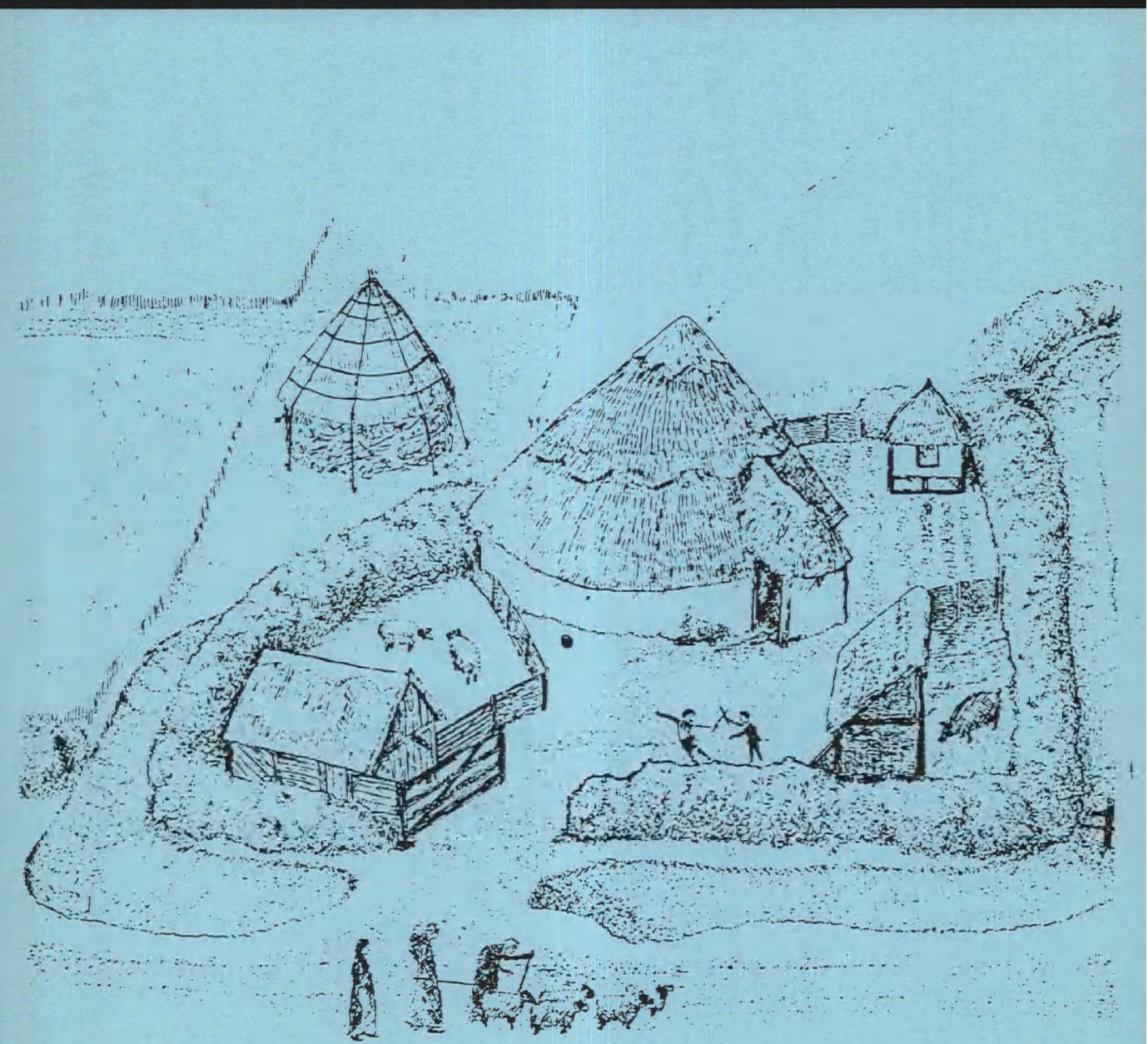


# BEDFORDSHIRE ARCHÆOLOGY



VOLUME 17

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Ampthill and District Archaeological and Local History Society

Bedford Archaeological Society

Bedford Museum

Bedfordshire, Buckinghamshire and Cambridgeshire Historic Buildings Research Group

Conservation Section, Planning Department, Bedfordshire County Council

Harlington Upper School

Higham Ferrers Hundred Archaeological Society

Luton Museum

Manshead Archaeological Society of Dunstable

North Bedfordshire Archaeological Society

Potton and District Local History Society

Shefford and District Local History Society

South Bedfordshire Archaeological Society

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**BEDFORDSHIRE**  
**ARCHÆOLOGY**

**VOLUME 17**

**BEDFORDSHIRE ARCHAEOLOGICAL COUNCIL**

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## Notes on Contributors

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JEREMY HASLAM MA is the author of *Medieval Pottery* and *Early Medieval Towns*. He was the editor of *Anglo-Saxon Towns in Southern England*, to which he contributed essays on towns in Wiltshire and in Devon. He has published essays on the early development of Cambridge and Bedford respectively in *Proceedings of the Cambridge Antiquarian Society*, 72 and *Bedfordshire Archaeology*, 16.

DAVID H KENNETT edited *Bedfordshire Archaeological Journal*, subsequently *Bedfordshire Archaeology*, from 1969 to 1986. He is the author of *Anglo-Saxon Pottery* and has written studies of Anglo-Saxon cemeteries found in Bedfordshire, Cambridgeshire, Norfolk, Northamptonshire, Oxfordshire and Suffolk. In 1978-80 he held a Leverhulme Research Award for the study of the cemetery found on St John's College Cricket Field, Cambridge, in 1888. His papers on rural society from the sixteenth to nineteenth centuries AD have appeared in *Norfolk Archaeology*, *Northamptonshire Past and Present*, *Proceedings of the Cambridge Antiquarian Society*, and *Textile History* as well as issues of *Bedfordshire Archaeological Journal*.

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PETER J WOODWARD BA BArch MIFA received an architectural education at Bristol University. He worked for a number of years as a Field Archaeologist for Bedfordshire County Council and subsequently as the Field Archaeologist for the Dorset Archaeological Committee. He is now a Senior Field Archaeologist for the Trust for Wessex Archaeology, Salisbury. He has contributed to volumes 135 and 143 of the *Archaeological Journal*, extensively to the *Proceedings of the Dorset Natural History and Archaeological Society*, and to issues of *Bedfordshire Archaeological Journal* and *Bedfordshire Archaeology*, 16.

### Corrigenda

In *Bedfordshire Archaeology* 16, 1983, 37-64 there appeared 'Excavations in Bedford, 1977 and 1978'. It is regretted that there was an omission in respect of acknowledgement of part authorship. The excavations at Peacock's Yard were co-directed by Peter J Woodward, Conservation Section, Planning Department, Bedfordshire County Council.

An imprecision also occurred in the Notes on Contributors. The corrected copy for Peter J Woodward appears above.

Figure 3 on *Bedfordshire Archaeology* 16, 1983, 89 has objects 437 and 485 incorrectly numbered. They should be numbered as the text on the same page.



# Twenty-Five Years of the Bedfordshire Archaeological Council

DAVID H. KENNETT

## INTRODUCTION

In 1959, the then curator of Luton Museum, the late Charles Freeman, brought together representatives of the Bedford Archaeological Society, the Manshead Archaeological Society of Dunstable and the South Bedfordshire Archaeological Society for an initial meeting to discuss the formation of an organisation capable of co-ordinating the considerable increase in fieldwork and excavation in the county which had taken place in the 1950s and to provide the resources to produce a permanent record of work. In 1984, the Bedfordshire Archaeological Council completed twenty-five years stewardship of those responsibilities.

This anniversary provides an occasion to review the work of the Bedfordshire Archaeological Council and to record its membership and officers.

## MEMBERSHIP

The initial membership of the Bedfordshire Archaeological Council was the three archaeological societies then active in the county, Luton Museum and by co-option in an individual capacity the curator of the Pritchard Museum of Bedford Modern School, the late F.W. Kuhlicke. The collections of the museum were transferred in the early 1960s to the ownership of the then Borough of Bedford and when Bedford Museum opened in 1967, Mr Kuhlicke served as Honorary Director for a further seven years. In this official capacity, he gave wise counsel to the Bedfordshire Archaeological Council.

Since the inauguration of the Bedfordshire Archaeological Council, several other archaeological societies have been founded in areas of the county not covered by those societies already active. These, too, have joined the Bedfordshire archaeological Council as have a number of educational establishments which have taken an interest in archaeology. From 1971, the Bedfordshire County Council has sent an officer to the meetings of the Bedfordshire Archaeological Council. Membership of the Bedfordshire Archaeological Council has

## FIGURE 1

*Bedfordshire Archaeological Journal*  
and *Bedfordshire Archaeology*

## VOLUME SIZE

| Volume | Year | No of Pages       | Articles | Notes |
|--------|------|-------------------|----------|-------|
| 1      | 1962 | x + 78 + 8pl      | 4        | 1     |
| 2      | 1964 | iv + 80 + 8pl     | 6        | 4     |
| 3      | 1966 | iv + 60 + 8pl     | 8        | 5     |
| 4      | 1969 | vi + 90 + 8pl     | 6        | 4     |
| 5      | 1970 | vi + 130 + 8pl    | 8        | 2     |
| 6      | 1971 | vi + 90 + 8pl     | 8        | 9     |
| 7      | 1972 | vi + 98 + 8pl     | 9        | 7     |
| 8      | 1973 | vi + 146 + 8pl    | 10       | 6     |
| 9      | 1974 | viii + 136 + 16pl | 12       |       |
| 10     | 1975 | vi + 90           | 8        | 2     |
| 11     | 1976 | vi + 90           | 9        | 5     |
| 12     | 1977 | vi + 106          | 8        |       |
| 13     | 1979 | x + 310           | 1        |       |
| 14     | 1980 | vi + 106          | 15       |       |
| 15     | 1981 | vi + 74           | 1        |       |
| 16     | 1983 | vi + 98           | 6        | 5     |
| 17     | 1986 | vi + 98 + 8pl     | 10       |       |

thus grown from the initial three societies and two museums to the present ten societies, two museums, two educational establishments and the county council. There have been other organisations represented; these include a college of education which closed, two societies which ceased to send representatives; one society has changed its title.

The following list records those organisations which send representatives to meetings of the Bedfordshire Archaeological Council. They are listed in order of their joining:

**FIGURE 2**

*Bedfordshire Archaeological Journal*, 1-15  
and *Bedfordshire Archaeology*, 16-17

**ANALYSIS OF CONTENTS**

| Volume                           | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Year                             | 1962 | 1964 | 1966 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
| Early Prehistory                 |      |      |      |      | ♦    |      | ♦    | ♦    |      |      | ♦    |      |
| Neolithic                        | ♦    | ♦    |      |      |      | ♦    |      |      | ♦    |      |      |      |
| Bronze Age                       | ♦    | ♦    |      | ♦    | ♦    |      |      | ♦    |      | ♦    |      | ♦    |
| Iron Age                         | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    |      | ♦    | ♦    | ♦    |
| Roman                            |      | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    |      | ♦    | ♦    |
| Anglo-Saxon                      | ♦    |      |      |      | ♦    | ♦    | ♦    | ♦    | ♦    |      |      |      |
| Late Saxon                       |      |      | ♦    | ♦    |      | ♦    | ♦    |      | ♦    |      |      |      |
| Medieval                         |      | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    |
| Post-Medieval                    |      |      | ♦    |      | ♦    |      | ♦    | ♦    | ♦    | ♦    | ♦    | ♦    |
| General Items                    |      |      | ♦    | ♦    |      | ♦    | ♦    |      | ♦    | ♦    |      |      |
| Bibliography                     |      |      |      |      |      |      |      |      | ♦    |      | ♦    |      |
| Bedfordshire Archaeology in 19?? |      |      |      | ♦    | ♦    | ♦    | ♦    | ♦    |      | ♦    | ♦    |      |
| Parish Survey                    |      | ♦    | ♦    | ♦    |      |      | ♦    |      |      | ♦    | ♦    |      |
| Church Buildings                 |      |      | ♦    |      |      | ♦    |      | ♦    | ♦    |      | ♦    |      |
| Church Monuments                 |      |      | ♦    |      |      |      | ♦    |      | ♦    | ♦    |      |      |
| Gentry House                     |      | ♦    | ♦    |      | ♦    |      |      |      |      |      |      |      |
| Vernacular Building              |      |      |      | ♦    |      |      | ♦    | ♦    |      | ♦    | ♦    | ♦    |
| Monastic Sites                   |      | ♦    | ♦    | ♦    | ♦    | ♦    |      |      |      |      | ♦    |      |
| Bedford                          |      |      | ♦    | ♦    | ♦    |      | ♦    |      | ♦    |      |      |      |
| Dunstable                        | ♦    |      |      |      |      |      | ♦    |      | ♦    |      |      |      |
| Elstow                           |      |      | ♦    | ♦    |      | ♦    |      |      |      |      |      | ♦    |
| Kempston                         |      |      |      |      | ♦    | ♦    | ♦    |      | ♦    |      |      |      |
| Luton                            |      | ♦    |      |      |      | ♦    | ♦    | ♦    |      |      |      |      |
| Sandy                            |      | ♦    |      |      |      | ♦    |      |      | ♦    |      |      |      |
| Volume                           | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |



| 13   | 14   | 15   | 16   | 17   | TOTALS   |       |                    |                                  |
|------|------|------|------|------|----------|-------|--------------------|----------------------------------|
| 1979 | 1980 | 1981 | 1983 | 1986 | Articles | Notes | Volumes with Topic |                                  |
|      | ◆    |      |      |      | 3        | 3     | 5                  | Early Prehistory                 |
|      |      |      | ◆    |      | 2        | 3     | 5                  | Neolithic                        |
|      |      |      |      | ◆    | 9        | 4     | 8                  | Bronze Age                       |
|      | ◆    |      | ◆    | ◆    | 18       | 9     | 14                 | Iron Age                         |
|      | ◆    | ◆    | ◆    | ◆    | 18       | 7     | 14                 | Roman                            |
|      | ◆    |      | ◆    |      | 12       | 3     | 8                  | Anglo-Saxon                      |
| ◆    |      |      | ◆    | ◆    | 9        | 2     | 8                  | Late Saxon                       |
| ◆    | ◆    |      | ◆    | ◆    | 35       | 10    | 15                 | Medieval                         |
| ◆    | ◆    |      |      | ◆    | 24       | 6     | 11                 | Post-Medieval                    |
|      |      |      |      | ◆    | 8        |       | 7                  | General Items                    |
|      |      |      |      |      | 2        |       | 2                  | Bibliography                     |
|      |      |      |      |      | 7        |       | 7                  | Bedfordshire Archaeology in 19?? |
|      | ◆    |      |      |      | 7        | 1     | 7                  | Parish Survey                    |
|      | ◆    |      |      | ◆    | 6        | 3     | 7                  | Church Buildings                 |
|      |      |      |      |      | 3        | 4     | 4                  | Church Monuments                 |
|      |      |      |      |      | 3        |       | 3                  | Gentry House                     |
|      | ◆    |      |      | ◆    | 18       |       | 8                  | Vernacular Building              |
|      | ◆    |      |      | ◆    | 9        | 2     | 8                  | Monastic Sites                   |
| ◆    |      |      | ◆    | ◆    | 14       | 1     | 8                  | Bedford                          |
|      | ◆    | ◆    |      |      | 7        |       | 5                  | Dunstable                        |
|      | ◆    |      |      | ◆    | 6        | 1     | 6                  | Elstow                           |
|      |      |      | ◆    |      | 4        | 1     | 5                  | Kempston                         |
|      |      |      |      |      | 5        | 1     | 4                  | Luton                            |
|      |      |      | ◆    |      | 4        | 2     | 4                  | Sandy                            |
| 13   | 14   | 15   | 16   | 17   |          |       |                    |                                  |

- 1959 Bedford Archaeological Society  
Luton Museum  
Manshead Archaeological Society of  
Dunstable  
Pritchard Museum of Bedford Modern  
School (to 1965)  
South Bedfordshire Archaeological Society
- 1962 Ampthill Archaeological Society
- 1963 Letchworth and North Hertfordshire  
Archaeological Society (to 1973)
- 1965 Bedford Museum
- 1966 North Bedfordshire Archaeological Society
- 1969 Higham Ferrers Hundred Archaeological  
Society
- 1970 Department of Archaeology and History,  
Putteridge Bury College of Education,  
Luton (to 1978)
- 1971 Archaeological Liaison Officer,  
Bedfordshire County Council (to 1974)  
Bedford College of Education
- 1974 Conservation Section, Planning  
Department, Bedfordshire County  
Council
- 1977 Shefford and District Local History Society  
(to 1981)  
Dunstable Historic Buildings Research  
Group (to 1979)
- 1979 Bedfordshire, Buckinghamshire and  
Cambridgeshire Historic Buildings  
Research Group  
Harlington Upper School  
Potton and District Local History Society
- 1981 Haynes Research Group
- 1985 Sundon Research Group

Meetings of the Bedfordshire Archaeological Council are held three times a year. To these meetings, the constituent societies send three representatives; the institutions have a single representative. At first, meetings were held at different venues in the county. Since 1974, Bedford Museum have acted as hosts and the thanks of the Bedfordshire Archaeological Council are due to the curator, John Turner, for the museum's hospitality.

Representatives on the Bedfordshire Archaeological Council are members of its individual constituent bodies. Any society is, of course, free to nominate whom it wishes to act as its representatives. However, there has been considerable continuity of representation on the Bedfordshire Archaeological Council. In 1984, two persons remain from those who attended the initial meeting. Two others have been representatives for over

twenty years and another ten people have served on the Bedfordshire Archaeological Council for at least fifteen years.

## OFFICERS

The officers of the Bedfordshire Archaeological Council are a chairman, a secretary, an assistant secretary, a treasurer, an editor, an assistant editor, and a sales officer. Various people have served in these capacities, often for long periods. They are:

|                     |                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------|
| Chairman            | C.E. Freeman (1959-65)<br>J. Dyer (1965-71)<br>R. Fowler (1971 to date)                                          |
| Secretary           | L.A. Speed (1959-70)<br>Miss E.G. Cole (1970-83)<br>J.M. Bailey (1983 to date)                                   |
| Assistant Secretary | Miss O.N.M. Dyke (1959-65)<br>Miss E.G. Cole (1965-70)<br>J.M. Bailey (1971-83)<br>Miss E.G. Cole (1983 to date) |
| Treasurer           | Mrs V.J. Cousins (1959-62)<br>T.H. Gardner (1962-65)<br>B.D. Lazelle (1965 to date)                              |
| Editor              | W.H. Manning (1959-64)<br>J. Dyer (1964-69)<br>D.H. Kennett (1969-86)                                            |
| Assistant Editor    | Miss P.J. Spencer (1982-85)<br>Mrs E.M. Baker (1985 to date)                                                     |
| Sales Officer       | A. Crawley (1982 to date)                                                                                        |

Officers serve for a term of three years and are eligible for re-election.

The Bedfordshire Archaeological Council has two sub-committees to assist in its work. These are an editorial committee and a sales committee.

In its present form, since 1970, the members of the editorial committee have been the editor and the treasurer, *ex officio*, and since 1982, the assistant editor, *ex officio*, together with three others who include one who is professionally employed as an archaeologist and one who is not so employed. The sales officer is invited to attend meetings of the editorial committee. Excluding officers of the Bedfordshire Archaeological Council, seven persons have served on the editorial committee: S. Davison (1980-83), A.W. Guppy (1970-72), R.K. Hagen (1972 to date), Miss J.M. Hassall (1974-79), J.B. Hutchings (1970 to date), F.W. Kuhlicke (1970-73), and Miss A.H. Simco (1979 to date).

The sales committee was formed in September 1982, with three members — J.M. Bailey, S. Davison and R. Fowler — in addition to the sales officer and



### FIGURE 3

*Bedfordshire Archaeological Journal*  
and *Bedfordshire Archaeology*

#### CONTRIBUTORS

| Name           | Articles | Notes | Volumes                                  |
|----------------|----------|-------|------------------------------------------|
| N.W. Alcock    | 2        |       | 4, 11                                    |
| J.M. Bailey    | 5        | 1     | 10, 12, 14                               |
| D.B. Baker     | 7        | 1     | 3, 4, 5, 6, 9, 13                        |
| E.M. Baker     | 2        |       | 9, 17                                    |
| B. Dix         | 3        |       | 14, 16                                   |
| J. Dyer        | 7        | 5     | 1, 2, 3, 5, 6, 9, 11, 16                 |
| K.J. Fadden    | 4        | 4     | 3, 5, 7, 8, 10, 11                       |
| R.K. Hagen     | 5        | 1     | 6, 7, 8, 9                               |
| D.N. Hall      | 15       | 3     | 3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 16     |
| J.M. Hassall   | 5        | 1     | 8, 9, 10, 11, 13, 16                     |
| J.B. Hutchings | 6        |       | 4, 6, 7, 11, 14, 16                      |
| D.H. Kennett*  | 18       | 12    | 3, 4, 5, 6, 7, 8, 10, 11, 12, 14, 16, 17 |
| F.W. Kuhlicke  |          | 8     | 3, 4, 5, 7, 8                            |
| C.L. Matthews  | 4        |       | 1, 7, 15                                 |
| A.H. Simco     | 5        | 1     | 8, 11, 13, 14, 17                        |
| T.P. Smith     | 13       | 2     | 3, 5, 7, 8, 9, 10, 12, 14, 17            |
| A. Taylor      | 2        |       | 10, 16                                   |
| P.G. Tilson    | 4        | 1     | 8, 10, 11, 14, 16                        |
| R.F. White     | 2        |       | 12, 14                                   |
| P.J. Woodward  | 7        | 1     | 10, 11, 12, 16, 17                       |

\*Excludes items compiled.

the assistant editor, *ex officio*.

Two representatives of the Bedfordshire Archaeological Council have been asked to attend meetings of an advisory committee instituted to assess the future needs for archaeological work, Bedfordshire County Council. At different times, K.J. Fadden, R. Fowler, and J.B. Hutchings have represented the Bedfordshire Archaeological Council.

The Bedfordshire Archaeological Council is represented on the Countryside Commission for Bedfordshire. Representatives have included R.K. Hagen and Miss B.J. Sewell.

The Bedfordshire Archaeological Council is affiliated to the Council for British Archaeology, both nationally and regularly. The particular region

of the Council for British Archaeology which includes Bedfordshire is Group 9, based on Oxfordshire, Northamptonshire, Buckinghamshire and Bedfordshire. To its standing committee, the Bedfordshire Archaeological Council nominates three representatives, each serving for three years and then being ineligible for immediate re-election. Those who have served include J.M. Bailey, S. Davison, R. Fowler, Miss J.M. Hassall, D.H. Kennett, C.L. Matthews, Miss A.H. Simco and Miss P.J. Spencer.

#### PUBLICATIONS

The primary stimulus to establish the Bedfordshire Archaeological Council in 1959 was the need to

## FIGURE 4

Bedfordshire Archaeological Council

### CONFERENCES

| DATE     | LOCATION   | THEME                            |
|----------|------------|----------------------------------|
| Dec 1969 | Dunstable  | Inaugural Conference             |
| Dec 1970 | Bedford    |                                  |
| Nov 1971 | Luton      |                                  |
| Mar 1973 | Dunstable  |                                  |
| Nov 1975 | Bedford    | Presentation<br>to F.W. Kuhlicke |
| May 1977 | Harlington |                                  |
| Mar 1979 | Dunstable  |                                  |
| Sep 1980 | Luton      | 21st Anniversary<br>Conference   |
| Dec 1982 | Bedford    |                                  |
| Oct 1983 | Haynes     |                                  |
| Nov 1984 | Amptill    | Archaeology and<br>Young People  |

provide an organisation with the resources to produce a permanent record of the archaeological work which had been done in the county in the 1950s. The permanent record was to be the production of a scholarly periodical devoted to the archaeology of Bedfordshire. The first issue of the *Bedfordshire Archaeological Journal* was published in 1962. Volumes thereafter were issued irregularly until 1969. From 1969 onwards the attempt has been maintained to issue one volume each year, although production of an individual volume has taken as long as fifteen months. With volume 16 in 1983, the name of the periodical was changed to *Bedfordshire Archaeology*.

Volume one was produced by letter-press with a

single block of print occupying the width of the page. In volume three, a double-column format was adopted; for volumes four to sixteen, printing was by pre-set typesetting and photolithographic methods. Since volume thirteen there has been greater use of a smaller typeface for detail as well as for notes and references.

Details of volumes by size, number of articles and notes, and contributors are given in figure 1. Period coverage of individual volumes is shown in figure 2. Here each paper has been allocated to a specific period, that which is the major focus of the contribution.

Most of the volumes have been multi-period in content and included work on more than one site or areas of the county. To date three volumes have had a more concentrated focus:

- 9 1974 Essays presented to Frederick William Kuhlicke
- 13 1979 Excavations in Bedford, 1967-1977
- 15 1981 The Roman Cemetery at Dunstable, Durocbrivae

Fifty individuals have contributed articles and notes to issues of the *Bedfordshire Archaeological Journal* and *Bedfordshire Archaeology*. Of these twenty-eight have written for one volume only and seven persons have published items in two volumes. Fifteen contributors have had articles published in three or more volumes, of whom eight have contributed to six or more issues. Details of the twenty most prolific contributors' papers and notes are given in figure 3.

There have been 179 contributions, excluding reviews and entries in the compilation, 'Bedfordshire Archaeology in 19xx', which appeared in *Bedfordshire Archaeological Journal* 4 to 8 and 10 to 11. Twenty-four contributions have two authors; four articles were written by three people; one item had four principal authors.

Excluding preliminary pages, the first sixteen volumes comprised 1,800 pages of textual matter and illustrations. A rough calculation suggests that over one million words have appeared in print.

### CONFERENCES

Since 1969, the Bedfordshire Archaeological Council has held eleven conferences at various venues within Bedfordshire. They have taken the form of a set of lectures given on a Saturday afternoon with an exhibition of recent work. Details of dates and venues are given in figure 4.



# Ring-Ditch Sites in the Great Ouse Valley

## Notes relating to the Bronze Age burial sites at Roxton, Radwell and Willington with specific reference to double ring-ditches

PETER J. WOODWARD

A complete list of Bronze Age ring-ditch (barrow) sites in the Great Ouse Valley, and their definition, was published by Ken Field in 1973 (Field, 1973). Since then many new sites have been discovered with continued air surveillance by Ken Field, and the Cambridge University Committee for Aerial Photography. Although much of this new information is not yet available in a published form the overall distribution described by Field remains much the same. Much discussion has focused on the distribution of the Bronze Age ring-ditches, which can be taken to be the surviving element of barrow structures. This discussion has centred on the excavations at Milton Keynes (Green, 1973), Radwell (Hall and Woodward, 1977), and Roxton (Taylor and Woodward, 1983; Taylor and Woodward, forthcoming; a summary of the Bronze Age barrow structures is published below), and the settlement characteristics depicted by their structural distribution, and the distribution patterns of contemporary material; flint (Woodward, 1978). Discussion relating to the size and structure of ring-ditches, the type of barrow they may represent, and the distribution of cemetery and ring-ditch types has been developed in the report on the Bronze Age barrow cemetery at Roxton (*op. cit.*, forthcoming). In this report the results of the excavations of ring-ditches in the Great Ouse are reviewed, the gazetteer of ring-ditches in the Roxton area updated, and there is also a specific discussion relating to small diameter ring-ditches and double rings. It is this latter discussion (following) which is of relevance to the excavation of the double rings at Radwell and Willington which are published by Pinder in this volume. In the following discussion reference should be made to Field (1974).

In the Great Ouse Valley, where excavation evidence allows, there is a consistently small dimension (up to 23m diameter) for early Bronze Age ring-ditches (barrows), and the ditches themselves are slight. It is probable that at least some of these early barrows acted as foci for ring-ditch barrow ceme-

teries, and when this occurs the original barrow may have been elaborated with an additional outer ditch and modified mound. There is some evidence for this in the occurrence of double-rings along the Great Ouse valley. The occurrence is not frequent (ten examples in the Upper and Middle Great Ouse, Field 1973). They are usually in separate locations (apart from Biddenham 'm' and 'n'), and associated with groups of single rings. In some cases extensive ring-barrow cemeteries may have gathered around them (Cardington, and Buckden). However at Radwell the double-ring (Pinder, this volume), apparently remains somewhat isolated, and to the north of a ring-barrow group, although two additional rings have been recently located only 200 metres to the east at TL 00595880, and TL 00615883 (Bedfordshire County Council S.M.R. 262), but these are considered as uncertain ring-barrows (Field, *pers. comm.*). Also the outer ring now appears somewhat asymmetrical, and may have been an integral part of a later ditch system (Cambridge University, BY294); although this could still be considered as a funerary elaboration of the original burial monument. At Willington the double ring (Pinder, this volume), has a large number of nearby ring-ditches in association, although none are particularly close and none have any specified locational association, which suggest that the double-ring was the central focus of this extended but dispersed cemetery group. In addition double-rings occur with increasing frequency in the Middle Great Ouse, particularly towards its junction with the Ivel. This is where the large extended cemeteries can be found, whilst in the Upper Great Ouse there is a notable lack of cemetery expansion and in particular around the excavated small diameter Early Bronze Age Barrows. In conclusion it is probable that double rings were a result of the enlargement and modification of early barrows, and this occurs more frequently where ring-ditch cemetery groups were developed.

It is perhaps also significant to note here that the



evidence at Roxton shows that the latest barrows in the group were of greatest diameter.

The evidence from the two double rings described in this volume is however inconclusive, since no funerary material was recovered. At Radwell the outer ring may simply act as a ditch to separate the inner ring-ditch (and presumed barrow mound) from surrounding settlement incursion, in which case access to the mound would then be from the direction of the river and floodplain. This may be significant for discussions related to funerary site and farmland; the separation of the dead from the active farming interests of the living.

In the case of Willington the outer ring can perhaps be best justified as an addition and elaboration of the monument, although Pinder suggests contemporaneity. The structural evidence for riverine barrows, which focuses on the excavation results of Roxton (*op. cit.*), suggests that the mounds are not high, only up to one metre, and that the ditch is the principal element of structural importance. Also the Roxton results suggest a wide variety of barrow forms rather than simple mounds and ditches. At Willington it is perhaps more likely that a small barrow was initially constructed in the Early Bronze Age (*cf.* diameter); that the irregular layout of ditch may be due to the presence of tree stumps, perhaps this early structure was located on arable ground in recently cleared woodland (the earliest ring-ditch at Roxton, C, was also irregular and may have resulted from setting out with a string tied to the bowl of a tree); that this barrow was enhanced in appearance by the cutting of an outer ditch when woodland clearance was complete, when the surrounding land was cultivated or open pasture, and when the monument needed to be redefined; that this outer ditch may have provided an outer bank rather than an enhanced mound, since there is a suggestion that there was recutting of the inner-ditch and some modification of the central structure; that the eventual form of this double ring-ditch monument was a bell/disc barrow.

It is hoped that this short note contributes to the collation and development of the discussion of ring-ditch structures in the Great Ouse Valley. The author also hopes that the note draws attention to the importance of recording individual ring-ditches before destruction, and that an overall understanding of ring-ditch structures will not be achieved until there is a greater body of well excavated evidence.

## APPENDIX

### A Bronze Age cemetery and associated settlement at Roxton, Bedfordshire — A summary

The excavation of a cropmark complex (TL157535) on the flood plain of the Great Ouse concentrated on the examination of five ring-ditches, and parts of a system of associated rectilinear enclosures and other features.

Although three of the ring-ditches surrounded no surviving burial, all could be shown to be the surviving structures of a Bronze Age barrow cemetery. Carbon dates from the two surviving urned primary cremations gave a construction dated early in the second millennium BC. On certain of the ring-ditch sites stratigraphy was such that the height of the mounds, the sequences of construction, and the equivalent barrow type could be suggested; one ditched bowl, one bell, one saucer and two of the bell/saucer type. However, it is suggested that these funerary monuments could be better defined as ring-barrows. An early burial and associated post structure was also independently sited outside one of the ring-ditches.

It could be demonstrated that this cemetery was located on a site of earlier settlement; post-structures were sealed below the barrow mounds, an earlier flint industry was identified, and knapping foci could be suggested.

The cemetery continued to be used during the Bronze Age. Carbon dates from two secondary cremations gave dates in the late second millennium BC. A contemporary flint industry was identified in the naturally developed soil profiles in the ditch silts of two barrows.

This cemetery was turned into arable land during the Iron Age, and fields systematically laid out in the late Iron Age and Romano-British period. The associated rectilinear and other cropmarks were of this date or later. The material and structural evidence for this and earlier periods suggests that the occupation episodes were short and seasonal. It is likely that the main focus of settlement was at some distance above the flood plain of the river valley.

Burials of the Romano-British and Saxon period were identified on two ring-ditch sites. This suggests that the barrows were then still visible as earthworks. Careful contour surveying across the ring-ditch sites also indicates that they may have survived as shallow mounds until relatively recent times. The post-Bronze Age settlement has been described in *Bedfordshire Archaeology* 16 (Taylor and Woodward, 1983, 7-28).



It is hoped that this summary of the full report on the Bronze Age cemetery, and associated settlement (Taylor and Woodward, in press for *Archaeological Journal* 143, 1985) will provide some added detail that is useful to the discussion related to the ring-barrows described in this volume.

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*The Bedfordshire Archaeological Council is indebted to Bedford Museum, the North Bedfordshire Borough Council, and the Bedfordshire County Council for grants towards the costs of this paper.*

# A Ring Ditch at Radwell Quarry

ANDREW PINDER

## SUMMARY

*In 1983 a small excavation was undertaken of a double ring ditch at Radwell, Felmersham. The limited scope of the excavations and the poor preservation of the site meant that the results were inconclusive.*

## INTRODUCTION

In February 1983 a small scale excavation was undertaken by the Field Team attached to the Planning Department of Bedfordshire County Council to investigate an unusual crop mark site of a double ring ditch prior to its destruction by gravel extraction. Manpower from a Community Enterprise Programme was used.

The archive and finds have been deposited with Bedford Museum.

The site lay 1 km north of the hamlet of Radwell, in the parish of Felmersham, close to the River Ouse. The aerial photograph (plate 1) showed a number of archaeological features, including various enclosures, a pit alignment and the ring ditch. No surface signs were evident of any of the features, and no finds were produced from field-walking of the area. Unlike the previous excavation at Radwell quarry, in 1972 and 1975, where mechanical graders were used to strip the topsoil and subsoil (Hall 1973, Hall and Woodward 1977), the methods of topsoil stripping employed by the 1983 sub-contractors immediately in advance of archaeological investigation was helpful. This, together with adverse weather, meant that it was not possible to recognise many of the archaeological features in the partially exposed gravel and thus no complete plan of the site could be made. A watching brief demonstrated how limited the information gathered under these conditions could be. Excavation was restricted to the ring ditch, and was designed to try to answer certain specific questions about date and function. A cruciform trench, dug by hand from topsoil, was placed to locate the feature from plotted aerial photographs, and two further trenches were opened by mechanical methods: one to check the position of the inner ditch, and the other to expose a large area over the centre of the

ring ditch in order to locate any possible surviving burial.

## NATURAL TOPOGRAPHY

The features were originally located on rising ground that sloped gently up to the river. Deposition of alluvium and build up of plough soil was uneven over the site, varying from almost none at the northern end, to over 50 cm at the base of the slope at the southern end of the trench. This resulted in the modern ground surface being level, with about 30 cm of plough soil lying on the subsoil. Archaeological features were found dug under the subsoil, and sealed by it, and cut both from within and through it. The subsoil consisted of alluvial deposits that had been heavily ploughed, with artefacts, charcoal and stones being mixed throughout.

## THE RING DITCH

The ditches forming the ring were sealed by the subsoil, and cut into the natural gravel. Six lengths of the ditches were excavated, sufficient to enable the location of the centre of the feature. The inner ditch 1 (Figs 1 and 2) had an external diameter of 31 m, was 3 m wide and between 90 cm and 1.10 m deep. The lower deposits were a loamy gravel, the upper layer being a dark, grey-brown loam with few pebbles, and flecks of charcoal. The general appearance of this and all the ditch fills was very similar to the overlying subsoil.

The outer ditch, 2 (Figs 1 and 2), had a radius in the north of 23 m, where it followed closely the line of the inner ditch around the northern half. It then split off from the circle in the southern part, continuing as two straight, converging lines. Exactly where they end is not clear. Examination of the aerial photograph (Plate 1) makes the outer ditch appear to form an open horseshoe around the inner ditch, although in another published photograph (Field 1974, Pl VIII B) it appears to be closed at the southern end, to describe a large oval around the circular ditch 1. Ditch 2 had very similar fill to 1, but was narrower and shallower. The southern section of ditch 2, where excavated, was very much



# RADWELL 83

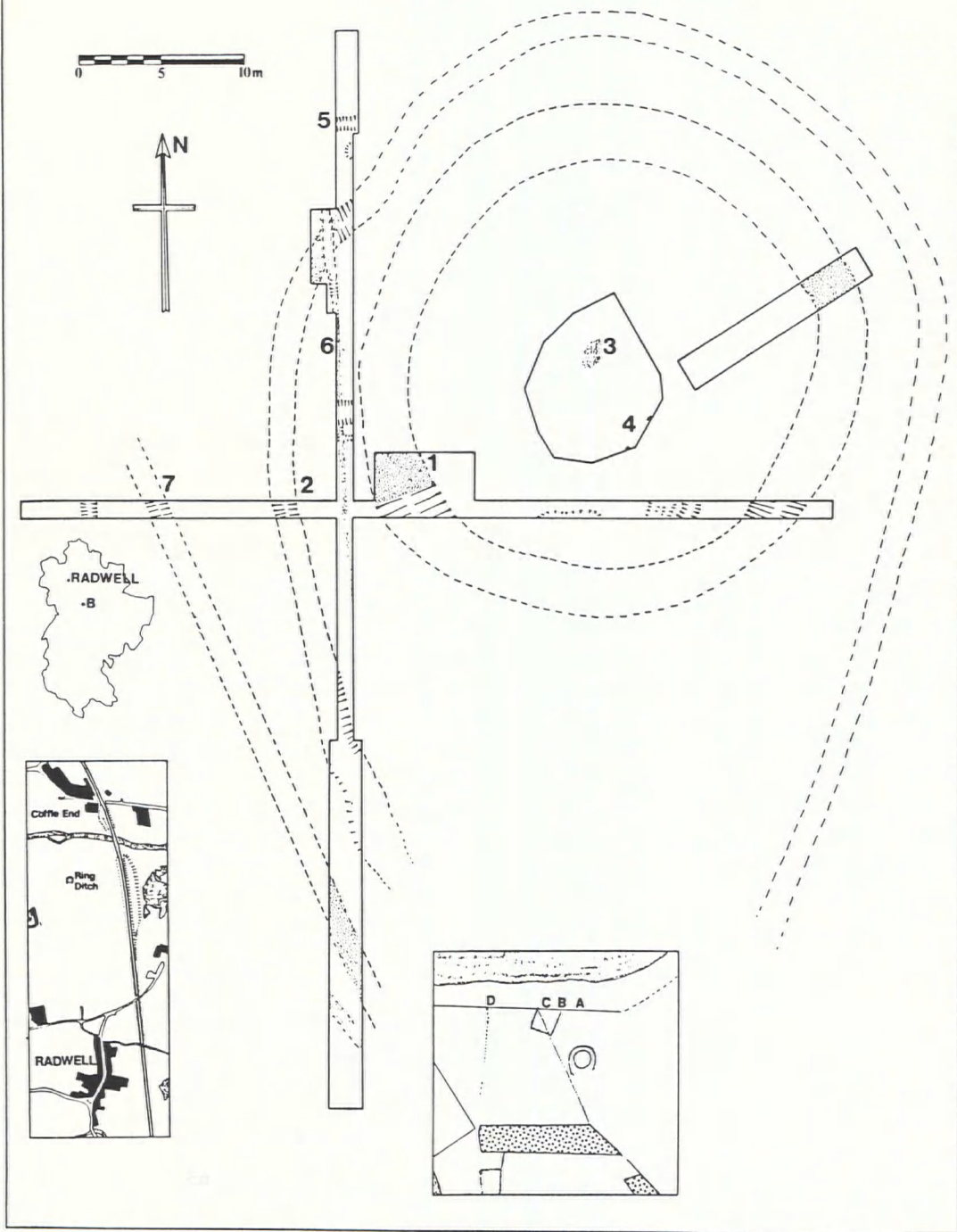


Fig 1 Plan of site; inset shows location of site

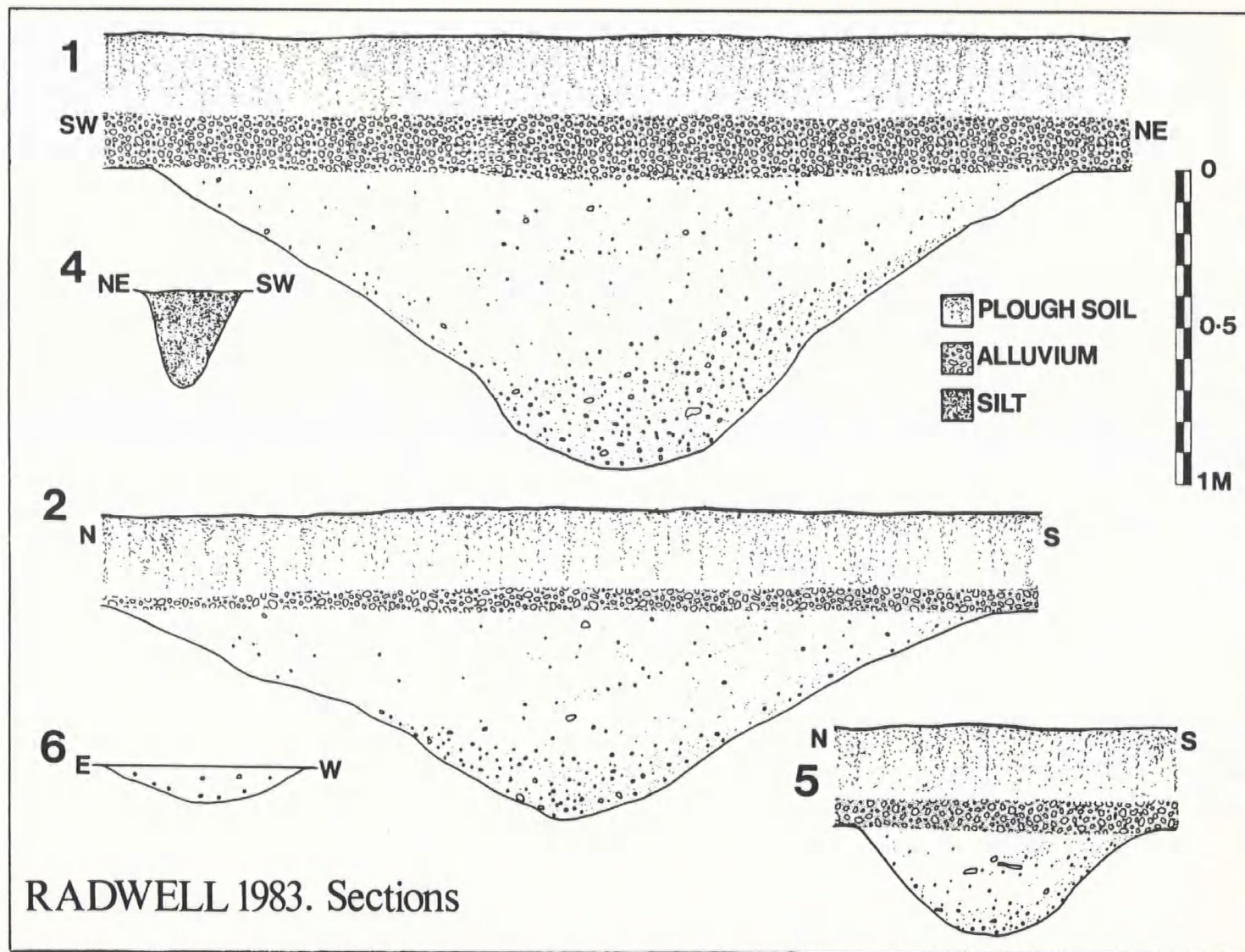


Fig 2 Sections



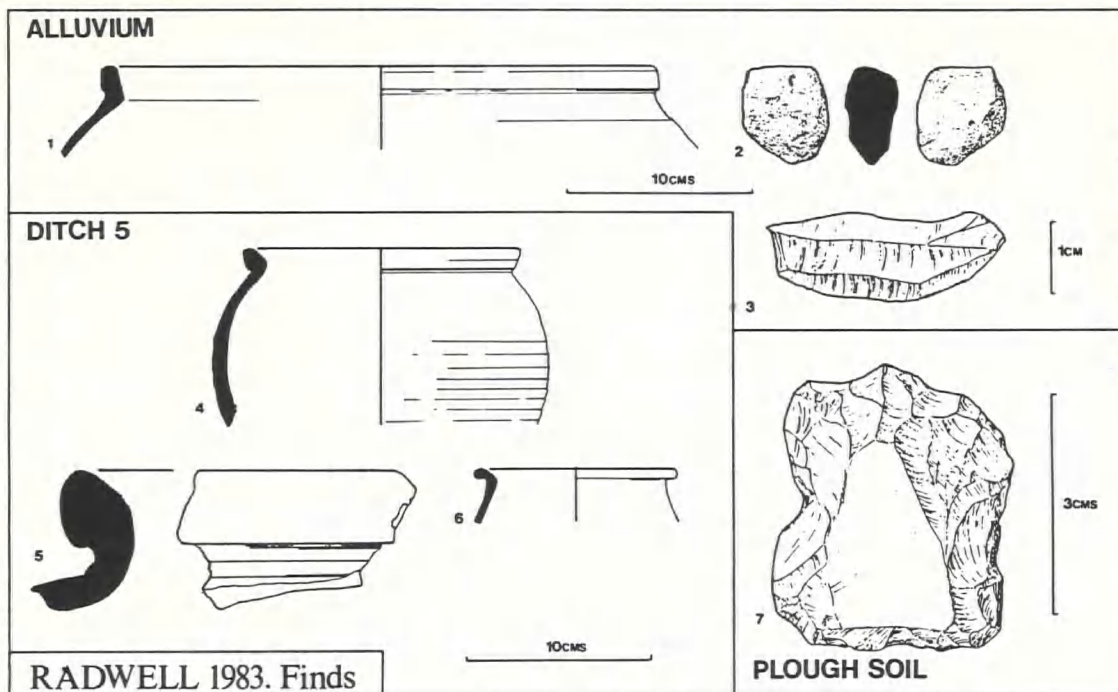


Fig 3 Finds  
Scales as marked

shallower and seemed about to disappear completely as it reached the bottom of the slope. It may therefore represent more of a terrace of the slope on this side than a proper ditch, and was possibly dug to give any central mound a more dramatic appearance from the south when looking towards the river.

No evidence of a mound survived, although small patches of grey silty soil accumulated in natural dips in the gravel surface may have represented an old ground surface. Without any connecting stratigraphy it was not possible to demonstrate that the two ditches were contemporary, although the absence of any finds in the outer ditch, the similarities of the fills and the shape and size all suggest that they must be of broadly the same date.

The central area of the ring ditch was rather unproductive, but there was a discolouration in the gravel at the centre, where the interment might be expected, 3 (Fig 1), which produced small flecks of charcoal. This proved to contain no finds at all, and was only about 3 cm deep at the most. Close to the discoloured gravel were two post or stake holes, 4 (Figs 1 and 2); these were about 30 cm wide and 30 cm deep, and were filled with a grey silt. Again

the relationship of these with the ring ditch cannot be demonstrated because of the lack of any connecting stratigraphy.

#### LATER FEATURES

Overlying the ring ditch were a number of later features. The only one with a direct relationship with the earlier features was a narrow gully, 6 (Figs 1 and 2), which was cut into the upper fill of ditch 2. This gully produced one body sherd of Roman pottery (see 3, d, below). A number of small ditches and gullies were excavated, only two of which were datable. The first was a small ditch, 5 (Figs 1 and 2) with a loamy gravel fill, containing a number of sherds of Roman pottery, and out from below ploughed alluvium. The only other datable feature was a late field boundary ditch, 7 (Fig 1), cut from the plough soil.

The remaining features were without any finds. One small gully, filled with dark grey silt, 8 (Fig 1), was sealed by the subsoil. Another irregular cut, filled with silt showed up in the early plough soil, 9 (Fig 1), whilst a ditch filled with unused loamy deposits (Fig 1), was cut through it. The difficulty of

distinguishing the content of the ditches from the subsoil has already been discussed, and it was only when the ditch was cut from the top of it that the relationship could be easily seen, when the fill had a larger proportion of loam in it than the earlier deposits.

### OTHER FEATURES

A watching brief was kept on the field as it was stripped and, in spite of the ground conditions, four other find spots were recorded (Fig 1). Features A, B and C were exposed in the cutting of a roadway for the quarry, but were all rather indistinct. Possibly B may have represented the ditch of the rectangular enclosure shown in the aerial photograph (Pl 1a). D was part of a pit alignment, and consisted of two pits cut into the gravel. The first was 1.5 metres wide tapering to 50 cms at the bottom, and was 1.5 metres deep, the second survived to only a few centimetres. The fill consisted of a silty grey-black loam with many flecks of charcoal. No evidence of posts or post-packing was observed in either.

### FINDS

#### FLINT

A number of flints was found although none was in a stratified context.

- (a) (Fig 3,7) a scraper with retouch all round the circumference giving the tool a 'waisted' appearance. The working face forms an angle of 40° to the horizontal. Found in topsoil.
- (b) (Not illustrated) two waste flakes found in topsoil.
- (c) (Not illustrated) end of a blade with 4 parallel flake scars, possibly a broken tang, found in subsoil.
- (d) (Fig 3,3) broken blade, with parallel flake scars, found in subsoil.
- (e) (Not illustrated) waste flake, found in subsoil.

#### POTTERY

##### Prehistoric:

- (a) (Fig 3,2) rim sherd from a hand made vessel, very abraded, buff outer surface with a grey core showing many shell inclusions. Not enough survives to estimate either the shape or the size of the vessel, although it must have come from a pot with a thickened rim. Found in subsoil close to the centre of the ditch.
- (b) (Not illustrated) body sherd of dark brown, hand made pot with a flaky, vassicular fabric. Found in upper fill of Ditch 1.
- (c) (Not illustrated) body sherds of two hand made vessels, a buff coloured pot with a dark grey core and a vassicular fabric with very fine flint grits, and a thin walled dark grey vessel with a very soft fabric filled with grog and very fine quartz grits. Found in A, a shallow pit north of the site.
- (d) (Not illustrated) body sherd of a well made, hand made vessel. Dark grey fabric with small quartz grits, surface is hard and smooth, possibly late Iron Age? Found in B, a shallow ditch north of the site.

##### Roman

A number of Roman coarseware sherds were found throughout the modern and early plough soils.

- (a) (Fig 3,5) Rim sherd from a very large storage vessel. Buff outer surface grey core with no visible grits. Ditch 5.
- (b) (Fig 3,4) Rim and body sherds, pale buff, very light, 'corky' fabric, partially blackened on the outside. Ditch 5.
- (c) (Fig 3,6) Rim sherd of white, hard fabric, with very small flint grits. Ditch 5.
- (d) (Not illustrated) Body sherd of hard, white, smooth fabric. Gully 6.
- (e) (Not illustrated) Body sherds found with a sherd of hard, white fabric with a dark brown colour coat. Found in C (a small pit, north of the site).

##### Other

A scatter of post medieval pottery was found in the plough soil and subsoil.

### DISCUSSION

The state of preservation of the ring did not allow for any close investigation into date or function. Being built on a small natural mound meant that the centre has been particularly vulnerable to ploughing. Perhaps the most likely sequence of building is a round barrow with a central interment, followed by engrandisement, perhaps marking secondary use at some later date.

Although the pattern of land use was obviously quite complex throughout the prehistoric and Roman period this limited excavation could not answer any questions concerning its development. Nor can the important question of when the heavy alluvial deposits were laid down in the Ouse valley be answered with any certainty, due to the continual ploughing of the site, including modern deep ploughing which has mixed up the deposits and truncated many of the features.

### ACKNOWLEDGEMENTS

I would like to thank Steetley (M. & G.) Ltd for permission to excavate the site, and to P. Tarry, the Manager for his help. I am grateful to A. Simco for plotting the aerial photograph and E. Baker for help and advice during the excavation. The work was undertaken with the help of the Manpower Services Commission, who provided the manpower. The excavation was co-directed by Joe Prentice.

The archive and finds have been deposited with Bedford Museum.

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*The Bedfordshire Archaeological Council is indebted to Bedford Museum, the North Bedfordshire Borough Council, and the Bedfordshire County Council for grants towards the costs of this paper.*



# Excavations at Willington 1984

## I — The Bronze Age

ANDREW PINDER

### SUMMARY

*During 1984 a double ring ditch was excavated in advance of gravel extraction at Willington in Bedfordshire. A circular ditch surrounded an inner ditch of irregular plan with a single causeway. No burial was found, and the monument had suffered heavy plough damage. The site was presumed to be a Bronze Age funerary monument, dug on the boundary between arable land and unploughed grassland.*

### INTRODUCTION

In January and May 1984 the Bedfordshire County Council's Archaeological Field Team undertook the rescue excavation of several crop mark sites at Willington, prior to gravel extraction. Four areas of interest were identified (a fifth site being found, on excavation, to be natural deposits) dating from the Bronze Age to the Roman period. This report is concerned with the excavation of a Bronze Age ring ditch, in Area 1.

The threatened area lay within an extensive distribution of crop mark sites to the east of Bedford (Fig 2), including several ring ditches (some multiple), some rectilinear features, possibly *cursus* and many ditches and enclosures. Over the years prehistoric and Roman finds have occasionally come to light and one ring ditch was excavated at Manor Farm, Willington, in 1962 by James Dyer, who interpreted it as a possible early Iron Age funerary structure. Two early prehistoric pierced stones were recovered from the area in the first quarter of this century, but have now disappeared, although Bedford Museum holds casts of them (Fig 1).

Medieval land use was common arable land with meadow along the edge of the river, the boundary apparently being on the same line as the modern field boundary. This pattern of land use continued until the 1960's when the area was planted with poplar trees. In the area excavated, the trees had been felled and the land returned to arable use.

An aerial photograph (Plate 1b), taken prior to

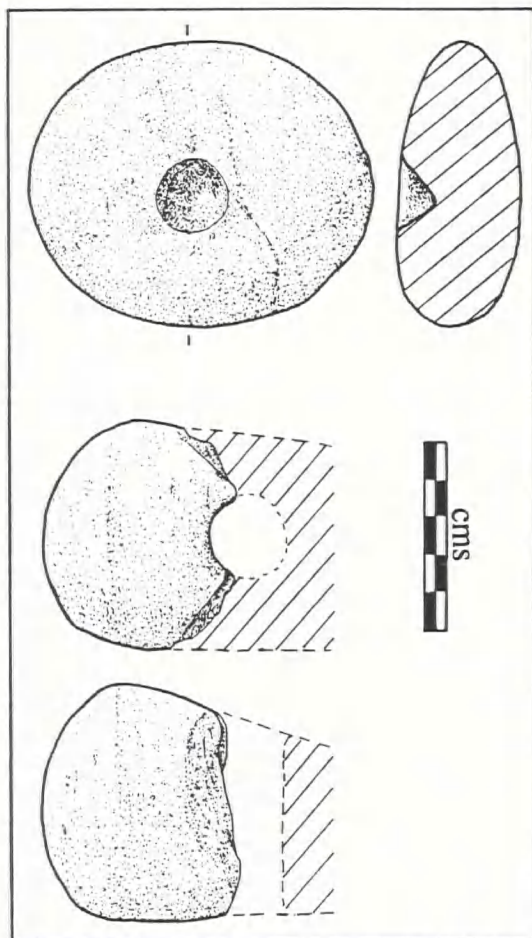


Fig 1 Prehistoric pierced stones from Willington  
Scale: 1/2

tree planting, shows several features, notably a double ring ditch cut by the modern field boundary, a large double enclosure, some ditches and a small square enclosure. In addition, a natural bank of sand can be seen running diagonally across the field, shown by the light strip in the photograph.

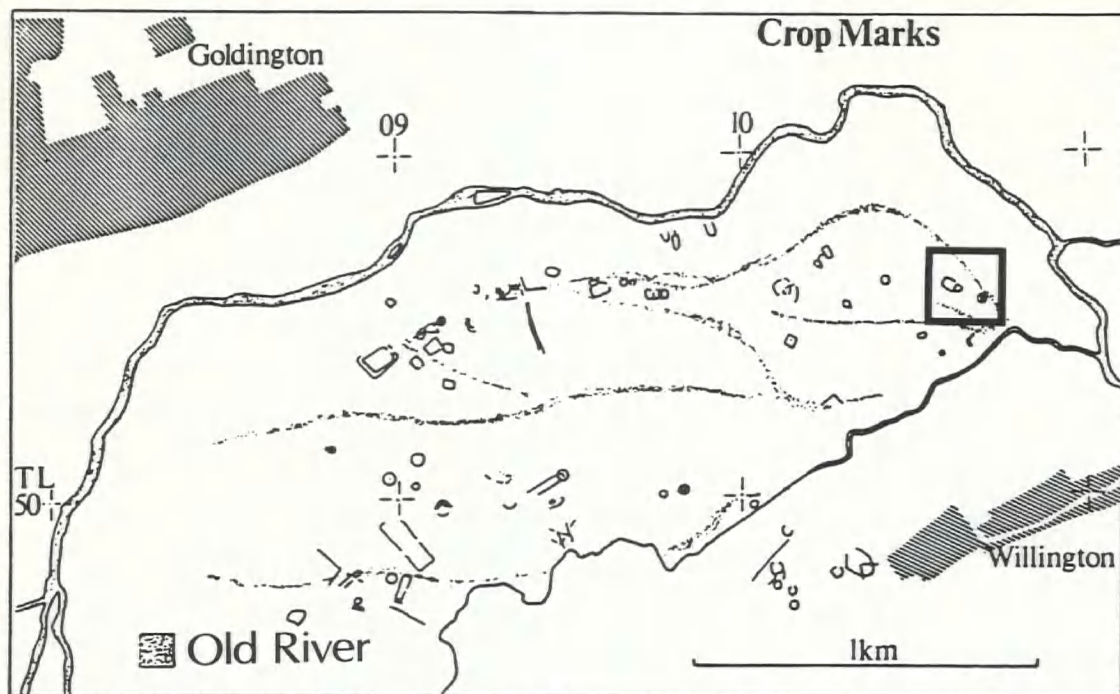


Fig 2 Crop Marks East of Bedford

The method of excavation on the ring ditch was to remove the topsoil by mechanical graders, and then excavate the overburden of old ploughsoil by hand.

#### NATURAL TOPOGRAPHY

The site lies on glacial sand and gravel between a loop of the Ouse and a small tributary river. The gravel surface was dissected by two former watercourses, probably representing late glacial or early post-glacial braiding of the Great Ouse, which would not have been active by the time Neolithic settlement took place in the area. The sand bank formed by river action, however, would have been noticeable and, even after modern ploughing, this natural bank existed as a barely visible ridge that can be seen from a contour survey (Fig 3) showing the ring ditch and river deposits superimposed. Overlying the gravel, within the area of study, was a varying thickness of dirty, gravelly loam; the remains of old ploughsoil. To the east of the field boundary ditch this layer was absent, the modern ploughsoil lying directly on top of what appeared to be dark grey alluvial deposits.

#### AREA I — THE RING DITCH

##### (1) INTRODUCTION

Crop marks showed a double ring ditch, the inner ditch having a break in its circumference to the north west (Plate 1b). A careful contour survey of the area (Fig 3) failed to detect any sign of earthworks, other than the natural ridge. The shaded area on Fig 3 represents pre-Bronze Age alluvium.

Immediately on removal of topsoil, the top of the sand ridge was revealed with the ring ditch cut into it and on either side of this the gravelly loam old ploughsoil. Subsoil was removed by hand and the surface of the ring ditches cleaned. The centre was directly in the middle of the sand ridge. To the east the ditches were cut through deposits from an old watercourse that ran north-west to south-east along the boundary. After initial cleaning, sections were cut through the ditches and features (Fig 4). Lastly, the whole central area was taken down about 10 cms into the sand and gravel, to look for any features that might have been hidden by surface disturbances.



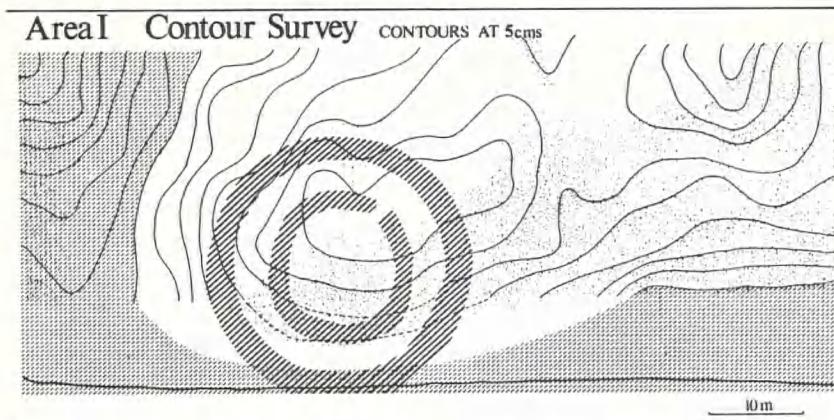


Fig 3 Area I: Contour Survey and Alluvium Deposits

### THE DITCHES

The inner ditch (1) was 2.5 m wide by 80 cm deep and was broken by a narrow causeway, about 30 cm wide. There was no discernable evidence of re-cutting. Over most of its circumference the sections of the ditch displayed a normal pattern of silting (Fig 5, E and I). On the east side of the inner ditch, one section (Fig 5, F) displayed an unusual silting sequence. After a primary silt had developed, a mass of black, stone free, silty loam conjoined with a layer of dirty gravel was deposited in the ditch. These layers were possibly formed by a block of topsoil, together with its attached sub-soil falling into the ditch soon after completion. An analysis of this block of loam suggests that it derived from an area that had never been ploughed. Subsequently the partially filled up ditch appeared to be then recut and refilled with clean gravel. The western side of the ring ditch showed significant differences: it had been partially dug through ploughed soil (Fig 6). This suggests that the ring ditch was dug on the boundary between two areas of agricultural activity: ploughed land to the west, and unploughed grassland to the east.

The outer ditch was 2.5 m wide and about 1 m deep. It formed a complete circuit and had a normal silting pattern.

The ditches show contrasting plans. The inner ditch had external measurements of 19 m by about 16.5 m and the layout was not at all regular. It narrowed and diverted around feature 4, as if there once was a post standing prior to the laying out of the central area. The causeway in ditch 1 does not appear to be functional as it stands, especially when it is considered that there would then have been several extra centimetres of soil on top of the

natural. There was no evidence of recutting the ends of the ditch so it would appear that the causeway would not be very much wider than it appeared when excavated, probably no wider than about 50 cms and possibly less. Clearly, it would not have been a serviceable path for very long, dug as it was in sandy subsoil.

The outer ditch has an external diameter of about 30 m and was nearly regular. The deviation from the circular does not seem to be regular and a true circle can be made to cut through the ditch all round. The irregularity may either be just poor laying out, or could be accounted for by laying out from a central point on ground that was sloping away irregularly. The centre point of ditch 2 is 2.5 m to the west of the centre of ditch 1 so they are unlikely to have been laid out at the same time.

### OTHER FEATURES

Two circular features, one in the central area (4) and the other just outside the 'causeway' (5) were found. The internal feature was 60 cm wide and 40 cm deep, without packing and with no finds of any sort. The fill was a brown, charcoal free loam. The external feature (5) was also find free, 60 cms in diameter and 30 cms deep. Both features were heavily disturbed by modern tree roots. No other features were identified, although the eastern third of the central area was heavily disturbed by ancient tree roots. Probably this root disturbance pre-dates the digging of the ring ditch.

### FINDS

Finds were confined to the ditches and consist of pottery, flint and a small amount of animal bone fragments.

Area I

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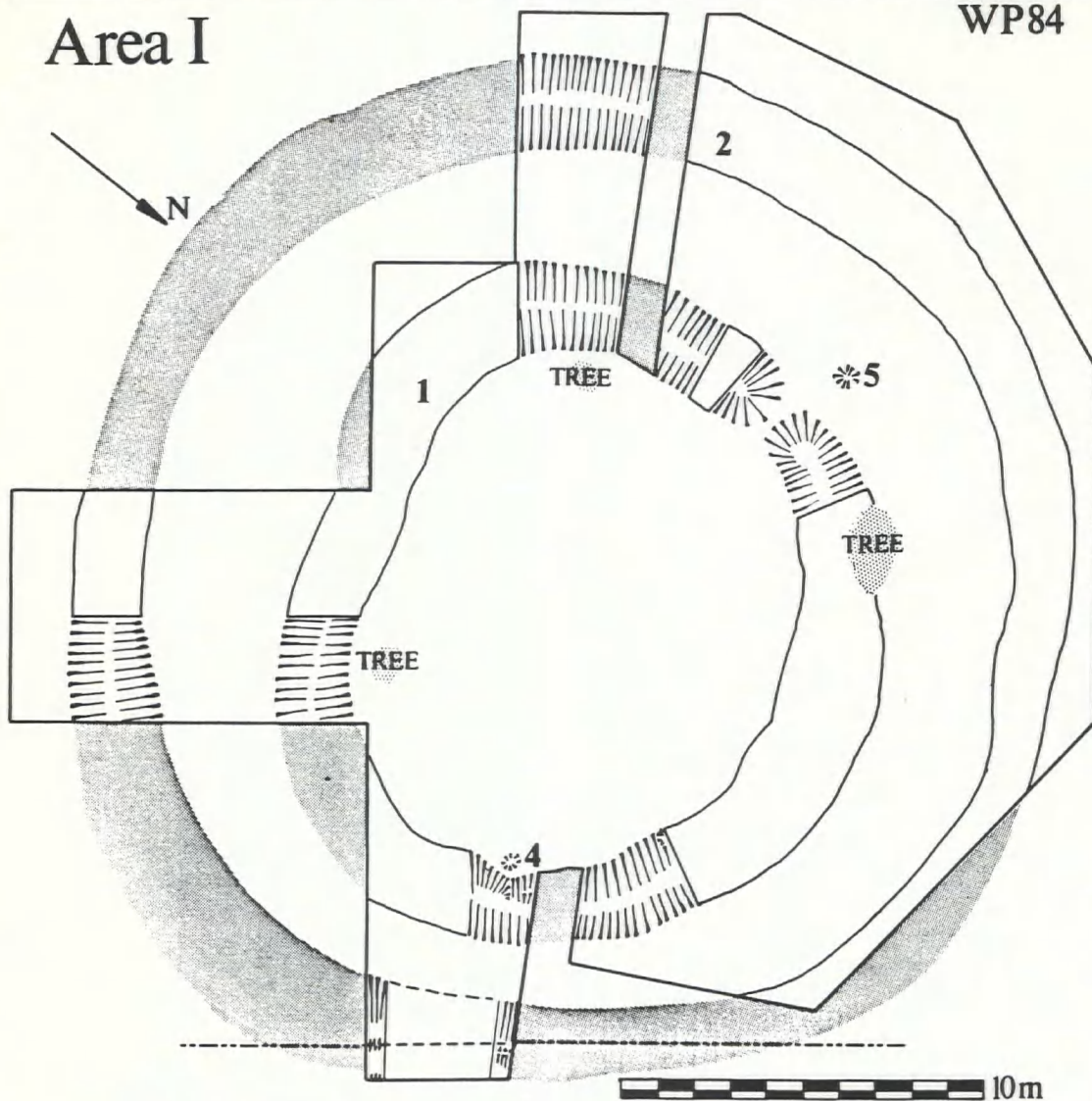


Fig 4a Area I: Plan

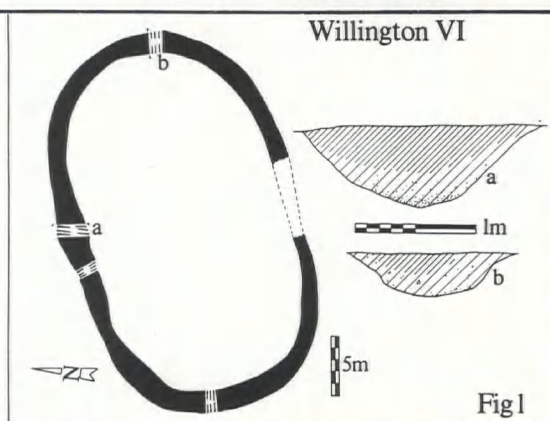


Fig 4b Area VI: Plan

Willington VI

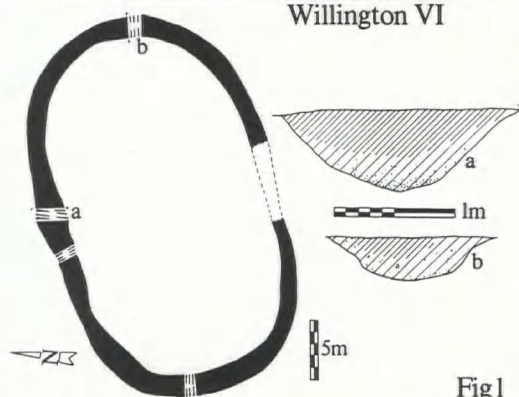


Fig 1



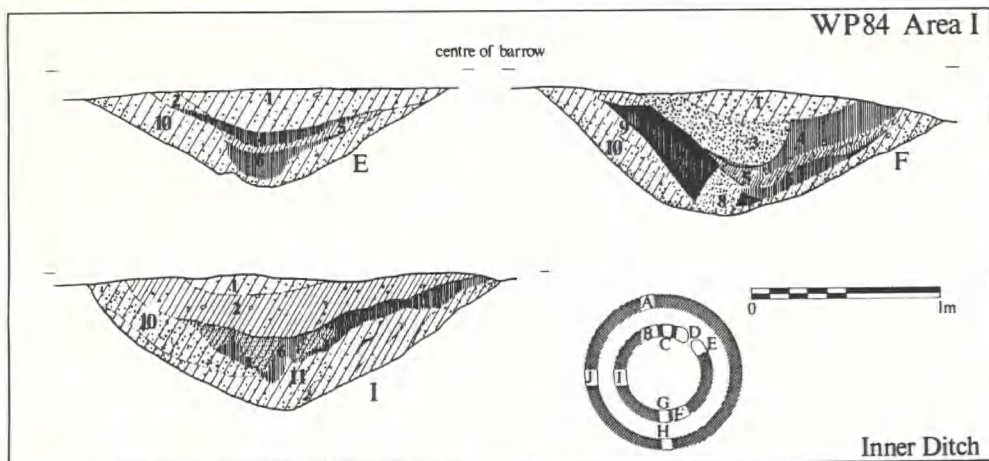


Fig 5 Area I: Ditch Sections

Twenty-two sherds of pottery were found, mainly in the upper fills of the ditches. Most of them were tiny, less than finger nail size. There was only one rim sherd (Fig 7, a) and none of the pieces showed any decoration or diagnostic features which could be used to date them. Most sherds contained small flint grits within the fabrics and several had the vassicular appearance of leached or burnt out shell or organic material. The pottery appears to be early prehistoric rather than derived from the Iron Age site to the north, and the quantity and condition of it is consistent with normal ploughland scatter.

Flints were scattered throughout the ditch fills. Eleven struck flakes and one possible core were found, although there was a large amount of natural flint on the site, and most of the flakes could have been accidentally struck. There are two utilised flakes (Fig 7, b and c). The first (b) is struck from dark grey flint and shows a regular flaking along both sides of one edge, and could have been utilised as a scraper. The other (c) is a regularly struck blade with several parallel scars on one face and some small flakes along the one sharp side, presumably from utilisation. A core (Fig 7, d) of burnt flint with a thick white patina shows a number of parallel scars of blades. The lithic material does not suggest any large scale manufacture of tools on the site so, presumably, any contemporary occupation was set at some distance from the ring ditch.

## DISCUSSION

There are no remains of any mound or bank, or linking stratigraphy between the two ditches. It is therefore not possible to be sure of the exact relationship

of the various features with each other. There are a number of possible interpretations of the site, the two ditches could either be contemporary or widely separated in time. The contrasting plans of the ditches would appear to reflect contrasting functions: the inner ditch was probably merely a quarry for a central mound, but the outer and more carefully dug one may have been more of an important feature in its own right. There is no evidence which precludes the ditches being contemporary or separated from each other by a short period of time. If this is so, the three phases of construction demonstrated by the excavation could be interpreted as being stages in the building of a single monument rather than a reuse and enlargement of the site, as could be the case at Radwell (published in this volume).

The sequence of construction would have started by inserting two posts which were the means of defining an area. A mound would then have been thrown up over this area, the earth being derived from a rough quarry ditch (1). The central mound was then encompassed by an outer, carefully laid out, ditch (2). The spoil from this second ditch could have been piled onto the central mound. In this case the combined volume of the two ditches would have produced a heap about 3 m high. Alternatively the spoil could have been used to form an external bank. The inner ditch causeway could either be a means of getting spoil from the outer ditch onto the mound, or just a random break in what was a very irregular ditch.

There is no evidence for function. The monument's prominent position on an upstanding ridge

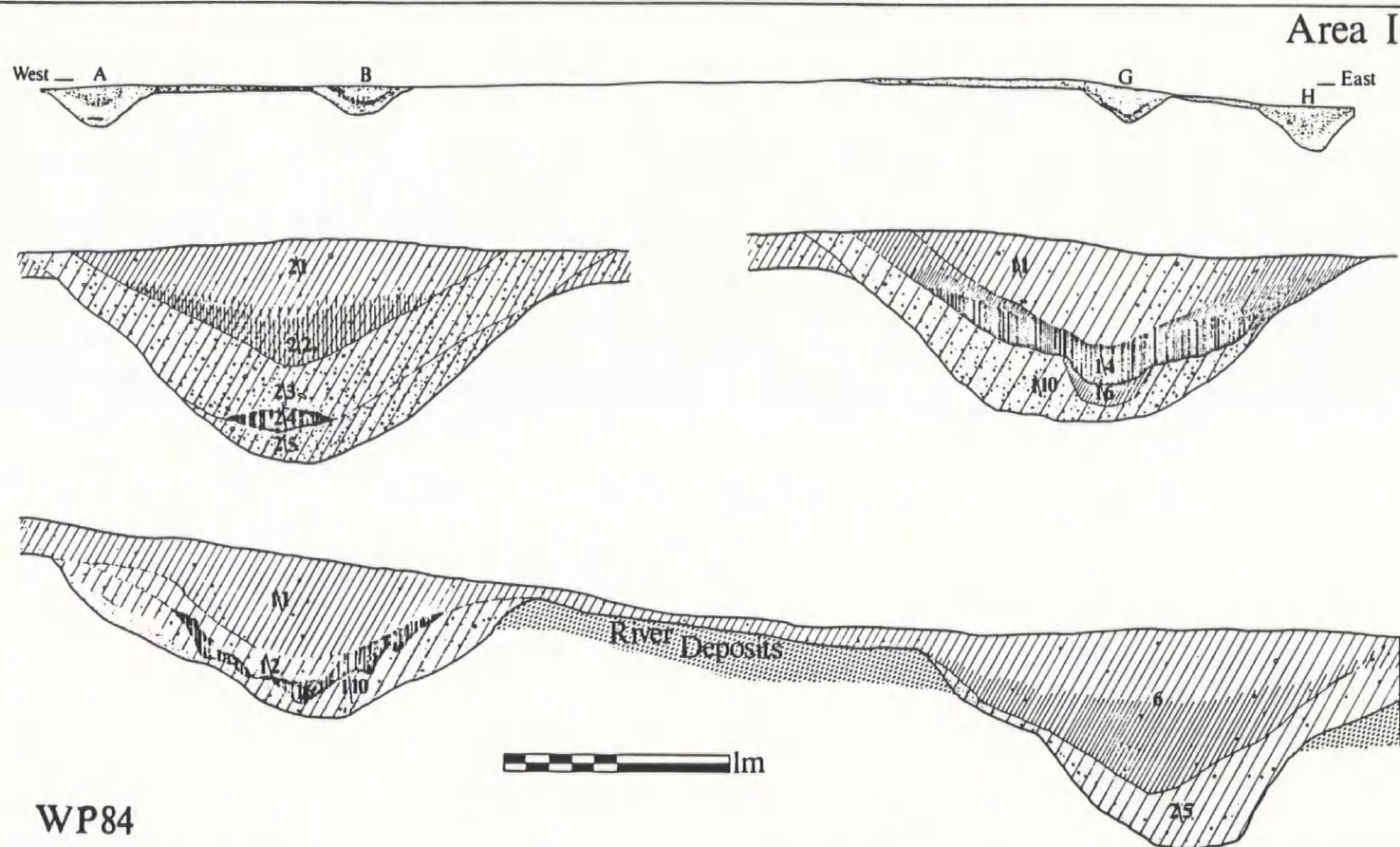


Fig 6 Area I: Ditch Sections



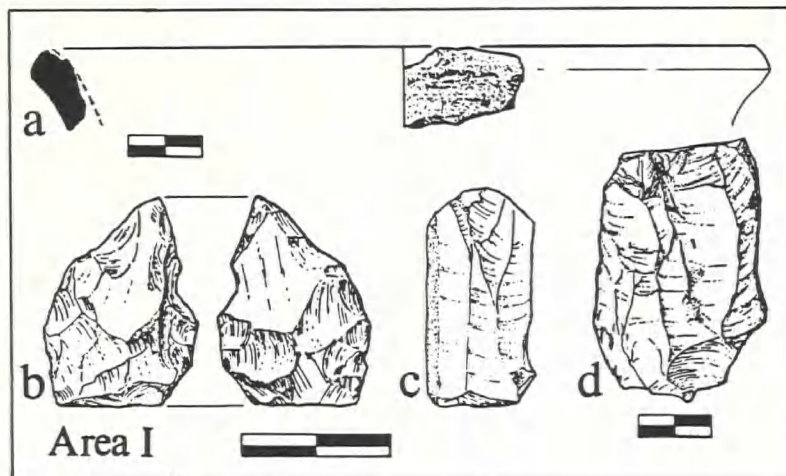


Fig 7 Finds

Scales: a and d  $\frac{1}{2}$ ; b and c full size

of sand would make it particularly vulnerable to plough damage, and any central inhumation or cremation would have been long since destroyed. The lack of any later prehistoric pottery in the upper fills of the ditch in a fairly heavily occupied area, suggest an early date for the destruction of the monument.

As has been discussed above, the double ring ditch at Radwell is not immediately comparable to Willington; a better parallel is perhaps ring ditch 16 from Harrold (Eagles and Evison 1970), which contained a crouched inhumation. Any definitive discussion about the date and function of these monuments must wait until a better preserved example can be investigated, though P. Woodward (this volume) has put forward some useful observations.

## APPENDIX

### *A Crop Mark Site at Willington*

In November 1985, a large crop mark site was investigated prior to destruction by gravel excavation. The site lay about 220 m south-east of the double ring ditch (Area I) and can be seen on Plate 1b of *Willington I, The Bronze Age*, in this journal. The entire site had to be cleared, recorded and sectioned in two hours, so the excavation was far from complete.

The site was initially thought to be a ring ditch

which had been extended to the west. On stripping it proved to be an irregularly cut ditch enclosing an oval area 28 m by 16 m with the long axis running roughly east-west (Fig 4b). The ditches were of a single phase and showed no evidence of recutting or cleaning in the four sections dug. There were no internal features and no finds from the site.

The absence of finds in an area so intensively settled from the iron age suggests an early prehistoric date for the digging and silting up of the ditches. The lack of any of the normal domestic detritus suggests that this was not an occupation site, and the lack of a break in the ditches would make it difficult to interpret it is an enclosure for agricultural use. The function of the site cannot, on the meagre evidence collected, be postulated.

## ACKNOWLEDGEMENTS

I would like to thank my co-director, Joe Prentice, and the staff funded by the Manpower Services Commission for their work on the excavation. I am grateful to Miss Angela Simco for conducting pre-excavation research, and for the help given prior to the excavation. Mark Robinson commented on the environmental evidence from the site. Special thanks are due to Redlands Quarry Limited for permission to excavate and the practical help given during excavation. The project was grant aided by English Heritage.

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# Excavations at Willington, 1984

## II Iron Age and Roman Periods

ANDREW PINDER

with a contribution from  
Ann Stirland

This report concentrates on the excavation of features dating from the Iron Age and Roman period from Redlands gravel pit in Willington. The general topographical and archaeological context for the sites under discussion, and the aerial photograph showing them, is contained within the report *Excavations at Willington, 1984*. I The Bronze Age, in this journal.

### THE IRON AGE

As stated in the above report, the site at Willington was divided up into five areas of archaeological interest. The Iron Age material was concentrated within area II: a large double enclosure to the north-west of the Bronze Age ring ditch. The site was excavated by the Bedfordshire County Council Planning Department Archaeology Field Team, with Mrs Terry Jackman as co-director.

Because of limited time and resources it was decided to strip and excavate an area that concentrated on the smaller, south-eastern enclosure and restrict work on the larger enclosure to a watching brief and limited excavation during the stripping by the quarry. A mechanical excavator stripped away the overburden of old ploughsoil and revealed the surface of the natural sand and gravel. Damage by tree roots was limited but roots had penetrated all the ditches and other features extensively. After clearing, a total of 138 post-holes, gullies, pits and ditches were excavated and recorded (Fig 1).

#### (i) THE DITCHES

Sections were taken through all the ditches and junctions of ditches and several interesting features were observed. The larger enclosure had a 'V' shaped ditch and near the entrance (14) it had been recut, the recut being done on the inside of the enclosure (Fig 2). The rest of the circumference had

only a single phase of digging and measured about 1.5m wide and 1m deep.

The smaller enclosure had a ditch of approximately the same size, although the length between the two enclosures (3) was noticeably smaller (Fig 3). The ditch at the entrance (11) had been recut twice and the ditch dividing the small enclosure, once. Unlike the larger enclosure the recuts had been done on the outside of the enclosure. Presumably this reflects both pressures on space within the small enclosure and also the differing function of the two enclosures. The one with an internal recut is likely to have had an external bank, the smaller enclosure is more likely to have had an internal hedge.

#### (ii) INTERNAL FEATURES

##### (a) *The Small Enclosure*

Over one hundred features were recognised within the small enclosure. The larger proportion of these consisted of post holes, with varying sizes (20 cms to 50 cms wide and between 10 and 40 cms deep) but generally 'V' shaped. There were no packing stones in any of the post holes and only one showed any evidence of a post pipe (Fig 4, 70). The plan and section of several of the post holes (eg Fig 4, 20) showed evidence of recutting but only in one case was it possible to differentiate the fills so as to discover the sequence of cutting (Fig 4, 128, 129). The fills of the post holes was similar to the ditches, varying between a sandy, grey loam and a yellow-brown, sandy loam. The distribution of the different fills reflected the varying natural and subsoil through which they were dug.

Of the considerable number of post holes found in the small enclosure only relatively few can be consigned to a particular structure. Three putative



10m



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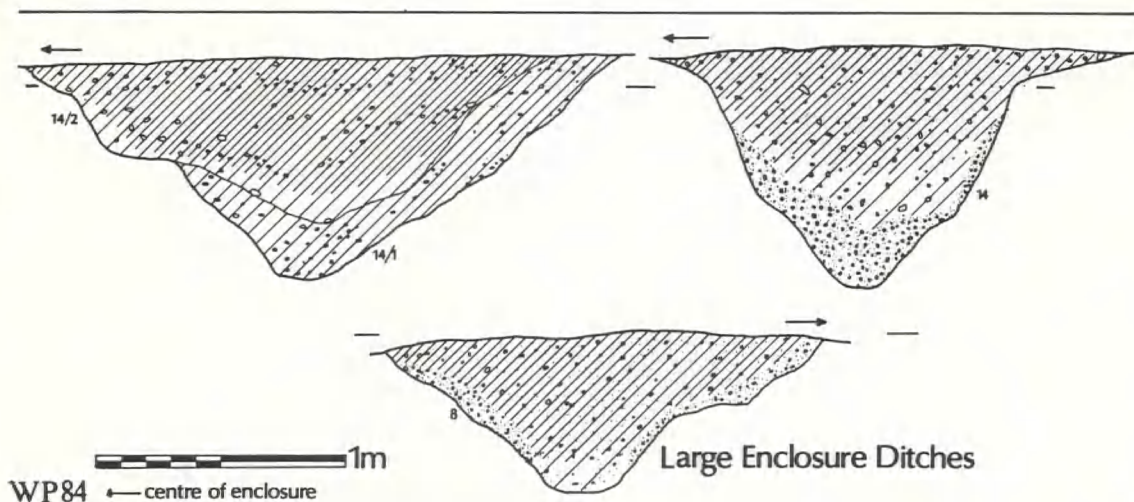


Fig 2 Area II: Large Enclosure Ditches

rings of post holes suggest three possible rebuilds of huts (Fig 5). Two were about 1.6 m in diameter with central posts. One of these huts (b) had a possible porch. The third, and earlier hut, had no central post and was only 12 m diameter. There was no evidence of any drip gullies so these 'huts' are merely the product of selecting groups of post holes and not too much credence should be put upon them.

Four lengths of gully were excavated presumably these were drip gullies for structures as they held no structural elements (see Fig 4, 4 and 13), and were in contrast to the post holes by virtue of the fact that they contained pottery, suggesting they were left open for some time.

Only one definite pit was found within the small enclosure (7). The presence of large quantities of pot and bone from within it and the fact that it was cut into the side of the enclosure ditch suggest that it was intended as a rubbish or latrine pit.

#### (b) *Large Enclosure*

Features within the larger enclosure were less numerous, but only a relatively small area was excavated archaeologically, so no real comprehensive plan could be observed. A number of post holes and one pit were uncovered by mechanical stripping though none produced any finds.

#### (iii) *EXTERNAL FEATURES* (Fig 6)

Three pits were found to the SE of the smaller enclosure. All were regularly dug about 2 m in diameter and survived to between 40 and 60 cm

deep. Pits 1 and 2 were found by mechanical stripping and were emptied in rather hurried conditions; the third (12) was identified on the aerial photograph and was found and excavated archaeologically. This pit was partially clay lined. There was no carbonized grain from any of the pits, and although a few sherds of pottery and bits of bone were recovered there was little evidence to suggest that they were ever used for rubbish deposition. Presumably they were originally storage pits and possibly, as the natural soil is so permeable, they could have once been totally clay lined.

The aerial photograph shows a ditch running north-west to south-east to the north of the site. This ditch (137) consisted in its earlier form as a steep-sided cutting, surviving to about 50 cms deep. Silting had apparently occurred rapidly and the ditch was recut to the north-east, as a deeper (70 cm) and wider (1.6 m) shallower-sloping feature. This appears to have been fairly thoroughly cleaned out at some time, as there was no clean primary silt, as occurred in other ditches on the site.

To the east of this ditch were traces of another (138). This was far harder to define as it ran along the edge of the sand escarpment and was dug into old riverine deposits. The upper fill of this ditch was loamy gravel, which was replaced at the bottom of the feature by black silty clay, probably the result of intermittent flooding. It was into the upper fill of this ditch that the Roman cremation was found (see below). Running along the south-west edge of this ditch was a row of regularly spaced post holes, but as



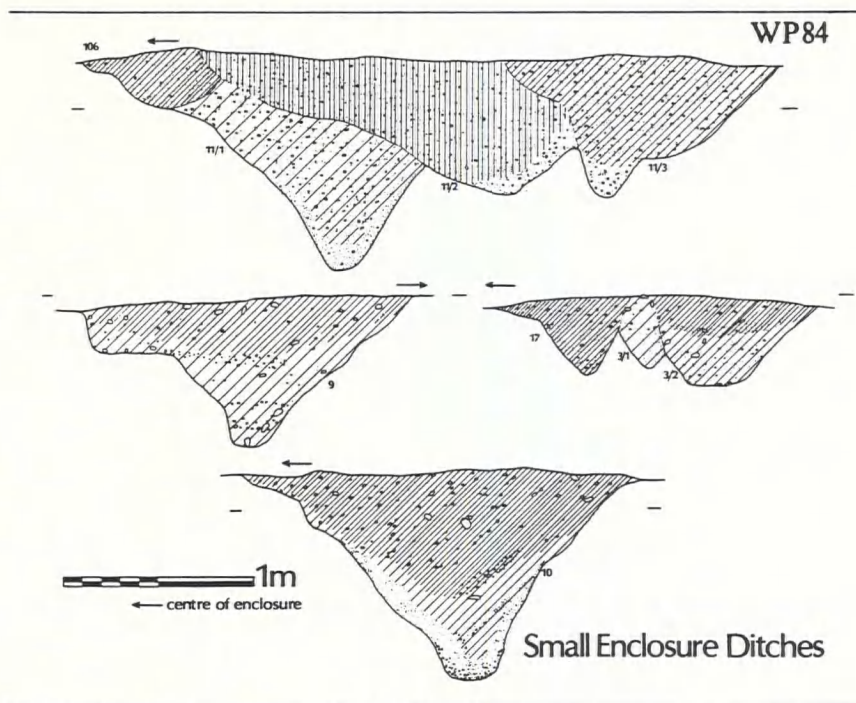


Fig 3 Area II: Small Enclosure Ditches

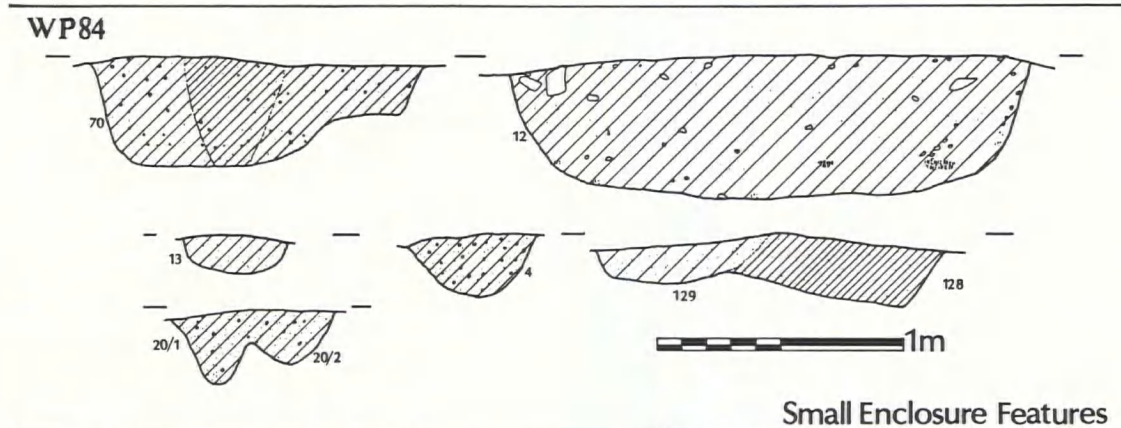


Fig 4 Area II: Sections of Small Enclosure Features

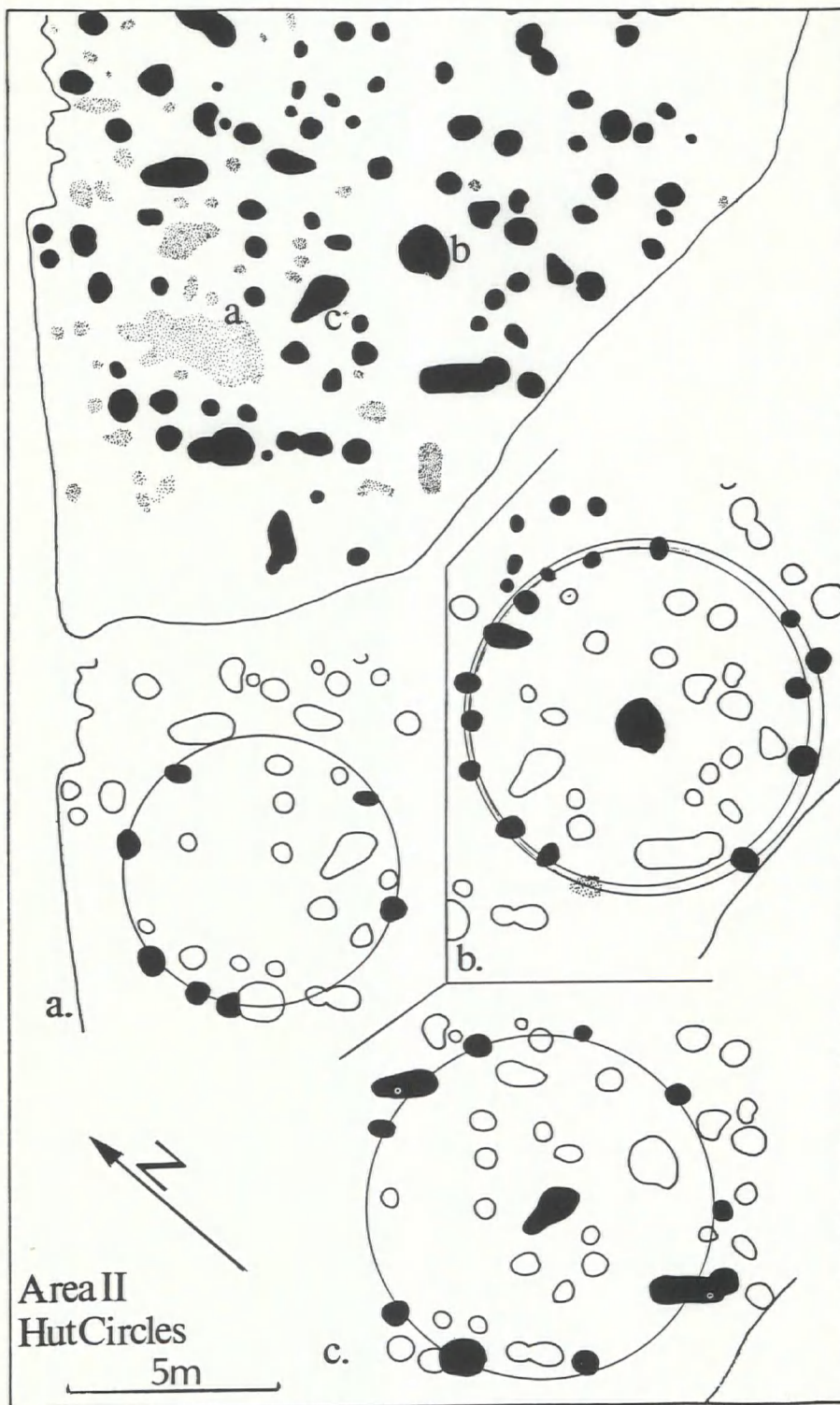


Fig 5 Area II: Hut Circles



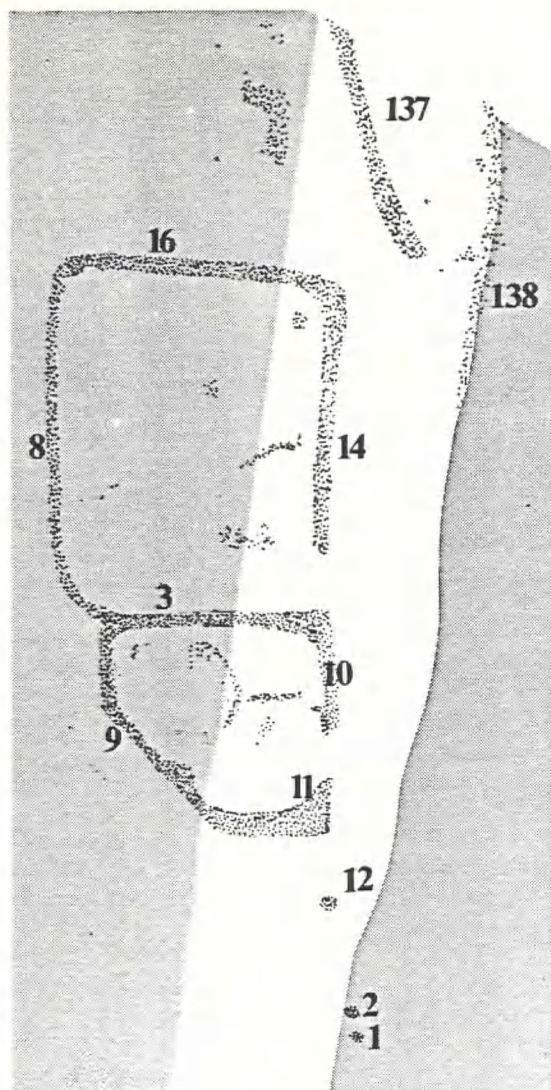


Fig 6 Area II: External Features

these were noticed during mechanical stripping by the quarry it was not possible to investigate them.

These two ditches and post holes would seem to be the remains of a trackway and fence line running up to the enclosure. It runs along the top of the sand ridge and possibly marks the natural division between good arable land to the west and marshy, intermittently flooded pasture to the east.

#### (iv) *FINDS*

Finds were confined to the ditches, pits and gullies: nothing was recovered from any of the post holes. Although there were at least three recognisable phases of the occupation, it was not possible in the majority of cases to ascribe finds to a particular phase. The pottery forms a homogenous group, so it has been treated as a single assemblage spanning a long period of time.

#### (a) *Pottery*

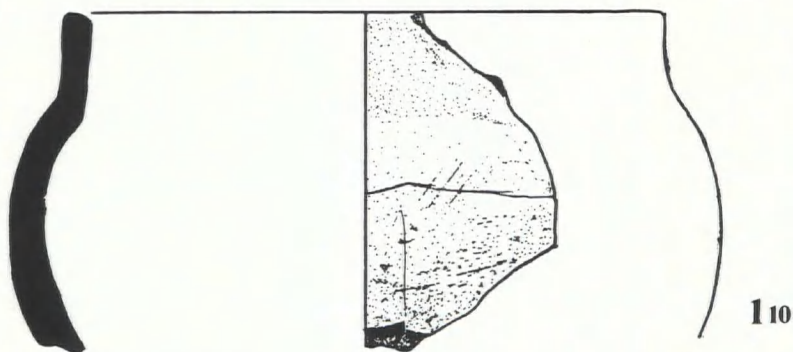
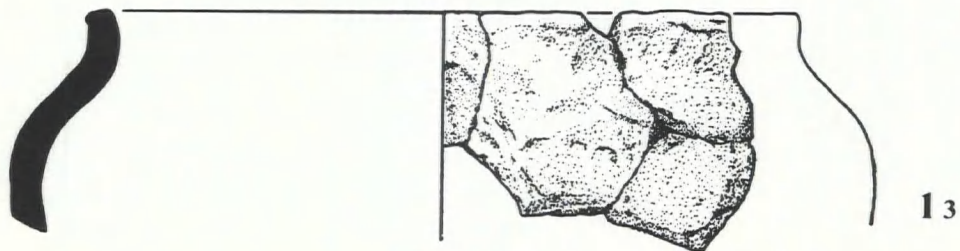
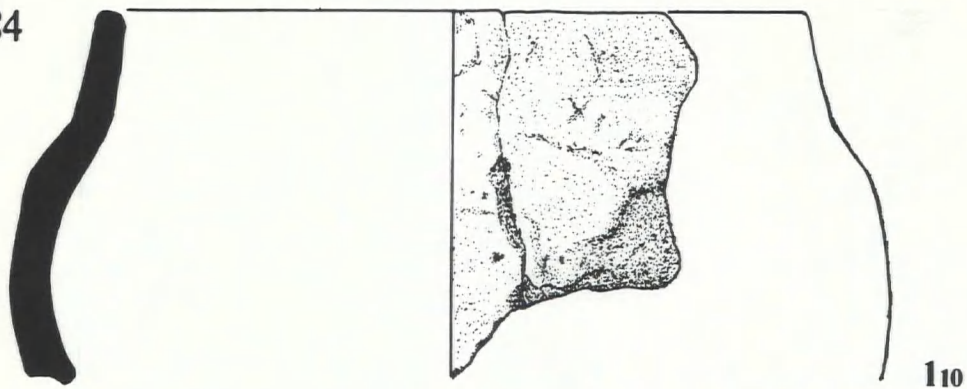
The pottery fabric is much as one would expect from an assemblage of this period. The majority of the pot is made with a clay containing some limestone or fossil shell. Within this basic matrix there are varying proportions of grog and organic matter, although it could be that these may be derived from the clay source, such as deposits exposed by river erosion. This fabric has been termed F1. F2 is a variant of F1 but contains much larger inclusions (up to 5 mm across). In addition there is a small group of pottery which is made of clay with a fairly uniform amount of small rounded quartz and grog fragments. The look and feel of this fabric (F3) suggests that the clay source may have been different from the others. All the pottery was hand made and the firing was, as might be expected, variable. F1 is generally rather soft with F2 fabrics, usually from the larger vessels, being on the whole harder and having a dark inner core and an outer surface that varied from pale beige to dark grey. F3 by contrast is a well fired hard fabric which has been uniformly reduced.

The fabric of illustrated sherds is described on the drawings (Figs 7 and 8). The majority of vessels were simple jars or cooking pots, with short upright necks, rather ill-defined shoulders and straight or slightly rounded bodies. Bases were flat and rather thick. In addition to this basic form there are two different bowl forms (Fig 8): a simple bowl with a flattened rim, and a small bowl with an upright neck and a slightly flaring shoulder. Lastly there is a sherd from a straight-sided jar with no neck and thumb-nail impression along the rim. Three handles were found, one being grooved along its back, possibly as an aid to suspension.

All the decorated sherds have been illustrated, decoration being confined to thumb-nail impression along the rims and simple linear scoring of the body of the vessels.

The ceramic evidence is little use as a tool for dating. The early Iron Age in the Ouse Valley is characterised by an extreme conservatism in

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2 Fabric  
2 Feature

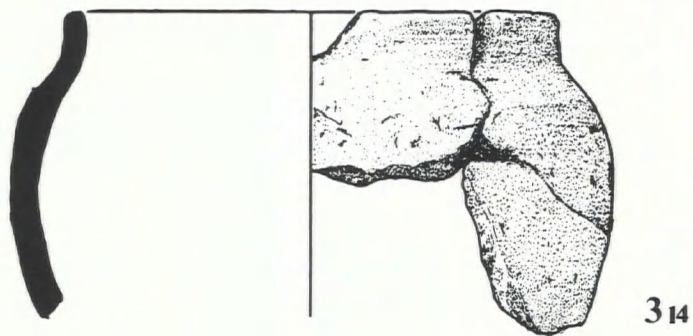
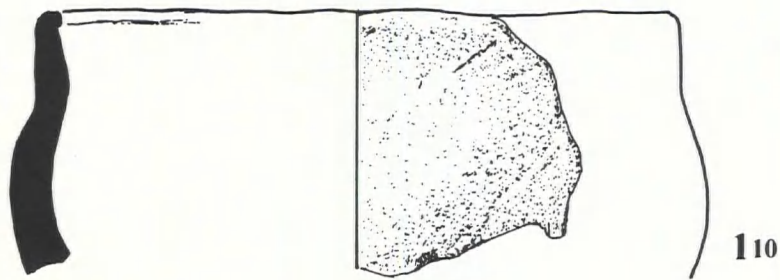
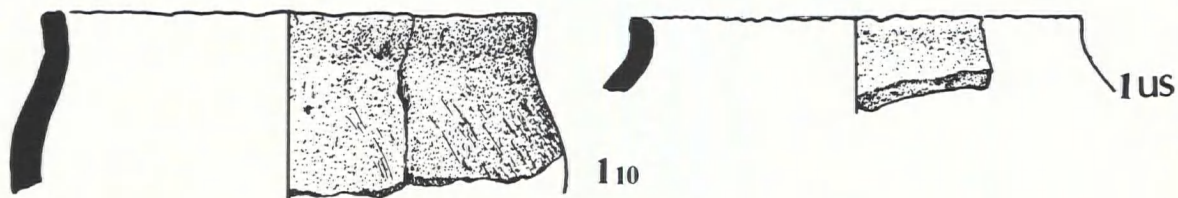
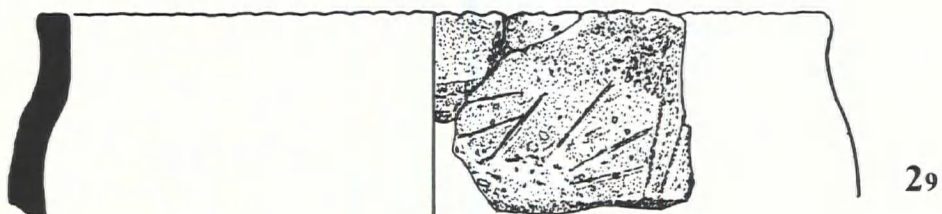
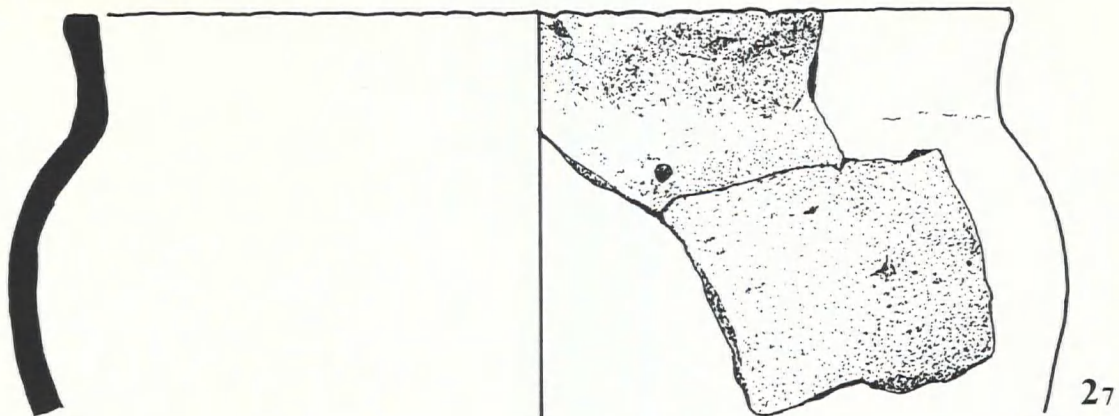


Fig 7 Area II: Pottery  
Scale:  $\frac{1}{2}$







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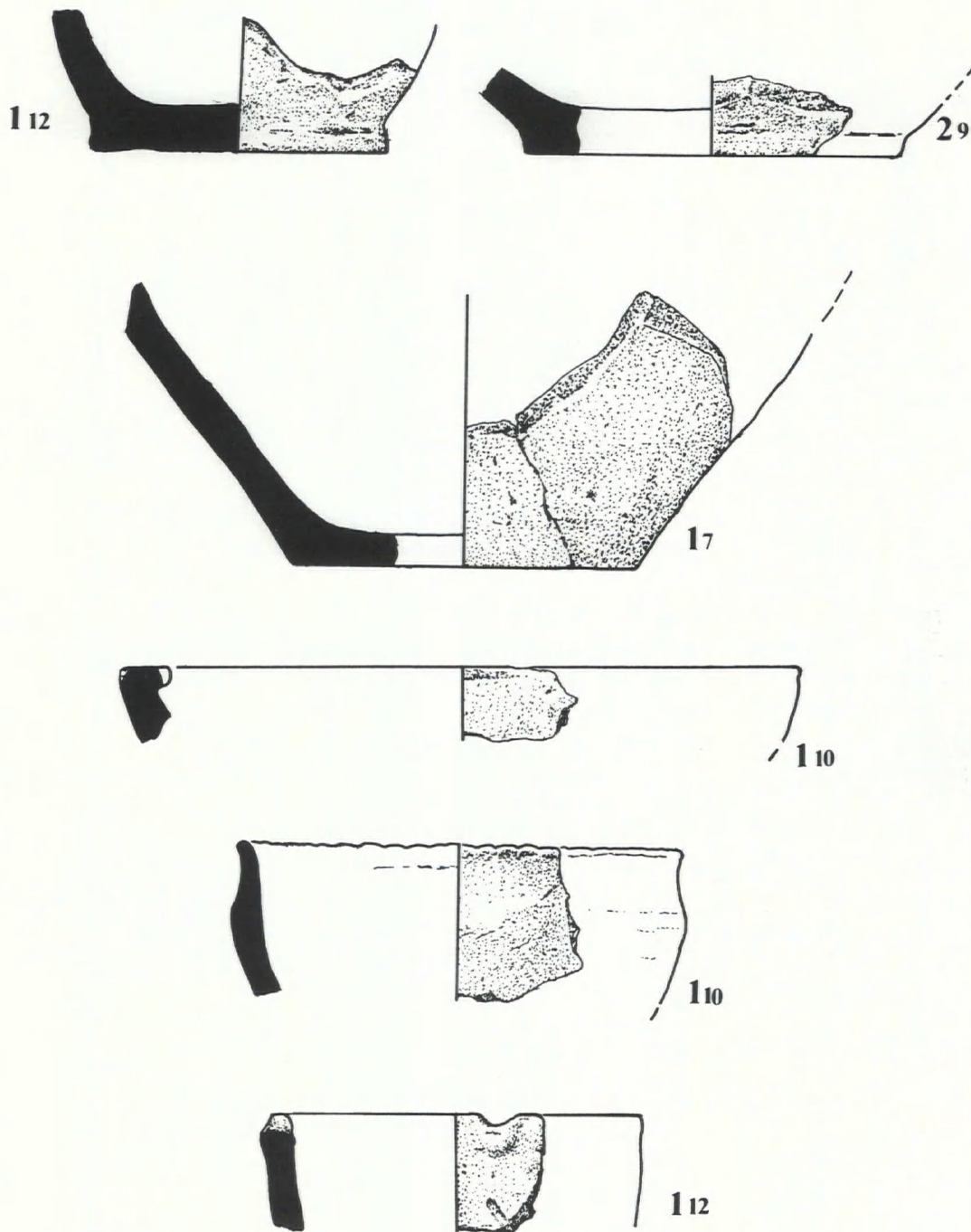
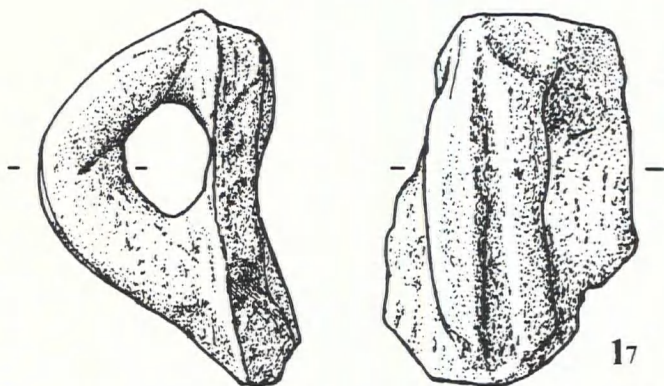


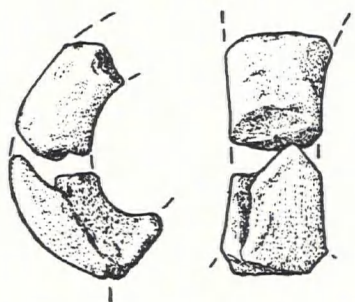
Fig 8 Area II: Pottery  
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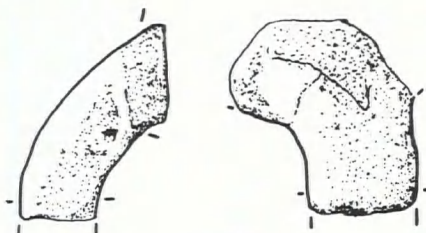




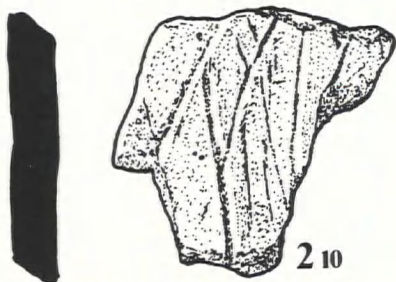
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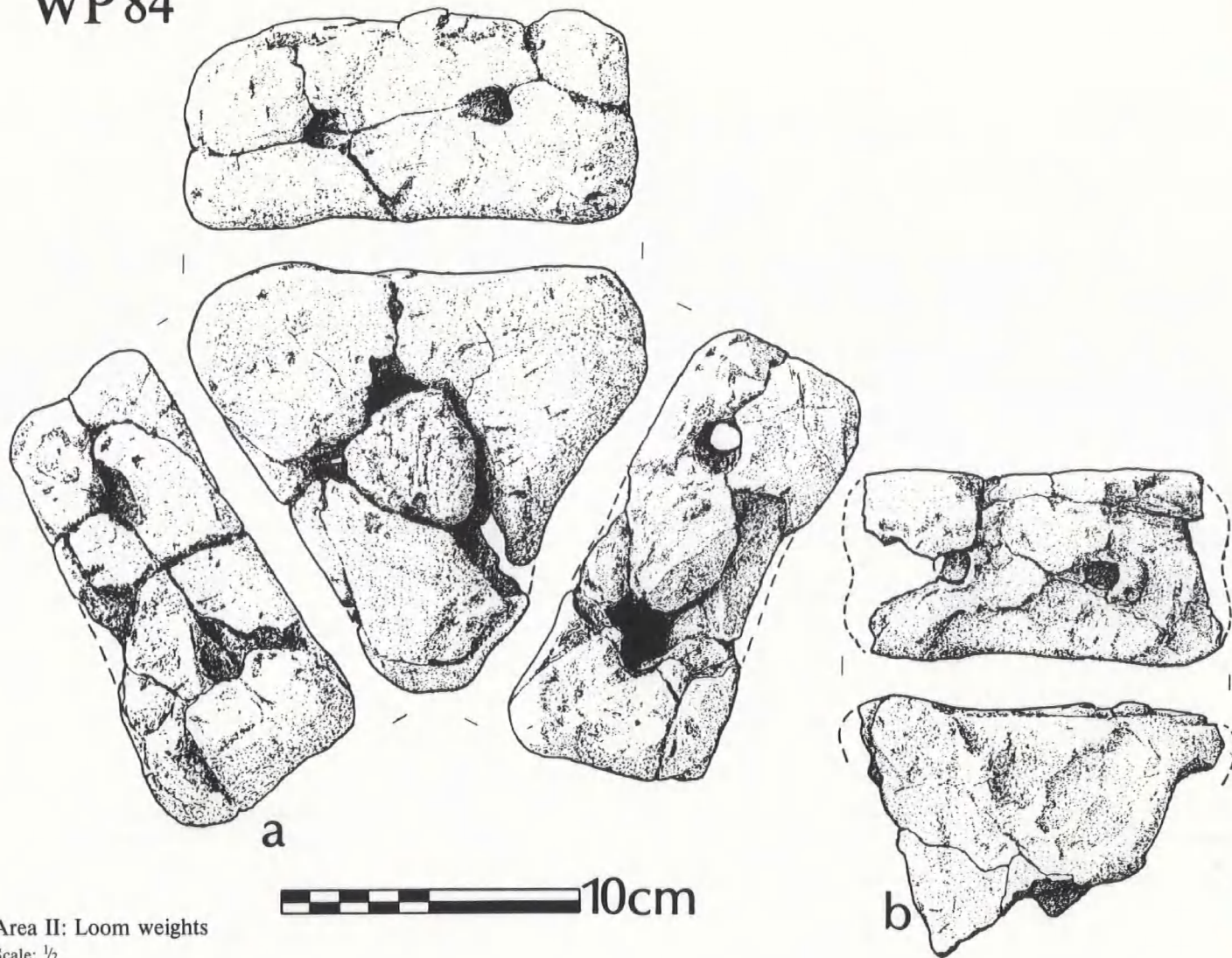


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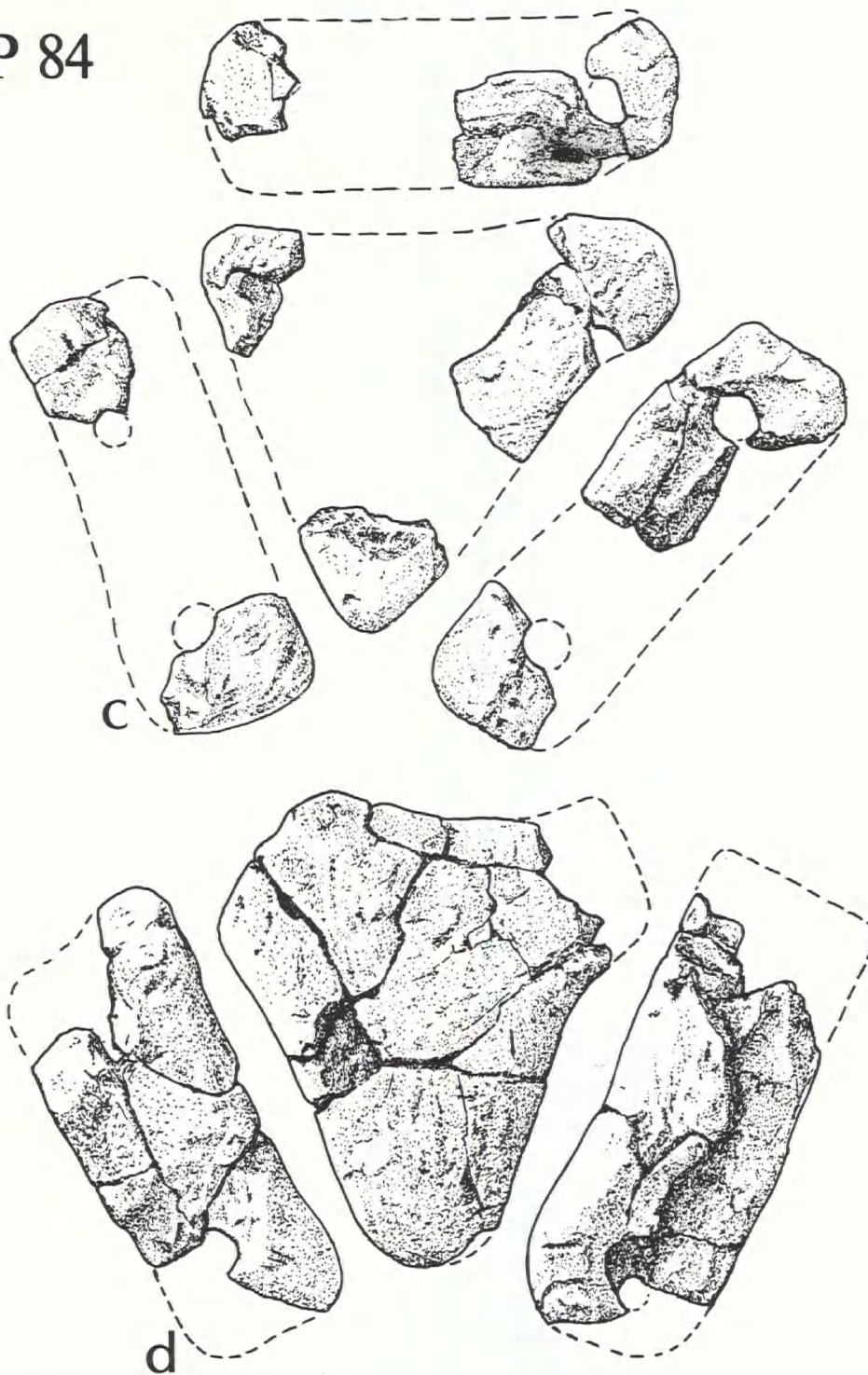


Fig 10 Area II: Loom weights  
Scale:  $\frac{1}{2}$

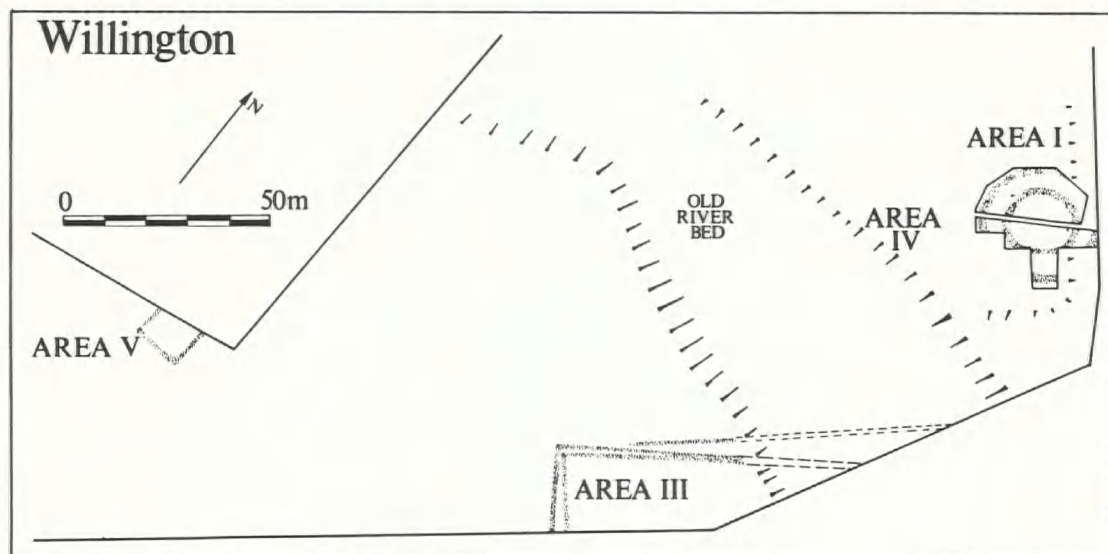


Fig 11 Roman Features: all areas

ceramic forms, and without the presence of well made, decorated pottery, no date can be ascribed to the assemblage.

#### (b) *Baked Clay*

Four loom weights (Figs 9 and 10) were found. These are made of an F1 fabric with a few large flint grits (up to 8 mm long), firing is poor with the middle of the weights being almost completely unfired in places. Three of the weights have the usual three suspension holes, the fourth has only the lower suspension hole, the upper two being replaced by narrow grooves. Although quite large and heavy, they fall into the range of sizes for loom weights rather than thatch weights (of the same form but larger). Again these artefacts are not very useful for dating as they seem to occur throughout the early Iron Age and into the later Iron Age (cf the excavations at Odell).

#### (c) *Animal Bone*

The animal bone has not been studied by a specialist, but preliminary identification suggests that the majority of the bone was bovine, with horse as the next most prevalent and only a few sheep bones present.

#### (v) *DISCUSSION*

The site appears to have been conceived as a single entity. The evidence from the junctions to ditches is, with all the recutting, confused but does not suggest that either of the enclosures was dug as a self-contained unit. The smaller enclosure shows considerably heavier occupation than the larger, and the differences of ditch and bank construction suggest different functions. The simplest interpretations would be a stock enclosure with a smaller enclosure for domestic buildings. Thus in the large enclosure the internal ditch is to keep animals in, the small enclosure has an external ditch to keep them out. A trackway funnelled in towards the entrance is an aid to animal driving.

The whole complex was built on the edge of the dry arable land, with wetter, presumably permanent pasture to the east. The three cuts of the ditch mirror the three possible rebuilds of the huts, and it could be that this represents two total refurbishments of the site. If this was the case, the site would have to be temporarily abandoned, or at least the centre of occupation moved elsewhere. It is of course possible that the occupation of the site was purely seasonal, with a degree of transhumance. If this were so the site would be only fully occupied from the harvest time, through the winter up to spring, the animals being taken away to summer pastures after the planting of corn.



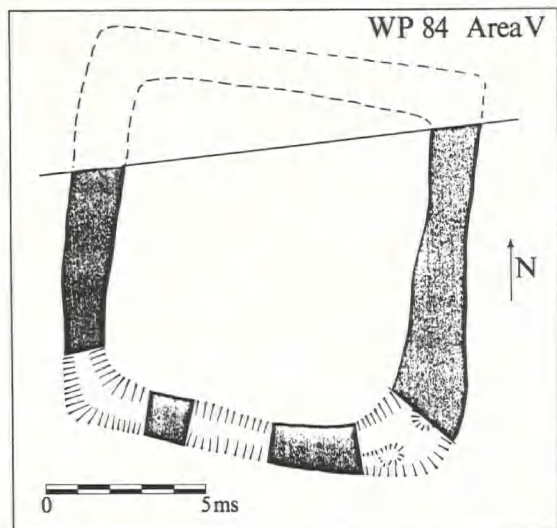


Fig 12 Area V: Plan

## THE ROMAN PERIOD

The Roman period is represented by two areas (Fig 11), numbers V and III and by a few stray finds.

### (i) AREA V

The small square enclosure with sides 13 m long was recognised on the aerial photographs, and turned up unexpectedly in the excavation of a trackway for quarry machinery. The ditch, or gully (Fig 12) was continuous and produced early Roman pottery. The feature was, for the majority of its circumference, only about 30 cm deep and only showed a single phase of digging. It had a homogenous fill with no evidence of post settings or other structural elements. The south-east corner (Fig 13) however has a more complex section which possibly shows recuts.

Finds were mainly pottery (Fig 14) and were quite prolific considering the small area of ditches dug. The illustrated finds are as follows:

Fig 14

- (a) Large jar. Fabric contains a large amount of shell and few large flint grits, up to 5 mm long. The outer surfaces have a corky texture and are a pale buff colour; the core is dark grey. Other sherds in the same fabric have a grey patchy surface and appear to have been hand made.

- (b) Small jar. Wheel made in clay which has a large quantity of small rounded quartz grits (about 2-3 mm diameter). Fired to a uniform dark grey on the rim, with the body of the vessel being a pale buff colour.
- (c) A small bowl. Probably hand made in a clay with a few small quartz grits and leached out limestone or shell fragments. It is reduced to a dark grey throughout.
- (d) Jar. The fabric contains grey and red grog, leached out shell or limestone and occasional flint grits. The inner surface is pale buff-coloured, the outer surface and core a dark grey.
- (e) Decorated rim. Hand made in a clay with a lot of medium and large limestone grits. The outside is pale, pinkish brown and the core is black. The sherd is decorated on both sides with chevron designs executed in string impressions. This sherd is presumably a residual find, possibly dating from the Bronze Age.
- (f) Jar base in same fabric as "d", probably wheel made.
- (g) Small base made in grey ware with some medium sized quartz pieces and some very fine black grits.
- (h) Fragment of a pedestal base. The fabric contains dense fine quartz grits. The core is grey, the outer surface is pale buff coloured but has been blackened over most of the surface. The central hole is probably original, to facilitate the uniform drying and firing of the vessel.

Not illustrated is a fragment of pottery in a white fabric with a red-brown colour coat.

- (i) A fragment of the upperstone of the beehive quernstone, made out of red brown Hertfordshire pudding-stone.

Other finds included two flint flakes and a quantity of oyster shell.

Area V can be dated from the finds which are probably first century AD; its function though is rather more problematic. There were no internal features or any structural elements within the ditch, yet the ditch is rather too feeble to form a stock enclosure. The finds suggest some sort of domestic occupation and it could be seen as a drainage gully around a square building which has left no archaeological trace.

### (ii) AREA III

Area III contained a series of Roman ditches (Fig 15) which form a field boundary (Fig 11). The section shows a ditch that has been recut 4 times along the north-south length. The east-west length

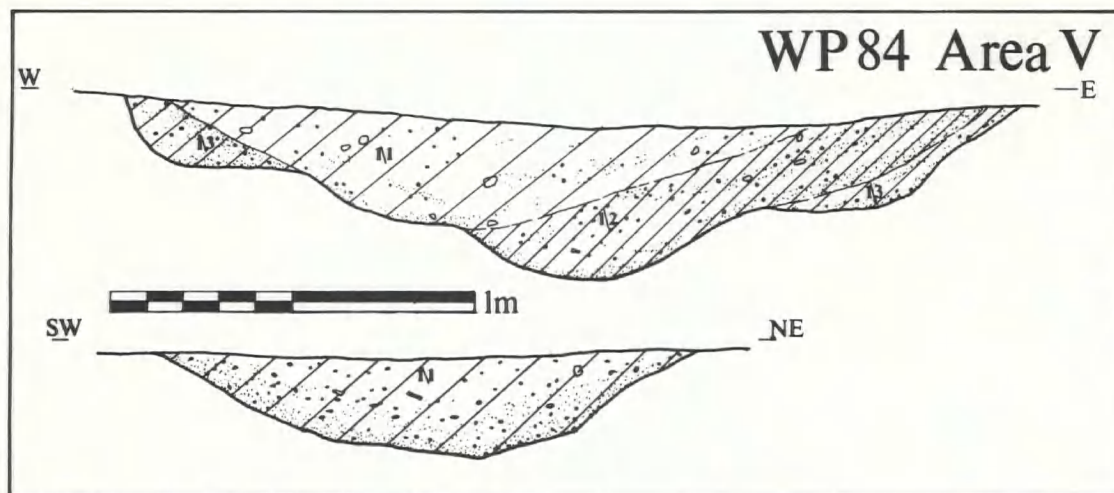


Fig 13 Area V: Sections

of the ditch was largely destroyed by mechanical stripping and only three phases of ditch could be identified. The finds (Fig 16) are as follows:

#### *Ditch 2*

- (d) a sample base in a clay with a large amount of shell, probably hand made.

#### *Ditch 4*

- (e, f, i, j, k, m) a series of vessels, wheel-turned, and all made in a very shelly fabric. They have oxidised surfaces and a grey core.

- (l) made in a fabric with large flint and limestone grits, patchy brown surfaces and a grey core.

- (n) grey-coloured vessel with a large amount of fine quartz grits.

- (g, h) grey ware with white limestone grits.

In addition two samian vessels were found (Dr. 27 and Dr. 33).

#### *Ditch 5*

- (a) The base of a vessel in grey ware with small white limestone grits. The broken edge of this vessel has been carefully smoothed to form a small bowl.

- (b) A base in a grey ware with a large quantity of fine quartz grit and some large flint fragments. Again the vessel has been reused by grinding the broken edge smooth to form a small platter.

- (c) A finely made jar in a fabric with large amounts of fine quartz grit and possibly leached out limestone. It is black on the outside and reduced on the inner surface.

The pottery suggests of a date of late first or early second century AD for ditch 4. Although no firm conclusions should be drawn from such a small collection of pottery such as this, it is interesting to note that the earlier ditch has some good quality pottery whilst the later one has produced some carefully reused broken vessels. This might reflect a decline of agriculture wealth in the area.

#### (iii) *OTHER FINDS*

As described above, a Roman cremation was found in the upper layer of the trackway ditch in Area II. The cremation was contained in a pot (Fig 17b) made in a soft pottery with grog and small flint grits, together with two other pots. One was well made in a hard fabric with grog and small grits (Fig 17a) the other, a much smaller pot made in a soft fabric with



# Area V

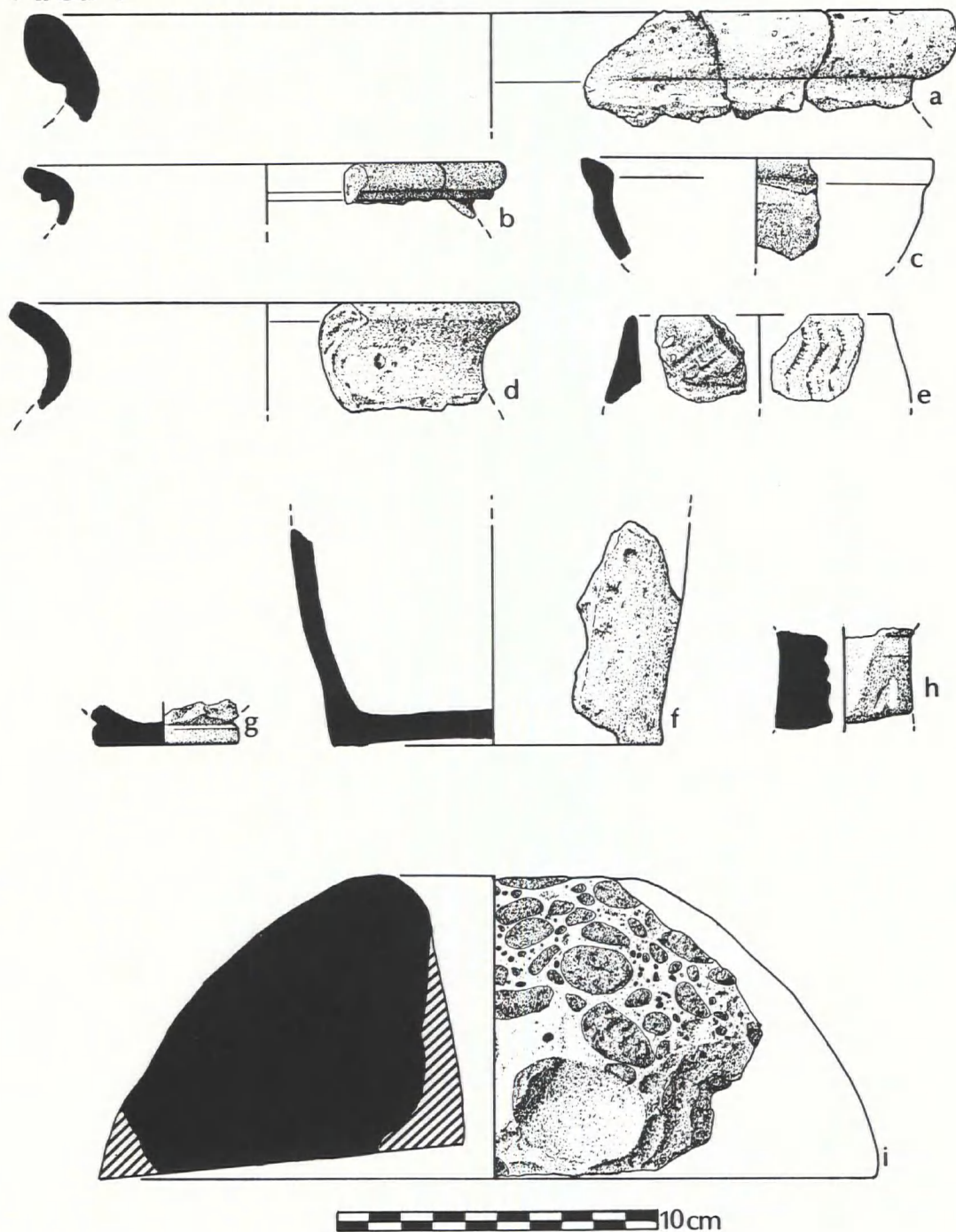


Fig 14 Area V: Finds  
Scale: 1/2

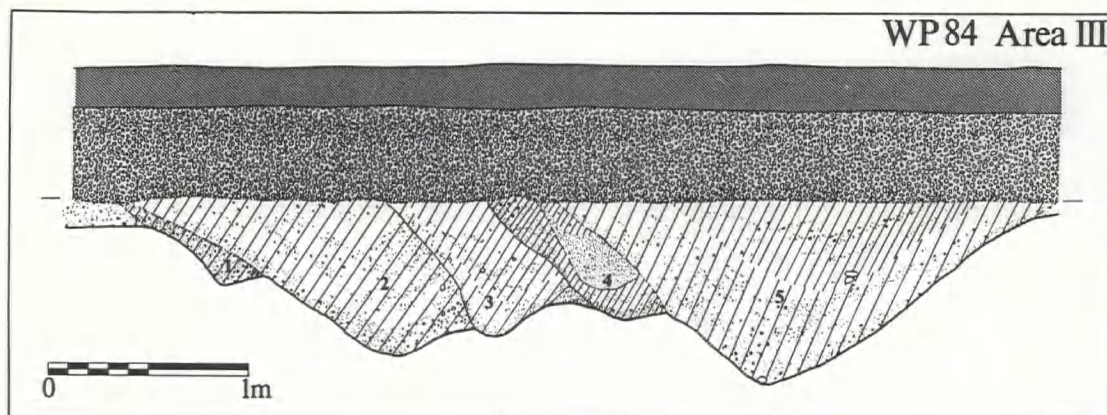


Fig 15 Area III: Section

grog and limestone grit, was too damaged to retrieve a profile. All the pots had been truncated by ploughing.

The cremation itself was studied by Ann Stirland whose report appears below.

#### (iv) DISCUSSION

The evidence from the Roman period is fragmentary. Apart from showing that there was general occupation and farming in the area very little else can be said. Further work at Willington in the next few years, it is hoped, will throw some light on the nature and extent of the land use under the Romans.

### APPENDIX I

#### *WILLINGTON II; CREMATED HUMAN BONE*

Ann Stirland

Investigation of this cremation was somewhat impeded by the nature of the soil matrix in which the fragments of bone were embedded. This was both hard and heavy and had accreted the bone together in a completely erratic manner. When attempts were made to remove the fragments of bone from this matrix, the fragments proved very

friable and most broke on attempted removal. Consequently, as much bone was removed as possible, and enough to give a reasonable amount of data.

The surviving bone represents the incomplete remains of a probable adult. One surviving tooth root and a finger phalanx are both fused, both suggesting the presence of an adult. Neither further ageing, nor the sexing of this individual are possible. The degree of cracking and calcination of most of the bone suggests burning at a high temperature. The presence of some fragments of blue bone, however, suggest a lower temperature was achieved in some areas. Some parts of the body may have been well away from the fire. In the case of tooth roots and the cancellous bone in the femoral head, it is easy to imagine that these areas would be protected from intense heat, since they are embedded in bone or flesh. Some of the blue bone, however, is possibly from ribs, and this is more difficult to explain, since this area would be very exposed to any fire. A considerable amount of the bone is still contained in the soil matrix, and so it is not possible to obtain a weight for this cremation. The fragments are consistently small and, while it is tempting to suggest post-burning breakage, it must be remembered that the fragments are very friable. A lot of post-burial breakage may well have occurred.



# Area III

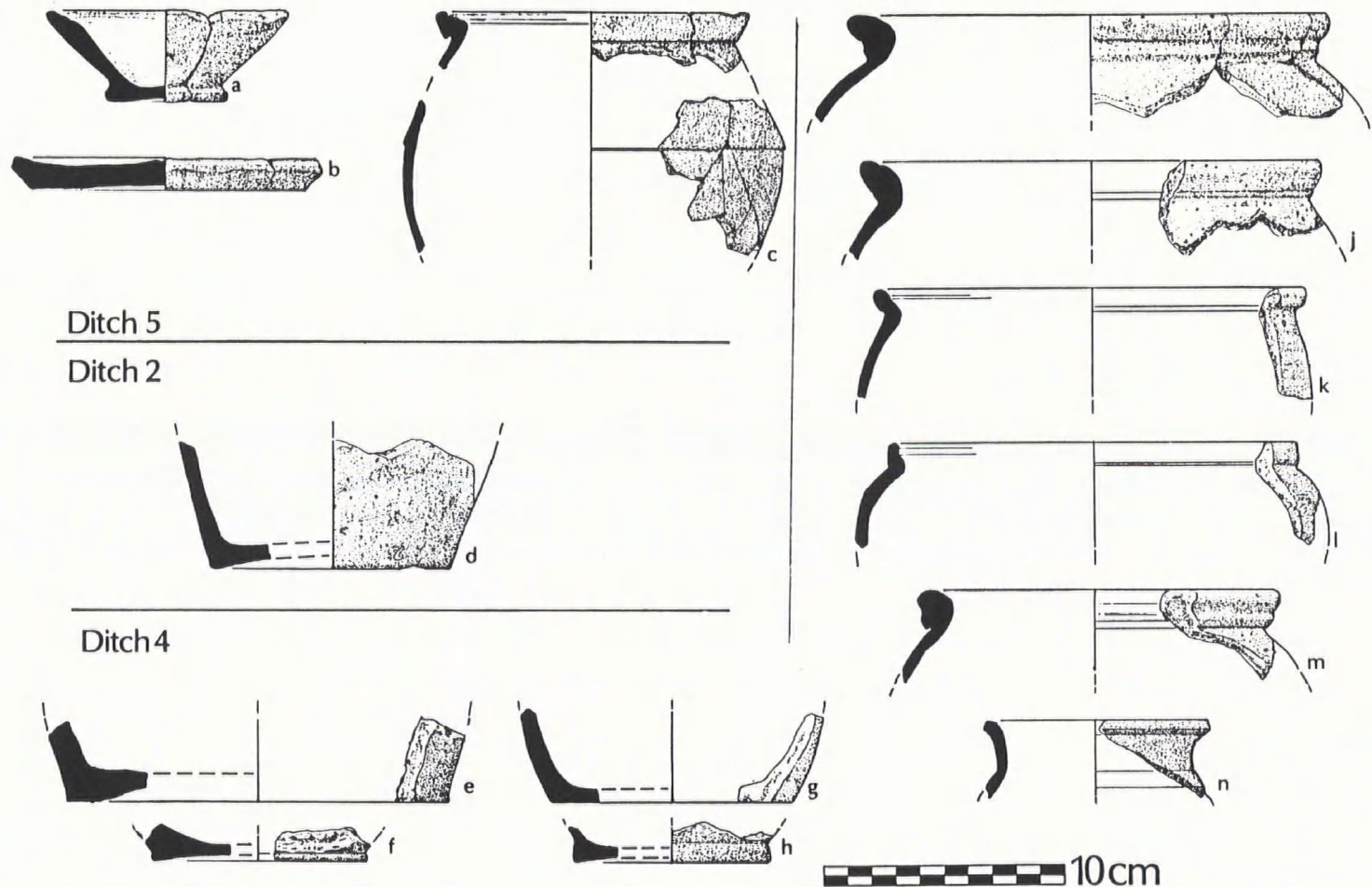


Fig 16 Area III: Finds  
Scale: 1/2

WP84

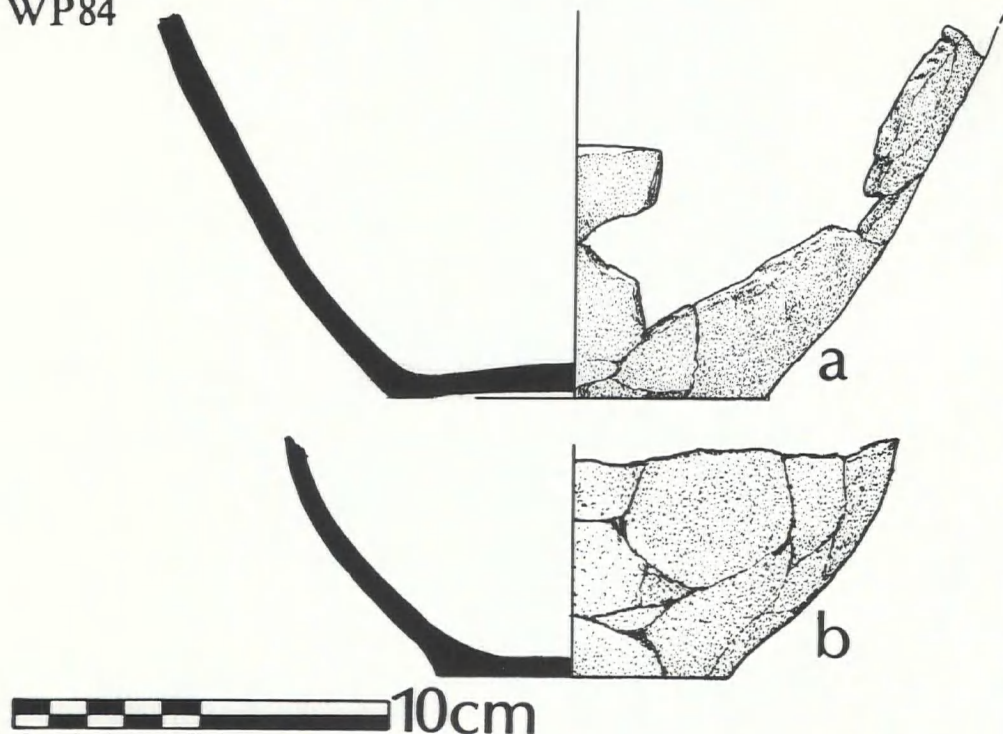


Fig 17 Roman Cremation Vessels

Scale:  $\frac{1}{2}$

#### ACKNOWLEDGEMENTS

Credit for the excavation of Area II must largely lie with Mrs Terry Jackman who co-directed the site. Thanks too must be given to Mrs Evelyn Baker for help and advice during the excavation, and to Gordon Smith and Richard Ransome for work on site. Excavation and post-excavation work was made possible by a grant from the HBMC. We were considerably helped by Redlands Quarries who gave us permission to excavate the sites.

Thanks are also due to the staff of a Manpower Services

Commission rescue archaeology project for help on the excavation, especially Joe Prentice who supervised the excavation of the Roman sites. Angela Simco was responsible, as on The Willington I, for the pre-excavation research, and Ann Stirland for the report on the cremation. Lastly I must thank Mrs Nicola Clarke, and inmates of HM Prison, Bedford for the identification of the animal bone from Area II.

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# The Ecclesiastical Topography of Early Medieval Bedford

JEREMY HASLAM

In the previous issue of *Bedfordshire Archaeology* the writer put forward a hypothesis for the origin of Bedford, which proposes that it was a planned urban place which formed one element in a system of fortified urban burhs instigated by king Offa (d. AD 796) throughout Mercia as a whole (Haslam 1983). This system is argued as having been conceived as a defensive measure against Viking sea-borne attack, which began at the end of the eighth century. As a general model this still provides, in the writer's view, the best explanation in historical terms for several topographical and archaeological observations relating to both Bedford and those other places which are considered as part of this system (Haslam 1984). In particular, the hypothesis of the existence of a burh at Bedford from the late 8th century places the occupation of Bedford (and other such centres) by the Danish army in the late ninth century for the first time in some sort of meaningful context.

In this article it is argued that this model also provides the best explanation for certain aspects both of the chronology and development of the historical landscape, and of the ecclesiastical topography of the northern and southern burhs of Bedford, in particular the topography of the town parishes and the physical relationship of these parishes to their neighbours. In addition, the analysis of this evidence throws some light, it is suggested, on the origin of both urban and rural parishes in general.<sup>1</sup>

The early ecclesiastical history of the county is shrouded in darkness, though the writer of the VCH at the beginning of this century (VCH i [1904], 309) suggested that the conversion of the area was well under way by the later seventh century. The association of named churches in Domesday with important royal manors is but one indication that the early ecclesiastical arrangements conformed to a pattern, common in other areas of the country, which consisted of the addition of minsters or mother churches to existing royal centres, the

extent of the parochiae of these minsters comprising the area of the royal estates or territories of which these places were the administrative centres. Domesday Book provides evidence in Bedfordshire for three of these centres (Leighton [Buzzard], Luton and Houghton Regis) apart from Bedford itself (see below). It is not the purpose here to examine this arrangement further, though this would be a particularly fruitful subject for the kind of detailed topographical and historical research that has been applied in other areas of England.<sup>2</sup>

The documentary information relating to the early history of the church at Bedford is sparse and for the most part circumstantial. From the information in Domesday Book it can be inferred that it was one of the best – if not the best – endowed churches in the county. The church was worth £5 (five pounds) before Domesday, before being robbed of its local endowment by the new bishop of Lincoln (Round 1904, 196-7). This compares with the endowments of churches at Leighton (Buzzard) with 4 hides worth £4 (four pounds), Luton with 5 hides worth £3 (three pounds), and Houghton Regis with half a hide worth 12 shillings (fol 209 b-c, paras. 1a, 2a, & 3; VCH i [1904], 222-3).<sup>3</sup> The church of St Paul, mentioned by name in Domesday Book, was a house of secular canons in the eleventh century (Round, *ibid.*), was ruled by an abbot in 971, and was the burial place of Oskytel, archbishop of York (and formerly bishop of Dorchester) in 956 (VCH i [1904], 311). All this evidence shows that it was an important minster church from at least the tenth century onwards.

Its pre-Danish history is more obscure. The evidence has been discussed by the VCH, the author of which suggests the possibility that in the late eighth century 5 hides belonging to the church (perhaps significantly approximately the same as its endowment in the mid eleventh century) were given by Offa to St Albans abbey (*ibid.*, 310). This land had apparently been given to Offa by one abbot

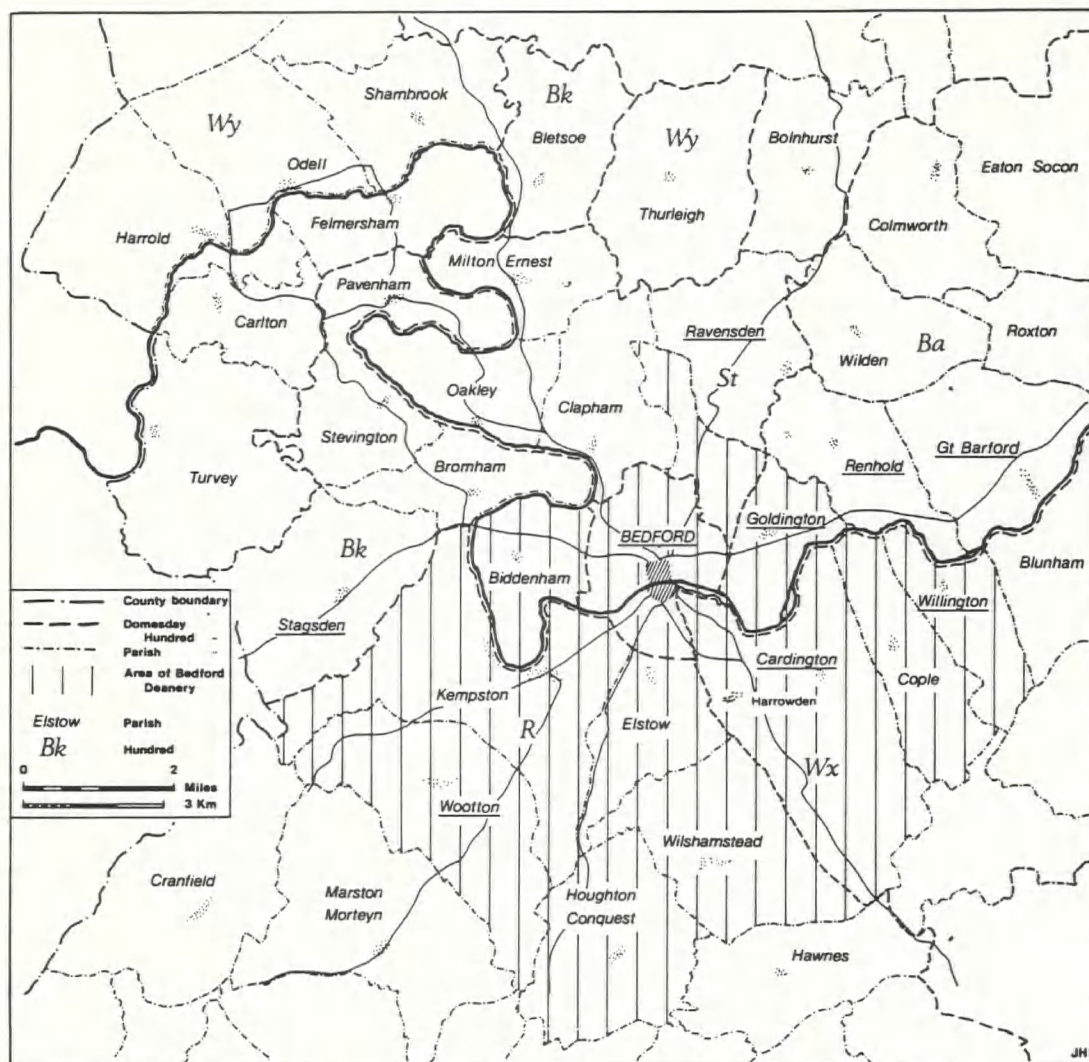


Fig 1 The Bedford Area, showing parishes, Domesday Hundreds and the Norman Deanery of Bedford Names underlined show churches owned by Newnham Priory in the twelfth-century

Ahlmund, which could be taken as indicating that it formed part or all of the endowment of a monastic establishment at St Paul's at that time.<sup>4</sup> Bedford is also recorded by Matthew Paris as being the burial place of King Offa himself (*ibid.*) (see further below). This evidence provides at least some basis for the inference that St Paul's was also an early minster or mother church before the Viking occupation of Bedford, and that it was established no later than the reign of Offa, in the later eighth century.

This raises the question of the significance, and indeed the existence, of St Paul's church at an earlier date than this. One possibility is that, as recently

suggested by Dorothy Owen (1978, 10), it was an early minster founded during the conversion period in the seventh century, and thus the direct predecessor of the well-endowed minster of Domesday. However, there are several considerations which suggest an alternative hypothesis. This is that the early minster was located at Elstow, immediately to the south of Bedford (see Fig 1), and that St Paul's was a new church (a 'new minster') provided by Offa for his newly founded burh, to which the majority of the endowments of the early minster were transferred. Thus dual hypothesis provides in the writer's view the best explanation for a number of topo-



graphical and historical observations.

Firstly, from its central position in relation to the suggested burh of Offa it can be inferred that St Paul's functioned as the burh church, created to serve the ecclesiastical needs of its inhabitants, from the time of its original foundation. It is unlikely therefore to be earlier in date than the foundation of the burh itself.<sup>5</sup>

Secondly, the hypothesis provides a historical context for the circumstances of the possible burial of Offa at Bedford, first recorded by Matthew Paris in the twelfth century.<sup>6</sup> The relevant documentary evidence, however, raises certain problems (quite apart from its late origin and rather legendary form), in that the chapel in which he was supposedly buried is said to have lain outside the town on the banks of the Ouse, to have become eventually submerged by the river. This chapel may have been attached to a presumed royal palace located near the river (possibly on the site of the later castle), with St Paul's church provided as a separate foundation. A parallel for this process could exist at Cambridge, where the writer has argued (Haslam 1984b, 17) for the foundation of a church (St Giles) in the northern burh by Offa, its parish carved out of a wider territory dependent on a presumed mother church at the royal site of Chesterton nearby. On the other hand, it could equally well be argued that St Paul's church, which, it is suggested here, could have been founded by Offa as a new minster, was also his burial place. It is not impossible that the story of the washing away of Offa's remains is a later legendary accretion which has grown up to explain the documentary lacunae relating to his burial, and even the physical loss of his tomb and/or remains, which is likely to have been the result of the destruction of richly-endowed minsters of the Bedford type by the Vikings in the late ninth century.

Thirdly, there are several independent reasons for the identification of the site of the primary minster in the area with Elstow, an idea already put forward by Wood (1984, 29). These relate to evidence from its place-name, its early religious associations and ecclesiastical connections, and its location at the centre of a possible early parochia. These will be discussed in turn.

From the earliest forms of the place-name (the earliest is *Aelnestowe*, c.1050) it can be inferred that the first element is an Old English personal name — which in this case seems to be unconnected with St Helen, the dedication of the parish church. Such a name, when compounded with -stow, is usually that

of a saint (Mawer and Stenton 1926, 70-1). Later name forms appear to have been influenced by the dedication of the parish church to St Helen. Mawer and Stenton's suggestions fit neatly with the further inference, from the dedication of the nunnery to St Mary recorded in *Domesday Book* (f.217b, para.53.4), that the dedication to St Helen may anyway well be secondary, possibly even itself suggested by the place-name, and perhaps post-Conquest in origin.<sup>7</sup>

This interpretation is further supported by the results of Margaret Gelling's recent analysis of place-names containing the stow element (1982). She concludes, firstly, that 'a place designated stow had some rare characteristic and was performing a special function in the life of a wide area' (*ibid.*, 189); and secondly, that an important early sense is that of a 'venue for a specific activity, meeting place', from which meaning arose the sense of 'Christian holy place' or 'site of special Christian sanctity' (*ibid.*, 188, 191 and *passim*).

The ascription of this sense to the name Elstow (the only place-name in Bedfordshire containing the -stow element) is given further support from its proximity to the pagan religious centre at Harrowden, only 1 km to its east. The place-name is one of a class of similar names denoting the presence of a pagan religious site (Gelling 1978, 158-61), which, as the -dun element in its name suggests, can be located on the slight hill now occupied by Shortstown (*ibid.*; Wood, pers. comm.). The wider relationships of Harrowden and Elstow are also significant in this context. Both the pagan and Christian religious foci lay close to each other in an estate whose centre was arguably located at Kempston. This was a significant settlement focus in the Roman and early Saxon periods (Wood 1984, 23-28), and the centre of jurisdiction at the time of *Domesday* for a large area which also included Elstow (f.217b, para. 53.4), Wilshamstead (f.217a, para. 53.3), Harrowden (f.217d, para. 53.32) and Cardington (f.217d, para. 53.33).

An overall model for the development of the area in the post-Roman period can be put forward to explain this evidence in functional terms. It seems reasonable to suggest that the pagan religious site at Harrowden functioned in a relationship which was essentially complementary towards the estate centre (and pagan cemetery) at Kempston. In the period of the conversion it seems likely that the religious focus of the area was relocated to Elstow in conscious Christian opposition to the pagan associations of the site at Harrowden, and that this new focus maintained the same or equivalent functional



relationship to the primary estate centre at Kempston. The meaning of -stow in Elstow must in this case have had the sense of a specifically Christian meeting place. This new ecclesiastical focus then became the minster church, which was probably dedicated (as were many other sites of the period) to St Mary.

An indication of the extent of the early parochia of the suggested original minster at Elstow is provided by the area of the deanery of Bedford, which in the thirteenth century comprised the following parishes: Bedford parishes, Biddenham, Cardington, Cople, Elstow, Goldington, Houghton Conquest, Kempston, Willington, Wilshamstead and Wootton (shown in Fig 1).<sup>8</sup> Though the deanery as an institution is probably only of eleventh century origin (VCH i [1904], 313), it seems at least a possibility that this grouping was based on an earlier arrangement of ecclesiastical dependencies. The validity of this hypothesis seems to be strengthened by a number of other considerations: firstly, that this area includes no less than five Domesday hundreds (see Fig 1), and is probably therefore earlier in date than the establishment of this pattern. From the arguments given below suggesting that the boundary between two of these hundreds to the south of Bedford were in existence by the early tenth century, it can be inferred that this area was also in existence by this time. Secondly, while Bedford itself is near the periphery of this area, Elstow lies at its centre.

A further indication of the extent of the early parochia attached to St Paul's Bedford – which it is argued here was transferred to it from the 'old minster' at Elstow by Offa – is given by the record of the churches which formed the endowments of the priory at Newnham. This was founded in 1166 by Simon de Beauchamp as an Augustinian priory attached to St Paul's itself, which was later moved in c.1180 to Newnham, immediately to the east of Bedford (Godber [ed.] 1963, x-xi). The regular canons of this priory were the successors to the secular canons of St Paul's, the holdings of the latter forming the priory's initial endowments (VCH i [1904], 377-8). These included the tithes and dues of fourteen churches in all, of which the following nine were situated within the immediate area of Bedford: St Paul's, Renhold, Ravensden, Gt Barford, Willington, Cardington, Wootton, Stagsden, and Goldington (*ibid.*, 380). These are marked on Fig 1. These churches all lay in vill forming the Barony of Bedford, held by Simon de Beauchamp. Domesday Book however records a far larger number of

properties (which may or may not have included the churches) held by his grandfather Hugh. It must be inferred from this that Simon gave to the priory only those churches originally held by the canons of St Paul's and no others, and therefore that the parishes of these churches represent the extent of its earlier parochia.

It is of some interest that amongst these churches are four which lie outside the deanery of Bedford (Stagsden to the west, and Ravensden, Renhold and Great Barford to the north-east). It is possible that this compact grouping formed the widest extent of this earlier parochia – though whether they were additions to an early 'core area' fossilised by the Norman deanery and centred on Elstow, or whether they formed its original extent, is on present evidence uncertain. That the latter is the case can perhaps be inferred from an early ecclesiastical connection between Elstow and Gt Barford, shown by an agreement in c.1180 by which Newnham priory paid Elstow abbey 20s p.a. in return from the latter's tithe from Great Barford (Godber [ed.] 1963, no. 148).

Those parishes within the deanery and suggested early parochia, but which did not form part of the endowment to Newnham priory, are of equal interest. Cople was also held by Simon de Beauchamp, and its church was given by him to Chicksands priory in the later twelfth century (VCH i [1904], 392). If this took place after the foundation of the original priory at Bedford, it would follow that Simon kept to himself the church at Cople out of the original endowments belonging to the canons of St Paul's. The churches of St Peter, St Mary and St Cuthbert at Bedford had already been given to the Augustinian priory at Dunstable by Henry I (*ibid.*, 371), their tithes presumably therefore having been taken from the endowments of St Paul's at this time. Houghton Conquest is problematical, but from the division of both the advowson and the rectory recorded in the thirteenth century (VCH iii [1912], 290), it can be inferred that the parish was a comparatively recent composite, of which possibly only a part (that belonging to Countess Judith) was within the ancient parochia of Elstow and/or Bedford. Lastly, the ownership and early ecclesiastical connections of the church at Biddenham are not known before the thirteenth century (*ibid.*, 39).

This leaves a block of three parishes unaccounted for (Kempston, Elstow and Wilshamstead). These formed part of a large estate which was owned by Countess Judith before Domesday, and which also included parts of Bromham, Stagsden and



Houghton Conquest (Wood 1984, 28-30, 33 and Fig 2). To this block may be added Cardington, which included Harrowden/Eastcottes (see arguments below). The vill of Elstow and Wilshamstead formed the major part of her endowment to a nunnery at Elstow which was founded by her before Domesday (VCH i [1904], 353-7; DB f.217a, paras. 53.3 and 53.4). The churches of both places were held by the nunnery in the thirteenth century, and there are grounds for inferring that their tithes and other dues also formed part of its original endowment. This seems to have been true of Kempston, since a substantial pension was paid to the nunnery, by inference for tithes lost to it, on the establishment of a vicarage there in 1218 (VCH iii [1912], 304).

The status of these churches before the Conquest is however not at all clear. It is possible that Countess Judith appropriated them, together with their dues, from the minster at St Paul's, to which these dues would formerly have been paid. If this is so there is remarkably little evidence, in Domesday Book or elsewhere, of what must have been a major act of reorganisation. The only evidence which could be interpreted in this light is the gift of 3 hides in Harrowden by Judith to St Paul's. As Wood has suggested (*pers. comm.*), this might have been given to the canons by Judith to satisfy a claim by St Paul's to be the legitimate successor of the original minster at Elstow, and to secure the canons' cooperation in establishing the nunnery — although, as Round has remarked (1904, 197), these three hides were worth the low sum of 'only' 30 shillings. There is also a further possibility that the church and tithes of Cardington, which would have included Harrowden, had been given to St Paul's by Judith. Although Domesday Book does not record such transactions, this would be a legitimate inference from the close connections of Cardington both with the estate centre at Kempston and with Judith, as shown in Domesday Book, and the ownership of the church by the canons in the twelfth century (see above). Even if this were so, however, it is difficult to envisage the logic of a transaction in which the appropriation of the tithes of several churches in a large estate from a minster would be recompensed by the gift back to that minster of only a small proportion of the original appropriation.

While it would be dangerous to place too much weight on the lack of evidence for this act of appropriation having taken place, an alternative model for the early ecclesiastical development of the area seems best able to accommodate all this evidence. This is that these churches (Kempston, Elstow,

Wilshamstead, and Harrowden/Cardington) had in fact always belonged to Elstow, in the sense that they had remained ecclesiastically dependent upon it even after the transference of other endowments from the original parochia centred on Elstow to the 'new minster' at St Paul's. This would imply that after St Paul's was founded there still remained a small ecclesiastical establishment at Elstow (the 'old minster'), which retained those tithes and other dues from the area of the old Saxon estate centred on Kempston. These tithes and dues were then utilised by Countess Judith (with the probable exception of those from Harrowden/Cardington which she gave to St Paul's) to form the endowment of her new nunnery at Elstow. In this case the nunnery would be the natural successor to, and in effect a refoundation of, the pre-Conquest establishment. It would furthermore be consistent with the available evidence to suggest that it was at this time that the old minster dedicated to St Mary acquired the additional dedication to St Helena.<sup>9</sup>

#### THE TOWN PARISHES

The fourth type of evidence providing further substantiation for the validity of the model proposed here for the origin of St Paul's as a 'new minster', which was created by Offa in the late eighth century, lies in the pattern of parishes of the Bedford churches.

The analysis of this pattern must however proceed from the more certain to the less certain — in this case from the arrangements which can reasonably be inferred to have existed in the early tenth century to those existing earlier. The key is the creation of the southern burh by Edward the Elder consequent upon his capture of the Danish stronghold in 917. It is argued that the foundation of this burh involved the creation of a planned settlement of urban character within a new defended enceinte, the whole forming an additional defence for an already existing bridge, which was itself defended by a burh on the north bank (Hassall and Baker 1974, 79; Baker and others 1979, 296-8; Haslam 1983). It can be inferred both from comparable evidence in other Edwardian burhs, and from its situation at the central crossroads of the burh, that the church of St Mary was a new foundation contemporary with the creation of the burh itself, and that it was therefore provided by the king as the church for its inhabitants. This is a process which can be recognised in many similar places in western and eastern Mercia, East Anglia and Wessex.<sup>10</sup>



This being so, it follows (at least in this case) that the parish of this church — that area from which the inhabitants and owners of fields paid tithes, burial and other dues to the church — was defined at the same time as the foundation of the church. It can be inferred from the relationships of this parish to others on the south side of the river (Figs 1 and 2) that this was carved out of two parishes (Kempston and Elstow). It is also clear that the parish of St John, sited at a peripheral location within the burh (Fig 2), was itself carved out of St Mary's parish, both the church and the parish being of later date.<sup>11</sup> The close temporal connection of the church and parish of St Mary's to the burh is also shown by the fact that its boundary follows a line some 1.5 km to the south and west of the church, mirroring the line of defences. The secondary nature of the parish is also indicated by its small size in relation to its neighbours.<sup>12</sup> Furthermore, the eastern boundary of St Mary's/St John's parishes follows the boundary of Cardington parish northwards to the river, instead of following the eastern side of the defences and cutting off the north-western corner of this latter parish. The explanation for this lies probably in the fact that this was also a hundred boundary, certainly at the time of Domesday (Sankaran and Sherlock 1977, map at end), and probably therefore as early as the early tenth century. This relationship again serves to emphasise the secondary nature of St Mary's parish.

There are two important inferences relating to the historic geography of the area which can be drawn from these relationships: firstly, that the underlying structure of the hundreds was already in existence in the early 10th-century as a pattern sufficiently well established to have influenced the layout of a new parochial unit of royal origin in c.917 or soon after. From this it can also be inferred (though this cannot be explored further here) that the origin of the basic structure of at least two of those hundreds near Bedford lies either with a programme of territorial reorganisation by Edward the Elder at that date, or that they had by the early tenth-century already been in existence for some time. Secondly, it can be inferred that the parish boundaries of the neighbouring rural settlements, truncated by a newly-created parish of early tenth-century origin, were also established as fixed boundaries at this time. These same parishes are, as ecclesiastical units, therefore likely to represent survivals from the pre-Viking, and probably therefore middle Saxon, period — although their status as parochial chapels to the mother church at Bedford is not necessarily in

doubt.<sup>13</sup>

The ecclesiastical geography of the northern burh is of similar interest. Such meagre documentary evidence as exists (see above) provides at least a reasonable basis for the hypothesis of the existence of a major church at Bedford by the end of the reign of Offa at the end of the eighth-century, and that the minster of St Paul's, documented from the tenth-century onwards, is its direct successor. The arguments supporting the presence of a pre-Viking burh at Bedford are also independent arguments for the existence of an associated church, which must have served the ecclesiastical needs of the inhabitants of that burh. The natural inference must be that the minster of Offa, and the church in the burh arguably created by Offa, are one and the same. Although of course one inference cannot validate the other, each one is independently tenable as accounting for the available evidence.

This series of inferences gives a particular significance to the relationship of the parishes of the northern burh (St Paul's, St Cuthbert's and St Peter's — see Fig 2) to those of neighbouring churches. A notable feature of their topography is that these combined parishes together form a remarkably regular 'envelope' around the town. The primary status of St Paul's church, argued above, together with both the peripheral siting of St Peter's and St Cuthbert's churches and the smaller size of their parishes,<sup>14</sup> show that the two latter have been carved out of the former area of St Paul's parish, which originally therefore must have comprised the whole area of this 'envelope'.

The relationship between these parishes is of some interest in itself. It has been argued elsewhere that the course of the division between St Paul's parish and St Peter's/St Cuthbert's parishes follows the line of an intra-mural or wall street on the northern and eastern side of the burh (Haslam 1983, 29-30). This suggests that the parish boundary was created when this feature was a functioning element in the layout of the burh. It must have been established before the Conquest, when this boundary was arguably deflected eastwards by the insertion of the castle. From this consideration, and from the common association of churches with extra-mural market areas, some of which are probably of early tenth-century date or earlier,<sup>15</sup> it can be inferred that St Peter's church and its parish were creations of the period immediately after Edward the Elder's 'restoration' of the burh in 917. The smaller size of St Cuthbert's parish and the peripheral position of its church in relation to St



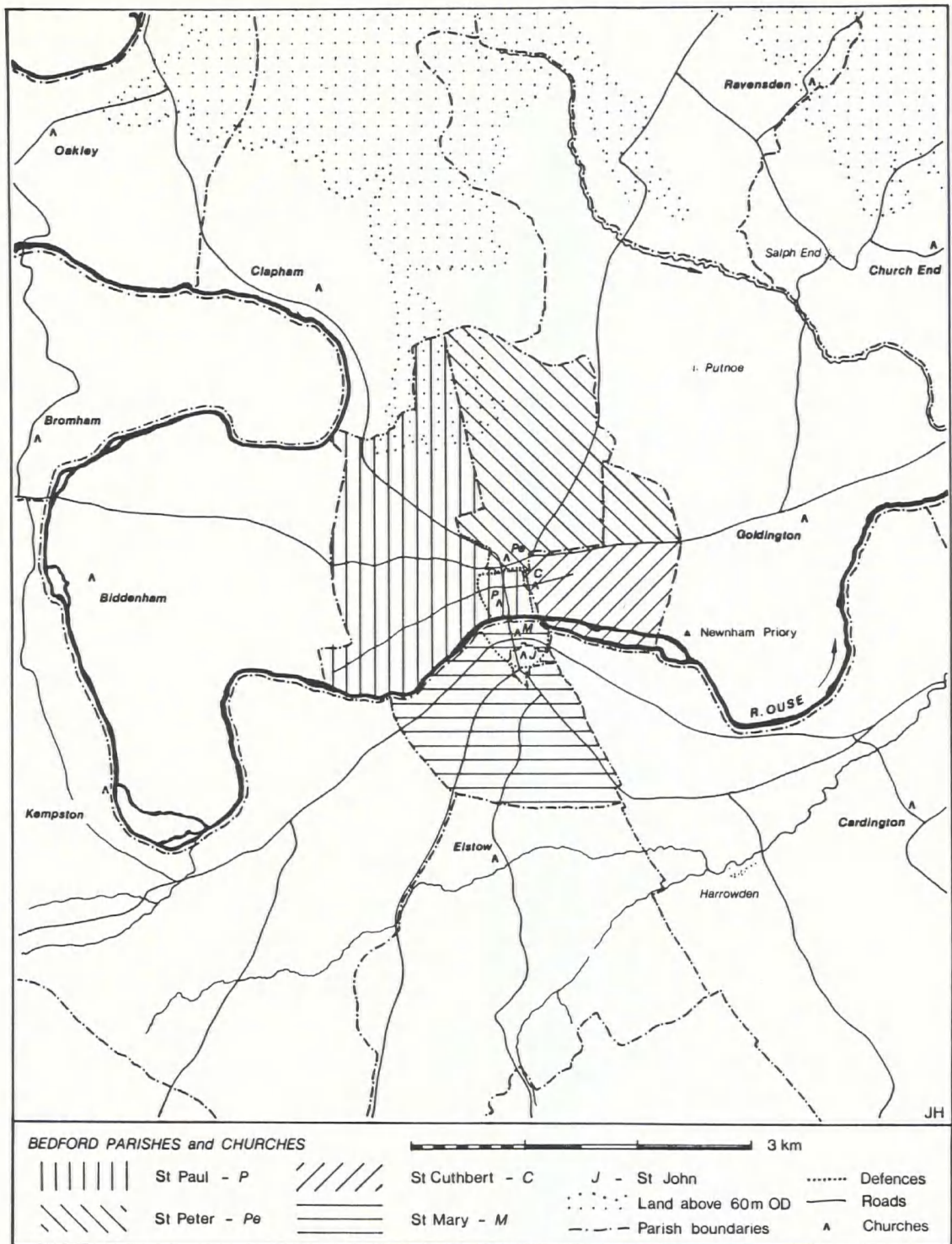


Fig 2 Bedford and neighbouring parishes

Peter's suggests that this could well be a subdivision of St Peter's parish at a slightly later date.

The regularity of the shape of this envelope, the whole of it originally comprising St Paul's parish, is evident when it is compared with the rather sprawling nature of the agricultural parishes nearby (Fig 1). This is a feature which requires explanation. The line of its boundary appears to mirror that of the defences of the burh some 1.5-2 km outside them. Although the original St Paul's parish is of the same order of size as many of its neighbours,<sup>16</sup> it can be inferred that the parish is likely to have originated as a later addition to an already existing pattern of established boundaries, as has been argued above in the case of the southern burh. A further argument in favour of the early date is that the regularity of the shape of this parish is only partly reflected by that of St Mary's parish around the southern burh. From this it could be inferred that the former is the primary feature, to which the latter has been added as a secondary development. Lastly, the middle Saxon origin of at least some of the parishes in the neighbourhood of Bedford has been argued above.<sup>17</sup> There is abundant archaeological evidence for middle Saxon occupation at Bedford as well as in some of the neighbouring villages (Hassall and Baker 1974, 77; Baker and others 1979, 154-5, 294 and *passim*). There is therefore no inherent difficulty in postulating the origin of St Paul's parish as a feature inserted into a landscape which was already articulated with parochial and territorial boundaries by the end of the eighth-century.

There is also some basis for the hypothesis that the area of this new parish functioned as the 'town fields', a new agricultural unit set aside (presumably by the royal founder) for the use of the inhabitants of the burh. This can be inferred from the record of the name 'Bury Fields', describing a large area to the north of St Peter's church and within St Peter's parish, in the early sixteenth-century (Henman 1947).<sup>18</sup> Such a function has already been postulated by the writer for the area attached to the suggested eighth-century burh at Cambridge (Haslam 1984, 15, 23-26). Similar names (including Portfield and its variants) are known from a number of other places which were also burhs, all of which denote the common fields arguably made available to the original burgesses by virtue of their possession of holdings within the burh (Haslam 1985, 20, 40, 42; forthcoming b).

## CONCLUSION

It is argued here that there are a number of other-

wise unrelated observations and inferences about the topographical, archaeological and documentary evidence concerning Bedford's early history and its ecclesiastical development which are neatly and logically unified by a single historical model, which is explanatory in terms of processes which can be recognised in other parts of the country. These observations relate to (a) the place of St Paul's church in the development of the historic landscape in the middle and late Saxon periods, and its status as an ecclesiastical focus which is secondary to an earlier one at Elstow; (b) the secondary nature of its parish (in its original extent) with its neighbours; (c) the archaeological evidence for middle Saxon settlement in Bedford itself; (d) the documentary evidence possibly associating St Paul's with Offa; and (e) the possible origin for the burh at Bedford as a fortified urban place created as part of a unitary system in Mercia as a whole by king Offa.

The overall unifying model is that St Paul's church was founded by king Offa in the late eighth-century as a new minster, which was created as the ecclesiastical provision for the inhabitants of his new burh. This new church at least partly replaced the functions of an earlier 'old minster' at Elstow, and was founded by the transference to it of a large part of the original ecclesiastical endowments of the earlier minster. At the same time as this a new parish was defined around it by being carved out of existing parochial and territorial units. This formed an area which became in effect a new agricultural unit (the 'town fields') assigned for the use of the inhabitants of the new burh.

It must be emphasised however that while none of these classes of evidence by itself demonstrates the validity of the overall model, it nevertheless arguably provides the best explanation in historical terms for the series of observations and inferences as a whole. It would for instance be possible to suggest that the creation of the 'new minster' of St Paul's, together with its associated parish, should be assigned to the period of Edward the Elder's 'restoration' of the burh in 917, on the analogy of the creation of a number of other similar new minsters in burhs in the late ninth and early tenth centuries.<sup>19</sup> This would however still leave without adequate explanation the associations of Offa with Bedford, and the arguably necessary ecclesiastical provisions for the pre-Viking burh at Bedford and its archaeologically attested population in the middle Saxon period.<sup>20</sup>



# NOTES

- 1 I am grateful to David Baker and Terry Slater for reading and commenting on an earlier draft of this paper. Terry Slater's comments have stimulated me to rethink many of my earlier ideas, in particular in terms of the existence of an early minster at Elstow. This idea was strengthened by useful comments in further correspondence from John Wood (see Wood 1984). Much of the work done for this paper was made possible by a research award from the Leverhulme Trust during the period 1982-4.
- 2 Particular studies include Hampshire (Hase 1975), the hundred of Blything, Suffolk (Warner 1984), the Cirencester region (Slater 1976), Dorset and Gloucestershire (Pearce 1982), and several large towns and counties in southern England (various chapters in Haslam [ed.] 1984). The writer is currently examining the early development of urban parishes for a book (Leicester University Press, forthcoming).
- 3 References to Domesday Book give the folio and paragraph numbers in Sankaran and Sherlock 1977.
- 4 Offa was also connected with Luton, another of Bedfordshire's early minster sites (VCH i [1904], 315 n.1). The historical connections between St Albans, the Bedfordshire minsters and Offa requires further detailed analysis.
- 5 There are of course a number of instances where new Saxon burhs not on Roman sites included within their defences minster churches which were established very much earlier. Examples include Christchurch, Dorset/Hants (the Priory) and Oxford (St Frideswide's church). In neither of these instances is the site of the minster church so closely related to the early street layout as at Bedford.
- 6 See Matthew Paris, *Chron. Majora* (Rolls Series) i 363; the evidence is discussed in VCH i (1904), 310.
- 7 The secondary origin of the place-name has also been suggested by Margaret Gelling (1982, 192), who has given other examples of the influence of place-names on church dedications. For the evidence of the separate existence of a chapel of St Helen, and archaeological evidence for early and middle Saxon burials, and therefore ecclesiastical use of the site, see Baker 1971, 55-6.
- 8 This is given in the *Taxatio* of Pope Nicholas IV in 1291. The Bedford churches of St John, St Cuthbert and St Peter are however omitted (VCH i [1904], 323 and 324 n.4). The area is given in A. Bryant's map of the county of 1826, and (VCH i [1904], map opp. p. 346).
- 9 See note 7 above.
- 10 The writer has argued for a similar process of church foundation in the southern burh at Cambridge (Haslam 1984b). The wider evidence will be discussed by the writer at a later date (Haslam forthcoming a). Mention could be made here of the provision of new minsters as new burh churches in the late ninth or early tenth centuries at Winchester (Biddle [ed.] 1976, 314), Gloucester (Heighway 1984, 371) and Chester (Thacker 1982).
- 11 St John's Hospital was founded probably in the late 12th century (VCH i [1904], 396). The formation of the parish was arguably the direct consequence of the ordination of a vicarage for the chapel of the hospital by the bishop in the early 13th century, the area of the parish comprising the extent of the hospital's holdings at that time (*ibid.*).
- 12 St Mary's parish comprises 535 acres, and St John's 29. Kempston parish comprises 5,026 acres, Elstow 1,617 acres, and the next parish to the east, Cardington (which includes the 19th century parish of Eastcottes), 5,339 acres. Source: Ordnance Survey 1:1,056 maps, index sheet, 1891; acreage to the nearest acre.
- 13 This hypothesis must, however, itself be further tested by the analysis of these parish boundaries in terms of the structure of pre-Conquest estates, as has been undertaken for instance in Lincolnshire by David Roffe (1984).
- 14 St Paul's parish comprises 799 acres, St Peter's 560 acres, and St Cuthbert's 300 acres. Source as in note 12.
- 15 It was stated in the writer's article on Bedford (Haslam 1983, 30) that there are few parallels to extra-mural market areas outside burhs in the south of England. Further research since this article was written (in 1979) has shown that this is in fact a common phenomenon: see several examples cited in Haslam 1984a and 1984b, and further evidence cited in Haslam forthcoming b. A church, probably contemporary with the foundation of the burh as a market centre, is associated with such a market at Axbridge, Somerset (Aston 1984, 172-3; Batt 1975). A further example nearer Bedford is at Newport, N. Essex, which is suggested as being the site of the burh of *Wigingamere*, built by Edward the Elder in 917. It is argued that a small defended enclosure was provided with a church which was placed on one side of an extra-mural market area, its parish carved out of an already existing parochial unit (and significantly called 'Bury Fields'), and that all these elements were created by the king of the occasion of the foundation of the burh (see Haslam forthcoming b).
- 16 St Paul's with St Peter's and St Cuthbert's: 1759a; Biddenham 1586a; Clapham 1995a; Goldington 2588a; Oakley 1786a; Ravensden 2290a; Renhold 2211a. Source: as n.12 above. This pattern is the same as that which can be inferred from the Domesday entries, with however a few important exceptions in the vill immediately to the northeast of Bedford. Renhold is not mentioned, but is the equivalent to Salchou, 1 km to the west. The church is at Church End, halfway between the modern settlements of Salph End and Renhold (Fig 2). Ravensden is also not mentioned, but has been taken as being the same as Chainhale (Sankaran and Sherlock 1977, note for para 25.3). Putnoe (Putnor Farm) is a separate vill to Goldington, and although at present in Goldington parish (Fig 2), was in a different hundred in Domesday (Fig 1). The Domesday hundred boundaries (reconstructed from Sankaran and Sherlock 1977, map at end) are given in Fig 1. The entry for Bedford states that it was reckoned as a half hundred.
- 17 See also comments in Hassall and Baker 1974, 77.
- 18 Since the English Place-Name Society's volume (Mawer and Stenton 1926) does not include field names, there is no information available concerning the earlier history of the name. This can however be compared to the same name at for instance Colchester, recorded from 1196 onwards, which denotes an area worked in common by the burgesses (Reaney 1935, 531).
- 19 See note 10 above.
- 20 Paper submitted July 1985.

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# Three Excavations in Bedford, 1979-1984

EVELYN BAKER

with contributions from

Georgina Brine, Annie Grant, Mark Robinson, Mike Wilkinson

## INTRODUCTION

Three excavation reports on small sites in Bedford are presented as a group with common location plan (Fig. 1), finds illustrations, catalogue and bibliography. Pottery reports and finds analyses have been completed for individual sites, but published material has been grouped in order that it may utilize and expand the Type Series in D. Baker *et al.*, 'Excavations in Bedford 1967-1977', *Beds Archaeol J* 13, 1979 (henceforth Bedford 1967-77). Only significantly new or better examples are published.

Objects of all types are published with a Catalogue number. Types mentioned in the text which are the same as objects already published will be referred to as 'as Cat. no. . . .' and no further illustration will be published. Code numbers for these sites are also the accession numbers for Bedford Museum. They are

Liberal Club, 1979/1/-;  
Bennett's Works, 1980/1/-;  
Duck Mill Lane, 1984/2/-.

Objects of all periods have been treated together within classes of material. In the case of an intrinsically dateable object, the date has been placed before the code number. Dates following the code number derive from the context itself.

The excavation archive is deposited in Bedford Museum, and consists of all written and drawn records, photographic material and finds. It contains all unpublished analyses and tables of records and finds, including support material for specialist reports.

Many people have contributed to the preparation of these reports, including staff funded by the Manpower Services Commission. Thanks are due to Mrs D. Blaxter, A. Pinder, Miss N. Simpson and Mrs P. Walsh for the illustrations; Mrs Walsh and Mrs H. Duncan processed the finds. Mrs Duncan also examined the slag according to type as defined by McDonnell. The work would not have been possible without the kind cooperation of J. Turner, Curator of North Bedfordshire Borough Council's Bedford Museum, who provided storage, working space and grant aid. All the excavations were undertaken by the Archaeological Field Team, Planning Department, Bedfordshire County Council. David Baker read the texts in manuscript and made a number of helpful comments.

## THE FINDS

Figure 2 shows Saxon and medieval pottery from these excavations. Descriptions of catalogue numbers 1569-1571 under the excavations at Bennett's Works (this paper site 2); descriptions of catalogue numbers 1572-1575 are given under the excavations at the site of the Liberal Club (this paper site 1).

For convenience all finds other than pottery have been drawn together on figure 3 and these are described below.

Flora and Fauna are discussed by single site analysis.

## 1. EXCAVATIONS ON THE SITE OF THE LIBERAL CLUB, MIDLAND ROAD, BEDFORD, 1979

Evelyn Baker

### SUMMARY

*Evidence was found for iron working fuelled by woodland clearance in the later 9th century, followed by metal working in the late Saxon and Saxo-Norman periods. The excavation did not locate the Saffron Ditch, although it is possible that a natural predecessor to it was encountered.*

## INTRODUCTION

Excavation on the site formerly occupied by the Liberal Club was undertaken during two weeks in August 1979 in advance of redevelopment by Richard Thomas and Robert White under the direction of David Baker. The intention was to clarify the course of the Saffron Ditch and test the date and nature of activity on both street frontage and back area of the plot (Figs. 1 and 4).

Two mechanical trial trenches, 1 and 2, were placed at right angles to cut across the ditch. The third trench was a small area 5 m square set as close as possible to the street frontage. The scope of the excavation was restricted by the time and resources

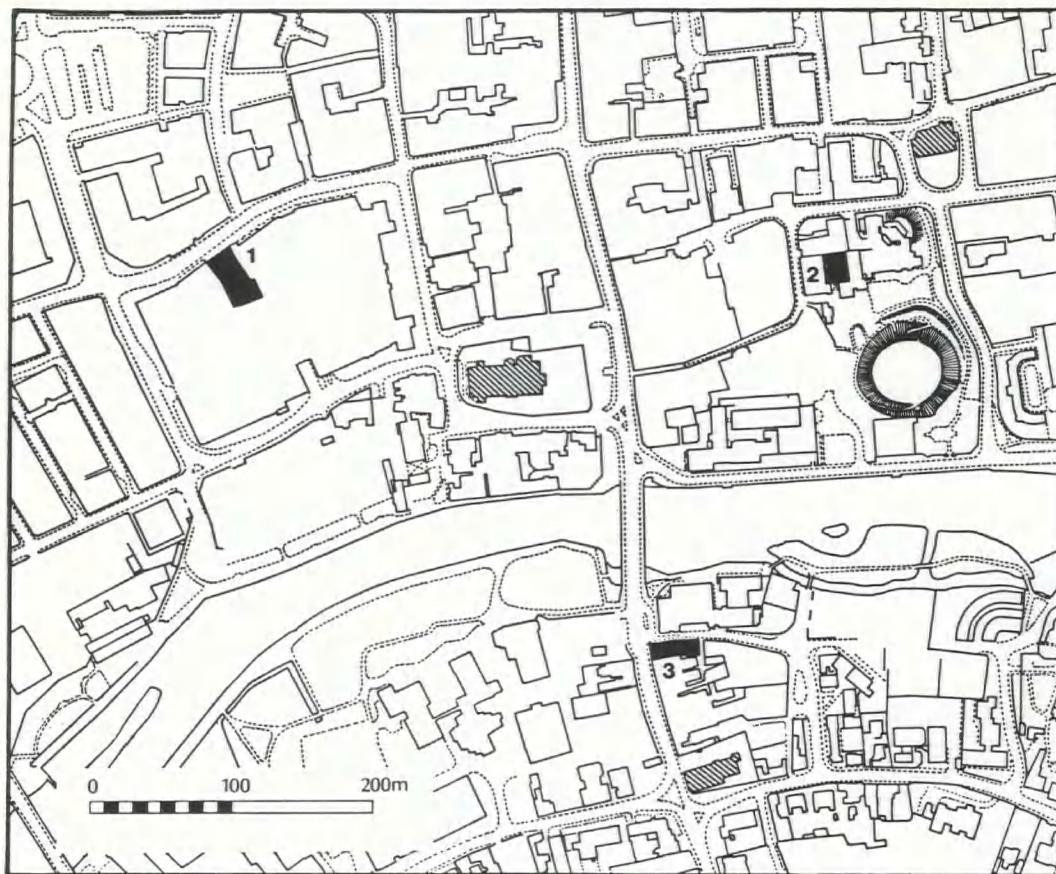


Fig 1 Location Plan showing excavation areas

- 1 Liberal Club
- 2 Bennett's Works
- 3 Duck Mill Lane

available and the need to reinstate ground disturbance; it was undertaken with the kind permission of Marshman, Warren and Taylor, architects to the developers, and funded by Bedfordshire County Council.

### THE EXCAVATION

Trenches 1 and 2 produced no archaeologically significant stratigraphy, except that there were traces of alluvial deposition, indicating periodic flooding.

Trench 3 was excavated mechanically to a depth of 0.6m followed by hand digging. Four main periods of activity were recognised.

- Period 1* Late Saxon
- Phase A Iron Working
- Phase B Occupation

*Period 2* Saxo-Norman Industrial Activity

*Period 3* Late Medieval Occupation

*Period 4* Post Medieval Occupation

*Period 5* Activity post 1800.

#### *Period 1A Late Saxon Iron Working*

Excavation was possible to a depth of 2m where it cut into a layer of organic material 0.26m thick which overlay gravel (23, 24). Soil samples were taken and are discussed by Robinson below. Among the woody fragments identified separately by R. Thomas were pieces of oak, hazel, blackthorn hawthorn, dogwood, willow, ash and field maple. The majority of blackthorn showed signs of cutting or tearing, and the presence of tree stumps, a



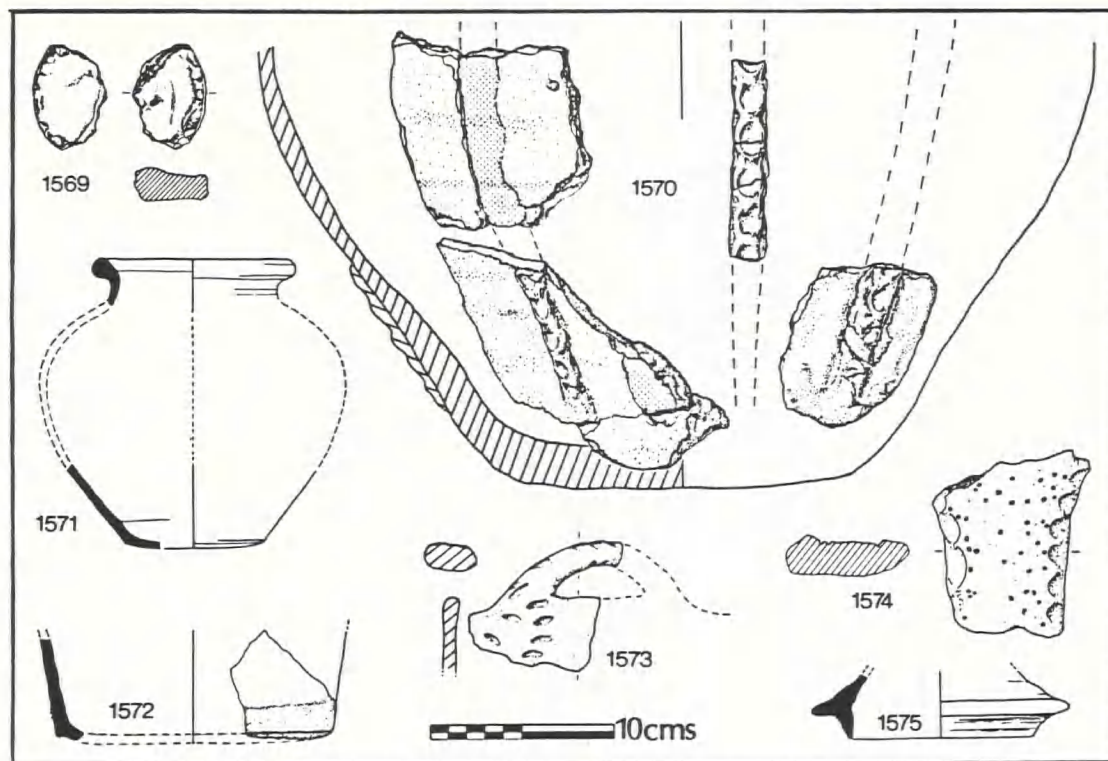


Fig 2 Saxon and Medieval Pottery from Bedford

Cat nos 1569-1571 Bennett's Works

Cat nos 1572-1575 Liberal Club

fragment of hazel stool and chips from a large roundwood of ash was established. Together these might suggest the bringing of wood to the site from some form of scrub clearance, possibly to act as fuel for iron working. Only small samples of slag were kept from these levels, all of it tap slag. See Period 2 below. Pottery indicates a date in the late Saxon period, probably towards the end of the 9th century.

#### *Period 1B Late Saxon Occupation*

Set above and also cut into the organic deposits of Period 1A was a wall footing (25). This comprised of three courses of rough limestone slabs which protruded from the N section and sloped markedly down to the W. Associated with it was a dark silty deposit containing pottery and animal bone which may have seeped up from (24) below. Similar silty clay containing occupation and organic material formed a sealing layer (26) over the footing. The presence of tap slag, and the fragment of Stamford ware crucible discussed below may indicate metal working activities.

#### *Period 2 Saxo-Norman Industrial Activity*

Thick deposits of clay loams (15, 22) showing traces of ash and burning were mixed with tip layers of slag (16, 17, 21). Tap slag, fuel ash slag, cinder, smelting/smithing slag and ironstone were all present (Fig 5). These appeared to be entering the site from the west. Probably contemporary with the slag heaps were two clay filled post holes (18, 19) and a shallow pit (21). The evidence is too slight to suggest a positive structure, and the features cannot be ascribed to an industrial building.

All the slag found resulted from iron working, but smelting slag tends to be utilized for hardcore and metallurgy and thus can be found at a considerable distance from its origin. It is also suggested (McDonnell 1983, 83) that smelting slag is perhaps more common in the low smelting technologies of the Iron Age or Anglo-Saxon periods. No furnace lining or bottoms were identified. Since the slag could have been imported for a secondary purpose, the location of the actual iron working site must remain uncertain.

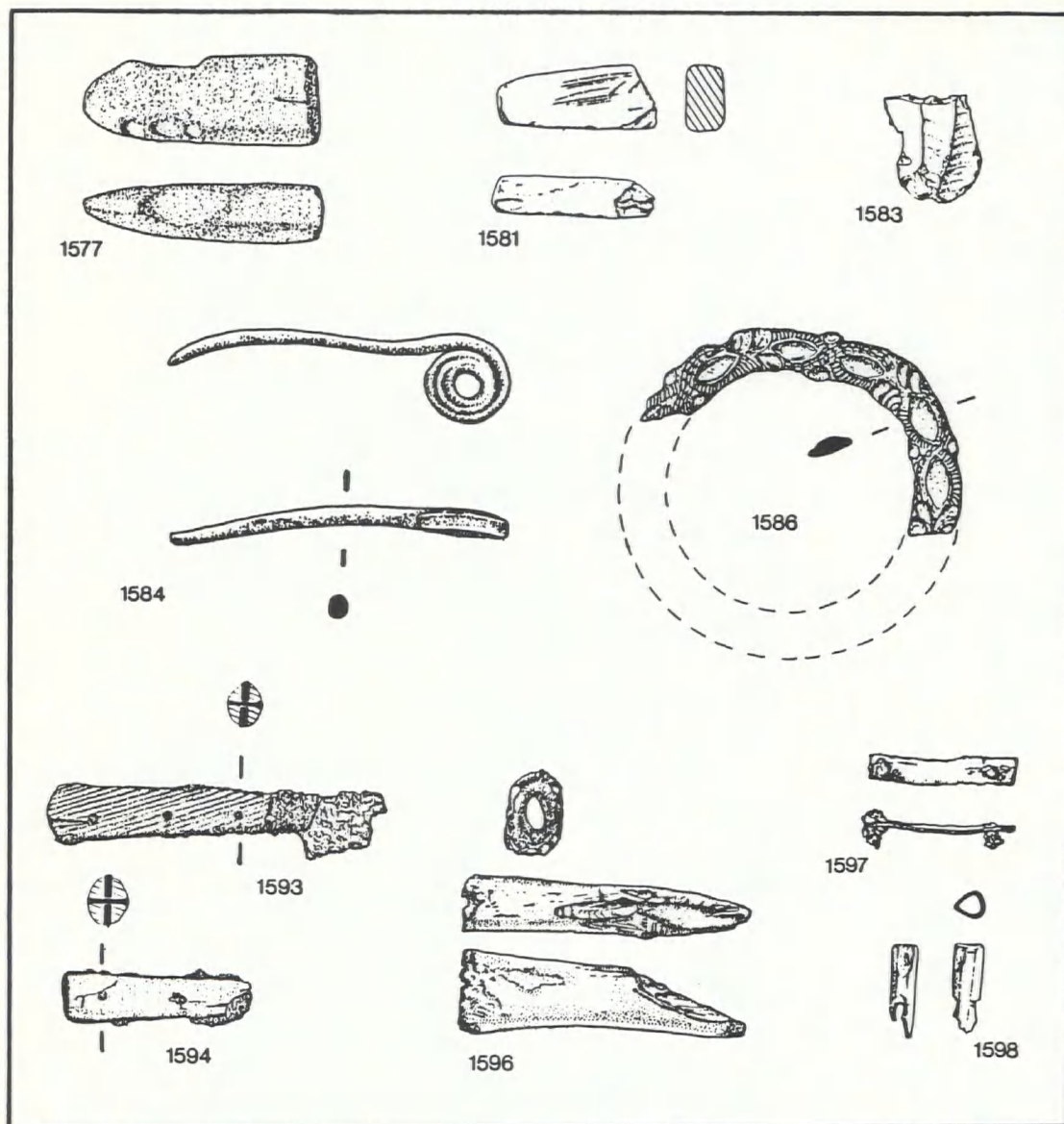


Fig 3 The Finds

Scales: Cat nos 1584, 1586 at full size; remainder  $\frac{1}{3}$

#### Period 3 Late Medieval

Two substantial clay loam layers (7, 11) containing occupation material sealed Period 2. This may represent deliberate dumping from elsewhere to cover industrial waste.

Cut into the top of the clay loam were two substantial post pits (12, 13) both packed with limestone slabs.

#### Period 4 Post Medieval Occupation and Later Activity

There was considerable activity on the site during the two hundred years after about 1600. Parts of two structures (5, 6) were recognised. All that remained of the southern building (6) was what appeared to be a floor surface of sandy brick earth with limestone debris and brick fragments. The northern structure



(5) was similar in appearance, having a base layer of sandy brick earth (5/1) under a gravelly mortar layer (5/2) upon which a rubble wall (5/1) was built. The reason for the more substantial base may have been recognition of the need for adequate consolidation of the pit (14) which lay directly beneath it.

One of the buildings shown on the OS map of 1882 (published 1884) is in the correct position to be structure 6, but this building did not appear on the Inclosure map of 1795. Structure 5 appears to be a little too far west, but there is a possibility that it is the building shown. Three other features were recognised at this level: a cess or rubbish pit (4), a post hole (8) and a probable slot (9).

#### Period 5 Modern

A thick accumulation of garden soil (3) covered the post medieval activity, and was succeeded by Victorian make-up layers. The construction trench for the Liberal Club cut through these, and all the stratigraphy in the NE part of the area. This in turn was sealed by the contemporary hard standing.

#### MAP EVIDENCE

The Saffron Ditch is first shown on John Speed's map of Bedford (1610), crossing Midland Road and Horne Lane beneath small bridges. Recent work by Christopher Pickford, County Record Office, has enabled closer identification of the route, showing it to flow along the western and southern boundaries of the Liberal Club Site rather than through it (Fig 4). This evidence was not available at the time of the rescue excavation.

The Inclosure Map of 1795 (CRO: MA26, 1795) has the Liberal Club site marked as Plot 46 with the ditch flowing around it, and a large structure on the western side. The Inclosure Award of 1797 (CRO: A26, 1997) lists the property as being a homestead, tenanted by Widow Smith but owned by the Corporation of Bedford.

The Ordnance Survey Map of 1882 (published in 1884) shows two structures on the site which may have been the post medieval structures located by excavation. Fig 5 (see below).

The Liberal Club was built in 1884 to the designs of the architects Usher and Anthon of Bedford, and the block plan for this is deposited in the County Record Office (CRO: Bor. B.P. 1215).

In retrospect it is clear that neither the 1977 excavation by Hassall and Woodward, *Bedfordshire Archaeology*, 16, 1983, p. 37, nor the excavation under discussion, could have located the Saffron Ditch. The ditch found by Hassall and Woodward

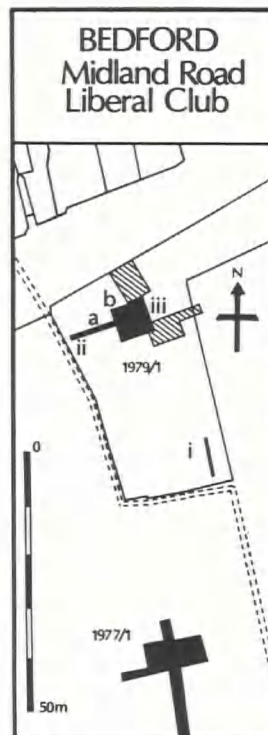


Fig 4 The Saffron Ditch and Liberal Club Excavation Location Plan

was almost certainly a rectangular water filled feature, possibly a quarry pit, shown on Plot 44 of the Inclosure Map. The Saffron Ditch, draining field boundaries from NW outskirts of the town to the river, missed the Liberal Club site altogether.

#### CONCLUSION

Not surprisingly the excavation failed to find the Saffron Ditch. The two linear excavations showed a barren plot with indications of flooding. The small area excavation located a grazed flood marsh adjacent to a stream channel. In the late Saxon period wood was brought to the site, possibly for use as fuel for iron working. This was immediately followed by occupation which caused a substantial change in the vegetation of the site to weeds of nutrient enriched wet soil. Metal working activity both here and on the opposite side of the street at the Empire Cinema site (Hassall, 1983, 37) would suggest that this was a metal working area in Bedford in the Saxo-Norman period. After a hiatus in the medieval period the site is densely occupied by structures fairly close to the modern street frontage.

## THE FINDS

### THE POTTERY

#### Georgina Brine

The excavation produced over 16 kilogrammes of pottery. The pottery from each context was sorted into fabric and then into form for quantification using the fabric series developed by Baker and Hassall (Baker & Hassall, 1979 — 147ff). One new fabric A13 has been added to the Saxon wares series and is described below. Typological features (rims, bases, handles, decoration et cetera) were compared to the types already published (*op cit*) and only new forms have been illustrated (Fig 2).

Quantification involved weighing all the sherds of a particular form within each fabric. In addition rim sherds were measured to give the percentage of the vessel they represented (Estimated Vessel Equivalent — EVE). The use of weighing and EVEs has been adopted in preference to sherd count because it gives greater scope for statistical analysis.

The information was entered on micro-computer which facilitated analysis using programmes developed by Dr Paul Tyers, Department of Urban Archaeology, London. A full Level III Report is available in the excavation archive. This report gives a summary of the results dealing with the pottery period by period.

#### *Fabric A13*

Fabric A13 has sparse mixed inclusions of very coarse, sub-angular limestone and grog, with medium to coarse red and white quartz. There are also occasional red, ochreous (iron ore?) and sparse black (organic?) inclusions. The core is an even dark grey and the surfaces are pinky-brown with voids on both the inside and the outside where the limestone has leached out and/or the organic inclusions have burnt away. This gives the fabric a corky 'feel' and appearance. The one sherd found in the fabric is from a cooking pot with a depressed convex base which is heavily sooted on the outside (Cat No 1572). The external surface has been knife-trimmed 3.6 cm up the sides of the pot from the base and the internal surface has been smoothed. The pot was possibly coil built and then finished on a wheel. It occurs in a context dated 850+.

#### *Period 1*

The pottery from period 1 was mostly early St Neots type (B1) giving a date of late 9th to 10th century.

Some sherds of A11, A12 (local Bedford types) suggest earlier activity on the site, to which the A13 sherds might belong (see above). A few Stamford ware (C12) crucibles make up the assemblage.

There is a clear predominance of shelly wares which would seem to characterise the late Saxon — early medieval pottery record in Bedford. The total lack of local sandy wares, apart from A13 may be noted but the assemblage is too small to come to any positive conclusions.

The shelly forms fit in with those usually recognised as 'domestic' in function: cooking pots and bowls. Some of the sherds show traces of sooting which shows they must have been used in a heating process of some sort. The Stamford ware crucibles, however, are a clear indication of industrial activity and were associated with slag deposits. It is possible that the other pottery was used in an industrial context but there is no direct evidence for this.

One crucible sherd is encrusted with a residue which has been analysed by Justine Bayley, Ancient Monuments Laboratory, English Heritage. X-ray fluorescence has indicated the presence of silver, copper, zinc and a trace of lead which would suggest the melting of silver debased by brass.

#### *Period 2*

Period 2 is characterised by a high proportion of early medieval shelly wares (over 70%) with a few fine and coarse sandy wares, mostly thought to be local to Bedford. Of the shelly wares, the harsher B4 fabric (again thought to be a local Bedford product) is the most frequent.

Most sherds are from cooking pot and bowl forms though there are several Olney Hyde/Harrod ware (B5 and B8) jugs represented. There is a sherd from a Stamford ware (C12) jug and several sherds of Brill/Boarstall type (C9) jugs which suggest that most of the finer vessels were being imported. (The term Brill/Boarstall is now used rather than just Brill because fieldwalking at Boarstall has produced pottery indistinguishable from that found at Brill, see Farley, 1982.)

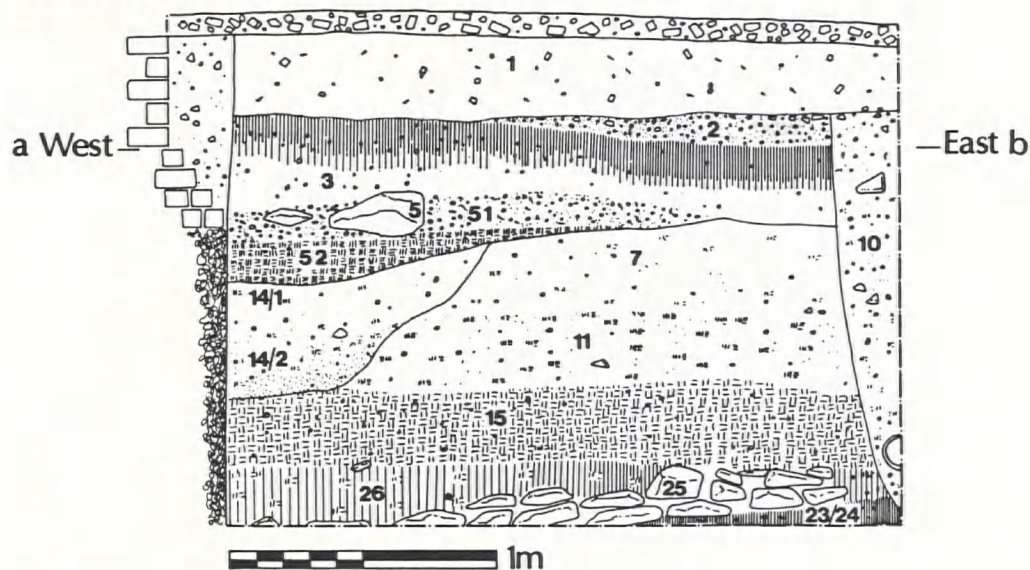
The pottery appears to be domestic in function and there are no crucibles from this period on the site. The dating is from the 12th to the 13th century.

#### *Period 3*

Two spreads with a moderate amount of pottery have been analysed together in this group. Both assemblages are very mixed and include residual material and some sherds which are regarded as



# Bedford, Liberal Club Section



## Bedford, Liberal Club

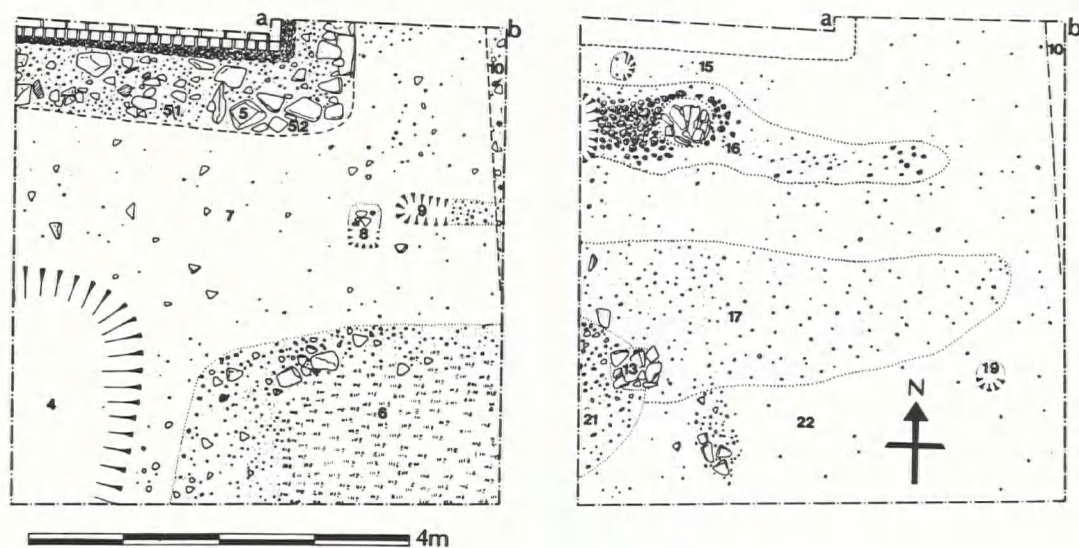


Fig 5 Liberal Club; Plans and Section

intrusive. The occurrence of late medieval coarsewares in both contexts suggests a date of 1450+.

There is a great variety of residual Saxon and Medieval shelly wares in this group. As in period 2 though, fabric B4 is the most common with smaller amounts of Olney Hyde/Harrold types (B5 and B8), developed St Neot's type (B7) and St Neots type (B1).

Of special note is a St Neots type (B1) decorated basket handle Cat 1573, probably from a two-handled bowl or shallow pan. The form is known in Bedford in a Saxon fabric (Baker & Hassall, 1979, cat 111-112) but the form is long-lived, appearing at the Lyveden kilns in the late 12th to early 13th century (Webster, 1975, fig 23 nos 1.03, 1.04).

A broad strap handle in the developed St Neots type fabric (B7) comes from a large pitcher; this fabric is generally dated 12th to 13th century in Bedford.

Local imports occur such as Pottersbury ware (C10), Oxford and Brill/Boarstall type (C9 and C11) and one sherd in a fabric reminiscent of Nottingham/Scarborough ware.

Imported wares include a fine Saintonge (C31) lid (Cat No 1575) and other sherds from a jug. The lid has parallels from Southampton (Platt and Coleman-Smith, 1975, fig 190 no 1061) but it is a much more unusual find for Bedford which has very few examples of such imports.

#### Period 4

Group 4 consists of those contexts dated to the post medieval period. Most of the material fits in with the post medieval types found at other sites in Bedford (Baker & Hassall, 1979, 217-240). The various glazed and unglazed earthenwares, from various sources including most probably Brill, Pottersbury/Paulerspury, are the most conspicuous, with small amounts of local slipware, Nottinghamshire/Staffordshire stoneware and Staffordshire slipware. One jar rim occurs in a rather micaceous fabric and may be a Spanish import (not illustrated).

The residual material included the base of a Tudor Green cup (not illustrated).

#### Discussion

The industrial evidence found in period 1 is similar to that found at the nearby Empire Cinema site in the initial period of that site dated 9th to 12th century (Hassall, 1983). The suggestion must be that there were workshops and ironworking in this part of Bedford during that period.

The rest of the pottery record suggests general

urban refuse. The presence of St Neots-type (B1) and no B4 fabric from period 1 might be significant but the assemblage is not large enough to make conclusions from this.

Certainly the pottery from period 2 with its contrasting predominance of fabric B4 fits in generally with evidence from the other sites excavated in this area. This contrasts with the Castle area where B1 dominates. Further work is needed to establish whether this has any chronological, sociological or functional implications.

Fig 2 Liberal Club Saxon and Medieval pottery Cat nos 1572-1575.

(Note: Hatched sections denote the pot has been handmade, filled sections denote use of wheel.)

1572 A13 base of cooking pot with sooting indicated by stippling 1979/1 III (24).

1573 A11 basket handle from a bowl with impressed and stabbed decoration 1979/1 III (11).

1574 A11 handle from pitcher with thumbing and stabbing decoration 1979/1 II (11).

1575 C31 lid with traces of copper green glaze on upper part, mostly abraded 1979/1 III (11).

#### FLORA AND FAUNA

##### *Waterlogged Seeds from Middle to Late Saxon Deposits at the Liberal Club, Bedford*

Mark Robinson

A sequence of four soil samples from the waterlogged sediments at the bottom of Trench 3 were investigated for plant and invertebrate remains. 250 g of each sample was washed through a stack of sieves down to an aperture size of 0.2 mm and the residues sorted. The results are given in Table 1 available in the archive.

#### Interpretation

Layer 24, brown humic silt overlying the terrace gravels, was probably a riverine deposit which accumulated at or near the margin of a channel or water course. An aquatic element in the three samples from layer 24 was represented by caddis fly (*Trichoptera*) larval cases, and a few seeds of aquatic plants including water crowfoot (*Ranunculus* S. *Batrachium* sp.), and pondweed (*Potamogeton* sp.). The majority of the remains from these samples, however, were seeds of marsh plants, especially from: tussock rushes (*Juncus effusus* gp.), other rushes (*Juncus articulatus* gp.), sedges (*Carex* spp.),



spike rush (*Eleocharis* S. *Palustres* sp.), mint (*Mentha* sp.) and lesser spearwort (*Ranunculus flammula*). These species are all tolerant of grazing and some require a high level of illumination. Together they comprise an assemblage of grazed marsh.

There was no evidence from the seeds for the presence of woodland. Therefore it is likely that the wood recovered from this layer during the excavation, which showed signs of cutting, had been brought to the site. There was no other evidence from the plant remains from layer 24 for human activity on the site.

The seeds from Layer 23 suggest that although conditions on the site remained as wet as they were when Layer 24 accumulated, the vegetation was very different. The most abundant seeds were from celery-leaved crowfoot (*Ranunculus sceleratus*) and stinging nettle (*Urtica dioica*). Red shank (*Polygonum persicaria*) was also well represented. *R. sceleratus* is an annual or biennial herb of nutrient-rich mud either submerged by shallow water or exposed. From medieval archaeological contexts, it is a species which seems to be particularly characteristic of waterside and ditch habitats on occupation sites where the soil had become enriched with dung and experienced frequent disturbance. The other two species favour disturbed habitats, *U. dioica* likewise tending to grow in nutrient-rich places. Seeds from another plant which was formerly associated with settlements and farmyards, henbane (*Hyoscyamus niger*), were present. Seeds of most of the plants of marsh pasture identified from Layer 24 were either absent or occurred in much reduced numbers in the sample from Layer 23. Layer 23 was rich in charcoal and other occupation debris. It is clear that there was much human activity on the site when it was accumulating.

Some seeds from plants of economic importance were present in Layer 23, and they suggest some possible activities on the site. A seed of hemp (*Cannabis sativa*) might have resulted from the processing of hemp plants for fibre at the site. Hemp was a significant crop during the Saxon period and the plants require retting (rotting) in water-filled pits or ponds to free the fibres. The site, with its high water table, would have been an ideal place for such an activity. Several seeds of teasel (*Dipsacus fullonum*) were also discovered. Unfortunately, the receptacular bracts were not found, so it is not possible to determine whether the seeds were from wild teasel (*ssp. fullonum*) or the cultivated fullers' teasel (*ssp. sativus*).

During Period 1A of the site (Layer 24) the site was an open grazed marsh that experienced at least periodic flooding. It was probably adjacent to a stream or river channel, indeed it is possible that the Saffron Ditch ran along the course of a natural channel close to the site. The presence of cut wood which had been brought to the site, however, showed that human activity was beginning. In Period 1B there was much human activity on the site probably resulting from it becoming part of an urban tenement. While the first buildings of the tenement were presumably on higher ground, debris from the various industrial processes which took place on the tenement were deposited on the wetter ground. This dumping, perhaps combined with the rationalisation of the drainage system with the digging of the Saffron Ditch probably represented the start of the reclamation of this land which made it suitable for habitation from the medieval period onwards.

## 2. SALVAGE EXCAVATIONS AT BENNETT'S WORKS, BEDFORD

Evelyn Baker

### SUMMARY

*Two mechanically excavated linear trenches produced six distinct periods of occupation delineated by a turf line and a cultivation level. No major structures of Bedford Castle were seen, but indications of substantial Early Middle Saxon to Saxo-Norman activity were identified.*

Period 1 (A) Early Middle Saxon features sealed beneath turf line (B).

Period 2 (B) Early Middle/Middle Saxon turf line.

Period 3 (C) Middle Saxon/Late Saxon features cut into turf line (B) and sealed by agricultural deposit (D).

Period 4 (D) Late Saxon/Saxo-Norman agricultural deposit.

(E) Intermediate occupation and features within (D).

Period 5 (F) Saxo-Norman structures.

(G) Saxo-Norman occupation.

Period 6 (H) Modern.

### INTRODUCTION

Ground disturbance for the new link block for



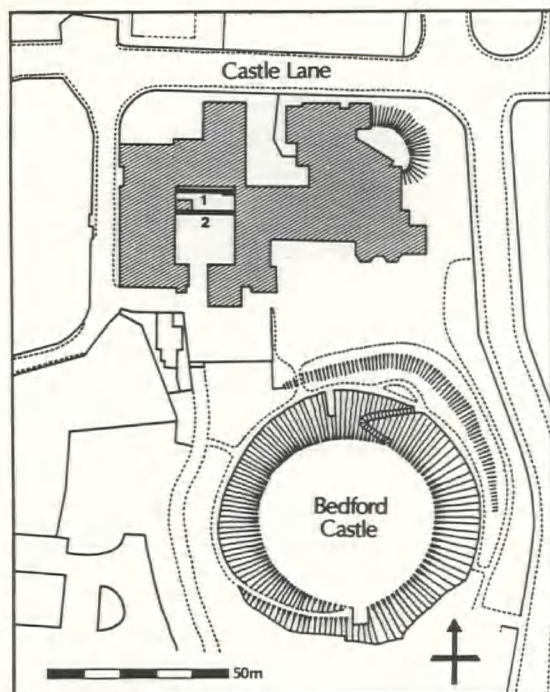


Fig 6 Bennett's Works,  
Location Plan for Trenches

Bedford Museum gave an opportunity to examine part of the NE quadrant and probable outer bailey of Bedford Castle (Fig 1). Lying within a hitherto unexamined part of the castle, the development was inside a modern courtyard surrounded by buildings and cellars (Fig 6).

Two narrow trenches were machine cut by the contractors. They ran E W on either side of the cellar entrance. Archaeological investigation was restricted to a three day watching brief. It consisted of cleaning the trenches, sampling features surviving in their bottoms and recording stratigraphy from the sections (Fig 7). The area was surprisingly undisturbed given the proximity of the extant buildings, and the build-up of recent occupation material was shallow.

This report acknowledges an incomplete record, but nevertheless the date and type of activity has been established. This is best demonstrated by the recorded lengths of sections (Fig 8) upon which the report is largely based.

Permission to enter the site was given by North Bedfordshire Borough Council, and the excavation was funded by Bedfordshire County Council. I am grateful to colleagues who laboured with

great efficiency under less than ideal circumstances: Penny Spencer, Archaeology Officer at Bedford Museum, with Robert Mustoe, Nicholas James, Teresa Moore (now Jackman) and Patricia Aird, all members of the Bedfordshire County Council Planning Department's Archaeological Field Team. The contractor's workmen (Ward) were most co-operative, and it is thanks to them that the assemblage Pit 39 was completed after the end of the watching brief. Diana Blaxter, Patricia Walsh, Andrew Pinder and Nicola Simpson assisted with the drawings. The policy for publishing finds material has been described in the general introduction. One sequential numbering system covering both trenches was utilized, with allocation to contexts as they were recognised. It doubles as the Accession number for Bedford Museum.

## THE EXCAVATION

The key for allocating contexts to trenches is the site matrix, Fig 9.

### PERIOD 1

#### *Phase A Early Middle Saxon*

Six features were recognised, cut into natural brick earth and sealed beneath a substantial turf line 2B. All were filled with brown loamy clay. Some contamination by mechanical excavation is reflected by the pottery dates which range from about AD 650 to AD 850+. The features consisted of two slots 64 and 67, two post holes 21 and 22 together with a hearth 23 and a hearth pit 63.

### PERIOD 2

#### *Phase B Early Middle/Middle Saxon*

This took the form of an old ground surface or turf line at first indistinguishable from the subsoil. A substantial layer of clay loam, it formed a seal over Period 1 features, and was recognised as contexts 9, 26, 33 and 36.

### PERIOD 3

#### *Phase C Saxon*

Fourteen features, all filled with dark loamy clay, were cut into the Period 2 turf line and were sealed by a thick black agricultural deposit (Period 4). Probably representing buildings and occupation, the features were seen in both cuttings. Pits, post holes, slots and burnt layers were represented. Some may have been cut from Period 2 Phase D, but it was not possible to verify this. The context numbers were 10, 11, 12, 19, 20, 35, 40, 45, 46, 49, 53, 57, 58 and 59. Several produced finds, including tap and smelting/smithing slag, perhaps indicating iron



working nearby. Context 19 was subjected to soil analysis and would appear to be a cess pit containing plant and invertebrate remains, and perhaps most significantly, both freshwater and sea fish. Context 10 contained a small fragment of human skull.

#### PERIOD 4 SAXON/SAXO-NORMAN

##### *Phase D Late Saxon/Saxo-Norman Cultivation*

##### *Phase E Occupation*

Phase D was represented by a well churned layer of dark loam up to 0.5 m thick. Such a thick, homogeneous deposit was probably accumulated by continuous cultivation over a long period. Contexts representing this activity are 13, 14, 18, 32 and 48.

Phase E consisted of a sequence of features situated midway in Phase D stratigraphy. A post pit 41 and associated burnt clay floor levels 42, 43 and 54 may represent a burnt timber structure built and destroyed half way through the cultivation time span.

#### PERIOD 5 SAXO-NORMAN

##### *Phases G and F, Saxo-Norman Structures*

Fourteen features were recognised as post dating the Period 4 cultivation levels. It is possible, but by no means certain, that they belong to the early Castle.

In Phase F the chief structure's main component was a dwarf stone footing, 16, seen in the S section of Cutting 1 (Fig 8). Two further walls, 17 and 60 appeared to join it at right angles and went into the N section (Fig 7). Machine disturbance prevented investigation as to whether 60 was indeed associated and contemporary with 16, or was an earlier pit or robber trench.

A second possible structure was represented by a post pit 8 and associated burnt floor levels 2, 3 and 4. The superstructure had been destroyed by modern disturbance.

A substantial pit 25 (with 39, 61 and 65) was seen in the southern trench. Its stratigraphical relationships were partially obscured by the modern cellar, but it appeared to be cutting phase D in Period 4. The soft loose fills were excavated archaeologically to a depth of 1.30 m, with the bottom fill 65 being subsequently donated by workmen. Mark Robinson has confirmed its function as a cess pit (see below) and M. Wilkinson has shown that both freshwater and sea fish were present. The pottery gives the feature a date of 850+ to 1100, with perhaps a

preference for the earlier end of that span. It contained quantities of tap, smelting/smithing slag, iron stone and cinder, again suggesting some iron working in the vicinity. There was some slight evidence of bone working.

Phase G is represented by part of a substantial pit 5 and 6. Although it was seen to cut the floor levels belonging to Phase F above, the two phases are thought to be nearly contemporary. A single pot sherd was recovered, with a date of 900+.

#### PERIOD 6

##### *Phase H Modern*

This consisted of recently deposited material which cut directly into the tops of phases F and G (1, 7, 8, 15, 27, 28, 29, 30, 31, 34, 37, 44, 47, 54, 55 and 56). Post medieval finds were largely absent, and the modern accumulation appeared to be almost exclusively associated with the construction of the present complex of buildings, either as construction trenches, service pipes, or ground consolidation for courtyard services.

#### CONCLUSION

The marked absence of late medieval and post medieval activity has greatly assisted the survival of evidence for earlier periods. It is unwise to generalise from the data provided by the two narrow mechanically excavated trenches alone, but the soil conditions can be compared with previous excavations further SW. The tantalizing remains of the earliest periods, 1A, 2B and 3C, sealed under the black layer represented by Period 4, represent a similar stratigraphic sequence to that encountered S of Castle Lane, Baker et al, Excavations in Bedford 1967-77, *Beds Arch J*, 13, 1979, pp. 17-27 covering trenches 10, 12, 15, 16 and 25.

It seems probable that timber structures of early date lie under the Museum complex, though it was not possible to isolate building plans in such limited excavations. They are a significant extension to the early Middle Saxon settlement so far found in Bedford. Some of the finds may date to the mid to late 8th century possibly strengthening the theory that substantial occupation N of the river pre-dated the laying out of the southern burh of Edward the Elder in 915.

So far this early occupation appears to be confined within the area later defined in Bedford Castle, and it would seem that there may have been a hiatus in building activity when housing was replaced by some sort of agricultural or horticultural process.



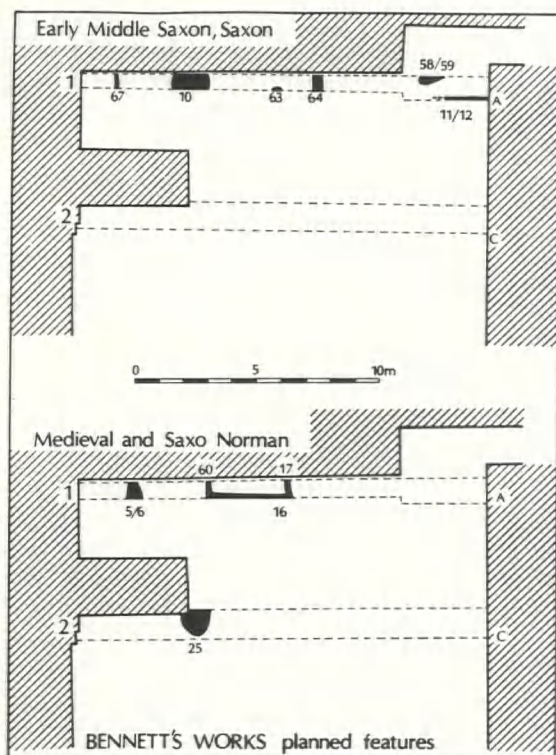


Fig 7 Bennett's Works Planned Features

The fish bone report on context 19 in Period 3 has important implications for Bedford trading in the late Saxon period since it suggests that by that date there must have been a well developed trade between Bedford and the coast.

The Period 5 Saxo-Norman structures seem to be small scale and short lived. They could represent late Saxon occupation possibly with some industrial activity wasted by the building of the early Norman Castle, activity outside a smaller early castle precinct, or outbuildings within either the early or later castle area.

The noticeable lack of post-twelfth-century finds confirms previous theories that the castle was abandoned early, this particular area being an open space during the castle period, and not used for dumping rubbish after the slighting of 1224.

## THE FINDS

### THE POTTERY

Georgina Brine

#### Introduction

Five hundred and seventy-three sherds of mainly Middle Saxon to Saxo-Norman pottery were recovered from the Bennett's Works. They have been quantified by each context according to the sherd count and estimated vessel equivalent (EVE) of particular forms within each fabric present. (The EVE has been taken as the proportion of the rim present.)

The summary below deals with all the pottery for each period of the site.

The Bedford fabric types series (see *Bedford*, 1967-77) has been used and gives full descriptions of the fabrics. One new fabric occurred at Bennett's Works and is described below.

#### Fabric C55

C55 is a hard, fine, sandy fabric with abundant small mineral inclusions and sparse, small inclusions of grog and mica. The sherds in the fabric are burnt and sooted but the colour seems to range between black external surfaces, a core which varies from black to light grey, and a pinky buff internal surface. Seven sherds have been identified coming from one or more small cooking pot forms (see Cat No 1571). The fabric has similarities with Stamford ware but whether it is a local or imported product has not yet been established. The sherds come from a context dated to the 10th century (1980/1/10).

#### Period 1

Only two sherds of pottery relate to period 1. One in fabric A6 would suggest an Early Middle Saxon date for period 1, contemporary with Castle Period 1 in the nearby excavation at Castle Lane South (BC70 15, Baker *et al*, 1979, 21). The other is from a pitcher in fabric A12, however, which is often found in rather later context (*ibid* 155) but was found in association with Early Middle Saxon fabrics at the Castle Lane South excavation (cf Structure 3, *ibid* 25).

#### Period 2

The single sherd from the turf line is of Early Middle Saxon date and is from an A6 cooking pot.



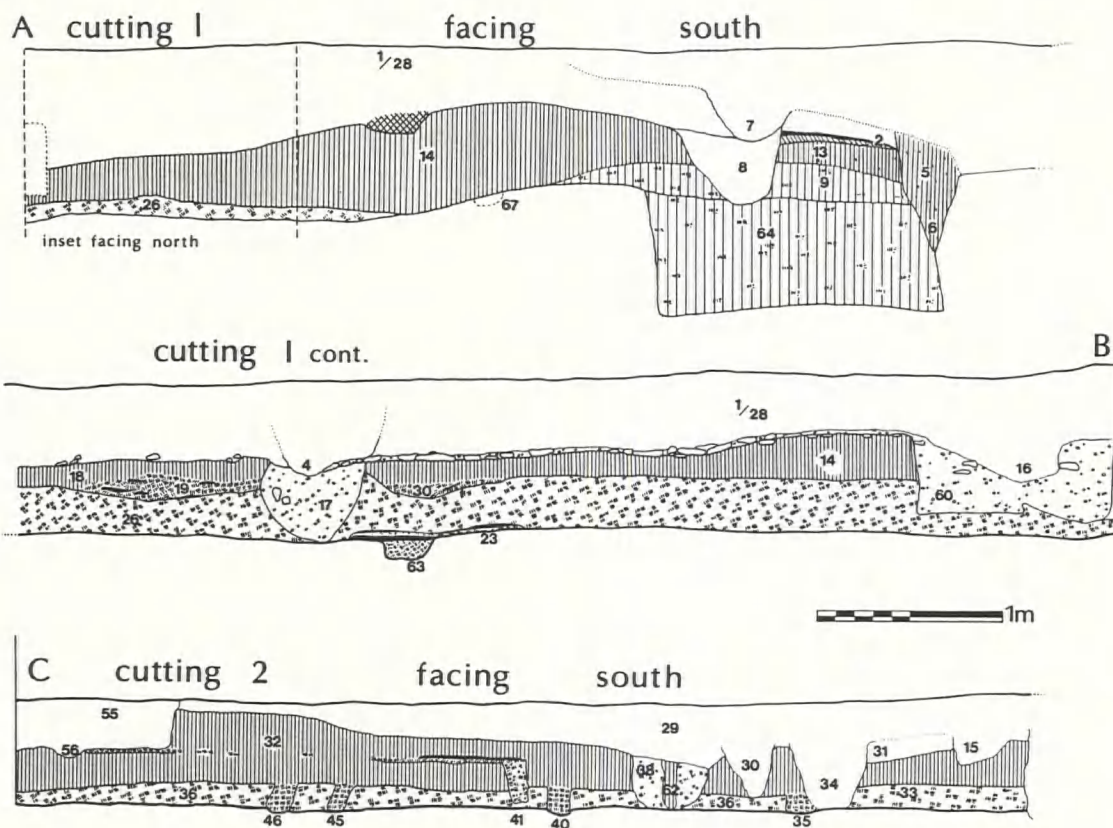


Fig 8 Bennett's Works, Sections

#### Period 3

The pottery mostly consists of shelly Saxon wares (A11, A12) and St Neots type ware (B1) which again place this period well before the Conquest. There is a sherd of Stamford ware (C12) which gives a date of 900+ and the sherds in fabric C55 (see above and Cat No 1571), which are similar to Stamford ware come from this period.

The forms are all domestic and the C12 jug is the only finer table ware. This jug is the only definite import but the C55 cooking pot is probably another, although its source is not known.

#### Period 4

Ten sherds from this period are mostly from St Neots type (B1) cooking pots with one sherd in a

local sandy ware (C1), which would suggest a date from the 10th to 11th century.

#### Period 5

A single sherd of fabric C43 (local sandy) with a date of 1100+ was found but with the exception of this sherd, the pottery could date from the 10th century. Again it is mostly St Neots type wares in cooking pot and bowl forms. There are a few sherds of the coarser, local B4 shelly fabric, which make up less than 5% of the assemblage (according to sherd count), and some sherds from an A11 storage jar (Cat No 1570). A large proportion of St Neots type ware has been previously encountered in the black occupation layers of Castle Site Period 2, dated Middle Late/Saxon to early Norman (Baker *et al*,

1967-77, 26). The preponderance of B1 in association with A11 and B4 would make the deposit in this period most likely in the early life of the Castle, and could possibly pre-date it.

The forms are again domestic and one St Neots type (B1) sherd may come from a lamp (Cat No 1569).

#### Period 6

This is modern disturbance on the site and produced 2 sherds of residual medieval pottery dated 1100-1300.

#### Catalogue of Pottery

##### Fig 2

(Note: Hatched sections denote the pot has been hand made, filled sections denote use of wheel.)

1569 B1 lamp? 1980/1/65.

1570 A11 storage jar with applied, thumbled strip decoration. 1980/1/25 and 39.

1571 C55 cooking pot 1980/1/10.

#### FLORA AND FAUNA

##### Plant and Invertebrate Remains from Two Contexts at Bennett's Works.

Mark Robinson

Two soil samples were examined from pits within the area of Bedford Castle:

Context 19 — Middle Saxon Period 3C

Context 39 — Saxo-Norman Period 5F

10 litres of each sample was floated over water onto a 0.5 mm aperture sieve to extract carbonised plant remains. The residues were sieved on a 2.5 mm aperture mesh to recover bone fragments. 1 kg of each sample was washed onto a 0.5 mm sieve and the residues were sorted for mineralised plant and invertebrate remains.

The results are available within the archive in tables 1-3. In addition, context 39 contained much charcoal, especially of oak. Both samples also contained shells of the mollusc *Cecilioides acicula* (Mull), encrusted with calcium phosphate.

The two contexts contained relatively similar assemblages. The occurrence of remains mineralised with calcium phosphate suggests that the pits

were either cess pits or contained soil reworked from cess pits (Green 1979). However, the pits also contained a range of refuse including pottery, large bone fragments and slag. The carbonised seeds were mostly from cultivated species, including cereals and beans, and they perhaps represent kitchen waste. The mineralised seeds comprise dietary remains, especially sloe or plum stones, and a few weed seeds. The pits contained a few fly puparia but there were abundant mineralised millepede fragments. It is very likely that differential mineralisation had occurred, favouring millepedes because they contain calcium carbonate in their exoskeletons. Millepedes preserved by calcium carbonate replacement have been recovered from archaeological contexts elsewhere (Girling 1979) but, along with the other anthropods, the remains from the two pits had been preserved by calcium phosphate replacement. The millepedes had probably been feeding on dead plant material amongst the refuse dumped in the pits.

The presence of the *Cecilioides acicula* shells in the pits is interesting, because it is regarded as a recent introduction to Britain (Evans 1972, 168). *C. acicula* is a subterranean species, so it is difficult to obtain reliable archaeological records of this mollusc. However, the calcium phosphate encrustations on these shells suggest them to be contemporaneous with the other contents of the pits.

##### Fish Bone Remains from Bennett's Works, Bedford

Mike Wilkinson

Two contexts were shown to have fish bones surviving. The general description of the deposits lies within the excavation report, and these results should be read with the report on the plant and invertebrate remains by Mark Robinson, and the animal bone report by Annie Grant that deal with the same contexts.

1980/1/19

|                                      |                |
|--------------------------------------|----------------|
| Eel ( <i>Anguilla anguilla</i> )     | vertebrae (10) |
| Herring ( <i>Clupea harengus</i> )   | vertebrae (13) |
| Mackerel ( <i>Scomber scombrus</i> ) | vertebrae (2)  |
| Cyprinid sp                          | vertebrae (4)  |

1980/1/39

|                                      |                   |
|--------------------------------------|-------------------|
| Eel ( <i>Anguilla anguilla</i> )     | vertebrae (2)     |
| Herring ( <i>Clupea harengus</i> )   | vertebrae (13)    |
|                                      | hyomandibular (1) |
|                                      | scale (1)         |
| Mackerel ( <i>Scomber scombrus</i> ) | vertebrae (2)     |
| Cyprinid sp                          | vertebrae (1)     |
|                                      | pharyngeal (1)    |



# BENNETTS WORKS Site Matrix

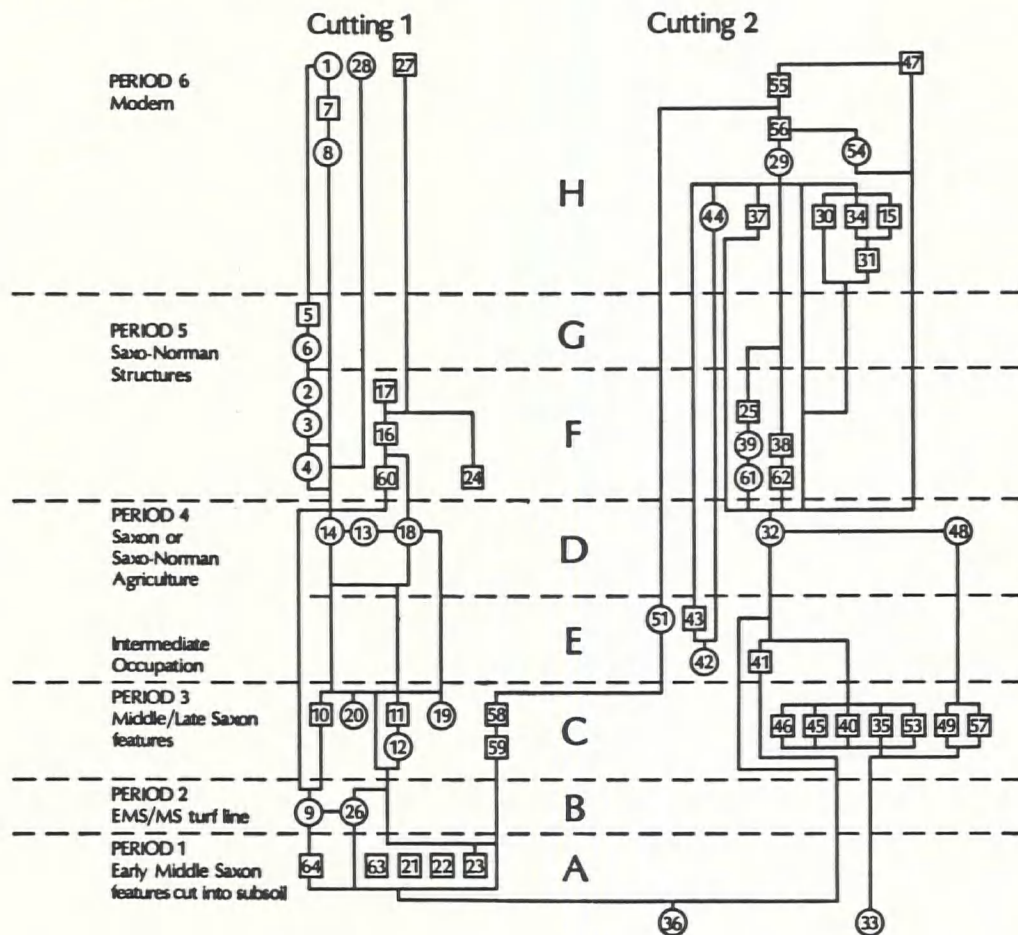


Fig 9 Bennett's Works, Site Matrix

Little more can be said of the assemblage as it is very small and comes from a single context type. It demonstrates the existence of marine fisheries and trade in pelagic shoaling fishes (herring, mackerel) alongside fresh water fisheries for cyprinids and eel.

*The animal bones from the excavation at Bennett's Works, Bedford*

Annie Grant

A small number of animal bones found during the salvage excavations at Bennett's Works were examined by the present writer. While some bones

were found in features dated to all the recognised periods of occupation at the site, only two groups, those from periods 3 and 5, were large enough for analysis to be worthwhile.

## *Period 3 Middle Saxon/Late Saxon*

The features and occupation deposits of this period produced 164 identifiable animal bones and bone fragments, of which 41 were rib fragments. A further 90 small fragments were not identified.

A small piece of human skull bone was found in context 10.

The majority of the animal bones were cattle bones, but sheep, pig, horse and bird bones were

also found (see Tables 1 and 2). As far as it was possible to determine from such a small number of bones, all parts of the skeleton of cattle, sheep and pigs were represented. The single horse remain was an upper molar, the extensive wear suggesting that it came from an elderly animal.

The cattle, sheep and pig bones were from animals of a range of ages, from juvenile to old. The only two complete mandibles found were both from fully mature cattle. There were no remains of very young animals.

#### *Phase 5 Saxo-Norman*

The majority of the bones from this phase came from a single pit, whose function as a cess pit was subsequently confirmed by analysis of the organic remains. A total of 160 bones, including 40 rib fragments, were identified from the period 5 features as whole. Four hundred fragments could not be identified. A large proportion of these unidentified fragments were recovered when part of the contents of the cess pit was sieved.

The majority of the bones were sheep and bird bones, but cattle and pig bones were also found (see Table 1). Cat was represented by a single mandible. Two small mammal bone fragments were found in the sieve residue, but could not be identified as to species.

There was no evidence that any particular parts of the skeletons of cattle, sheep or pigs were preferentially represented, and the range of ages was similar to that deduced for the period 3 remains. The only mandible found that gave a clear indication of age was from a mature sheep.

#### *Butchery*

There were cut marks on bones from both periods of occupation, giving evidence for the methods and tools used for butchery. Many of the cuts had been made by fairly heavy chopping tools, but there were also traces of finer knife cuts. The cut marks and the rather fragmented condition of the bone are typical of their period. Cuts seen on the vertebrae of bones from period 3 deposits were all at right angles to the line of the spine, while two out of the three sheep lumbar vertebrae found in the period 5 deposits had been cut longitudinally. A review of major developments in butchery techniques in England suggested that during the medieval period there was a change in the treatment of carcasses, seen in an increased incidence of split vertebrae (Grant, in press).

Table 1: Species represented  
No. = Number of fragments, excluding ribs

| <i>Species</i> | <i>Phase 3</i> |          | <i>Phase 5</i> |          |
|----------------|----------------|----------|----------------|----------|
|                | <i>No.</i>     | <i>%</i> | <i>No.</i>     | <i>%</i> |
| Cattle         | 63             | 51       | 13             | 13       |
| Sheep          | 39             | 31       | 46             | 25       |
| Pig            | 18             | 15       | 12             | 12       |
| Horse          | 1              | 1        |                |          |
| Cat            |                |          | 1              | 1        |
| Bird           | 2              | 2        | 29             | 19       |
| Total          | 123            |          | 101            |          |

Table 2:  
Proportions of cattle, sheep and pig bones

| <i>Species</i> | <i>Phase 3</i> |          | <i>Phase 5</i> |          |
|----------------|----------------|----------|----------------|----------|
|                | <i>No.</i>     | <i>%</i> | <i>No.</i>     | <i>%</i> |
| Cattle         | 63             | 53       | 13             | 18       |
| Sheep          | 39             | 33       | 46             | 65       |
| Pig            | 18             | 15       | 12             | 17       |
| Total          | 120            |          | 71             |          |

#### *Bone working*

A small strip of bone approximately 7 cm long and probably cut from a rib was found in feature 39 (period 5). It had broken where a hole had been bored through the bone. There was no other evidence of bone working.

There were no horn cores found in either period 3 or period 5 deposits. While in such small samples this could be due to chance, it is worth noting that at other Bedford sites horn cores were either rather uncommon, or were found in unusually large numbers, suggesting local hornworking industries (Grant, 1979a, 288).

#### *Discussion*

There is a significant change in the relative proportions of cattle and sheep bones in the two phases of occupation discussed here. In the earlier phase, cattle bones predominate, but sheep bones predominate in the later phase (Table 2). The relatively high proportion of sheep bones found in



the period 5 deposits is also typical of the majority of other Bedford sites of late Saxon and early medieval date (Grant, 1979a, 286), although there were more cattle than sheep bones in some of the Bedford Castle contexts dated to twelfth and early thirteenth centuries (Grant, 1979b, 60-61). More information from the sites contemporary with the period 3 occupation at Bennett's Works will be required before the increase in sheep and decrease in cattle bones seen at this site can be assumed to have wider implications.

There is no evidence for any change in the importance of pigs at the site. Very similar proportions of pig bones were found at other Bedford sites (Grant, 1979b, c, d, e, f, 60, 72, 95, 105, 135).

Very different proportions of bird bones were found for the two phases, with significantly larger numbers being found in the later period. This cannot simply be due to the fact that some of the deposits dated to this phase were sieved, since many of the bird bones came from layers which had not been sieved. Other contemporary sites at Bedford have been found to have varying proportions of bird bones, but similarly high proportions were found during the Bedford Castle excavations, particularly in area C (Grant, 1979b, 62).

The scarcity of horse remains and the absence of dog and wild deer bones are not at all unusual features of the faunal assemblages at other Bedford sites of the period (Grant, 1979a, 287) nor indeed at other urban sites of the Saxon and medieval periods. Dogs were clearly kept at or near the site as several of the animal bones had been gnawed.

Analyses of small collections of bone material are rarely very informative, but in this case the value of the sample was increased by the considerable amount of comparative material available from other excavations in Bedford.

### 3. A WATCHING BRIEF AT DUCK MILL LANE, BEDFORD

Evelyn Baker

#### SUMMARY

*Minor ground disturbance connected with the construction of a surface car park has provided the opportunity to examine a site on the relatively unexplored east side of St Mary's Street (Fig 1). Material recovered from a probable cess pit has given valuable insight into environmental conditions in the 11th to 13th centuries.*

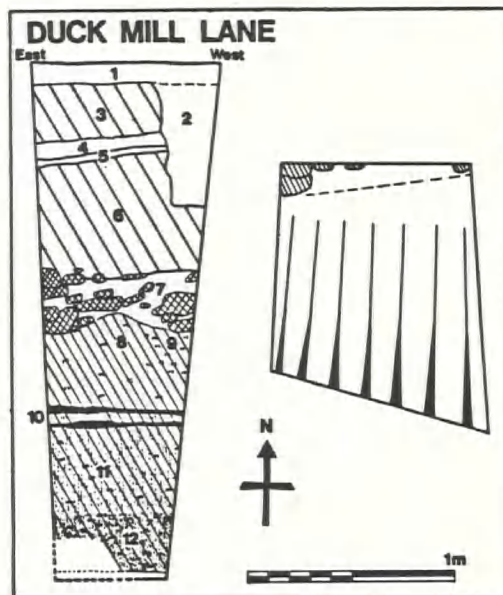


Fig 10 Duck Mill Lane, Plan and Section

#### INTRODUCTION

The corner plot of 4 St Mary's Street leading into Duck Mill Lane was developed into a surface car park needing a soakaway pit. Evelyn Baker and Andrew Pinder recorded the excavation of the 1 m square soakaway with the kind permission of the owner, Mr Giorgio Garofolo, who had himself removed the upper fills. Richard Compton assisted with the excavation. The work was funded by Bedfordshire County Council.

#### THE EXCAVATION

##### PERIOD 1

##### *Early Medieval Waterlogged Deposits*

Contexts 8 to 15 inclusive.

The earliest activity seen within the trench took the form of a waterlogged silt filled feature which might have been a ditch or rubbish pit, but was more likely a cess pit. The bottom fills, 10, 11 and 13 consisted of grey and black silty clays with high organic content. These were interlaced with dirty clays 12 and 14 which had slumped in from the N side of the excavation.

Sealing the feature were thick deposits of loamy clay, 8 and 9 which may have formed its final and deliberate back filling, the organic content of which appeared to derive largely from processing grain. See Robinson overleaf.

The pit would appear to have been open and filled during the 11th to 13th centuries.

## PERIOD 2

### *Later Medieval, ? Occupation*

#### Context 7

The remains of what was probably a dwarf stone wall, 7, was seen in the N part of the trench. It had been partially destroyed by non-archaeological excavation, making the interpretation as to whether it was a wall or destruction levels of a structure difficult to determine. It consisted of randomly laid limestone rubble without mortar, set in a clay loam matrix, and dates probably to the 13th century.

## PERIOD 3

### *Later Medieval, ? Horticultural Activity*

#### Context 6

Sealing Period 2 was a thick deposit of grey brown loam. Seen only in section, the layer appeared to be very homogenous as if constantly turned over, possibly indicating an agricultural or horticultural process. A 13th century date is likely for this activity.

## PERIOD 4

### *Post Medieval and Later*

#### Contexts 1 to 5 inclusive

All the upper levels of the excavation appeared to be associated with the remains of a brick structure dating possibly between the 17th and 18th centuries. This was interpreted as construction 5; occupation 3 and 4; destruction 2, topped with a concrete and rubble surface 1.

Research by S. Coleman has shown that the property was occupied by drapers from the mid 19th century, changing to motor agents from the time of the first world war until 1959. During the late 19th century it was known as Bridge House.

## CONCLUSION

The information received from this 'keyhole' into Duck Mill Lane was disproportionate to the size of the excavation and the method imposed upon it. While no firm conclusions should be drawn from such a tiny sample, it has nevertheless provided data

which support ideas as to the nature of activity in the locality.

Waterlogged deposits so close to the river were expected, and there were indications that water meadows or waste land lay close by. The cess pit provided insight into horticultural and agricultural pursuits, as well as into the living conditions of the nearby population. Other finds indicate a date late in the Saxo-Norman period, for occupation on this E side of the St Mary's Street, but again, the area looked at was very small. There were some signs of structural evidence in Period 2, but this may have been short lived and replaced by some sort of gardening or horticulture, and the plot may have been left barren and empty for some considerable time thereafter.

## THE FINDS

### *THE POTTERY*

#### Georgina Brine

The excavation yielded a small sample of pottery. This has been sorted into fabric groups according to the Bedfordshire fabric type series (see Baker & Hassall, 1979).

#### *Period 1 – Early Medieval Waterlogged Deposits*

##### *Lower Fills*

Most of the pottery fits in with Olney Hyde/Harrold (B5 and B8) types, comparable with Northampton fabric group T2 (McCarthy 1979, 156) broadly dated 1100-1400. One jug compares closely with a Harrold kiln type (Hall 1972, no 27), which suggests a date from the thirteenth century. In addition there are a few sherds of local, early medieval, sandy wares and shelly fabric B4.

##### *Upper Fills*

No significant chronological difference appears between the upper fills of the pit and the lower waterlogged deposits in the pottery record. Again, most of the sherds are from Olney Hyde/Harrold types with fewer examples of B4, St Neots-type (B1) and local sandy wares C1 and C4.

#### *Period 2 – Later Medieval ? Occupation*

This contained a late medieval E ware dish, which would give a fifteenth century date. In addition there were residual sherds of Olney Hyde/Harrold (B5/B8), Brill/Borstall (C11) and St Neots-type (B1).



### Period 3 — Later Medieval ? Horticultural Activity

There were only a few fragments of pottery from the loamy layer deposit above the destruction layer, but they included a late medieval coarseware.

### Period 4 — Post Medieval and Later

Two post medieval earthenware forms were recovered.

## FLORA AND FAUNA

### Plant and Invertebrate Remains from Early Medieval Deposits at Duck Mill Lane, Bedford

Mark Robinson

A sequence of six soil samples was examined from the Saxo-Norman layers encountered at the bottom of the trench in Duck Mill Lane. Contexts 15 and 13 were found to contain a wide range of plant and invertebrate remains variously preserved by water-logging, calcium phosphate mineralization and charring. Context 8 contained much carbonised plant material. These samples were then processed as follows:

| Context                                   | Weight of sample processed (kg) |    |   |
|-------------------------------------------|---------------------------------|----|---|
|                                           | 15                              | 13 | 8 |
| Floated over 0.5 mm aperture mesh         | —                               | —  | 5 |
| Washed through sieve stack down to 0.2 mm | 1                               | 2  | — |

The relevant flotants and residues were sorted and the remains identified are listed in Tables 1-7 (available in the site archive).

### Interpretation

It was unclear from the excavation whether these layers were the fill of a ditch or a pit. Context 15 did contain a few aquatic molluscs, as might be expected in a ditch with running water, but some of these shells contained a white calcareous silt with *Chara* fragments. Both Contexts 15 and 13 were waterlogged organic dark grey silt, so it is likely that the shells had been redeposited, perhaps from water-lain silts cut by the feature. The occurrence of calcium phosphate mineralisation and the range of plant remains from these two contexts show the presence of sewage. Layer 14, the intervening deposit between 15 and 13, was inorganic clay with very heavy iron panning. It is probable that the Saxo-Norman feature excavated was a cess pit and

Layer 14 was a sealing layer dumped into the pit when the contents had become too noisome. Other aquatic invertebrates were absent from the samples, even though 15 and 13 accumulated below the water table, and this was probably the result of very polluted conditions.

Context 15 was very rich in cereal bran and also smashed fragments of corn cockle (*Agrostemma githago*) and cornflower (*Centaurea cyanus*) seeds. This would have been the result of the users of the pit eating products made with impure wholemeal flour containing many weed seeds which had been milled along with the grain. Corn cockle was well known as a serious contaminant of grain and medieval cess pits are often rich in fragments of its seeds. Cornflower was a familiar weed in medieval husbandry but its seeds are not normally abundant in archaeological deposits; the occupants of Duck Mill Lane seem to have been using especially contaminated flour. Bran and seed fragments of these two weeds were present in context 13, which also contained calcium phosphate concretions in which bran and monocotyledonous plant stems (perhaps straw) were evident.

Contexts 15 and 13 contained remains of several species of fruit that had probably been consumed: blackberry and wild strawberry seeds, plum and sweet cherry stones and fragments of apple core. All but the blackberry are likely to have been horticultural crops, perhaps grown in the tenements of the town. The possible inclusion of field/horse beans (*Vicia faba*) in the diet is suggested by the presence of the bean beetle (*Bruchus rufimanus*). The beetle lays its eggs on flowering beans and the larvae develop to maturity in the growing bean seeds. The adult beetles remain dormant at harvest time and do not emerge from the dry beans until the following season, so are quite likely to be inadvertently eaten. Alternatively, infested beans could have been discarded into the pit or stored nearby. Another crop species, flax, was represented by a single seed fragment in Context 15 and ground linseeds could have been eaten, for example as an ingredient of porridge.

Most of the intact seeds in the two waterlogged samples were not from culinary species but either from weeds of disturbed ground or from plants of wet grassland. It is, however, possible that the calcium phosphate-replaced *Brassica* or *Sinapis* seeds were from cultivated mustard. Some of the smaller weed seeds, for example those of poppy (*Papaver argemone*) might have been flour contaminants, but they do not have the close dependence on



cereal cultivation for their survival in Britain that corn cockle and cornflower show. They are just as likely to have grown on disturbed ground on the site in company with such non-arable weeds as hemlock (*Conium maculatum*). The wet grassland to marsh plants, such as kingcup (*Caltha palustris*) and meadow rue (*Thalictrum flavum*) might have grown in the vicinity. The presence of frond fragments of bracken (*Pteridium aquilinum*), however, suggests that plant material had been brought to the site, in this case perhaps as bedding. It is quite possible that many of the seeds of wet ground species, such as sedges (*Carex spp.*) and bulrush (*Schoenoplectus lacustris*) were from cut vegetation imported for thatch, floor coverings etc.

The *Coleoptera* from the waterlogged samples, with the exception of *Bruchus rufimanus*, are all species associated with dead or decaying plant material of one sort or other. The two most numerous species, *Anobium punctatum* and *Ptinus fur* both show a close association with buildings and indoor habitats. *A. punctatum* is the woodworm beetle, while *P. fur* occurs amongst stale food remains, in mouldy straw etc. Both these beetles can live away from human influence, but they are common synanthropic species and the overall composition of the coleopteran assemblage suggests that their origin was domestic refuse.

Context 8, black gritty loam, seems to have been soil used to backfill the cess pit. It was very rich in carbonised bread-type wheat. A little wheat chaff was also present and about 12% of the carbonised seeds were from weed species, especially stinking mayweed (*Anthemis cotula*). Either this assemblage resulted from the accidental charring of rather badly cleaned wheat or the carbonised remains were derived from several different grain processing activities.

## CATALOGUE OF FINDS OTHER THAN POTTERY Fig 3

### Clay Pipe

Type F, early to mid 18th century, incomplete, 1979/1 III (4), 1600-1800 (as Bedford 1967-77, Cat. No. 1010) not illustrated.

### Objects of Stone

#### Whetstones

1577 Sandstone, one end broken, edges damaged, showing signs of wear. Portion of a v-shaped groove survives on the obverse face. Remaining length 101.25 mm.

- 1979/1 III (3). 1600-1800.

1578 Mica schist, fragment only, remaining length 76 mm.

- 1979/1 III (3). 1600-1800. Not illustrated.

1579 Mica schist, fragment only, remaining length 91 mm.

- 1979/1 III (3). Not illustrated.

1580 Slate, squared edges, showing signs of wear, top half only. Remaining length 60 mm.

- 1979/1 III (3). 1600-1800. Not illustrated.

1581 Siltstone, one end broken, edges shaped, smooth, remaining length 71 mm. Several shallow, narrow grooves visible on obverse face.

- 1979/1 III (7). Late 15th century.

1582 Mica schist, fragment only, remaining length 75 mm.

- 1979/1 III (7). Late 15th century. Not illustrated.

### Flint

1583 Scraper, end of blade retaining striking platform and bulb on one side, opposing side has three parallel flake scars. Heavily worn along one edge and scratched along face, length 23.5 mm.

- 1980/1/39 Saxo-Norman.

### Objects of Copper Alloy

1584 Strip, rolled into spiral at one end, slightly hooked at opposite end. Scrap, length 50 mm.

- 1979/1 III (3). 1600-1800.

1585 Tiny fragment of copper alloy and lateen? Waste, length 8 mm.

- 1979/1 III (11) mid-15th century. Not illustrated.

1586 Portion of decorated brooch/buckle, estimated diameter c 45 mm.

- 1979/1 III (4). 1600-1800.

1587 Off-cut, triangular in plan, of copper alloy, length 55 mm.

- 1984/2 I US.

### Objects of Iron

1588 Blade from shears or a knife, curved backed blade, straight cutting edge.

- 1979/1 III (?) mid-15th century.

1589 Large nail or spike, end broken, head and shank rectangular.

- 1979/1 III (7) mid-15th century.

1590 Portion of an 'L-shaped' pivot (7), both ends broken.

- 1979/1 III (7) mid-15th century.

1591 Unidentified object (?) of iron, partly forged iron (?).

- 1979/1 III (7) mid-15th century.

1592 Strip or rod of iron, both ends broken, poor state of preservation.

- 1980/1 39, Saxo-Norman.

### Objects of Bone

1593 Riveted, composite bone knife handle with iron tang, portion of blade and 3 rivets in situ.



- 1979/1 III (3), 1600-1800.
- 1594 Riveted, composite bone knife handle, incomplete, with portion of iron tang and two iron rivets in situ.
- 1979/1 III (3), 1600-1800.
- Spindle whorl, polished and shaped patella, slightly off-centre drilled hole.
- 1980/1/10 middle to late Saxon. (As Bedford 1967-77 cat. 1529.) Not illustrated.
- 1596 Gouge, hollowed, one end split diagonally, worn smooth and polished.
- 1980/1/65, Saxo-Norman.
- 1597 Plate, broken at one end, retaining two iron rivets, possibly from a composite bone comb.
- 1980/1/25 Saxo-Norman. (As Bedford 1967-77 cat. 1523.)
- 1598 Hollowed and polished bone flute pierced by two sub-rectangular perforations in line. One end broken, the opposite end has been cut and the edges smoothed and polished.
- 1984/2 I US.

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# The Creation, . . . Marginalia and Ornament in the Refectory Paintings of Bushmead Priory

DAVID PARK

The refectory is the only substantial part of the Augustinian priory of Bushmead (TL115607) to survive. Placed in the care of the Department of the Environment in 1973, it underwent extensive conservation work prior to its being opened to the public by the Historic Buildings and Monuments Commission in 1985. This conservation programme has led to a reassessment of the architectural history of the building, which will be treated in detail in an article in a future issue of this Journal.<sup>1</sup> Although some medieval painting was already known on the west wall (Plate 2a), during the removal of later layers of unstable plaster and limewash further painting came to light on this and the other three walls, all clearly forming part of a single scheme datable to about 1310, and which has likewise now received conservation treatment.<sup>2</sup> The painting which has been revealed is of importance not only because it is unusual for the painted decoration of refectories to survive, but also because it includes rare scenes of the Creation, including one or perhaps two which are apparently unparalleled in wall painting elsewhere in England.

The refectory is a large rectangular hall (approximately 21 m x 7.5 m). Originally open to the roof, it was divided by the insertion of a first floor c.1500, and by partition walls in the post-Dissolution period. There is no documentation for the chronology of the different phases of the building; dating must therefore be based on stylistic evidence. Although the priory was founded c.1195,<sup>3</sup> the earliest phase of the refectory appears to date from c.1250. This includes the cinquefoil arch of the lavatorium in the south wall, part of the (blocked) south doorway, the lower jambs and inner arch of the great west window, and the magnificent crown-post roof.<sup>4</sup> In c.1310 various alterations were made, and it was at this time that the extant painted decoration was carried out. The sill and window head were taken out of the west window and new tracery inserted within the same opening (only stumps of this tracery now survive). A window was inserted in the north wall, towards the east end; it is of three lights, with a shallow internal arch on nook-shafted jambs. All the early fourteenth-century

alterations are in clunch, in contrast to the Barnack stone used for the earlier work. The substantial alterations made c.1500 included not only the construction of the first floor, and the addition of windows in the north and south walls, but also the blocking of the great west window and the insertion within it of a smaller window with Perpendicular tracery (Plate 2a). The west window is now filled with modern timber tracery, which allows the painting previously concealed by the blocking to be seen. After the Dissolution, large first-floor windows were created and the interior sub-divided for domestic use, and various other alterations were made at later dates.

Enough survives of the wall painting to allow a partial reconstruction of the overall scheme. One of the main elements is masonry pattern — a very common form of medieval decoration, consisting of horizontal and vertical lining imitating the joints between blocks of ashlar. This pattern seems to have covered the greater part of all the walls (with the possible exception of the east wall, much of which may have been occupied by a large figure-subject), and the window splays as well. A great deal of this decoration remains on the west wall surrounding the window, and on the head and splays of the window itself (Plates 2b and 8). There is also a large area above and to the east of the early fourteenth-century window in the north wall (Plate 3a), and smaller areas on the south and east walls. All the masonry pattern is of the same type, consisting of single red horizontal lines and double vertical lines, the left-hand line being thinner and fainter than the other. The blocks formed by the lines are enriched by five-petalled flowers (about 5.5 cm in diameter), clearly executed with a stencil.<sup>5</sup> These rosettes were originally vermilion, but most have now turned grey-black. At the base of the masonry pattern on the north wall is a horizontal border comprising a wide red band (c.13 cm) above a narrow red line. This is c.240 cm above the present floor level and presumably continued around the interior;<sup>6</sup> on the west wall it would have been approximately at the height of the window sill. The plaster below the level of the surviving length of border is unpainted,



and this may have been the case throughout the refectory; possibly the lower part of the walls was covered with wainscoting or textile hangings. On the east and west walls, running beneath the gable rafters, is a band of red vine-scroll, bordered on either side by black lines. There are now only fragments of this border on the east wall, at the very top, but it survives much better on the west wall (Plate 2b). The scrollwork emerges, on the south side of the west wall, from the beak of a beautifully drawn crane-like bird (Plate 4a); in the corresponding position on the north side is a damaged, but still recognisable male figure, hooded and with his face in profile (Plate 4b).

The painted decoration of the west window itself is quite elaborate, comprising an outer and inner order, with the intervening area of the window embrasure covered in masonry pattern. The outer order — inserted c.1310 — is decorated on the interior face of the arch with a bent-riband pattern enriched with trefoil leaves painted in red, yellow and black (Plate 3b). The inner order has feigned supports for the inner arch of the window, in the form of columns painted at the edge of the jambs. The long, slender shafts are painted to imitate a 'marble' such as Purbeck, with black, comma-like strokes (resembling fossil shells) on a grey ground. The capital of each column (Plate 8a), painted in black against the plain plaster ground, is formed of stylised leaves with serrated edges and each has a prominent necking and abacus. Springing from these capitals is the inner arch decorated on its narrow soffit with white foliate scrollwork on a black ground (Plate 8b), and on its chamfer and main face with red banding bordered by double black lines.<sup>7</sup>

At the top of the walls, running below the wall-plate, was a border composed of lozenge-shaped frames (c.30 cm x 41.5 cm) containing small scenes (the subject-matter of the surviving scenes will be discussed below) with foliate ornament between them, and bordered above and below by a narrow strip of wave pattern (c.5.2 cm wide). Although this border can now best be seen at the eastern end of the north wall (Plate 3a), it also partially survives on the west wall (it was less faint when photographed in 1958; see Plate 2a), where it terminates at the level of the capital of the inner order of the window. Presumably, then, this border continued along the length of the north, west and south (and possibly east) walls, interrupted only by the west window.

To summarise, the painted decoration of the north and south walls would have consisted of enriched masonry pattern bounded below by a red

dado border and above by a lozenge border enclosing narrative scenes running below the wall-plate. The gable ends of the east and west walls were decorated with a scrollwork border with the remaining wall surface covered by masonry pattern (or possibly a large figure-subject on the east wall). The focus of the surviving painted decoration is the west window with its inner and outer orders articulated in paint and with the capitals and bases of the fictive columns of the inner order coinciding respectively with the termination of the lozenge border and the dado band. The colours used are red and yellow ochre, vermilion, white and black. Red is certainly the predominant colour, in both the decoration and the figure-scenes.

It is reasonable to assume that the architectural alterations of c.1310 and the painting date from the same phase of work on the refectory. It is evident from their interrelation that the painting cannot pre-date the architectural alterations: on the west window, the riband border is actually painted on the outer order inserted at this time, when the window was filled with Decorated tracery; on the north wall, the painting was obviously executed after the eastern window was inserted, with the figural border running immediately above it, and the dado border carrying over onto its jamb. Further, the style of the painted decoration itself indicates a dating in about the first third of the fourteenth century. The vine-scroll borders along the gables of the east and west walls (Plates 4a-b), with their relatively naturalistic leaves and tendrils, can be compared quite closely to the scrollwork in the Gough Psalter, of about the beginning of the fourteenth century.<sup>8</sup> The bird and man at the bases of the west wall border are strongly reminiscent of the marginalia of contemporary manuscripts. For example, the Beatus page of the Peterborough Psalter (of about the end of the thirteenth century) has various birds including a crane in the foliate border, as well as figures of peasants and others, several of whom are hooded (Plate 5a).<sup>9</sup> The Bushmead bird cannot be identified as any particular species, and in this respect is similar to a bird in the celebrated wall paintings of Longthorpe Tower (Cambs.) of c.1330-40, which likewise appears at the foot of an area of foliate scrollwork.<sup>10</sup> The hooded figure in the Bushmead paintings can be compared not only with those in the Peterborough Psalter, but also with the crouching man supporting the foliate border of a page in the Ormesby Psalter (c.1300-25) where — although the figure is shown in three-quarter face — his hood is similarly represented on the back of his head,



revealing the curly hair above the forehead (Plate 5b).<sup>11</sup>

The west window decoration and also the masonry pattern support a dating in this period. Although the best surviving parallel to the columns painted at the edge of the jambs is provided by the thirteenth-century painting on a window at Bishop's Cleeve (Glos.),<sup>12</sup> columns similarly placed support canopies over figures in the mid fourteenth-century paintings at Chalgrove (Oxon).<sup>13</sup> The fictive marbling of the column shafts at Bushmead is paralleled in both thirteenth- and fourteenth-century painting, for example, on the screen on the south side of the choir of Lincoln Cathedral (c.1310).<sup>14</sup> The highly stylised foliage of the capitals (Plate 8a) strongly suggests a dating in the first third of the fourteenth century rather than in the preceding century. The long serrated leaves can be seen as a half-way stage between the exaggeratedly long oak leaves which appear in such manuscripts as the Peterborough Psalter (Plate 5a), and the more stylised 'cabbage leaf' foliage seen in initials and borders in this manuscript and also, for example, in the Ormesby Psalter. On the other hand, it does not have the fleshy, undulating appearance of such foliage of the second quarter of the fourteenth century as that carved in the spandrels of the Thornham Parva retable, or represented on capitals in the wall paintings of South Newington (Oxon).<sup>15</sup> The bent-riband border on the outer order, though rather archaic in appearance, was very closely paralleled in the wall paintings of Wendens Ambo (Essex) of c.1330.<sup>16</sup> The elaborated masonry pattern with double vertical lines and rosettes which do not have the indented petals characteristic of such later paintings as Chalgrove (c.1350),<sup>17</sup> is also entirely typical of decoration of the first third of the fourteenth century. The scenes in the lozenge border, in their arrangement and small size, are again very reminiscent of early fourteenth-century manuscript illumination. Thus, in the border encircling the Beatus page of the Gorleston Psalter (c.1310-20), small Nativity scenes and seated figures are contained within oval frames.<sup>18</sup> Similarly, in the border of the Beatus page of the St Omer Psalter (c.1330-40), Creation scenes and other Old Testament subjects are enclosed in approximately circular frames (Plate 6b).<sup>19</sup>

Although they are very damaged, close examination of the scenes on the north wall at Bushmead reveals that Creation subjects are represented here too. This is of great interest since Old Testament scenes of any sort are comparatively rare in sur-

viving English medieval wall paintings, and there appear to be only two other examples with Creation subject-matter. The first of these is the impressive scheme of paintings, attributed to travelling English artists working c.1200, in the chapter house of the nunnery of Sigena in northern Spain. These paintings were badly damaged by fire in 1936, and the remnants are now in the Museo de Arte de Cataluña, Barcelona.<sup>20</sup> Two Creation subjects are included in the Sigena Old Testament cycle: the Creation of Adam, and the Creation of Eve.<sup>21</sup> In the wall paintings of c.1300 in the chancel of Easby church (N. Yorks), which unfortunately were heavily repainted in the Victorian period, Adam and Eve subjects are represented on the north wall, including the Creation of Eve.<sup>22</sup>

The westernmost surviving scene in the Bushmead border is a standard representation of the Creation of Eve (Plate 6a). The figure of Eve is shown emerging from Adam, who is represented reclining and supporting his head with his right hand. Eve faces towards the right, and has both arms raised together; she is held by the wrist(s) by God, represented further to the right, with his left hand raised in blessing. This depiction of the subject is closely paralleled in both the Sigena and Easby wall paintings (Plate 6c), as well as in many manuscript representations, such as that in the St Omer Psalter (Plate 6b). The lozenge immediately to the east of the Creation of Eve in the Bushmead border contains only a single figure (Plate 7a), whose identification will be considered below. The next scene to the east (Plate 7b) shows a reclining figure, of rather manikin-like appearance, its head a simple oval without facial features or even hair, and its arms hanging limply. Above this figure are the remains of another leaning over it. In view of its close proximity to the Creation of Eve, this subject can clearly be identified as the Creation of Adam, with Adam typically represented lying at the foot of the scene. A similarly composed representation can be seen in the west front sculpture of Wells Cathedral (second quarter thirteenth century), where however Adam lies diagonally on the lumpy ground from which he has been created (Plate 7c).<sup>23</sup> In the Bushmead scene, Adam appears to be depicted only incompletely formed, which is very unusual, though in the twelfth-century Lambeth Bible God is actually shown fashioning him with his hands.<sup>24</sup> The object God holds in his left hand and which touches the shoulder of Adam is difficult to explain, but given the lifeless pose of Adam is unlikely to be the rib for the later Creation of Eve.



The figure in the lozenge between these two scenes (Plate 7a) is represented on a larger scale; it is a recumbent, clothed male figure, with his head inclined towards the east, and apparently bearded and with long hair. Because the figure is clothed, it cannot be a representation of Adam. The subject can almost certainly be identified as God Resting on the Seventh Day, which in other Creation cycles is occasionally represented as here between the Creation of Adam and the Creation of Eve, and which would account for the reclining pose of the figure in the painting. In the twelfth-century mosaics of Monreale Cathedral and the Cappella Palatina at Palermo, God is shown enthroned between the same two Creation subjects.<sup>25</sup> Logically, of course, the subject of God resting should occur after the Creation of Eve. However, Eve's creation is described twice in Genesis: once in the general account of the Creation which ends with God resting on the seventh day (Genesis 1:1-31 and 2:1-3); and then again in the account of how God provided man with a helper (Genesis 2:18-25). It is probably this which accounts for the occasional representation of God resting between the Creation of Adam and the Creation of Eve.

To the east of the Creation of Adam are fragments of further lozenges, though the remains are much too slight for any subjects to be identified. However, because the narrative of the surviving subjects runs from east to west, it is likely that these contained earlier Creation scenes. No remains of subjects can now be seen within the lozenges faintly visible in the border on the west wall, but since it can be presumed that this border continued along the whole of the north, west and south walls, there is every possibility that an exceptionally long cycle of scenes existed in this scheme at Bushmead. The width of the lozenges is consistently c.41.5 cm where verifiable on the north wall; this would allow for another six scenes between the Creation of Adam and the east wall, and a total of approximately 106 on the north, west and south walls! It is, though, quite possible that some of the lozenges were empty, or contained only single figures (like some of those in the Gorleston Psalter).

This narrative scheme in a refectory is without surviving parallels. The figure-subjects which occur in the few other known English refectory paintings tend to have a more obvious appropriateness to their location. Thus, the Last Supper was represented on the east wall of the refectory of the Augustinian priory of Ivychurch (Wilts),<sup>26</sup> and a fine twelfth-century rendering of the same subject

survives in this position in the Benedictine priory at Dover.<sup>27</sup> Another representation of the Last Supper existed in the early thirteenth-century paintings on the east wall of the refectory of Eastbridge Hospital, Canterbury, beneath a Majesty and other subjects.<sup>28</sup> The Crucifixion — with its obvious Eucharistic significance — occurs in the paintings of the refectory east wall of the Benedictine priory of Horsham St Faith (Norfolk), of c.1250-60;<sup>29</sup> another representation is recorded on the west wall of the refectory of Durham Cathedral Priory,<sup>30</sup> and a late fifteenth- or early sixteenth-century example was formerly visible on the refectory east wall in the Cistercian abbey of Cleve (Somerset).<sup>31</sup> Running beneath the Crucifixion at Horsham St Faith is a strip of scenes illustrating the miraculous circumstances of that priory's foundation, and it seems that representations of founders and patrons (including patron saints) were also characteristic of refectory decoration.<sup>32</sup>

The Creation subjects represented at Bushmead, if originally forming part of an overall cycle, would themselves have been far from inappropriate to a refectory. Genesis tells how God gave man dominion over all other living things, and 'every plant yielding seed . . . and every tree with seed in its fruit' for his food (Genesis 1:28-29). Subjects from the Fall may also have been shown in the paintings, with Adam and Eve eating of the Tree of Knowledge of Good and Evil, and with Adam labouring for food after the expulsion. Even though the scenes at Bushmead are small and at a considerable distance above floor level, this does not necessarily imply that their subject-matter would not have been carefully chosen; the biblical scenes on the west front of Wells Cathedral are also small and quite high up,<sup>33</sup> and even the subjects of roof-bosses — as in the Lady Chapel of Ely Cathedral (completed c.1353), where they include scenes of the Virgin — could be quite deliberately chosen.<sup>34</sup>

In most of the other refectory paintings noted above, the subject-matter is concentrated — as might be expected — on the east wall, behind the dais. Thus, at Horsham St Faith the Crucifixion and foundation scenes are represented in this position, while on the other original surviving wall the remains consist only of masonry pattern and other decorative painting. On the east wall at Bushmead, the only painting which survives is a fragment of the gable border and of masonry pattern at the top of the wall. It is an intriguing possibility that a large figure-subject may have been represented lower down this wall — perhaps the Crucifixion or Last



Supper. If the Temptation was among the further scenes originally represented in the lozenge border, a representation of the Crucifixion would have been particularly appropriate on the east wall, the tree of the cross redeeming the Fall of Man occasioned by the eating of the fruit in the Garden of Eden. A Crucifixion painted on the wall above the dais would have formed a fitting and powerful climax to the overall scheme of the refectory.<sup>35</sup>

#### NOTES

- 1 John Bailey and David Sherlock, 'Bushmead Priory, the Conservation of a 13th-century Hall and Roof', *Bedfordshire Archaeology*, forthcoming. See also the guide by David Sherlock, *Bushmead Priory, Bedfordshire* (1985). I am very grateful to Mr Sherlock, Inspector of Ancient Monuments in charge of the conservation programme, for help in the preparation of the present article, and for allowing me to use his researches on the building. Ms Sharon Cather has kindly read the whole article, and made many useful suggestions. For assistance of various kinds I would also like to thank Dr Paul Binski, Miss Anne Godfrey, and Dr Christopher Norton.
- 2 The decorative border at the top of the west wall is briefly and somewhat inaccurately recorded by Tristram, who dated it to c.1300; E.W. Tristram, *English Medieval Wall Painting: The Thirteenth Century* (1950), 345, 518. Some of the painting on this wall is also described by N.W. Alcock, 'Bushmead Priory, Bedfordshire: a Thirteenth-Century Hall and Roof', *Jnl Brit Arch Assoc*, 3rd ser, 33 (1970), 52-3, 55, where it is assigned to the late 13th century. For useful information on the scheme as a whole I am indebted to Mrs Krystyna Barakan, the conservator of the paintings for the Dept of the Environment. All the painting has now been recorded for the National Survey of Medieval Wall Paintings, which is being undertaken by the present author on behalf of the Courtauld Institute of Art, with funding from the Leverhulme Trust, and in collaboration with the Royal Commission on Historical Monuments (England). I would like to thank Mr Leonard Furbank who took most of the RCHM photographs illustrating this article.
- 3 For the history of the priory, see *VCH Bedfordshire*, I (1904), 385-7, III (1912), 197-8; and G. Fowler and J. Godber (eds), 'The Cartulary of Bushmead Priory' (*Beds Hist Rec Soc* 22), 1945.
- 4 All the datings of the building itself in this article are those of Mr Sherlock; the roof was regarded as late 13th-century by Alcock, *op cit*, 53-4.
- 5 A lead stencil for painting such rosettes has been found on the site of the Cistercian abbey of Meaux (Humbly Grove); see D. Park, 'Cistercian Wall Painting and Panel Painting', in *Cistercian Art and Architecture in the British Isles*, ed C. Norton and D. Park (forthcoming).
- 6 The existing floor is 19th-century, and slightly lower than the original.
- 7 Some of the red banding, as well as some of the decoration on the inner order and the masonry pattern on the west wall, has now been restored in the *tratteggio* technique (ie with short, hatched strokes).
- 8 Oxford, Bodleian Library MS Gough liturg 8; see L.F. Sandler, *The Peterborough Psalter in Brussels and Other Fenland Manuscripts* (1974), figs 90, 95, etc. According to Sandler, 10, this Psalter dates from after 1292, but possibly before 1304.
- 9 Brussels, Bibliothèque Royale MS 9961-62, fol 14; Sandler, *op cit*, fig 296. Sandler, 9, attributes this manuscript to the period c.1299-1317; but A. Bennett, in her review of Sandler (*Art Bulletin* 64 (1982), 508, suggests a late 13th-century date.
- 10 E.C. Rouse and A. Baker, 'The Wall-Paintings at Longthorpe Tower, near Peterborough, Northants', *Archaeologia* 96 (1945), pls II, IIIa.
- 11 Oxford, Bodleian Library MS Douce 366, fol 147v. In painting on an arch in Christchurch Priory (Dorset), foliate scrollwork is shown emerging from a grotesque hooded head; this painting is dated by Tristram to the 13th century; see Tristram *op cit*, 201-2, 527, supp pl 22c.
- 12 *Ibid*, 506, supp pl 29f.
- 13 E.W. Tristram, *English Wall Painting of the Fourteenth Century* (1955), pl 30.
- 14 D. Park, 'The Medieval Painted Decoration of Lincoln Cathedral', *Medieval Art and Architecture at Lincoln Cathedral* (British Archaeological Association Conference Transactions for the year 1982, 7), forthcoming.
- 15 For the retable, see M. Rickert, *Painting in Britain: The Middle Ages*, 2nd ed (1965), pl 144; and for South Newington, Tristram, *op cit*, pl 16a. A dating in the late 1330s or c.1340 is argued for these works in P. Binski, C. Norton and D. Park, *A Dominican Altar Reconstructed: The Thornham Parva Retable and Musée de Cluny Frontal* (forthcoming).
- 16 Tristram, *op cit*, 261, pl 49.
- 17 *Ibid*, pls 30, 38, etc.
- 18 London, British Library MS. Add 49622, fol 8; Rickert, *op cit*, pl 131.
- 19 London, British Library MS. Yates Thompson 14, fol 7.
- 20 See O. Pächt, 'A Cycle of English Frescoes in Spain', *Burlington Magazine* 103 (1961), 166-75; and W. Oakeshott, *Romanesque Painting in Spain and the Winchester Bible Artists* (1972).
- 21 *Ibid*, pls 10 and 11.
- 22 Tristram, *Thirteenth Century*, 375, 539. See also T. Owen, *The Wall-Paintings of Easby Church, North Yorkshire*, unpubl MA dissertation, York University (1980), 16-21, 35-9.
- 23 This is the first of a series of forty-nine Old and New Testament scenes running above the lowest tier of canopies on the west front. For the scene of the Creation of Eve, which is very similar to that at Bushmead, see P. Tudor-Craig, *One Half of our Noblest Art: A Study of the Sculptures of Wells West Front* (1976), pls 19, 20. Each of the Wells scenes is enclosed in a quatrefoil frame, and in their fairly small scale, and representation quite high up in relation to the viewer, are generally reminiscent of the Bushmead border. For the series as a whole, see W.H. St John Hope and W.R. Lethaby, 'The Imagery and Sculptures on the West Front of Wells Cathedral', *Archaeologia* 59 (1905).
- 24 London, Lambeth Palace MS 3, fol 6v; C.R. Dodwell, *The Canterbury School of Illumination 1066-1200* (1954), pl 50a.
- 25 O. Demus, *The Mosaics of Norman Sicily* (1949), pl 95A (Monreale), and pl 27B (Palermo). A more elaborate representation of God Resting occurs between the Creation of Adam and Creation of Eve in the 12th-century mosaics of San Marco, Venice; see R.B. Green, 'The Adam and Eve Cycle in the *Hortus Deliciarum*', in K. Weitzmann (ed), *Late Classical and Mediaeval Studies in Honor of Albert Mathias Friend, Jr* (1955), pl LV.
- 26 Tristram, *Thirteenth Century*, 223, 360. Tristram, 233, also mentions a figure of St Peter and another saint (St Paul?).
- 27 E.W. Tristram, *English Medieval Wall Painting: The Twelfth Century* (1944), 24-5, 120, pl 27a.
- 28 Tristram, *Thirteenth Century*, 274-5, 520-1, supp pl 49.
- 29 *Ibid*, 360-1, 554, pls 205-7; D. Purcell, 'The Priory of Horsham St Faith and its Wallpaintings', *Norfolk Archaeology* 35 (1974), 470, pl 1.
- 30 C.E. Keyser, *List of Buildings Having Mural Decorations*, 3rd ed (1883), 90. *Victoria History of the Counties of England, Durham III* (1928), 127. On the east wall of this refectory a very damaged, and unidentified 12th-century figure-subject was uncovered in the 1960s; see M. Johnson, 'Recent Work on the Refectory of Durham Cathedral', *Transactions of the Architectural and Archaeological Society of Durham and Northumberland*, new ser, 1 (1968), 86-7.
- 31 See M.R. James, *Abbeys* (1926), 125, pl facing p 127, and D. Park, 'Cistercian Wall Painting and Panel Painting' (forthcoming). For an interesting discussion of the reasons for depicting the Last Supper and the Crucifixion in refectories, concentrating on examples in Italian Renaissance wall painting, see C. Gilbert 'Last Suppers and their Refectories', in C. Trinkhaus and H. Oberman (eds), *The Pursuit of Holiness in Late Medieval and Renaissance Religion* (1974), 371-407. At Denny Abbey (Cambs), the (unpublished) remains of 14th-century decorative painting in the refectory included birds (cf that on the west wall at Bushmead).
- 32 For the Horsham St Faith scenes, see Purcell, *op cit*, 470-2, pl 1. Cf also the wall paintings in the refectory of the abbey of Cluny, given by Roger of Montgomery, Earl of Shrewsbury (d.1093), which included representations of the founders, benefactors, and abbots; see J. Evans, *Cluniac Art of the Romanesque Period* (1950), 20.
- 33 See above, note 23.
- 34 See C.J.P. Cave, 'The Roof Bosses of Ely Cathedral', *Proc of the Cambridge Antiquarian Soc*, 32 (1932).
- 35 Paper submitted July 1985.

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# The Moated Site and Timber-Framed Building at Mavourn Farm, Bolnhurst

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## SUMMARY

*An integrated survey of the late-seventeenth-century timber-framed house at Mavourn Farm, Bolnhurst, placed off-centre on an earlier moated site has appended a summary of the tenorial history from 1500 to 1944. There was an earlier house on the site known to have been standing in 1671 but the present house does not incorporate any of its predecessor.*

## INTRODUCTION

The timber-framed farmhouse at Mavourn Farm, Bolnhurst, was examined in 1973 as part of an ongoing survey of the buildings and landscape of Bolnhurst, a survey which is itself part of a much wider study mainly directed at the social history of the rural society of north Bedfordshire in the eighteenth century. One element of the work on Bolnhurst, examining the farmhouse at Crowhill Farm, has been published in a previous issue of the *Bedfordshire Archaeological Journal*.<sup>1</sup> It is to be hoped that further work on the parish and its buildings will be completed for submission for inclusion in future issues.<sup>2</sup>

To the tenorial history and building survey has been added an examination of the moated site.

## LOCATION AND SITE

Mavourn Farm, Bolnhurst (TL 072575) is 1 km (5/8 mile) south of the road from Thurleigh to St. Neots on the extreme western edge of the modern civil parish of Bolnhurst and Keysoe and close to its southern boundary. The moated site with the timber-framed farmhouse placed close to its western side is approached from the east by a track from the Bedford to Kimbolton turnpike road of

1795 (now the B660). The latter track passes Brook Farm, Bolnhurst, before reaching Mavourn Farm and is now indistinct for part of the way between the two farmhouses. It seems apparent that the main entry has always been from the north.

On the eastern edge of the lands associated with Mavourn Farm is a small stream which flows south-east to join with the brook beside Brook Farm as a tributary of South Brook in Wilden and Eaton Socon (the old parish). To the West of Mavourn is another small stream, flowing southwards and later forming the boundary of Ravensden and Thurleigh before reaching Salph End, Renhold. The stream becomes the parish boundary of Renhold and Goldington before reaching the River Great Ouse to the east of Bedford.

The site is at about 78 metres OD on ground which is level with the adjacent fields but declines sharply to the west. Present day farming is largely arable, including some fields used for vegetables, but dairy cattle is part of the economy of the mixed farm. The historical indications suggest that a concentration on arable but including cattle and some sheep has been the pattern for several centuries.<sup>3</sup> Woodland is sparse and acts mainly as boundaries and wind-breaks. There is no evidence of even semi-commercial forestry.<sup>4</sup>

## THE MOATED SITE

The main island of the moated site was originally trapeze-shaped. The north-west corner has long been refilled and the area occupied by farm buildings, but the generally lower level of the ground indicates that the moat was continuous at this point. There is a substantial outer bank on the east side and the eastern half of the south side, with a smaller external bank to the north. The interior is in orchard and garden use, and does not show any irregularities which could be identified as the site of an earlier building. The *Victoria County History* of 1904<sup>5</sup>

\* The three authors are responsible respectively for general introduction and tenorial history; the moated site; and the timber-framed building. Figure 1 by A.H.S.; the remaining figures by T.P.S.



records that 'the moat has a flat berm under the waterline and then suddenly drops to a depth of nine feet, an ingenious device for embarrassing intruders'. This feature was not observed during the survey work, but no depth measurements were taken.

There is a narrow secondary enclosure to the south-west, partly over-lapping the south side of the main moat. A narrower ditch continues the line to the south-east corner, but there are no indications that it was ever as substantial as the moat of the secondary enclosure. There is no trace of any subsidiary enclosure to the east of the main moat.

To the north, two square enclosures are defined by slighter ditches, though the northernmost ditch is widened in its eastern part, possibly for use as a fishpond. There are no internal features, and the enclosures were probably horticultural in function. The field in which they lie was called 'Hop Ground' on the Tithe Map of 1847.<sup>6</sup> Two smaller enclosures further north again were recorded by Beauchamp Wadmore on a plan published in 1920,<sup>7</sup> but these have now been taken into arable cultivation.

Earthworks in a close to the north-west (called 'Cow Close' in 1847) had not previously been recorded. They form a series of rectilinear platforms, with a hollow way running diagonally across the close at its southern end. The earthworks probably mark the site of dwellings alongside the track leading north from the farm.

The moated site is of typical medieval form, and the 'village' earthworks to the north-west are consistent with a medieval origin, though they may be later. However, the discovery of an eighth-century disc at the farm in 1962<sup>8</sup> suggests that occupation in the area may go back as early as mid-Saxon times. The land associated with Mavourn Farm was not subject to Parliamentary enclosure, and it possibly formed a separate land unit within the medieval parish. One of the first recorded forms of the name (1549) is 'Maverns'.<sup>9</sup>

### TENURIAL HISTORY

The tenement recorded as 'Maverns' in 1549<sup>10</sup> is known a decade earlier from a lease by John Francklin, yeoman of Thurleigh, of a grange of Pleshey Abbey, Essex, known as 'Mavyon, Bolnhurst' for thirty years from 2 March 1539.<sup>11</sup> It then comprised 48 acres of arable, 1 acre of meadow and 10 acres of pasture. Ownership in the third quarter of the sixteenth century is difficult to establish<sup>12</sup> but on 18 May 1573, George Francklin of the Middle Temple purchased the capital messuage known as

Mavourn, two gardens, two orchards, 100 acres of land, 20 acres of meadow, 100 acres of pasture, 10 acres of wood, 10 acres of heath and 10 acres of moor. This large block of land was in Bolnhurst, Thurleigh and Ravensden and included the farms now known as Mavourn and Blacklands. Hence the reference to 'two gardens, two orchards'; buildings are not necessarily mentioned in land conveyances.<sup>13</sup>

It is worth remarking that by 1573, the Francklin family was one which was rising in the world: in contrast to the earlier documents calling John Francklin 'yeoman', George Francklin is designated 'gentleman' as are succeeding male members of the family. Some indeed were called 'esquire' or were knighted. A grant of arms was made in 1566, at the first heralds' visitation of the county.<sup>14</sup> The house purchased by George Francklin is well-known from a full-length inventory taken in 1633<sup>15</sup> when George's son, Edmund Francklin, was able to take up residence following a period of severe mental illness.<sup>16</sup> It is clear from the inventory and from the correlation of a lease, dating to before 1678,<sup>17</sup> and the entry in the 1671 Hearth tax of Richard Parker in a house of eleven hearths<sup>18</sup> that the present house is much smaller than the original house. The original house, it is apparent, was used as a farmhouse on the Francklin estate from the mid-seventeenth-century onwards when the family lived away from the parish although they continued to be buried in St Dunstan's church until 1727.<sup>19</sup>

Tenancies from the 1650s to 1940 have been summarised in table 1.<sup>20</sup> Little can be said to elaborate these names. Some indeed are not otherwise known. None appears to have been a man of great wealth. Robert Fountaine described himself as a dairyman and left bequests of only ten pounds to each of his two sons and five pounds to his two daughters; John Wadsworth II called himself a yeoman and John Hartop is recorded as a farmer but Thomas Kilpin suggests no precise occupation in his will.

More may be said of the continuity of tenure within families. John Wadsworth I of 1731 was followed by John Wadsworth II recorded in 1759 and presumably he remained the tenant until his death in 1782. Richard Kilpin whose elder children were baptised at Thurleigh before 1782 was the father of Thomas Kilpin, and William Kilpin of 1823 may have been Thomas' brother. The successive members of the Hartop family are husband, wife, son and grandson.

Fields occupied by tenants are recorded in detail in 1703, 1731 and 1821: see table 2. After 1829, the



# MAVOURN FARM, Bolnhurst

North Bedfordshire Archaeological Society

Bedfordshire County Council

Surveyed 1981/2

TL 072576

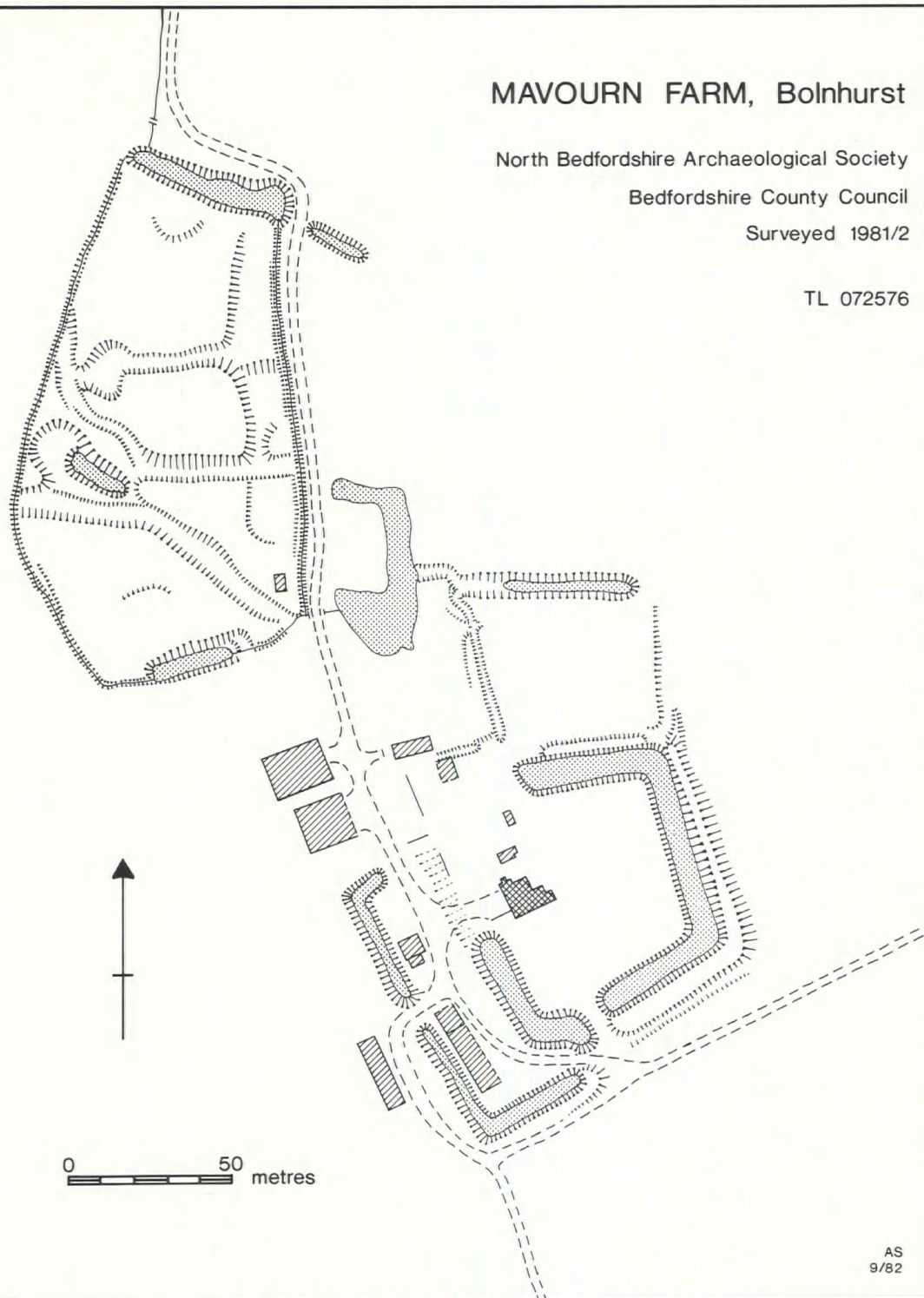


Fig 1 Mavourn Farm, Bolnhurst: a survey of the moated site

TABLE 1

**Mavourn Farm, Bolnhurst. Tenancies 1650-1940**

| Date                                                                                          | Name              | Rent and Acreage                  | Source                                                                                                            |
|-----------------------------------------------------------------------------------------------|-------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 1650s                                                                                         | Thomas Gale       | £69 0s 0d                         | Terrier FN 1248, pp 733-737                                                                                       |
| 1671<br>and before 1678                                                                       | Richard Parker    | £69 0s 0d<br>previously £84 5s 0d | Hearth Tax <i>BHRS</i> 16, 134<br>Rental FN 1000                                                                  |
| 1691<br>1696<br>1703<br>to death 1705                                                         | Robert Fountaine  | £59 0s 0d<br>88 acres             | Rental FN 996<br>Lease FN 93, FN 96<br>Marriage settlement (1703), FN 940<br>Will, ABP/W, 1705/89                 |
| c1710                                                                                         | Robert Hills      | —                                 | Lease, FN 97, notes as former tenant                                                                              |
| 1714                                                                                          | William Lowin     | —                                 | Lease FN 97                                                                                                       |
| 17 July 1731<br>buried 9 November 1738                                                        | John Wadsworth I  | £60 0s 0d<br>88 acres             | Marriage Settlement (1731) FN 942<br>Bolnhurst Parish Register                                                    |
| 1759<br>but probably from 1738<br>buried 5 February 1782                                      | John Wadsworth II | —                                 | Marriage Settlement (1759) FN 946-<br>FN 949<br>Bolnhurst Parish Register<br>Will, ABP/W, 1782/9                  |
| 1783                                                                                          | Richard Kilpin    | —                                 | Land Tax, HA 14/5/1                                                                                               |
| 1797-1822<br>but probably from<br>Marriage 25 September 1787<br>Retired, 1822<br>Buried, 1828 | Thomas Kilpin     | £86 5s 6d<br>farmed 117 ac 2r 34p | Land Tax, QDL Bolnhurst 1797-1822<br>Valuation (1821) FN 1002<br>Bolnhurst Parish Register<br>Will, ABP/W 1828/47 |
| 1823                                                                                          | William Kilpin    | —                                 | Land Tax QDL Bolnhurst 1823                                                                                       |
| 1824-1837<br>died 1837                                                                        | John Hartop       | —                                 | Land Tax QDL Bolnhurst 1824-1832<br>Will, ABP/W 1837/59                                                           |
| 1847<br>probably from 1837                                                                    | Hannah Hartop     | —                                 | W. Kelly & Co. <i>Post Office Directory</i><br>for 1847                                                           |
| 1854-1885                                                                                     | Samuel Hartop     | —                                 | Directories, 1854-1885                                                                                            |
| 1890-1894                                                                                     | John Hartop       | —                                 | Directories 1890-1894                                                                                             |
| 1898-1924                                                                                     | —                 | —                                 | Directories of 1898, 1903, 1906, 1910,<br>1914, 1920 and 1924 do not give a<br>farmer for Mavourn Farm            |
| 1928-1940                                                                                     | Richard Ingle     | —                                 | Directories 1928-1940                                                                                             |

## NOTES

- 1 All documents quoted are in Bedfordshire County Record Office, Bedford; directories are available there and in the Local History Collection, Bedfordshire County Library, Bedford.
- 2 Bolnhurst Parish Register is printed as *Bedfordshire Parish Registers*, 11C, 1935.
- 3 All directories are published by the firm of W. Kelly and Co.

adjacent Spencer's Farm was incorporated in the lands of Mavourn Farm. This remains the position as it was in 1944 when Commander P.W. Francklin disposed of the estate. At that sale, the house was described as having a sitting room, breakfast room, six bedrooms, cheese room, dairy, kitchen and cellar.<sup>21</sup>

**DESCRIPTION OF THE BUILDING**

The building presently occupying the moated site at

Mavourn is a timber-framed house of T-plan; the ground floor has been much altered and few constructional details are readily visible. Therefore, it is the first-floor plan which is presented here, together with a schematic plan of the ground floor (Fig 2). The principal rooms are in the south-wing (the bar of the T) which runs east-west and is of two storeys with additional rooms in the attic space. This wing is of five bays, with the brick stack occupying the central bay. The stack, which has two backing fire-



TABLE 2

## Fields at Mavourn Farm, Bolnhurst

| Robert Fountaine 1703 |      | John Wadsworth I 1731 |      | Thoma Kilpin 1821       |       |        |
|-----------------------|------|-----------------------|------|-------------------------|-------|--------|
| Old Orchard           | 1ac  | Old Orchard Pightle   | 1ac  | Farmyard and Orchard    | 2ac   | 0r 34p |
| Colts Pightle         | 2ac  | Colts Pightle         | 2ac  | Crow Pightle            | 2ac   | 1r 11p |
|                       |      |                       |      | Hop Ground              | 3ac   | 3r 7p  |
| Little Field          | 8ac  | Little Field          | 8ac  | Little Field            | 8ac   | 1r 0p  |
| Lentils Close         | 17ac | Lentils Close         | 17ac | The Riding and Lentils  | 19ac  | 1r 8p  |
| Park Field            | 30ac | Park Field            | 30ac | Park Field              | 33ac  | 2r 20p |
|                       |      |                       |      | Park End Close          | 12ac  | 1r 30p |
| Short Wood Field      | 30ac | Short Wood Field      | 30ac | Short Wood Field        | 4ac   | 2r 27p |
|                       |      |                       |      | Fuller Shortwood Close  | 16ac  | 2r 19p |
|                       |      |                       |      | Middle Shortwood Close  | 7ac   | 0r 28p |
|                       |      |                       |      | Further Shortwood Close | 7ac   | 1r 0p  |
| Farm size             | 88ac | Farm size             | 88ac | Farm size               | 117ac | 2r 34p |

## Sources

1703 Marriage Settlement, FN 940

1731 Marriage Settlement, FN 942

1821 Valuation of Bolnhurst Farms, FN1002

All documents in Bedfordshire County Record Office, Bedford.

places on the ground floor, divides the wing into two main chambers, each of two bays. In addition there is a small entrance lobby south of the stack and what is now a small closet to its north. The closet is entered from the west chamber, which is now the principal room and probably always was such: it may thus be regarded as the hall of a hall-and-parlour type of post-medieval house. The fireplace in the hall is large with an inglenook and possibly a salt-box in the rear; the bressummer has a plain chamfer with straight-cut stops (Jones and Smith type C1, Fig 3a).<sup>22</sup> The beam has been cut away in the middle, doubtless in connection with the modern fireplace unit. In the south wall is a much renewed window which, however, retains the (blocked) mortises for two mullions at top and bottom as well as a central iron bar. From the north-west angle of this room an eighteenth-century stair now leads up to the first floor, but this is manifestly not a primary feature. Renewal of the floorboards and the position of the stair to the attic suggests an original stair was in the ground floor closet beside the stack.

The east room, best interpreted as an original parlour, has both corner-posts visible; in the south-west angle is a principal post, while in the present south-east angle is a storey-post marking the abutment of the north wing. In the east wall is a

large rail (1.93 m [6 ft 4 in] above the sill). Above this is a portion of a principal post which is also visible at first-floor level. Externally a blocked window is visible below the large principal post. This could have been inserted and subsequently blocked, thus accounting for the sawn-off end of the surviving principal post. A central joist runs east-west and is plain-chamfered. The fireplace has been much altered but doubtless was similar to that backing it on the other side of the stack.

The north wing (the stem of the T) is again two storeys with the attic space also used. It is two bays in length. It contains kitchen and larder and this was probably always its purpose. Portions of an original and enclosed stair to the first floor (possibly serving only the north wing) are preserved in the south-east angle. This was entered by a door marked 'Cheese Room', a room specially mentioned in the sale catalogue of the Francklin estate when the family's Bolnhurst lands were sold in 1944 (see above with note 21).

The north-east corner-post is preserved and there is a deep rail in the north wall. The principal joist has ovolo mouldings with fairly elaborate stops (Jones and Smith type A variant, Fig 3b).<sup>23</sup> A dovetail mortise on the soffit indicates this to be a re-used beam, possibly from the earlier house on the site.

The north-west re-entrant angle of the building

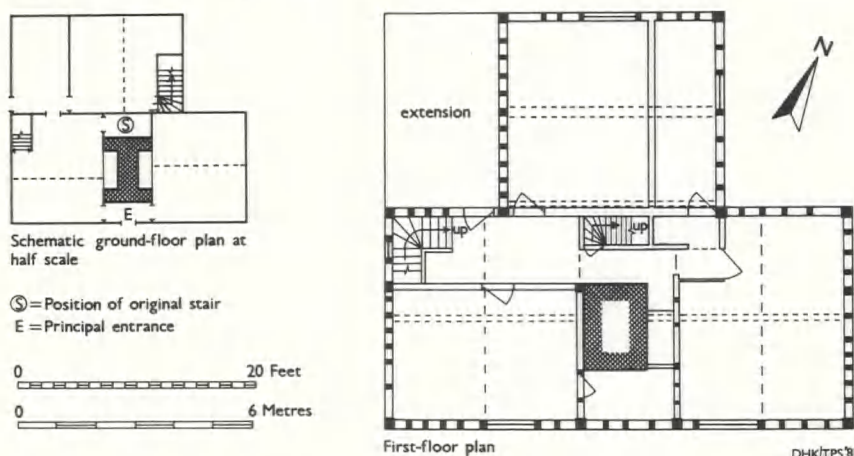


Fig 2 Mavourn Farm, Bolnhurst: first-floor plan and schematic ground-floor plan

now houses a recent extension, indicated in outline on Figure 2. Building this apparently involved cutting through a principal post to make the communicating doorways at both ground and first-floor levels.

The first floor preserves rather more of its original appearance. The south wing has a broad passage or landing along three-fifths of its northern position. At the west end of this is the eighteenth-century stair already mentioned. A small squarish window in the end wall lights the stair; it has lead comes dividing it into three by three panes. The north-west corner-post has a gradual jowl; a blocked mortise in its east face presumably received the tenon and a brace which no longer exists. In the north wall of the passage is a storey-post marking the abutment of the north wing. The wall-plate is also visible here, and has a scarf joint (see below) and a number of peg-holes indicating the positions of studs, some of which remain. In the centre of the building on the first-floor beside the stack is an enclosed and very steep stair giving access to the attic. It is suggested that the original stair from the ground floor to the first floor in the south wing was below this.

The west room preserves its corner- and principal-posts. There is a large joist running longitudinally. A window in the south wall has its original central light with lead comes making three by four panes.

Between this room and the east room is a partitioned section containing the stack and two

closets, one opening from the west room, the other from the passage/landing. The stack has no fireplaces at this level, which was unheated.

The east room preserves a number of its principal timbers; the post of the south-west angle has a well jowled head. The longitudinal joist is in line with that in the west room. The window in the south wall has three lights with a central side-hung casement. The window is probably original. The lights have lead comes forming three by four panes; in addition the casement has a central iron bar, square and diagonally set, whilst the sidelights have two iron transoms.

The north wing is divided into two rooms. The eastern room is long and narrow. Though now a bathroom, this small room originally housed a stair up to this level (see below). The ground-floor door to this stair still has a wooden label inscribed 'Cheese Room'. If this first floor room was the cheese room, it could well have been self-contained as it is clear that studs have been removed to allow a door to be inserted from the passage on the north side of the south wing. Of this room, the north-east corner-post remains, as to six studs in the east wall together with a straight tension-brace. The wall-plate is a rough-hewn timber, a feature which would be consistent with a non-domestic purpose for the room.

The largest west room also preserves a number of original timbers including the studs of its west and



north walls. The window in the north wall is large with vertically-hung sashes; it presumably represents an eighteenth-century alteration to the building but may be in an original position as there is no evidence of a stud below the window.

The attic is divided into three rooms in the principal wing with one further room in the north wing. The central room of the main wing has the stack, by now considerably narrowed, in its south-west angle, and it is to this room too that the stair from the first floor rises: it may be considered a sort of vestibule or lobby to the other rooms. That to the west is small and square with a small window in its west wall. The east room is also square but larger, with a window in its east wall; this has sliding horizontal sashes of two panels, each of two by three panes. The north room is again square in plan; there is a small window in the north wall.

The roof construction is similar throughout the building. Roofs are of double-frame construction with two sets of side-purlins, one above the other, set in-pitch. There are queen struts (or raking struts) rising to the lower purlins from the tie beams, a number of which are visible or partly visible throughout the building. In some cases the purlins are set in notches in the upper face of the collars (Fig 4b) in the normal Bedfordshire manner for post-medieval roofs; in other cases the collars are placed *above* the purlins (Fig. 4c). Where collars are absent, as in the centre room of the south wing, the strut has a notched end which engages the lowest arris of the purlin (Fig 4a). Only the central truss of the north room has a collar to the upper set of purlins. Several scarf-joints are present in the purlins.

No braces were visible in the west gable of the south wing; those of the east gable were raking struts to collar level and straight, as is the east brace to the north gable. However, the west brace to the north gable was curving but this probably reflects only the use of a convenient timber to hand as all tension-braces in the building were straight timbers.

## JOINTS

A number of joints were able to be inspected. The building throughout is in 'normal assembly', the tie-beams being placed over the wall-plates using bare-faced lap-dovetails. Elsewhere the expected mortise-and-tenon joints are used. The scarf in the wall-plate of the north wall of the main wing is of face-halved and bladed type, with one peg to each blade, a type which is fully at home in the seventeenth-century context. The purlin scarfs, on the other hand, are of simple splayed type without abut-

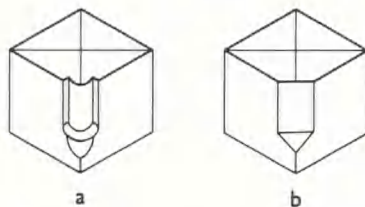


Fig 3 Mavourn Farm, Bolnhurst: chamfer stops

ments, warning against any simplistic chronological scheme in which these are taken as evidence of early date. The rafters are set in trenches in the wall-plates.

## BRICKS

The bricks used in the stack are of red colour and fairly coarse in texture. They measure 9-9½ by 4½ by 2 inches. Probably they were made fairly near at hand, as was normal practice before the nineteenth-century, possibly at Thurleigh where 'One close called Brickills [sc. brick kilns] containinge by estimation 2 acres and a halfe' is mentioned in a lease of 1604.<sup>24</sup>

## CONCLUSIONS

The building may be safely dated to the seventeenth-century. It is an example of the three-cell lobby-entrance type of house, the successor to the normal medieval open-hall house.<sup>25</sup> The type could indeed be achieved by conversion of an earlier house by the insertion of a central stack in the screens passage together with flooring-over of the formerly open hall, as at the nearby Crowhill Farm.<sup>26</sup> At Mavourn the stack is a primary feature, and the 'hall' — a term borrowed from a 1604 survey of neighbouring Thurleigh<sup>27</sup> — is no more than the principal living room on the ground floor. The parlour is the room on the opposite side of the stack. There are also chambers on the upper floor — probably two in the south wing originally with a small vestibule or lobby in the central (stack) bay at the head of the stair. The present arrangement with the long landing/passage must date only from the insertion of the new staircase at the north-east angle of the wing. The general arrangement of the main wing at Mavourn is similar to that at the house numbered T10 by Alcock in his study of Thurleigh.<sup>28</sup> Here, however, the additional (?service) bay is at one end; at Mavourn, in a recognised alternative manner,<sup>29</sup> a subsidiary wing has been added at the rear of the main wing to give a T-plan. A stair, as

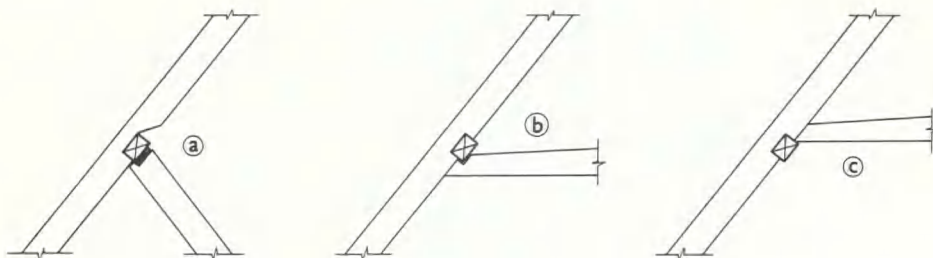


Fig 4 Mavourn Farm, Bolnhurst: details of side purlins

already remarked, originally rose from the south-east corner of this wing, which also included the larder (representing the medieval buttery and pantry, no longer separate).<sup>30</sup> The kitchen occupied, as it still does, the rest of the wing.

The bay lengths are 8 ft in the north wing and in three of the bays of the south wing; the two easternmost bays in the latter, however, are only 7 ft long. The bay widths, in both wings, are 19 ft.

The face-halved scarf fits a seventeenth-century dating, for the type is recognised in the area as of seventeenth-century date.<sup>31</sup> The simple splayed scarfs of the purlins are clearly no earlier; in their poor quality they may already mark a falling off of traditional timber-frame construction. For the most part, however, the building is sturdily constructed; the studs, where examinable, are fairly closely spaced: this is not disturbing, for although close-studding seems to be principally a sixteenth-century technique in Bedfordshire there is a fine seventeenth-century example in the large Campton Manor.<sup>32</sup>

However, the social context of the construction of the present house at Mavourn Farm, Bolnhurst, should not be compared with that of Campton Manor. At the latter, John Ventris Esq, lived in a house of eleven hearths in 1671.<sup>33</sup> The same number of chimneys is recorded for Mavourn where a tenant of the Francklin family, Richard Parker, was then living.<sup>34</sup> But the present house at Mavourn post-dates the published record of the hearth tax, and hence of house-size, in Bedfordshire. Manifestly the

present house at Mavourn can claim no more than three or four fireplaces. The evidence of the joints is consistent with carpenter's work of the late seventeenth-century; the timbers have not been re-used from an earlier building (with the possible exception of one joist with a chamfer-stop suggesting the middle of the seventeenth century). Indeed the survey of the moated site suggests that the present house was built to the west of the site of the original house. This doubtless was more central to the moated site and foundations have been reported in an orchard now occupying this area.<sup>24</sup>

The rebuilding of Mavourn Farm in the seventeenth-century for a tenant should be taken as an episode in the particular history of the site and there is no need to see it as an instance of the 'Great Rebuilding'.<sup>36</sup> It is clearly later than Hoskins' postulated dates (1570-1640) since the house belongs to the last quarter of the seventeenth-century. In many ways the whole notion of such a 'Great Rebuilding' does not seem easily applicable to Bedfordshire and is, moreover, in general need of thorough overhaul.<sup>37</sup> Individual studies of particular buildings such as the house at Mavourn Farm, hopefully, will demonstrate the need to relate the survey of individual buildings to the specific economic and social history of the locality. It can be done in summary fashion as herein; it may result in a more extended treatment as with the survey of Crowhill Farm, Bolnhurst,<sup>38</sup> but it enables any general thesis of building development to be related to the wider historical context.<sup>39</sup>



## ACKNOWLEDGEMENTS

The work on Mavourn Farm was facilitated by the kind permission of the then tenants, Mr and Mrs King. The moat and associated earthworks at Mavourn Farm were surveyed in two sessions, in 1981 and 1982, by members of the North Bedfordshire Archaeological Society, with the assistance of Stephen Coleman, Angela Simco, Robert White and John Wood of Bedfordshire County Council. Permission for this survey was kindly given by Mr and Mrs C. Shuker and Mr D. Pell.

Work on the tenorial history occupied the summer of 1973; a preliminary draft was completed in September 1973 and revised in November 1975. All documents cited are in the Bedfordshire County Record Office (cited herein as BCRO) and our best thanks are due to the then staff, in particular to Miss P.L. Bell, County Archivist for Bedfordshire, and Mr A.F. Cirket, whose fund of knowledge on the county seems inextinguishable.

## ABBREVIATIONS

BCRO Bedfordshire County Record Office, Bedford.

BHRS Publications of the Bedfordshire Historical Records Society.

## NOTES

- 1 D.H. Kennett and T.P. Smith, 'Crowhill Farm, Bolnhurst, Bedfordshire: a timber-framed building and its history', *Bed Arch J*, 12 (1977), 57-84. This contains background on the area.
- 2 Work has been done on the medieval topography, see D.H. Kennett, 'Domesday Book and Landscape History: some Bedfordshire estates identified', which suggests identifications for an earlier version of Kennett/Smith, 1977, Fig 2. Notes on a visual survey of the buildings of Bolnhurst have been lodged with the Conservation Section, Planning Department, Bedfordshire County Council.
- 3 BCRO documents FN 82-138, and other documents cited in tables 1 and 2.
- 4 Woodland is recorded as uncropped for over a century on a mortgage of 28 January 1807; BCRO, document FN 101.
- 5 *VCH* (Beds), vol 1, 1904, 306.
- 6 BCRO, MAT 7, 1847.
- 7 B. Wadmore, *The Earthworks of Bedfordshire*, 1920, 187-188.
- 8 Ann Smallridge, 'A Late Eighth-Century Disc from Mavourn Farm, Bolnhurst, Bedfordshire', *Bed Arch J*, 4, 1969, 13-15.
- 9 A. Mawer, F.M. Stenton (eds), *Place-Names of Bedfordshire and Huntingdonshire* (English Place-Names Society, vol III), 1920, 13.
- 10 Mawer/Stenton (ed), 1926, are presumably citing BCRO, document FN 84, a quitclaim which by its very nature implies the existence of other documents.
- 11 BCRO, document FN 82.
- 12 The possible descent is traced in D.H. Kennett, 'The Francklins and Bolnhurst: the tenorial history of the Bedfordshire estate', (typescript 1975; available BCRO).
- 13 BCRO, document FN 86.
- 14 F.A. Blaydes, *Visitations of Bedfordshire* (Harleian Society, 1884). The rise of the family is elaborated in Kennett, 'Francklins'; see also D.H. Kennett, *Portrait of Bedfordshire* (1978), 85-88.
- 15 BCRO, document FN 1063 (usually housed at Moot Hall, Elstow), with eighteenth-century transcript in BCRO, document FN 1248.
- 16 The nature of this illness has not been investigated. Apart from legal papers connected with the estate, it is not documented in the Francklin muniments. D.H.K. under-

stands that there is other material in the Public Record Office, London; he is unable to supply reference.

- 17 BCRO document FN 1000.
- 18 L. Marshall, 'The Rural Population of Bedfordshire, 1671-1921', *BHRS*, 16 (1937), 134.
- 19 Bolnhurst Parish Register, 1605-1812, printed as *Bedfordshire Parish Registers* 11C (1935). Kennett, 'Francklins'.
- 20 See references there cited.
- 21 BCRO, document AD 1147/29; also undated cutting in files of D.H.K. deriving from an issue of the *Beds Times* after 6 May 1944.
- 22 S.R. Jones and J.T. Smith, 'Chamfer-Stops: a Provisional Mode of Reference', *Vernacular Architecture*, 2, 1971, 14, 15.
- 23 Jones and Smith, 1971, 15.
- 24 A. Cox, *Survey of Bedfordshire: Brickmaking: a History and Gazetteer*, 1979, 101.
- 25 J.T. Smith, 'The Evolution of the English Peasant House to the Late Seventeenth-Century: the Evidence of Buildings', *JBAA*, 3rd series, 33, 1970, 138.
- 26 Smith, 1970, 138; D.H. Kennett and T.P. Smith, 'Crowhill Farm, Bolnhurst, Bedfordshire: a Timber-Framed Building and its History', *Beds Arch J*, 12, 1977, 57-84, esp 75-6.
- 27 N.W. Alcock, 'Timber-Framed Buildings in North Bedfordshire', *Beds Arch J*, 4, 1969, 48.
- 28 Alcock, 1969, 55-7; plan at 58.
- 29 Smith, 1970, 138. The type apparently not found in West Cambridgeshire, for which a classification scheme has been devised: Royal Commission on Historical Monuments, *An Inventory of . . . West Cambridgeshire*, 1968, xlii-li; nor is it present in North-East Cambridgeshire: RCHM, *An Inventory of . . . North-East Cambridgeshire*, 1972, xliii-xlvii. The type may perhaps best be considered a variant of West Cambridgeshire Type L.
- 30 Cf Smith, 1970, 136.
- 31 RCHM, 1972, xlix; cf T.P. Smith, 'A Timber-Framed Building in Cumberland Street, Luton', *Beds Arch J*, 8, 1973, 129 and 130 n 10; and J.M. Bailey, *Timber-Framed Buildings: a Study of . . . Bedfordshire and Adjoining Counties*, 1979, 5. C.A. Hewett, *The Development of Carpentry 1200-1700: an Essex Study*, 1969, 157-8, 184 gives a nicely dated example (1623) at Cressing Temple Granary, Essex; however, Hewett's general sequence for scarf-joints, most recently presented in C.A. Hewett, *English Historic Carpentry*, 1980, 263-71, needs caution, as urged by J.T. Smith, 'The Dating of Buildings: Problems and Fallacies', *Vernacular Architecture*, 3, 1972, 16-20; this need is underlined by the clearly seventeenth-century splayed scarfs at Mavourn, reported in the text.
- 32 T.P. Smith, 'Bedfordshire Timber-Framed Buildings - III', *Beds Magazine*, 134, 1980, 235-6.
- 33 Marshall, 1937.
- 34 Marshall, 1937, 134; BCRO, document FN 1000.
- 35 Information to D.H.K. and T.P.S. from Mr and Mrs King.
- 36 W.G. Hoskins, 'The Rebuilding of Rural England', *Past and Present* 4, 1953, 44-59; reprinted in W.G. Hoskins, *Provincial England*, 1965, 131-148.
- 37 See T.P. Smith, 'Bedfordshire Timber-Framed Buildings - I', *Beds Magazine*, no 132, 1980 144; cf Alcock, 1969, 59: 'With these houses [in Thurleigh] there is very little sign of a "housing revolution".' For the national situation see R. Machin, 'The Mechanism of the Pre-Industrial Building Cycle', *Vernacular Architecture* 8, 1977, 15-19.
- 38 Kennett/Smith, 1977.
- 39 Paper completed 24 December 1982; for approximate dates of individual contributions see the Introduction.



# Timber-Framed Porches to Bedfordshire Churches

TERENCE PAUL SMITH

## SUMMARY

Bedfordshire possesses four timber-framed church porches of medieval and post-medieval date. The uses to which they were put varied according to their pre- or post-Reformation date, but in construction they follow their normal tradition of Bedfordshire timber-framing as this is known from other studies.

This paper is dedicated, with affection, to the memory of Stuart Eborall Rigold (1919-1980), who encouraged and helped its author.

## PART ONE: INTRODUCTION

Timber-framed porches to churches occur with varying frequency in the counties of England.<sup>1</sup> Although Bedfordshire's contribution is meagre, they are worth study and record. What Cecil Hewett has written of the Essex examples may be applied, *mutatis mutandis*, to the Bedfordshire examples: they 'are complete buildings like one-roomed houses, with walls, fenestration, verge-boards and roof-frames all conforming to the general trends' within the county.<sup>2</sup> There are two principal types of timber-framed porches:<sup>3</sup> the open type, in which the side walls are pierced by a series of unglazed windows or openings, with or without arch-heads carved from boards; and the closed type, in which the side walls are solid, pierced at most by one or two small (often glazed) windows and sometimes by none at all. It has been plausibly suggested by Stuart Rigold<sup>4</sup> that the open-type were designed as marriage porches to provide shelter for clergy and bride and groom — most notably, perhaps, for the lord of the manor's daughter when she married. The open sides would ensure that the ceremony remained at least partly visible to those outside the porch. The medieval marriage ceremony took place partly at the church door.<sup>5</sup> The *Missale Sarum* has the rubric: *In primis statuatur vir et mulier ante ostium ecclesiae coram Deo, sacerdote, et populo, vir a dextris mulieribus, et mulier a sinistris viri.*<sup>6</sup> John Myrc's *Instructions for Parish Priests* directs:

Then lete hem [sc. the bride and groom] come and wytnes  
brynge  
To stonde by at here weddyng;  
So openlyche at the chyrche dore  
Let hem eyther wedde othere.<sup>7</sup>

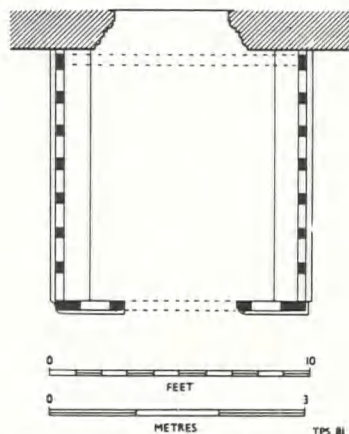


Fig 1 Flitwick, church of St Peter and St Paul: South Porch: Plan

And we are told of Chaucer's Wife of Bath that:

She was a worthy womman al hir lyve,  
Housebondes at chirche-dore she hadde fyve. . . .<sup>8</sup>

A French illustration of the late fourteenth century or early fifteenth century shows the bride and groom with the priest outside the church door and apparently (though not certainly) outside a porch.<sup>9</sup> Presumably the service took place *within* the porch only during inclement weather (*cf. ante ostium* in the *Missale Sarum*). A woodcut from *The arte or crafte to lyve well* shows a marriage ceremony taking place with, apparently, a building in the background.<sup>10</sup> According to a reference traced by Maskell the doorway of the church was used for other business connected with a marriage: 'Dower seems to have been made over to the bride, or settlement of it completed, at the door of the church before the marriage service began.'<sup>11</sup>

The closed or blind-sided porches, of course, could not serve a similar purpose. Rigold suggested<sup>12</sup> that most, if not all, the blind-sided timber-framed porches are of post-Reformation date; and certainly one would not want to suggest an earlier date for the closed porches in Bedfordshire or in neighbouring Cambridgeshire or Hertfordshire.<sup>13</sup> After the Reformation that part of the marriage service which had taken place at the church door



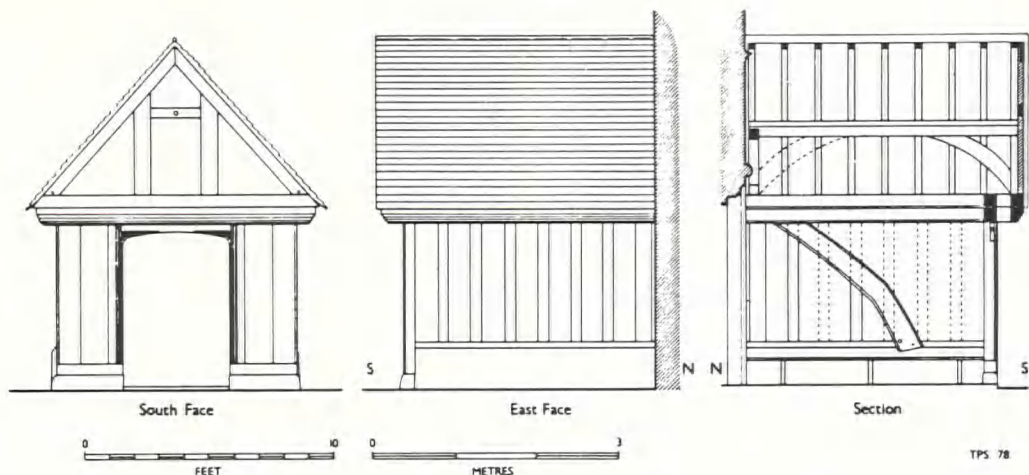


Fig 2 Flitwick, church of St Peter and St Paul; South Porch Elevations and Section

was discontinued, and the First Prayer Book of Edward VI (1549) pointedly directs that 'At the daye appointed for Solemnizacion of Matrimonie, the persones to be married shal come into the bodie of ye church, with theyr frendes and neighbours. And there the priest shal thus saye . . .' etc.<sup>14</sup>

## PART TWO: DISCUSSION

Of the Bedfordshire porches one (Salford) is certainly of the open type, one (Flitwick) is certainly of the closed type, whilst the other two are probably of the closed type also. It is interesting in connexion with what is said in Part One that the Salford open-type porch is the oldest and the only one to have a crown-post roof. The changeover from crown-post roofs to side-purlin roofs in timber-framed buildings seems to have occurred, in this area, in the period either side of 1500, and a number of buildings are now recorded which show both types in different parts of the building;<sup>15</sup> all these are dated to the very end of the Middle Ages. The porch of definite closed type at Flitwick has a roof of side-purlin construction; this has the purlins set in-pitch and notched into the collar of the inner truss. This is the usual type of post-medieval roof construction within the county.<sup>16</sup> Tilsworth, which is almost certainly of the closed type, also had a side-purlin roof of this sort, whilst Ravensden, again probably of closed type, has a somewhat characterless roof of collared rafter-couples without purlins.

Salford, as already indicated, is the oldest of the Bedfordshire porches, although the thirteenth-

century date suggested by Howard and Crossley applies only to the unstructural tie-beam which is clearly reset in the present building. The equilateral arch of the front face would be at home in a fourteenth-century context, as would the sturdy construction, though neither of these is decisive. On the other hand, the scantling of the crown-post braces, though they are not square in section, is large — especially that of the arch-braces to the collar-purlin. This may be taken to indicate a fairly early date;<sup>17</sup> on balance, a date in the fourteenth century seems most likely. Down-bracing to the tie-beam, as found at Salford, is well established as a characteristic at least in the northern half of the county, and may be due to dissemination along the Ouse Valley.<sup>18</sup>

Of some interest is the re-use of a thirteenth-century tie-beam in the present building; it is placed immediately in front of the inner-truss tie-beam and itself serves no structural purpose. Its date is beyond doubt since its lower arris is decorated with thirteenth-century dog-tooth ornament. Rigold has suggested that the beam was kept and re-used from an earlier building — probably a porch on the same site — because of some special significance that it had for the people of Salford.<sup>19</sup> This would seem to be borne out by the presence on the beam of some simple carvings or graffiti: a pentangle, perhaps a heart, and what appears to be a rosette. The pentangle was a well-known medieval Christian symbol, its five points or pentads being associated with the five wounds of Christ and the five joys of

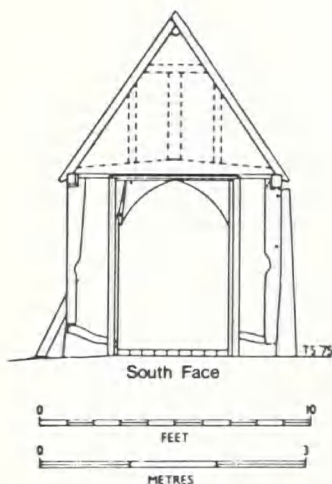


Fig 3 Ravensden: church of All Saints:  
South Porch South Face

Mary. As such it is important in the meaning of the fourteenth-century *Sir Gawain and the Green Knight*:

Then thay schewed hym the schelde, that was of schyr  
goulez  
With the pentangel depaynt of pure gold hwez.<sup>20</sup>

The presence of the pentangle in a *porch*, however, may look back to earlier, pre-Christian uses of the symbol, in particular as an apotropaic talisman intended to ward off evil, or the Devil in particular. As such it is preserved in the folk-song *Green Grow the Rushes O*: 'Five for the symbol at your door'.<sup>21</sup> This is not to say that some kind of pagan religion co-existed with Christianity, as some have supposed, but rather that, at a popular level, talismanic elements were taken up within Christianity itself. Hence the fifteenth-century *Medicina pro Morbo Caduco et le Fevr*, a conjuration against the hex which uses, *inter alia*, the Five Wounds of Christ, may have been unofficial so far as the Church was concerned, but it was no more pagan than was the use of bell, book, and candle:

In nomine Patris et Filii et Spiritus Sancti, Amen.  
What manere of Ivell thou be  
In Goddis name I coungere the.

I coungere the with woundes fyve  
That Iesus suffred be his lyve . . . (etc).<sup>22</sup>

The other symbols are less definite. If there really is a heart (rather than a conventional 'heraldic' symbol) then this would connect with medieval iconography of the heart of Mary.<sup>23</sup> Similarly, if the

third design really is a rosette then this would reflect the contemporary veneration of the Virgin Mary and her comparison to the rose.<sup>24</sup> The religious symbolism of the Salford emblems, which must be more than casual graffiti, would provide sufficient reason for keeping the beam and incorporating it in the present porch. If, as seems likely, it comes from an earlier porch on the same site then the symbolism would act as a reminder that the service was to take place *coram Deo*.

The side walls of the Salford porch have each five unglazed openings, the heads formed by the wall-plates without any arch-heads cut from boards which are a feature of some porches in Hertfordshire, Cambridgeshire, and elsewhere.<sup>25</sup> The side walls at Tilsworth are rendered and therefore unexaminable. Those of Flitwick are close-studded, a technique which, in Bedfordshire, is normally reserved for buildings of some quality, and then sometimes only on the principal face.<sup>26</sup> Presumably this is an indication that the Flitwick porch was regarded as of some importance within the community. At Ravensden the studs, now represented only by their peg-holes, were also closely set, being at about 18-inch intervals centre-to-centre. The use of close-studding in these buildings may probably be taken, in this area, to indicate a relatively late date, probably in the sixteenth century. This would be consistent with their being placed, because of their closed-sided construction, in the post-Reformation period.

The treatment of the front face also differs from porch to porch. None of the Bedfordshire examples now has openings on either side of the central archway, as in some other examples,<sup>27</sup> although their original presence cannot be firmly ruled out; and it is possible that the peg-holes in the now mutilated tie-beam at Tilsworth are connected with arch-head boards in its front face. In all cases the central opening is framed by door-posts which run the full height from ground-level to tie-beam, even where, as at Salford, other uprights are placed on half-height walls. Arch-heads to the central openings are formed by separate boards tenoned into the posts and tie-beams; at Tilsworth this has been altered, and the tie-beam cut through, but peg-holes indicate clearly enough that the original arrangement was the same as in the other porches. At Salford the arch is equilateral whilst at Ravensden it is only slightly less pointed. At Flitwick there is a very shallow three-centred arch, whilst the peg-holes at Tilsworth indicate that this too must have had a fairly shallow arch — of four- or three-centred



form. At Salford the panels above the tie-beam are left open, the dominant features being the central crown-post and its wide down-braces. In other cases the panels are infilled, although one cannot be certain that this is always a primary feature. At Tilsworth two queen-posts rise to a collar, above which is a single central strut; at Flitwick two studs rise from the tie-beam to the rafters with an horizontal timber running between them; at Ravensden (which is rendered and so has to be inspected from inside) there is a central and two side struts, the former rising to a collar.

In all cases where there is an inner truss (Tilsworth has none) there are arch-braces from the posts to the tie-beam. At Tilsworth the horizontals are embedded in the church wall rather than being supported by an inner truss. None of the Bedfordshire examples has an intermediate truss.

Jointing calls for no special comment. The timbers are too short to require scarfing whilst other joints are of common-place design: mortise-and-tenon joints where appropriate, with lapped joints for fixing collars to rafters. Rafter-heads are halved together. Where visible, the usual lap-dovetails are used for fixing the tie-beam to the wall-plates.

In order to accommodate the necessary mortises at their juncture with corner-posts and tie-beams the wall-plates in all cases project beyond the front face for a short distance. But the treatment of these projecting ends differs; at Salford the one original is chamfered on both lower arrises but is not pared; both plates have fairly substantial brackets rising to them from the corner-posts. In the other porches no such brackets are used. The ends of the plates are pared at Tilsworth, though the one original plate at Ravensden is not pared. At Flitwick the pairs of wall-plates are returned along the front face, so that no wall-plate ends as such are present.

Although some of the Salford timbers are plain-chamfered, Flitwick is the only one of the porches to exhibit mouldings. These include a three-quarter roll-moulding running up the outer angles of the corner-posts, a half-roll and stepped mouldings running up the door-posts, and a more complex moulding including half-rolls, hollow chamfers, and ogees, on the front-face fascia beam. In addition the porch has carved spandrels to the arch-head, the only instance of this amongst the Bedfordshire porches.

Only Salford shows rafter-holes at the feet of the rafters, just above wall-plate level. The purpose of these has been disputed;<sup>28</sup> but John McCann has convincingly argued that they were 'part of a

gauging system by which a perfectly aligned roof could be built on a pair of imperfectly aligned wall-plates'.<sup>29</sup> He posits a method, using a special gauge, for achieving this end.

### PART THREE: SCHEDULE

#### FLITWICK

*St Peter and St Paul*

South Porch

TL 029342

Figs 1 and 2

There is work of various periods in the church, which was drastically restored in 1858 and again (by Butterfield) in 1867. The south porch is set in front of a thirteenth-century doorway and is a fairly large structure of the closed type. It is set on dwarf walls of brick and local ironstone with timber sills. The front (S) face has large corner-posts, unjowelled, with three-quarter roll-mouldings at their outer arrises. The door-posts are moulded on their inner faces. Between them, at their heads, runs a plank carved to a very shallow three-centred arch with rosettes carved in the spandrels. There are two straight tie-beams set one above the other; the upper one is recent, and it is uncertain whether it replaces an original upper tie-beam. Above it is a pair of heavy queen-posts with a straight timber (not a collar) running between them at a high level.

The inner truss preserves its wall-posts but has been mutilated by having its tie-beam sawn through, leaving only the stumps in the side walls. The collar above, however, has three mortises in its soffit, indicating the former presence of a central and two queen-posts between tie-beam and collar.

The side walls are close-studded and have two wall-plates, one above the other; the upper plates are relatively recent timbers, but may replace originals in the same positions: the cut-through tie-beam of the inner truss would seem to indicate this. The east wall has, internally, a large carved brace fixed *onto* (not *into*) the wall: it is clearly not primary. Similarly, the functionally straight brace on the west wall is an added feature. A deep and heavily moulded fascia beam runs along both side walls and is returned along the front face. There are no windows in the side walls.

The roof is of side-purlin construction with the purlins set in-pitch. At the inner truss they are clasped between collar and rafters and set into notches in the upper face of the collar. Otherwise,

the rafter-couples, which are half-lapped at the apex, are without collars. A curved wind-brace survives in each slope at the outer (S) end, rising from rafter roof to purlin. Mortises in the rafters and purlins at the inner (N) end indicate the former presence of similar wind-braces at this end too. There are no barge-boards masking the verges.

The presence of a side-purlin roof and the closed nature of the porch indicate a fairly late date — that is, in the post-Reformation period. On the other hand, the use of close-studding and of well-curved wind-braces would seem to indicate a date not too long after the Reformation. A date in the later sixteenth century seems most likely.

## RAVENSDEN

### *All Saints*

#### South Porch

TL 078543

Fig 3

The complex history of this church has been revealed by archaeological excavation.<sup>30</sup> There is a crown-post roof. The porch stands against a doorway with a Norman tympanum set in a seventeenth-century brick wall. The porch itself is described laconically by Pevsner as 'of brick, probably late c17',<sup>31</sup> yet even a cursory glance shows timber door-posts and corner-posts as well as a tie-beam, and it is clear that the seventeenth-century brickwork is no more than a renewal of an earlier porch of timber-framing.

The front (S) face has corner-posts, the western one renewed but perhaps quite early — possibly of the time when the brick walling was built; the eastern post is primary and in poor condition. The wall-plates project slightly and that to the west — a renewed timber — is pared on the bottom and inner faces. Rough sill-beams at the foot may have been displaced during later repair work. The east door-post is renewed but that to the west is primary; it has a slight jowl at the top, into which is fixed, using a bare-faced tenon, the knee-piece which forms half the arch-head. There is a similar knee-piece (renewed) to the east door-post, and together they form a segmental-pointed arch-head. They are tenoned also into the tie-beam, only the lower portion of which is visible externally: the upper half is concealed by cement rendering, but is visible internally. Its upper face is slightly cambered. It carries one central and two queen-posts which rise to the high-set collar.

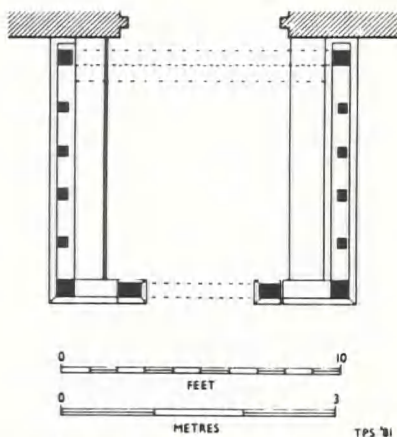


Fig 4 Salford: church of St Mary: North Porch Plan

The inner truss has a probably original uncambered tie-beam. The wall-posts (embedded in later walling) are also original, as is the western arch-brace, which is tenoned into both post and tie-beam. The eastern arch-brace is a replacement, using the original wall-post mortise but not the original tie-beam mortise, which has been blocked.

The original east wall-plate has peg-holes at 1 ft 6½ in intervals, doubtless for the studs of the original wall, which was thus fairly close-studded. Presumably the west wall was similar.

The roof has been much renewed, only two rafters appearing to be primary: they are fairly wavy timbers. A couple of collars may also be primary. The construction is of simple coupled rafters without side-purlins. A recent ridge-pole has been inserted, as have straight diagonally-set 'wind-braces'. The feet of the rafters have sprockets which may be original features re-used.

It is difficult to date this small and virtually featureless porch. A post-medieval date, but before the late seventeenth-century, seems likely, and the porch (*cf* Tilsforth) was probably a small example of the closed type.

## SALFORD

### *St Mary*

#### North Porch

SP 935391

Figs 4 and 5

The church is mostly of c.1300 though with some fairly drastic alterations carried out in 1867. Its timber-framed north porch is the largest, most



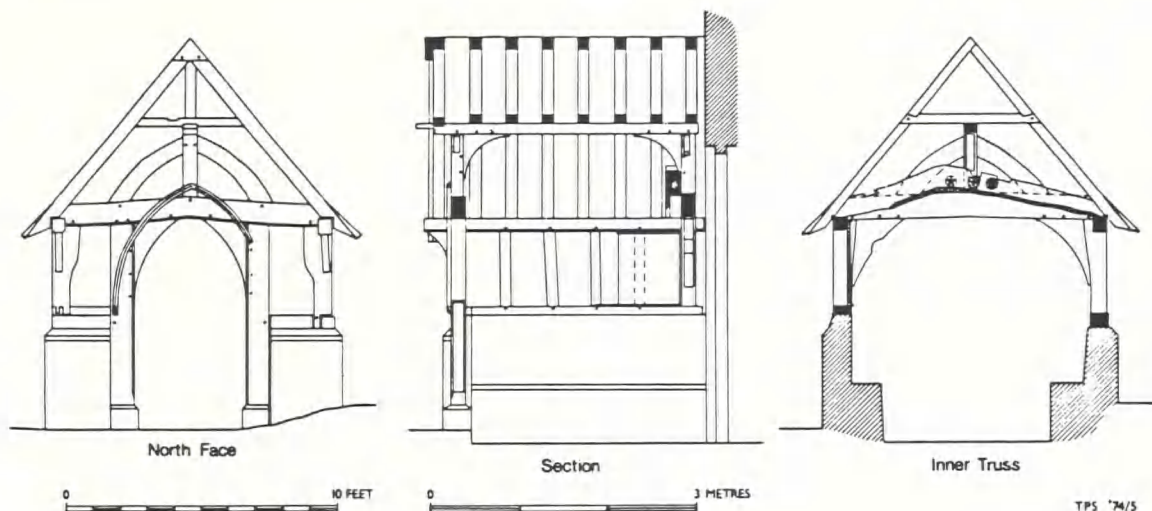


Fig 5 Salford: church of St Mary: North Porch  
North Face and Sections

impressive, and most interesting of the Bedfordshire examples. It is also the only instance within the county of the open type which, it is suggested in Part One, were used as 'marriage porches'. It is a one-bay structure on a low stone-built wall with integral benches. The front (N) face has fairly heavy door-posts with plain chamfers, the eastern post having a stepped run-out stop to its outer chamfer. The posts rise from dwarf walls lower than the main stone walls supporting the porch. Small timber spandrels tenoned and pegged into the posts and tie-beam form an equilateral arch, although they do not meet to form a point at the centre under the tie-beam. Following the line of the arch, and about 8 in beyond it, is an applied strip with shield-shaped stops, itself forming an equilateral arch. The corner-posts, which are jointed into the sills, have heavy jowls to take the wall-plates, which project about 10 in beyond the face with slightly curved brackets beneath. The tie-beam is only slightly cambered and has a plain chamfer along its lower arris. Centrally above the tie-beam is a short square crown-post supporting one end of the collar-purlin, which, like the wall-plates, projects well in advance of the wall-face. The crown-post is supported by a pair of well-curved tension-braces rising from the tie-beam. The collar here is slighter than others in the porch and is probably a replacement. Above it is a vertical strut rising to the apex. A solid arch-brace or bracket rises from the crown-post to the collar-purlin within the porch.

The inner truss is some 8 ft from the front truss

and is set  $4\frac{1}{2}$  in in front of the church wall. The posts are less heavily jowled than those of the front face, although once again the wall-plates project well (4 in) beyond them. Solid arch-braces, not forming an arch, rise to the straight tie-beam, which cuts across the top of the church doorway. A short square crown-post, again down-braced to the tie-beam, supports the collar-purlin, which in its turn supports the collar; the latter is lap-jointed with half-dovetails to the rafters. As at the other end, a solid arch-brace or bracket rises from the crown-post to the collar-purlin.

Set immediately in advance of this truss in the earlier tie-beam, carved with various designs whose significance is discussed in Part Two of this paper. It is fairly sharply cambered, although the original mid-point is set off-centre in the present arrangement. Altogether it is an awkward feature, and the reason for its inclusion is discussed above. It may be reliably dated to the thirteenth-century on the basis of the dog-tooth ornament carved on its lower outer arris.

The side walls are of short studs — four to each side — with no provision for infill panels. There can be no doubt that the spaces between the studs were intended to be open. The studs are pegged at top and bottom. The wall-plate on the east side is plain-chamfered along each lower arris. The west wall-plate is unchamfered, but is probably a replacement.

The roof, as previously noted, is of crown-post construction. There are eight pairs of rafters spaced at about 1 ft 4 in centre-to-centre. The collars are lap-

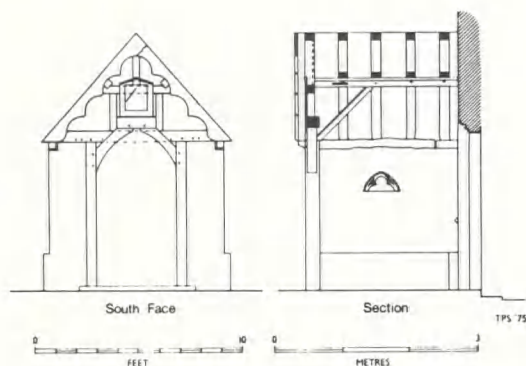


Fig 6 Tilsworth: church of All Saints: South Porch South Face and Section

joined with half-dovetails to the rafters, which are halved together at the apex. The feet of the rafters carry sprockets and also have rafter-holes just above the wall-plate level.

The porch is sturdily constructed. It must date from later than the re-used thirteenth-century tie-beam, and the shape of the front arch suggests a fourteenth-century date. There is nothing, however, on which firm dating may be based: the presence of a crown-post roof in this region could indicate any time up to c1500, although the large scantling of some of the roof members perhaps suggests an earlier date.

## TILSWORTH

### *All Saints*

#### South Porch

SP 975243

Fig 6

Much of the church is of thirteenth- and fourteenth-century date, with good crown-post roofs over both nave and chancel. The south porch is small and now has solid walls partly of recent brickwork and partly cement-rendered. The thin side walls and the projection of the wall-plates (which is not necessary if the plates are set over masonry walls) suggest an original timber-framed porch; it is possible that some timbers remain beneath the rendering. The front (S) face has door-posts rising from ground-level but these are renewed timbers. The peculiar arch-head is also recent and rises above the level of the straight tie-beam which has clearly been sawn through. Mortises in the tie-beam soffit, together with associated peg-holes, were clearly intended to take an original wooden arch-head (lower than the present one), proving that the door-posts too

replace earlier timbers. Peg-holes towards each end of the mutilated tie-beam presumably received the upper ends of timbers: either window-head boards of the sort familiar from other timber-framed porches or else braces of some kind. Above the tie-beam is a pair of short queen-posts rising to a collar with a king-stud above rising to the apex. The wall-plates' ends project about 4 in beyond the wall-face and are pared on the lower and inner faces. They support scallop barge-boards masking the verges.<sup>32</sup> A comparatively recent sun-dial board obscures some of the upper front face.

There is no inner truss, the wall-plates and purlins having their ends embedded in the fabric of the church. Nothing is known of the side walls. The west wall contains a reset trefoiled arch of stone, perhaps from a piscina, stoup, or other niche.

The roof is of side-purlin construction with the purlins set in-pitch. In the front face the purlins are clasped between the collar and the rafters and set in a notch in the upper face of the collar. The other collars, four in all, are placed *above* the purlins. Both purlins have mortises which make no sense in their present positions and these timbers must therefore be re-used. The rafters are widely spaced — about 1 ft 7 in centre-to-centre — and are halved together at the apex. On the west side is a straight functional wind-brace rising from wall-plate to purlin; this is not a primary feature.

There is no firm dating evidence, except that a side-purlin roof is not to be expected in this area, and in a building of this humble type, before c1500. The porch is a feeble affair compared with Salford, or Little Hadham, Herts, or even the smaller Hertfordshire porches at Stanstead Abbots and Hunsdon. A post-medieval date is likely and it is probably an example of a post-Reformation closed-type porch (*cf* Ravensden).



- 1 The late Stuart Rigold had been collecting data for many years on the subject. I am grateful for his encouragement to investigate the Bedfordshire, Cambridgeshire, and Hertfordshire examples. He provided me with several examples and was the source of ideas, both in correspondence and in informal discussion. It was therefore particularly sad to have to change the tenses of this note between manuscript and typescript, and the dedication of the paper is an inadequate attempt to express my gratitude. He was not, of course, responsible for any errors or infelicities in the present paper.
- 2 There is little in print on the subject: it was dealt with briefly in F.E. Howard and F.H. Crossley, *English Church Woodwork: a Study in Craftsmanship during the Mediaeval Period, AD 1250-1550*, 2nd ed, 1927, 60 sqq, and again in F.H. Crossley, *Timber Building in England from Early Times to the End of the Seventeenth-Century*, 1951, 68 sqq, but neither of these is adequate. (See also subsequent notes for further references.)
- 3 C.A. Hewett, *Church Carpentry: a Study Based on Essex Examples*, 1974, 69. Compared with the Essex porches — or some of those in Suffolk or Kent — the Bedfordshire examples are, as SER might have put it, 'no great shakes'.
- 4 This ignores those which are partly of stone and partly of timber, for example the stone-walled porch with full crucks at Conwy, Caernarfon (personal observation).
- 5 S.E. Rigold, in a paper read before the Royal Archaeological Institute, 1968, and in correspondence and discussion. Cf K.W.E. Gravett, *Timber and Brick Building in Kent*, 1971, 10, and T.P. Smith, 'Bedfordshire Timber-Framed Buildings — II', *Beds Magazine*, 133, 1980, 202.
- 6 Cf D. Rock, *The Church of Our Fathers as Seen in St Osmund's Rite for the Cathedral of Salisbury* . . . , new ed, in four vols, ed G.H. Hart and W.H. Frere, vol 4, 1904, 200.
- 7 Available in W. Maskell, *Monumenta Ritualia Ecclesiae Anglicanae: the occasional Offices of the Church of [sic] England according to the old use of Salisbury, the Prymer in English, and other prayers and forms* . . . , vol 1, 2nd ed, 1882, 50: *Ordo et faciendum Sponsalia*.
- 8 E. Peacock, ed, *Instructions for Parish Priests*, by John Myrc, EETS, OS 31, revised ed, 1902, 7, ll.204-7.
- 9 F.N. Robinson, ed, *The Works of Geoffrey Chaucer*, 2nd ed, 1957, 21b, ll.459-60. For a rare exception, with marriage taking place 'at the door of the chancel of the said church [viz Knaresborough] within the said church' in 1472 see Maskell, 1882, 50 and ref. therein.
- 10 BM Nero Eii, part ii, f217. Reproduced in H.S. Kingsford, *Illustrations of the Occasional Offices of the Church in the Middle Ages from Contemporary Sources*, Alcuin Club Collections, 24, 1921, 35, with accompanying description at 34.
- 11 f xlvi; reproduced in Kingsford, 1921, 37, with accompanying description at 36.
- 12 Maskell, 1882, 50n. For other uses of church porches see M.D. Anderson, *History and Imagery in British Churches*, 1971, 71-8.
- 13 Personal communication and discussion.
- 14 The timber-framed porches of the latter two counties are the subject of studies, similar to the present one, currently being prepared by the writer.
- 15 Available in D. Harrison, introd, *The First and Second Prayer Books of Edward VI*, 1968 (replacing ed by E.C.C. Gibson, 1910, with same pagination), 252: 'The Forme of Solemnization of Matrimonie', third rubric; the Second Prayer Book (1552) keeps these words, with slight variations of spelling: Harrison, 1968, 410; and they also occur, with some additions and some modifications of spelling, in the present *Book of Common Prayer*.
- 16 Cf J.M. Bailey, *Timber-Framed Buildings: a Study of . . . Bedfordshire and Adjoining Counties*, 1979, 4; T.P. Smith, 'A Demolished Timber-Framed Building at Luton', *Beds Arch J*, 7, 1972, 77 n. 10; T.P. Smith, 'Bedfordshire Timber-Framed Buildings — V', *Beds Magazine*, 136, 1981, 324-5. For examples: N.W. Alcock, 'Timber-Framed Buildings in North Bedfordshire', *Beds Arch J*, 4, 1969, 44-6; D.H. Kennett and T.P. Smith, 'Crowhill Farm, Bolnhurst, Bedfordshire: a Timber-Framed Building and its History', *Beds Arch J*, 12, 1977, 57-84; and J.M. Bailey, 'Two Hall and Crossing Buildings in East Bedfordshire', *Beds Arch J*, 14, 1980, 77-82.
- 17 Cf Alcock, 1969, 46-7; Bailey, 1979, 3; Bailey, 1980, 86; D.H. Kennett and T.P. Smith, 'A Timber-Framed House in Sundon Road, Harlington, Bedfordshire', *Beds Arch J*, 14, 1980, 102.
- 18 Cf E. Mercer, *English Vernacular Houses*, 1975, 94; and for locally relevant material see G. Bailey and B. Hutton, *Crown Post Roofs in Hertfordshire*, 1966, 6.
- 19 Alcock, 1969, 43; for local examples: Bailey, 1980, 80; Kennett and Smith, 1977, 67. None of the Hertfordshire porches has down-braces, and the type seems to be uncommon, though not unknown, in that county: Bailey and Hutton, 1966, *passim*.
- 20 S.E. Rigold, personal communication and discussion.
- 21 J.R.R. Tolkien and E.V. Gordon, ed, *Sir Gawain and the Green Knight*, 2nd ed, 1967, 18, ll.619-20; there is a valuable discussion in J.A. Burrow, *A Reading of Sir Gawain and the Green Knight*, 1966, 41-51. The meaning is explicit in the poem itself:  

And alle his afaunce vpon folde watz in the fyue woundez  
 That Cryst ka3t on the croys, as the crede tellez;  
 . . . . .  
 That alle his fornes he feng at the fyue joyez  
 That the hende heuen-quene had of hir chylde. . . .  
 (ll.642-3, 646-7).

The five joys of Mary were a common theme in lyrical poetry: e.g. R.T. Davies, *Medieval English Lyrics: a Critical Anthology*, 1963, 78. The pentangle, as connected with Mary, may also have evoked echoes of her description as 'Star of the Sea', e.g. Davies, 1963, 53: 'Of on that is so fair and bright, / *Velud maris stella* . . .'; and perhaps also of the five letters of the Latin MARIA. Pritchard gives some discussion of the pentangle, and the related hexagram (most familiar now as the Magen David on the flag of Israel), and she comments that 'both the pentagram and the hexagram are common graffiti', and 'the designs are well established, with a long tradition behind them, and . . . are not irresponsible drawings of no account': V. Pritchard, *English Medieval Graffiti*, 1967, 87-8. Cf also H. Child and D. Colles, *Christian Symbolism Ancient and Modern*, 1971, 44-5.
- 22 Cf J. Speirs, *Medieval English Poetry: the Non-Chaucerian Tradition*, 1957, 230 and n 20. Speirs also notes the appearance of the symbol in the Tarot Pack and in the traditional sword-dance, when the swords are knit together pentangle-fashion. So far as his analysis of *Sir Gawain* is concerned, however, he overstates the importance of the pre-Christian element, and pays insufficient attention (half of one short sentence!) to its Christianised significance, which is put beyond doubt by the text of the poem itself. Cf A.C. Spearing, *The Gawain Poet — a Critical Study*, 1970, 175, and indeed the whole of his chapter 5. The Gawain-poet was a sophisticated and courtly writer — his description of Sir Bertilak's castle at ll.785-802 reflects the

- vision of the ideal castle, depicted by the Limbourg brothers in their manuscript illuminations, and realised in, e.g., Lord Cromwell's towerhouse at Tattershall, Lincs. At a more popular level the magical use of the pentangle continued throughout and beyond the Middle Ages, as is indicated by the fact that such use had to be condemned by various Christian writers even as late as the seventeenth-century: e.g. the Jesuit Athanasius Kircher, *Arithmologia*, Rome, 1665: *voces horrendae vna mixtis sacris nominibus, nodo quem Salomonis vocant, adnexo*: quoted in Tolkien and Gordon, 1967, 93, n 623.
- 22 T. Silverstein, ed, *Medieval English Lyrics*, 1971, 103. Such a poem, with Christian references in every line, is impossible to fit into the extravagant claims of the late Margaret Murray and others for the survival, even down to the fourteenth century, of the 'Old Religion' alongside Christianity: the paganism posited was essentially Devil worship, and it is difficult to understand how a 'conjure' against 'Iv'ell' could be supportive of the Devil! See M.A. Murray, *The Witch-Cult in Western Europe*, 1921, and *The God of the Witches*, 1931; also *The Divine King in England*, 1954. To some extent Miss Murray took her cue from J. Grimm, *Deutsche Mythologie*, 1835. For critical discussion and full references see K. Thomas, *Religion and the Decline of Magic*, 1978 ed, 614sq.; for an equally effective refutation: G. Parrinder, *Witchcraft: European and African*, 1963 ed, *passim*, but especially 105 sqq.
  - 23 Child and Colles, 1971, 244. The Feast of the Immaculate Heart of Mary, on the other hand, was not instituted until 1648: D. Attwater, *A Dictionary of Mary*, 1957, 107.
  - 24 For the veneration of Mary in the Middle Ages see E. Power, *Medieval Women*, ed M.M. Postan, 1975, 19-20; also J. Sumption, *Pilgrimage: an Image of Medieval Religion*, 1975, 49-50; Anderson, 1971, 129 sqq. For the symbolism: Child and Colles, 1971, 243. The theme is familiar in Middle English lyrics and their Latin models and prototypes, e.g. the macaronic 'Levedy, flowr of alle thing./ *Rosa sine spina*,/Thu bere Jesu, Hevene King./ *Gratia divina*': Davies, 1963, 53; the tenderly beautiful, 'There is no rose of swich vertu', as Spiers remarks, reaches through its symbolism to 'moments of what might be called metaphysical vision': 'For in this rose contained was/Hevene and erthe in litel space./ *Res miranda*': Spiers, 1957, 74; and cf his whole discussion, 64-74. The symbolism of the number five (as in the pentangle) and that of the rose are brought together in, e.g., John Lydgate's 'As a Mydsomer Rose', *ll.113 sqq.* 'It was the Roose of the bloody feeld./Roose of Iericho that greuh in Beedlem:/The five Roosys portrayed in the sheeld,/Splayed in the baneer at Ierusalem./The sonne was clips and dirk in euery rem/Whan Christ Ihesu five wellys lyst vncloose/Toward Paradys, callied the rede strem./Of whos five woundys prent in your hert a roos.' J. Norton-Smith, ed, *John Lydgate: Poems*, 1966, 24.
  - 25 E.g. Little Hadham, Herts, which is also of interest for its construction: T.P. Smith, 'Unusual Timber-Frame Construction in the Porch of Little Hadham Church, Hertfordshire', *Vernacular Archit*, 7, 1976, 30-33. Cambridgeshire examples include Basingbourn and Little Eversham: for the latter see Royal Commission on Historical Monuments, *An Inventory of . . . West Cambridgeshire*, 1968, 164. Cf some of the Essex examples illustrated in Hewett, 1974, 69-78.
  - 26 T.P. Smith, 'Bedfordshire Timber-Framed Buildings - IV', *Beds Magazine*, 135, 1980, 278-9. For the national situation see Mercer, 1975, 118-20, where the connexion between close-studding and relative wealth is well brought out. The closed-type porches in Hertfordshire also have, or had, close-studded sides; they are at Ippollits and Tewin; Impington, Cambs is of similar type.
  - 27 E.g. Hunsdon, Ippollits, Little Hadham, Stanstead Abbots, Herts.
  - 28 R.T. Mason, *Framed Buildings of England*, nd but 1973, 56-7; F.W.B. Charles, 'Scotches, Lever Sockets and Rafter Holes', *Vernacular Archit*, 5, 1974, 21-4; K.W.E. Gravett, 'Rafter Holes', Letter to the Editor, *Vernacular Archit*, 8, 1977, 840.
  - 29 J. McCann, 'The Purpose of Rafter Holes', *Vernacular Archit*, 9, 1978, 26-31; this ref: 28; also J. McCann, 'A Gauge for the Alignment of Medieval Roofs', in S. McGrail, ed, *Woodworking Techniques before AD1500*, BAR International Series 129, 1982, 357-65. Now supported by examples reported in T.P. Smith, 'Three Medieval Timber-Framed Church Porches in Kent: Fawkham, Kemsing and Shoreham', *Arch. Cant.*, 101, 1984, 137-63.
  - 30 D.N. Hall *et al*, 'Excavations inside Ravensden Church, 1969', *Beds Arch J*, 6, 1971, 41-53.
  - 31 N. Pevsner, *The Buildings of England: Bedfordshire and . . . Huntingdon . . .*, 1968, 136.
  - 32 This is perhaps the commonest barge-board design for timber-framed porches throughout the country. Paper submitted May 1984.

*The Bedfordshire Archaeological Council is indebted to Bedford Museum, the North Bedfordshire Borough Council, and the South Bedfordshire Archaeological Society for grants towards the costs of this paper.*



# A Timber-Framed House and Barn in Wilstead Road, Elstow

TERENCE PAUL SMITH

## SUMMARY

*Recent renovation work at this house and its adjoining barn has enabled its structure to be studied. It is of post-medieval type, probably of the sixteenth- or early seventeenth-century, and is of lobby entrance plan. There is some indication of alteration to the flooring, whilst later — eighteenth- or nineteenth-century — revamping resulted in a cottage of typical Bedfordshire appearance.*

## DESCRIPTION

The house, 200 Wilstead Road, Elstow, is situated on the west side of the Luton-Bedford road (A6),<sup>1</sup> towards the southern end of Elstow village (NGR: TL051468). It stands parallel to the road, its long axis placed roughly north-south. From the exterior it appears as of one build with the adjoining property to the south: the side (east and west) walls are continuous, as is the thatched roof. To all appearances the buildings are a conjoined pair — ‘semi-detached’ would perhaps be an estate agent’s anachronism — of late eighteenth- or even early nineteenth-century estate cottages: the walls are (1982) somewhat unpleasantly pebbledashed, as are — or were — many of the Whitbread-owned houses in Elstow, and the fenestration is entirely consistent with such a dating.

Internal examination, however, shows this to be a false or surface impression. The building is clearly an originally free-standing structure: the apparent party-wall between this and the adjoining property is in fact an original end-wall: some 18 inches further south is the entirely separate end-frame of the southern property. The side-purlins are not continuous across the gap, whilst the full complement of studs and the flush setting of the panel plastering indicate an external wall. At some time the ends of the gap have been bricked up and the roof has been carried continuously across both properties.<sup>2</sup>

The building, then, is a two-storey, three-bay timber-framed structure of box frame construction on a rubble-stone sill (Fig 1). There is a large stack with accompanying lobby entrance at the northern end of the central bay, backed against ‘truss’ B-B. The stack is of rubble limestone, well laid, with

ashlar around the fireplace, which has a stout timber bressummer and is of inglenook type. At its eastern end the mouth of an oven opens from the back of the inglenook, though most of the oven is no longer extant (see Fig 1); the oven, unlike the rest of the stack, is of red brick, as is the blocking within ‘truss’ B-B where the former projecting portion of the oven has been demolished.<sup>3</sup> The stack narrows by a couple of steps or offsets, each section also being tapered. The very top, above the roof-line, is of brick, undoubtedly a renewal. Somewhat surprisingly, the entrance is to the west — away from the road. The present ‘front door’, at the southern end of the east wall of the same bay, is almost certainly a later insertion, presumably contemporary with the later inserted windows: at this time the original main entrance was relegated to its present status of ‘back door’.

The timber-framing throughout is sturdy, and familiar enough in post-medieval Bedfordshire. The corner- and principal-posts are well jowelled and carry the wall-plates and tie-beams in ‘normal assembly’. The joint between these members is of bare-faced lap-dovetail type with the post tenon set to one side.<sup>4</sup> The tie-beams are cambered, though without the subtlety of outline sometimes found in medieval structures. The wall-plates are fairly irregular timbers. A number of original studs have been located, together with a number of tension-braces in both storeys: those at first-floor level in the north-west angle are particularly well preserved. The braces provide both lateral and longitudinal stability in the outer walls. The intermediate ‘trusses’, however, do not possess lateral arch-braces — nor is there any evidence for their former presence: these would have restricted head-room and were probably omitted for that reason. The braces are mostly curved. It is noteworthy that they are set in the *inner* wall-faces, so that they would not be visible from the exterior: this arrangement has been encountered elsewhere in Bedfordshire and in neighbouring counties.<sup>5</sup> There is a mortise at ground-floor level in the western post of ‘truss’ A-A, though there is no corresponding passing-trench in the stud closest to the post; the significance of this is

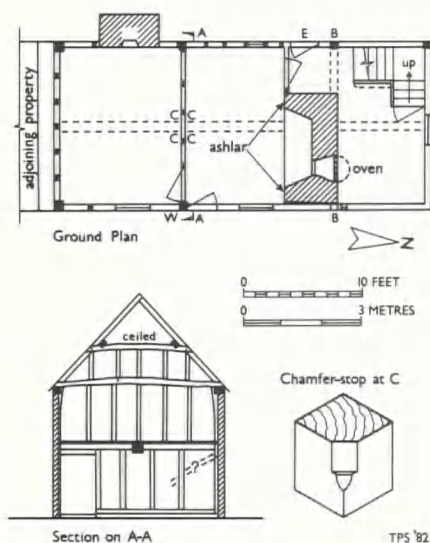


Fig 1 No 200, Wilstead Road, Elstow  
Plan and Section

E: Original Entrance  
W: Early First Floor Window

discussed below. It is not at present possible to establish whether the post at the eastern end of the same frame contains a similar mortise. The studs are of good scantling, and are fairly widely spaced, giving a wide-panel framing characteristic of the area.<sup>6</sup>

The floor is supported by mid-rails in the side and end walls — a short portion is exposed externally at the rear (west) — and by stout longitudinal principal-joists along the centre of the building. These are plain-chamfered; either side of 'truss' A-A (at C in Fig 1) are chamfer-stops of Jones and Smith Type A2; elsewhere chamfer-stops — where present at all — are of simple run-out type (A1).<sup>7</sup> Most of the first-floor boards in the southern bay are very wide oak planks; elsewhere there has been much renewal, in the central bay especially.

The roof is of doubled-framed, collared side-purlin construction, the purlins being clasped between the principal collars and principal rafters. These collars are lap-jointed (though not dove-tailed) to the principal rafters and are quite substantial timbers. Their upper faces have notches in which the purlins are housed, in the normal Bedfordshire fashion.<sup>8</sup> The intermediate 'trusses' (A-A, B-B) have queen-posts from tie-beam to collar, whilst the end-trusses have a full comple-

ment of studs, including a pair above the collar. The common rafters have slighter collars, tenoned into them; the purlins are not housed in notches in these collars. There are a number of almost straight wind-braces in the roof-plane, from principal rafter up to purlin. The roof is at present ceiled at collar-level.<sup>9</sup>

The present stair is L-shaped, set in the north-west angle. It is of fairly recent (nineteenth-century, probably) construction. Some boarding in the re-entrant angle, in the first floor, possibly indicates an originally different aperture for the stair. The present construction is therefore probably in the approximate position of the original stair, although this may well have been of different form: a steeper, almost ladder-like stair, perhaps.

One original window (now blocked) has been located, in the north-east angle of the southern bay at first-floor level (at W in Fig 1). It is small and squarish, the wall-plate forming its straight head. One diagonally set mullion is preserved *in situ*; another is set square, but is probably the original mullion twisted through 45°.

Only one scarf-joint — in the western wall-plate — has so far been found, and this is of edge-halved type with bridled butts and two face-pegs.<sup>10</sup>

The panel infills are of wattle-and-daub, plastered, except in the end 'trusses' where lath-and-plaster is used. The intermediate trusses are studded and infilled,<sup>11</sup> so that the bay-spaces are also individual rooms.

A few yards to the north of the house is a one-bay timber-framed barn, clad with wide-plank clapboarding and, like the house itself, with a thatched roof. In general, the framing is similar to that of the house, with a clasped side-purlin roof and wall-frame with wide-spaced studs, curved tension-braces internally set, and a mid-rail — though of course it is unfloored. Only one, straight wind-brace is preserved in the roof, although the mortises for the three missing braces are visible. The two pairs of principal rafters are old, and probably primary, but the common rafters have all been renewed in recent years. The framing of the north 'truss' differs from that of the other walls in that (i) the tension-braces are longer and of the straight, purely functional variety, and (ii) the braces do not pass full-length studs but rather have quasi-studs in two sections above and below them; these sections do not in most cases 'pair up'.

## DISCUSSION

The building is clearly of post-medieval type with no evidence of earlier work or of an original open hall.



Doubtless it has always been of more or less its present form: two storeys with 'central' stack with lobby entrance and a stair in the north-west angle. There is, however, evidence for some slight alteration on the ground-floor. Specifically, the A2 chamfer-stops on either side of 'truss' A-A are peculiar in view of the fact that they do not occur at the other end of each beam. It seems likely, in fact, that these stops originally occurred at the north and south ends of a single main joist running the full length of the two southern bays — that is, from the south end-wall to the chimney stack. Perhaps a weakness at 'truss' A-A led to the subsequent sawing-through of this beam; the two portions were then turned through 180°, the sawn-off ends being, respectively, tenoned into the south wall and embedded into the stack. If this *was* so then 'truss' A-A must originally have had its subsidiary joist in two portions, tenoned into the principal joist; after the alteration a single joist replaced the two portions of the primary build, in order to take the two ends of the main joist. It seems likely, too, that the ground-floor section of 'truss' A-A was originally studded rather than 'open', despite the continuous main joist running through both bays: the mortise in the western post would seem to belong to a tension-brace from this post down to the sill; such a brace would hardly have been placed 'free', and so a studded wall must be envisaged here.<sup>12</sup> The present studs show no signs of a passing-trench for such a brace, but these may well have been renewed, probably at the time of the alteration.<sup>13</sup> The primary doorway between the two chambers may have been centrally placed, where the long joist ran through.

A date sometime in the sixteenth- or early seventeenth-century would best fit the structure. Certainly it post-dates the demise of the open-hall type house and the advent of the side-purlin roof — both probably occurring, in this area, around 1500.<sup>14</sup> The tie-beams no longer possess the earlier elegance, but the framing throughout is sturdy enough, especially in the principal roof 'trusses'. Even the subsidiary timbers such as the studs are of good scantling. The wind-braces are tending towards a functional straightness, but this is a development which occurred quite early — certainly by c1562/3 at the schoolhouse at Alleyne's Grammar School, Stevenage, Herts.<sup>15</sup> The scarf-joint in the wall-plate if of a type recognised, quite widely, as of sixteenth- or early seventeenth-century date, whilst a similar date would apply to the joint between the posts, wall-plates, and tie-beams.<sup>16</sup>

Likewise, the retention of lap-jointing of the collars to the principal rafters would suggest a relatively early date — mortise-and-tenon joints (as used for the common-collar here) were later virtually ubiquitous. Again a stone-built stack would seem to pre-date the widespread use of brick for chimney stacks during the seventeenth-century.<sup>17</sup> In construction it is comparable with the central stone stack at Crowhill Farm, Bolnhurst, inserted into an earlier building during the sixteenth-century.<sup>18</sup> Both the form of the one early window and the A2 chamfer-stops<sup>19</sup> are consistent with such a dating, though neither on its own could prove it.

Elstow is not prohibitively far from sources of limestone for building, although it is questionable whether it would normally have been transported hither for a building of rather humble status, such as this is — it is certainly no Crowhill.<sup>20</sup> It seems quite probable that the ashlar around the fireplace, and perhaps the rubble-stone too, was obtained from the ruins of Elstow Abbey. If this be accepted, then a *terminus post quem* of 1539, when demolition of the abbey started, is provided.<sup>21</sup> No firmer date can be derived, however, since dismantling of the claustral buildings proceeded gradually during the construction of the Hillersden Mansion from c1625, and this was in its turn mostly dismantled after 1781, thus re-releasing former abbey building material.

Of some interest is the orientation of the building *away from* the road and towards its fields. These, presumably, provided the livelihood of the occupants, and it is to the fields that they looked. In this respect the building is *rural* and does not belong with the other, quasi-urban, timber-framed buildings in the centre of Elstow village.

There can be little doubt, from the similarity of framing technique, that the barn dates from approximately the same time as the house. The framing of the north 'truss' (though not its principal members), however, is degenerate and of a type well recognised, both in Bedfordshire and elsewhere, as of late date.<sup>22</sup> Clearly the framing was placed here in the eighteenth- or even the nineteenth-century. This may represent either (i) renewal of the primary end-wall — indicating more rapid deterioration of the north-facing timbers — or possibly (ii) the truncation of a once longer (?two-bay) barn to one of single-bay length and concomitant infilling of an originally intermediate 'truss'. Unless there has been subsequent alteration in land boundaries, however, this second possibility is ruled out: the north 'truss' of the barn is only two or three feet from the present boundary fence.<sup>23, 24</sup>



# ACKNOWLEDGEMENT

I am most grateful to Mark and Des Radford for inviting me into their new house and allowing me to make a thorough investigation.

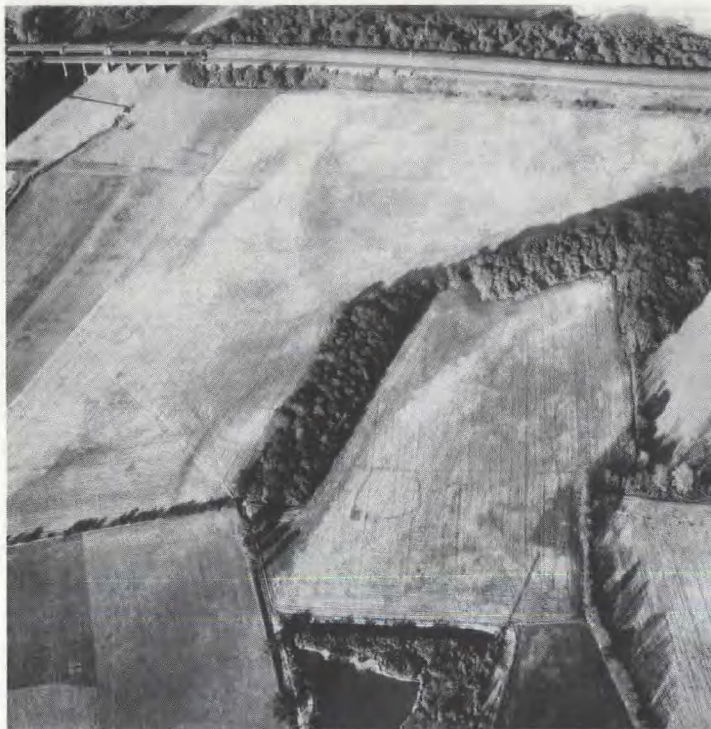
# NOTES

- 1 At time of writing (1982) a new by-pass, which will supersede the present A6 as the main road, is in course of construction.
- 2 There is local evidence (*ex inf* M. and D. Radford) for the roofs of the two buildings being separate some years ago; the walls, however, had already been joined by that time. The southern property is itself a timber-framed building, later than that which forms the subject of this paper: it is probably seventeenth-century.
- 3 Until recently there was a later fireplace and grate inserted in the large primary fireplace. There is no fireplace at first-floor level.
- 4 The joint-type is illustrated in C.A. Hewett, *The Development of Carpentry 1200-1700: an Essex Study*, Newton Abbot, 1969, 191; C.A. Hewett, *English Historic Carpentry*, London and Chichester, 1980, 274, where it is noted that the offset tenon is often known as a 'teazle tenon', 'for unknown reasons'; T.P. Smith, 'A Timber-Framed Building in Cumberland Street, Luton', *Beds Arch J*, 8, 1973a, 128.
- 5 Cf T.P. Smith, 'Bedfordshire Timber-Framed Buildings - IV', *Beds Magazine*, 17, 135, 1980a, 280; T.P. Smith, 'The Chantry House, Tempsford', *Beds Arch J*, 8, 1973b, 124; J.M. Bailey, *Timber-Framed Buildings . . . in Bedfordshire and Adjoining Counties*, Dunstable, 1979, 7; A. Gibson, 'Some Timber Framed Buildings in East Herts and their Dating', *Herts Past and Present*, 11, 1971, 5.
- 6 Smith, 1980a, 281-2; a number of examples are illustrated in Bailey, 1979, *passim*, and there are numerous references to published examples in D.H. Kennett and T.P. Smith, 'Crowhill Farm, Bolnhurst, Bedfordshire: A Timber-Framed Building and its History', *Beds Arch J*, 12, 1977, 83, n 85.
- 7 S.R. Jones and J.T. Smith, 'Chamfer-Stops: a Provisional Mode of References', *Vernacular Archit*, 2, 1971, 12-15.
- 8 T.P. Smith, 'Bedfordshire Timber-Framed Buildings - V', *Beds Magazine*, 17, 136, 1981, 323-4; Bailey, 1979, 3; cf also Kennett and Smith, 1977, 73, with refs to published examples at 83, n 104.
- 9 1982; in course of removal at time of writing.
- 10 The type is illustrated in Hewett, 1969, 183, and Hewett, 1980, 267-8, and in Smith, 1981, 326, with discussion. Bedfordshire scarf types are usefully displayed in Bailey, 1979, 5.
- 11 At ground-floor level the stonework of the back of the fireplace takes the place of infilling in 'truss' B-B.
- 12 It might be argued, in addition, that the main joist would need support at about its mid-point; on the other hand, it is a sturdy beam (9 by 11 inches) and should be capable of spanning the 19 feet involved; the distance is no greater than that covered by the inserted floor-joists across the former hall at Crowhill: Kennett and Smith, 1977, 68, Fig 6.

- 13 This could also explain why the ground-floor studs do not 'range' with those of the first floor (Fig 1), though it needs to be remembered that such 'staggering' would not be evident in the standing building, however striking it may be in a drawn section.
- 14 The demise of the open hall: T.P. Smith, 'Bedfordshire Timber-Framed Buildings - II', *Beds Magazine*, 17, 133, 1980b, 208-9. Side-purlin roof: Smith, 1981, 323-4; T.P. Smith, 'A Demolished Timber-Framed Building at Luton', *Beds Arch J*, 7, 1972, 77 with n 10; K.W.E. Gravett, 'Smaller Houses under the Tudors - a Period of Transition', *Proc Royal Institute of Gt Britain*, 43, 1970, 161-9.
- 15 T.P. Smith, 'A Sixteenth-Century Schoolhouse at Alleyne's Grammar School', *Herts Arch*, 3, 1973, 110-119.
- 16 Hewett, 1969, 183, 191; Hewett, 1980, 267-8, 274; Smith, 1981, 326; Bailey, 1979, 5; Kennett and Smith, 1977, 73-4, 76; D.H. Kennett and T.P. Smith, 'A Timber-Framed House in Sundon Road, Harlington, Bedfordshire', *Beds Arch J*, 14, 1980, 101, 102. For the general sequence of scarf-joints see the works of Hewett mentioned above, together with his pioneer paper, 'Structural Carpentry in Medieval Essex', *Med Arch*, 6-7, 1962-3, 240-71; also Royal Commission on Historical Monuments (England), *An Inventory of . . . North-East Cambridgeshire*, London, 1972, xlvii, and S.E. Rigold, 'Some Major Kentish Timber Barns', *Arch Cant*, 81, 1966, 5; also F.E. Brown, 'Aisled Timber Barns in East Kent', *Vernacular Architecture*, 7, 1976, 36, 37, reprinted in J. Wade ed., *Traditional Kent Buildings*, 1, 1980, 22, 23. But see also J.T. Smith, 'The Dating of Buildings: Problems and Fallacies', *Vernacular Architecture*, 3, 1972, 16-20.
- 17 Cf S.E. Rigold, 'Elstow Moot Hall', in *Beds CC, The Moot Hall, Elstow*, Bedford, 1969, 5; Kennett and Smith, 1980, 101, 102. For the general context of brick building in the county see A. Cox, *Survey of Bedfordshire: Brickmaking, a History and Gazetteer*, Bedford, 1979, 8 *sqq*.
- 18 Kennett and Smith, 1977, 73.
- 19 Jones and Smith, 1971, 14-15.
- 20 Kennett and Smith, 1977, 57-84; the size of the whole house at Elstow is almost exactly that of the end-wing at Crowhill.
- 21 D. Knowles and R.N. Hadcock, *Medieval Religious Houses: England and Wales*, London, 1971 edition, 258; D. Baker, 'Excavations at Elstow Abbey, Bedfordshire, 1966-68, Second Interim Report', *Beds Arch J*, 4, 1969, 27-8, 39-40.
- 22 N.W. Alcock, 'Timber-Framed Buildings in North Bedfordshire', *Beds Arch J*, 4, 1969, 59; Smith, 1970a, 282; Kennett and Smith, 1980, 100-101, 102. Good general discussion of late framing techniques in E. Mercer, *English Vernacular Houses*, London, 1975, 125-6.
- 23 Subsequent alterations include the insertion of a fireplace within the larger inglenook fireplace originally built, the addition of a further fireplace and brick stack at the southern end of the west wall, and the complete alteration of the fenestration.
- 24 Paper completed November 1982.

*The Bedfordshire Archaeological Council is indebted to Bedford Museum, and the North Bedfordshire Borough Council, for a grant towards the costs of this paper.*





a

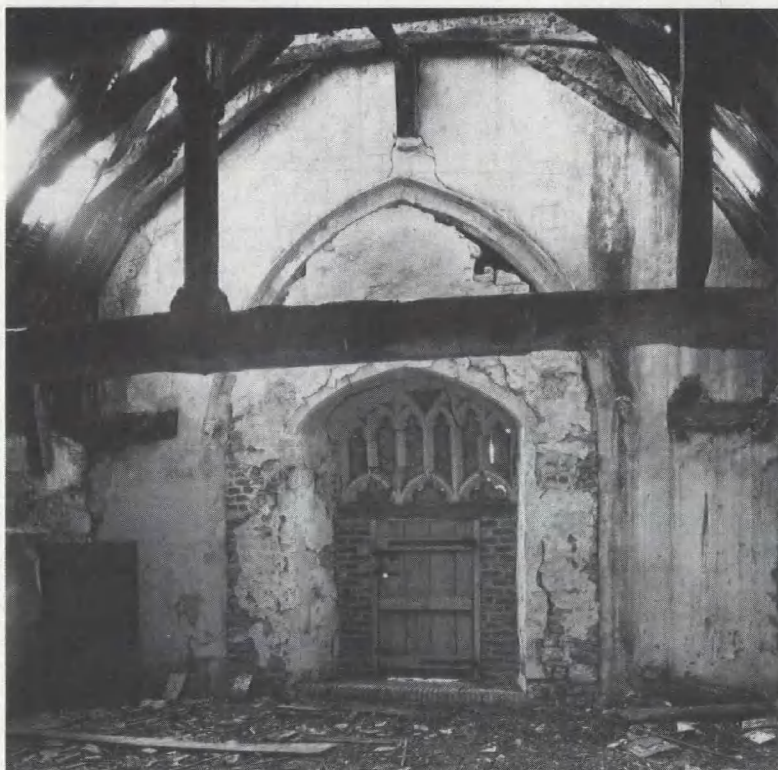


b

Plate 1 a Cropmarks showing double ring ditch at Radwell, looking north-east  
b Cropmarks at Willington, showing sites 1, 2 and 6, looking south

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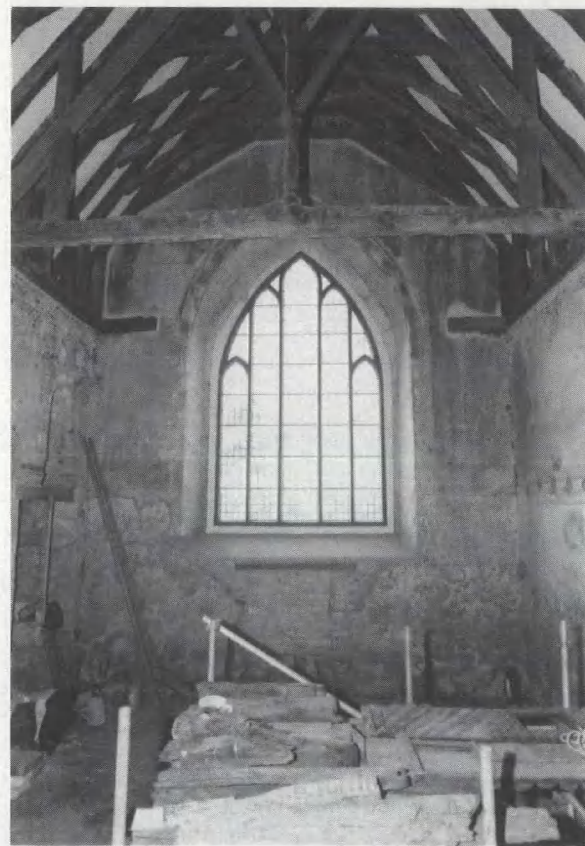
RADWELL  
RING DITCH  
WILLINGTON  
EXCAVATIONS



a

Plate 2 a Bushmead Priory, refectory: west wall and window in 1958  
b Bushmead Priory, refectory: west wall and window

Photo: R.C.H.M.: Crown Copyright

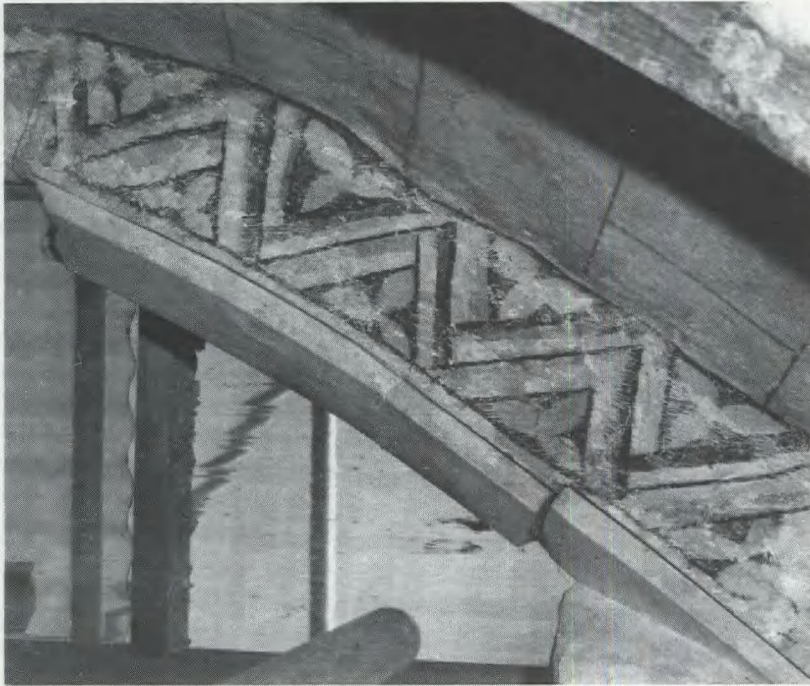


b





a



b

Plate 3 a Bushmead Priory, refectory: painting at east end of north wall  
b Bushmead Priory, refectory: detail of bent riband border on  
outer order of west window

Photo: R.C.H.M.: Crown Copyright

**BUSHMEAD PRIORY  
WALL PAINTINGS**



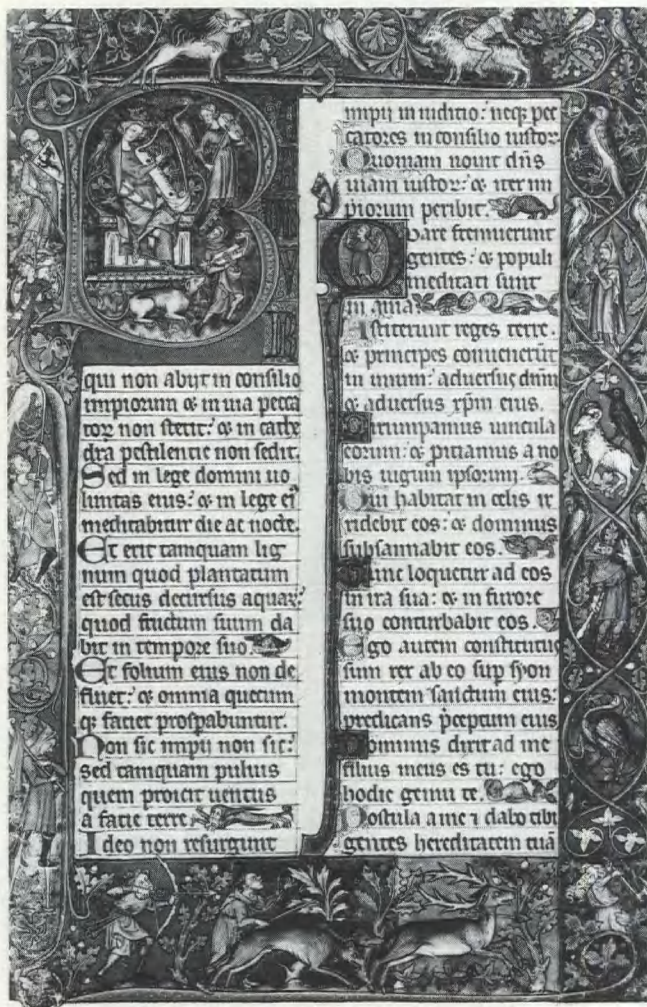
a



b

**BUSHMEAD PRIORY  
WALL PAINTINGS**





a

b

- Plate 4 a Bushmead Priory, refectory: detail of bird at base of border on south side of west wall  
b Bushmead Priory, refectory: detail of hooded man at base of border on north side of west wall

Photos: R.C.H.M.: Crown Copyright

- Plate 5 a Peterborough Psalter: Beatus Page  
b Ormesby Psalter: detail of border

Photo: a Copyright Bibliothèque Royale Albert Ier, Bruxelles

Photo: b Courtesy Bodleian Library, Oxford

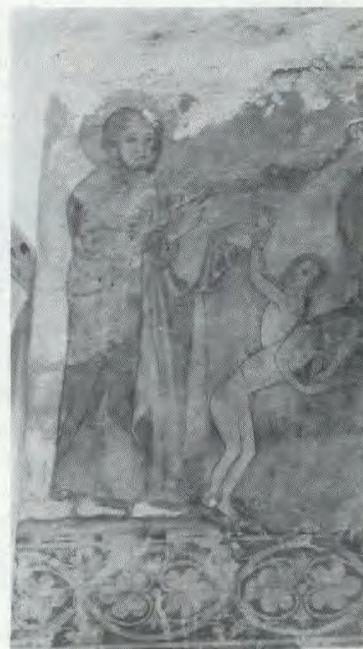
## BUSHMEAD PRIORY WALL PAINTINGS



a



b



c

Plate 6 a Bushmead Priory, refectory, north wall: Creation of Eve  
b St Omer Psalter: detail of border, Adam and Eve scenes  
c Easby, North Yorks, wall painting: Creation of Eve

Photo: a Copyright David Park

Photo: b reproduced courtesy British Library Board

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## BUSHMEAD PRIORY WALL PAINTINGS





a



b

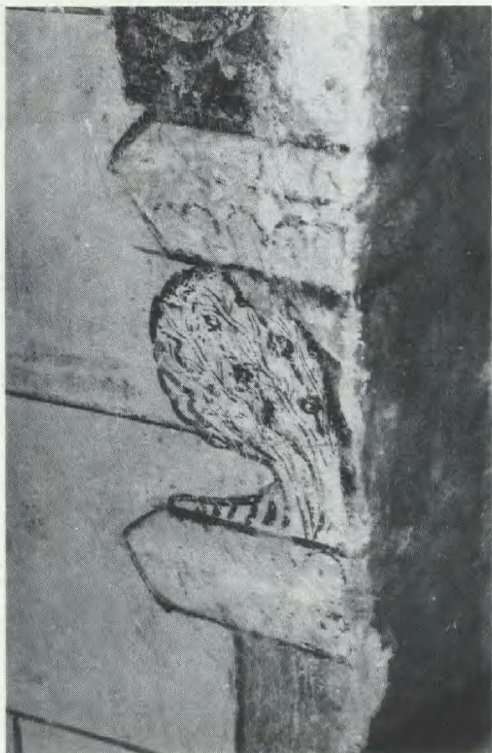


c

Plate 7 a Bushmead Priory, refectory, north wall: Creation of Adam  
 b Bushmead Priory, refectory, north wall: God Resting  
 c Wells Cathedral, west front: Creation of Adam

Photos: a and b Copyright David Park  
 Photo: c courtesy Courtauld Institute of Art, London

**BUSHMEAD PRIORY  
 WALL PAINTINGS**



a



b

Plate 8    a Bushmead Priory, refectory: painted capital on north jamb of west window  
           b Bushmead Priory, refectory: detail of foliate scrollwork on soffit of inner order of west window  
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**BUSHMEAD PRIORY  
 WALL PAINTINGS**



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