mostly a fine pinkish-buff or buff with a yellow lead glaze. Forms include platters, colanders and other pierced vessels, a side handle and a possible candlestick. The ware glaze and form are strongly reminiscent of Midlands Yellow-Ware. (Brears 1971, 31 – 37; Bartlett 1971, 21 – 23).

GREEN GLAZED EARTHENWARE 843 – 847
Mid-17th century

Over half the green-glazed sherds came from the St John's area and once more very little was found on the St Mary's sites. All green glazed pottery, unless of sufficiently distinctive type to be separated out (eg 853, although green-glazed, is Cistercian type) has been grouped together under this common title.

The ware varies from pale buff to pale orange or red, and there is a variety of glazes from light green, olive, to greenish-black. Decoration is usually limited to excised lines or rouletting. Forms are dishes, bowls, tankards, cups and a chafing dish.

843 and 844 are very probably Surrey ware. 847 shows a tankard which is markedly similar to some excavated by Jeremy Haslam at the Minley Road pottery site at Cove, East Hampshire (Haslam, 1975).

It is possible that 845 comes from a similar source. Notable absences seem to be Tudor Green wares and French imports such as Saintonge and Beauvais. Most of the wares indicate sources to the south of Bedford.

CISTERCIAN AND TYG 848 – 854
Early 16th – mid 17th century

A high proportion of Cistercian ware was found on the St John's site, with Midland Road also producing comparatively large quantities. Cauldwell Street produced the heaviest weight of Tyg due to the large number of near-complete vessels surviving. Substantial amounts came from St John's and only 25gm was found at St Mary's. The Bedford Cistercian vessels nearly all conform to established fabric and form typologies (Le Patourel, 1966; Mayes and Pirie, 1966; Brears, 1971). Both dull red and

grey bodies are present, covered with a brown to purple-black lead glaze. Forms are mostly two or three handled cups and costrels; the glaze is a brown to purple-black lead glaze. Decoration occurs only on a few cup sherds as small clay pellets glazed yellow. Brears puts a date close to the Dissolution for similar examples. No reversed Cistercian ware has been recognised. The cup illustrated as 853 is unusual: such green-glazed Cistercian wares are known from the North Riding and County Durham and this may be a regional import. The closest known production source to Bedford is the Babylon kilns near Ely (Tebbutt and Hurst, 1966).

In Northampton, Tyg ware appears between 1550 and 1600, and has supplanted Cistercian wares by 1600. Bedford seems to be acquiring Tyg by the early to mid-17th century. Forms are usually tankards or costrels.

The Woodside kiln, Herts, excavated by John Ashdown, is a probable source for this ware.

GLAZED SLIPWARE 855 – 867, 878 – 882
Mainly 17th century

Over half the total amount was found at St John's, whilst a mere 3 sherds were recovered from St Mary's. The ware is usually a coarse red or orange fabric, with a variety of slip-trailed designs, often covered overall with a lead glaze in the orange-brown-green range. The forms are chiefly flat wares, with bowls and pancheons predominating. The two fine chamber pots are virtually complete and represent some of the few hollow wares to have been recovered.

The form and decoration of the majority of the slipware sherds are much as described from the kiln site at Potterspury, Northants (Mayes, 1968). Several of the motifs are identical to some found in Bedford. The marbled slipware 879 and 882 may also be from the Potterspury kilns, although 882 is reminiscent of the Italian types.

There are also affinities with the Harlow and Metropolitan slipwares from the London region, and there has been a suggestion that the chamber pot 867 could be of Dutch origin. 857 and 858 appear to be remarkably similar to the west Norfolk slipware as illustrated from King's Lynn (Clarke and Carter, 1977, figs 116 and 117). On the whole, it seems likely that most of Bedford's slipwares came from the Potterspury area.

STAFFORDSHIRE SLIPWARES 868 – 877
Mid 17th – early 19th century

The St John's area produced the most Staffordshire slip whilst St Mary's had only two sherds. The techniques of manufacture and decoration have been described in the *Stoke-on-Trent Museum Archaeological Society Report No. 4* (Celoria and Kelly, 1973) and their terminology has been used in the Bedford figure description.

The forms found in Bedford were mainly from the typical press-moulded dishes with pie-crust edges, in a buff fabric decorated with cream and brown trailed and combed slip beneath an overall lead glaze. The combing was sometimes done in bands, using combs with various numbers of teeth. Several sherds from richly decorated, embossed dishes were also found.

Other forms include a few hollow wares, such as a small cup or bowl shape, recovered from *BMR73* (7) and *BMR74 II* (6) (not illustrated). The small decorated handle

873 may have some from such a cup, or it may belong to the mustard pot form (Celoria and Kelly, 1973, no 154). Jewelling decoration, as illustrated in 874 was noted on one or two sherds (Kelly and Greaves, 1974, no 150).

Suggested dating of the Bedford sherds is based on that put forward from the Albion Square, Hanley, excavations (Celoria and Kelly, 1973, 17) and is as follows:

embossed dishes – mid to late 17th century
combed and hollow wares – late 17th to early 19th century

About half a dozen vessels, represented by sherds (not published) may have come from the Bristol kilns. We are grateful to Tony Pearson for drawing our attention to this ware.

GERMAN IMPORTS 883 – 893 *Mid 16th – late 19th century*

Most of this ware was recovered from the Castle area, and there was a significantly high proportion from Midland Road. The amounts from Cauldwell Street were surprisingly low, and St Mary's produced only 1 sherd.

Slipware 883

Only one example of German slipware in the form of a single burnt dish rim from St John's was recovered. It is probably Wanfried 1575 – 1640 though it could possibly be Lower Rhineland Slipware, early 18th century (Hurst, 1961, 46 – 7).

Stonewares

COLOGNE 885, 886, (889), 890

Typical Cologne stoneware in the form of mugs and jugs from the mid-16th century to possibly the late 17th century.

FRECHEN 887, 888, (889), 892

Frechen stoneware in the form of jugs and drinking mugs, from the second half of the 16th century to possibly the late 17th century.

RAEREN 893

Sherds from mugs or jugs, c16th century.

SELTZER 891

Fragments from seltzer bottles, late 19th century.

SIEGBURG not illustrated

Two sherds only recognised. One from *BSJ67 7 (7)* and a jug base from *BMS71 19 (32)*, published by Baker, 1974.

WESTERWALD 884

Most of the recognisable Westerwald sherds are painted with cobalt blue, but there are a few painted with manganese purple or both. The chief form represented is drinking mugs, but there is also a chamber pot dating to the 15th century, and a stamp showing a rosette with a lion (Moorhouse, 1970, 73 – 82).

STONEWARE BOTTLES 894 – 901 *19th – early 20th century*

Nearly half of the stoneware bottles were found at St Mary's and there were none at all from Midland Road and Mill Street. Various stoneware ink-bottles were found, both brown and white salt-glazed types occurred, some

coming from Nottinghamshire. Others were stamped usually by a London maker, such as PRIDGE'S 899 and STREET & DAY 896. One unpublished example is stamped DOULTON, LAMBETH. There is no evidence for this form and ware being made in the Bedford region.

NOTTINGHAMSHIRE/STAFFORDSHIRE SALT-GLAZED STONEWARES 902 – 912 *Early 18th – 19th century*

Cauldwell Street, Midland Road and St John's produced more or less equal amounts whilst only a single sherd was recovered from St Mary's. The ware is the characteristic brown or buff salt-glazed stoneware. The forms are mainly cups, bowls, jars and tankards, and also include a cistern and a corn measure. The tankards can be identified as Staffordshire wares of the type which were probably first produced towards the end of the 17th century (Kelly and Greaves, 1974, 3). Three of the published examples bear an AR monogram, indicating that they were made during the early 18th century in the reign of Queen Anne (Barton, 1969, fig 66). 903 is unusual in that it has a slight lip and is therefore more of a jug form than a tankard. Quart, pint, and half-pint sized tankards are represented, although as has been pointed out (Mountford, 1971, 17 – 24) they are unlikely to have been made to an exact measure.

MEDITERRANEAN IMPORTS 913 – 918 (918 not illustrated) *16th – 17th century*

Only six sherds were found from the Bedford sites – three from the Castle, two from St John's and one from Cauldwell Street. The rims 913, 915, 917 have probably come from vessels with a Spanish or Mediterranean origin. They are usually bowls with heavily moulded rims, not dissimilar in form from some of the local earthenwares. Their fabric is buff or light red and they have a lightly slipped or smoothed surface.

Some of these wares resemble the fabric of the gault clay from Cambridgeshire, such as is used in the making of the Burwell bricks. Mike McCarthy has therefore suggested the possibility of a Cambridgeshire source for these bowls, although no kiln site is known.

914 may have come from north Iberia where a similar potting technique is known. The motif would also fit in with north Iberian examples, although an exact parallel has not been found.

916 is a very fine marbled sherd, and the only one of its kind to have been discovered in Bedford. It is unlikely to belong to the range of Italian marbled finewares and may well be of Islamic origin from Iznik (Lane, 1957).

DELFTWARE 919 – 979 *Mid 17th – late 18th century*

The majority of delftware finds have come from the Post-Medieval rubbish pits on the Cauldwell Street 1973 site. None was recovered from the St Mary's area. The ware is typical of the products of the Lambeth kilns and ranges from pale buff to deep yellow, covered with tin glaze in white, blue or pink. Occasional examples were found with a powdered lead glaze on the back, eg 954. A

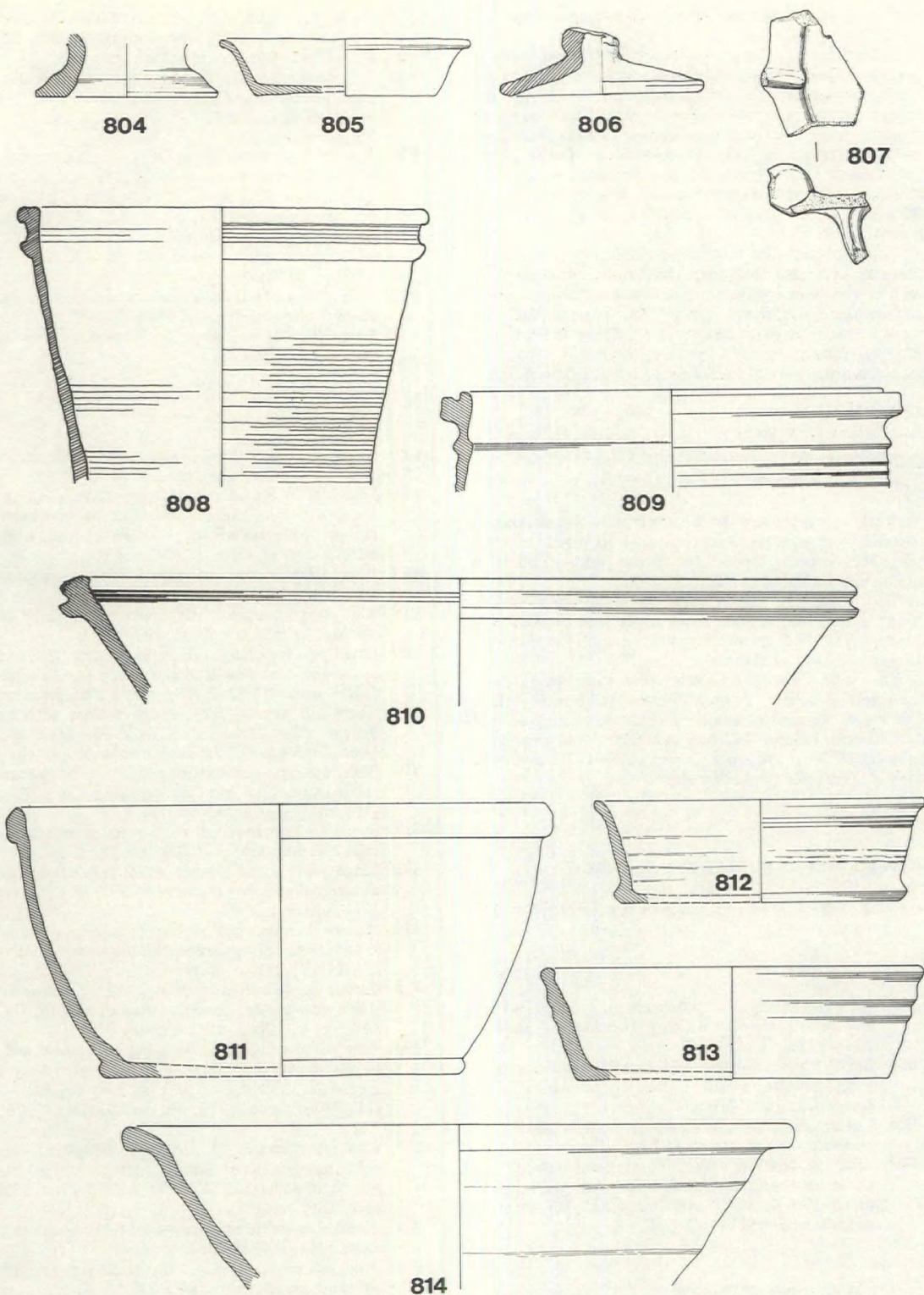


Fig 135 The Pottery: glazed (808 – 814) and unglazed (804 – 807) earthenware, scale 1:4.

few sherds were also decorated with manganese glaze, as 962.

Although many sherds had decoration painted in various shades of blue, a surprisingly large number of plain vessels was represented. The blue painted pieces ranged from stripes and borders to elaborate floral and landscape patterns, some treated in the Chinese manner. Techniques included the use of trek and sponged decoration. Some polychrome sherds were also found, indicating the existence of more elaborate pieces, eg 960, showing the influence of Italian maiolica. 959, 961 and 978 may be of Dutch origin.

Drug jars and bowls were common forms, plates and chargers were also frequent, whilst only one example of each of the more exotic types such as the flower vase 922 and wet drug jar 956 was found. Chamber pots, plates and wash bowls were often undecorated. The elaborate plate 919 was clearly part of a set since fragments of at least four others were found in Pits B and C at Cauldwell Street.

LUSTREWARE 980 – 984

Late 18th – 19th century

CHINESE PORCELAIN 985 – 994

Late 17th – mid 18th century.

Since an extremely small number of sherds was recovered from all sites, a minimum of 30 vessels of Chinese porcelain being represented, it was not possible to include them on the graph (fig 132, 133).

The lustreware sherds come from the Castle and St John's areas, and are all from small fine vessels. Both hand-painted and transfer-printed examples occur with decoration always in blue.

Sherds of Chinese porcelain were found in all areas, the majority coming from Midland Road and St John's. The forms were cups, saucers and bowls of various qualities, mostly painted in blue, but some were painted in enamels. BC70 3 (38) (not illustrated) was a hand-painted copy of a transfer-printed example.

POST MEDIEVAL POTTERY, 804 – 993.

Fig 135 UNGLAZED and GLAZED EARTHENWARE, 804 – 814. 17th – 19th century.

Unglazed Earthenware, 804 – 807

- 804 Base of chafing dish or fuming pot, orange-red fabric, smoothed over with slight bloom inside and out. 1976/2/38.
- 805 Small bowl in orange-red fabric, with occasional large limestone and flint inclusions; surfaces smoothed. 1976/2/508.
- 806 Lid in orange-red fabric, with roughly made hollow knob shaved off at top. BC70 13A.
- 807 Rim of chafing dish in orange-red fabric with smoothed surfaces, splash of brown glaze inside; pinched-up knob on rim flange and beginning of strap handle. BSJ74 III U/S.

Glazed Earthenware, 808 – 814

- 808 Upright jar, light orange fabric, internal thin yellow slip covered in orange glaze; moulded rim. BCS73 I (7), Pit B. 17th – early 18th century.
- 809 Rim of upright jar in red fabric, with dark slip and patchy olive-green glaze, inside and out; heavily moulded rim. BCS73 I (7), Pit B. 17th – early 18th century.
- 810 Rim of large bowl in red fabric, with dark slip outside, yellow glaze inside. 1976/2/81.
- 811 Large bowl in light red fabric, with patchy remains of brown glaze inside and out. BCL73 60 (2).
- 812 Small bowl in orange fabric, remains of dark slip with yellow glaze inside and out. BC70 8 (8). 17th – 18th century.
- 813 Small bowl in red fabric, subsequently burnt black; all-over olive-green glaze. 1976/2/537.
- 814 Large bowl in red fabric, lavish orange-brown glaze inside. 1976/2/506.

Fig 136 GLAZED EARTHENWARE, 815 – 829

Mainly 17th – 18th century

- 815 Jar in dark red fabric, heavily moulded rim, with orange glaze inside and out. BC70 8 (10).
- 816 Small jar in mixed red and grey clay; inside shows marked streaks, outside smoothed to give even red colour; with occasional splashes of yellow glaze. BCS73 I (21), Pit F. 17th century.
- 817 Rim of jar, orange-buff fabric, with green glaze on lid seating. 1976/2/537.
- 818 Rim of jar, orange fabric, green-yellow glaze on lid seating; outside smoothed. 1976/2/26.
- 819 Small pipkin, orange fabric, inside olive-green glaze at base and on inside of rim; strap handle with tip folded back. BCS73 I (31), Pit F. 17th century.
- 820 Sherd of pierced jar, orange fabric, with green brown glaze outside. 1976/2/505. (See Mayes, 1968, fig 30, no 17 for similar shape).
- 821 Small handled vessel, light red fabric, bright orange glaze inside and splashes outside. BC70 16 (1). (Mynard, 1969, fig 13, no 41).
- 822 Small jar in orange fabric, mottled green glaze outside, splashes inside. BMS71 19 (7).
- 823 Large pipkin, red fabric; inside rich orange glaze, occasional splashes outside. BCS73 I (28), Pit E. 17th century.
- 824 Base of jar with applied foot; orange fabric, orange-brown lavish glaze inside, thinner outside. BC70 8 (8). 17th – 18th century.
- 825 Corner of fish dish in orange fabric; orange-green thick glaze inside, heavily sooted outside. BCS73 III (23), Pit K. 17th – 18th century.
- 826 Rim of chafing dish, with support knob and air holes; orange-red fabric with all-over orange and green glaze. First half of 17th century. BSJ74 II (1). (Moorhouse, 1970, 46, no 20; Platt, 1976, no 721).
- 827 Rim from corner of fish dish. Grey-buff fabric, light orange glaze inside, sooting outside. Knife trimming on base. BCS73 III 11 F1, Pit J. 17th – early 18th century.
- 828 Small bowl or lid in orange-buff fabric, with orange glaze inside. 1976/2/537.
- 829 Fish dish in red fabric with grey core; patchy green glaze inside, sooted outside. 1976/2/131.

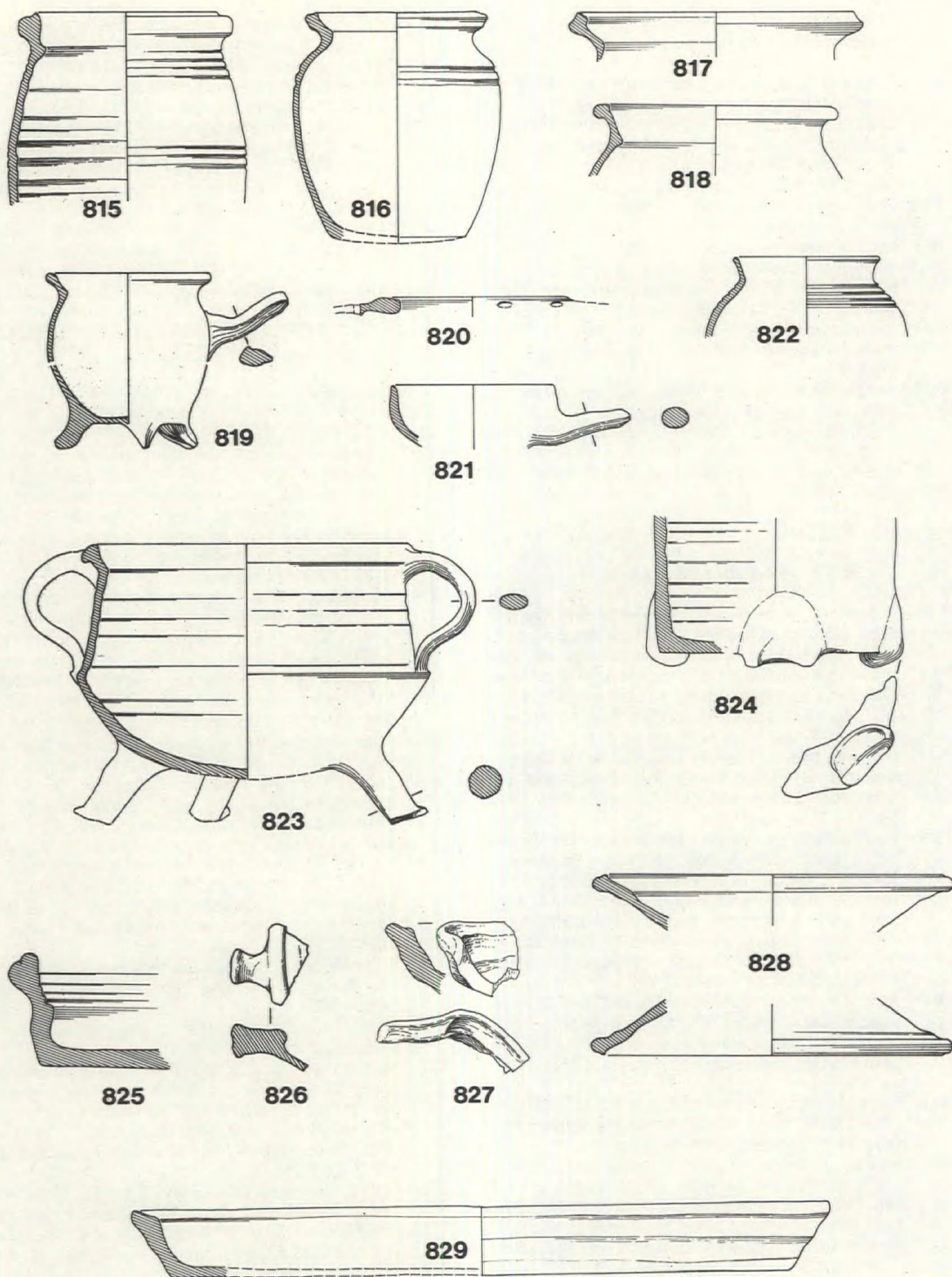


Fig 136 The Pottery: glazed earthenware, scale 1:4.

Fig 137 GLAZED EARTHENWARE, 830 – 835

Mainly 17th – 18th century.

- 830 Colander in orange-red fabric with bright orange glaze inside, splashes of glaze and slight bloom outside; pierced holes radiating from centre. Probably 17th century. Form indicates Potterspurpy origin. *BSJ67 U/S*. (Mayes, 1968, fig 28, nos 17 – 19; Baker, 1970, fig 9, no 74 for original publication).
- 831 Rim top of chafing dish or curfew; orange fabric and orange glaze inside. *BMod74 II (2)*.
- 832 Rim of chafing dish, dark orange fabric, yellow-green glaze inside; knob pulled up and folded over inside. *BMod74 II (2)*. (Platt, 1976, nos 705 – 707).
- 833 Bedwarmer/Colander handle, in red fabric, bright orange glaze especially on pierced side. *BCS73 I (31)*, *Pit F*. 17th century.
- 834 Handle in red coarse fabric, grey core; dark slip with patchy green-brown glaze on top of handle and inside vessel. *BCS73 I (7)*, *Pit B*. 17th – early 18th century.
- 835 Curfew, red fabric, thick orange-brown glaze outside. 1976/2/508.

Fig 138 YELLOW, GREEN and BLACK GLAZED EARTHENWARE, 836 – 847
Mid 17th – early 18th century

- 836 Butter pot, coarse red fabric; overall dark slip with thick black glaze applied from base, running down to rim in a strip, concealing dent in body wall; base shows signs of two smaller vessels adhering to outside during firing. Probably Paulerspury. *BCS73 I (28)*, *Pit E*. 17th century. (See Hall, 1974, fig 2, no 51 etc.)
- 837 Dripping pan or bowl in light orange fabric; with dark slip and lavish brown-black glaze inside. Probably Paulerspury. *BMR73 U/S*. (See Hall, 1974, fig 2, no 20).
- 838 Bowl in light orange-buff fabric with dark slip and lavish black glaze inside. Probably Paulerspury. *BMR73 U/S*. (See Hall, 1974, fig 2, no 36).
- 839 Bowl or pancheon in coarse orange fabric. Light orange slip outside and darker slip inside, covered with lavish black glaze. Probably Paulerspury. *BCS73 III (24)*, *Pit H*. 17th – 18th century. (Hall 1974, fig 2, nos 23 – 28).
- 840 Rim of pierced vessel in fine pink-buff fabric, bright yellow glaze outside. Possibly Midlands Yellow ware mid-17th century date. *BMS71 19 (31)*. 16th – 17th century context. (Mayes, 1968, fig 30, no 17).
- 841 Large bowl, coarse red-buff fabric, dark slip and thick black glaze inside. Probably Paulerspury. *BMR73 (22)*. (Hall, 1974, fig 2, bowls).
- 842 Side handle in pink-buff fabric with cream surfaces; inside thickly coated with yellow lead glaze; outside has traces of glaze giving a slight bloom. Midlands Yellow ware, mid-17th century. Probably from a Brears type 4 vessel. *BCS73 III (69)*, *Pit J*. 17th – 18th century. (Brears 1971, 35).
- 843 Rim of dish in pale buff sandy fabric, mottled bright green glaze outside. Possibly Surrey ware, 17th century. *BMod74 II (2)*. (Moorhouse, 1970, fig 14, nos 124 – 127).

- 844 Rim of dish in pale buff fabric, inside covered with rich green streaky glaze. Could be Surrey ware. 17th century. *BMS71 19 (31)*. 16th – 17th century. (Moorhouse, 1970, fig 4, nos 124 – 127).
- 845 Base of bowl in pale orange fabric, roulette pattern and olive-green glaze inside. 1976/2/97.
- 846 Base of chafing dish, coarse buff fabric, with traces of mottled light green glaze; hole pierced through from outside near base; beginnings of other openings at top of stem. 1976/2/21.
- 847 Most of tankard in red fabric with grey core; all-over dark green glaze with lighter patches. Knob on top of handle. 1976/2/97. (Similar form to Haslam, 1975, fig 8, nos 78 – 82).

Fig 139 CISTERCIAN, TYG and LOCAL GLAZED SLIPWARES, 848 – 865

Cistercian and tyg wares, 848 – 854; early 16th – mid 17th century

- 848 Costrel in smooth red Cistercian fabric, virtually complete. Flat base with small foot-ring, globular body coming to narrow neck and thickened rim. Two pierced lugs at neck for suspension. Brears Type 5. Top half of vessel glazed down to belly, mottled dark brownish-green glaze outside. *BCS73 I (35)*, *Pit F*. 17th century.
- 849 Single-handled beaker in dull red Tyg fabric. Poorly finished flat base, and cylindrical body with gently flaring rim. Flattened rod handle applied near base and to shoulder. Vessel thickening towards base but otherwise generally thin fabric. All-over dark greenish-black mottled glaze. *BCS73 I (35)*, *Pit F*, 17th century.
- 850 Three-handled cup similar to Brears type 2, in dark grey Cistercian fabric. Small curving body constricted at the neck with rim flaring out slightly but turning upright at the tip. Three handles set just above and below neck. Characteristic dark shiny brown all-over glaze, smoother inside. 1976/2/38.
- 851 Top of Cistercian Ware costrel in coarse dull red fabric, very similar to 848 but larger. Pierced suspension lug at shoulder and carination on neck. Mottled green-brown glaze outside and inside rim. *BSJ74 II (1)*.
- 852 Three-handled cup, similar to Brears Type 2, in red Cistercian fabric. Flat base and small foot-ring, small bulbous body, with line of carination at neck. Thick shiny brown glaze fading out to base of handles. *BMS72 38 (64)*.
- 853 Handled cup, from a two or three-handled example. Light red Cistercian fabric but with shiny grey-green all-over glaze. Bulbous cup shape with two fine lines of carination at neck, with flaring rim. *BCS73 II U/S*. (Brears type 4, but unusually light fabric and glaze. Le Patourel, 1966, 264).
- 854 Small globular cup, dark grey Cistercian fabric. Very short upright rim above neck. Handle sprouting from just below neck. Possibly top of a Brears Type 7 two-handled cup or even top of chalice, type 17, but with handle. All-over greenish-brown glaze, a bit patchy inside. *BC71 25 (60)*. 17th – early 18th century.

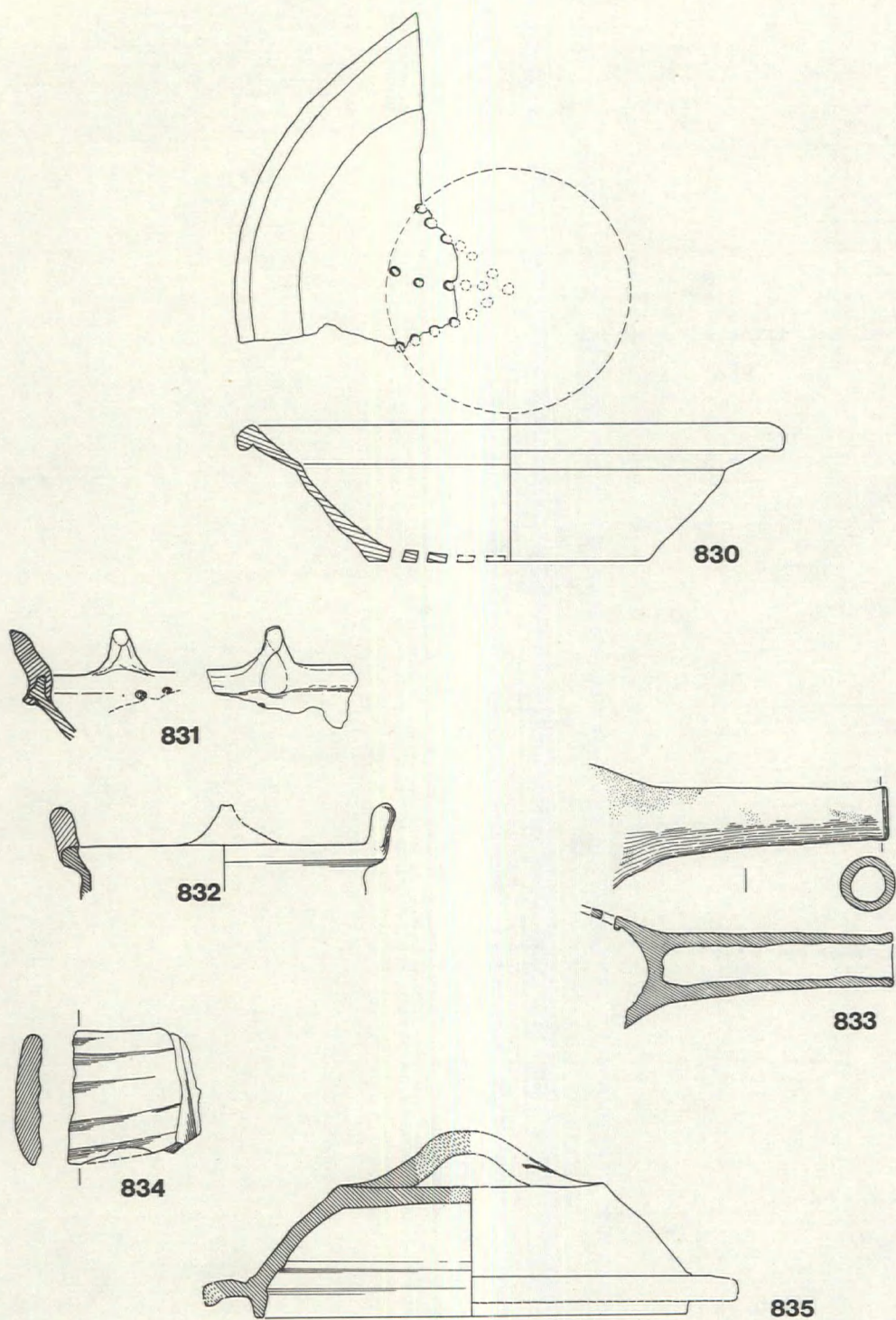


Fig 137 The Pottery: glazed earthenware, scale 1:4.

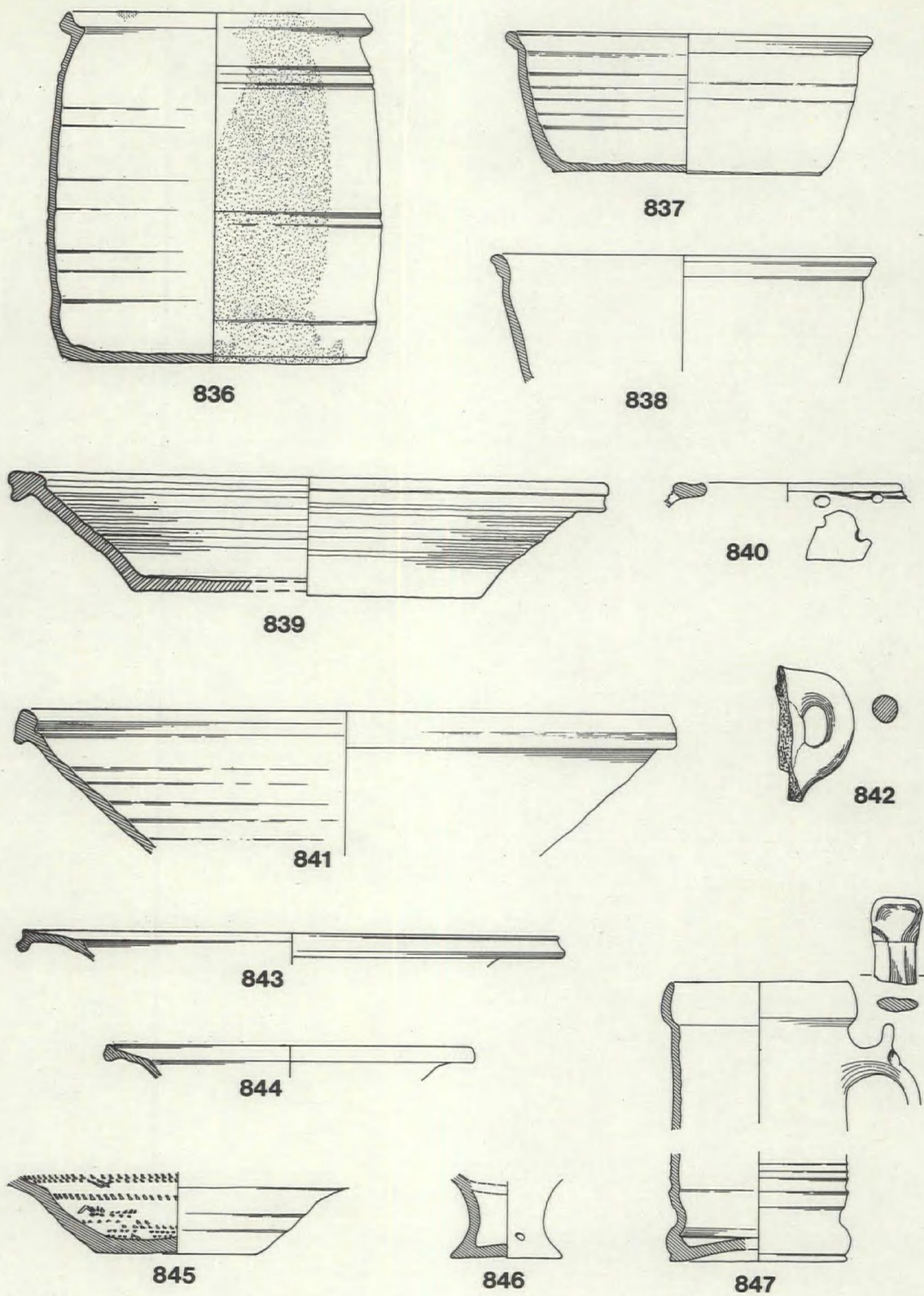


Fig 138 The Pottery: yellow (840, 842) green (843 – 847) and black (836 – 839, 841) glazed earthenware, scale 1:4.

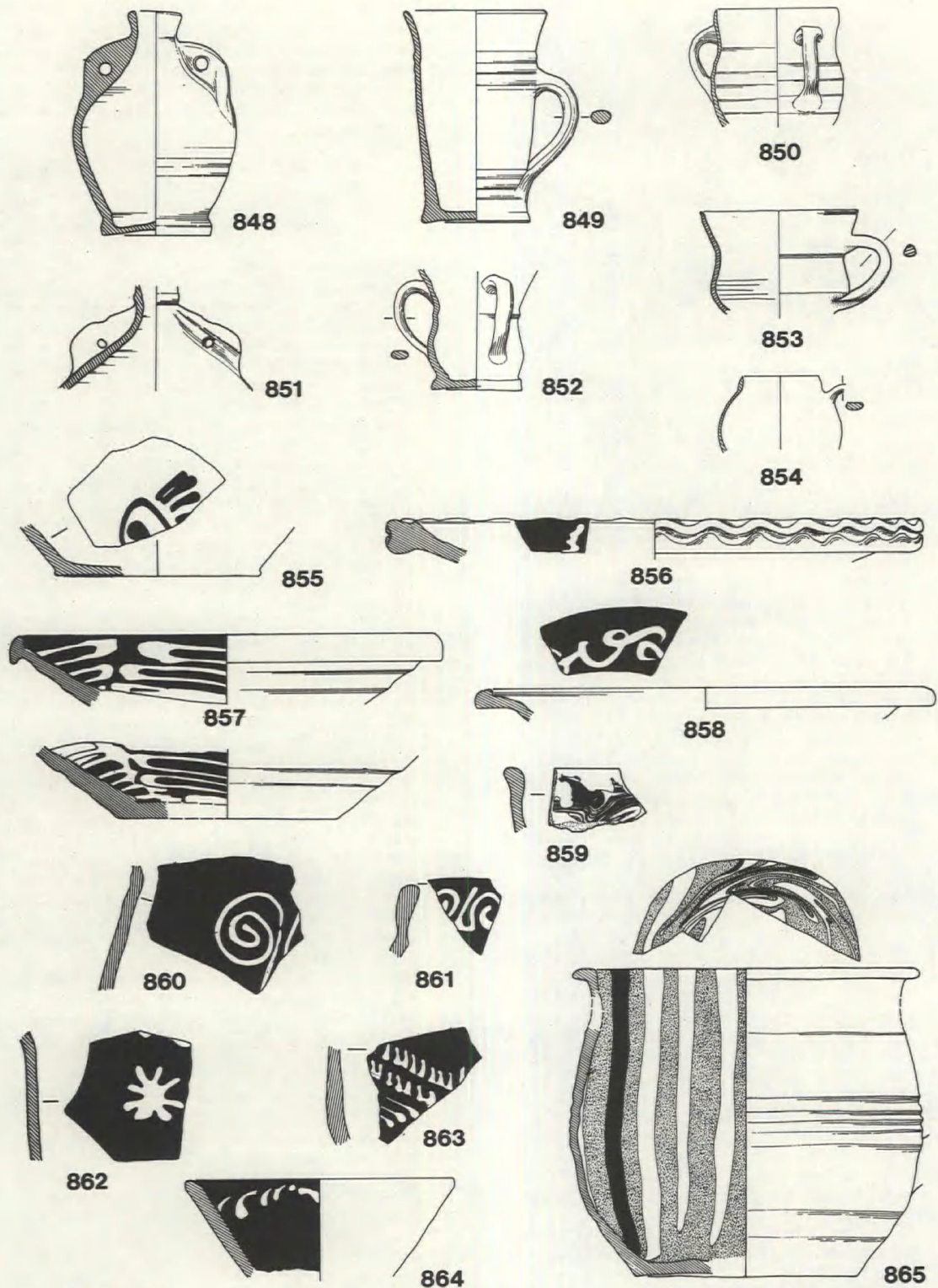


Fig 139 The Pottery: Cistercian (848, 850 – 854) tyg (849) and local glazed slipwares (855 – 865) scale 1:4.



Pl 32 Pottery: 17th century chamber pot in local glazed slipware, Cat 866.

Local Glazed Slipware 855 – 865, mainly 17th century

- 855 Base of coarseware bowl, brick-red fabric, with internal cream slip and yellow glaze; trailed slip decoration on base, possibly a devolved zoomorphic design. *BCS73 I (7), Pit B.* 17th – early 18th century.
- 856 Rim of bowl or pancheon, overfired oxidised fabric. Heavily thumbled similar to Hall, 1974, fig 3, 70 though much coarser. Remains of vertical zig-zag line of trailed cream slip on orange ground inside. *BC70 15 (11).*
- 857 Rim and base of coarseware pancheon, brick-red fabric, with decoration up to lip of rim inside. Trailed cream slip running back and forth inside, horizontally around bowl; overall lead glaze giving yellow on orange effect. *BMR72 (36).*
- 858 Rim of bowl in dull orange fabric, fired almost to stoneware; clear olive-green and orange glaze. Decorated on inner part of rim with cream trailed slip. *1976/2/537.* (Reminiscent of Mayes, 1968, fig 27, nos 12 – 14).
- 859 Rim, probably of bowl, in brick-red fabric; remains of marbled slip in cream and red, on cream slip background, with lead glaze. *BSJ74 II U/S.*
- 860 Sherd in brick-red fabric, with remains of yellow slip decoration in form of a spiral. Overall orange lead glaze. *1976/2/505.* (Similar to Mayes, 1968, fig 28, no 1).
- 861 Rim of pancheon or plate in brick-red fabric. Cream trailed slip pattern and orange lead glaze. *BSJ74 III U/S.* (Part of pattern as shown in Mayes, 1968, fig 27, no 3).
- 862 Sherd in brick-red fabric, hard-fired on outside surface; rough motif in cream slip on orange ground. *BSJ74 II (6).*
- 863 Sherd of pancheon in dull red fabric, cream slip pattern on orange ground. *1976/2/9.* (Similar to a pancheon in Mayes, 1968, fig 27, no 10).
- 864 Rim of small bowl in brick-red fabric, brown speckled all-over glaze, fading out towards base on outside; random cream slip-trailed decoration on inside just below rim. *BSM72 38 (1).*

- 865 Chamber pot in soft orange fabric, outside slurried over; inside has orange lead glazed ground with cream slip and reddish-brown glaze in stripes, merging into marbling over base. Unlike the 'Potters-pury' examples (Mayes, 1968, fig 28, nos 1 – 3), it has an everted rim. *BC71 25 (60).* 17th – early 18th century.

Fig 140 LOCAL GLAZED SLIPWARE, STAFFORDSHIRE SLIPWARE 866 – 877

Local Glazed Slipwares, 866, 867; mainly 17th century

- 866 Chamber pot, complete in brick-red fabric, glazed inside and out; inside has lower half green-glazed, upper half orange-brown glazed, with some lime deposit adhering; top of rim has cream slip-trailed uneven wavy line decoration, and a single cream slip line runs down centre of handle. Outside decorated with patterned and plain slip lines repeated around body. Covered in lead glaze, orange at top, green at bottom. *BSJ74 II F72.* (See Mayes, 1968, fig 27, no 6).
- 867 Chamber pot, almost complete, in brick-red fabric, with internal glaze and decoration; wavy line around top of rim in cream-trailed slip, devolved star or floral pattern on base, and three cruciform patterns repeated around sides of bowl also in cream slip; olive-green glaze overall outside. *BSJ67 5 (13).* Early 18th century. (Baker 1970, fig 9, no 75 for original publication).

Staffordshire Slipware 868 – 877. mid-17th century – early 19th century

- 868 Body sherd, smooth pink-buff fabric, from press-moulded dish; upper surface embossed, covered with cream slip, decorated with brown and black slip; glazed inside only. *1976/2/510.*
- 869 Base sherd, smooth pink-buff fabric, from press-moulded dish; upper surface with embossed decoration and cream slip, also orange and black slip, glazing inside only, glaze crazed. *BC70 27 (1).*
- 870 Rim of press-moulded dish with piecrust edge, buff fabric coated inside with cream slip, with trailed dark brown slip over it; glazed inside only. c1730 – 1760 type. *BSJ67 5 (13).* Early 18th century. (See Celoria and Kelly, 1973, no 384 for similar pattern in reversed slip).
- 871 Sherd of press-moulded dish, buff body, piecrust edge with cream slip over embossed decoration; light and dark slip applied alternately to semi-circle patterns near rim, dark slip to dots on rim; glazed inside only. 17th century type. *1976/2/97.* (See Greaves, 1976, fig 13 for parallels).
- 872 Most of large rectangular press-moulded dish, approx 240 x 280mm, buff fabric; finely thumbled piecrust edge, coated with dark slip and trailed with light slip, combed in bands with 6-toothed comb. Glazed inside only. c1730 – 1760 type. *BCS73 III (23), Pit K.* 17th – early 18th century. (Celoria and Kelly, 1973, nos 387 and 390).
- 873 Strap handle from small vessel, possibly a mustard pot, buff fabric with dark slip outside over which is combed cream slip, cream slip inside, yellow appearance. c1730 – 1755 type. *BMR74 I F19.*

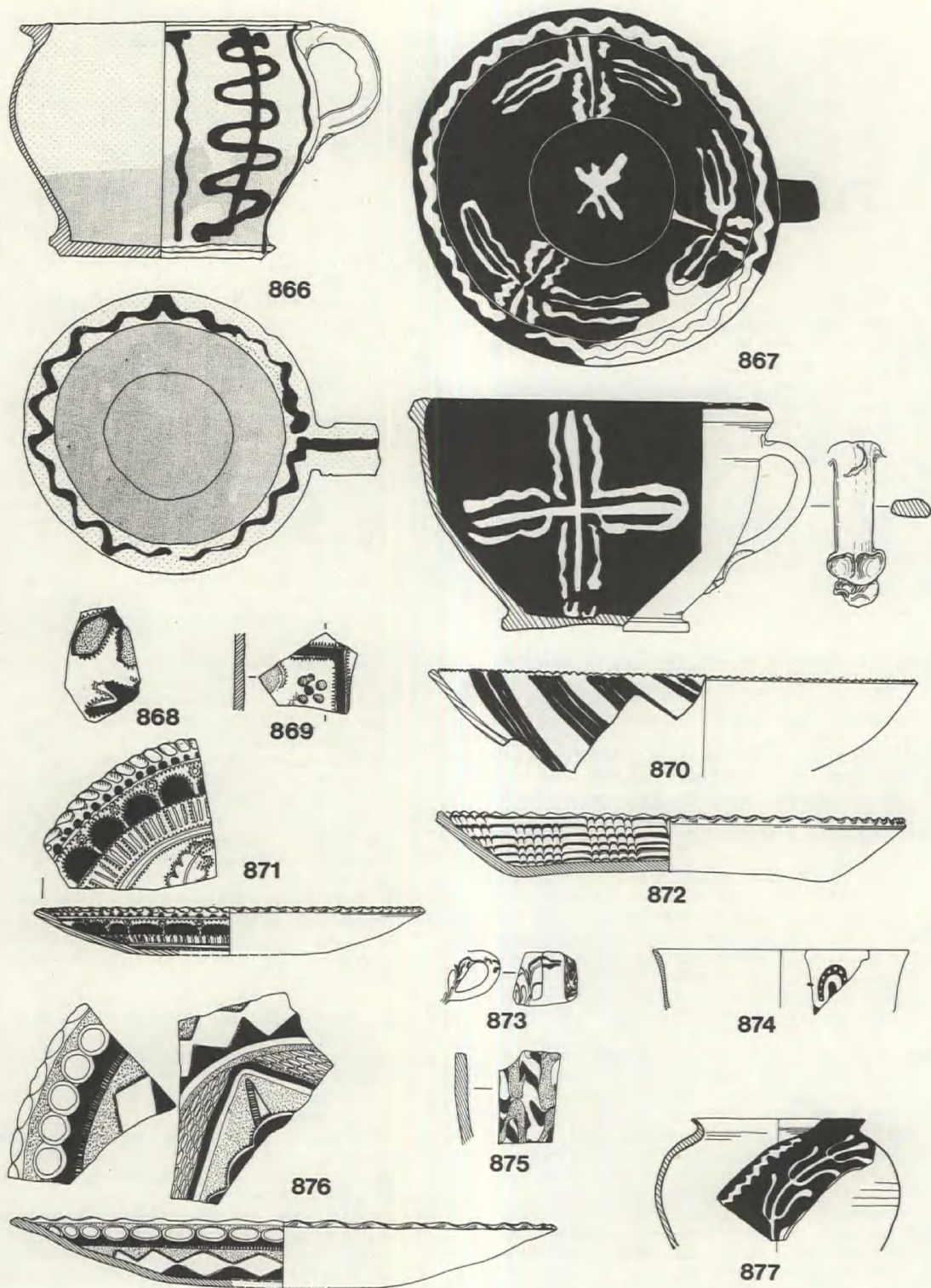


Fig 140 The Pottery: local glazed slipware 866 – 867; Staffordshire slipware 868 – 877, scale 1:4.

(Celoria and Kelly, 1973, no 154).

- 874 Rim of slip-decorated hollow ware vessel, buff body, decorated with cream slip and trailed dark slip, with cream slip jewellery. Cream slip inside, yellow appearance. Late 17th – early 18th century type. *BMR73* (27). (Kelly and Greaves, 1974, no 150).
- 875 Sherd of press-moulded dish, brownish streaky fabric, piecrust rim; coated with light brown slip, and decorated with trailed cream and dark brown slip inside only. Probably late 18th century type. *BCS73 III* (22) *F1*, *Pit J*. 17th – 18th century. inside only. Probably late 18th century type. *BCS73 III* (11) *F1*, *Pit J*. 17th – 18th century.
- 876 Part of press-moulded dish with piecrust edge; pink-buff fabric coated inside with cream slip and embossed decoration, covered with light and dark brown slip. 17th century type. 1976/2/510. (Greaves, 1976, fig 13).
- 877 Part of small globular vessel with out-turned rim, hollow ware, with smooth buff fabric; coated with dark brown slip, with trailed cream slip on it, with zig-zag and branching line decoration. Late 18th – early 19th century. *BCS73 III* (23), *Pit K*. 17th – 18th century. (For parallels to decoration see Celoria and Kelly, 1973, nos 290 and 292. Form resembles that of Celoria and Kelly, 1973, nos 315 and 316, three legged vessels; possibly a small salt or sugar).

Fig 141 SLIPWARES, GERMAN AND OTHER STONEWARES, 878 – 901

Slipwares, 878 – 883; mainly 17th century

- 878 Rim of small jar in coarse grey dense fabric; heavily moulded rim, all-over red slip, with Potterspur type slip-trailed decoration in cream slip on rim and shoulder; patchy olive-green glaze on top, inside and out. *BCS73 III* (6), *Pit J*. 17th – 18th century.
- 879 Base in dull orange fabric; all-over cream slip with dark slip trailed and marbled over it inside; spots of glaze outside. Possibly Potterspur. *BSJ74 II* (1).
- 880 Handled cup or posset pot, with small bump on rim, in dull red gault clay fabric; all-over dark olive-green glaze; cream slip-trailed decoration inside and out and striped across handle. Possibly a Potterspur example. 1976/2/97. (Mayes 1968, fig 28, no 1).
- 881 Handle from small cup or posset pot, cream fabric and light yellow glaze. Brownish black slip trailed in stripes across handle. *BSJ74 II* U/S.
- 882 Spout, handle or flask top in orange fabric, girth rings clearly visible; all-over orange glaze and fine cream slip marbling. Could be North French or Italian, 17th century. *BCS73 I* (12), *Pit C*. Early 18th century. (See Moorhouse, 1970, nos 300 and 301; see also Hurst, 1966 for discussion).
- 883 Rim of Wanfried or Lower Rhineland Slipware dish, in buff-orange fabric, inside coated with red slip carrying yellow slip with patches of copper-green yellow glaze. *BSJ74 I* (10). (Platt, 1975, 1267 and 1268).

German Stonewares, 884 – 893; mid 16th – late 19th century

- 884 Cylindrical tankard in Westerwald buff stoneware; stylized floral pattern, 1675 – 1700 type. *BCS73 III* U/S. (Courtenay, 1975, fig 5, no 2).
- 885 Cologne stoneware sherd, brown-grey fabric; dull brown glaze outside, redder inside; monogram band GOT:D. May come from jug dating to second half of 16th century. *BMS71 19* (7). 19th century. (Moorhouse, 1970, 78).
- 886 Cologne stoneware body sherd, probably from mug, with applied and stamped pads, external brown glaze, inside grey glaze. 16th century. *BMS71 19* (31). (Platt, 1975, no 1213) 16th – 17th century context.
- 887 Frechen stoneware jug top; mottled brown-yellow glaze with light grey areas, unglazed inside. Tall narrow neck is typical of early drinking jugs and may suggest a date of second half of 16th century. *BMS71 19* (31). (Moorhouse, 1970, 76) 16th – 17th century context.
- 888 Frechen stoneware rim and handle from small jug or drinking mug; mottled yellow-brown glaze, with slight yellow glaze inside; stamped W or M on top of handle. Probably late 16th century. 1976/2/510.
- 889 Cologne or Frechen stoneware sherd, mottled light brown glaze outside; brown glaze inside; with mouth and beard motif from face mask. Mid to late 17th century type. *BC72 55* (1). (Holmes, 1951, Type VIII, plate XXIV and Platt, 1975, no 1234).
- 890 Cologne stoneware sherd with mottled orange-brown glaze outside; showing part of medallion bearing Arms of Amsterdam. First half 17th century type. *BSM72 38* (1). (Moorhouse, 1970, no 269).
- 891 Bottle in buff stoneware; with lustrous orange glaze outside; stamp with crowned eagle, with ER on breast, and SELTERS NASSAU round border, Post-1866. *BMR73* (11).
- 892 Frechen stoneware base of jug, upper part in mottled orange-brown glaze, lower part in lighter buff and orange mottled glaze; plain foot. Late 16th – early 17th century. *BSJ67 6* (4).
- 893 Raeren stoneware jug, grey glaze with light brown patches; typical globular body and frilled foot; start of strap handle, cordon round neck. Second half 16th century. *BC71 25* (51). 16th – 17th century. (Moorhouse, 1970, no 252).

Stoneware Bottles, 894 – 901; 19th – 20th century

- 894 Grey stoneware ink bottle with mottled brown glaze. *BSJ74 I* U/S.
- 895 Ink bottle in salt-glazed stoneware, glaze poorly applied. *BCS71 24* (17).
- 896 Large ink bottle in stoneware with smooth light brown glaze; residual clay left in hollow in middle of base; stamped STREET & DAY LONDON near base. 1976/2/505.
- 897 Buff stoneware ink bottle, buff to orange-brown glaze; stamp, indecipherable near base. *BC72 54* U/S.
- 898 Grey stoneware ink bottle with light brown mottled all-over glaze, flaring neck; ink residue inside. *BSM72 38* (2).

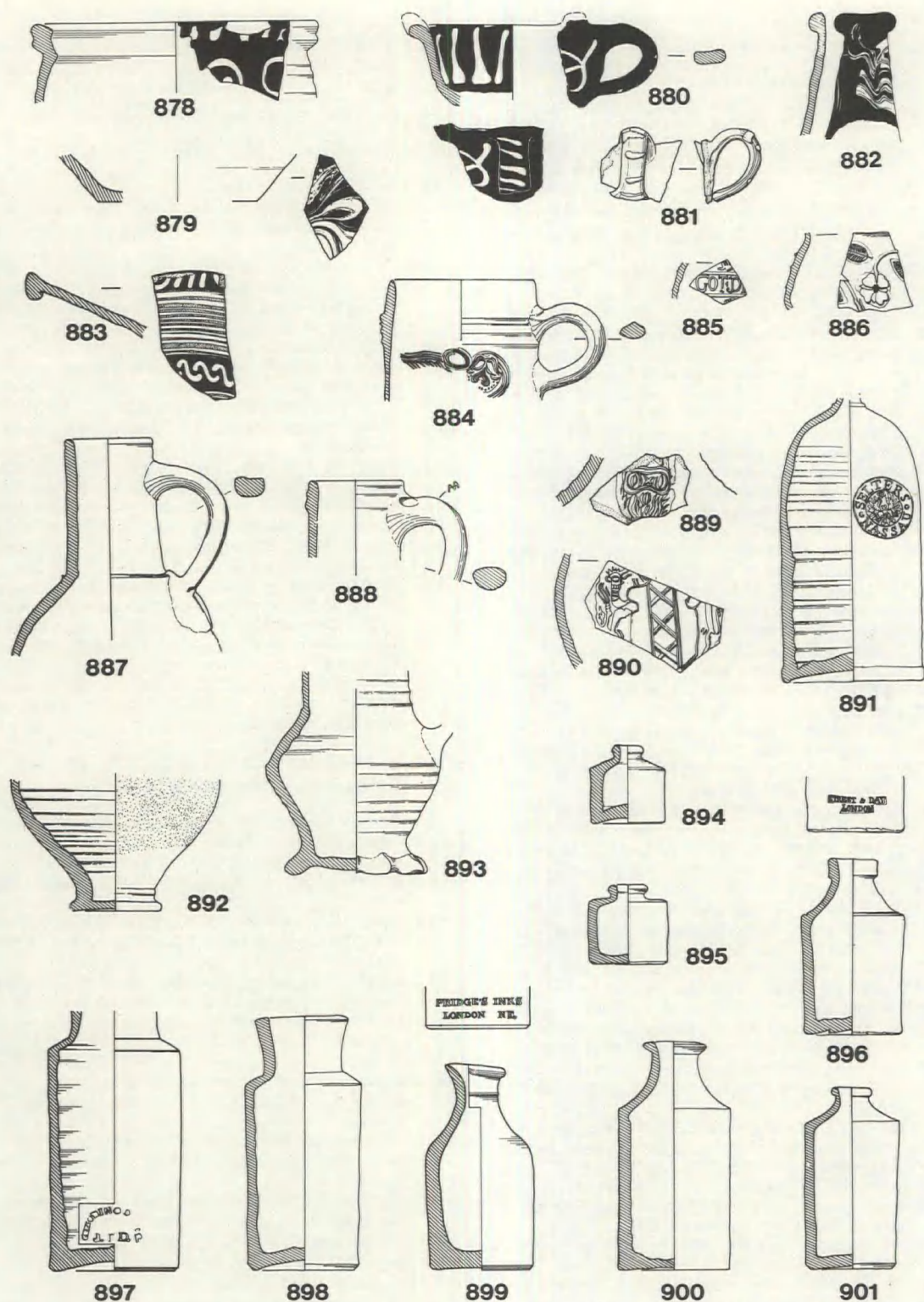


Fig 141 The Pottery: Slipwares 878 – 883; German stonewares 884 – 893; Stoneware bottles 894 – 901, scale 1:4.

- 899 Light stoneware ink bottle, all-over white salt glaze, with pouring lip; stamped near base PRIDGES INKS, LONDON N E. *BC72* 37 (1).
- 900 Light stoneware ink bottle with good all-over white salt glaze. 1976/2/505.
- 901 Grey stoneware ink bottle with buff-grey salt glaze, a little mottled on shoulder. *BCS73* I (12), *Pit C*. Early 18th century.

Fig 142 NOTTINGHAM and STAFFORDSHIRE STONEWARES, MEDITERRANEAN IMPORTS 902 – 918

Nottingham and Staffordshire Stonewares, 902 – 912
early 18th – 19th century

- 902 Quart-sized cylindrical tankard, pale buff stoneware, most of body covered in brown ferruginous wash; interior white engobe; lower part in white engobe with turned bands; heavily textured rouletting. AR stamp surmounted by crown on rim. Staffordshire, early 18th century. *BCS73* I (12), *Pit C*. Early 18th century.
- 903 Quart-sized cylindrical jug, pale buff stoneware, most of body covered with mottled brown ferruginous wash, lower part in white engobe and turned bands; inside covered with lighter ferruginous wash. AR stamp surmounted by crown under spout. Staffordshire early 18th century. *BCS73* I (12), *Pit C*. Early 18th century.
- 904 Half-pint sized tankard; pale buff stoneware; covered inside and out with streaky orange-brown ferruginous glaze. AR stamp on lower part of body. Early 18th century, Nottingham or Staffordshire. *BCS73* I (12), *Pit C*. Early 18th century.
- 905 Pint-sized tankard, pale buff stoneware; dipped in pipe clay with ferruginous wash on outside of rim and top of handle; turned bands at base. First half 18th century, Staffordshire. *BCS73* III (23), *Pit K*. 17th – early 18th century.
- 906 Small cup, pale buff stoneware; base covered in pipe clay, most of body with ferruginous wash, applied handle formed from strip of clay curled into S-shaped spirals. 18th century, Nottingham or Staffordshire. 1976/2/519.
- 907 Small tea bowl, pale buff stoneware, inside and lower part of bowl covered in white engobe; upper part and inside of rim covered with mottled ferruginous wash. Staffordshire 18th century. *BCS73* I (12), *Pit C*. Early 18th century.
- 908 Lid and base of cistern in grey stoneware; lustrous dark brown glaze outside, thinner ferruginous glaze inside, decorated with rouletted bands; bung-hole pushed through from outside, applied bung missing. 19th Century Nottingham or Staffordshire. *BMR73* (11).
- 909 Jar in pale buff stoneware with ferruginous rich brown glaze outside, fading towards base; spilling over inside of rim, pale bloom on rest of inside body. *BCS73* I (12), *Pit C*. Early 18th century.
- 910 Corn measure in grey-buff stoneware, light brown all-over matt glaze. *BSJ74* III U/S.
- 911 Jar in grey stoneware, pale grey core with darker margins; outside has mottled orange and dark brown glaze, inside with pale bloom. 18th century. *BCS73* I (76), *Pit D*. 18th century.

- 912 Small jar in buff stoneware, covered all over and inside rim with lavish orange-brown glaze, inside with clear glaze. Nottingham or Staffordshire. 1976/2/502.

Mediterranean Imports 913 – 918; 16th – 17th century

- 913 Bowl rim in pink fabric with buff margins; smooth buff surfaces, patch of thick black glaze on rim and shoulder. Possibly 16th or 17th century Spanish. *BC70* (13A).
- 914 Part of body of jug in fine pale cream fabric, with pale yellow lead glaze inside; outside decorated with painted watery blue spiral and covered with patchy poor quality tin glaze. 16th – 17th century, North Iberia. *BCS73* I (31), *Pit F*. 17th century.
- 915 Rim of bowl in coarse cream-buff fabric; covered in all-over self-slip; rim heavily moulded. Possibly 16th – 17th century Spanish. *BSJ67* 5 (6). Early 18th century. (Baker, 1970, no 78 for original publication).
- 916 Body sherd of very fine marbled tin-glazed ware; outside marbled predominantly in blues and greens on white with a little brown; residual marbling inside; good quality white glaze. Probably from an Islamic vessel from Isnik, 16th – 17th century. *BSJ74* I F56.
- 917 Rim of bowl in mixed pink and cream-coloured fabric, with pale cream all-over slip and patches of thick olive-coloured glaze outside; rim heavily moulded. Possibly 16th – 17th century Spanish. *BC70* (13A).
- 918 Body of large vessel, mixed dark grey fabric; outside with buff slip, inside with thick purple-black glaze. Not illustrated. *BC70* 8 (7).

Fig 143 TIN-GLAZED EARTHENWARES, 919 – 945
Early 17th to 18th century

- 919 Early 18th century type. Plate, pale pink-buff fabric, pale pink glaze, deep blue painted decoration showing vase of flowers, pattern around rim. *BCS73* I (7) (12), *Pits B and C*. 17th – early 18th century.
- 920 Early 18th century type bowl, yellow fabric, all over pinkish tin glaze. *BCS73* I (12), *Pit C*. Early 18th century.
- 921 c1680. Plate, pale yellow fabric, tin glaze with blue tinge, blue painted Chinese landscape surrounded by patterned border; base ring pierced for suspension. *BMS71* 19 (38). 18th century. (Baker, 1974, fig 8, no 96).
- 922 c1730. Part of flower vase or rose, yellow-buff fabric, good tin glaze, with blue decoration. *BC70* 15 (2).
- 923 1730 – 40. Rim of plate, yellow fabric, bluish glaze, with manganese motif painted on rim. *BSJ74* III F4.
- 924 18th century type. Upright bowl rim, buff fabric, white tin glaze, painted decoration in bright blues and yellow. *BC71* 25 (37). 17th century.
- 925 Early 18th century type. Rim of dish, cream-buff fabric, white glaze; remains of polychrome decoration in blue, green and dark yellow, *BCS73* I U/S.

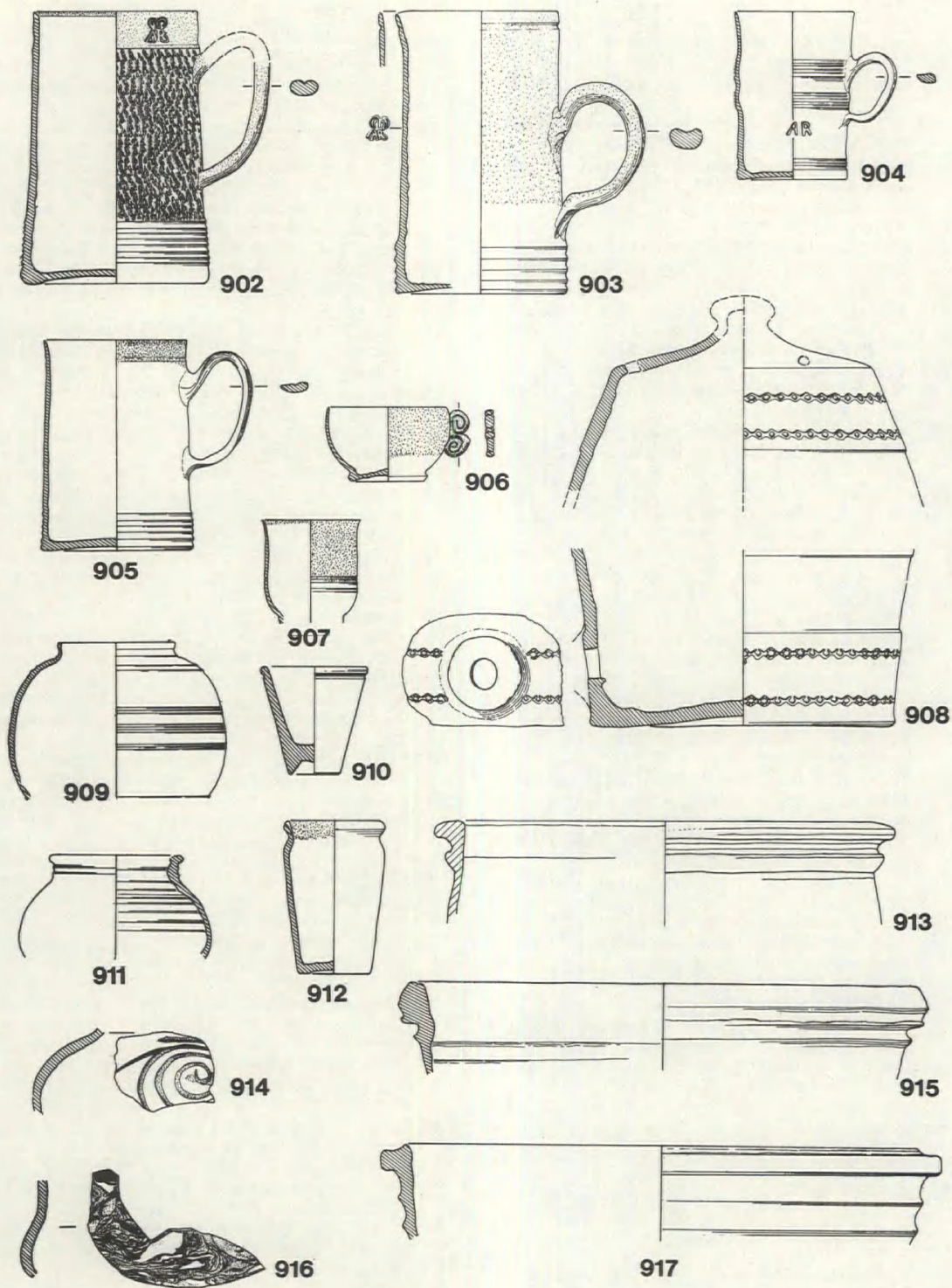


Fig 142 The Pottery: Notts/Staffs Stonewares 902 – 912; Mediterranean imports 913 – 917, scale 1:4.

- 926 Plate rim, pale yellow fabric, pinkish tin glaze; painted with deep bright blue decoration. *BSJ67 5 (6)*. Early 18th century. (Baker 1970, fig 8, no 62).
- 927 1730 – 40. Plate, yellow fabric, blue tin glaze, painted with deep bright blue decoration. *BMR74 I U/S*.
- 928 Mid-17th century type. Rim of bowl or charger; pinkish-buff fabric, brown painted motif surrounded by blue decoration; yellow rim and yellow glaze outside. 1976/2/97. (Similar decoration to Archer and Garner, 1972, pl 2C).
- 929 1730 – 40. Base of plate, yellow-cream fabric, tin glaze pale blue outside, greenish-blue inside with bird and foliage blue painted decoration. *BMR74 I U/S*.
- 930 Rim of bowl, yellow-buff fabric, overall tin glaze, with blue sponged and painted decoration inside. *BC70 8 (8)*. 17th – 18th century.
- 931 Base sherd of dish, cream fabric, good tin glaze, blue tinge; blue floral decoration inside. *BC70 15 (2)*.
- 932 Early 18th century type. Sherd, yellow-buff fabric, yellow glaze outside, matt tin glaze with light blue painted decoration. *BMod74 II (6)*.
- 933 Mid-18th century type. Base of plate, buff-yellow fabric, with pale blue tin glaze and blue floral decoration. *BSJ67 5 (6)*. Early 18th century.
- 934 Early 18th century type. Bowl, dark yellow fabric, bluish tin glaze, painted with grey-blue decoration. *BCS73 I (12) (7)*, *Pits B and C*. 17th – early 18th century.
- 935 Mid-17th century type. Rim of bowl or charger; buff fabric with yellow glaze outside; inside dark blue painted decoration beneath plain tin glaze. 1976/2/97.
- 936 17th century type. Plate, pale yellow fabric with pale blue tin glaze. *BCS73 III (23)*, *Pit K*. 17th – early 18th century.
- 937 Early 18th century type. Rim, pale yellow-buff fabric, rim folded over, hollow, remains of tin glaze. *BC70 15 (2)*.
- 938 18th century type. Bowl rim, pale yellow fabric, remains of pink tin glaze. *BC70 15 (3)*.
- 939 Rim of small bowl, pale buff fabric, pinkish tin glaze. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 940 Rim of wash bowl, white tin glaze. 1976/2/97.
- 941 Early 18th century type. Part of jar, pale yellow fabric, cracked tin glaze; pale blue-grey painted decoration outside. *BC70 (13A)*.
- 942 Early 18th century type. Part of chamber pot, yellow-buff fabric with overall tin glaze. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 943 Early 18th century type. Bowl, buff-yellow fabric, even blue tin glaze. *BSJ67 5 (6)*. Early 18th century. (Baker, 1970, fig 9, no 68).
- 944 Sherd, probably from large bowl, dark yellow-buff fabric, good tin glaze, pinkish outside, with blue painted decoration. *BC70 15 (2)*.
- 945 c1730. Chamber pot, pale yellow fabric, with pale blue tin glaze. *BCS73 III (23)*, *Pit K*. 17th – early 18th century.
- outside. *BSJ67 5 (13)*. Early 18th century. (Baker 1970, fig 8, no 66).
- 947 Early 18th century type. Storage/drug jar, buff fabric, pinkish tin glaze inside, blue outside, with painted blue bands. *BSJ67 5 (13)*. Early 18th century. (Baker, 1970, fig 8, no 63).
- 948 Mid-17th century type. Albarello form, dark pink-buff fabric, yellow-buff ground with pale blue and darker manganese decoration outside. *BCS73 I (31)*, *Pit F*. 17th century.
- 949 Mid-17th century type. Albarello, pale yellow fabric, pink lustrous glaze inside, outside painted in dark blue bands. *BCS73 I (35)*, *Pit F*. 17th century.
- 950 18th century type. Rim of small bowl, pale yellow fabric, smooth white glaze, bright blue painted decoration. *BMS71 19 (12)*.
- 951 Early 18th century type. Bowl, pale yellow fabric, pinkish tin glaze. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 952 Early 18th century type. Base of storage/drug jar, yellow-buff fabric, pale blue tin glaze, blue painted bands. *BSJ67 5 (6) = (13)*. Early 18th century. (Baker, 1970, fig 8, no 67).
- 953 Early 18th century type. Drug/storage jar, cream fabric, blue tin glaze with mottled blue painted bands outside. *BSJ67 5 (6)*. Early 18th century. (Baker, 1970, fig 8, no 64).
- 954 Late 17th century type. Cup base, yellow-buff fabric, pinkish glaze, landscape in watery blue paint. (not illustrated). *BC71 25 (60)*. 17th – early 18th century.
- 955 18th century type. Rim of small bowl, pale yellow fabric, remains of pinkish tin glaze. *BC71 27 (2)*.
- 956 18th century type. Neck or pedestal base of wet drug jar, dark yellow fabric; uneven glaze with pink and blueish tinges, bright blue painted decoration. *BC70 15 (1)*.
- 957 18th century type. Small jar, yellow buff fabric, pale blue tin glaze running on to base. *BC70 13A*.
- 958 Early 18th century type. Base of drug/storage jar, pale yellow fabric; crazed pinkish glaze, pale blue painted decoration. *BSJ67 6 (5)*. 20th century. (Baker, 1970, fig 8, no 65).
- 959 c1680. Moulded rim, yellow-buff fabric, blueish glaze, blue-grey painted decoration. 1976/2/521.
- 960 Mid-late 17th century type. Sherd, dark cream fabric, ochre and light blue painted beneath tin glaze. Italian influence. 1976/2/537.
- 961 c1720. Small bowl or cup, cream fabric, tin glaze with sponged and painted decoration in blue on outside. *BCS73 III (23)*, *Pit K*. 17th – early 18th century.
- 962 Early 18th century type. Base of jar, buff fabric, tin glaze, speckled manganese outside. *BMS71 19 (7)*.
- 963 Early 18th century type. Large base of storage/drug jar, cream fabric, tin glaze with pinkish tinge; typical blue painted decoration. *BC70 13A*.
- 964 Handle, buff-yellow fabric, pinkish tin glaze, pale blue decoration. *BC72 55 (3)*.
- 965 c1715. Sherd in yellow-buff fabric, pinkish tin glaze inside, dark blue Chinese type motif outside, remains of blue decoration inside. 1976/2/513.
- 966 c1720. Plate rim, pale yellow fabric, with blue painted scratched decoration on band round rim, London manufacture similar to Dutch pancake

Fig 144 TIN-GLAZED EARTHENWARES, 946 – 979

- 946 Early 18th century type. Storage/drug jar, yellow-buff fabric, blue tin glaze, blue bands painted round



Fig 143 The Pottery: tin-glazed earthenware, scale 1:4.

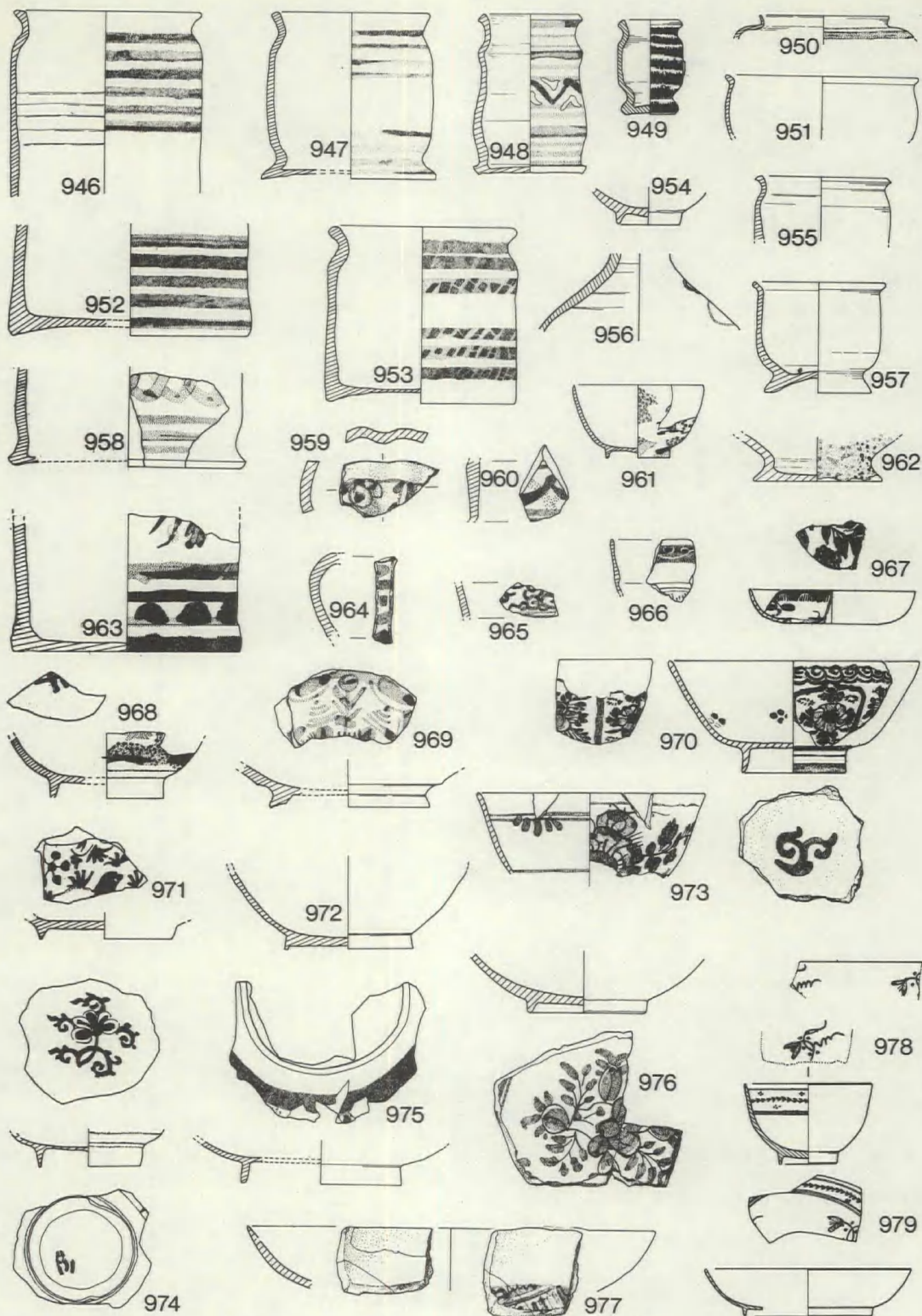


Fig 144 The Pottery: tin-glazed earthenware, scale 1:4.

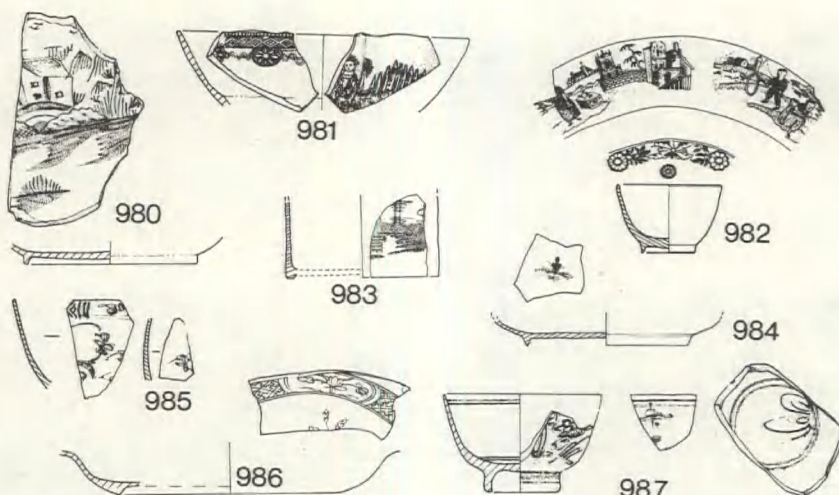


Fig 145 The Pottery: Lustware 980 – 984; Chinese Porcelain 985 – 978, scale 1:4.

- plates. *BC70 8 (8)*. 17th – 18th century.
- 967 Early 18th century type. Rim of saucer, pale buff fabric, pinkish glaze, delicate patterning in blue and brown outlined in trek. *BC70 5 13A*.
- 968 Early 18th century type. Base of bowl, buff-yellow fabric, good tin glaze with sponged decoration. *BCS73 I U/S*.
- 969 Mid-late 17th century type. Base of charger, pink-buff fabric, all over tin glaze with grey blue painted decoration. *BMS71 19 (31)*. 16th – 17th century context.
- 970 1710 – 20. Bowl, cream-buff fabric, pinkish glaze, deep bright blue decoration painted in panels outside; groups of dots inside with motif on bottom. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 971 Early 18th century type. Base of bowl, dark buff fabric, blueish tin glaze; blue painted decoration outlined in trek. *BSJ67 8 (5)*.
- 972 Early 18th century type. Base of bowl, yellow-buff fabric, pinkish glaze worn on footring. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 973 Early 18th century type. Bowl, cream-buff fabric, blueish glaze, deep blue painted decoration outside lined in trek, pale blue decoration inside. *BCS73 I (24)*, *Pit B*. 17th – early 18th century.
- 974 Early 18th century type. Base of bowl, yellow-buff fabric, pink tin glaze, dark blue motif inside base; blue painted decoration outside. *BCS73 I (12)*, *Pit C*. Early 18th century. (Archer and Garner, 1972, pl 46B for similar decoration).
- 975 Early 18th century type. Base of dish or charger, yellow-buff fabric, pale blue tin glaze, blue painted decoration outside. *BSJ74 II U/S*.
- 976 1690 – 1700. Bowl, pinkish-buff fabric, blueish glaze getting thinner and pinker at base; grey to bright blue painted decoration outlined in black trek. *BCS73 I (7)*, *Pit B*. 17th – early 18th century.
- 977 Early 18th century type. Bowl, cream-buff fabric, blue glaze, polychrome decoration in manganese, yellow and green. *BC70 3 (24)*.

- 978 18th century type. Tea bowl, cream fabric, overall glaze with blue tinge; dark blue floral decoration. *BC70 16 (5)*.
- 979 18th century type. Saucer, cream fabric, overall glaze with blue tinge; dark blue floral decoration. *BC70 16 (5)*.

Fig 145 LUSTREWARE and CHINESE PORCELAIN, 980 – 987
17th – Late 18th century

Lustware, 980 – 984

- 980 Lustware plate or dish base, pale white fabric, white glaze; Chinese landscape painted in blue. *BC70 12 (10)*.
- 981 Lustware, moulded bowl rim, cream fabric, blueish glaze; formal pattern painted round rim inside, pastoral scene outside. *BC70 16 (5)*.
- 982 Lustware, complete cup, buff fabric, blueish glaze, formal pattern inside rim, various scenes outside painted in blue. *BSJ74 III F4*.
- 983 Lustware, base of small vessel, white fabric, tin glaze, blue decoration outside. *BC71 25 (6)*.
- 984 Lustware, base of small bowl or cup, pale buff fabric, tin glaze with blueish tinge; dark blue motif. *BC71 25 (51)*. 16th – 17th century.

Chinese Porcelain, 985 – 987

- 985 Chinese, second quarter 18th century. Side of bowl, probably 6" diameter, pale blue background with darker blue foliage pattern and thin brown strip on top of rim. *BSJ74 II U/S*.
- 986 Chinese, c1725 – 40. Rim of dish or plate, pale blue background with blue geometric and stylised floral design in medallion; set in stripe around vessel below rim. *BMR74 I U/S*.
- 987 Chinese, late 17th or early 18th century. Roughly made cup, deep root-ring with concentric circles

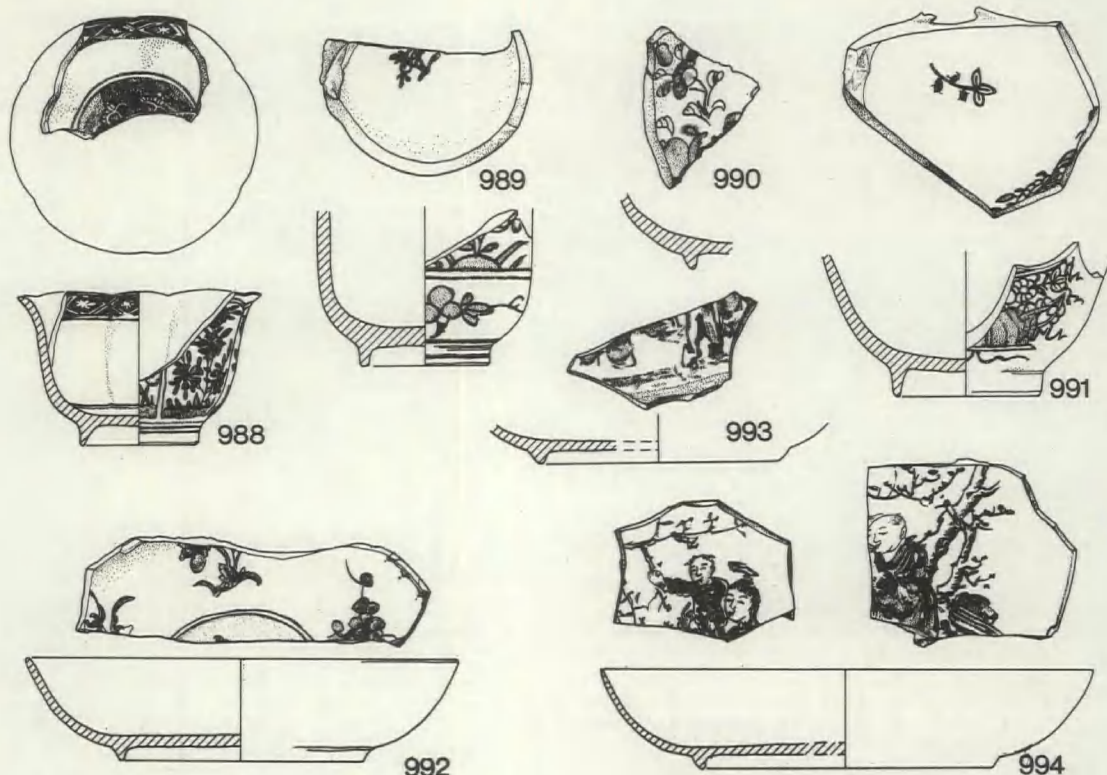


Fig 146 The Pottery: Chinese Porcelain, scale 1:2.

round foot and free foliage decoration in dark grey-blue on pale blue. Motif inside on base. *BCS73 III (23)*, *Pit K.* 17th – early 18th century.

Fig 146 CHINESE PORCELAIN, 988 – 994
17th – late 18th century

- 988 Chinese, 1700 – 20. Cup, finely made, deep foot-ring with concentric circle pattern in blue, with fluted sides and scalloped slightly everted rim; floral decoration in panels; tones of blue on white background inside, decoration on rim and base. *BCS73 I (12)*, *Pit C.* Early 18th century.
- 989 Chinese, 1715 – 40. Cup or coffee beaker, with small foot; thick coarse porcelain; small motif on inside base; decorated outside with pale blue design outlined in darker blue; stylised foliage design. *1977/1/109*.
- 990 Chinese, ?1715 – 30. Foot of small saucer or bowl, white background with Imari red decoration and blue foliage. *BC71 25 (51)*. 16th – 17th century.
- 991 Chinese, mid-18th century. Cup with deep foot-ring; inside flower motif on base, outside flowers in container; tones of blue on very pale blue background. *BC70 15 (1)*.
- 992 Chinese, 1760 – 80. Saucer with small foot-ring, with enamelled decoration on whitish background; pale yellow centre with small gilded flowers outlined in red or black, and green foliage. *BMR74 I (36)*.

- 993 Chinese, 1760 – 80. Cup and saucer, painted in enamels on white background, decoration of people including a mother holding up her son to a branch; also a male figure in reddish brown, dark yellow and black on white. *1976/2/74*.

OBJECTS OF POTTERY

Fig 147

- 995 Fragment of ?spindlewhorl; pottery fabric A6 (early Middle Saxon). 26mm wide. *BC70 15 F41*, *Structure 2*.
- 996 Spindlewhorl, reused from potsherd, B ware. 36mm wide. *BC70 15 (2)*, Post-Medieval.
- 997 Kiln bar, dark grey sandy fabric with grass tempering. 60mm long. *BSJ74 I (1)*.
- 998 Decorated spindlewhorl, B ware. 40mm wide. *BSJ74 I (1)*.
- 999 Spindlewhorl, B ware. 44mm wide. *BSM72 28 (120)*. 12th – 13th century.
- 1000 Fragment of china bust. 19th century. 65mm long. *BC70 15 (2)*.
- 1001 Spindlewhorl, unfired buff clay. 40mm wide. *BMR74 I (51)*. Saxo-Norman.
- 1002 Spindlewhorl, unfired buff clay. 36mm wide. *BSJ74 II F98*. Saxo-Norman.

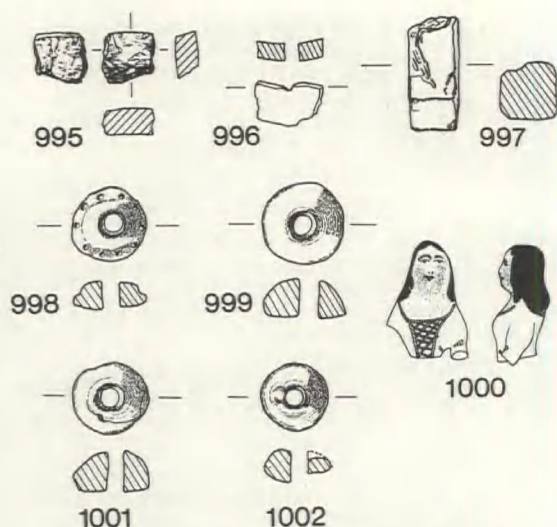


Fig 147 Objects of Pottery, scale 1:4 except 1000 - scale 1:2.

The Clay Pipes

Figs 148, 150 - 156

Fragments of bowl and stem have been recovered from most of the excavated sites in the town. Collecting policies varied between sites, according to the method of excavation, and the general period of evidence recovered. Where Post-Medieval layers were disturbed and mechanically stripped, or scarcely present, what seemed to be a representative sample of larger and more identifiable pieces was kept, eg most Castle trenches and BSJ74 etc. On sites with major Post-Medieval deposits such as BCS73 all fragments were kept. Pipe or pipe fragments were never recovered in sufficiently large quantities to make stem bore analysis feasible (Oswald, 1975, 92) though an attempt was made by Adrian Oswald in his specialist report on the first Bedford site, BSJ67, giving a date range of 1670 - 1700 (Oswald, 1970, 91, 93). Small stem fragments, unless stamped or decorated, were generally not kept.

No special attention has been given to the fabric of the pipes. No particular impurities or noticeable colour changes were observed, to indicate a possible local source for the raw material. The date range would seem to be from early 17th to late 19th century. This is based on the dated typology given in Oswald, 1975, figs 3G and 4G, and from some identifiable stamps of known pipe-makers found on some of the Bedford examples. The latter are shown in *italics* on the typology table.



Pl 33 Spindlewhorls in pottery, stone and bone: Cat 1001, 1142 not illus., 1143, 998, 1529.

Of the thirty-seven identified pipe-makers in Bedfordshire, as listed in Oswald, 1975, 160, thirty-two appear to have been working in Bedford itself. Although over 500 pipe and stem fragments were examined, only seven examples could be assigned to known pipe-makers (see table Typology).

A range of pipes found in Bedford has been used to form a typology which is described in the table. This shows how they relate to the Oswald types, and includes a possible date range for each. Decoration numbers are shown against each type in the table, where they occur, and the range of decorative motifs and stamps is described below.

STAMPS AND DECORATIONS FROM BOWLS AND STEMS

- 1 stamp, fig 156, 1053.
- 2 stamp, fig 156, 1066.
- 3 piecrust thumbed stem, fig 155, 1042.
- 4 incised-line criss-cross decoration, fig 155, 1041.
- 5 stamp, fig 156, 1062.
- 6 stamp, fig 156, 1050.
- 7 leaf decoration, fig 156, 1073.
- 8 traces of floral decoration, fig 155, 1040.
- 9 dot decoration, fig 155, 1045.
- 10 stamp, fig 156, 1049.
- 11 barley-sugar twist, fig 155, 1043.
- 12 rouletted decoration, fig 155, 1044.
- 13 stamp, fig 156, 1061.
- 14 remains of RL stamp, not illustrated.
- 15 stamped name, fig 155, 1046.
- 16 stamp, fig 156, 1056.
- 17 stamp, fig 156, 1055.

- 18 stamp, *fig 156*, 1052.
- 19 stamp, *fig 156*, 1058.
- 20 stamp, *fig 156*, 1051.
- 21 stamp, *fig 156*, 1070.
- 22 stamp, *fig 156*, 1054.
- 23 remains of L or T stamp, not illustrated.
- 24 stamped name, *fig 156*, 1048.
- 25 stamp, *fig 156*, 1064.
- 26 stamp, *fig 156*, 1060.
- 27 stamp, *fig 156*, 1067.
- 28 stamp, *fig 156*, 1063.
- 29 stamp, *fig 156*, 1071.
- 30 stamp, *fig 156*, 1065.
- 31 stamp, *fig 156*, 1068.
- 32 stamp, *fig 156*, 1057.
- 33 stamp, *fig 156*, 1069.
- 34 stamp, *fig 156*, 1072.
- 35 stamp, *fig 156*, 1075.
- 36 stamp, *fig 156*, 1059.
- 37 stamp, *fig 156*, 1074.
- 38 elephant and hounda motif, *fig 153*, 1031.
- 39 Prince of Wales feathers motif, *fig 150*, 1021.
- 40 pattern of lines and dots, *fig 152*, 1029.
- 41 pattern of fanning lines and foliage, *fig 152*, 1030.
- 42 pattern of foliage and sprays of dots, *fig 151*, 1025.
- 43 pattern of fanning lines, *fig 152*, 1027.
- 44 Hanoverian Coat of Arms motif, *fig 153*, 1033.
- 45 foliage pattern clasping base of bowl and stem, *fig 151*, 1024.
- 46 fern-like foliage pattern, not illustrated.
- 47 Prince of Wales feathers motif, different from 39, *fig 150*, 1022.
- 48 foliage pattern up seams of pipe, *fig 150*, 1023.
- 49 foliage and line pattern, not illustrated.
- 50 pattern of dots, *fig 154*, 1034.
- 51 foliage pattern clasping bowl, *fig 155*, 1037.
- 52 mulberry pattern, *fig 154*, 1035.
- 53 sailing ship pattern, *fig 153*, 1032.
- 54 Wellington boot shape, *fig 152*, 1028.
- 55 WM stamp in a square, not illustrated.
- 56 random oriental pattern, *fig 154*, 1036.

Fig 148 RANGE OF BOWL TYPES

- 1003 Type H, early 17th century. *BCL71* 22 (5).
- 1004 Type J, mid-17th century. 1976/2/97.
- 1005 Type P, mid-17th century. *BCS71* 24 (20).
- 1006 Type G, mid/late 17th century. *BC71* 25 (53).
- 1007 Type A, early 18th century. *BCS73* I (12), *Pit C*. Early 18th century.
- 1008 Type M, early 18th century. *BCS73* I (12), *Pit C*. Early 18th century.
- 1009 Type D, early/mid-18th century. *BMR74* II U/S.
- 1010 Type F, mid/late 18th century. *BMR73* U/S.
- 1011 Type L, early/mid-18th century. *BCS73* I (18), *Pit A*. 18th century.
- 1012 Type K, late 17th/early 18th century. *BC71* 25 (60). 17th – early 18th century.
- 1013 Type B, early 18th or mid-19th century. 1976/2/526.
- 1014 Type T, mid-19th century? May be earlier but example is too incomplete. *BCS73* III (12).
- 1015 Type C, mid/late 18th century. 1976/2/526.
- 1016 Type E, early/mid-19th century. *BCS71* 24 (20) and *BC70* 12 (13).

- 1017 Type E, early/mid-19th century. *BMR73* (19).
- 1018 Type R, mid-19th century. 1976/2/505.
- 1019 Type O, mid/late 19th century. *BMR73* U/S.
- 1020 Type R, mid-19th century. 1976/2/505.

Figs 150 – 154 RELIEF MOULDED BOWLS OF MID-LATE 19th CENTURY DATE

Fig 150

- 1021 Type N, dec 39. Prince of Wales feathers and motto Ich Dien on both sides. Simple foliage running up both seams. *BMod74* II (2).
- 1022 Type O, dec 47. Prince of Wales feathers and motto Ich Dien on front of bowl, with ornate garland of foliage running up back. *BMod74* II (2).
- 1023 Type O, dec 48. Vestigial foliage up both seams. *BMR73* (11).

Fig 151

- 1024 Type O, dec 45. Simple foliage running up both seams. Raised foliage clasps the foot of the bowl running along base of stem to form foot. *BCS71* 24 (13).
- 1025 Type N, dec 42. Simple foliage and sprays of triple dots running up both seams. Stamps H and I on either side of spur. *BC70* 12 (13).

Fig 152

- 1026 Type O. Fern-like foliage with dotted spine clasping base of bowl to form foot. Stamp F. Covington Bedford. *BMR73* (11).
- 1027 Type O, dec 27, 43. Fine lines fanning out around bowl, continuing as single line of foliage along stem, stamped H and W on either side. *BMod74* II (2).
- 1028 Type S, dec 54. Bowl, moulded to shape of Wellington boot, back seam smoothed. *BMR73* (11).
- 1029 Type N, dec 40. Pattern of lines and dots fanning out from back of bowl. Spray of foliage at front. *BC71* 25 (51).

Fig 153

- 1030 Type N, dec 41. Coarse lines fanning out round bowl, light foliage at seams. 1976/2/520.
- 1031 Type N, dec 38. Elephant with Hounda surmounting foliage on one side, flower and leaf design on other. Simple foliage on both seams. *BC70* 12 (3).
- 1032 Type N, dec 53. Anchor and rope on one side, 3 masted sailing ships on waves on the other. Foliage on both seams. *Bedford Museum* 1231.
- 1033 Type N, dec 33, 44. Hanoverian coat of arms, S stamp on spur. *BMR73* U/S.

Fig 154

- 1034 Type O, dec 50. Dots on both seams, remains of decoration on bowl. *BMR73* (11).
- 1035 Type G, dec 52. Mulberry pattern or orange tree with rouletting around top. Possibly late 17th/early 18th century. *BMod74* II (6). Oswald, 1975 90, fig 17.
- 1036 Dec 56. Random decoration with an oriental flavour. Possibly late 18th/early 19th century. *BMR73* (36).

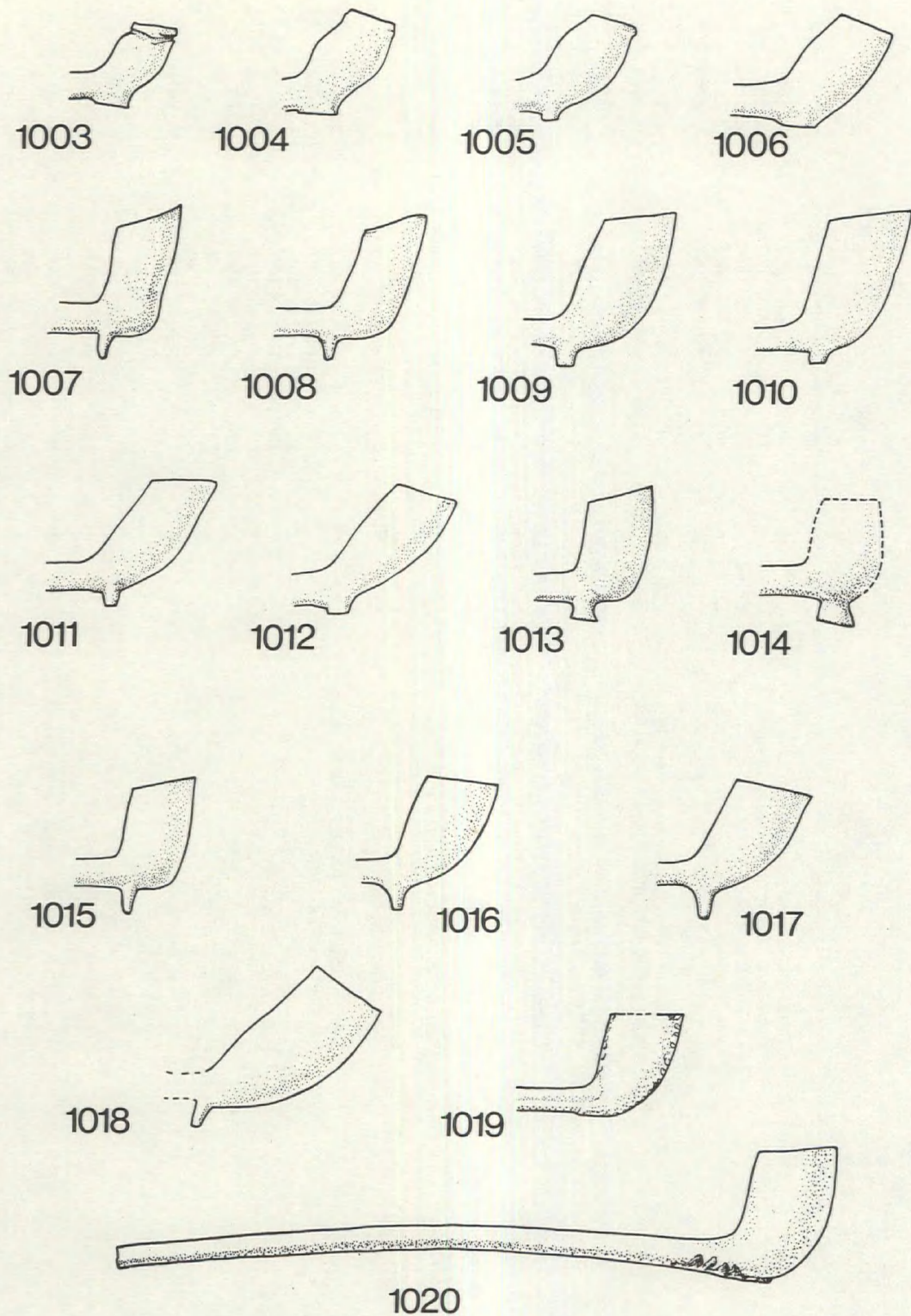
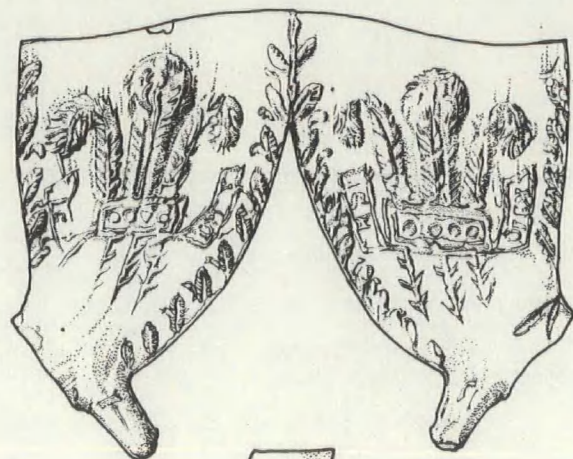


Fig 148 Range of Clay Pipe Bowl types 1003 – 1020, scale 1:2.

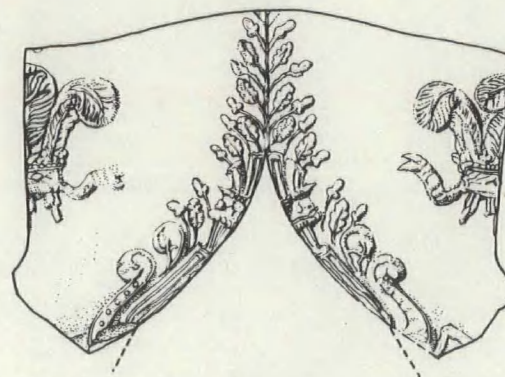
Type	Oswald type	Description	Date	Dec No	Figure and Catalogue Nos	
A	—	Thistle-shaped bowl with spur, probably a shape characteristic of the region. Oswald, 1975, fig 6 M, no 8	1715 – 26	6	<i>Fig 148, 1007;</i>	<i>Fig 156, 1050</i>
				18	<i>Fig 148, 1007;</i>	<i>Fig 156, 1052</i>
			1704	19	<i>Fig 148, 1007;</i>	<i>Fig 156, 1058</i>
			1715 – 26	20	<i>Fig 148, 1007;</i>	<i>Fig 156, 1051</i>
				33	<i>Fig 148, 1007;</i>	<i>Fig 156, 1069</i>
B	12/22	Straight bowl with mouth sloping back to stem, bulb at base, pronounced pedestal foot	1715 – 26	20	<i>Fig 148, 1013;</i>	<i>Fig 156, 1051</i>
				36	<i>Fig 148, 1013;</i>	<i>Fig 156, 1059</i>
C	22	Straight-sided upright bowl, bulb at base, with spur	1730 – 80	—	<i>Fig 148, 1015</i>	
D	12	Flaring bowl with wide mouth and flattened spur	? 1760 – 85	1	<i>Fig 148, 1009;</i>	
				27	<i>Fig 148, 1009;</i>	<i>Fig 156, 1067</i>
			? 1704	28	<i>Fig 148, 1009;</i>	<i>Fig 156, 1063</i>
				29	<i>Fig 148, 1009;</i>	<i>Fig 148, 1017</i>
E	—	Flared bowl with curving sides, spur foot	? c1800	—	<i>Fig 148, 1016;</i>	<i>Fig 148, 1017</i>
F	—	Large flared bowl with mouth sloping back to stem, narrow flat foot	c1700 – 50	—	<i>Fig 148, 1010</i>	
G	7	Medium-sized bowl with gently curving sides, flat shallow pedestal base	? 1722 – 32	2	<i>Fig 148, 1006;</i>	<i>Fig 156, 1066</i>
				16	<i>Fig 148, 1006;</i>	<i>Fig 156, 1056</i>
				18	<i>Fig 148, 1006;</i>	<i>Fig 156, 1052</i>
				30	<i>Fig 148, 1006;</i>	<i>Fig 156, 1065</i>
				52	<i>Fig 148, 1006;</i>	<i>Fig 154, 1035</i>
				55	<i>Fig 148, 1006</i>	
H	4	Small bowl with pedestal foot, wide stem, mis-shapen rim	c1600 – 40	37	<i>Fig 148, 1003;</i>	<i>Fig 156, 1074</i>
J	—	Bulbous bowl, larger than H, pinched in below rim; wide flat pedestal base	c1600 – 40	2	<i>Fig 148, 1004;</i>	<i>Fig 156, 1066</i>
			? 1704	32	<i>Fig 148, 1004;</i>	<i>Fig 156, 1057</i>
K	9	Long narrow bowl with lightly curved sides, small pedestal foot, wide stem	? 1722 – 32	16	<i>Fig 148, 1012;</i>	<i>Fig 156, 1056</i>
				32	<i>Fig 148, 1012;</i>	<i>Fig 156, 1057</i>
			? 1704	34	<i>Fig 148, 1012;</i>	<i>Fig 156, 1071</i>
				35	<i>Fig 148, 1012;</i>	<i>Fig 156, 1075</i>

L	20/21	Long bowl with straight sides, swelling towards flattened spur foot	? 1704	32	<i>Fig 148, 1011;</i>	<i>Fig 156, 1057</i>
M	—	Bowl with upward flaring rim, as thistle type A, but straighter sides and with spur set under stem rather than bowl	? 1722 – 32 1704	16 18 19	<i>Fig 148, 1008;</i> <i>Fig 148, 1008;</i> <i>Fig 148, 1008;</i>	<i>Fig 156, 1056</i> <i>Fig 156, 1052</i> <i>Fig 156, 1058</i>
N	24	Mainly heavily decorated bowls, plain upright forms, sometimes with small pedestal foot.	? 1854	31 33 38 39 40 41 42 43 44 53	<i>Fig 156, 1068</i> <i>Fig 153, 1033;</i> <i>Fig 153, 1031</i> <i>Fig 150, 1021</i> <i>Fig 152, 1029</i> <i>Fig 152, 1030</i> <i>Fig 151, 1025</i> <i>Fig 152, 1027</i> <i>Fig 153, 1033</i> <i>Fig 153, 1032</i>	<i>Fig 156, 1069</i>
O	24	Similar to N type, but smaller, often with vestigial foot formed by decoration	1838 – 90	15 45 46 47 48 49 50	<i>Fig 148, 1019;</i> <i>Fig 148, 1019;</i> <i>Fig 148, 1019</i> <i>Fig 148, 1019;</i> <i>Fig 148, 1019;</i> <i>Fig 148, 1019</i> <i>Fig 148, 1019;</i>	<i>Fig 155, 1046</i> <i>Fig 151, 1024</i> <i>Fig 150, 1022</i> <i>Fig 150, 1023</i> <i>Fig 154, 1034</i>
P	17	Bulbous bowl, rim slightly everted, small pedestal foot, wide stem	c1640 – 80	—	<i>Fig 148, 1005</i>	
Q	22	Large bowl with spur	—	—	Not illustrated	
R	—	Fairly upright bowl, usually decorated, sometimes with spur	c1800 – 50	51	<i>Fig 148, 1018;</i>	<i>Fig 155, 1037</i>
S	—	Wellington boot shaped bowl	c1800 – 50	54	<i>Fig 152, 1028</i>	
T	—	Bulbous bowl, pronounced pedestal foot	?c1700 – 25	5	<i>Fig 148, 1014;</i>	<i>Figs 155, 156</i> <i>1043 – 1062</i>

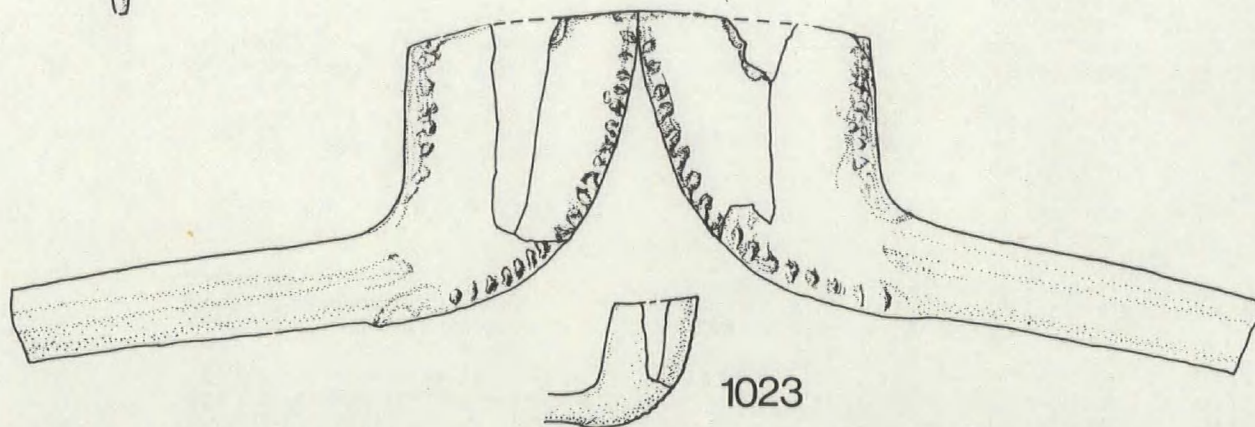
Fig 149 Table of Clay Pipe bowl types.



1021

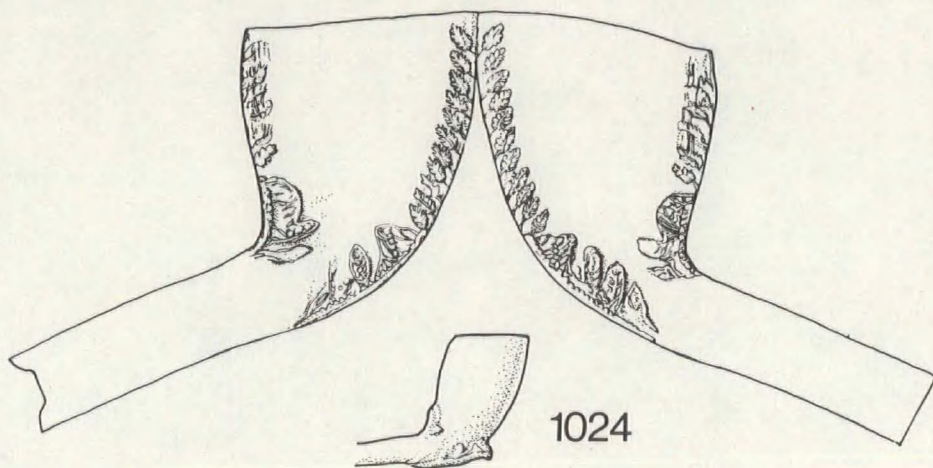


1022

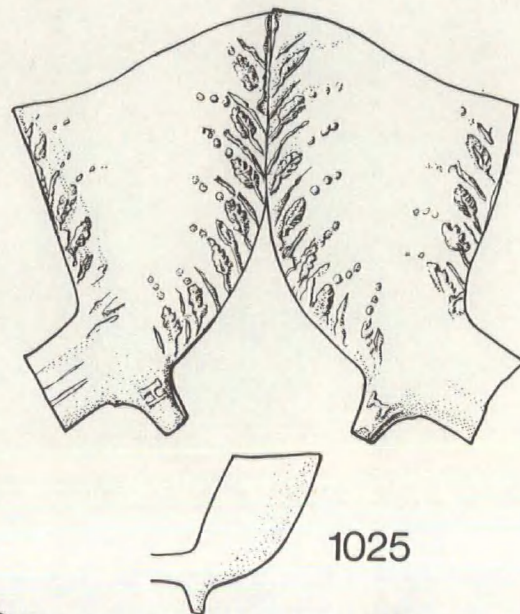


1023

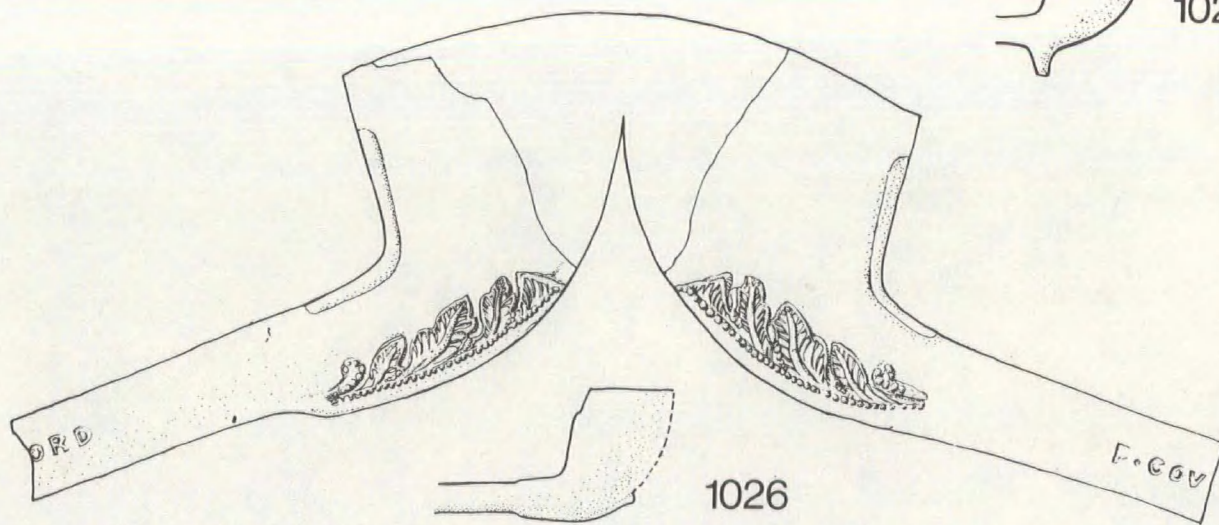
Fig 150 Relief-moulded clay pipe bowls, scale 1:1.



1024



1025



1026

Fig 151 Relief-moulded clay pipe bowls, scale 1:1.

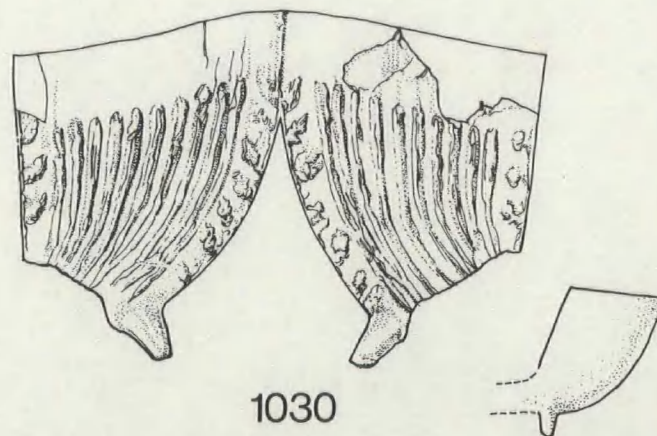
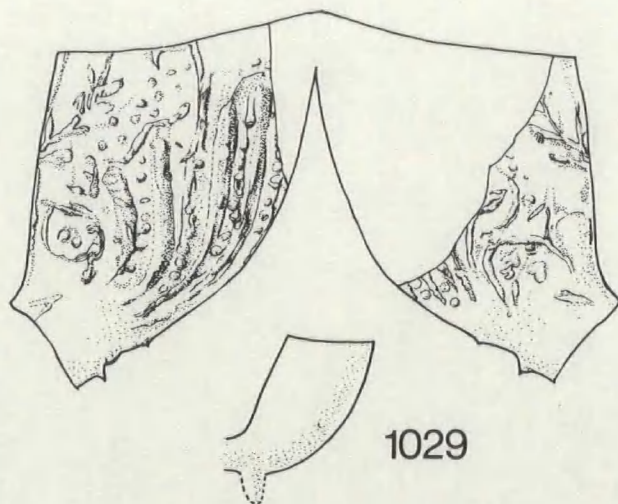
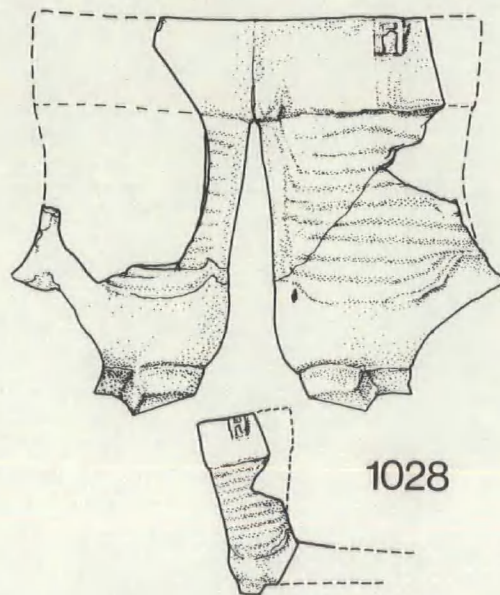
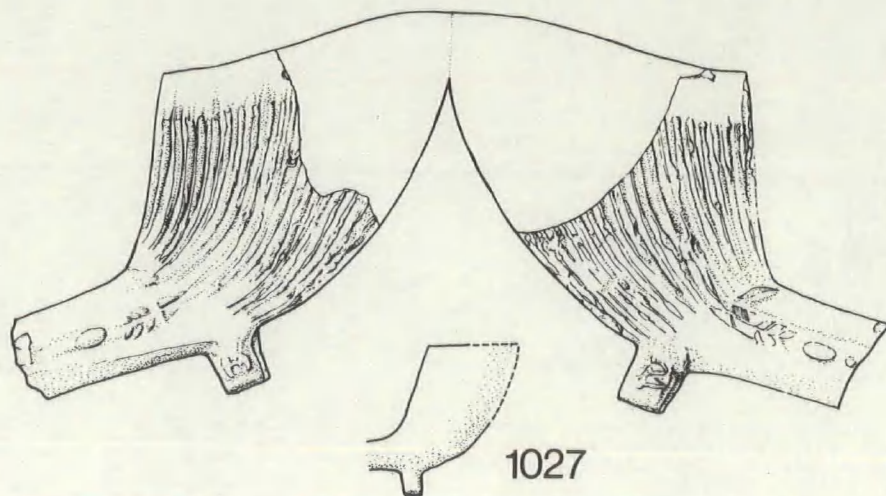
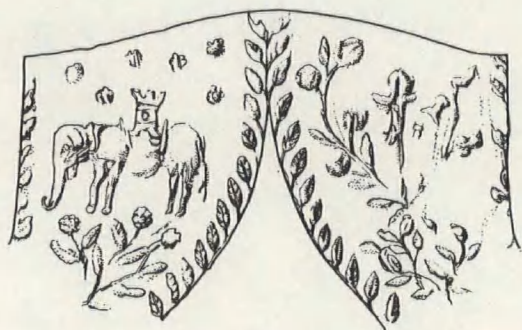


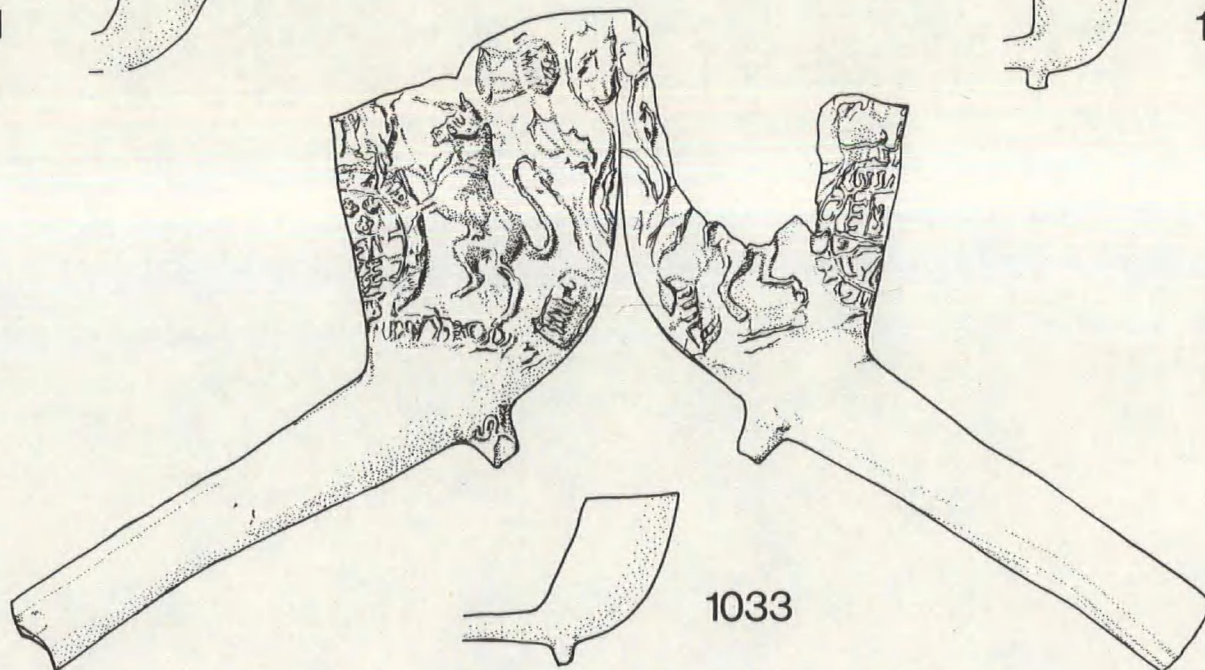
Fig 152 Relief-moulded clay pipe bowls, scale 1:1.



1031



1032



1033

Fig 153 Relief-moulded clay pipe bowls, scale 1:1.

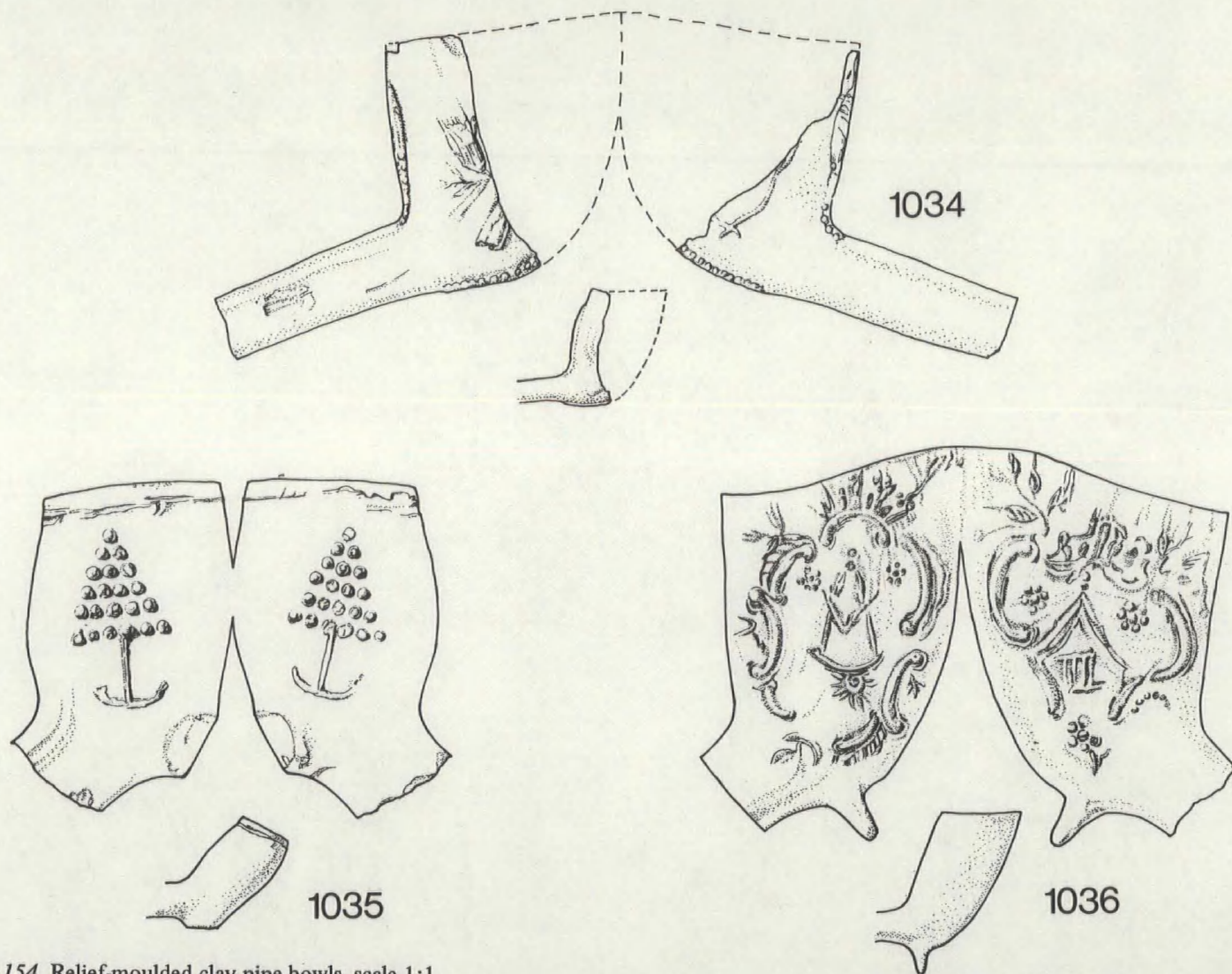


Fig 154 Relief-moulded clay pipe bowls, scale 1:1.

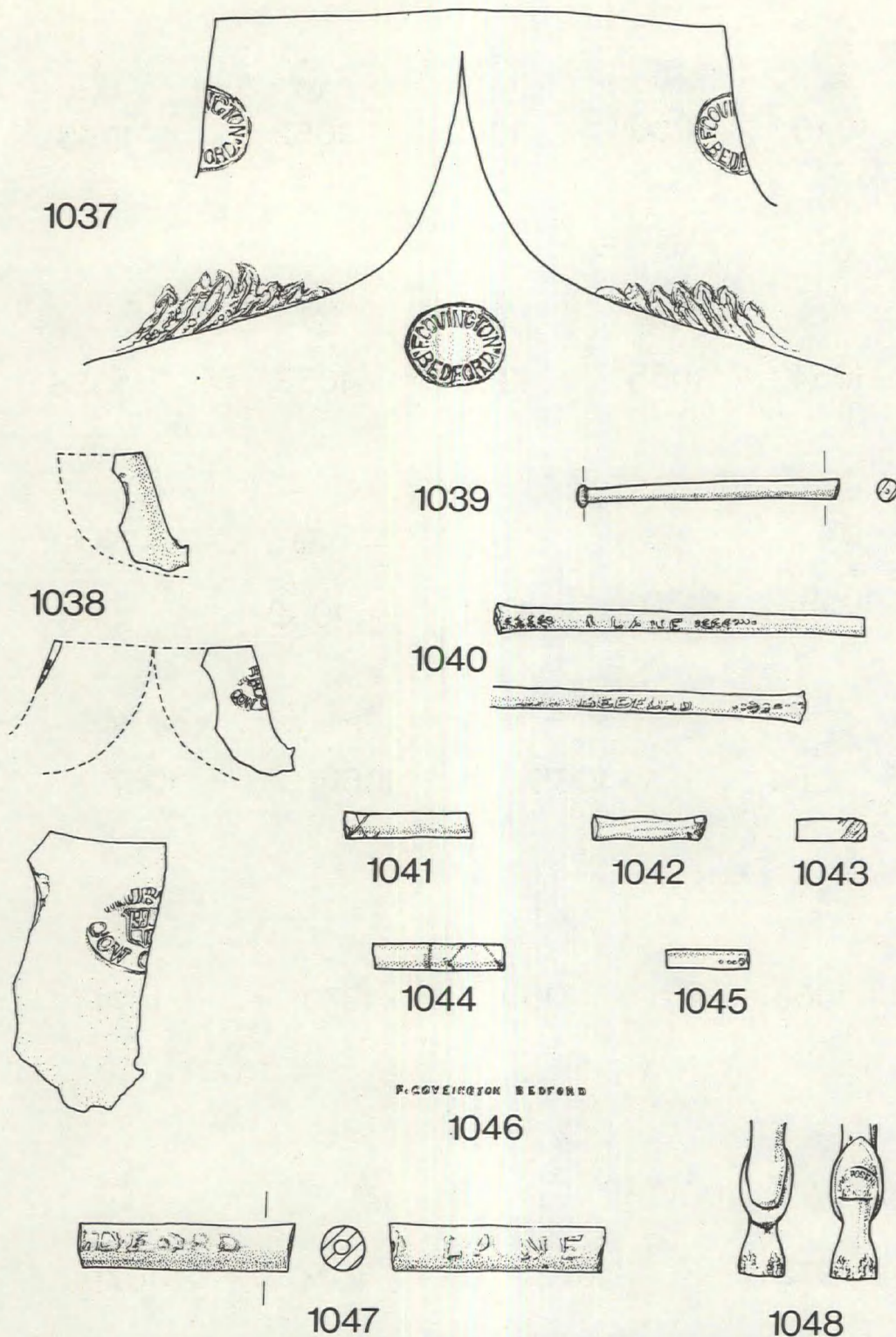


Fig 155 Clay pipe stamps, stems and mouthpieces, 1037, 1038, scale 1:1; 1038 – 1048 scale 1:2.

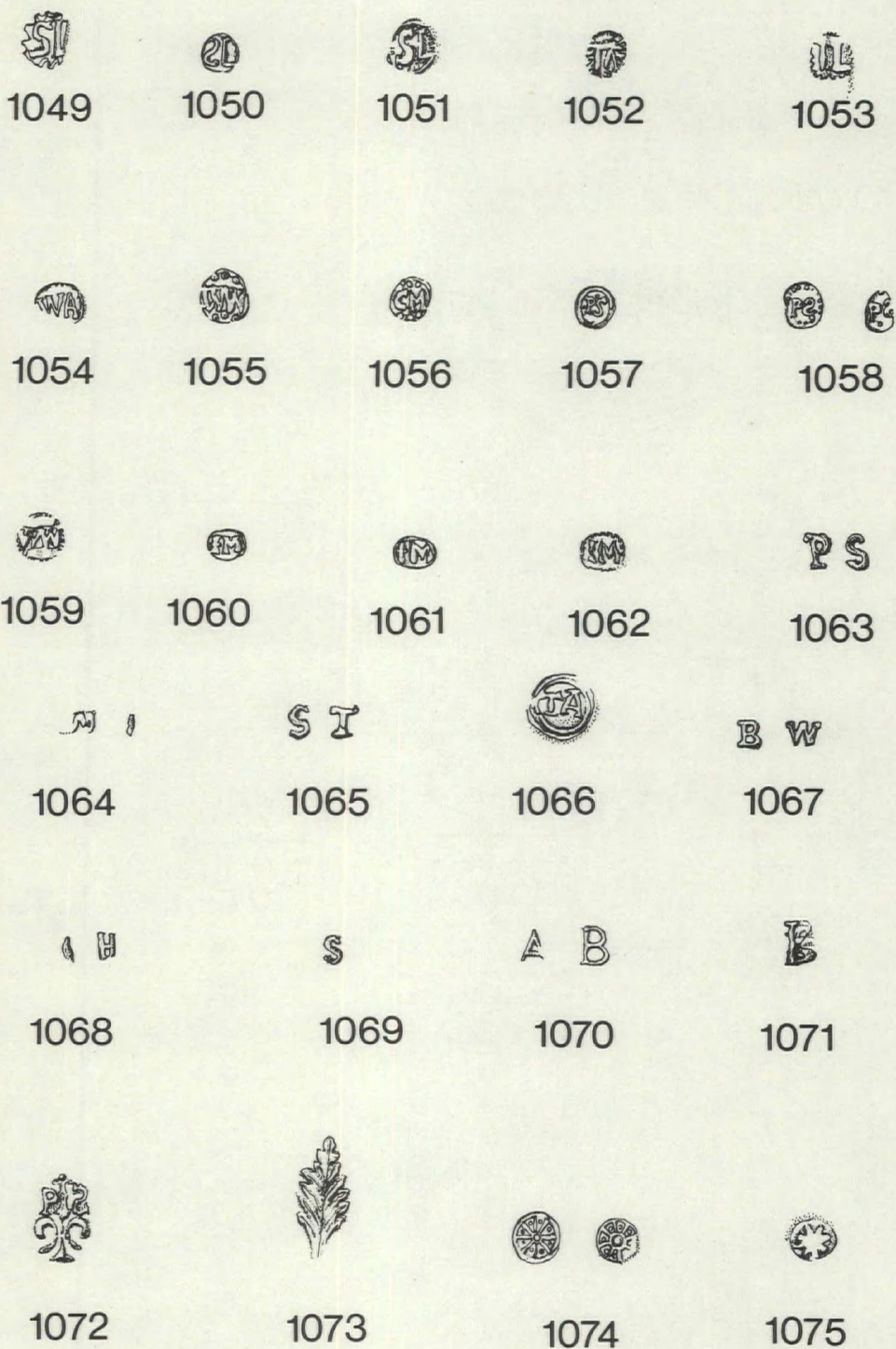


Fig 156 Clay Pipe decorated stamps and motifs, scale 1:1.

Fig 155 STAMPS, STEMS AND MOUTHPIECES

- 1037 Type R, dec 51. Foliage pattern clasping under-side of bowl, with oval stamp COVINGTON. BEDFORD on centre front. Context unknown.
- 1038 Bowl remains with stamp on centre front – JB above small coat of arms of City of London, and COW below. *BSJ74 III F14*.
- 1039 Mouthpiece. *BCS71 24 (22)*.
- 1040 Dec 8. Lightly decorated stem showing stamp S LANE and BEDFORD on either side. *1976/2/11*.
- 1041 Dec 4. Stem fragment with incised line decoration. *1976/2/519*.
- 1042 Dec 3. Stem fragment with pie-crust decoration. *1976/2/519*.
- 1043 Dec 11. Stem fragment with barley-sugar twist decoration. *1976/2/505*.
- 1044 Dec 12. Stem fragment with criss-cross decoration. *BCS73 I (7)*, *Pit B*. 17th to early 18th century.
- 1045 Dec 9. Stem fragment with dot decoration. *1976/2/74*.
- 1046 Dec 15. Stem fragment with F COVEINGTON BEDFORD stamp. *BC71 27 U/S*.
- 1047 Large stem fragment stamped – EDFORD and – LANE. *BSJ74 III F13*.
- 1048 Dec 24. Mouthpiece in shape of horse's foot, with stamp DAVID POSNER, LONDON. *BM73 (11)*.

Fig 156 DECORATED STAMPS AND MOTIFS

(Stamps occur on bowls unless otherwise stated)

- 1049 Dec 10. SL in crinkled edge stamp, ?Samuel Lane 1715 – 26. *1976/2/154*.
- 1050 Dec 6. Reversed S and L stamp in circle, ?Samuel Lane 1715 – 26. *1976/2/518*.
- 1051 Dec 20. SL in oval shape, stamp larger than 1050. *1976/2/519*.
- 1052 Dec 18. TA in oval stamp with horizontal markings around edge. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 1053 Dec 1. TL in squarish, jagged-edged stamp, ?Thomas Lane 1760 – 1785. *1976/2/507*.
- 1054 Dec 22. WA in oval stamp. ?William Arthur 1719 – 45. *BCS73 III (19)*, *Pit J*. 17th to early 18th century.
- 1055 Dec 17. WW with pattern of three dots above and below in circular stamp, ?William West c1721. *BMod74 II U/S*.
- 1056 Dec 16. CM with pattern of three dots above and below in circular stamp. Occurs in wide and narrow stamp. *1976/2/507*.
- 1057 Dec 32. PS in circle with dots above and to one side. ?Philip Sawyer 1704. *BSJ74 II (1)*.
- 1058 Dec 19. P with S reversed on oval stamp surrounded by pattern of dots. ?Philip Sawyer 1704. *BCS73 I (7)*, *Pit B*. 17th to early 18th century.
- 1059 Dec 36. MN or WW surrounded by pattern of dots in circular stamp. *BCS73 I (24)*, *Pit B*. 17th to early 18th century.
- 1060 Dec 26. IM in oval stamp, *BCS73 I (13)*, *Pit A*. 18th century.
- 1061 Dec 13. IM in oval stamp. *BC70 8 (7)*.
- 1062 Dec 5. IM in oval stamp with notched edge. *1976/2/526*.
- 1063 Dec 28. P and S stamped on either side of foot. *1976/2/519*.

- 1064 Dec 25. M and I stamped on either side of foot. *BC71 27 (6)*.
- 1065 Dec 30. S and T stamped on either side of foot. *BM73 U/S*.
- 1066 Dec 2. TA in ring, circular stamp. *1976/2/11*.
- 1067 Dec 27. B and W stamped on either side of foot. *BM73 (11)*.
- 1068 Dec 31. I and H stamped on either side of foot. *BC70 12 (13)*.
- 1069 Dec 33. S stamped on one side of foot. *BM73 U/S*.
- 1070 Dec 21. A and B stamped on either side of foot. *BCL71 22 (2)*.
- 1071 Dec 29. B stamped on one side of foot. *BM73 (22)*.
- 1072 Dec 34. Elaborate stamp with P and reversed S on top of fleur-de-lys pattern. *BSJ74 I U/S*.
- 1073 Dec 7. Leaf decoration occurring at foot of stem and under bowl c1830 – 90. *1976/2/513*.
- 1074 Dec 37. Circular cart-wheel stamp with dots. *BC71 25 U/S*.
- 1075 Dec 35. Circular rosette stamp. *BC71 25 (60)*. 17th – early 18th century.

Brick and Tile

Figs 160 – 162

INTRODUCTION

The geology of Bedfordshire is particularly suitable for brick and tile-making, since clays of various types cover much of the county. Boulder Clay predominates in the north, Lower Oxford Clay in the central vale, Gault in the east and south-west, and Clay-with-flints in the south. Around Bedford, Boulder Clay or the top callov of the Lower Oxford Clay was utilized. Both contain a high proportion of impurities generally giving mottled products with a wide range of colour.

A 4th century brick and tile kiln is known at Harrold. There then seems to be the usual gap of several centuries before the re-introduction of tile, followed by brick. The first documentation for tiles is in a description of a moated manor or house at Park Farm, Eaton Bray, in 1273. Two of the chambers and a stable block were roofed in tiles (Calendar of Inquisitiones Post Mortem No II *BHRS* XIX, 1937, 116). In 1419 Richard May, Helier (roofer or tiler) was involved with the re-roofing of Radwell manor house at Felmersham (CRO LL1/220). Bricks and tiles are not separated in Medieval references unless a specialized item was being produced. Two references to Bedford tilers who may well have been working in or near the

town towards the end of the 16th century were

- 1581 William Wildman (APW/W 1581/5), and
1597 Christopher Aborowe (APW/W 1597 –
8 8/23).

There are 16th century references to tile kilns at Ampthill, Leighton Buzzard, Riseley and Luton. In the 17th century there is tile-making at Caddington, Wootton and Sandy. Documentary evidence for brickmaking in Bedford appears in the 17th century with the will of Thomas Browne, brick-maker of Bedford, 1643 (ABP/W 1644/5/13). By the middle of the 18th century brick was established as the chief building material, and every parish which had access to clay possessed at least one brick kiln or brick yard. These often supplied all the local needs from land drains to pantiles, hand-made clay tiles, bricks and pavements.

With the demands of urban expansion and rural improvement in the mid-19th century, brickmaking in Bedfordshire became a major industry. The production of Fletton bricks for which the county is known, began in the 1890's.

It is likely that a number of kilns existed from the Medieval period onward in Bedford, but none has been found. The likeliest sources for augmenting the town supply would be the neighbouring parishes of Kempston, Ravensden and Renhold. The last brickworks to operate within the borough boundary was Franklins which closed during the Second World War (Cox, forthcoming).

BRICK AND TILE FROM BEDFORD

Brick and roof tile were recovered from all sites except 1977/2. Generally only sample or complete specimens were kept. Since very few bricks and pavements, and only a small proportion of tiles, have any complete measurable dimensions, little attempt has been made to classify them except by fabric and basic function. Although a division between brick and tile has been proposed by L.S. Harley (Harley, 1974), it was not possible to fit the Bedford material into this system. The date range is wide, including residual Roman flue tiles (1097), Medieval and Post-Medieval tiles, and mid-19th century tiles.

Since the collecting policy was broadly similar for all sites, the material has been divided up into geographical areas. These relate to similar groupings used in the pottery report, and are:

- Area 1 Bedford Castle
Area 2 Cauldwell Street
Area 3 Mill Street

- Area 4 Midland Road and sites going south to the river
Area 5 St Mary's Street and St Peter de Dunstable
Area 6 St John's Street and Rays Close

FABRICS

Sixteen fabrics were recognised, A to R, by applying criteria of inclusions, colour, texture and hardness. The division was made without the aid of magnification or thin sectioning. Subsequently these sixteen fabrics were grouped into six general types.

- 1 Mostly shell or shelly limestone, sometimes with grit.
 - A Shelly clay with no obvious other inclusions. Closely resembles pottery fabric B1.
 - C Clay with shelly limestone and hard grit inclusions. Reduced and oxidized examples.
 - 2 Sandy or smooth orange clay, often with voids and large inclusions.
 - B Sandy clay with hard grit inclusions and voids. Reduced and oxidized examples.
 - O Very smooth buff-yellow clay with voids and occasional mixed inclusions. Usually fired bright orange.
 - F Hard orange clay with small voids and large inclusions such as grog, large flint fragments and pebbles.
 - 3 This group is made from Gault Clay. They are usually greyish-yellow and smooth, but often with sandy inclusions and voids. Sometimes slightly oxidized.
 - D Very smooth buff-yellow clay with voids.
 - E As D but with a rougher texture, some grog and sand inclusions.
 - J Dense clay with fine sandy inclusions, giving a smooth appearance. Sandwich effect with a buff core and orange or pale orange surfaces.
 - M Smooth clay with some sandy inclusions, usually pale yellow-green.
 - P Very hard yellow-grey clay full of grit and sand. Sometimes oxidized slightly pink.
 - 4 Harsh sandy fabrics with quartz or pebble inclusions, and usually dark purple-brown or red.
 - K Harsh sandy fabric with limestone, quartz and pebble inclusions. Distinctive deep brown-purple colour.
 - L Hard, very sandy clay with friable outer surfaces. Dark purple-brown.
 - N As L, but extremely hard, and with very rough surfaces. Occasional large clay lumps used as temper.
 - R As K, but hard fired a deep red.
 - 5 This type is represented by a single tile.
 - H A distinctive fabric with a marked sandwich effect from a red core and black surfaces. The inclusions are hard, chiefly grit, and there is some burnishing.
 - 6 Limestone. These tiles are included for their function.
 - G Limestone slates – Colleywestons.
- Roof tiles similar to the Bedford A fabrics are known from Someries Castle near Luton and from Kensworth, and are known from about 1450. Some of those in fabric B may show wire cut marks and could perhaps be dated to the 18th century. Most of the C fabric tiles also show indications of having been hand-made. Those in F also

appear to be wire cut, and are probably 19th century from about 1840 onward. M and P are of the types produced in East Bedfordshire (Cox, forthcoming), fabrics B and C are the most common (Groups 1 and 2), with the Castle producing nearly double the quantity found at St John's.

PEG OR NAIL HOLES

Where observed, these were mostly round peg-holes or square or diamond-shaped nail-holes. Two circular peg-holes between 8 – 18mm diameter were seen on fabrics A, B, C, F and M. A single central peg-hole, or a single peg-hole set to one side of 7 – 10mm diameter was seen in G. Two square holes 15mm x 12mm were seen in B and C. Two diamond-shaped holes measuring 9mm and a pair of irregular holes were seen in B, and two triangular holes 15mm x 18mm x 21mm in fabric L. Some lugs were observed.

DECORATION

Roof tiles were usually unglazed. Of a total of 1179 tiles or fragments, 190 or 16% had some green glaze. The Castle sites produced 54 tiles altogether, including 66% of the glazed types. 1 tile only showed yellow lead glaze. Glazed tiles appeared in fabrics A, B, C, F and L.

Only 31 ridge tiles were recognized, half of which were glazed. Of three chimney pots all were in fabric A; two came from St John's (1082) and one fragment from Midland Road. The elaborate roof finial came from Mill Street (1076), and a roof ventilator from St John's (1083). These, together with the fine floor tiles from Mill Street (1077 – 1081) have already been published in full (Eames, 1974). They have therefore been reproduced here at a reduced scale and with only a basic description.

FLOOR TILES

Very few floor tiles have been found in Bedford. Apart from those illustrated they mostly appear as brick pavours between 23 and 40mm thick with dimensions of between 105 and 216mm. The majority come from the Castle and St John's and are either square or rectangular. They occur in fabrics A, B, C, E, F, H, M and N. Two examples of 14th century mosaic tile are 1088 and 1089.

BRICK

The term brick is used for blocks of fired clay substantially thicker than roof tile or pavours. Only 41 bricks were recovered, more than half of them from the Castle. The most common fabric was F, group 2, but B, E, H, J, N and R are also represented.

Fabric	Areas 1 and 3	Area 2	Area 4	Area 5	Area 6	Total
A	6	6	3	16	5	36
B	200	42	22	37	86	385
C	180	8	16	64	67	335
D	—	5	1	—	3	9
E	37	2	7	17	24	87
F	6	2	3	5	14	30
G	22	5	1	17	25	70
H	—	1	—	—	—	1
J	5	1	—	3	1	5
K	1	—	1	9	12	23
L	10	—	—	9	9	28
M	13	—	2	6	15	29
N	44	—	7	12	21	84
O	2	—	1	—	—	3
P	17	—	1	1	16	34
R	5	—	—	—	—	5
Total	547	72	65	196	198	1179

Castle and Mill Street
Cauldwell Street
Midland Road
St Mary's Street
St John's Street

Fig 157 Table of Roof Furniture fabrics

Fabric Group	Areas 1 and 3	Area 2	Area 4	Area 5	Area 6	Total
1	186	14	19	80	72	371
2	208	44	26	42	100	420
3	72	8	11	27	59	175
4	60	—	8	30	42	140
5	—	1	—	—	—	1
6	22	5	1	17	25	70
Total	548	72	65	196	298	1177

Fig 158 Table of Roof Furniture fabric groups

Fabric	Length	Width	Thickness
A	252	143	15
B	—	132 – 174	12 – 16
C	263 – 293	140 – 192	11 – 19
D E	—	—	11 – 16
F	—	140 – 176	11 – 14
G	220 – 246	135 – 204	irregular
H J K	—	—	11 – 16
L	—	—	11 – 14
M	—	153 – 172	14

Fig 159 Table of Roof Tile dimensions in mm

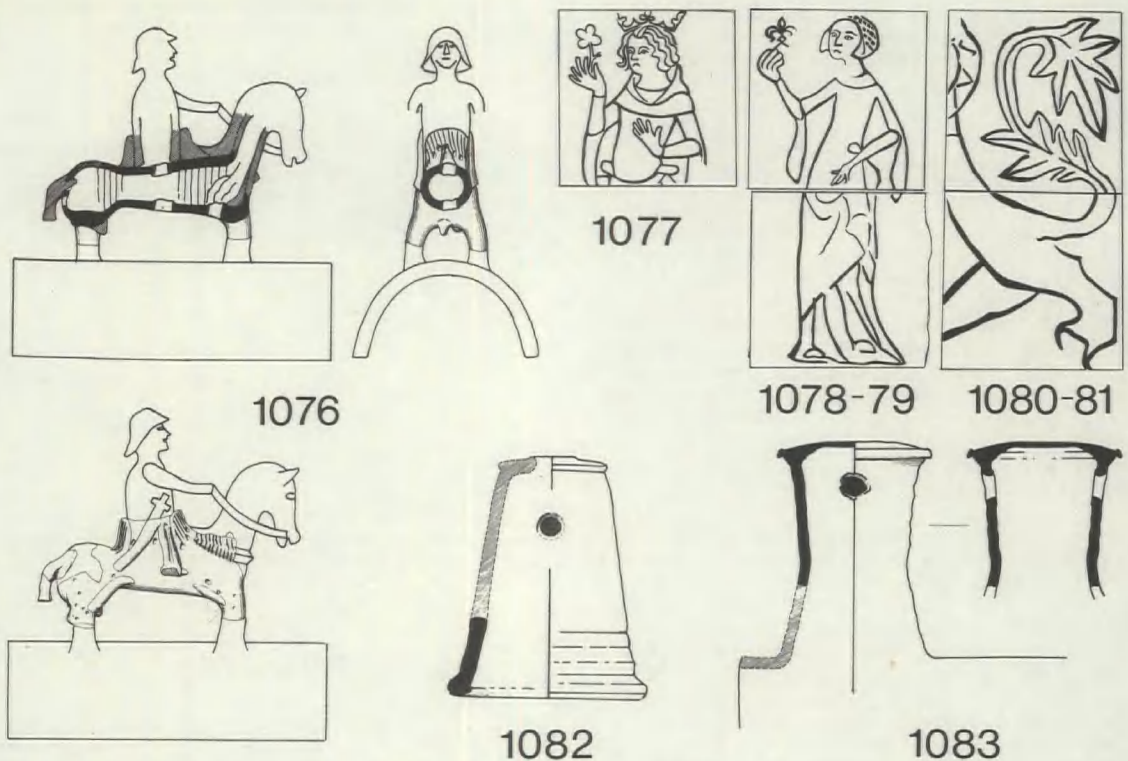


Fig 160 Roof furniture and floor tiles,
1077 – 1081 scale 1:8, 1076 scale 1:10.

Fig 160 ROOF FURNITURE AND FLOOR TILES,
1076 – 1083, 14th – 15th century.

- 1076** E : 3 fabric. Roof finial in the form of a horse and rider. c1450. *BMS71 19 (32)*. 15th – 16th century. (Dunning, 1974).
- 1077** E : 3 fabric. Floor tile showing the upper part of a king. 14th century type. *BMS71 19 (21)*. 16th – 17th century. (Eames, 1974).
- 1078** E : 3 fabric. Floor tiles showing the upper and lower parts of a lady. 14th century type. *BMS 19 (21)*. 16th – 17th century. (Eames, 1974).
- 1080** E : 3 fabric. Two-colour floor tiles showing the tail and hind quarters of a lion. 14th century type. *BMS71 19 (21)*. 16th – 17th century. (Eames, 1974; Baker, forthcoming).
- 1082** A : 1 fabric. Chimney pot. *BSJ67 6 (4)*. (Dunning, 1970B).
- 1083** A : 1 fabric. Roof ventilator. *BSJ67 6 (4)*. (Dunning, 1970B).
- 1085** M : 3 fabric. Floor tile with stabbing on back. *BSJ67 1 (9)*. Post-Medieval.
- 1086** M : 3 fabric. Floor tile, green-glazed. *BMod74 II (2)*.
- 1087** N : 4 fabric. Paviment. *BMS71 19 (21)*. 16th – 17th century.
- 1088** E : 3 fabric. Pseudo-mosaic floor tile with its surface divided to form two squares subsequently scored diagonally to form four triangles. No glaze or slip extant, but the pattern is similar to tiles from Warden Abbey. 14th century type. *BC71 25 (51)*. 17th – 18th century. (Baker, forthcoming; Eames, 1975).
- 1089** M : 3 fabric. Mosaic floor tile fragment with remains of black colour; from a roundel containing a sixfoil. Similar to those found at Meesden, Icklingham and Warden Abbey. 14th century type. (Baker, forthcoming; Keen, 1970; Keen and Thackray, 1974). *BC71 25 (51)*. 17th – 18th century.
- 1090** C : 1 fabric. Ridge tile. *BSM72 38 (30)*. 12th – 13th century.
- 1091** B : 2 fabric. Ridge tile. *BSM71 28 (28)*. Post-Medieval.
- 1092** B : 2 fabric. Ridge tile with thumbing. 1976/2/125. 14th century.
- 1093** B : 2 fabric. Ridge tile with green glaze. 1976/2/521.

Fig 161 FLOOR TILES, FLUE TILE AND ROOF FURNITURE, 1084 – 1099

- 1084** M : 3 fabric. Relief moulded floor tile, green-glazed. *BSJ67 5 (4)*. Post-Medieval. (Eames, 1970).

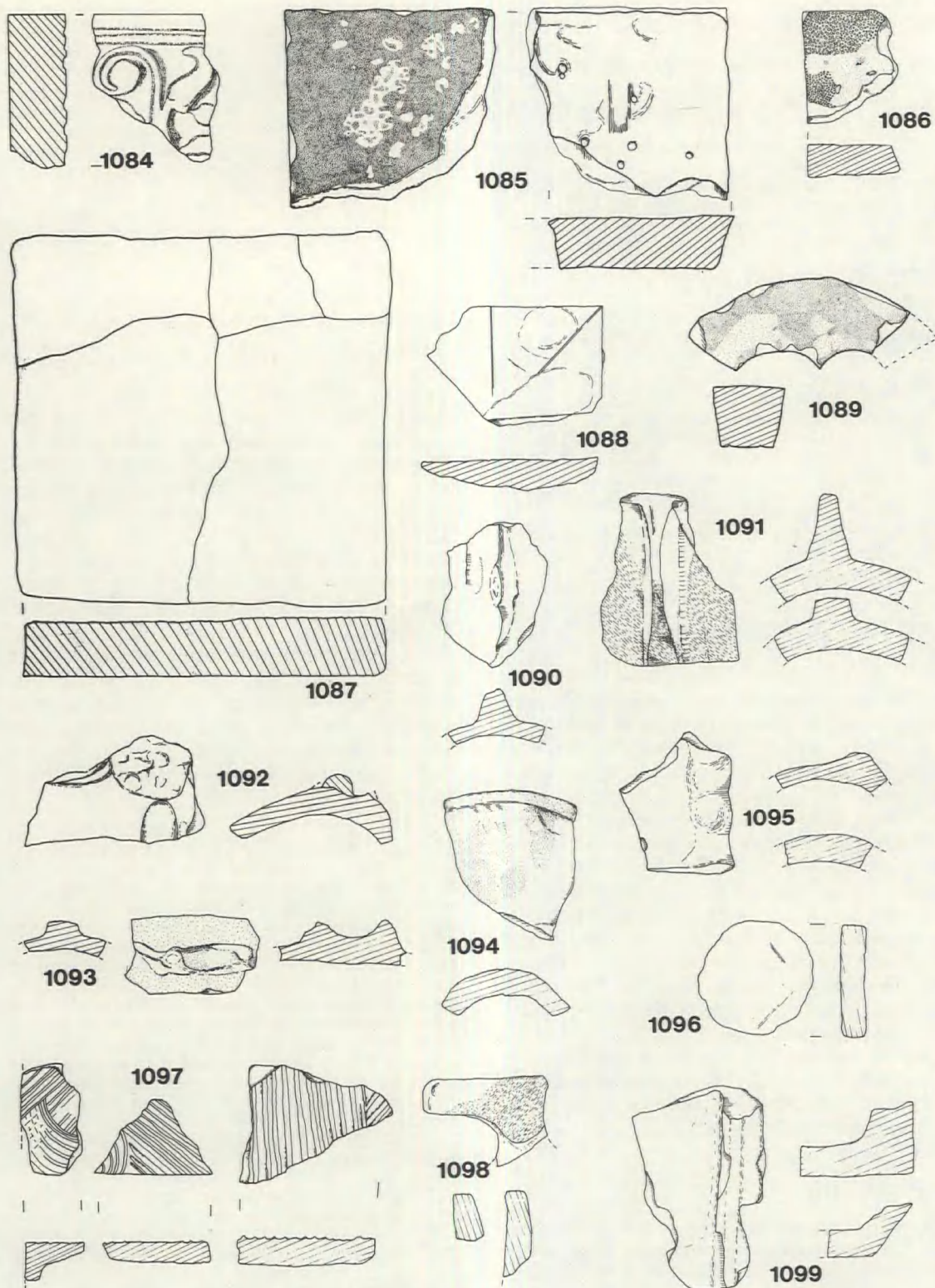


Fig 161 Floor tiles, flue tile and roof furniture, scale 1:4.

- 1094 F : 2 fabric. Ridge tile. *BC71 25 (51)*. 17th – 18th century.
 1095 C : 1 fabric. Ridge tile. *BSM71 28 (61)*. 12th – 14th century.
 1096 C : 1 fabric. Roundel cut from roof tile. *BSM72 38 (69)*. 14th – 16th century.
 1097 A : 1 fabric. Flue tile. Roman. *BCS73 I (30)*. 13th – 14th century.
 1098 B : 2 fabric. Ridge tile. *BSM72 38 (37)*. 14th – 16th century.
 1099 B : 2 fabric. Ridge tile. *BMR74 I F53*. Saxo-Norman.

Fig 162 STONE AND CLAY ROOF FURNITURE AND DAUB, 1100 – 1110

Roof Furniture, 1100 – 1106

- 1100 G : 6 fabric. Limestone roof slate. *BCS73 I (18)*, *Pit A*. 18th century.
 1101 G : 6 fabric. Limestone roof slate. *1976/2/521*.
 1102 G : 6 fabric. Limestone roof slate. *1976/2/U/S*.
 1103 E : 3 fabric. Fragment of roof tile with animal print. *BC72 48 (55)*. c1100 – c1225.
 1104 P : 3 fabric. Roof tile with projecting lug. *BMS71 19 (12)*. Post-Medieval.
 1105 B : 2 fabric. Roof tile. *BMR74 I F4*. Post-Medieval.
 1106 A : 1 fabric. Roof tile. *BCS73 I (31)*, *Pit F*. 17th century.

Daub

Fig 162

Daub was recovered from surprisingly few sites and occurred in greatest quantity at Bedford St John's 1976, particularly in Saxo-Norman contexts. For the most part it consisted of a mixture of clay and chopped straw in varying proportions. Sufficiently large lumps were found at St John's to retain the impressions of withies which formed the wattling. Dick Thomas has analysed these examples and has observed traces of very thin strips of peeled bark in a mesh-like form, and lenticels in the impressions in the daub, indicating quite clearly that the withies were of hazel (*Corylus avellana*). The stem diameter ranged from 10 – 30mm and the hazel would have been between 5 – 7 years old when gathered.

Wattle and daub must have been prime building materials in Bedford, but few examples have been recovered from structural features, most lumps coming from the rubbish pits.

Daub, 1107 – 1110

- 1107 Lump of burnt daub with wattle marks in centre, wattle impressions on both short sides, surface coarsely flattened, 144mm long. *1976/2/83*. 11th – 12th century.

- 1108 Lump of burnt daub fired red, with wattle marks, 72mm long. *1976/2/148*. 11th – 12th century.
 1109 Lump of burnt daub with wattle marks on three sides, showing wattles crossing at right angles; surface coarsely flattened with traces of lime wash, 111mm long. *1976/2/147*. 11th – 12th century.
 1110 Lump of burnt daub with wattle marks, roughly flattened surface, 114mm long. *1976/2/142*. 11th – 12th century.

Wall Plaster

Fig 163

Plaster was found in surprisingly few sites. Whereas other building material such as roof tile, brick, limestone and daub were found in substantial quantities all over Bedford, plaster with a painted surface is a rarity. Fragments with a plain white-painted face came from only 32 contexts, 25 of them from the Castle area. 6 others came from Bedford St John's, and 1 only from St Mary's. Decorated painted plaster came mostly from the Castle (11 contexts), 2 from St Mary's, and 1 from St John's.

No attempt has been made to quantify the amount of plaster. The surface area of the fragments varied widely, and the backing material, usually a coarse pebbly yellow mortar ranged from between being totally absent to about 100mm thick. A weight analysis would have given little information.

1111 shows selected plaster fragments from *BC72 54 (9)*. It is probably Post-Medieval, and represents the only plaster with painted designs other than straight lines. The pieces clearly represent an elaborate design scheme. Colours are limited but striking, being white, black, red and orange together with thin white painted over black or orange. The design components are as follows: areas of plain white, areas of solid black with some black areas having a scratched white pattern. The overall design seems to have been divided into panels by black or red lines of various widths, both vertical and horizontal. There also appears to be a trellis pattern in red. Even more elaborate are the fragments which show a freely painted curvilinear design in conjunction with straight lines, using all the colours.

Fig 163 PAINTED WALL PLASTER, 1111

- 1111 Selected pieces of painted wall plaster. *BC72 54 (9)*. Post-Medieval.

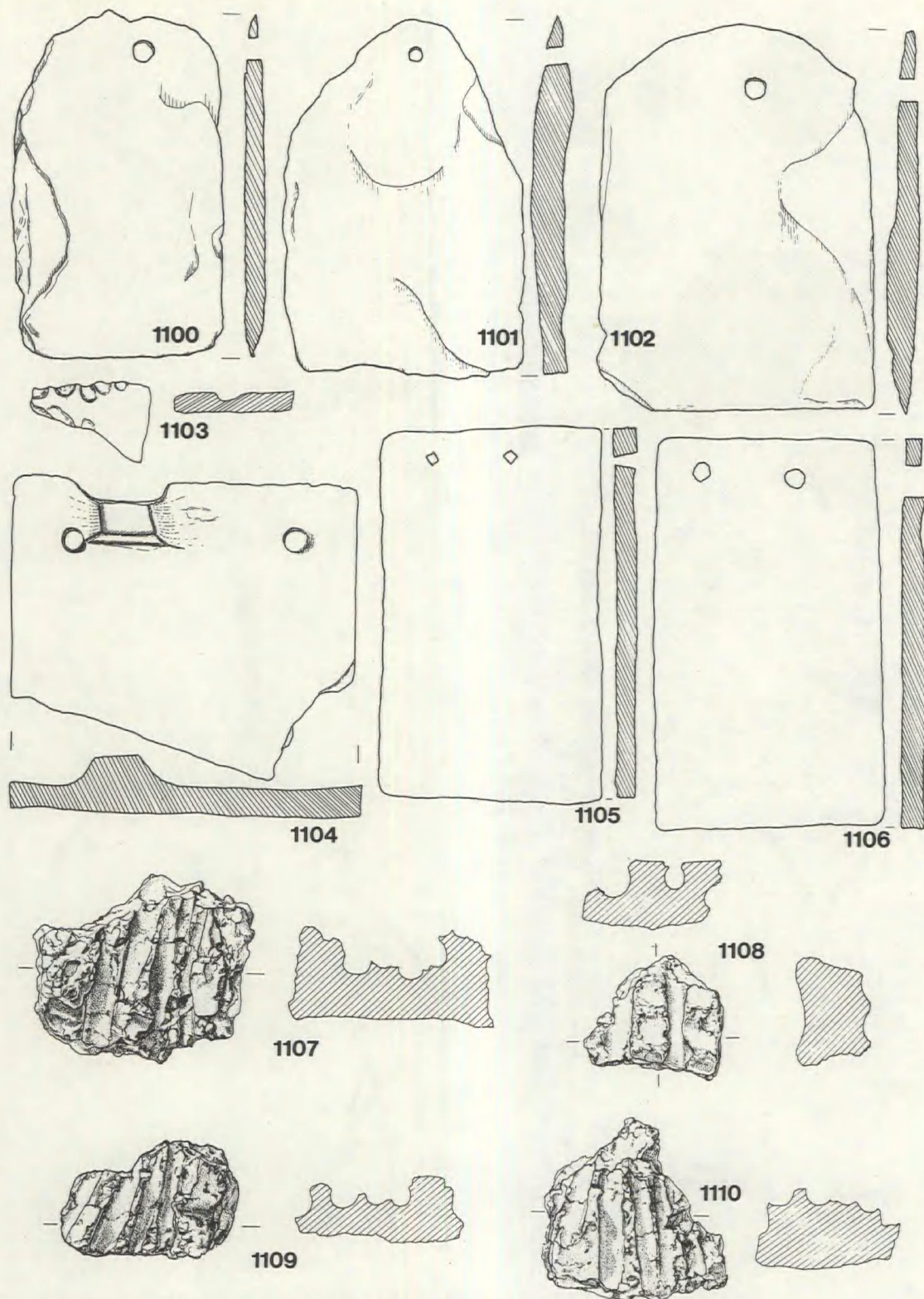


Fig 162 Stone and Clay roof tiles (1101 – 1106) and daub (1107 – 1110); scale 1:4.

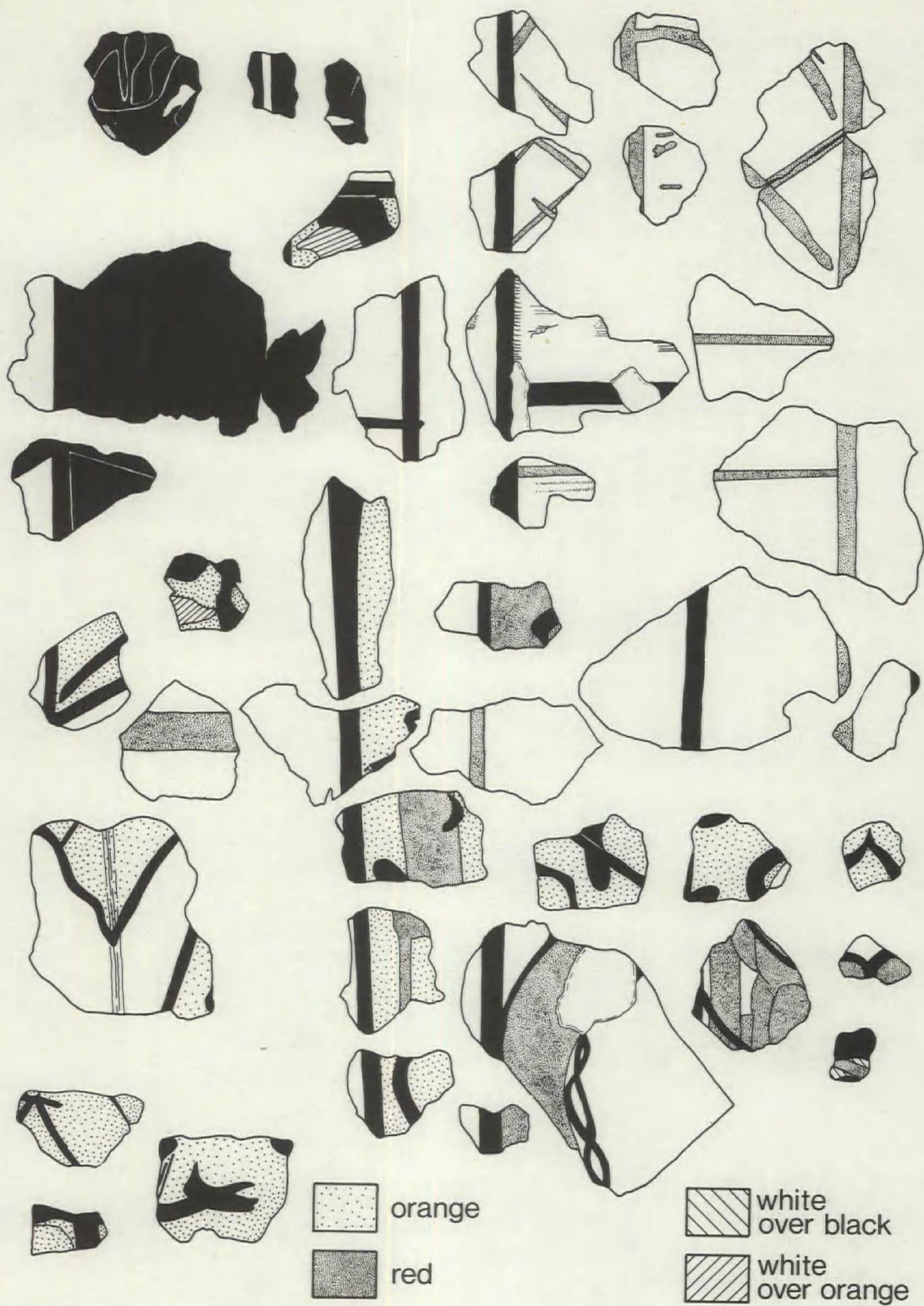


Fig 163 1111: Painted wall plaster, scale 1:2.

Architectural Fragments

Figs 164 – 166

DAVID WILKINSON

I would like to thank Mr P. Woodard, the Minerals Officer for Bedfordshire County Council, who assisted by identifying the geology of some fragments and Mr R. Bates of the Totternhoe Lime and Stone Company. Mr M. Long and Mr B. West also made useful comments.

Of the ninety-two finds of stonework from Bedford, eighty-two came from the Castle area. Many of these are architectural fragments, including forty-six pieces of limestone and eight of Totternhoe Stone. There are twenty-eight mangonel shot. All the fragments were initially given an Architectural Fragment number (abbreviated to AF). These are only used in the text when a fragment is not listed in the catalogue.

STONE SOURCES

Various sources and types of limestone are available in and around the north of Bedfordshire, and there is a source of hard chalk at Totternhoe in the south of the county. From the Great Oolite Series there is a grey-blue limestone, which has occasionally been used for building and White Limestone, which is a true Oolite from north Bedfordshire. Bedford Limestone is Cornbrash, which has been used locally for building. The best sources of stone are outside the county and include Stamford Freestone, Lincolnshire Limestone and Clipsham Stone from Leicestershire. Collyweston Limestone was used for roof tiling (AF 92). The geology of the area and the sources of building stone have been extensively described (Chatwin, 1961; Davey, 1976).

Totternhoe Stone, generally referred to as Clunch, occurs as a hard band midway in the Lower Chalk. The stone is excellent for interior and decorative work. It can be easily worked and forms fine joints, but it must be base-bedded when used externally because of its vulnerability to frost. The processes of stone extraction, together with a description of the quarry, have been thoroughly considered elsewhere (Roberts, 1974). The land journey of over twenty miles must have cost more than the initial cost of the stone.

1120 is of Millstone Grit, a hard sandstone of the north Pennines. AF 13 is ferruginous Carstone from the Greensand Series of central Bedfordshire.

TOOL MARKS

The nature of the stone and weathering processes affect the preservation of tool marks. Finishing processes also obscure earlier tool marks.

The reverse side of 1113 has tool marks formed by a pick. If these were not received at the quarrying stage, the pick must have been used at the next stage to hack away the worst of the protruding lumps. There is no evidence for the use of either a walling hammer or a saw.

Most working was carried out with a variety of chisels

which were either hammer or mallet struck. With true chisels there are two main types of working. Firstly, a relatively broad chisel is used so that when struck much of the blade is in contact with the surface of the stone. This leaves the face of the stone smooth in the direction of working and slightly undulating across it. This type of working occurred on twenty-four examples. The second method employs the chisel at a tilt so that only a fraction of the blade together with the side edge of the blade is in contact with the stone. The process imitates the use of the point. The resulting close set incisions are often nearly parallel and leave a flat, although rough, surface (AF 19, 23, 28 and 82).

Occasionally much broader bladed tools were employed such as a bolster or a claw-chisel. The bolster only leaves a slight mark while the claw-chisel forms one which is quite distinctive (1128). While claw-chisels are occasionally portrayed as having pointed teeth, the marks on the Bedford example suggest that the tool was little more than a bolster with notches filed into the blade.

A punch has been used on 1121 on an already well-finished bedding plane. Here it has been used to make rough a surface already accurately shaped, presumably to aid bonding and at the same time allow much of the mortar to remain concealed. A hammer with a small rounded head was used on 1131 and AF 48, interpreted as mangonel shot.

The point probably had a general use, but the marks only appear clearly on 1117, 1127 and AF 76. It was also used to score setting-out lines which can be divided into three main types. Firstly, lines were scored to delineate the profile, often with the aid of a template. These rarely survive since the mason usually removed them by working up to them. The second use was to score lines to construct profiles by setting out lines along ribs or fillets and centrally on bedding planes of symmetrical mouldings. Finally, there are lines scored to indicate the relative position of one stone to another, and occasionally the shape of one stone profile is marked onto the bedding plane of its neighbour (1116). Setting-out lines occur on 1112, 1113 and 1115 and AF 32 which are Totternhoe Stone and 1116, 1118 and 1123 which are limestone.

There are three fine traceried panels (1112, 1113 and 1115) and other miscellaneous mouldings. Some plain dressed building stone fragments occur, as well as some with angled sides and chamfers. Twenty-eight roughly spherical lumps of limestone have been identified as mangonel shot, which range in weight from 4.2kg to 24.8kg. They may be associated with the 1224 siege of the Castle. They were found in the ditch at the base of the motte, mostly below destruction debris.

Figs 164 – 166 ARCHITECTURAL FRAGMENTS, 1112 – 1125

Fig 164

1112 Totternhoe Stone. Block of panel tracery possibly from a tomb or altar. It has plain 'Y' tracery of the type commonly found in 14th century window designs, the form being frequently retained in panel tracery. The main arches are equilateral while the subsidiary ones are lancet. Only the central foil of the cinquefoil is pointed. BC70 16 F1. It came

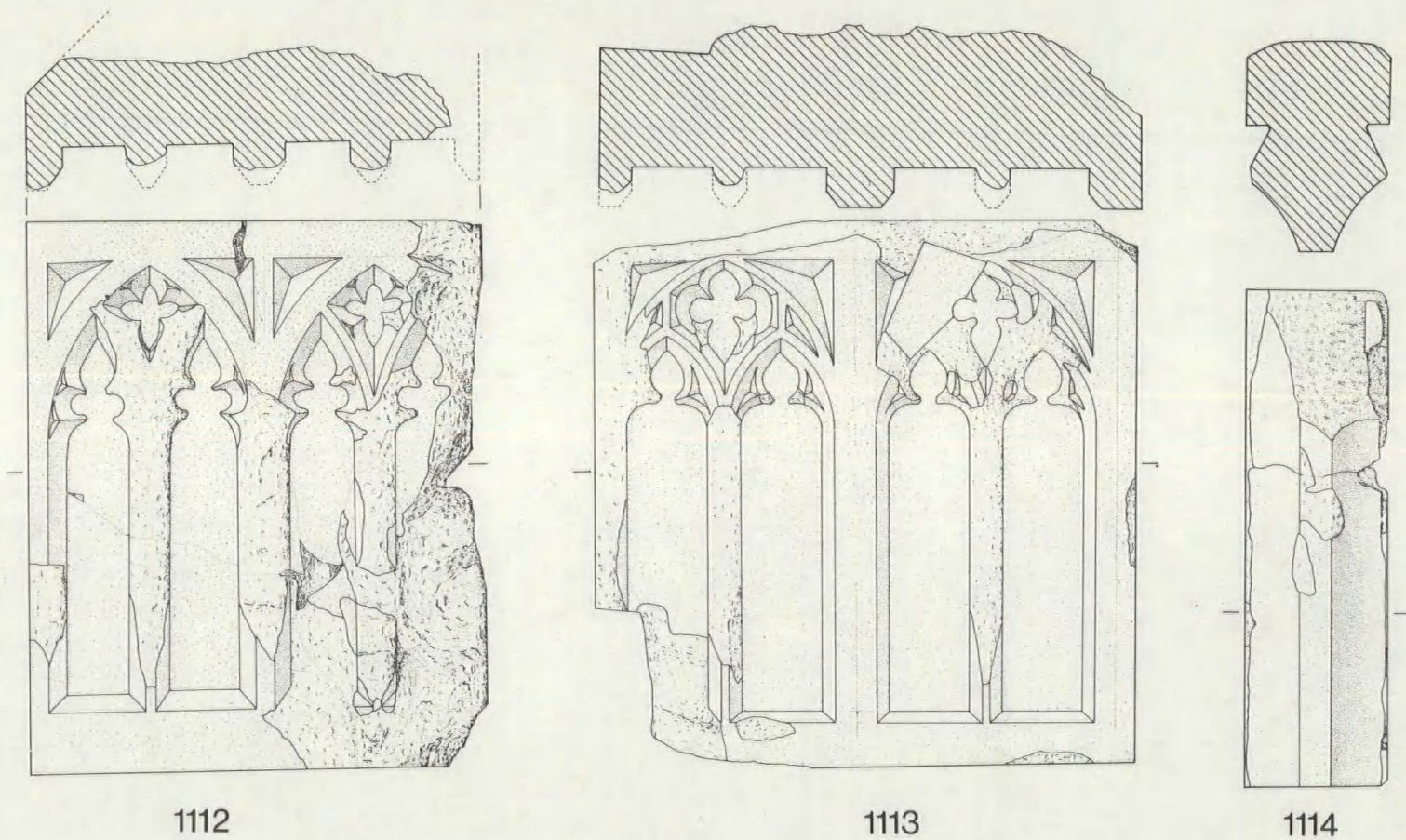


Fig 164 Architectural Fragments.

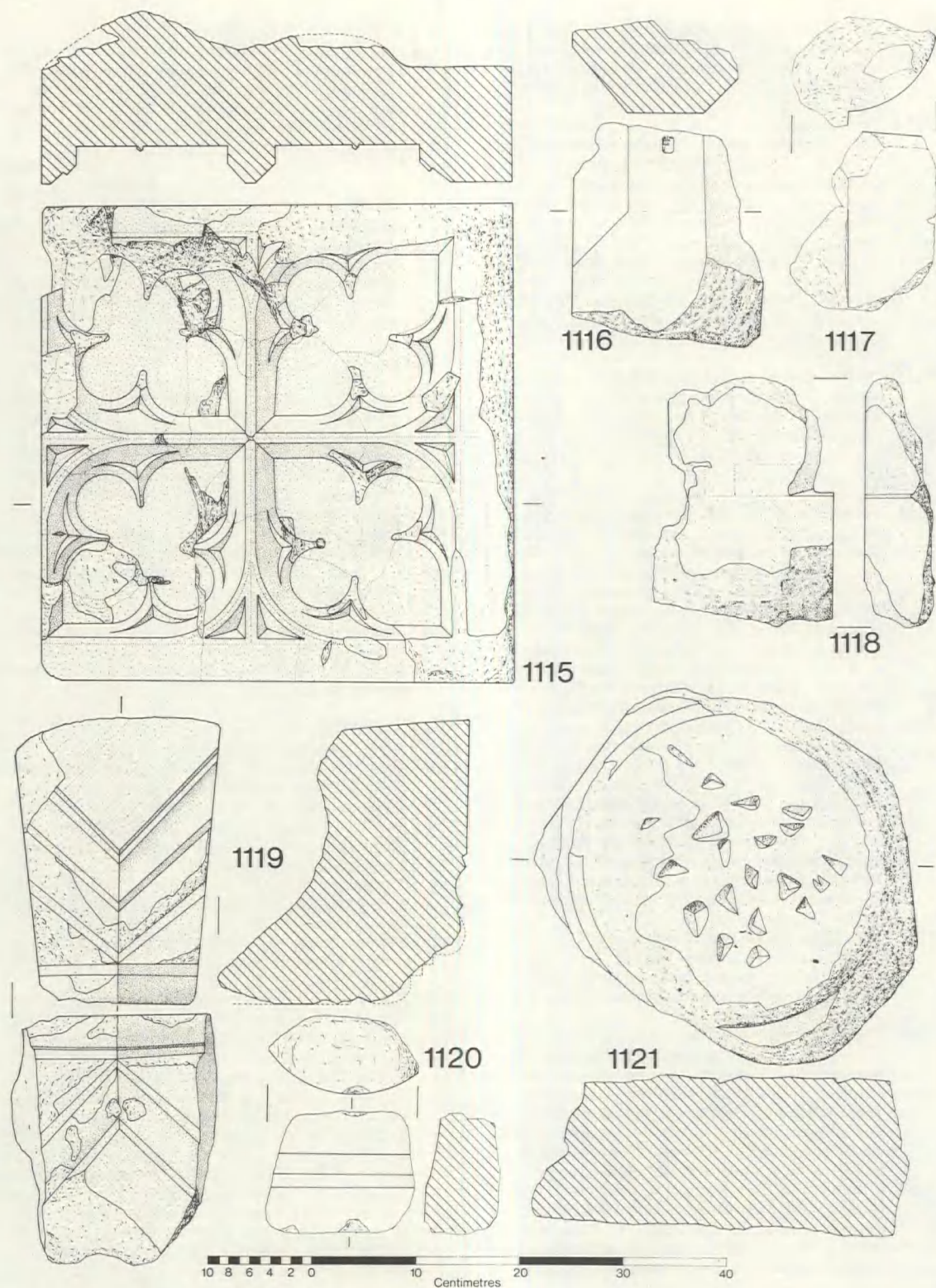


Fig 165 Architectural Fragments.

from a Post-Medieval wall footing. Its manufacture dates from 1375 to 1525 and it is very likely 15th century. The altar panelling at Enstone Church, Oxfordshire, provides a close parallel, dating to c1420 (Parker, 1850, vol 2, 37, pl 2).

- 1113 Totternhoe Stone. Block of panel tracery, possibly from a tomb or altar. All mullions/ribs have plain chamfers. The design of a main arch enclosing two subsidiary arches is duplicated. A mullion stands on the apex of the subsidiary arches running up to the main arch. The quatrefoils have two pointed and two circular foils. *BC70 16 F1*. Context as for 1112. Its manufacture dates from 1375 to 1525, but the piece is probably 15th century. It is similar in design to the traceried panelling behind the altar and reredos of the Stanbury Chantry Chapel at Hereford Cathedral of c1480 (Burrows, 1971, 13).

- 1114 Jurassic limestone. Part of an attached vertical shaft, possibly from a screen pinnacle or a plain wall mullion. Most likely later than 1300. *BC72 55 (68)*. Post-Medieval.

Fig 165

- 1115 Totternhoe Stone. Near square block with a square design of panel tracery, possibly from a tomb or altar. Each of the four sub-squares contains a quatrefoil. Such quatrefoils are common, but usually all four foils are either circular or pointed. A similar panel presumably adjoined at the side which has no border. *BC70 16 F1*. Context as for 1112. Its manufacture dates to the period 1375 to 1525. The same design can be seen in the Turret window in the west tower of St Peter's Church, Norwich (Brandon J and R 1903, Perpendicular pl 22).

- 1116 Shelly limestone. Chamfered window jamb or mullion. A setting-out line indicates that it extended below as well as above the level of the sill. The recessed slope was probably the interior. Without the chamfers the mullion is nearly square in section, and there is a square hole for a bar or rod. *BC71 25 (17)*. From the initial stone rubble fill of the inner bailey castle ditch, deposited c1224. Possibly 14th or 15th century, but the proportions are those more usually found in late 13th century pieces.

- 1117 Totternhoe Stone. An attached round moulding, diameter 180mm, possibly part of a pier. *1976/2/521*. From a mixed Medieval spread. Similar forms occur commonly in the late Romanesque as well as in the Gothic styles.

- 1118 Shelly limestone. A block with a roughly disc-shaped protrusion. The protruding disc has a chamfered profile and may be a semi-circular pedestal in a corner for a statue or other erect ornament. There are four, possibly five, setting-out lines. The dressed area outside the four main setting-out lines would have been bedded into the two wall faces. *BC71 25 (17)*. Context as for 1116.

- 1119 Totternhoe Stone. Norman voussoir with typical chevron or zig-zag decoration which is duplicated on the soffit plane. The radius of the arch is between 550 and 700mm. Since the arch was almost certainly semi-circular the distance between the

jambes will be up to twice the radius of the arc formed by the voussoir. Because there may have been an inner order, 1.40m is only a maximum distance for the width of the opening, which may have been a door or window. *BC72 48 (30)*. From a 13th century destruction layer in the motte ditch. Manufactured in the second half of the 12th century.

- 1120 Maroon millstone grit. Fragment of column base with a maximum diameter of 206mm, with a shallow moulding. *BCS71 24 (20)*.

- 1121 Ferruginous limestone. A column base combined with a near rectangular block. The profile of the base is composed of a shallow circular roll and a chamfer. The well-finished bedding plane has been punched. *BC70 16 F1*. From a Post-Medieval wall footing.

Fig 166

- 1122 Jurassic limestone. Well-dressed fragment with recessed 15° splay. *BC72 55 (23)*. Reused in a stone drain. Medieval.

- 1123 Jurassic limestone. A plain block with an irregular rebate at the corner. Two setting-out lines indicate that the piece was not complicated. *BC71 25 (17)*. Context as for 1116.

- 1124 Blue-grey lava stone which was probably imported from Germany. Part of a rotary quern which may have been worked with a hammer. Two other fragments, AF 88 and 89 are likely to have come from the same quern. *BSJ71 30 (14)*.

- 1125 Totternhoe Stone. A slightly curved member of roughly rectangular section with a small chamfer. *BC70 15 (12A)*. From an area of limestone within a Medieval occupation level.

NOT ILLUSTRATED

- 1126 Shelly limestone. Fragment of a circular shaft, diameter 202mm, which is large enough to have been either freestanding or a central column with surrounding detached shafts. *BC70 6 (23)*. Probably associated with Castle demolition. Presumably Early English or Norman.

- 1127 Totternhoe Stone. A slightly curved member with a branching arm and small chamfer. *BC70 15 (12A)*. Context as for 1125.

- 1128 Jurassic limestone. A well formed block, 80mm wide, with an oblique end face. *BC71 25 U/S*. Unstratified.

- 1129 Jurassic limestone. A regular block with a wedge-shaped section, possibly a voussoir. *BC72 48 (30)*. From a 13th century destruction layer on the motte.

- 1130 Jurassic limestone. Part of a block with a 90° corner. The sides are recessed at 160mm from the corner so that it is formed by a protruding square block. The corner also has a 55mm wide chamfer with a plain angled termination. As one side has been burnt the fragment may be the jamb of a fireplace opening. *BC72 55 (23)*. Context as for 1122.

- 1131 Jurassic limestone. A near spherical lump of stone worked with a hammer over much of its surface. It was probably used as mangonel shot. *BC72 48 (101)*. From a 13th century destruction layer in the motte ditch.

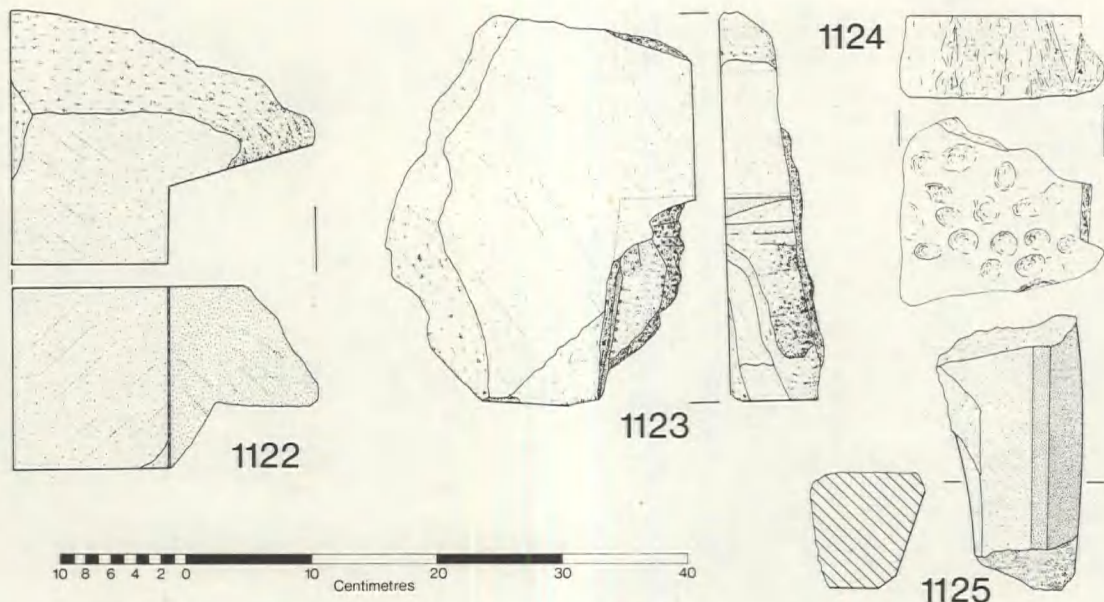


Fig 166 Architectural Fragments.

Objects of Stone

Figs 167, 168

The stone artefacts illustrated in the two figures represent the usual range of Medieval and later types. Whetstones and grinding stones have been the most frequent finds and these are made chiefly of sandstone or siltstone. The Millstone Grit deposits of the Pennines may well have been the source of raw material for these objects. An alternative possibility is the area of the Midlands Coalfield around Nuneaton, which is a little closer to Bedford. Whatever the source, the objects are likely to have been imported ready made. No working areas have been found to suggest they were made in Bedford from imported unworked stone.

The fragment 1140, made of ferruginous limestone could have come from the Banbury area or Northamptonshire.

The lava quernstone fragments 1148 and 1150 will have come from the Rhineland where a flourishing export trade in such items was in operation across Europe from the Saxon period through to late Medieval times (Platt and Coleman-Smith, 1975, Vol 1, 35).

The spindle-whorls or weights are made mainly from chalk known as Totternhoe stone or clunch

coming from the South Bedfordshire quarries. The strange chalk object 1154 could have come from the outcrop of Gade Valley, Hemel Hempstead. 1151, 1154 and 1155 are all made from Purbeck limestone and originated from the Purbeck Beds of Dorset.

Mr C. Maybrey, Department of Geography, Bedford College of Higher Education, very kindly undertook the identification of the stone.

Fig 167 OBJECTS OF STONE, 1132 – 1150

Whetstones

- 1132 Sandstone, both ends broken, remaining length 100mm. *BMS71 19 (31)*. Post-Medieval.
- 1133 Siltstone, extremely smooth, both ends broken, remaining length 100mm. *BSM72 28 (168)*. Saxo-Norman.
- 1134 Sandstone, coarse surfaces, one end broken, remaining length 110mm. *BCL71 22 (10)*. Late Medieval – early Post-Medieval.
- 1135 Calcareous siltstone, smooth, one end broken, remaining length 104mm. *BC70 5 (41)*. 12th – 13th century.
- 1136 Calcareous siltstone, virtually complete, showing signs of wear, 100mm long. *BC70 6 (34)*. 12th – 13th century.
- 1137 Siltstone, one end broken, remaining length 78mm. *1976/2/519*. Probably 14th century.

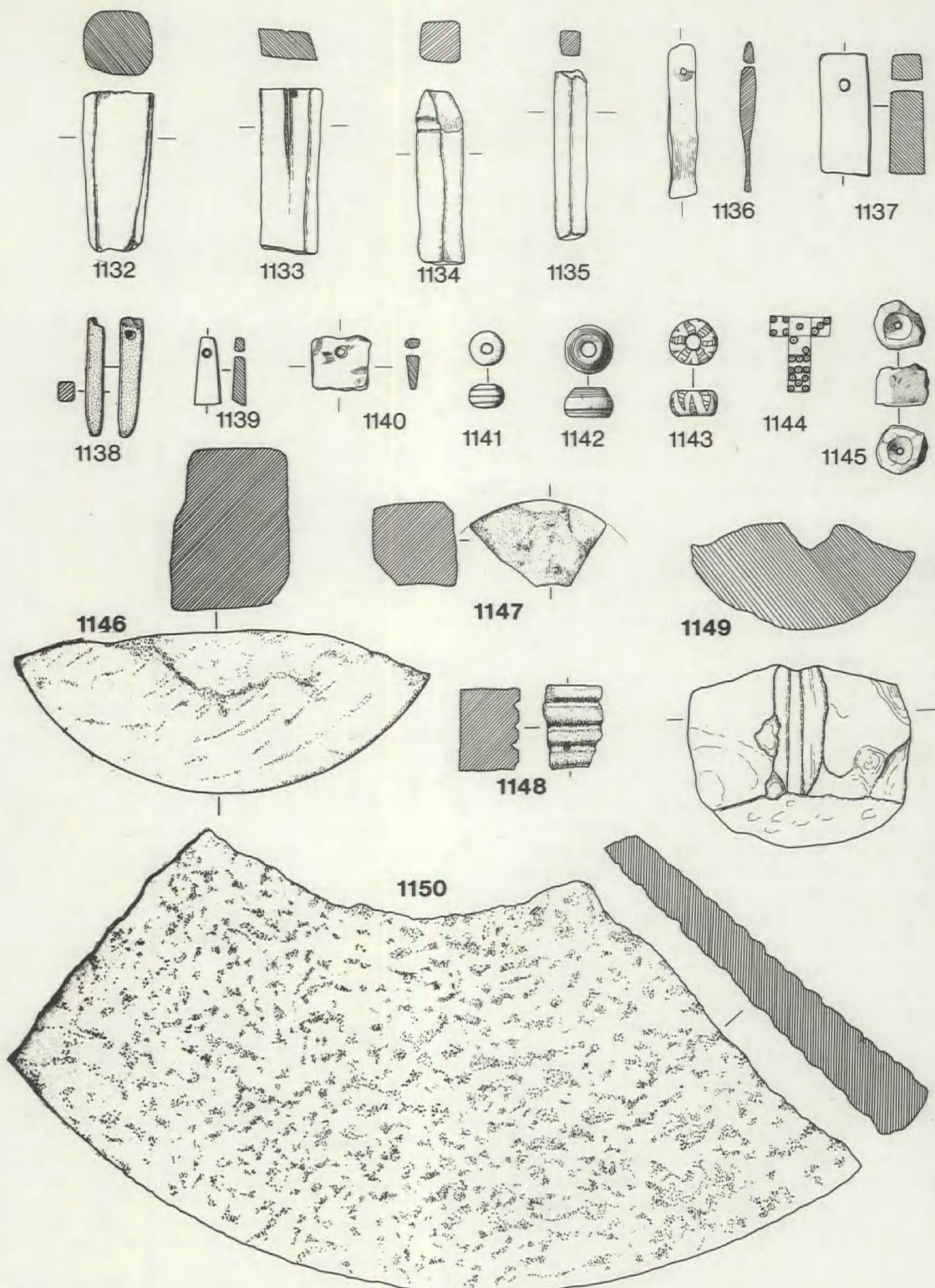


Fig 167 Objects of Stone, scale 1:4, except 1144, scale 1:2.

- 1138 Calcareous siltstone, virtually complete, 75mm long. *BC70 5 (53A)*. Probably 12th – 13th century.
 1139 Limestone, probably bituminous, top half only, 44mm long. *1976/2/529*. Probably 14th century.
 1140 Ferruginous limestone, top half only, 34mm long. *BC70 15 (16)*. Probably early Middle Saxon.

Spindle-Whorls or Weights

- 1141 Chalk, 22mm diameter. *BSM72 38 (57)*. Probably 13th century.
 1142 Chalk, 30mm diameter. *BSM72 23 (6)*. 12th – 14th century.
 1143 Chalk, 30mm diameter. *BSM72 23 (77)*. 12th – 14th century. (Clarke and Carter, 1977, fig 144, no 4).
 1144 Die, chalk, 7mm each side. *BSJ74 II (10)*. Probably 17th century. (Platt, 1975, fig 249, no 1945).
 1145 Chalk, 22mm long. *BC70 5 (51A)*. Medieval.

Grinding Stones

- 1146 Sandstone, smooth surface on flat side indicates position of square central hole. Estimated diameter 330mm. *BSJ74 I U/5*.
 1147 Sandstone, traces of central hole, estimated diameter 140mm. *1976/2/106*. 11th – 12th century.
 1148 Basalt lava fragment, 52mm x 36mm. *BSJ74 II F63*. Medieval.
 1149 Sandstone, square central hole, estimated diameter 150mm, depth 83mm. Traces of iron in centre. *1976/2/16*. Post-Medieval.
 1150 Basalt lava segment, estimated diameter 700mm, thickness varies from 15mm to 30mm. *1976/2/524*. Medieval.

Fig 168 OBJECTS OF STONE, 1151 – 1155

- 1151 Purbeck limestone, fragment of mortar, 125mm x 75mm. *BC71 25 (69)*. c1100 – c1225.
 1152 Limestone, decorated rectangular block, 120mm long. *BSJ74 I F124*. Post Medieval.
 1153 Purbeck limestone, circular block, with one side smoothed and the other showing tool marks. 95mm diameter. Traces of plaster and red paint on sides. *BSM71 28 (28)*. 12th – 14th century.
 1154 Chalk, possibly Melborne rock, irregular polygonal object. *BSJ74 I (60)*. 12th – 13th century.
 1155 Purbeck limestone mortar, surviving height 70mm, diameter 285mm. *BSJ67 4 (6)*. Post-Medieval. (Baker, 1970, 93, fig 13B).

Flint not illustrated by P.J. WOODWARD

All the knapped flint material from Bedford was recovered from Medieval contexts. The sample recovered was too small (29 in all) to be of any great statistical significance when analysed in detail, and there were no characteristics which could place any of the material within a specific knapping tradition or period. However there were some

points from a detailed analysis worth noting:

- 1 About 64% of the material had some cortex.
- 2 About 20% of the material was patinated.
- 3 The quality and colour of the material varied greatly. A colour range from buff to blue-grey was noted.
- 4 There was no preferred flake size.
- 5 There was a high percentage of re-touched material – about 60%, four scraper tools, and one as a fabricator for knapping.
- 6 There was a single core for manufacturing blades (2 platforms at 180°).

Characteristics 1 – 3 are typical of knapped flint recovered from the gravel terrace of the River Great Ouse, which suggests that the material was obtained and knapped in the locality (Woodward, 1978). Re-touched flakes, scraper tools, and a core were a very high percentage of the total assemblage, but could have originated in any period from Prehistoric to Medieval. However, the manufacture of these crude tools and the use of waste flakes within a Medieval urban context does not seem likely, and also the vast majority of this type of material found on the gravel terrace has a pre-historic origin.

It is therefore suggested that the majority of the Bedford material is residual from a period at least prior to the Medieval. This group of material compares well with one from Elstow where some of it was also recovered from Medieval (though not urban) contexts, and could be considered to be residual (Woodward, 1977).

Vessel Glass

Figs 169 – 171

The bulk of the glass vessels dates from the Post-Medieval period, with only one item, 1265, definitely bearing a Medieval date.

A range of wine bottles is illustrated, beginning with a group of late 16th to early 17th century date, 1171 – 1178, (Charleston, 1969, fig 31, nos 5 – 7). This is followed by the late 17th – early 18th century type of 1156 – 1170 (Moorhouse, 1971, fig 29, nos 37 – 40) and the late 18th century bottles of fig 171, 1181 – 1187, (Barton, 1969, fig 70, no 78). Early 19th century types are represented by 1188 and 1189 (Ashurst, 1970, fig 34, no 3), developing into the later machine-made form, 1190. Inconsistent sampling would invalidate any quantitative analysis of this development in bottle types, though there is a marked increase in

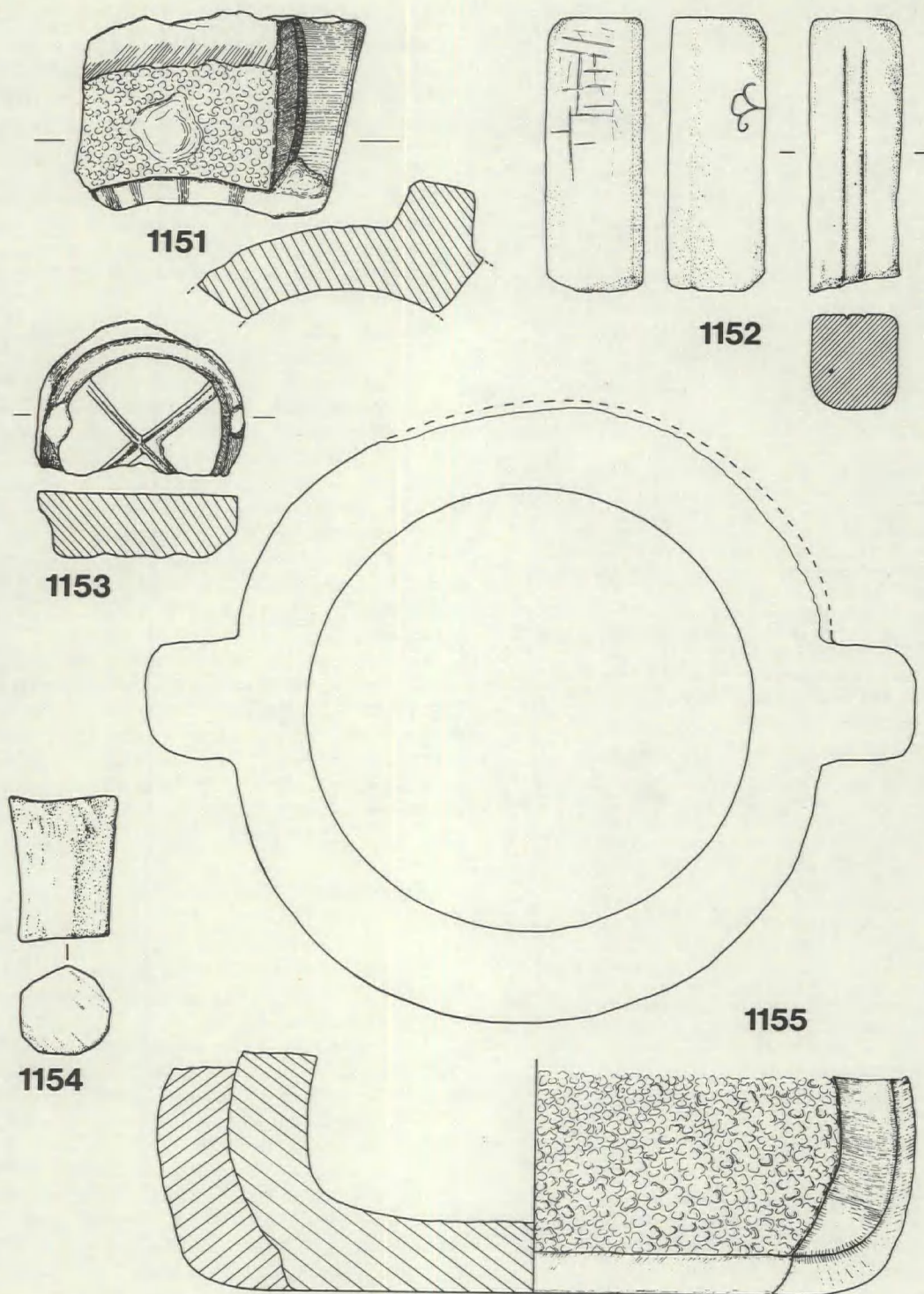


Fig 168 Objects of Stone, scale 1:3.

the quantity of vessels from the late 17th – early 18th century onwards. The two elongated necks 1179, 1180 are presumed to be imports of the late 17th or early 18th century (Charleston, 1976, fig 225, nos 1607 and 1608).

The small bottles and phials, 1194 – 1227, came from all contexts from the 17th century onwards, and are difficult to date typologically except in very broad terms. The rounded forms with flat rims, eg 1198, 1199, 1203, 1204 and 1206, would not be out of place in 18th century contexts (Barton, 1969, fig 70, nos 83 – 85) while the more regular angular vessels, 1221 – 1227, are of at least 19th century date.

The wine glasses (1237 – 1249) are of varied forms, and are in most cases assigned dates only from their contexts.

The distribution of different types within the town does not throw up any points of particular interest, other than that a few sites produced large quantities of certain forms. For example, many of the small bottles or phials came from Midland Road sites, and a large group of late 17th – early 18th century wine bottles was found within pits in Cauldwell Street.

At an early stage in the processing of the glass, a number of types were defined, and each identifiable fragment was classified. The types have been rearranged for the purposes of the published illustrations and catalogue, but type numbers have been quoted to facilitate any further archival research.

Fig 169 BOTTLES, 1156 – 1180

- 1156 Complete bottle, in dark green, slightly bubbled glass. Type 58. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 1157 Near complete bottle in mid-green thin glass, bubbled, with slightly twisted neck. Type 58. *BC71 25 U/S*.
- 1158 Bottle in dark green, slightly bubbled glass. Seal with reversed S and W over three dots. Type 58. *1976/2/510*.
- 1159 Dark green kick, slightly bubbled. Type 60. *BC70 8 (10)*.
- 1160 Neck of bottle in mid-green glass. Type 58. *BMR71 I (36)*. Probably 17th century.
- 1161 Neck of bottle in mid-green glass. Type 58. *BCS73 III (11) F1*, *Pit J*. 17th to early 18th century.
- 1162 Neck and shoulder of bottle in clear glass. Type 17. *BC70 13A*.
- 1163 Rim of bottle in clear glass. Type 18. *BSJ74 I F17*. Probably 17th century.
- 1164 Small kick in pale green, slightly bubbled glass. Type 58. *BSJ74 II F77*.
- 1165 Kick in mid-green, highly bubbled glass. Type 58. *BC70 13A*.

- 1166 Kick in mid-green, bubbled glass. Type 58. *BC70 13A*.
- 1167 Kick in mid-green, slightly bubbled glass. Type 58. *BCS73 III (23)*, *Pit K*. 17th to early 18th century.
- 1168 Heavy base with slight kick in mid-green bubbled glass. Type 61. Possibly a mid-16th century type (Moorhouse, 1971, fig 29, no 36). *BCS73 I (11)*.
- 1169 Pronounced kick from small vessel in dark green glass. Type 29. *BC71 27 (11)*.
- 1170 Pronounced kick from small vessel in pale green glass. Type 29. *BSJ74 II (11)*.
- 1171 Neck of bottle in pale green, heavily corroded glass. Type 72. *BC72 55 (9)*.
- 1172 Neck and shoulder of bottle in pale green corroded glass. Type 72. *BCS73 I (31)*, *Pit F*. 17th century.
- 1173 Neck and shoulder of bottle in pale green, slightly bubbled glass. Type 72. *BCS73 I (31)*, *Pit F*. 17th century.
- 1174 Neck and shoulder of bottle in pale green, slightly bubbled glass. Type 72. *BC72 55 (9)*.
- 1175 Neck of bottle in pale green glass. Type 72. *BC72 55 (9)*.
- 1176 Base with indications of kick in pale green, slightly bubbled glass. Type 72. *BCS73 I (21)*, *Pit F*. 17th century.
- 1177 Base with slight kick in pale green, slightly bubbled glass. Type 72. *BCS73 I (21)*, *Pit F*. 17th century.
- 1178 Square base in pale green, slightly bubbled glass. Type 72. *BCS73 I (31)*, *Pit F*. 17th century.
- 1179 Long, slightly flaring neck in pale blue-green glass with small elongated bubbles. Type 62. *BCS73 I (7)*, *Pit B*. 17th to early 18th century.
- 1180 Long straight neck with slight ribbing, in pale green glass. Type 62. *BCS73 I (11)*.

Fig 170 BOTTLES AND PHIALS, 1181 – 1227

- 1181 Complete bottle in mid-green glass, slightly bubbled. Type 64. *BMR73 U/S*.
- 1182 Neck and shoulder in mid-green, bubbled glass. Type 64. *BMod II (6)*.
- 1183 Rim of bottle in clear glass. Type 20. *BMR74 I (21)*.
- 1184 Base with pronounced kick, mid-green. Type 67. *BSJ74 II (11)*.
- 1185 Base with pronounced kick in mid-green, slightly bubbled glass. Type 64. *BMod II (6)*.
- 1186 Base in dark greenish-brown glass. Type 66. *1976/2/505*.
- 1187 Base with pronounced kick in mid-green glass. Type 67. *1976/2/505*.
- 1188 Complete bottle in very pale green, slightly bubbled glass. Type 68A. *1976/2/503*.
- 1189 Nearly complete bottle in very pale green, slightly bubbled glass. Type 68A. *BSJ74 II F53*. Probably 18th century.
- 1190 Dark greenish-brown bottle, with IMPERIAL PIINT mark. Type 65. A type developed in the second quarter of the 19th century (Ashurst, 1970, fig 36, no 23). *1976/2/505*.
- 1191 Octagonal base in pale green, slightly bubbled glass. Type 94A. *BCS71 24 (13)*.
- 1192 Fragment of hexagonal base in pale green glass with striations and some bubbles. Type 94B. *BCS73 I (21) (31)*, *Pit F*. 17th century.

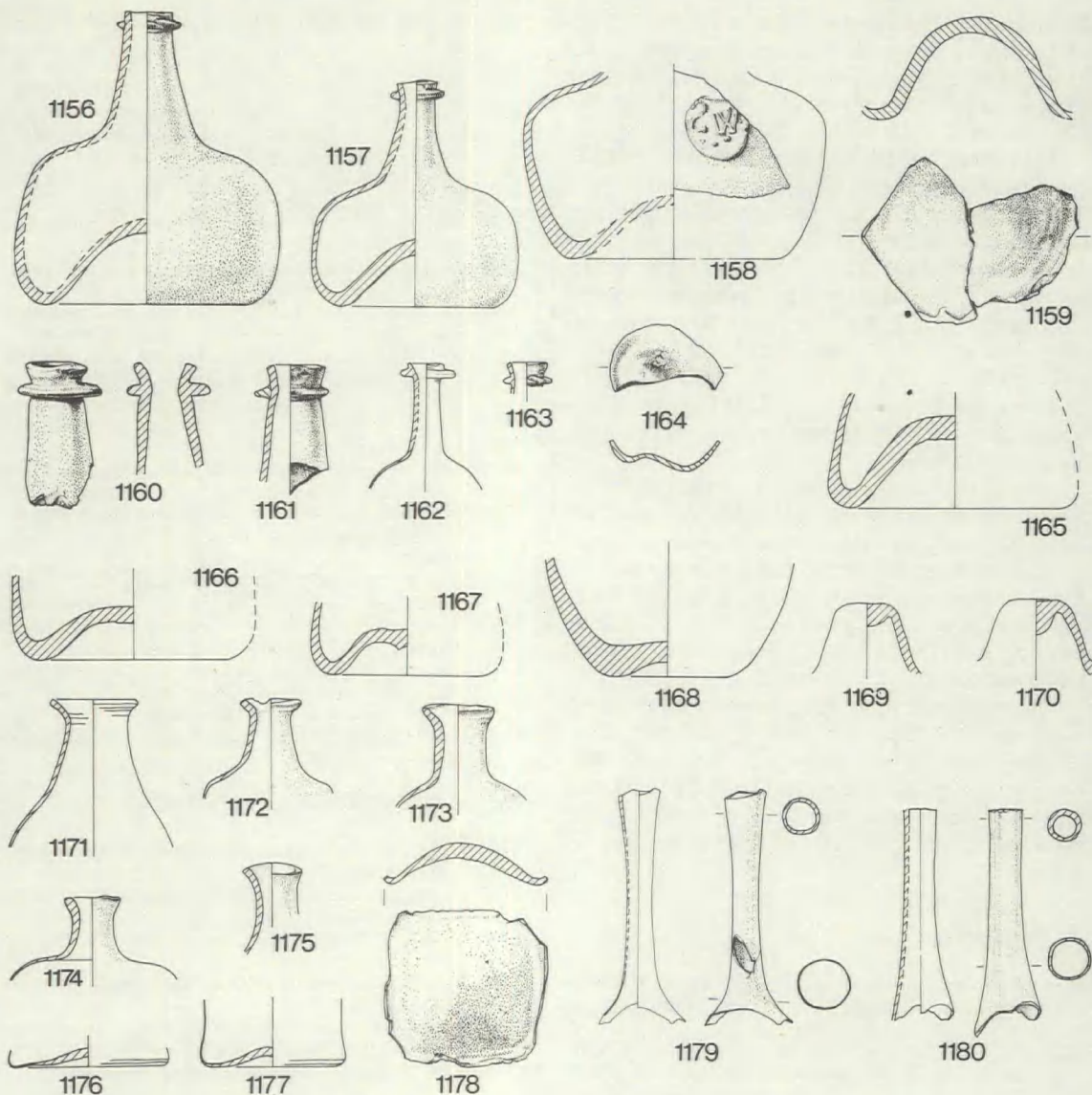


Fig 169 Glass bottles, scale 1:4.

- 1193 Square base with pipe scar in mid-green glass. Type 69. *BC70* 15 2A.
- 1194 Base of phial in mid-green, highly bubbled glass. Type 31. *BC70* 15 6A.
- 1195 Phial in clear glass. Type 13. *BC70* 13A.
- 1196 Base of phial with pronounced kick in pale green glass. Type 28. *BMod74* U/S.
- 1197 Base of phial in pale green glass. Type 28. *BC71* 27 (3).
- 1198 Neck and shoulder of phial in pale green, slightly bubbled glass. Type 21. *BCS73* I (21), *Pit F.* 17th century.
- 1199 Neck and shoulder of phial in pale blue glass. Type 21. *BC70* 16 (2).
- 1200 Neck and shoulder of phial in pale green, slightly wrythern. Type 22. *BC70* 13A.
- 1201 Neck of phial or small bottle in pale blue glass. Type 25. *BC72* 37 (27).
- 1202 Neck of phial in clear glass. Type 25. 1976/2/505.
- 1203 Phial in clear, slightly bubbled glass. Type 25. 1976/2/505.
- 1204 Phial in pale green, slightly bubbled glass. Type 24. *BMR74* I F6.
- 1205 Neck of phial with sheared rim in pale green, slightly bubbled glass. Type 19. *BCS71* 24 (43).
- 1206 Phial in pale green, bubbled glass. Type 23. *BC70* 13A.

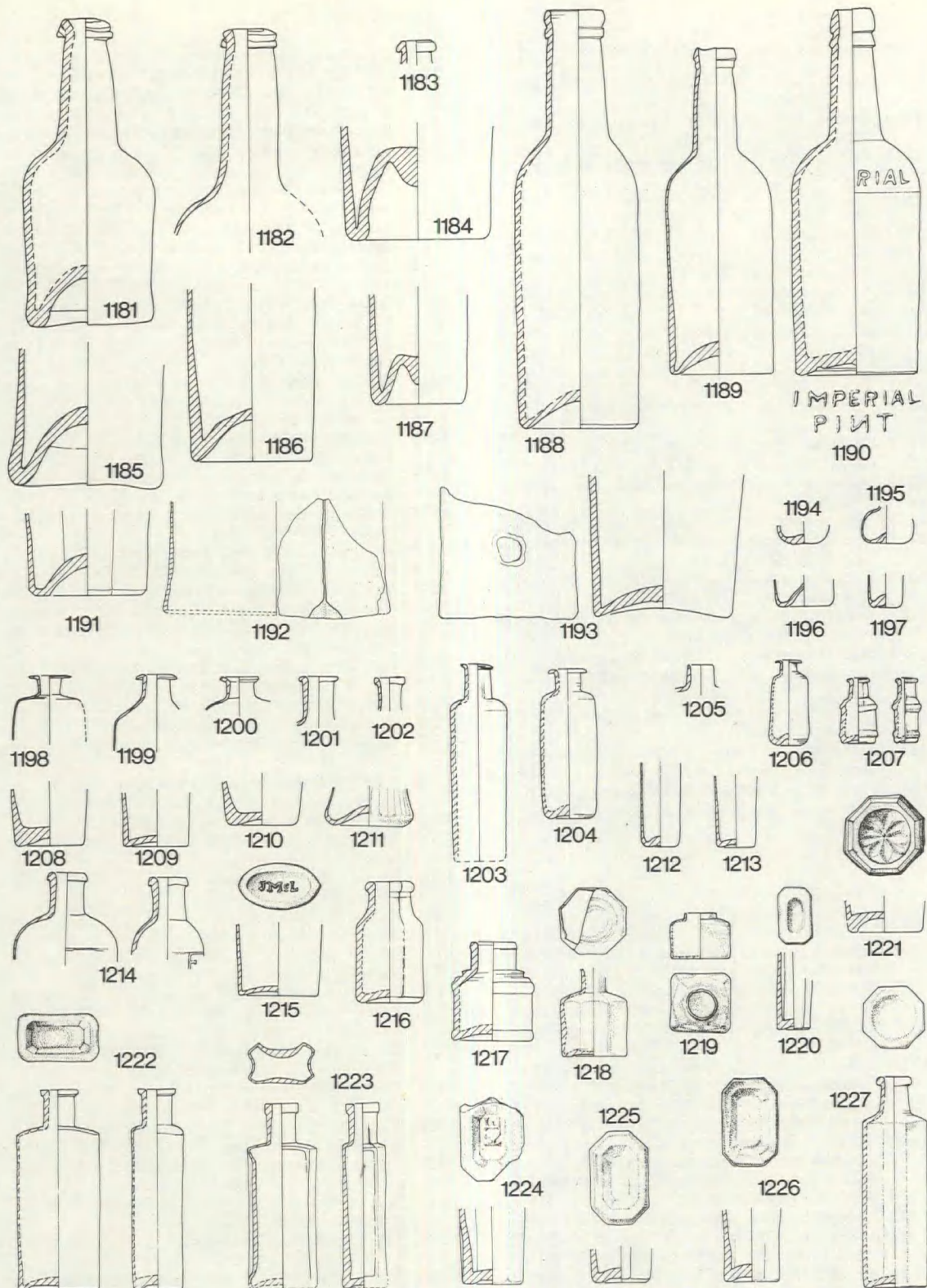


Fig 170 Glass bottles and phials, scale 1:4.

- 1207 Phial in clear glass. Type 15. 1976/2/502.
- 1208 Base of small bottle in clear glass. Type 32. *BMR73* (19). 18th century.
- 1209 Base of small bottle in pale blue glass. Type 33. *BMR73* (19). 18th century.
- 1210 Base of small bottle in clear glass. Type 77. *BSJ74 III F2*.
- 1211 Base of small bottle in mid-green glass. Type 28. *BCS73 I* (21), *Pit F*. 17th century.
- 1212 Phial in clear glass. Type 34. *BC70 12* (10).
- 1213 Phial in clear glass with indecipherable stamp on base. Type 35. 1976/2/505.
- 1214 Neck and shoulder of moulded bottle in pale blue, slightly bubbled glass. Type 26. 1976/2/503.
- 1215 Base of moulded bottle in clear, slightly bubbled glass, with J McL stamp. Type 43. *BCS71 24 U/S*.
- 1216 Complete moulded bottle in very pale green glass. Type 3. *BMR74 I U/S*.
- 1217 Moulded bottle in mid-green, bubbled glass. Type 2. *BMR74 I U/S*.
- 1218 Octagonal moulded bottle in pale green, bubbled glass. Type 1. *BMR73* (11). Probably 18th century.
- 1219 Square bottle in clear, bubbled glass. Type 10. *BMR74 II* (2).
- 1220 Base of bottle in clear glass. Type 5. 1976/2/505.
- 1221 Base of octagonal moulded bottle in clear glass. Type 9. 1976/2/502.
- 1222 Complete moulded bottle in very pale green, bubbled glass. Type 6. 1976/2/502.
- 1223 Nearly complete moulded bottle in clear, slightly bubbled glass. Type 7. *BMR74 II* (2).
- 1224 Base of moulded bottle in pale green, slightly bubbled glass, with KE stamp. Type 4. *BC72 53* (15).
- 1225 Base of moulded bottle in pale green bubbled glass. Type 4. *BCL73 60* (2).
- 1226 Base of moulded bottle in mid-blue, slightly bubbled glass. Type 4. *BCL73 60* (2).
- 1227 Complete octagonal moulded bottle in very pale green glass. Type 8. *BC72 54 U/S*.
- Fig 171 BOTTLES AND DRINKING VESSELS, 1228 – 1269
- 1228 Egg-soda bottle in pale green, slightly bubbled glass, marked T PEACOCK MANUFACTURER BEDFORD Type 36. Thomas Peacock of Bedford is listed as a ginger beer or soda-water manufacturer in local trade directories from 1850 to 1871. *BC72 54 U/S*.
- 1229 Egg-soda bottle in pale green, slightly bubbled glass, marked on one side J.BURGESS AMPHILL BEDS, and on the other with a JB monogram over three crosses, between the words TRADE MARK. Type 36. Josiah Burgess set up mineral water works in Amphyll in 1852, and the firm continued in production for more than a century (Underwood, 1976, 133). *BMR73* (11).
- 1230 Egg-soda bottle in pale green, slightly bubbled glass, marked ROBERTO FRANCE MANUFACTURER OF GLASS BOTTLES 19 LONDON STREET FENCHURCH STREET LONDON E C. Type 36. *BMR73* (2).
- 1231 Globe-stoppered bottle in pale green glass, marked JARVIS & CO REGISTERED TRADE MARK BEDFORD, and DAN RYLANDS 4 MAKER BARNSELEY. Type 37. Dan Rylands began producing bottles with grooves to retain the stopper in the 1880's (Talbot, 1974, 51), and the name on the bottle was changed to 'The Rylands' in 1897 (ibid, 54). This bottle therefore falls within the last two decades of the 19th century. Jarvis & Co are listed as aerated water manufacturers in Kelly's Directories from 1885 to 1914. *BMR73* (2).
- 1232 Feeding bottle in pale green, slightly bubbled glass, marked T.W.H & Co. LD. THE STANDARD FEEDING BOTTLE. Type 38. *BRC71 31* (4).
- 1233 Stopper in pale green glass. Type 14. 1976/2/502.
- 1234 Neck of moulded bottle in pale green glass. Type 68B. *BCL73 60* (2).
- 1235 Neck of moulded bottle in pale green glass. Type 68B. 1976/2/503.
- 1236 Mug in clear glass. Type 54. *BMR73* (11).
- 1237 Wine glass in clear glass. Type 50. *BCS73 I* (7), *Pit B*. Early 18th century.
- 1238 Wine glass in clear glass. Type 51. *BCS73 I* (7), *Pit B*. Early 18th century.
- 1239 Beaker in clear glass with horizontal striations. Type 53. *BSJ74 II* (11).
- 1240 Wine glass in clear glass. Type 57. *BMR73* (11).
- 1241 Wine glass in clear glass. Type 48. *BCS71 24* (17).
- 1242 Wine glass in clear glass. Type 63. 1976/2/526.
- 1243 Wine glass in clear glass with highly crazed surface. Type 59. *BCS73 III* (23), *Pit K*. 17th to early 18th century.
- 1244 Wine glass in clear glass. Type 49. *BCS73 III* (23), *Pit K*. 17th to early 18th century.
- 1245 Wine glass in clear glass. Type 55. *BMR73* (11).
- 1246 Wine glass in clear glass. Type 76. *BMR73 U/S*.
- 1247 Base of wine glass in clear glass. Type 44. *BC70 16* (2).
- 1248 Wine glass stem in pale green glass with hollow twisted knop. Type 98. An 18th century type (Mynard, 1974, fig 11, no G6). *BSM72 38 U/S*.
- 1249 Wine glass stem in clear glass. Type 56. *BMR73* (11).
- 1250 Jug handle in clear glass. Type 12. *BCS73 I* (18), *Pit A*. 18th century.
- 1251 Handle in clear glass. Type 11. *BCS73 I* (7), *Pit B*. 17th to early 18th century.
- 1252 Rim in clear glass, possibly from a bowl. Type 80. *BMod74 II* (2).
- 1253 Rim in pale green glass, heavily corroded, possibly from a bowl. Type 80. *BCS73 I* (7), *Pit B*. 17th to early 18th century.
- 1254 Rim in pale green glass. ?Window glass. Type 80. *BC71 25* (51). 16th to 17th century.
- 1255 Rim in pale green glass. ?Window glass. Type 80. *BC71 25* (51). 16th to 17th century.
- 1256 Wall sherd from very fine vessel in clear glass with ruby painted decoration. Type 42. *BMR74 I* (21).
- 1257 Rim in pale green glass. ?Window glass. Type 80. *BC71 25* (51). 16th to 17th century.
- 1258 Base of wine glass in clear glass. Type 45. *BC70 12* (10). Post-Medieval.
- 1259 Top of small flask in clear glass. Type 16. *BCS73 I* (18), *Pit A*. 18th century.
- 1260 Rim of flask in clear, slightly bubbled glass. Type 74. Similar rim forms have been dated to the early

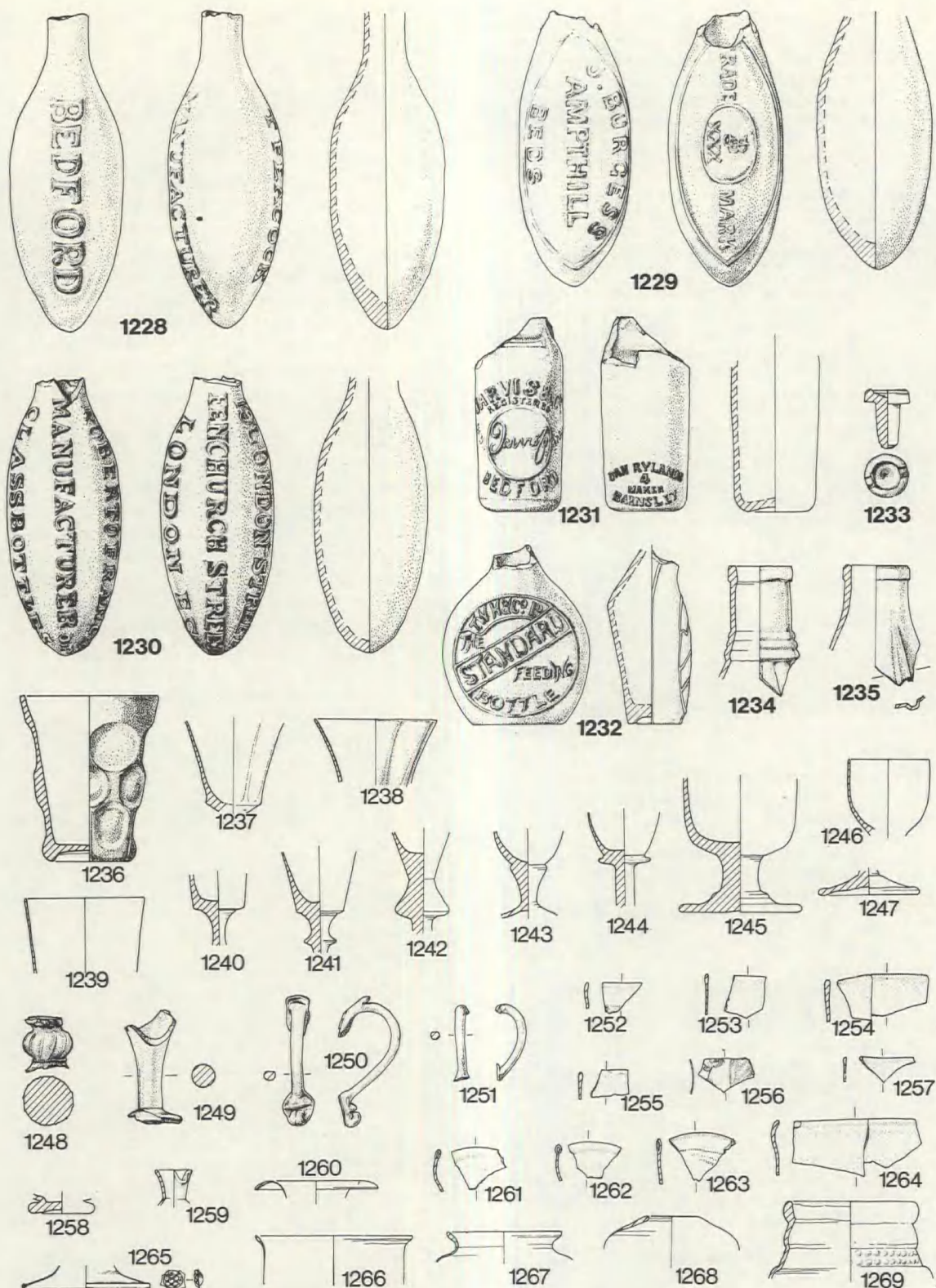


Fig 171 Bottles and drinking vessels, scale 1:4.

- 17th century (Moorhouse, 1971, fig 28, nos 24 and 25). *BCS73 II (4)*, *Pit G*, 17th century.
- 1261 Folded foot-rim of beaker in pale green, slightly bubbled glass. Type 74. Similar examples have been assigned 17th century (Crossley, 1967, fig 20, no 11) and 18th century (Ashurst, 1970, fig 35, no 4) dates. *BCS73 III (11)*.
- 1262 Folded foot-rim of beaker in pale green glass. Type 74. *BSJ74 I F42*. Possibly 17th century. See 1261.
- 1263 Folded foot-rim of beaker or goblet in clear glass. Type 53. *BC71 25 (60)*. 17th or early 18th century.
- 1264 Rim in pale green glass. ?Window glass. Type 80. *BC71 25 (25)*.
- 1265 Goblet base in very fine yellow glass, with applied rim of bright green glass; applied prunt in yellow glass. Also (not illustrated) body sherd with trailed decoration in bright green glass, and fragment of hollow stem. Type 78. *BSM72 38 (120)*. Possibly 12th century.
- 1266 Rim of beaker in clear glass. Type 71. *BC72 55 (9)*.
- 1267 Rim of bowl in pale green glass. Type 71. *BC72 55 (9)*.
- 1268 Rim of vessel in pale green glass. Type 73. *BCS73 I (31)*, *Pit F*, 17th century.
- 1269 Rim and neck of jar in pale green, slightly bubbled glass. Type 75. *BSJ74 III U/S*.

VESSEL GLASS TYPES NOT ILLUSTRATED

Type No

- 27 Hollow tube in colourless glass.
- 30 Kick of bottle, partially sealed over outside, in pale green glass.
- 39 Bovril jar.
- 40 Carbonated drink bottles without stamps.
- 41 Jar lid with knobbed top, in clear glass.
- 46 Stem in pale green glass.
- 47 Very small fragment of stem from faceted bowl, in clear glass.
- 52 Small fragment of folded-over rim, in clear glass.
- (70 Painted window glass.)
- 79 Fairy lights in pale ultramarine or dark blue glass.
- (81-86 Window glass.)
- 87 Body sherds in clear glass.
- 88 Body sherds in brown glass, probably from modern beer bottles.
- 89 Body sherds in dark blue glass, from poison bottles.
- 90 Body sherds in thick mid-blue glass.
- 91 Base of small rounded vessel with kick, in pale greenish-blue glass.
- 92 Base of small jar with stamp, very modern.
- 93 Heavy bases in clear glass. Some with chamfered edges or sides, one with a star pattern; some plain round examples.
- 95 Moulded body sherds in clear glass.
- 96 Moulded body sherds in green glass.
- 97 Body sherds in fine green glass.

Window Glass

Fig 172

Fragments of window glass ranging in date from the 13th – 18th centuries have been found, and Dr Richard Marks has examined much of the Medieval material.

The two main concentrations of painted window glass finds were at Bedford Castle *BC72 54 (7)*, a Post-Medieval context, and at St Mary's *BSM72 38 (56)*, dated to the 14th century. In both cases the date range was from the 13th – 14th centuries, and very elaborate windows were represented. The glass from St Mary's survived in a better state and was almost certainly associated with a vernacular structure. Window glass has been noted from other excavated trenches but never in any great quantity.

The inscription fragment, 1275, and the head and drapery pieces 1270 – 1273, show that the windows did include figures. All the 13th century pieces appear to be of 'grisaille' glass, ie white glass painted with stylized foliage on cross-hatched grounds. There is some coloured glass, with blue, ruby (red) and yellow being the most common. There may be more coloured glass than appears, but this is hidden by the devitrification of so many of the fragments. The heavy clear glass pieces of a strong green tinge, many of which have prunts, are parts of 17th – 18th century panes.

Fig 172 WINDOW GLASS, 1270 – 1309

Mainly 13th – 15th century

- 1270 Fragment in clear or white glass of the bearded head of a saint with a nimbus, facing left. The nimbus has a patterned rim. Probably the head of an apostle. Late 14th – 15th century type. *BSM72 38 (56)*.
- 1271 Two opaque fragments of white clear or yellow glass which fit together. The pattern of the painted lines appears to represent drapery folds, from the cloak or mantle of a figure. 14th century type. *BSM72 38 (56)*.
- 1272 Opaque fragment in blue glass of the chest and right arm of a figure. 14th century type. *BC72 54 (7)*.
- 1273 Opaque fragment in blue glass of drapery from a figure. 14th century type. *BC72 54 (7)*.
- 1274 Opaque fragment in green glass with vine leaf pattern. 14th century type. *BCS71 24 (26)*.
- 1275 Fragment of an inscription in opaque yellow glass. Lombardic script *OBUS*, ie. Jacobus, for SS James the Lesser or James the Greater. Corrosion on reverse. 14th century type. *BSM72 38 (56)*.
- 1276) Two fragments, each of opaque clear/white glass with stylized trefoil leaves and stems on a cross-hatched ground. Corrosion on reverse. 13th century type. *BSM72 38 (56)*.
- 1278 Shaped piece of clear glass with formal pattern. *BSM72 38 (56)*.

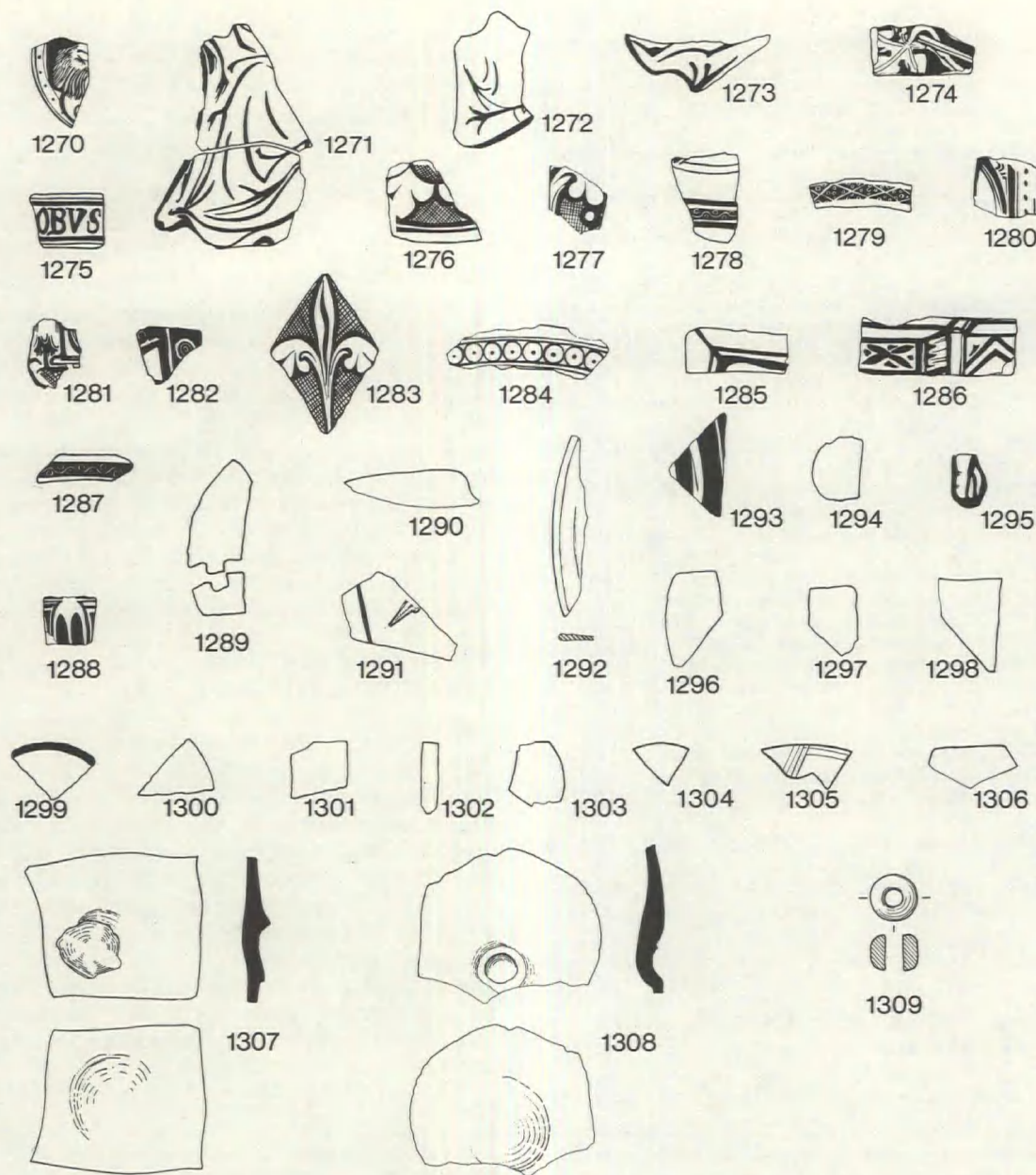


Fig 172 Painted and plain window glass and bead, scale 1:4.

- 1279 Shaped piece of opaque glass with border pattern of trellis work and circles picked out on a painted ground. *BSM72 38 (56)*.
- 1280 Fragment in opaque white/clear glass with a border pattern and stem of a leaf. 14th century type. *BSM72 38 (56)*.
- 1281 Fragment of shaped blue glass with pattern of eagles foot on cross-hatched ground. *BSM72 38 (56)*.
- 1282 Shaped piece of clear glass with pattern of circles and stripes. *BSM72 38 (56)*.
- 1283 One complete quarry with a fleur-de-lys on a cross-hatched ground. 13th century type. *BSM72 38 (56)*.
- 1284 Opaque oblong fragment with border work. 14th century type. *BSM72 38 (56)*.
- 1285 Opaque piece from a border or background. Heavy

- external corrosion. 13th – 14th century type. *BCS71 24 (22)*.
- 1286 Shaped piece of clear glass with elaborate border pattern. 14th century type. *BCS71 24 (22)*.
- 1287 Well-preserved quarry or trellis work fragment in clear/white glass. Formal painted edging pattern. 14th century type. *BC72 54 (7)*.
- 1288 Fragment of clear glass with painted pattern. *BC72 54 (7)*.
- 1289 Two shaped pieces of clear glass which interlock. *BC72 54 (7)*.
- 1290 Shaped piece of yellow glass. *BC72 54 (7)*.
- 1291 Shaped piece of corroded glass with traces of paint. *BSM71 23 (3)*. Post-Medieval.
- 1292 Fragment of clear window glass with thickened edge. *BSM72 38 (56)*.
- 1293 Shaped piece of pale blue glass with painted stripes. *BMS72 38 (56)*.
- 1294 Shaped piece of corroded glass, probably amber. *BSM72 38 (56)*.
- 1295 Shaped piece of amber glass, corroded, some painted decoration. *BSM72 38 (56)*.
- 1296 Shaped piece of amber glass, corroded. *BSM72 38 (56)*.
- 1297 Shaped piece of amber glass. *BSM72 38 (56)*.
- 1298 Shaped piece of clear glass. *BSM72 38 (56)*.
- 1299 Shaped piece of dark blue glass. *BSM72 38 (56)*.
- 1300 Shaped piece of yellow glass. *BSM72 38 (56)*.
- 1301 Shaped piece of clear glass. *BSM72 38 (56)*.
- 1302 Shaped piece of twisted blue glass. *BSM72 38 (56)*.
- 1303 Shaped piece of amber glass. *BSM72 38 (56)*.
- 1304 Shaped piece of opaque glass. *BSM72 38 (56)*.
- 1305 Shaped piece of dark red glass. *BSM72 38 (56)*.
- 1306 Shaped piece of clear glass. *BSM72 38 (56)*.
- 1307 Window pane in CROWN glass, 17th – 18th century type. *BC72 54 (7)*.
- 1308 Window pane in CROWN glass, 17th – 18th century type. *BC72 54 (7)*.
- 1309 Glass bead in olive green with cream spots. Saxon. 1976/2/75.

Coins, Tokens and Jettons by H.J. TURNER

55 specimens were submitted for report. Of these, 6 turned out not to be of a numismatic nature and another 5 were so badly worn or damaged as to be unidentifiable.

The remaining 44 were made up as follows:

Type	No	Sites
Roman Ae	3	BMS71, BMR74, BSPD73
Medieval Silver	7	BC70, BCL71, BCL73, BSM71, BSM72
Jettons	10	BCL73, BCS73, BSM71, BSJ74, 1976/2

Rose farthing	1	BSM71
17th century tokens	2	BSM71, 1976/2
License farthings	4	BC71, BSJ74, 1976/2
17th-19th century Ae	14	BC71, BC72, BCS73, BMS71, BMR73, BSM71, BSM72, BSJ74
Miscellaneous	3	BSM72, 1976/2

Extreme wear or damage prevented precise identification in many cases. Detailed descriptions are not published but may be found in the archive.

I am grateful to Miss Marion Archibald, Assistant Keeper, Department of Coins and Medals in the British Museum, who has prepared the following report on the seven Medieval silver coins. An abstract is published here and her full report is deposited as part of the level III archive in Bedford Museum. I am also grateful to Mr J.G. Pollard, Keeper of Coins and Medals in the Fitzwilliam Museum, Cambridge, for assistance with the jettons.

The Medieval Silver Coins by MARION M. ARCHIBALD

The demonstrable variation in the condition of the coins struck at the same period in a single hoard makes it impossible to give very firm narrow dates for the deposition of Sterling pennies. The dates suggested below are those for coins in typical condition for the currency medium at particular periods but it must be borne in mind that coins might be in abnormally good or bad condition compared with their fellows. It is, however, the normal which is after all the most likely to turn up and therefore these dates may be used with reasonable confidence unless there is reliable evidence to the contrary.

BC70 5 (8)

John or early Henry III
Penny Short-cross issue, Lawrence class V or VI
Mint: Canterbury Moneyer: Samuel
Wt.: 1.28gm = 19.7 gr
Date of production: between 1205 – c1218. The type remained current until superseded within about three years of the introduction of the Long-cross type in 1247.

BC70 5 (12)

Uncertain ruler
Penny Short-cross issue
Mint and Moneyer uncertain
Wt.: 0.19gm = 2.9 gr (small fragment of c50% of the circumference survives)
Date of production: uncertain, but currency likely to have been first half of 13th century.

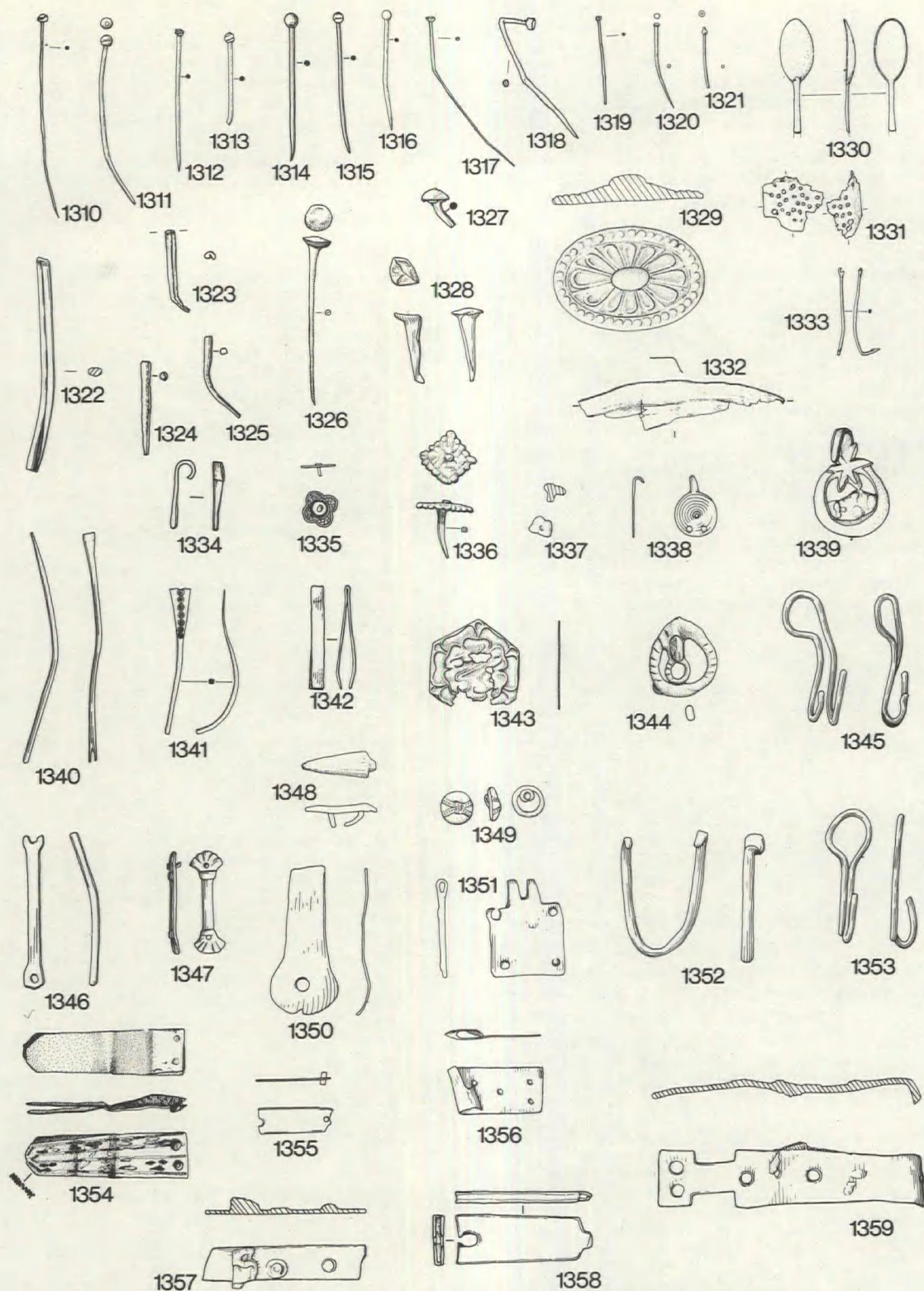


Fig 173 Objects of Copper Alloy, scale 1:2 except for 1327, 1330 – 1333, 1341, 1352 scale 1:4.

BC71 25 U/S

Scotland

William the Lion 1165 – 1214

Cut halfpenny Second Coinage, Stewart class 2

Mint: ?Roxburgh Moneyer: ?Raul

Wt.: 0.58gm = 9.0 gr

Date of production: between 1180 and 1195. A deposit date before c1200 seems most likely but a later survival cannot be ruled out.

BCL73 60 (10)

Edward III 1327 – 77

Halfpenny Florin Coinage 1344 – 51

Mint: London

Wt.: 0.45gm = 6.9 gr

Date of currency: c1350 – 75 probably.

BMS71 19 (20)

Edward III 1327 – 77

Penny Florin Coinage 1344 – 51

Mint: London

Wt.: 0.70gm – 10.8 gr

Date of currency: c1375 – 1400 probably.

BSM72 38 (43)

Edward III 1327 – 77

Penny Treaty Period 1361 – 9

Mint: York

Wt.: 0.68gm = 10.5 gr

Date of deposition: c1400 ± 10 years.

BSM72 38 (69)

John 1199 – 1216

Cut farthing Short-cross issue, Lawrence class Vb

Mint: ?Canterbury or London, Moneyer: ?Iohan

Wt.: 0.21gm = 3.2 gr

Date of currency: c1210 – 50.

Objects of Copper Alloy

Figs 173 – 175

The 100 items illustrated are representative of many copper alloy fragments recovered from all the excavated trenches in the town. On the whole, the objects were in fair condition when recovered from the ground, and basic conservation work was carried out where necessary. The objects were found in a wide range of contexts, dating from the 10th through to the 19th century.

Fig 173 OBJECTS OF COPPER ALLOY, 1310 – 1359

1310- Various pins, from 7mm to 66mm in length, mostly
1321 Post-Medieval except for 1310 and 1311 which may be c1200 – 1225.

1310 – 1976/2/11;

1312 – *BSJ74 I (1)*;

1314 – 1976/2/1;

1316 – *BSJ74 II F40*;

1311 – *BC72 48 (31)*

1313 – *BSJ74 II U/S*

1315 – *BSJ74 II (2)*

1317 – *BSM72 38 (1)*

1318 – 1976/2/86; 1319 – *BCS73 I (7)*

1320 – *BSJ74 II (1)*; 1321 – 1976/2/25

1322- Lace-ends or points, from 30mm to 68mm in
1325 length. Post-Medieval.

1322 – *BSJ74 II F10*; 1323 – *BSJ74 III F15*

1324 – *BSJ74 II F1*; 1325 – *BSJ74 II F4*

1326 Nail, 53mm long. *BSJ74 II (1)*. Post-Medieval.

1327 Stud, 27mm long. *BSJ74 II F59*. 12th – 13th century.

1328 Nail, 25mm long. *BSJ74 III F15*. Post-Medieval.

1329 Decorative furniture plate, 48mm long. *BSJ74 III F8*. Post-Medieval.

1330 Spoon, 70mm long, unusual form. Shape suggests 15th century or later type. *BC71 25 (78)*. 13th century context.

1331 Strainer, 43mm long. *BSJ74 II F12*.

1332 Rim of bowl or other vessel, 157mm long. *BSJ 74 II F164*.

1333 Fish hook, 56mm long. *BC71 25 (61)*. 17th – 18th century.

1334 Hook, 20mm long. 1976/2/14. 13th – 14th century.

1335 Quatrefoil stud, 12mm diam. *BSM72 38 (14)*.

1336 Square-headed stud, 18mm diam. *BMS71 19 (32)*. 15th – 16th century. (Original publication in Baker, 1974, fig 14, no 10).

1337 Stud, 7mm diam. *BSM71 23 (56)*. 12th – 14th century.

1338 Hook, probably for clothes' fastening, 13mm diam. *BC70 15 (12)*. Possibly Post-Medieval, but from probable early Middle Saxon context post-dating *Structure 4*.

1339 Pendant or roundel with attachment, 24mm diam. *BC71 25 (25)*. Post-Medieval.

1340 ?Needle, 77mm long. *BC71 26 (25)*. Post-Medieval.

1341 Decorated curved strip, 106mm long. *BHS71 29 (5)*. Medieval. (Original publication in Baker, 1974, fig 14, no 17).

1342 Tweezers, 33mm long. 1976/2/11. Probably 13th century.

1343 Hexagonal plate or badge, decorated with traces of two figures within stylised rose, 27mm long. *BC71 25 (16)*. Probably 13th century.

1344 Object for fastening or attachment, 25mm long. *BC70 5 (45)*. 12th – 13th century.

1345 Pair of looped fasteners, 84mm long. *BMS71 19 (42)*. Late Medieval.

1346 Mount, probably from small box, or article of clothing, 50mm long. *BSJ74 II F59*.

1347 Mount, probably from small box, or article of clothing, 33mm long. *BSM71 23 (1)*. Post-Medieval.

1348 Decorative stud, 24mm long. 1976/2/97. Late Medieval.

1349 Gilded button, 11mm diam. *BSM72 38 (2)*. Post-Medieval.

1350 Mount, 47mm. *BSM72 38 (71)*. Probably 14th century.

1351 Buckle plate, 31mm long. *BC71 26 (36)*. Post-Medieval.

1352 Locking device from locking buckle, 93mm long. 1976/2/97. Late Medieval.

1354 Belt chape, decorated 50mm long. *BMS71 19 (34)*. 14th – 15th century. (Baker, 1974, fig 14, no 4).

1355 Small plate with rivets, 23mm long. *BMS71 19 (32)*. 15th – 16th century.

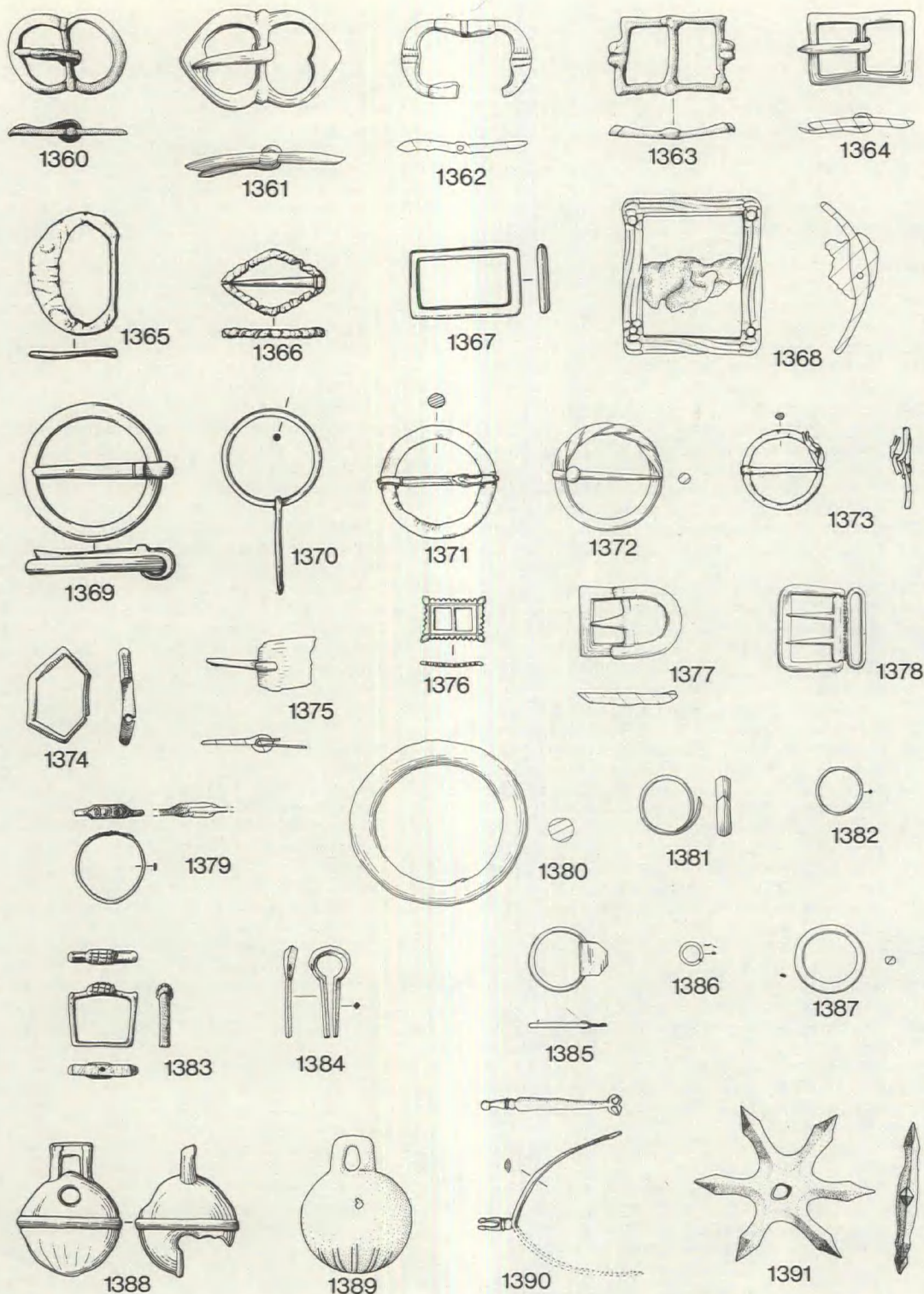


Fig 174 Objects of Copper Alloy, scale 1:2 except for 1376, 1382, 1384, 1386, 1390 scale 1:4.

- 1356 Plate pierced with rivet holes, 39mm long. *BC71* 26 (10). Post-Medieval.
 1357 Strip with broken iron rivets in situ, 52mm long. *BSM72* 38 (20). Post-Medieval.
 1358 Belt chape, 44mm long. *BSM72* 38 (71). Probably 14th century.
 1359 ?Book clasp with associated mounts and buckle pin, 91mm long. *BSM72* 38 (61). 14th century.

Fig 174 OBJECTS OF COPPER ALLOY, 1360 – 1391

- 1360 Spectacle buckle, 37mm long. *BSJ74* II F40. Late Medieval.
 1361 Spectacle buckle, 50mm long. 1976/2/11. 14th – 15th century.
 1362 Buckle, 40mm long. 1976/2/510. Medieval.
 1363 Rectangular buckle, 39mm long. *BCS73* I (35), *Pit F*. 17th century.
 1364 Rectangular buckle, 32mm long. *BMS71* 19 (31). 16th – 17th century.
 1365 D-shaped buckle, 37mm long. *BSM72* 38 (124). 13th – 14th century.
 1366 Diamond-shaped iron buckle with twisted gold wire, copper alloy pin, 31mm long. *BSJ74* II (11). Possibly 15th – 16th century.
 1367 ?Strap-end buckle, 35mm long. 1976/2/14. Late Medieval.
 1368 Curved rectangular decorated buckle, 57mm long. 1976/2/510. Possibly 14th century.
 1369 Plain circular brooch, 42mm diam. *BSM72* 38 (60). Late 13th – late 14th century.
 1370 Plain circular brooch, 30mm diam. *BSM72* 38 (120). Probably 12th – 13th century.
 1371 Plain circular brooch, 35mm diam. Late 13th – late 14th century type. *BSM71* 23 (1). Post-Medieval.
 1372 Circular brooch with cable twist decoration, 32mm diam. *BC72* 54 (11). Probably 14th century.
 1373 Circular brooch with twisted animal head ends, 26mm diam. *BC70* 15 (2). Post-Medieval.
 1374 ?Buckle, 29mm long. 1976/2/15. Probably late Medieval.
 1375 Strap-end buckle, 32mm long. Probably 15th century. *BC71* 25 (55). Post-Medieval.
 1376 Decorated rectangular buckle, 39mm long. *BSJ74* II U/S. Possibly Late Medieval.
 1377 Strap-end buckle, 30mm long. *BC71* 25 (60). 17th – early 18th century.
 1378 Buckle, inscribed HOLLOWAY on reverse, 27mm long. 1976/2/506. 19th – 20th century.
 1379 Ring inscribed copper alloy on iron, 22mm long. *BMS71* 19 (32). 15th – 16th century. (Baker, 1974, fig 14, no 19).
 1380 Ring probably from circular brooch with pin missing, 52mm diam. *BSM72* 38 (45). Probably 14th century.
 1381 ?Finger ring, 13mm diam. *BC72* 37 (1). Post-Medieval.
 1382 Ring from circular brooch with pin missing, 30mm diam. Probably 14th century. *BC71* 25 U/S.
 1383 ?Belt fitting, 21mm long. *BMS71* 19 (27). Probably 16th – 17th century. (Baker, 1974, fig 14, no 5).
 1384 Jew's harp, 57mm long. *BC71* 25 (6). Post-Medieval. (Huggins, 1976, fig 41, no 14).

- 1385 Ring attachment, 20mm diam. *BSJ74* II U/S. Post-Medieval.
 1386 Small plain ring, 14mm diam. *BC71* 25 (47). Post-Medieval.
 1387 Ring, 21mm diam. 1976/2/131. 12th – 13th century.
 1388 Bell, rumbler type from harness, 32mm girth. 1976/2/537. Post-Medieval.
 1389 Bell, rumbler type from harness, 36mm girth. *BMod74* II (2). Post-Medieval.
 1390 Part of straight-sided spur and rowel attachment, 111mm long. *BMS71* 19 (32). 15th – 16th century. (Baker, 1974, fig 14, no 2).
 1391 Spur rowel with 6 points, 56mm long. *BMS71* 19 (32). 15th – 16th century. (Baker, 1974, fig 14, no 1).

Fig 175 OBJECTS OF COPPER ALLOY, 1392 – 1410

- 1392 Plate for attachment, 52mm long. *BC70* 3 (9). Post-Medieval.
 1393 Offcuts of copper alloy, 29mm, 62mm, 66mm long. 1976/2/120; *BSJ74* I (1); *BSJ74* I (1).
 1395 Boss or boss-cap, 24mm diam. *BC70* 13A U/S.
 1396 Offcut of copper alloy, 45mm long. *BSJ74* I (57). 12th – 13th century.
 1398 Six pointed star mount, 35mm long. *BSJ74* II (1).
 1399 Mount or container with rivet hole, 34mm long. *BSJ74* III F4.
 1400 Handle mount with four rivet holes, 29mm diam. *BCS71* 24 (13). Post-Medieval.
 1401 Curved mount with rivet hole, 65mm long. Medieval type. *BC71* 25 (60). 17th – early 18th century.
 1402 Peg-shaped object, 43mm long. *BCL73* 60 U/S.
 1403 Knop from end of prick spur or bolt head, 38mm long. *BSM71* 23 (57). 12th – 14th century.
 1404 Pierced strip, 46mm long. *BCL71* 22 (5). Post-Medieval.
 1405 Keyhole mount, 55mm long. *BSM72* 38 (60). Probably 13th century.
 1406 Decorative mount, 22mm long. *BC71* 25 (60). 17th – early 18th century.
 1407 Boss cap, 22mm diam. *BMS71* 19 (56). Late Medieval.
 1408 Circular fitting with straightened edge probably for attachment, 22mm diam. *BSJ74* II U/S.
 1409 Fragment of pierced bronze, probably part of buckle, 32mm long. 1976/2/520.
 1410 Decorated fitting or clasp made from single folded strip, riveted at centre and at end, anthropomorphic design, 40mm long. *BSJ74* II F72. Medieval.

Objects of Iron

Fig 176 – 177

Iron objects were found on most sites and were generally collected. Lack of conservation facilities in the earlier years of work resulted in further corrosion affecting several objects. All corroded material was X-rayed in the process of preparing



Fig 175 Objects of Copper Alloy, scale 1:2 except for 1393 – 1395, 1397 – 1399, 1401, 1403, 1405 scale 1:4.

this report, and a selection for publication was made on the basis of the extra information gained thereby. Objects drawn partially or entirely from X-ray plates are marked (x) in the Catalogue. Nails were recovered from all sites: a representative selection from BSJ74 have been chosen for illustration, supplemented by a few examples from other sites. Measurements refer to maximum length.

Fig 176

- 1411 Bucket handle, 352mm. *BCS71* 24 (13).
- 1412 Bucket fragment with seam (x), 100mm. *BC72* 51 (17). Post-Medieval.
- 1413 Part of small bucket handle, 116mm. *BSJ74* II F18.
- 1414 Blade of sickle, with tang continuing line of blade, 224mm. *BC72* 37 (18). Post-Medieval.
- 1415 Part of scissors, 124mm. *BCS73* I (7), *Pit B.* 17th to early 18th century.
- 1416 Knife blade with tang (x), 140mm. *BMR74* I (24). Late Medieval.
- 1417 Fragment of shears (x), 84mm. *BSM72* 38 (101). 11th – 12th century.
- 1418 Smithing fuller, 124mm. *BCH69* 1 (2). Post-Medieval.
- 1419 Object, broken at top (x), 92mm. *BMR74* I (13). Late Medieval.
- 1420 Bracket, with rivets (x), 80mm. 1976/2/508.
- 1421 Fragment of spur and buckle, 100mm, 32mm. *BSJ74* I F73. 10th – 12th century.
- 1422 Part of horseshoe (x), 108mm. *BC70* 7 (6). Medieval.
- 1423 Fragment of horseshoe (x), 100mm. *BSM72* 38 (71). 14th – 16th century.
- 1424 Key (x), 132mm. *BC70* 8 (10). Post-Medieval.
- 1425 Casket key (x), 78mm. Late Medieval. (*Med. Catalogue*, 1954, 135, fig 42, no 9, type IX, 143). 1976/2/38.
- 1426 Key handle (x), 40mm. *BCL73* 60 (17). 13th century.
- 1427 ?Key fragment (x), 68mm. *BCL73* 60 (17). 13th century.
- 1428 ?Bolt socket (x), 108mm. *BC70* 15 (15). Post-Medieval.
- 1429 Fragment of lock (x), 72mm. *BC70* 9 (21). Post-Medieval.
- 1430 Lock plate (x), 180mm. 1976/2/60 (*Pit* 39). Probably 10th century.
- 1431 Buckle (x), 56mm. *BCS73* II (17).
- 1432 Buckle (x), 64mm. *BC70* 3 (46). Post-Medieval.
- 1433 Buckle (x), 44mm. *BC71* 25 (37). Post-Medieval.
- 1434 Fragment of buckle, 68mm. *BMS71* 19 (9). Post-Medieval.
- 1435 Staple (x), 84mm. *BC72* 37 (20). Post-Medieval.
- 1436 Split pin (x), 60mm. 1976/2/97. Post-Medieval.
- 1437 Patten, 200mm. *BCS71* 24 (13). (Matthews, 1973, fig 6).
- 1438 Ring with attachment, 24mm. *BSJ74* III F4. Post-Medieval.
- 1439 Hook (x), 28mm. *BC70* 6 (15). 12th – 13th century.

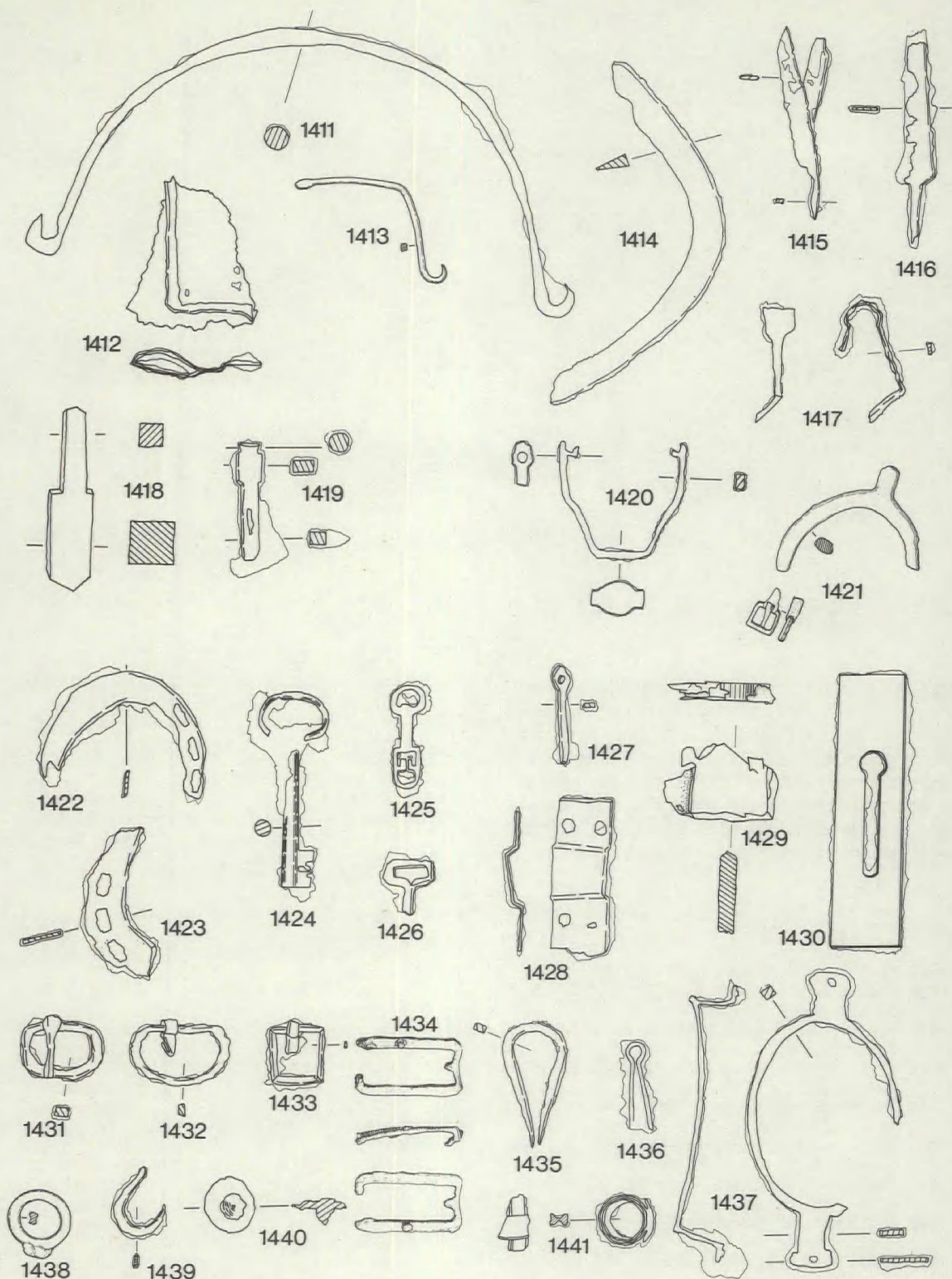


Fig 176 Objects of Iron, scale 1:4 except 1438 – 1440, scale 1:2.

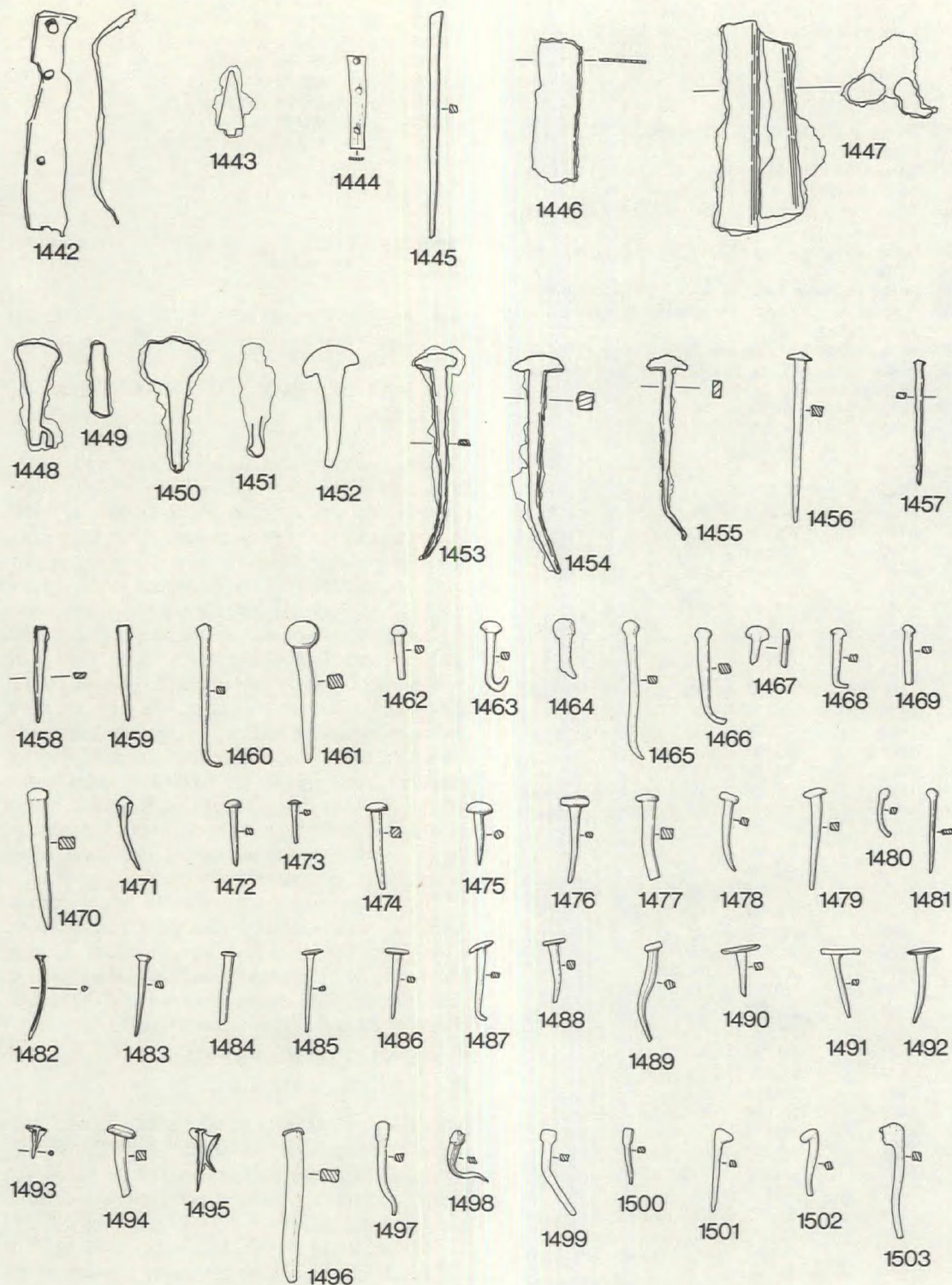


Fig 177 Objects of Iron, scale 1:4.

- 1440 ?Stud (x), 18mm. *BCL73 60 (10)*.
 1441 Ring with fragment of plate attached (x), 40mm.
1976/2/508. Post-Medieval.

Fig 177

- 1442 Strip with holes (x), 136mm long. *BC72 48 (32)*.
 Early 13th century.
 1443 ?Arrowhead (x), 44mm long. *BMR74 I (51)*. 12th –
 14th century.
 1444 Strip with holes, 60mm long. *BSJ74 I F8*. Saxo-
 Norman.
 1445 Spike, 144mm long. *BSJ74 II F63*. 12th – 13th
 century.
 1446 Strip (x), 92mm long. *BC70 3 (12)*. Post-Medieval.
 1447 Pipes of slag, 132mm long. *BSM71 28 (18)*. 12th –
 13th century.
 1448- Nails, mostly (x), from 20mm long (1493) to
 1503 140mm long (1454). Post-Medieval in date except
 where indicated.
 1448 – 1451 *BC70 6 (36)*
 1452 *BSJ74 II U/S*
 1453 *1976/2/513*
 1454 *BC70 9 (21)*
 1455 *BC72 37 (25)*
 1456 *BSJ74 III (4)*
 1457 *BC70 6 (5)*
 1458 – 9 Horseshoe nails, *BC72 50 (4)* Late/
 Post-Medieval.
 1460 *BSJ74 III F4N*
 1461 *BSJ74 II (1)*
 1462 *BSJ74 II (1)*
 1463 *BSJ74 I F17*
 1464 *BSJ74 II F37*
 1465 *BSJ74 III F4*
 1466 *BSJ74 I (11)*
 1467 *BSJ74 I (41)*
 1468 *BSJ74 III F15*
 1469 *BSJ74 II F27*
 1470 *BSJ74 I F30*. 12th – 13th century.
 1471 *BC72 50 (4)*. Late/Post-Medieval.
 1472 *BSJ74 II F53*
 1473 *BSJ74 I F17*
 1474 *BSJ74 II F5*
 1475 *BSJ74 I F96*. Saxo-Norman.
 1476 *BSJ74 II F2*
 1477 *BSJ74 II (1)*
 1478 *BSJ74 II F10*
 1479 *BSJ74 II F104*
 1480 *BSJ74 II (1)*
 1481 *BSJ74 II (1)*
 1482 *BSJ74 I (28)*
 1483 *BSJ74 I (34)*
 1484 *BSJ74 I F17*
 1485 *BSJ74 II (1)*
 1486 *BSJ74 II F104*. Saxo-Norman.
 1487 *BSJ74 I F17*
 1488 *BSJ74 II (2)*
 1489 *BSJ74 II F104*. Saxo-Norman.
 1490 *BSJ74 II F31*
 1491 *BSJ74 I F30*. 12th – 13th century.
 1492 *BSJ74 I (41)*
 1493 *BC70 5 (38)*. 14th century.
 1494 *BSJ74 II F37*
 1495 *BC72 50 (4)*. Late/Post-Medieval.

- 1496 *BSJ74 II F27*
 1497 *BSJ74 II F10*
 1498 *BSJ74 I F17*
 1499 *BSJ74 II F37*
 1500 *BSJ74 I F17*
 1501 *BSJ74 III F15*
 1502 *BSJ74 I (11)*
 1503 *BSJ74 II F27*

Objects of Lead

Fig 178

- 1504 Seal-Matrix, c1200. *BC70 6 (9)*. 12th – 13th cen-
 tury.

SEAL-MATRIX FROM BEDFORD CASTLE

by S.E. RIGOLD

Lead, with surfaces very well preserved, either from conditions of burial or from a slight alloy. Consists of a circular disc, diameter 40mm, thickness 4mm, and a suspension-loop made by boring, in the plane of the disc, through a rounded appendage, cast or welded to it. In general it is the usual kind of lead personal seal, for attesting documents or closing letters, common in the late 12th and 13th centuries and discussed in the writer's 'Two common species of medieval seal-matrix' (Rigold, 1977, 324 – 9), but above the usual standard of execution and exceptional, at least in England, in being armorial. It is not easily assigned to either of the two kinds there distinguished, engraved on a cast blank, or cut from ordinary sheet-metal: probably the latter, as it is slightly trimmed round the edge of the very solid and regular disc. The back, often decorated on cast blanks, is quite plain.

The design shows a shield with upper corners rounded, bearing a barry coat (four barrulets) and a bend: on the bend are three annulets, or more likely circular buckles or brooches, as they seem to have tongues. The legend, between two deeply cut circles of 23 and 37mm diameter, is

§ RADVLFI:DETORFREVILL

(Seal of Ralph de Torfreville)

Note the unusual suspension marks, diagonal over S and crossing both L's. Demay (1880) instances no purely armorial seal, as this, before 1193. The rounded form of shield is, of course, archaic – usual throughout the 12th century, rarely found to the middle of the 13th: Demay cites seals of 1205, 1211 and 1227. The lettering is a fair, normalized and not idiosyncratic, Lombardic; the T is

Roman, the E closed Lombardic, and the most diagnostic letter is R, with its incurved tail, as for instance, on short-cross pennies from 1180 to 1205, and before that on the 'Tealby' coinage of Henry II. Both these features point to the late 12th century.

The seal-holder, and probably the seal itself, is almost certainly from Normandy. The name fits no Bedfordshire place or family (Turvill', for instance, is always thus spelt), but exactly matches the several Touffrevilles or Touffrévilles, in Calvados, Eure or Seine Maritime (T-la-Celle, T-sur-Eu). All these derive from 'Thorfred's vill' and the actual spelling (Torfreville) is found at T-sur-Eu in 1151. Forms like *Turfredivilla* are found earlier (Dauzat and Rostaing, 1963). Normans from Normandy were as likely to serve in England under Richard I and John as at any time since just after the Conquest.

All the evidence, and the atypical, for England, details of the seal, point to a Norman origin of the 1190's or early 1200's, but enquiries from Rouen for identification of the precise place and family (not found in any accessible French work on genealogy or heraldry) or even the individual, have produced no additional information, save that the seal is not in Demay's *Inventaire des sceaux de la Normandie* (Demay, 1881). I am grateful to Mme E. Chirol Conservateur des Musées Départementaux de la Seine-Maritime for searching the available published references.

- 1505 Spoon handle with acorn knob; ?pewter. 88mm long. Late medieval type (*Med. Catalogue*, pl XXVII, no 3). *BSJ74 I F17*.
- 1506 Window came. 64mm long. *1976/2/527*.
- 1507 Strip. 68mm long. *BCS71 24 (22)*.
- 1508 Strip. 34mm long. *BCS73 I U/S*.
- 1509 Pierced strip with scoring. 46mm long. *1976/2/U/S*.
- 1510 Broad strip. 70mm long. *BSJ74 II F70*. 12th – 13th century.
- 1511 Ingot; weight 2 lb 2 oz, 964g; 160mm long. *1976/2/52*. 11th – 12th century.

Slag

Slag has been recovered from most sites in Bedford and we are grateful to Leo Biek (Ancient Monuments Laboratory) for his comments on selected groups of the material. He has identified smithing and smelting slag from most excavated areas, and has recognised some lumps which might relate to iron-working in the Saxon period. Subsequent



Fig 178 Objects of Lead, scale 1:4 except 1504 scale 1:2.

analysis of the pottery from contexts for this early slag has indicated a 10th – 11th century date in most cases.

In general, iron smelting produces large quantities of characteristic slag in considerable heaps. Smithing residues are very small by comparison. As a result, smithing slag is easily disposed of, along with general rubbish and hearths are usually found clear. Smelting slag, on the other hand, tends to get used for hard-core and metallurgy and could be found at considerable distances from its origin.

In addition, considerable quantities of the material have occurred in Medieval contexts. The majority of it is iron slag though occasional lumps resulting from copper working have also been found. Very few examples of furnace lining material have been discovered and there is, therefore, little evidence of where the iron-working took place in the town. However, fragments of hammerscale found at Midland Road, trench II, suggest the existence of a forge nearby.

On the whole, the slag from Bedford represents the rubbish cleared out from iron-working sites. Until hearths or furnaces are discovered in situ, little can usefully be said about this industry.

The Animal Bones from Bedford

by ANNIE GRANT

This brief section is a general synthesis of the results of the analyses of bone material recovered from the various excavations carried out in Bedford over the last ten years. The Bedford sites referred to in this discussion are those included in this volume together with two previously published sites — Mill Street (Grant, 1974, 127) and St John's 1967 (Grant, 1970, 94 — 96).

With the exception of the bones from Mill Street, which were dated to the 15th century, all the animal bones discussed here were recovered from deposits dated to the 9th to 13th centuries. The vast majority of the animal bones were recovered from rubbish pits dug close to the houses of the Saxon and Medieval town.

Analysis of bone material from urban sites presents particular problems. The social and economic status of the town dwellers, their dietary preferences, methods of rubbish disposal and industrial activities will all have an effect on the type of food consumed and the nature of the bone refuse discarded. Thus no individual site can be assumed to be typical of the town as a whole. This is clearly seen in the bones recovered from the excavations at Bedford Castle. Analysis of the bones from three separate contexts within the castle precincts yielded very different results (see page 62). The long occupation of many of the areas excavated and the difficulty of very precise dating of deposits inevitably obscure the evidence for any small-scale changes that might have taken place during the period of occupation.

The other major problem that arises with urban sites is in the elucidation of the nature of the relationship between the town and the area surrounding it. The meat eaten by the inhabitants of a farm may be expected to have been provided by animals kept by the inhabitants on the land surrounding the farm, but this may not necessarily be the case at an urban settlement. Bedford, like most other English towns, was fairly small in the Medieval period and was surrounded by open fields (Henman, 1945, 15 — 73). It is thus possible that it may have satisfied its own food needs from the surrounding land, by the labours of its inhabitants. However, a market is believed to have been in existence in the town from before the time of the Domesday Survey (Hassall and Baker, 1974, 79). The presence of specialists living within the town is strongly suggested by the evidence that exists for a variety of industrial activities, including horn-working, dis-

cussed below. It is thus also possible that meat eaten in Bedford may have been bought at the market and have been from animals reared anywhere within the area served by the Bedford market.

We may try to solve this problem by looking at the analyses of bone material from all the Bedford sites so far excavated. At almost all the Bedford sites, the bones of sheep were the most numerous, followed by cattle and then pig bones. The only exceptions were at the St John's 1967, Cauldwell Street and Peacocks Yard 77/1 sites where sheep and cattle bones were found in similar numbers, and at the Mill Street site where cattle bones predominated. It may be relevant to note that the bones recovered from Mill Street were of a later date than those found at all other sites. The area immediately surrounding Bedford may be considered as an area more suitable for cattle and pig rearing than for sheep rearing, as the town lies in a river valley. However, the land exploited by the town's inhabitants could well have included the higher land on either side of the river valley, which would have been more suitable for sheep rearing. Alternatively, it can be argued that the predominance of sheep bones at most Bedford sites reflects the animal husbandry of a far wider area than that which could have been directly exploited by the inhabitants of Bedford themselves and may indicate that within the region served by the Bedford market there was an emphasis on sheep rearing, perhaps with wool as the primary requirement.

Some evidence to suggest that animals may have been reared by the town dwellers themselves is seen in the analyses of the individual skeletal parts represented. Platt has shown that in some towns husbandry was a part-time occupation of most local craftsmen, and some burgesses were full-time farmers. In other towns there was very little involvement in agriculture by the inhabitants (Platt, 1976A). At almost every site, all parts of the skeleton were represented. This suggests that the butchery of animals and perhaps any utilization of non-edible parts was carried out by the town dwellers. This would be more likely to have happened if they have been involved in the rearing of the animals. We know that butchery is a trade that was established very early in the Middle Ages — in the City of London, the Butchers' Guild is almost certainly one of the six most ancient companies of the City (Jones, 1976). If any significant percentage of the meat consumed in the town were bought at market, one might expect the growth of butchery as a trade within the town. Evidence for

the presence of butchers might be expected to be seen in the presence of particularly high percentages of meat-bearing bones in the rubbish pits of the houses, and deposits elsewhere of 'waste' bones. The only evidence there is for any specialized butchery is to be seen in the group of bones found within the lime kiln at the castle, where a particularly high percentage of bones were 'waste' bones. However, in the rubbish pits associated with the houses, at all the other sites excavated, both meat-bearing and 'waste' bones are found.

In contrast, an indication of the absence of the kind of relationship between man and the land that seems to have existed at many country sites is perhaps to be seen in another aspect of the animal bones – the rarity of deer bones. At no site apart from the Castle and the St John's 1976 site were any deer bones found. Although deer hunting was in many areas in the early Medieval period the sole prerogative of the king and his noblemen, and although poaching deer was an offence punishable by death, nonetheless, deer bones are by no means rare at country sites. A good example is Lyveden in Northamptonshire (Steane and Bryant, 1975). This site, which included a farmer's toft, lay well within the Royal Forest of Rockingham, where forest laws would certainly have operated (Steane, 1974). However, in the 11th to 14th century deposits, a relatively high percentage of deer bones were found (Grant, 1975B, 152 – 7). These may well have been the remains of poaching expeditions and suggest a relationship between man and the land that was not to be upset by legal niceties. This sort of exploitation of the environment's resources does not seem to have happened at Bedford and indeed it may well have been difficult to poach deer successfully and return unobserved with the spoils to a town dwelling. The scarcity of deer bones at the Bedford sites may also be indicative of a greater prosperity among the town dwellers than among the country dwellers so that supplementing the diet at the risk of the severest punishment may not have been at all necessary.

It is interesting that of the deer bones that were found, the majority came from the Castle site. Here we may have an example of social differentiation within the town rubbish deposits. Deer eaten by the Castle inhabitants may well have been legitimately hunted.

Sheep, cattle and pigs clearly provided the vast majority of the meat eaten in the town, but other species also seem to have played a part in the economy and social life as the bones of dogs, cats, horses, birds and fish show.

Bird bones were found at most locations, although never in very large numbers. These bones may represent domestic fowl, perhaps kept in backyards, and also hunted or trapped creatures. Hunting may not necessarily have been done by those who ate the birds, as it is known that a wide variety of wild birds were sold by Medieval butchers, and the birds could have been sold at the market (Sabine, 1933, 335 – 353).

Given the situation of the town, astride a river which is still fished today, fish are likely to have been a more important source of food than the number of their bones that have been recovered would suggest. Their relative scarcity is more likely to reflect poor recovery and survival than an initial absence of their bones in the rubbish pits. However, the find of a particularly large number of fish bones in a single pit at the St John's site (BSJ74), may suggest that the fish bones were buried separately, perhaps further away from the houses than the other domestic refuse, because of the particular unpleasantness of their smell during decomposition.

Although butchery marks were occasionally found on the bones of horses, dogs and cats, it seems unlikely that these animals were eaten, except in exceptional circumstances. In fact it seems that horses and dogs were disposed of separately and specially. On all sites bones had been gnawed by dogs, and yet at Mill Street and St Mary's, trenches 23 and 28, no dog remains at all were found. At other sites, St John's 1976 and the Castle lime kiln, whole skeletons of dogs were found. This suggests some special disposal of dog carcasses and may in some respects parallel the situation in London, where the practice of throwing dead dogs into one particular ditch of the town was the origin of the name Houndsditch (Sabine, 1933). At Cauldwell Street, the presence of both pet and guard dogs is possible.

Some horse bones, and indeed some dog bones were found mixed in with the food debris, but in several instances examples of unusual burial practices involving horse bones were encountered. The strange assortment of horse bones, mainly limb bones, in the square pit at the St John's 1974 site has been discussed after the site report above. Excavations on the east side of St John's Street, 1976/2, uncovered the burial of a horse that was complete apart from its limbs. At all but the St John's sites, horse bones were in fact rare, contrasting with the rather higher percentages of horse bones found at Lyveden (Grant, 1975), Wharram Percy (Ryder, 1961) and Upton (Yealland and

Higgs, 1966) amongst other country sites. During the Middle Ages, horses became increasingly important for agricultural purposes, although there seems to have been local and perhaps personal differences in the choice made between horse and oxen to pull ploughs (Trow-Smith, 1957). Horses used for agricultural purposes may not have been expected to have been kept within the town boundaries, although their meat may have been eaten within the town when the animals died or were killed. The location of the town on a cross-roads at a river crossing makes it a very suitable location for stables, providing travellers with fresh horses. We may conjecture that the location of such stables could well have been at or near St John's.

There is evidence for industrial activities involving animal by-products at Bedford. While at some sites horn cores, especially cattle horn cores, were rare, at other sites they were particularly plentiful. The suggestion has already been made that particularly high percentages of horn cores suggest the presence of a horn-working industry, and horns with their horn cores may have been collected together at particular locations to provide the raw material for a specialised craft. The concentration of particular crafts to particular areas is well known as a Medieval development in many towns and is the origin of many street names still in use today. There is no evidence in Bedford for this having been the case for the horn-working industry — the three sites where particularly high percentages of horn cores were found, Midland Road, St John's and the lime kiln at the Castle, are each in a different area of the town. We might suppose that there were several small-scale, rather than one large, industry. This would add weight to the view that Bedford was a town where the pursuance of crafts was combined with agriculture. Occasional finds of worked bones suggest some local but probably small-scale bone tool manufacturing activities. Other crafts or industries involving animal by-products are also likely to have existed, some leaving no tangible evidence for their presence. For example, we may surmise that the banks of the river, perhaps just beyond the town itself, would have been an ideal location for a tannery. Finds of spinning and weaving equipment already mentioned suggest other crafts.

Considered as a whole, the animal bone evidence suggests that Bedford was a town whose inhabitants included both farmers and craftsmen, and thus may have been to some extent self-supporting in food. If this were the case, the local animal husbandry may have been based on the raising of

sheep, with cattle and pigs of secondary importance. We may hope that further excavations in Bedford may help to answer some of the questions raised in this section.

Objects of Bone

Figs 179, 180

A variety of bone items have been found in Bedford, nearly all of them being made from skeletal bone rather than from antler. There were very few trial pieces or other indications that the artefacts were made in the town, despite the fact that large quantities of animal bone refuse were recovered from the excavated sites. Whilst there is no evidence of a bone artefact industry it seems probable, particularly in the earlier settlement phases, that the small bone tools were fashioned by individuals for their own needs.

Objects of bone have come from contexts varying in date from 7th – 18th century. In the earliest phases, the objects are usually well-polished but otherwise quite plain, such as needles 1551 – 1553 and the toggle 1547. They have been recognised in late Saxon/Saxo-Norman contexts in a number of towns including Northampton. Bone skates such as 1512 also occur in Saxo-Norman phases and these too are purely functional objects (McGregor, 1976, 57 – 74). The decorated pieces, usually handles or plates from combs etc. generally belong to the 13th century and later Medieval times.

We are grateful to Graeme Lawson, Arthur McGregor, Gwynne Oakley and Leslie Webster for their comments on some of the objects.

Fig 179 OBJECTS OF BONE, 1512 – 1537

- 1512 Skate made from horse metacarpal, shaped at distal end, signs of wear underneath, 215mm long. 1976/2/105. 11th – 12th century.
- 1513 Skate made from horse metacarpal, shaped at distal end to form leading edge, signs of wear underneath, 250mm long. 1976/2/52. 11th – 12th century. (McGregor, 1978, fig 31, no 11).
- 1514 Polished, end-blown fipple flute, with thumb hole and part of two finger holes, 130mm long. BC72 48 (110). Probably early 13th century. (Megaw, 1968, 149 – 150).
- 1515 Remains of skate, probably from horse metacarpal, shaped distal end, 125mm long. 1976/2/540. 14th century.
- 1516 Part of decorated plate, probably from comb, 32mm long. 1977/1/20.
- 1517 Worked, socketed object, 65mm long. BSJ74 I U/S.

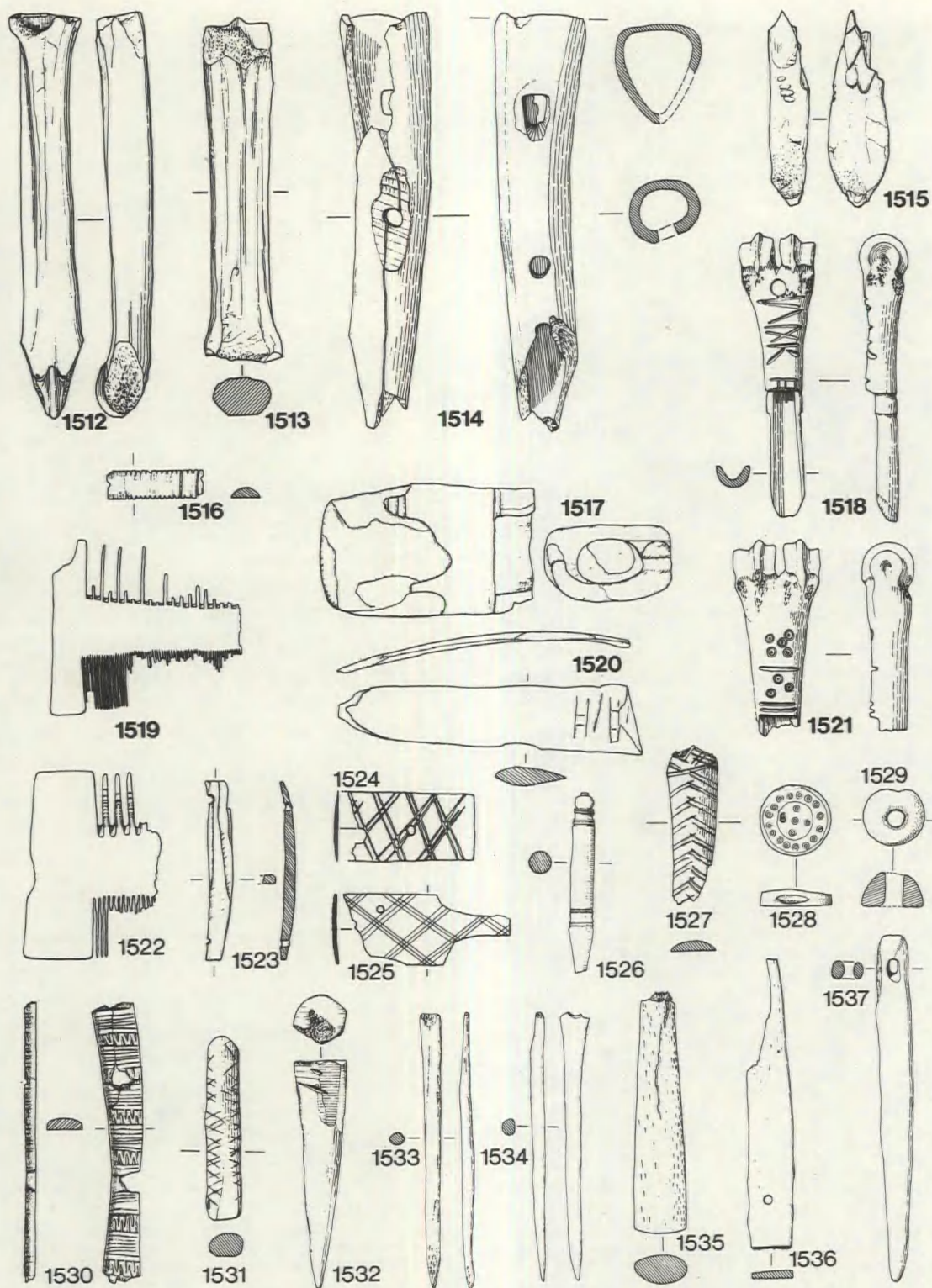


Fig 179 Objects of bone, scale 1:2 except 1512, 1513, 1515, 1524, 1525, 1528, 1529, scale 1:4.



Pl 34 Saxon and Saxo-Norman bone objects: Cat 1530, 1547, 1512, 1552, 1513, 1548, 1532, 1551, 1533, 1549, 1537.

- 1518 Carved and decorated apple corer, underside polished, 88mm long. *BC U/S*.
- 1519 Fragment of double-sided comb, teeth coarse on one side, fine on the other, 58mm long. *BCS73 I (12)*, *Pit C*. Early 18th century.
- 1520 Part of rib, polished, with rudimentary carving, 100mm long. *BSM72 38 (71)*. 14th century.
- 1521 Carved and decorated part of apple corer, 60mm long. *BMR73 (27)*. Post-Medieval.
- 1522 Fragments of double-sided comb made in segments, teeth widely spaced one side, close together on the other, 35mm long. *1976/2/521*. (Platt, 1975, no 1939).
- 1523 Plate from end of comb, with remains of rivet holes each end, 58mm long. *BSJ74 I F77*. Probably 12th century.
- 1524 Carved plate with rivet hole, criss-cross incised line pattern, 38mm long. *BSM72 38 (127)*. 12th – 13th century.
- 1525 Carved plate with rivet hole, criss-cross incised line pattern, 50mm long. *1976/2/83*. 11th – 12th century.
- 1526 Carved polished handle, lower end stained green, 54mm long. *BMR73 (27)*. Post-Medieval.
- 1527 Carved plate, criss-cross incised line pattern, possibly from split rib comb case, 50mm long. *BMR74 II U/S*. 10th century. (McGregor, 1978, fig 29, no 13).
- 1528 Carved and polished disc decorated with concentric circles on one side, probably a gaming piece, 45mm diam. *BC70 5 (53)*. 12th – 13th century context. (Platt, 1975, no 1930, early 13th century).
- 1529 Spindle-whorl, polished and shaped patella, centrally drilled hole, 40mm diam. *BMS72 23 (121)*. 12th – 13th century.
- 1530 Carved plate, probably antler, with straight and zig-zag incised line decoration, 88mm long. *BC70 15 F41*. Early Middle Saxon, *Structure 2*. Mrs L. Webster suggests it is part of the back of a comb. The decoration has a long life, but the earliest parallels date towards the end of the 7th century.
- 1531 Strip of polished bone, light criss-cross incised line pattern, 55mm long. *BC72 50 (4)*. Early Post-Medieval.
- 1532 Carved and polished implement with pointed end, probably an awl, 73mm long. *BMR74 I (51)*. 10th – 11th century.
- 1533 Shaped and smoothed bone point, 87mm long. *BC71 26 (10)*. Post-Medieval.
- 1534 Roughly shaped bone point, 82mm long. *BC71 27 (45)*. Saxo-Norman.
- 1535 Polished handle stained green with remains of iron knife tang in socket, 75mm long. *BSJ74 III U/S*. Post-Medieval.
- 1536 Broken rectangular strip with rivet hole, 94mm long. *BSJ74 I F77*. Probably 12th century.
- 1537 Polished bone needle pointed at one end, drilled eye at other, 111mm long. *BC70 10 (36B)*. Early Middle Saxon.

Fig 180 OBJECTS OF BONE, 1538 – 1554

- 1538 Carved and polished part of whistle or flute with remains of small bronze rivets on top, 80mm long. *BCS71 24 (7)*. Medieval.
- 1539 Domino made of wood with bone plate riveted on centrally, 33mm long. *BMS71 19 (7)*. Post-Medieval. (Baker, 1974, fig 14, no 22; Platt, 1975, no 1950, early 18th century).
- 1540 Flat bone disc, hole in centre, possibly a mount or button, 18mm diam. *BCL73 60 (19)*. (Platt, 1975, no 1948, 17th century).
- 1541 Narrow bone shaped for use as pen, green staining around point, 145mm long. *BSM72 38 (31)*. Post-Medieval.
- 1542 Carved and polished implement with sharp point, probably an awl or bodkin, 130mm long. *1976/2/34*. 10th century.
- 1543 Carved bobbin, probably for lace-making, 70mm long. *BMod74 II (2)*. Post-Medieval.
- 1544 Polished and highly decorated carved bone handle fragment, 65mm long. *BSJ74 II F59*.
- 1545 Polished and decorated hollowed object, probably a handle, 64mm long. *BSM72 23 (121)*. 12th – 13th century.
- 1546 Part of knife handle with iron tang attached, rivets at top and bottom, 65mm long. *1976/2/519*. Post-Medieval.
- 1547 Toggle made from pig metapodial, with drilled hole in centre, 60mm long. *1976/2/39*. 10th century.
- 1548 Broken toggle made from pig metapodial with drilled hole in centre, 60mm long. *1976/2/506*. Post-Medieval.
- 1549 Highly polished, flat implement, 107mm long. *BSM72 38 (97)*. 13th – 14th century.
- 1550 Small object with squared head, pierced, possibly a tuning peg from stringed instrument, 36mm long. *1977/2/37*.
- 1551 Smoothed and shaped bone pin, 90mm long. *1976/2/34*. 10th century.
- 1552 Smoothed and shaped bone needle, 50mm long. *1976/2/127*. 10th century.
- 1553 Smoothed and shaped broken needle, 70mm long. *1976/2/127*. 10th century.
- 1554 Remains of polished flattened implement, 75mm long. *BSJ74 II (1)*.

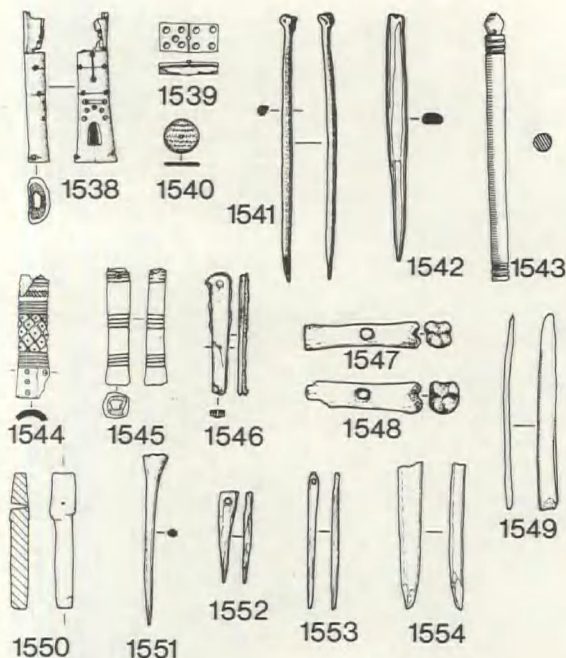


Fig 180 Objects of bone, scale 1:4 except 1543, 1550 scale 1:2.

Shell

The collecting policy for shell varied between keeping all specimens (eg Castle and Cauldwell Street) and retaining only examples from other sites. The species represented are common oysters, snails, mussels, cockles and whelks. Identification and counting was organized by William Peacock. Oysters, which were by far the most common crustacea on all sites were counted by dividing the shells into tops and bottoms, and calculating the maximum number present. Most of the cockles

were seen at the Castle, closely followed by St John's. The majority of the few mussels were found in the St John's area, while the tiny quantities of whelks were recovered only from Cauldwell Street and winkles at Midland Road.

The shell count below is intended to show the trend of shell representation in the town. It shows the total of all shells found in the Castle area, but is distorted by the cluster of seventy-one snails found in the robber trench fill *BC72 52 (6)*.

Oysters	Snails	Mussels	Cockles	Whelks	Winkles
218	196	9	9	—	—

Clearly oysters were the principal shellfish appearing in the Bedford diet. Most of the snails were too small to be edible even if they can be counted as a food source. The tiny amounts of mussels, cockles, winkles and whelks reflect the difficulty of bringing shellfish so far inland.

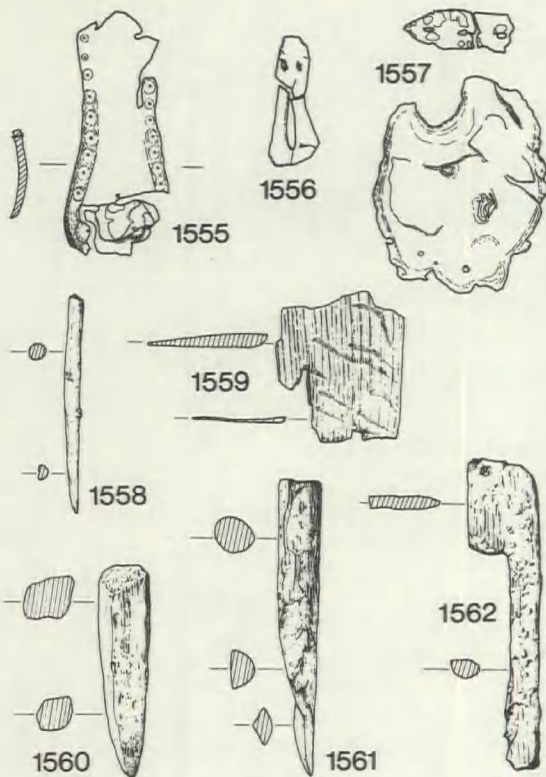


Fig 181 Objects of leather 1555 – 1557, objects of wood 1558 – 1562 scale 1:4.

Objects of Leather

Fig 181

- 1555 Leather shoe sole, probably child's, with copper alloy studs. *BMR 73 (11)*.
- 1556 Leather button fastener. *BC70 12 (13)*. Post-Medieval.
- 1557 Leather shoe sole with stud holes; leather strap. *BC70 5 (36)*. 12th – 13th century.

Objects of Wood

Fig 181

- 1558 Twig of blackthorn with end sharpened to point, 118mm long. *BMR 74 II F3*. Saxo-Norman.
- 1559 Strip of oak showing traces of working, 80mm long. *BMR 74 II F6*. Saxo-Norman.
- 1560 Twig of oak, shaped sides and pointed end, 112mm long. *BMR 74 II F6*. Saxo-Norman.
- 1561 Twig of sweet chestnut with shaped sides and broken pointed end, 158mm long. *BMR 74 II F20*. Saxo-Norman.
- 1562 Shaped piece of oak, 166mm long. *BMR 74 II F20*. Saxo-Norman.

Textiles

by ELISABETH CROWFOOT

(with dye analysis by D. Patterson, and fibre analysis by M.L. Ryder)

The only fragments of woven cloth to be recovered came from a Post-Medieval stone-lined tank *BC70 12 (10)*. These fabrics are consistent with the 18th century date suggested. All are of good quality and the weaves present, four tabbies and one three-shed twill, were produced in quantities for domestic use in England throughout the Medieval period and up to the introduction of machine weaving. The tabbies have the usual characteristics of fabrics woven to be fulled or napped, a different spinning direction used in the two systems, commonly Z for the warp and S for the weft, so that the fibres in the yarns lie in the same direction when woven, which facilitates their raising.

Wool samples from all pieces were sent to Dr M. L. Ryder (Animal Breeding Research Organisation, Roslin) for fibre analysis. The overall fibre diameter ranged from 8 to 40 microns, the mean diameters in the ten yarns ranged from 15.9 to 22.2 microns with an overall mean of 19.9 microns, and the modes from 16 to 24 microns with a mean mode of 20 microns. The similarity between the means and modes indicates a symmetrical distribution which, coupled with their low values, indicates a fine wool. Such measurements today would be identified as Merino wool, which suggests that this wool was imported from Spain, since available evidence indicates that 18th century British wool is coarse.

Dye samples from nos 1563 and 1567 were sent to Dr David Patterson (Department of Colour Chemistry and Dyeing, Leeds University) who found that both were dyed with madder, but the use of different mordants has produced different colours.

There is no way of telling if the fabrics were imported ready made, but in view of the flourishing English trade in manufactured textiles, it seems most probable that the Spanish Merino wool was imported, and spun, woven and dyed in England.

TEXTILES, 1563 – 1568, 18th CENTURY *BC70 12 (10), not illustrated*

- 1563 Five large fragments (a) 215 x 55, (b) 200 x 110, (c) 150 x 355, (d) 120 x 170, (e) 55 x 135mm, and many smaller scraps. All the same fabric, fine wool,

- now purplish-brown, originally red, dyed madder, spinning Z one system, S the other, weave tabby, regular, count 16(Z)/18(S) per cm, no selvedge preserved. Many of the pieces have cut edges; on (a) there are also holes that suggest stitches, though they bear no relation to the edge, and on (d) cut edges and slits. These are probably pieces cut from a garment when re-shaping or re-using better parts.
- 1564** (a) 170 x 200, (b) c110 x 210, (c) 110 x 85mm, fine wool, bright yellowish-brown, Z, S, tabby, no selvedge, count 22(Z)/20(S) per cm, very regular; again fulled but worn; parts stained darker. (a) cut edges, wedge shaped; (c) cut in Y shape and marked with bronze staining; the piece seems to have been folded to a V shape and fastened with two bronze clips.
- 1565** 55 x 185mm, probably a piece of **1564** though it is more generally stained dark, and the fulling heavier; count, spin and weave as for **1564**.
- 1566** Very similar in colour to **1564** a bright golden brown, three small pieces, the largest 45 x 95mm, Z, S, tabby, no selvedge, count 25(Z)/24(S) per cm, very regular and even; again the weave has been fulled, but is now worn, and also damaged on all pieces possibly by resin, or by burning.
- 1567** Cut fragment 38 x 45mm, dark brown, originally red, dyed madder, fine wool, Z, S, tabby weave, no selvedge, count 26(Z)/22(S) per cm, taken as 13/11 or 5mm, after clearing the well-fulled surface.
- 1568** Three small fragments, the largest 62 x 35mm, light brown, fine wool, Z spinning in both systems, no selvedge, three-shed twill, very good even weaving, either 2/1 (warp face) count 35/25 per cm, or perhaps at this date more probably used with the weft face, 1/2, count 25/35 per cm; un-fulled.

ECONOMIC ACTIVITY

This section summarises selected aspects of economic activity in Bedford, seen mainly in the light of the physical remains recovered from a relatively random pattern of excavations. These have testified to a wide range of commercial activities and localised industries in the pre-Modern town, complemented rather than corroborated by the documentary evidence summarised in Godber, (1969, *passim*). Future excavation is expected to modify and expand this picture.

During the Middle Saxon period it is likely that pottery was made in or near Bedford, and some of it may have been commercially produced. By contrast other artefacts such as spindle-whorls, bone awls, bodkins and polishers seem to have been the result of individual effort. Such items are associated with small-scale home-based activities such as the spinning of yarn, the preparation of cloth and leather working, etc. Contact or possibly trade with East Anglia is suggested by the finds of Ipswich-type pottery.

The importance of Bedford during the Saxo-Norman period as a marketing centre is shown by a variety of evidence. Before the Norman Conquest, Bedford already had a mint and a market, shortly afterwards acquiring a fair and a borough charter (Godber, 1969, 50–1). Throughout Saxo-Norman times, trading indicated by pottery finds became more widespread. Not only were coarse wares made in large quantities in the Bedford area, though apparently only for local consumption, but manufacturers from neighbouring counties and abroad were also supplying the town. These vessels could have been imported for their intrinsic value or for the substances they had contained. Iron-working and, to a lesser extent, copper-working were probably carried out in the town, as well as various industrial activities using animal by-products (see **THE FINDS: The Animal Bones**). There is as yet no clear indication that specialist crafts were practised in specific areas of the town.

From the 12th–14th centuries, there is an increasing survival of evidence, also suggesting an expanding pattern of trade and industry. Pottery finds show wide-ranging contacts. Glazed jugs from Northamptonshire (Lyveden Ware, B9) and Oxfordshire (C9 and C11) became popular imports.

Most of the Lyveden vessels were concentrated north of the river and the Oxford types south of the river, hinting at two distinct trade routes impinging upon different economic foci in the town, despite the existence of a stone bridge from the late 12th century, or perhaps because of tolls levied upon it. Slag found in most of the excavated areas indicates much small-scale iron-working, and evidence of lime production was also found. For Bedford Castle in its later stages large amounts of lime were probably supplied by the kiln in Castle Lane, BCL73 60. At Cauldwell Street, BCS73 IV, lime-slaking or possibly tanning may have been undertaken, whilst the remains of another possible lime-kiln were uncovered in St John's Street, BSJ74 II. Hearths and ovens were ubiquitous features, and some of the larger examples must have had an industrial rather than a domestic function. A notable concentration of several large and many small hearths and ovens, dating from the 14th–15th century, probably for baking or brewing, was uncovered at St Mary's Street, BSM72 23/28, and a smaller domestic oven was found at St John's Street, BSJ74 II. Contemporary documents describe a wider range of occupations less likely to leave traces in the material record. The 1297 taxation return indicates the presence of 11 tanners, butchers, fishers, a spicer and salter, a draper, blanket maker, dyer, tailor and shoemaker, smiths, carpenters and wheelwrights (Godber, 1969, 56).

Building materials before the 12th century appear to have been chiefly timber, wattle and daub. After that time limestone was widely used for wall footings, hearths, kilns etc. Whenever a structure went out of use, the stonework was usually robbed and presumably re-used. Roof tiles of clay and limestone became widespread, sometimes elaborately glazed and decorated, such as the Mill Street example, 1076. Brick and floor tiles were in use by late Medieval times. Indications are that most domestic dwellings outside the Castle were plain and simple in nature. Apart from one apparently luxurious town house at St Mary's Street (BSM72 38), where quantities of painted window glass were discovered, little evidence was found of elaborate roofs, plain tiled floors or even decorated pavements, except for the re-used floor tiles at Mill Street (1077–1081): plastered walls and glass

lights seem to have been a rarity. Sanitary and water supply arrangements left little trace apart from occasional stone-lined drains, well-houses and cess-pits.

Insufficient evidence has been recovered from excavation to allow much comment on the question of the late Medieval economic decline suggested by the documentary evidence (Godber, 1969, 135), especially in the 14th and 15th centuries (although the St Mary's Street sites suggest relative prosperity at this time). There are gaps in the chronological sequence on certain sites, but these may have been caused by a thorough ground clearance at a later date rather than by an original absence of occupation. Nonetheless, the material record contains conspicuously fewer survivals from the later as compared with the earlier Medieval period.

In Post-Medieval times houses were beginning to be constructed of local bricks (Cox, forthcoming), and brick floors, glazed windows and plastered walls became more common. Pottery shows a wide range of imports from neighbouring counties, with high quality mass-produced goods coming from Lambeth, Staffordshire and elsewhere, though very few continental imports have been recognised. A comfortable life was enjoyed by some, if the plethora of wine glasses, wine bottles, cooking vessels and fine table ware found at Cauldwell Street (BCS73) in 17th – 18th century pits is to be interpreted as indicating a high living standard.

EARLY TIMBER STRUCTURES

This section briefly summarises the evidence for timber structures from the Middle Saxon to Saxo-Norman periods. It is extremely fragmentary since small excavations covering single street frontage plots were usually even more restricted at the earliest and lowest levels by the effects of modern services and general safety considerations, whilst larger areas also suffered from the disruption of many later disturbances. Consequently discussion can be confined to general comments on types of structural feature, types of construction or building, and the relationship of constructions to the modern and earlier street frontages.

Structural features included various combinations of stake-holes, post-holes and perhaps post pits, and slots, mostly cut into natural subsoil. The slightness of stake-holes must have contributed to the non-survival of many, especially when cut into loose natural gravel subsoil. A great variety of post-holes was seen, with different diameters, depths,

profiles and fills. Some were large enough to have been post-pits, but no evidence was seen for the post within the packing, except in the early Middle Saxon structures under the site of Bedford Castle. Slots also varied in length, width, depth and profile, with the same early Middle Saxon structures showing examples of post-holes and slots combined as post-in-trench construction.

The interpretative grouping of these features to form structures was beset by difficulties already outlined, and generally common to urban excavation (Rahtz, 1976, 70). On most sites, the surviving evidence must represent timber buildings, in some cases with associated pits. However many features could not be grouped horizontally into discrete complexes, nor could be distinguished vertically from one another, in that they were merely observed cut into natural subsoil below the earliest occupation layers.

In BMR74 I, stake-holes tended to form clusters, patterns which neither made sense in themselves nor could be interpreted as an identifiable structure repeatedly renewed. In BC70 5, a narrow trench, stake-holes formed a linear feature, possibly a fence, of Castle date.

The interpretation of post-hole groups was more complex. A line of post-holes running east-west in BSM72 38 could represent either one side of a building or a fence line. Post-holes of probable early Middle Saxon date under the Castle site in BC70 10, 12 and BC71 25 were seen in such small undisturbed areas that little more than their existence could be noted. Even in larger areas, specifically designed to recover building plans, such as the BSM74 excavations, there were problems: post-holes which on evidence of plan distribution might be grouped together as a building were seen to be of different sizes and fills, which might imply more than one superimposed period of building or phase of construction.

Slots or trenches with posts could provide evidence of building axis, but the other limitations remained. In BSM71 23/28 two parallel slots were seen, running at right angles to the street, but it was not possible to say definitely whether they represented two sides of one building or single adjacent sides of two buildings. The difficulties of unravelling the superimposed sequence of early Middle Saxon post-in-trench structures in BC70 15 have been explained (see **BEDFORD CASTLE: Area B**): their existence is certain, their identity far less clear. In the BSM74 area excavation, slots running at right angles to each other were evident, but could not be clearly enough related together

or with post-holes to make complete structures. In both areas it is uncertain whether post-holes seen outside slots represent buttressing of a single period building or another constructional period altogether.

Despite these interpretational difficulties, there was definite evidence for early timber buildings on several modern street frontage sites. The earliest buildings so far found in Bedford, of probably early Middle Saxon date, cannot be located within any settlement plan because no evidence for associated streets or roads was recovered. Slots and post-in-trench features of 9th – 10th century date uncovered on the south side of Midland Road, though set back from the pavement, showed some alignment with the street. This by itself does not demonstrate a similar antiquity for Midland Road, although taken with topographical and documentary evidence, does tend in that direction. South of the river, in St Mary's and St John's Street, 10th – 12th century levels have produced buildings parallel to or at right angles to the present street. The BSJ74 excavations also produced some evidence for a possible property boundary between structures.

As already indicated relating such buildings to their contemporary streets has its problems. Rarely could excavation be carried out even up to the back edge of the modern pavement. However old the origins of these streets, they must have been widened to some extent since the 12th century, and may even have wandered slightly in alignment.

The question of rubbish pits and their relationship to street frontages has been a problem since the first ones were excavated in Bedford in 1967 (Baker, 1970, 74 – 5). It has generally been assumed that pits of Saxo-Norman date were usually dug at the rear of buildings. However, pits have been observed at the street frontage end of excavations, leaving relatively little room for structures between them and the street. Whilst it could be argued that this is evidence of an area not having been built upon by that date, it is worth noting that at BSJ74 1 pits were dug alongside buildings, both fronting the street. In Cauldwell Street, BCS 73, pits front the street while the remains of a building was set behind them.

Little is known of the precise location or width of Saxon or Medieval streets in the town. Arguments regarding the date of the street plan can be assembled, and structural evidence observed, but the two have not been directly and physically associated in Bedford. Future excavations taking a section across the present pavement and road area might help to clarify these points.

URBAN ORIGINS

Whilst it lies outside the scope of this volume to consider all aspects of Bedford's origins, a statement of current theories is necessary. That made in 1974 (Hassall and Baker, 1974, 75 – 98) provided a frame-work for the existing evidence and pointed the way for future research. Recent excavations have not substantially altered the picture outlined in that article, of Bedford's growth from Middle Saxon times.

In 1970 David Hill summarised the available evidence for settlement in Bedford towards the end of the 9th century (Hill, 1970). Occupation on at least a minor scale was implied and the town's situation on the Danelaw boundary would have been significant. This boundary was not respected for long, and subsequently Edward the Elder set out to reconquer the Danelaw, establishing fortified garrisoned *burhs* as part of his plans. The Anglo-Saxon Chronicle entry for the year 915 is central to the consideration of Bedford:

'In this year King Edward went with his army to Bedford, before Martinmas and obtained the borough, and almost all the townsfolk who dwelt there before submitted to him. And he stayed there four weeks, and before he went away ordered the borough on the south side of the river to be built.' (Whitelock et al, 1965, 64)

From this, Hill sees the implication of a pre-Edwardian Danish *burh* north of the river. Edward rebuilt it and laid out the southern town, thus creating a double *burh* at Bedford as had been done at other towns such as Buckingham. Topographically the south *burh* can still be traced today, and may perhaps be outlined by the U-shaped plan of the King's Ditch which forms a half circle around the town bridge. It is not certain from the 1971 excavation across a portion of the bank (Hassall and Baker, 1974, 79 – 80) whether this earthwork relates to Edward's fortification or whether it was in fact a floodwork. However, if it was constructed under Edward it would have provided a fortified bridgehead thus controlling the Ouse and reducing the threat of attack by river.

In the north *burh*, which would have been a major site in Late Saxon times, the basically rectilinear street pattern was most probably established by Edward (Biddle and Hill, 1971, 84). Such a street plan would have been necessary as Edward was essentially re-founding the town which had defence, settlement and trading functions, evidenced by its important mint (Hill, forthcoming).

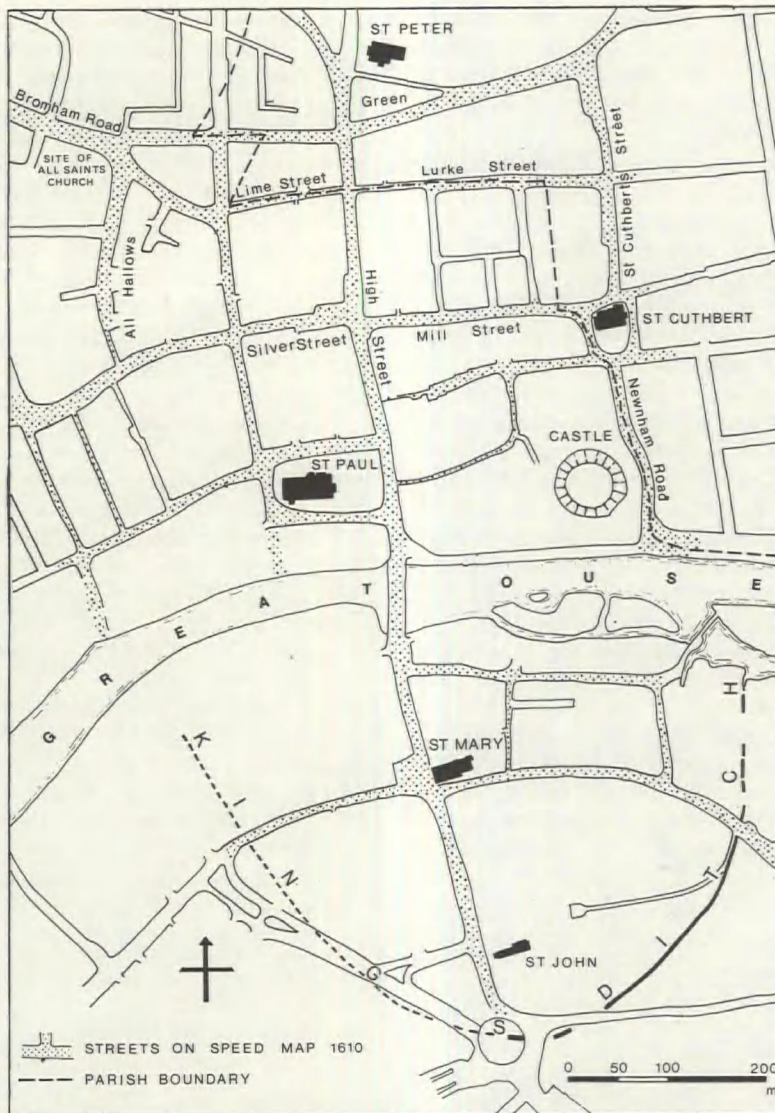


Fig 182 Outline plan of Bedford to illustrate discussion of urban origins.

In addition, being the centre of the shire must have involved Bedford in various aspects of law and local government, and it was therefore a town of considerable significance well before Domesday. The situations of the pre-Conquest churches were carefully chosen and St Peter's could have been strategically placed, perhaps as part of the north line of the defences.

An alternative hypothesis regarding the pre-Conquest origins and plan of Bedford has been proposed by Jeremy Haslam. We are most grate-

ful to him for permitting a summary to be published in advance of its detailed exposition (Haslam, forthcoming).

Haslam sees Bedford "as one element of the defences of Greater Mercia, set up by King Offa, probably in the last years of his reign, in direct response to the real or foreseen threat of Scandinavian invasion." The evolution of a planned town north of the river followed the sequence of Mercian to Danish to Edwardian *burh*, with the southern *burh*, constructed by Edward the Elder in 915 – 916,

forming an additional defence for the southern end of the bridge. In general, analogies and a context for the plan of the north *burh* should be sought in 8th century Mercia rather than in 9th and 10th century Wessex.

The north gate of the original planned *burh* was probably at the junction of High Street with Lime Street and Lurke Street, which may have formed an intra-mural street. It is towards this point that that main roads from the north-west and the north-east are aligned. This would make St Peter's church and the adjacent green, perhaps with a market, part of Saxo-Norman extra-mural development rather than a part of the defences of the north *burh*. The eastern limit north of Mill Street is marked by the parish boundary of St Paul's running west of St Cuthbert's Street. South of Mill Street the parish boundary seems to have been diverted eastwards, as has Newnham Road, probably by the imposition of the Norman castle. This would make the original St Cuthbert's Street and its church, perhaps also associated with a market, all extra-mural.

The western defences and gate would have lain at the same distance from the central cross-roads of High Street/Mill Street/Silver Street as the eastern gate on the parish boundary of St Paul's. Accordingly, All Hallows would be a later extra-mural street, and the lost All Hallows church another extra-mural foundation, together with a possible market, at the point where the present Bromham Road entered the town.

These two explanations by Hill and Haslam must both stand as acceptable alternative theories until further evidence becomes available, directly from excavation within Bedford, or by analogy from other towns. They are more likely to undergo piecemeal modification than sudden resolution since the scarce opportunities for urban excavation arise from modern development needs rather than from pure research policies. Both theses agree on the early 10th century establishment of the town south of the river with the Edwardian *burh*: pottery evidence from the excavation sites in Cauldwell Street, St Mary's and St John's Streets tends to confirm this argument.

Some topographical details in each thesis may be open to dispute, but adjustments on single points are unlikely to resolve the basic questions. These can be summarised as the form and the date of appearance for urbanisation, and the date of structuring by the deliberate imposition of a street grid plan. It would help if the roles of St Peter's and St Cuthbert's as either Saxo-Norman suburban extra-mural churches or elements in early 10th century *burh* defences, could be clarified. The problem of Bedford is indeed exacerbated by its geographical position, on the edges of 8th century Mercia, late 9th century Danelaw and subjected to the influence of early 10th century Wessex. The activities of Offa, the Danes and Edward the Elder all provide possible contexts for the exercise of kingship to strengthen or 'urbanise' existing settlements.

APPENDIX A

LOCATIONS OF BEDFORD EXCAVATIONS, 1967 – 77 (Fig 2)

All trenches or areas were given codes containing a year element. Until 1974 this was combined with a letter code derived from the relevant street name. Trenches were numbered sequentially, regardless of year, though not all numbers in the sequence 1 – 65 were allocated, and the first excavations in 1967 were numbered separately. After 1976, site codes take the form of museum accession numbers.

<i>Trench Code</i>	<i>Site Location</i>	<i>Page No.</i>
BSJ76 1 – 5, 7, 8	7 – 11 St John's Street	97
BSJ67 6	8 – 10 Cauldwell Street	65
BSJ67 9	Unfinished trial trench on site of 'Telephone House'	–
BC69 1, 2	North edge of north Castle Lane surface car park	41
BC70 3	Mound at north-east corner of Castle	51-55
BC70 4	East-west trial trench at east side of raised area of former Golden Eagle Public House	42-43
BC70 5 – 7, 11, 18	North Castle Lane surface car park, south of former Golden Eagle Public House	38-40
BC70 8 – 10, 12 – 17 (1971)	South Castle Lane surface car park St Peter de Dunstable (<i>Beds. Archaeol.</i> 6, 1971, 75 – 77): excavations by D.N. Hall)	20-29
BMS71 19	43 Mill Street	96
BMS71 20, 21	Litson's Timber Yard, Mill Street end	96
BCL71 22	Litson's Timber Yard, Castle Lane end	96
BSM71 23)		
BSM72, 23, 28)	5 – 11 St Mary's Street	127-136
BCS71 24	9 Cauldwell Street	65-67
BC71 25, 26	South Castle Lane surface car park	30-33
BC71 27	North of BC70 4	43
BHS71 29	Howard Street, rear of former County Press Office	96
BSJ71 30	East side of St John's Street, site of present Willmers corner roundabout, near King's Ditch	97
BRC71 31	Section across King's Ditch in Rays Close	97-99
BRS72 33, 34	Corner of River Street and Midland Road, Co-op car park	79
BC72 35 – 37	Ginn's Yard surface car park	33-34
BSM72 38	17 – 19 St Mary's Street	137-142
BC72 40 – 47	Pier base trenches for Swan Hotel extension	58
BC72 48	West side of Castle motte	13-17
BC72 49 – 52	Lower car park trenches, north of Lime Kiln	43-45
BC72 53	Garden of Castledene, north-west of Castle motte	34
BC72 54	North of former Golden Eagle Public House, west of BC70 4, BC71 27: initial Lime Kiln trench	45
BC72 55	Site of former County Library	55-58
BCL73 60	Lime kiln, north of former Golden Eagle Public House	46-51
BCS 73	16 Cauldwell Street	67-78
BMR 73	10 Midland Road	80-83
BSPD 73 65	St Peter de Dunstable, corner of Cauldwell Street and St Mary's Streets	143-145
BMR 74 I, II	4 Midland Road, 6 – 8 Midland Road	83-95
BMod 74	Central area of former Bedford Modern School	95
BSJ74 I – III	39 – 43 St John's Street	99-115
1976/2	20 – 24 St John's Street	115-126
1977/1	Peacock's Yard, Horne Lane	79
1977/2	Salvation Army Hall, Horne Lane/River Street	79

APPENDIX B

GUIDE TO THE EXCAVATION ARCHIVE

The archive consists of paper records, photographic material and the finds themselves, comprising the whole body of evidence from which the printed conclusions have been drawn. The technique recommended in 'Principles of Publication in Rescue Archaeology' (DoE, 1975), of preparing a full archive report and printing only an abstracted version, appeared after work on this monograph had begun. Consequently the relationship between printed report and archive varies from site to site. Excavations in Bedford from 1976 have been recorded on a context sheet system introduced as part of a combined archival preparation and accessioning process.

The published reports include the main conclusions reached in the archive report together with sufficient evidence to illustrate and clarify them. Whilst the printed conclusions can be re-interpreted at face value, any full reworking of the evidence must commence with the archive material.

Preparation of the archive has included the annotation and cataloguing of primary material. Drawings and notebooks have been inked, and, where necessary, typed. Some composite drawings have been assembled from various site records. Loose finds have been marked. A series of record sheets has been devised bringing together information from the primary records. Object Record Sheets have been completed for all small finds and are filed according to material (objects of iron, objects of bone, etc). Pottery Assemblage Sheets are stored by context for each site. A comprehensive Finds Assemblage Sheet for each context contains abstracts from these more detailed records, as well as publication catalogue numbers. The production of the pottery and other finds reports has resulted in various working papers which are also available in the archive.

The loose finds have been stored by category within sites apart from the pottery, which has been organised according to fabric type in the first instance, and then by site within each fabric type. Not all finds collected in excavation have been accessioned into the Museum collections. Collecting policies varied slightly between sites, and, because of extensive use of volunteers, erred on the side of caution. Following detailed study and recording of all finds, it was decided to adopt the accessioning policies outlined below. An overriding constraint and salutary discipline is the problem of museum storage space which is both limited and expensive; the material product from merely the first ten years' work is daunting in itself.

All objects which form part of the type series published

in the monograph, and which have received catalogue numbers, are kept. All the pottery which has been processed, including body sherds, has also been accessioned. Unstratified Post-Medieval sherds which did not form part of the pottery study have been sampled only. Objects of pottery and clay pipes are stored, but featureless pipe stems have been rejected. Samples of tile and brick, wall plaster, window and vessel glass have been kept, including any significant assemblages, whilst most unstratified and Post-Medieval duplicate examples have not been included. Architectural fragments (except duplicate and plain fragments), objects of stone and flint, and coins have all been accessioned.

Not many pieces of daub have been recovered and all lumps with withy marks are being retained. Copper alloy duplicate pins and unstratified fragments are not kept, and neither are the bulk of the iron objects, many of which are so rusted that their true shape has been lost, and X-rays provide the best record. Very few lead objects were found and all are kept. A representative group of slag types has been selected but the bulk has been rejected.

Human bones were recovered chiefly from BSPD73 which cut across the cemetery area of St Peter de Dunstable. Arrangements have been made for these to be kept in Bedford. With animal bones from Post-Medieval spreads and unstratified contexts little useful study could be undertaken and these have been discarded following the recording of their existence and any special points. Shells have been found mainly in rubbish pits and have been sampled for identification. A small representative group of the range of species has been kept.

Leather and textile finds have been accessioned but wooden items have been discarded. Wood types have been identified and Carbon-14 dates obtained from Harwell where appropriate. Objects of wood were extremely fragile and fragmentary, and not considered to be worthwhile conserving.

The full excavation archive from Bedford excavations 1967 - 77, consisting of material remains and documentation, has been accessioned into *Bedford Museum, The Embankment, Bedford MK40 3NY*. Requests for information should be addressed in the first instance to the Curator. Some material has been duplicated or micro-filmed for separate security storage in the *County Record Office, County Hall, Bedford MK42 9AP*. A selection of pottery fabrics from Saxon, Saxo-Norman and Medieval periods has been deposited with the reference collection at the *Department of Medieval and Later Antiquities, British Museum, London WC1B 3DG*. The *Bedfordshire Sites and Monuments Record* at County Hall (Planning Dept) contains a copy of the detailed index to the archive and some duplicate photographic material.

APPENDIX C

RADIO-CARBON DATES

The following dates have been obtained from wood or charcoal samples sent to the Carbon-14/Tritium Measurements Laboratory at Harwell:

BMR74 II F18
BSJ74 III F6
1976/2 well-house timber
1976/2 well-house timber
1976/2/58
1976/2/39

HAR 976, 1000 $\pm$ 100 years BP - a d 950 $\pm$ 100 years
HAR 987, 790 $\pm$ 80 years BP - a d 1160 $\pm$ 80 years
HAR 1929, 650 $\pm$ 70 years BP - a d 1300 $\pm$ 70 years
HAR 1930, 480 $\pm$ 70 years BP - a d 1470 $\pm$ 70 years
HAR 1897, 1110 $\pm$ 70 years BP - a d 840 $\pm$ 70 years
HAR 1896, 1010 $\pm$ 70 years BP - a d 940 $\pm$ 70 years

ABSTRACT

More than 30 sites threatened by redevelopment were examined during the first ten years of excavation in the historic core of Bedford. They varied in size, date and results.

Timber buildings and associated pottery of early Middle Saxon date were found south of Castle Lane, while pottery evidence for Middle Saxon occupation was recovered from several sites in Midland Road. The bank inside the King's Ditch south of the river, traditionally ascribed to the early 10th century, was shown to have been heightened in the Medieval period. Sites within the south burh contained pottery from the 10th century onwards. North of the river insufficient evidence of pre-Conquest Bedford was found to clarify questions of urban origins and the creation of the street grid, in favour of Mercian or Wessex influence.

Saxo-Norman pottery and pits, together with timber structures, were found in large area excavations fronting the south end of St John's Street and smaller sites in St Mary's Street and Midland Road. Elements of Bedford Castle, first mentioned in the 1130's and destroyed after a siege in 1224, were examined, but a definite plan and sequence of development cannot yet be proposed. A stone-lined ditch of probable early 13th century date was found on the west side of the motte: another also divided presumed inner from outer baileys. South of the latter lay a substantial range of stone buildings, including a hall or chamber. A wall tower or possible water gate was partly uncovered on the south perimeter of the Castle. A large lime kiln was found on the north perimeter, probably belonging to the final refortification before the siege: it has been preserved and displayed.

Medieval industrial activity was located south of the river on 3 sites, notably in St Mary's Street close to the south bridgehead, where there had been a complex series of 14th – 15th century hearths and ovens, probably for baking and brewing. Late Medieval decorative elements from Mill Street included a knight finial and decorated floor tiles. The graveyard for the church of St Peter de Dunstable, demolished in the mid-16th century, was found on the corner of St Mary's and Cauldwell Streets.

A notable series of pits with Post-Medieval pottery and glass was excavated in Cauldwell Street.

The report includes a comprehensive catalogue of finds from these first excavations. A ceramic sequence has been devised for the town.

RÉSUMÉ

Dr E. Zadora-Rio

Plus de 30 sites menacés par l'aménagement urbain ont fait l'objet de recherches archéologiques au cours des dix premières années de fouilles dans le centre historique de Bedford. Ils différaient du point de vue de leurs dimensions, de la datation, et des résultats obtenus.

On a trouvé au sud de Castle Lane des constructions de bois et de la céramique des VII^e – VIII^e siècles, tandis que plusieurs sites de Midland Road ont livré de la céramique attestant une occupation des VII^e – IX^e siècles. Le rempart de terre à l'intérieur du King's Ditch (Fosse Royale), au sud du fleuve, traditionnellement attribué au début du Xe siècle, a été surélevé à une époque plus tardive du moyen âge. Les sites fouillés à l'intérieur du burh sud ont livré des céramiques dont les plus anciennes remontaient au Xe siècle. Au nord du fleuve, on n'a pas retrouvé suffisamment de témoignages de l'époque antérieure à la Conquête pour résoudre la question des origines urbaines et de l'implantation du réseau des rues de Bedford, et pour déterminer l'appartenance de la ville à l'aire d'influence du royaume de Mercie ou de celui de Wessex.

Des structures de bois, ainsi que des fosses et de la céramique du XI^e siècle ont été découvertes dans des fouilles de grande surface à l'extrémité sud de St John's Street et sur des sites moins étendus dans St Mary's Street et Midland Road. Les recherches ont porté également sur certaines parties du château de Bedford, mentionné pour la première fois vers 1130 et détruit à la suite d'un siège en 1224, mais il n'a pas encore été possible d'en établir un plan précis ni de reconstituer ses phases de construction. Un fossé à revêtement de pierres, datant probablement du début du XIII^e siècle, a été découvert à l'ouest de la motte; un second fossé séparait la basse-cour de l'enceinte extérieure. Au sud de cette dernière se trouvaient d'importants bâtiments de pierre, parmi lesquels une aula et une camera. Une tour d'enceinte, à laquelle il était peut-être possible d'accéder par le fleuve, a été partiellement dégagée au sud du château.

Un vaste four à chaux, qui date vraisemblablement de la dernière phase de fortification, avant le siège, a été découvert sur le pourtour du château, au nord; il a été conservé pour être présenté au public.

Des traces d'activités industrielles de l'époque médiévale ont été localisées au sud du fleuve sur 3 sites, en particulier dans St Mary's Street, près du pont, où on a retrouvé un ensemble de fours et de foyers du XIVe – XVe siècle, qui servaient vraisemblablement à faire du pain et de la bière. Dans Mill Street ont été découverts des éléments de décor de la fin du moyen âge, parmi lesquels un épi de fûtage et des carreaux vernissés. Le cimetière de St Pierre du Dunstable, détruit au milieu du XVIe siècle, a été retrouvé à l'angle de St Mary's Street et Cauldwell Street.

De nombreuses fosses contenant de la céramique et du verre d'époque post-médiévale ont été fouillées dans Cauldwell Street.

Le rapport comprend un catalogue exhaustif des trouvailles effectuées à l'occasion de ces premières campagnes de fouilles à Bedford, ainsi qu'une étude de l'évolution de la céramique dans la ville.

KURZFASSUNG

David Parsons

Bei den Grabungen in der historischen Stadtmitte Bedfords sind in den ersten zehn Jahren mehr als 30 von Bauunternehmen bedrohte Grundstücke untersucht worden. Sie waren an Grösse und Datierung sowie an Ergebnissen recht unterschiedlich.

Holzbauten und mitgefundene Tonwaren der frühen angelsächsischen Periode sind südlich von Castle Lane aufgedeckt worden, während keramische Beweise für Siedlungen der mittleren angelsächsischen Periode an mehreren Stellen auf der Midland Road zutage gekommen sind. Es ergab sich, dass die üblicherweise dem 10. Jahrhundert zugeschriebene Befestigung innerhalb des 'King's Ditch' südlich des Flusses im späteren Mittelalter erhöht worden war. Innerhalb des curtis-ähnlichen südlichen Stadtteils haben die Grabungsplätze Keramik aus dem 10. und späteren Jahrhunderten aufgezeigt. Nördlich des Flusses reichte der frühmittelalterliche Befund nicht aus, um die Fragen über die Herkunft des Stadttyps und des Strassennetzes – ob aus Mercia oder aus Wessex – zu klären.

In grossen, an das südliche Ende von St. John's Street anstossenden Flächenausgrabungen, sowie auf kleineren Grabungsplätzen an St. Mary's Street und Midland Road sind saxo-normannische Tonwaren und Gruben samt Holzbauten aufgefunden worden. Tiele von Bedford Castle, in den dreissiger Jahren des 12. Jahrhunderts zum ersten Male urkundlich genannt, und nach einer Belagerung 1224 abgetragen, sind untersucht worden, ohne dass man noch eine Entwicklungsfolge hat vorschlagen können. Ein steinverkleideter Graben – wohl des 13. Jahrhunderts – ist westlich der Motte entdeckt worden; ein weiterer Graben trennte die anzunehmenden inneren und äusseren Vorburgen voneinander. Südlich davon lag eine beträchtliche Flucht von Steinbauten einschliesslich Halle oder Kammer. An der Südgrenze des Schlossbereichs ist eine Bastei bzw. ein Wassertor teilweise aufgedeckt worden. An der Nordgrenze ist ein grosser Kalkofen angetroffen worden, der wahrscheinlich der letzten Wiederbefestigung vor der Belagerung zuzuschreiben ist; er ist konserviert worden und ist jetzt wieder zu besichtigen.

Mittelalterliche Industriebeschäftigungen sind südlich des Flusses an drei Stellen festgestellt worden, vornehmlich an St. Mary's Street in der Nähe vom Brückenkopf, wo eine komplexe Reihe von Herden und Öfen aus dem 14. – 15. Jahrhundert, vermutlich zum Backen und Brauen verwendet, entstanden ist. An Mill Street aufgefundene Zierstücke aus dem späten Mittelalter schlossen einen Ortziegel in der Form eines Ritters und geschmückte Fussbodenziegel ein. Im Winkel zwischen St. Mary's Street und Cauldwell Street ist der Friedhof der gegen 1550 abgebrochenen Kirche St. Peter de Dunstable entdeckt worden.

Eine bemerkenswerten Reihe von Gruben, die Keramik und Glas nachmittelalterlicher Zeit verbargen, sind an der Cauldwell Street ausgegraben worden.

Dieser Bericht enthält einen umfassenden Katalog der Funde aus diesen ersten Grabungen in Bedford. Es wird versucht, die Keramik der Stadt chronologisch einzuordnen.

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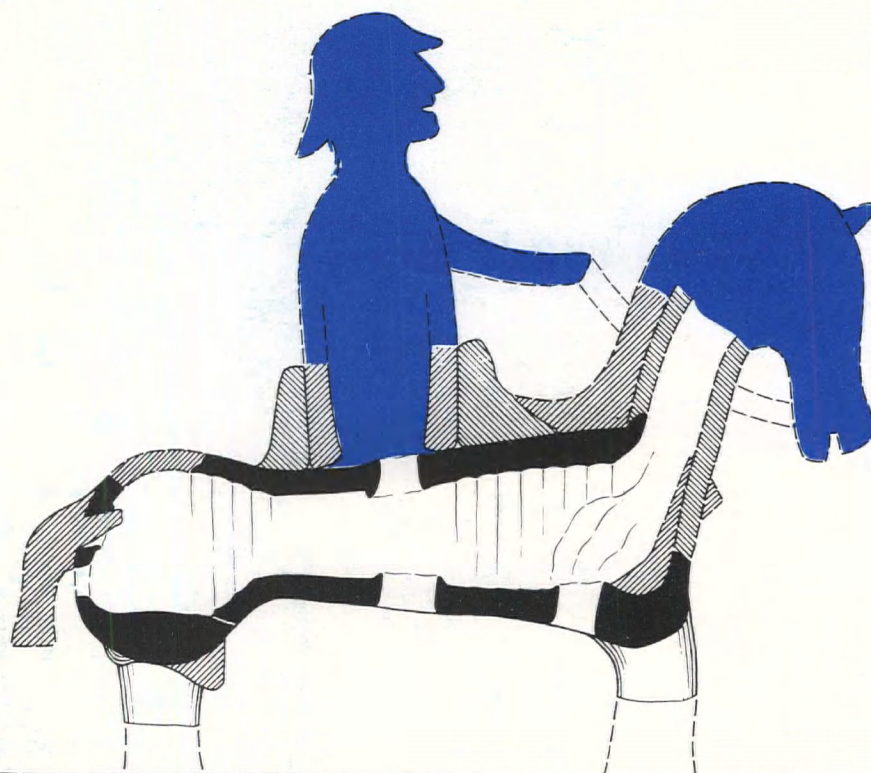
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Back Cover Drawing

Longitudinal section through 15th century Knight
Finial roof fitting (Catalogue 1076), drawn by
Gerald Dunning, to whose memory this volume is
dedicated, and originally published by him in
Volume 9 (1974) 113 of the Bedfordshire Arch-
aeological Journal.



BC 72 Motte

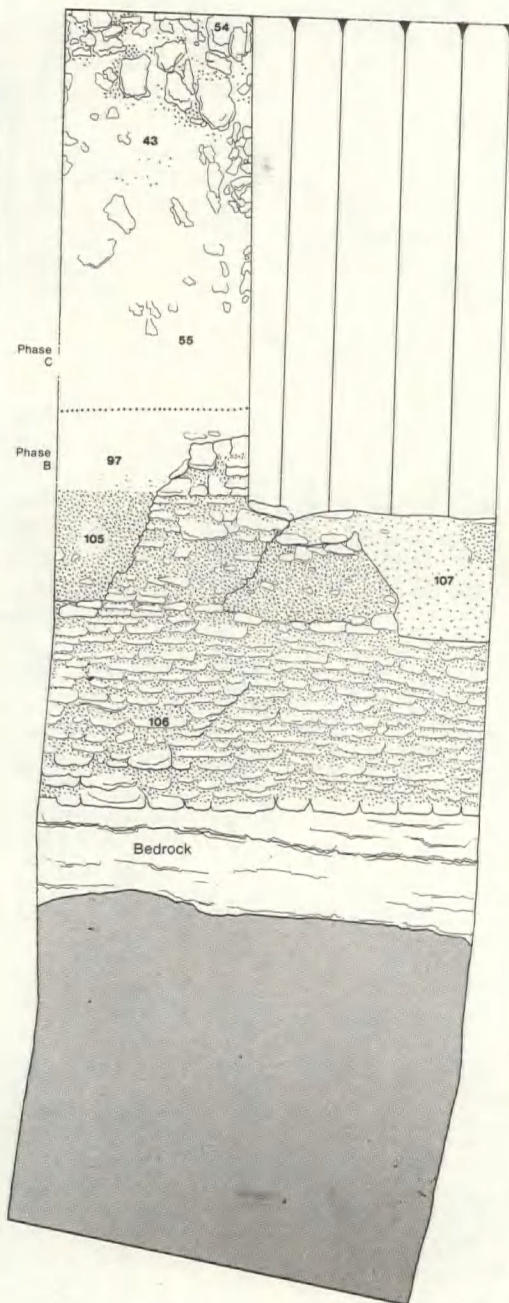
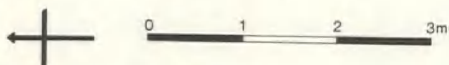


Fig 5 Bedford Castle: area A: plan of motte excavation.



Pl 1 Bedford Castle: area A: BC72 48, west side of motte.

lengthened in an unsuccessful attempt to locate the west side of the ditch. The bottom part of the ditch fill and the layers immediately over the stone-lined slope were removed by hand (*pl 1*).

Phase A

Only a small part of the body of the motte could be examined, largely due to the thick accumulation of post-Castle material over its surface, and restrictions by existing tree cover on the width of trial trench. Two sondages (*fig 6*) showed a clear difference of attitude and composition between inner and outer layers of the motte itself. The inner had been laid down, rammed solid, at a much steeper angle than the outer, sloping steeply downwards both to west and south. They consisted of rammed layers of sandy clays and pebbly loam with the possibility of deliberate turf spreads (*104*).

Phase B

The upper and outer levels of the motte consisted of irregular tips of clay and clay mixed with gravel. The latest surface of the motte slope appeared to have been turf revetted (*55*). Possibly the bottom part of the turf line had been cut away when the surrounding ditch was revetted with mortared limestone on the motte side (*pl 2*).

To the south of Castle Lane (Area B), extensive Post-Medieval dumping and some quarrying has created a raised plateau, but lowered the ground to the east between the 1970 excavation sites and the motte. There is a significant drop in level on the east and south sides of this plateau, into Ginn's and Swan Yard respectively.

The northern limit of the castle is that most clearly reflected in existing ground levels. The north-east earthwork and the motte, with its almost filled ditches, provide a clear indication on the east. The levels in the vicinity of the motte have been affected by 19th century building in Castle Close, the filling of the eastern watercourse or ditch when Newnham Road was laid out, and by the landscaping of the (now) public gardens. Where the east side of the motte pushes out the line of Newnham Road, the ground to the west of the retaining wall is much higher on the Castle than on the pavement side. It is not clear whether this is a relic of the Castle or of later works.

The Embankment has been built up over the south limit, and any significant levels have been obscured. The same has happened on the west side as a result of building on the east side of the High Street. However, the ground level running from High Street through a passageway into Ram Yard does show a dip running north-south at about the point where a main ditch might be expected.

Despite its truncation in the 13th century and alteration in subsequent years, the motte continues to be an impressive tree-covered feature on the east side of the town. The present day approximate measurements of diameter at 46m on the top and 70m at the base, together with height above modern ground surface not exceeding 6m, are those of a slighted stronghold. Traces of ditches can be seen on the eastern and northern sides, and have been landscaped into the municipal gardens.

The north-east earthwork shows clear slopes on its northern and eastern sides, but all evidence for slopes internal to the Castle perimeter has been destroyed or concealed by 19th century building. Early antiquarians described it as a lesser motte, but it could equally well represent a length of fortuitously surviving rampart, strengthened at a corner.

AREA A: THE MOTTE

(BC72 48; Figs 5, 6)

by EVELYN BAKER

SUMMARY

A trial trench ran east from Ginn's Yard across the line of the ditch in front of the motte and about half way up its west side. The failure to find a pre-Norman ground surface might be explained by some evidence for an earlier, smaller motte, whose ditch had been filled to accommodate an expansion, presumably in the early 13th century. The ditch which was filled after the siege of 1224 was stone-lined on its east face, the west side having been destroyed by a Post-Medieval disturbance.

Trench Phase	Castle Site Period	Activity
A	3	11/12th century, construction of primary motte and ditch
B	3	?post-1216, stone lining of inner ditch face, following possible expansion of motte
C	4	c1224 - 25; slighting of motte and filling of stone-lined ditch
D	5	Post-Medieval gravel extraction west of motte
E	5	Post-Medieval, continued reduction of motte, ?Civil War and bowling green use
F	5	Mid-19th century, Ice House cut into north side (not represented in this excavation)
G	5	20th century (municipal) paths and pits

THE EXCAVATION

Introduction

The west side of the motte was examined by the writer assisted by David Devereux, as part of the work in Ginn's Yard during the summer session of 1972. It was intended to investigate the ditch, faint surface traces of which are visible on the north and east sides, and to define the original profile of the motte. Only a limited exploration of the body of the motte was made due to limitations of time and working space on the tree-covered slope.

A section 2.0m wide was taken through the surface of the motte slope. The top 0.20 - 0.30m was removed by machine and work continued by hand until the appearance of the stone revetting for the east side of the ditch, when further machinery was employed. The trench was widened at the base of the existing mound to 4.70m and

The western limit of the castle seems to have been represented by the rear of properties fronting High Street, rather than by the present building line on High Street. Hurst (*ibid*) noted a length of moat (d) 675 feet long from the Swan Hotel northwards to Ram Yard, where it turned eastwards. Farrer cited the remains of a south-west tower found when the embankment was built in the 1870's (1926, 57). Several deeds from the 16th century onwards give the Castle ditch as a boundary eastwards for properties on the east side of High Street. An example is that of 12 August 1563, describing 'a messuage or Inn called the Ramm between . . . the Rose . . . and the Red Lion . . . abutting High Street west and on le Castle ditch east . . .' (CRO CRT 130 Bedford 7, no 6). Hurst's reference, repeated by others, to cellar and other excavations fronting High Street continually turning up quantities of human remains 'showing the sanguine nature of the conflicts in contending for the castle' may partly or entirely be a misinterpretation of the large rubbish pits, filled with animal bone, which often appear in Bedford excavations (1851, 390).

The southern limit of the castle was the river, itself a natural moat, which may have needed no more reinforcement than a wall, perhaps that shown on Speed's Map of 1610. There are no references to ditches found during 19th or 20th century building. Hartshorne (1861, 12) noted that 'a small portion of a little mural tower on the south side still existing' might have been original, but there is no other information on this feature. Suggestions that the cellars and other walls of the Swan Hotel (e) contain castle walls probably derive from the frequent assumption that limestone walls must be castle walls, though the reuse of material is more likely.

Connected with the question of moats forming the outer perimeter of the Castle are several references to a wall across the river, south of the castle site. These were recently reviewed in the magazine *Lockgate* (No 4, July 1962, 66 – 68). Hurst (1851, 390) mentioned a stone wall 10 feet wide built across the river, acting as a dam to keep up a head of water for supplying the Castle moat. This was partly visible at low water, and more could have been seen before 1774 when some of the stone had been used to build the Howard Chapel in Mill Street. Elwes saw it as a causeway (1864, 256) and Farrar as a device both for raising the level of water in the King's Ditch south of the river and for working a mill on the Castle moat.

Another major feature of the outer perimeter, the barbican, is mentioned in contemporary and 19th century documentation. The Pipe Roll of 34 Henry II (1187 – 88) records £4 6s 0d spent upon 'the bridge of the castle of Bedford and of the postern towards the water'. Neither need be the barbican, let alone that which existed in 1224, but Elwes (1864, 245) was encouraged to make the strange suggestion that the main entrance to the castle was south of the river, the northern part merely being the outer bailey. Blyth noted that the remains of the 'barbican' had been removed from Castle Lane in 1851 when cottages were erected (1868, 29). He did not however give a precise location for this find, nor indicate why this interpretation should be applied to rough stones comprising a wall less than 1.0m thick. There is a long standing tradition that the modern Castle Lane preserves the location of this barbican, with the slight bend (f) 30m from the High Street entrance being an indication of where the outer bailey actually began.

MODERN TOPOGRAPHY (Fig 4)

The Castle developed on land sloping gently but unevenly towards the north bank of the River Ouse, immediately east of the bridge site, which it dominated. The limited work undertaken so far has indicated considerable changes in ground level during and after the life of the Castle, making reconstruction of the 11th century ground surfaces difficult. At its fullest extent it occupied an approximate rectangle 200m x 150mm or 3.36ha.

The northern perimeter of the latest castle coincided with a terrace marked by Ram Yard, extending at least from St Cuthbert's Church to the High Street. To the south the ground falls away to the river, and rises northwards to Mill Street. The changes in level are most clearly visible along the track northwards from Ginn's Yard by way of Castle Lane to Ram Yard.

To the north of Castle Lane (Area C), the lower edge of the terrace has been built up artificially about 1.60m against a wall at the edge of Ram Yard. This may be partly explained as the northern limit of the castle, though no direct evidence has been found. In any case, it was definitely accentuated by 19th century cottages built in the angle at the junction with Castle Lane, lining its north and west sides.

the church of St Cuthbert, and with the stones of the churches he built towers, walls and outer walls, and surrounded it on all sides with deep paved ditches.....' (Rolls Series, 1875, 205).

SIEGE AND DESTRUCTION

The events of 1224 – 5 produced two descriptions of the castle refortified by Falkes de Breaute for his brother William, who was left to defend it against Henry III. Both Ralph de Coggeshall and the Dunstable Chronicler give an order of siege, the detailed preparations for which have been fully discussed elsewhere (Fowler, 1920, 117 – 32; Allen Brown, 1976, 191 – 4). Firstly the barbican was taken and the outer bailey occupied; next the wall near the old tower was breached by mining so that the inner bailey was taken; finally, the keep or tower was successfully mined, causing the surrender.

The Close Rolls record the royal commands for the dismantling of the fortifications. The tower was to be laid even with the ground, and the fosse that encircled it with the pavement was to be made level with the earth. In the same way the outer bailey was to be entirely thrown down, its fosse and all the fosses of the Castle filled up, together with their pavements, and restored to the common level of the earth. The walls of the lesser bailey were to be partially lowered and to remain plain and uncrenellated. Three-quarters of the ancient tower towards St Paul's church was to be demolished (Rot. Lit. Claus. 1, 632, 654).

These accounts relate to the Castle at its fullest extent, with boundaries approximately represented by the river, High Street, Ram Yard and Newnham Road. But they tell little more than that Bedford Castle included the familiar elements of keep, inner and outer baileys and barbican. There are only two distinctive items. The 'old' or 'ancient' tower 'towards St Paul's' might be a major building retained from the earlier Norman plan in later expansion, though there are no indications as to whether it was free-standing, a part of the latest inner bailey defences, or on the outer perimeter. The paved ditches are mentioned by both chronicles and royal papers, and have been confirmed in excavation.

AFTERMATH

William de Beauchamp objected to this emasculation of his primary stronghold (Rolls Series,

1862, 236). He was told that he might retain an unfortified dwelling within the site, but it is not known whether he took advantage of the offer. By 1361 it was described as a 'void plot of old enclosed by walls' (Ch. Inq. P.M. 35 Ed III pt II no 10).

There is little documentary evidence for the site being used significantly before the 19th century expansion of Bedford. Camden described ruins overhanging the river on the east side of the town (VCH, 1912, 11). Speed's Map of 1610 shows an empty site, with the motte and a length of ruined wall. In 1644 – 45, a Captain Hudson was using the 'Mount', presumably the motte, as a refuge and prison which was subsequently further slighted (HMC 8th Rpt, 1881, App 1, 7b, 8a), perhaps improving its utility for the sportsmen of Bedford as a bowling green. Three-quarters of the site was redeveloped in the 1840's with the construction of the Higgins Brewery, and the Higgins house in the north-east corner of the enclosure, followed by houses and sheds lining Castle Lane, Ram Yard and Ginn's Yard.

RECORDED REMAINS (Fig 3)

Deeds, maps and early antiquarian literature give some information, almost entirely about the perimeter of the latest phase. The following summary concentrates upon vanished features, excluding the motte and the small earthwork at the north-east corner of the site.

On the east side, the 1841 Reynolds Map shows a ditch running along what was to become Newnham Road, discharging out into the river at the south-east corner of the castle (a). This is also shown more crudely on the Speed Map. Goddard described this muddy ditch as open until recently (1906, 50). Foundations were discovered after 1804 during the construction of the hexagonal Militia Depot on the earthwork at the north-east corner of the Castle, and in the 1840's when the Higgins house (b) was built. Blyth thought this represented a 'sally-port' (1868, 29), but some kind of defensive point or angle tower may have existed here on the outer curtain.

On the north perimeter, Hurst (1851, 390), asserted that the outer ditch ran east along Ram Yard for 600 feet from the north-west corner. The western length of this (c) is corroborated by a deed of 1800 which shows the line of the largely filled ditch (CRO R/4/534/13). This ditch is also mentioned in 16th century deeds as a southern limit to properties on the south side of Mill Street (CRO CRT 130 Bedford 7).

36). Monastic chroniclers had a vested interest in the dramatic: their descriptions of impregnable fortresses and bloody assaults were not necessarily topographically exact. In the same way, the royal papers relating to the 1224 siege were more concerned with the mechanics of warfare and its financial consequences than with the nature of the beleaguered fortress: even the commands for the slighting were couched in generalised terms.

There are several references to the site after the destruction of the castle. Deeds from the 16th century onwards occasionally use features like the outer ditch or a wall as a boundary limit. John Speed's map of 1610 shows the site and a few features, but Reynolds map of 1841 was the first to be properly surveyed.

Camden and Leland, who provided little detail, were the first antiquaries to note the castle site. More extensive interest in the 19th century was timely for its appearance just before urban expansion covered much of the site, but misleading for the confusion of useful observations with speculation about Roman and Danish activity in the town. Scholars followed one another, each adding their own piece of interpretation or recollection. A seminal paper was the 'Historical Notice of Bedford Castle' (Hurst, 1851, 381 – 391). It preceded the privately printed 'Bedford Castle' (Hartshorne, 1861), another paper of the same title (Elwes, 1864, 243 – 257), passages in a general 'History of Bedford' (Blyth, 1868), and the 'Great Siege of Bedford Castle' (Goddard, 1906). 'Old Bedford' (Farrar, 1926) wove all into an imaginatively compelling tapestry.

ORIGINS

The brief Bedford entry in Domesday Book makes no mention of the Castle, but this does not preclude its existence by 1086, since the Survey was primarily concerned with assessment for taxation, rather than expenditure on fortifications. A map of castles known to have been built by 1086 (Renn, 1968, 15) has to omit Bedford, though strongholds existed in all the adjacent county towns of Cambridge, Huntingdon, Hertford, Buckingham and Northampton. Bedford's strategic value had been underlined during the previous century: in 915 Edward the Elder had fortified the southern burh and taken over the existing fortification of the northern burh; in 1010 Danish raiders found the town worth attacking and burning.

The barony of Bedford was probably granted by William II to Hugh de Beauchamp in 1087, succeeding Ralf de Tailleboosc, who had acquired a major estate at the Conquest. Succession must have continued in the Beauchamp family until the first direct reference to the castle occurs in the 1130's. The foundation of the castle has been ascribed to the Beauchamps, probably in William II's reign (Godber, 1969, 21), but there is at least the possibility that Bedford was a sufficiently important centre to have required subjugation at the Conquest by the familiar means of placing a castle athwart an existing urban boundary, whatever physical form this fortification may have initially taken.

DEVELOPMENT

Bedford Castle is first mentioned in the 1130's. Milo de Beauchamp held it in 1138 against Stephen, lost it to him, and recovered it again shortly afterwards. At that time it was 'completely ramparted around with an immense earthen bank and ditch, girt about with a wall strong and high, strengthened with a strong and unshakeable keep.....' (Rolls Series, 1886, 30 – 32). This seems a purely formal description, giving no indication of size or plan. There may also have been sieges in the mid-1140's, when the Earl of Chester took the Castle, and in the early 1150's, since the Pipe Roll for 1157 – 8 records a payment of 20 marks due to the king from the burgesses of Bedford 'who were in the castle against the king'.

It is possible that the disturbances of Stephen's reign provided a context for the expansion or re-ordering of an early Norman castle, but there is no positive evidence. There were other periods of disorder in the second half of the 12th century which might also have been the occasion for major works. But the only references are to the expenditure of small sums by the sheriff in routine repairs, £4 10s 1d in 1180, £12 0s 0d in 1183, and £4 6s 0d in 1188 for work on the bridge and the postern towards the river (Colvin, 1963, II, 558). The Pipe Roll for 6 John 1205 – 6 records the expenditure of 13s 9d on repairs to the prison.

In 1215, after a brief siege, Falkes de Breaute took Bedford Castle from an absent William de Beauchamp. Ralph de Coggeshall records in convincing detail the refitting which followed. 'Falco strengthened and expanded the castle at great expense, fortifying it with towers and outworks and a variety of warlike machines. He pulled down to the foundations the great church of St Paul which from antiquity had stood next to the castle, and

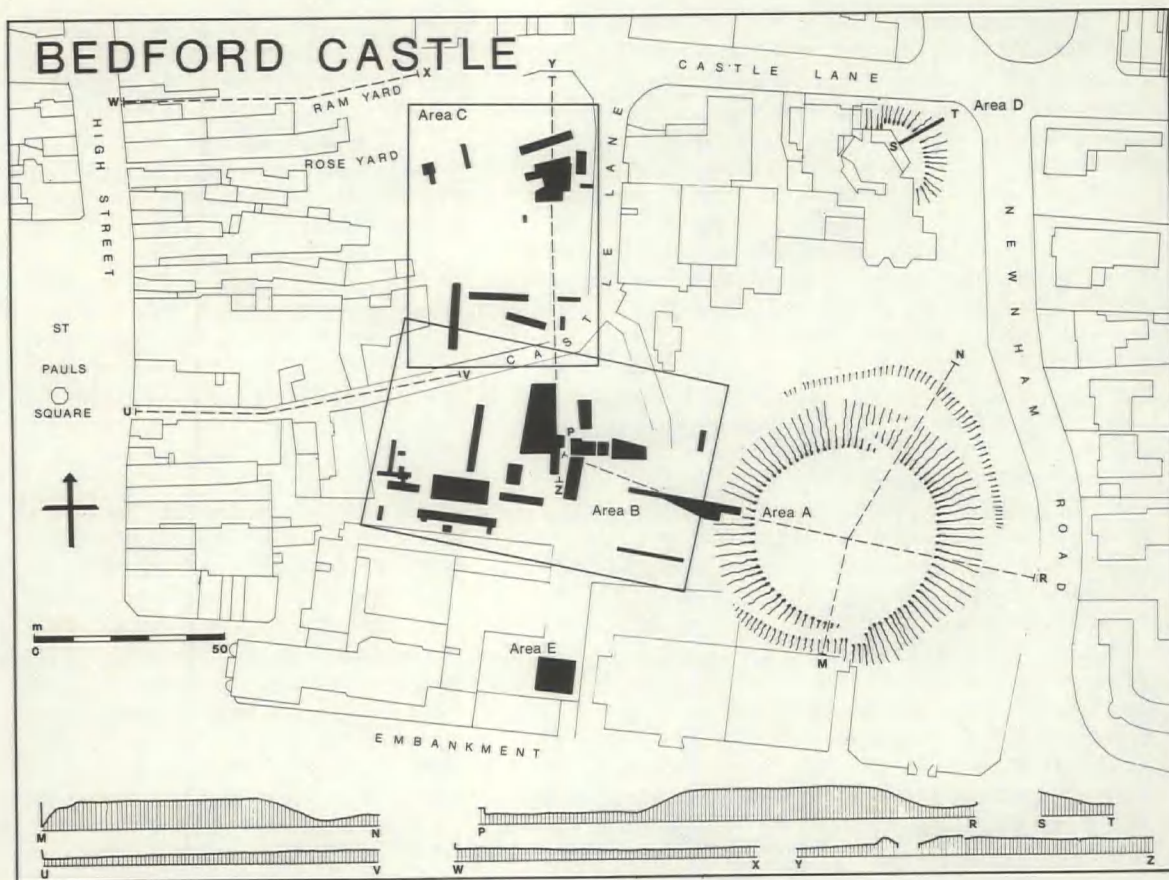


Fig 4 Bedford Castle: excavation areas and ground sections.

tween trenches unless this is specifically stated.

We are grateful to many people who have discussed the Castle evidence with us at intervals since 1970. While accepting full responsibility for the report in its printed form, we should like to acknowledge many valuable comments and helpful suggestions made by Brian Davison upon an earlier typescript version. Publication drawings were mostly prepared by Evelyn Baker.

DOCUMENTARY EVIDENCE

SOURCES

Royal papers provide only four short references to Bedford Castle before the siege of 1224. This is probably due to the special position of the Beauchamp family who held it with the barony of Bedford and must have undertaken necessary works from their own resources (Colvin, 1963, II, 558).

Chronicles are more informative. The *Gesta Stephani* (Rolls Series, 1886, 30 – 33) describes the involvement of Bedford Castle in the civil wars of the mid-12th century. The final siege is described in classic detail by Ralph de Coggeshall's *Chronicon Anglicanum* (Rolls Series, 1875, 204 – 8) the *Annales de Dunstaplia* (Rolls Series, 1866, 86 – 89) and Royal Letters (Rolls Series, 1862, 229 –