



EXCAVATIONS AT
REDCASTLE FURZE,
THETFORD, 1988-9

East Anglian Archaeology

Field Archaeology Division, Norfolk Museums Service 1995

EAST ANGLIAN ARCHAEOLOGY

Excavations at Redcastle Furze, Thetford, 1988–9

by Phil Andrews

with contributions from
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Cover:

Excavation at Redcastle Furze in progress, facing west. Structure 6 adjacent
to the street lies in the foreground, Red Castle is beyond the limit of excava-
tion in the background.

Contents

List of Contents	v	Structure 6	69
List of Plates	vi	Yard	74
List of Figures	vi	Detached Kitchen	74
List of Tables	viii	Structure 7	77
Contents of Microfiche	viii	Features 2019 and 2020	78
Contributors	ix	Pit 1989	78
Acknowledgments	ix	Structure 8	81
General Introduction	xi	Discussion	82
Chapter 1. Introduction		Chapter 3. The Finds	
I. Summary	1	I. Introduction, by Alexandra Little	87
II. The site	1	II. Coins and Jettons, by Marion Archibald	87
III. Geology	1	III. Non-ferrous Metal Objects	90
IV. Excavation Methods	3	IV. Iron Objects	90
V. Site Phasing	3	Metalworking Tools	90
Chapter 2. The Excavations		Textile Manufacturing and Clothworking Tools	90
I. Period 0 – Prehistoric	7	Leatherworking Tools	90
II. Period I – Roman	7	Agricultural Tools	93
Structure 1	7	Knives	93
Ditches	7	Building Ironwork and Fittings	96
Pits	7	Household Ironwork	96
Other Features	9	Buckles	96
Discussion	9	Weapons	96
III. Period II – Early Saxon	11	Fishing Hook	97
Sunken-Featured Buildings	11	Horse Furniture, with a contribution by	
Discussion	19	Blanche Ellis	97
Ditches	21	Other Objects	97
Pits	21	V. Metalworking Evidence, by	
Post-holes	22	Phil Andrews	97
General Discussion	22	VI. Stone Objects	98
IV. Period III – Middle Saxon	24	Hones	98
Discussion	25	Querns	98
V. Period IV1 – Late Saxon	27	Spindle-whorls	98
Ditches	27	Loomweights	98
Pits	32	Moulds	98
Discussion	32	Miscellaneous Worked Stone	98
VI. Period IV2 – Late Saxon	33	The Flint	98
The Street	33	VII. The Glass	99
The Structures	33	VIII. Ceramic Objects	100
Ditches	38	Spindle-whorls	100
Enclosure A	38	Loomweights	100
Pits	42	Tile	100
Burials	44	Brick	100
VII. Period IV3 – Late Saxon/Early Medieval	45	Fired Clay and Daub	101
The Street	45	IX. The Pottery	101
The Structures	45	Introduction	101
Structure 5	46	Roman	101
Ditches	46	Early Saxon	101
Pits	48	Middle Saxon	101
VIII. Period IV – General Discussion	54	Thetford Ware	103
The Street System	56	Stamford Ware	104
IX. Period V – Early Medieval	58	Shelly Wares	105
The Street	60	Grimston Coarse Wares	105
Ditches	60	Early Medieval Wares	106
Pits	64	Local Medieval Unglazed Coarse Wares	107
Oven 390	64	Medieval Imports	107
Discussion	65	Medieval Glazed Wares	107
X. Period VI – Early Medieval	66	Late Medieval Transitional Wares	108
Discussion	66	Stonewares	108
XI. Period VII – Medieval	69	Post-Medieval Wares	108
		Unidentified Sherds	109
		Quantities of Fabric Types	109

	Presence of Main Fabrics within each Period and Phase	109		Chapter 4. Zoological and Botanical Evidence	
	The Site Sequence	110	I.	Human Bones, by Jacqueline I. McKinley	120
	Discussion	110	II.	Animal Bones, by Tristan Wilson	121
	The Pottery Catalogue	111	III.	Fish Bones, by Rebecca Nicholson	128
X.	Antler and Bone Objects	116	IV.	Molluscs	131
	Combs	116	V.	Plant Macrofossils, by Peter Murphy	131
	Needles and Pins	116	VI.	Parasitological Investigations, by Rebecca Nicholson	135
	Double-ended Implements	116			
	Spindle-whorl	116		Chapter 5. Conclusion	137
	Toggle	116			
	Spoon	116		Appendix I	140
	Flute, by Graeme Lawson	116		Bibliography	141
XI.	Textile, by E. Crowfoot with a contribution by H.M. Appleyard	116		Index	144
				Microfiche	

List of Plates

Pl. I	SFB 915, looking north	11	Pl. VI	Pig burial 1690, looking west	73
Pl. II	SFB 951, looking south	11	Pl. VII	Structure 7, west end, malting kiln 2020 and stone-lined pit 1989, looking south-west	77
Pl. III	Central southern area of site, ditch 1224 under excavation in foreground, looking south	27	Pl. VIII	Stone-lined pit 1989, looking north	78
Pl. IV	Street surface 1618, later ditch 1303 to right, looking south-east	33	Pl. IX	Anglo-Saxon and later coins (numbers refer to catalogue nos.). Scale 1:1	88
Pl. V	Structure 6 and walled yard, looking north-east	71			

List of Figures

Fig. 1	Location Map	x	Fig. 22	Plan Period IV features	28
Fig. 2	Map of Thetford	xii	Fig. 23	Plan Period IV1 ditches	29
Fig. 3	Key to plan and section conventions	2	Fig. 24	Sections ditches (Period IV1)	30
Fig. 4	Plan all features	5	Fig. 25	Sections ditches (Period IV1)	31
Fig. 5	Plan Period I features	6	Fig. 26	Section pit (Period IV1)	32
Fig. 6	Plan Structure 1 (Period I)	7	Fig. 27	Section street (Period IV2)	34
Fig. 7	Sections ditches and pits (Period I)	8	Fig. 28	Plan Structure 2 (Period IV2)	35
Fig. 8	Plan pit 1272 (Period I)	9	Fig. 29	Plan Structure 3 (Period IV2)	36
Fig. 9	Plan pit 170/172 (Period I)	9	Fig. 30	Plan Structure 4 (Period IV2)	37
Fig. 10	Map of Thetford: Iron Age and Roman topography	10	Fig. 31	Sections ditches (Period IV2)	39
Fig. 11	Plan Period II and Period III features	12	Fig. 32	Plans Enclosure A (Period IV2)	40
Fig. 12	Plans and sections SFBs 915 and 1528 (Period II)	13	Fig. 33	Sections ditches Enclosure A (Period IV2)	41
Fig. 13	Plans and sections SFBs 951 and 1599 (Period II)	14	Fig. 34	Sections pits (Period IV2)	43
Fig. 14	Plans and sections SFBs 1938 and 2098 (Period II)	15	Fig. 35	Plan Burials 961 and 964 (Period IV2)	44
Fig. 15	Plans and sections SFBs 1299, 1965 and 2125 (Period II)	18	Fig. 36	Sections gullies (Period IV3)	46
Fig. 16	Sections ditches and pits (Period II)	20	Fig. 37	Plan and section Structure 5 (Period IV3)	47
Fig. 17	Sections gullies (Period II)	21	Fig. 38	Plan ditches Enclosure A (Period IV3)	48
Fig. 18	Sections pits (Period II)	23	Fig. 39	Sections ditches Enclosure A (Period IV3)	49
Fig. 19	Plan ditches (Period III)	25	Fig. 40	Sections pits (Period IV3)	50
Fig. 20	Sections ditches (Period III)	26	Fig. 41	Sections pits (Period IV3)	51
Fig. 21	Map of Thetford: location of Middle-Saxon settlement	27	Fig. 42	Plan pit 741 (Period IV3)	53
			Fig. 43	Plan pit 1324 (Period IV3)	53

Fig. 44	Map of Thetford: postulated Late Saxon street system	57	Fig. 78	Stone objects: limestone roof tile	100
Fig. 45	Plan Period V and Period VI features	59	Fig. 79	Ceramic objects: spindle-whorl	100
Fig. 46	Plans Enclosures B and C (Period V)	60	Fig. 80	Ceramic objects: loomweights	100
Fig. 47	Sections ditches Enclosure B (Period V)	61	Fig. 81	Pottery seriograph	102
Fig. 48	Sections ditches Enclosure C (Period V)	62	Fig. 82	Pottery. Roman Coarsewares, Early Saxon Wares, Thetford Wares, Late Saxon Wares – other, Stamford Ware, Shelly/St Neot's-type Wares	112
Fig. 49	Sections ditches (Period V)	63	Fig. 83	Pottery. Shelly/St Neot's-type Wares and Early Medieval/Medieval Wares	113
Fig. 50	Sections pits (Period V)	64	Fig. 84	Pottery. Early Medieval/Medieval Wares and Medieval Unglazed	114
Fig. 51	Plan and section oven 390 (Period V)	65	Fig. 85	Pottery. Medieval Unglazed Coarse Wares, Grimston Ware and Late Medieval Transitional Ware	115
Fig. 52	Sections ditches (Period VI)	67	Fig. 86	Bone and antler combs	117
Fig. 53	Location plan Red Castle excavations	68	Fig. 87	Bone objects	118
Fig. 54	Plan Period VII features	70	Fig. 88	Animal bone. Percentage indicators, Period II	123
Fig. 55	Plan Structure 6 (Period VII)	72	Fig. 89	Animal bone. Percentage non-indicators, Period II	123
Fig. 56	Plan pig burial 1690 (Period VII)	73	Fig. 90	Age distribution of sheep/goat jaws, Period II	124
Fig. 57	Plan Structure 6 Detached Kitchen (Period VII)	74	Fig. 91	Animal bone. Percentage indicators, Period III	124
Fig. 58	Sections Structure 6 (Period VII)	75	Fig. 92	Animal bone. Percentage non-indicators, Period III	124
Fig. 59	Sections pits (Period VII)	76	Fig. 93	Animal bone. Percentage indicators, Period IV2	124
Fig. 60	Plan Structure 7 (Period VII)	77	Fig. 94	Animal bone. Percentage non-indicators, Period IV2	124
Fig. 61	Plans and Sections feature 2019 and malting kiln 2020 (Period VII)	79	Fig. 95	Animal bone. Percentage indicators, Period IV3	125
Fig. 62	Sections Structure 7 (Period VII)	80	Fig. 96	Animal bone. Percentage non-indicators, Period IV3	125
Fig. 63	Plan Structure 8 (Period VII)	81	Fig. 97	Age distribution of sheep/goat jaws, Period IV3	126
Fig. 64	Plan Structure 6 structural sequence (Period VII)	83	Fig. 98	Animal bone. Percentage indicators, Period VII	126
Fig. 65	Map of Thetford: medieval topography	86	Fig. 99	Animal bone. Percentage non-indicators, Period VII	126
Fig. 66	Copper alloy objects	91	Fig. 100	Age distribution of sheep/goat jaws, Period VII	126
Fig. 67	Copper alloy objects	92	Fig. 101	Cow skeletal element indications by period	127
Fig. 68	Iron objects: metalworking tools, textile manufacturing and clothworking tools, leatherworking tools	93	Fig. 102	Sheep/goat skeletal element indicators by period	127
Fig. 69	Iron objects: agricultural tools	93			
Fig. 70	Iron objects: knives	94			
Fig. 71	Iron objects: building ironwork and fittings, household ironwork, buckles	95			
Fig. 72	Iron objects: weapons	96			
Fig. 73	Iron objects: horse furniture	97			
Fig. 74	Iron objects: horse furniture	97			
Fig. 75	Stone objects: hone	98			
Fig. 76	Stone objects: chalk loomweights	99			
Fig. 77	Stone objects: ingot mould	98			

List of Tables

Table 1	Flint: categories by period and context (microfiche)	Table 19	Animal bone: Period IV3. Miscellaneous (microfiche)	
Table 2	Animal bone: Period I. Indicators, non-indicators and avian (microfiche)	Table 20	Animal bone: Period IV3. Avian (microfiche)	
Table 3	Animal bone: Period II. Indicators (microfiche)	Table 21	Animal bone: Period VII. Indicators (microfiche)	
Table 4	Animal bone: Period II. Non-indicators (1) (microfiche)	Table 22	Animal bone: Period VII. Non-indicators (1) (microfiche)	
Table 5	Animal bone: Period II. Non-indicators (2) (microfiche)	Table 23	Animal bone: Period VII. Non-indicators (2) (microfiche)	
Table 6	Animal bone: Period II. Miscellaneous species (microfiche)	Table 24	Animal bone: Period VII. Miscellaneous species (microfiche)	
Table 7	Animal bone: Period II. Avian (microfiche)	Table 25	Animal bone: Period VII. Avian (microfiche)	
Table 8	Animal bone: Period III. Indicators (microfiche)	Table 26	Animal bone: cattle epiphyseal fusion (microfiche)	
Table 9	Animal bone: Period III. Non-indicators (microfiche)	Table 27	Animal bone: sheep/goat epiphyseal fusion (microfiche)	
Table 10	Animal bone: Period III. Avian (microfiche)	Table 28	Animal bone: pig epiphyseal fusion (microfiche)	
Table 11	Animal bone: Period IV2. Indicators (microfiche)	Table 29	Animal bone: pathological material (microfiche)	
Table 12	Animal bone: Period IV2. Non-indicators (1) (microfiche)	Table 30	Animal bone: miscellaneous butchery (microfiche)	
Table 13	Animal bone: Period IV2. Non-indicators (2) (microfiche)	Table 31	Animal bone: ratios of proximal to distal humerus and tibia	128
Table 14	Animal bone: Period IV2. Miscellaneous (microfiche)	Table 32	Animal bone: ratios of meat-bearing to non-meat bearing skeletal elements for cow and sheep/goat	128
Table 15	Animal bone: Period IV2. Avian (microfiche)	Table 33	Details of the fish remains	129
Table 16	Animal bone: Period IV3. Indicators (microfiche)	Table 34	Plant macrofossils from Period II (Early Saxon) contexts	132
Table 17	Animal bone: Period IV3. Non-indicators (1) (microfiche)	Table 35	Macrofossils from other contexts	134
Table 18	Animal bone: Period IV3. Non-indicators (2) (microfiche)	Table 36	Plant macrofossils from malting kiln	134
		Table 37	Parasites: sample descriptions	135
		Table 38	Measurements of <i>Trichuris</i> ova	135

Contents of Microfiche

1:A.1	Table of Contents	1:C.9–11	Brick and tile
1:A.2–6	Non-ferrous small finds	1:C.12	Animal bone: abbreviations used in tables
1:A.7–14	Ferrous small finds	1:C.13–14	Animal bone tables
1:B.1–14	Ferrous small finds	1:D.1–14	Animal bone tables
1:C.1–4	Ferrous small finds	1:E.1–13	Animal bone tables
1:C.5–7	Worked stone	1:F.1–6	Bone musical instrument
1:C.8	Flint		

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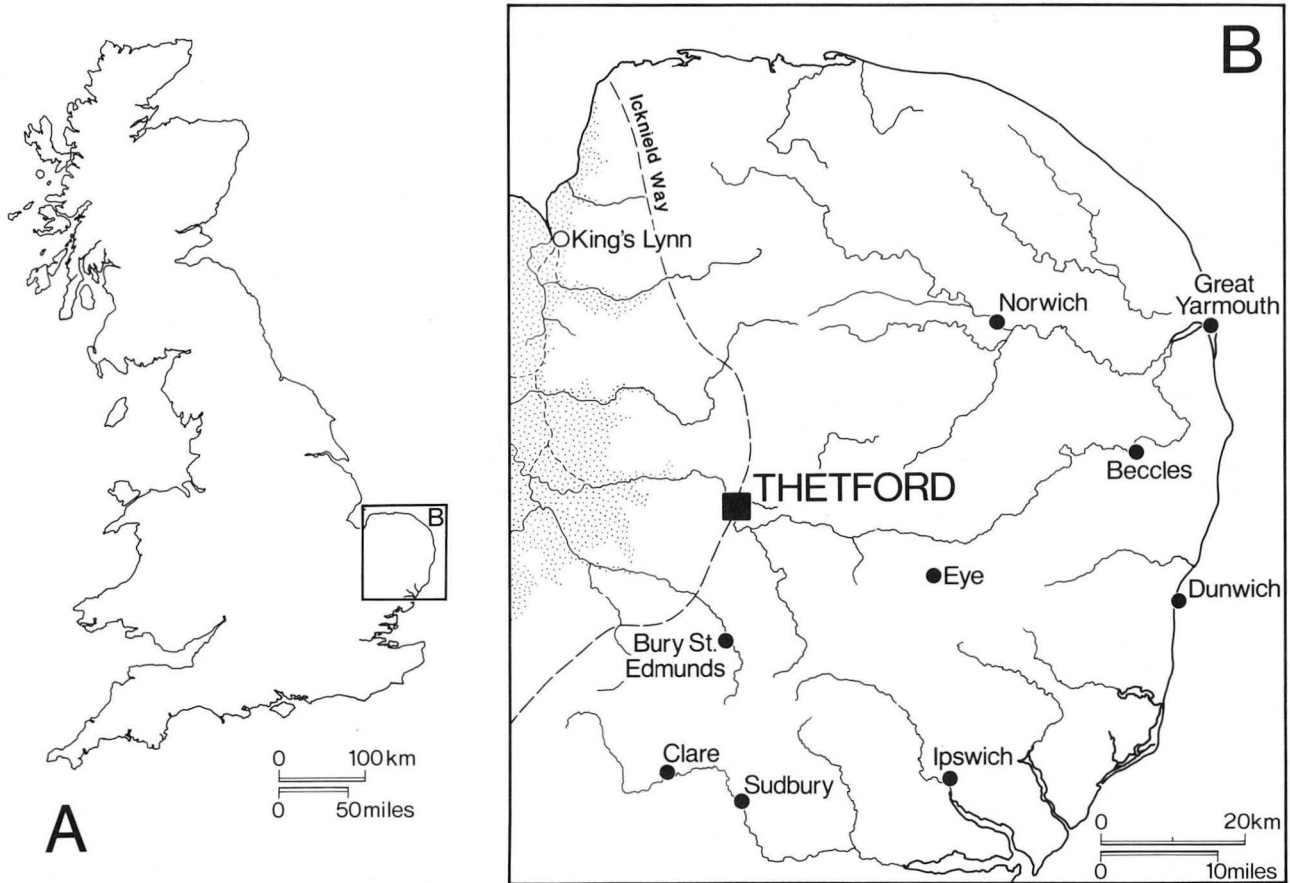


Figure 1 Location maps.

General Introduction

Thetford lies in the extreme south-west of Norfolk at a fordable point at the confluence of the rivers Thet and Little Ouse (Fig.1). The Icknield Way crossed the rivers here, and the development of Thetford owes much to its location at the junction of these important water and land routes. These provided access to the Fens, the Wash, and the North Sea, as well as to inland areas of what is now Norfolk and Suffolk.

The earliest evidence for major occupation in the area is at Thetford Castle where there is an Iron Age fort constructed in the fifth century BC (Green and Clarke 1963), and also just to the north of the present town at Fison Way where there was an important religious or ceremonial centre in use from the Late Iron Age to the first century AD, and again in the fourth century (Gregory 1992).

Early Saxon occupation appears to have been concentrated around a fordable point on the south bank of the river, approximately 1.5km to the east of the Icknield Way crossing, in the area of Red Castle (Knocker 1967; Dallas 1993). Early Saxon inhumations have been found south of the river at the site of St Margaret's church (Dunmore with Carr 1976, 5) and north of the river at Brunel Way (Penn forthcoming).

Middle Saxon settlement lay mainly to the west of Red Castle (Knocker 1967), but little is known at present about the nature and extent of occupation. However, documentary references indicate that Thetford was already an important centre by 870, when it provided a winter base for the Vikings (Whitlock 1961, 46).

Throughout the tenth and much of the eleventh centuries Thetford developed into a major Anglo-Danish town so that by *Domesday*, population estimates placed it amongst the six most important towns in England. The northern and southern defensive circuits together enclosed a large area of approximately sixty hectares, and there is also likely to have been suburban development outside these defences. Thetford had a mint at least as early as the tenth century, and by 1042 it was one of nine English boroughs where six or more moneys were at work (Stenton 1947, 529). At least ten of the twenty churches recorded in the thirteenth century were pre-Conquest foundations (Davison 1993), and for a brief period in the late eleventh century Thetford was the seat of a bishopric.

During the late eleventh and twelfth centuries, Thetford underwent a rapid decline after which occupation was largely restricted to the north bank of the river. There is evidence for limited medieval settlement near to Red Castle, along the south bank of the river, but this area

remained largely open ground until housing development commenced early in the twentieth century.

No major archaeological investigations were carried out in Thetford until 1948 when Group-Captain G.M. Knocker began work which he continued until 1960 (Knocker and Hughes 1950a and b; Dunning 1949; Knocker 1967; Rogerson and Dallas 1984). Between 1964 and 1970 B.K. Davison investigated an area of three acres (1.2 hectares) south of Brandon Road, and carried out further excavations at two other sites south of the river (Davison 1967). Together, these three sites represent a campaign of excavations of national, and perhaps international importance for the understanding of Late Saxon towns (Dallas 1993). Several small excavations have taken place at various times in Thetford during the past thirty-five years, both south and north of the river (Mackay 1957; Green and Clarke 1963, Dunmore with Carr 1976; Hare 1979; Rogerson and Dallas 1984; Davies 1992), but many opportunities to investigate potentially important sites were missed.

However, during the late 1980s several sizeable areas south of the river which had remained undeveloped were threatened, and other sites north of the river were designated for redevelopment. Together, these provided an opportunity to mount a new campaign of excavations which might recover further information about the origins and growth of Thetford, as well as allowing the results of some of the earlier work to be re-assessed.

In 1987 an area of 0.6 hectares immediately to the east of Red Castle where Knocker had carried out limited investigations (Site 5746) and only 80m west of Davison's large-scale excavations at Brandon Road (Site 5756) was scheduled for housing development (Fig.2). This sizeable site provided a chance to look for further evidence of occupation in the Early and Middle Saxon periods, as well as to investigate a part of Thetford which was still occupied during the late eleventh and twelfth centuries when the Late Saxon town was in decline.

Two further areas, north of the river, became available for excavation in 1989 (Sites 5913 and 25296). Both were excavated with the aim of establishing when the north bank was occupied, the nature of the occupation, and whether or not a Late Saxon defensive circuit had existed (Andrews and Penn forthcoming).

Additional work was carried out at an Early Saxon cemetery discovered by chance during building work on a site north of the river, on the east edge of Thetford (Penn forthcoming).

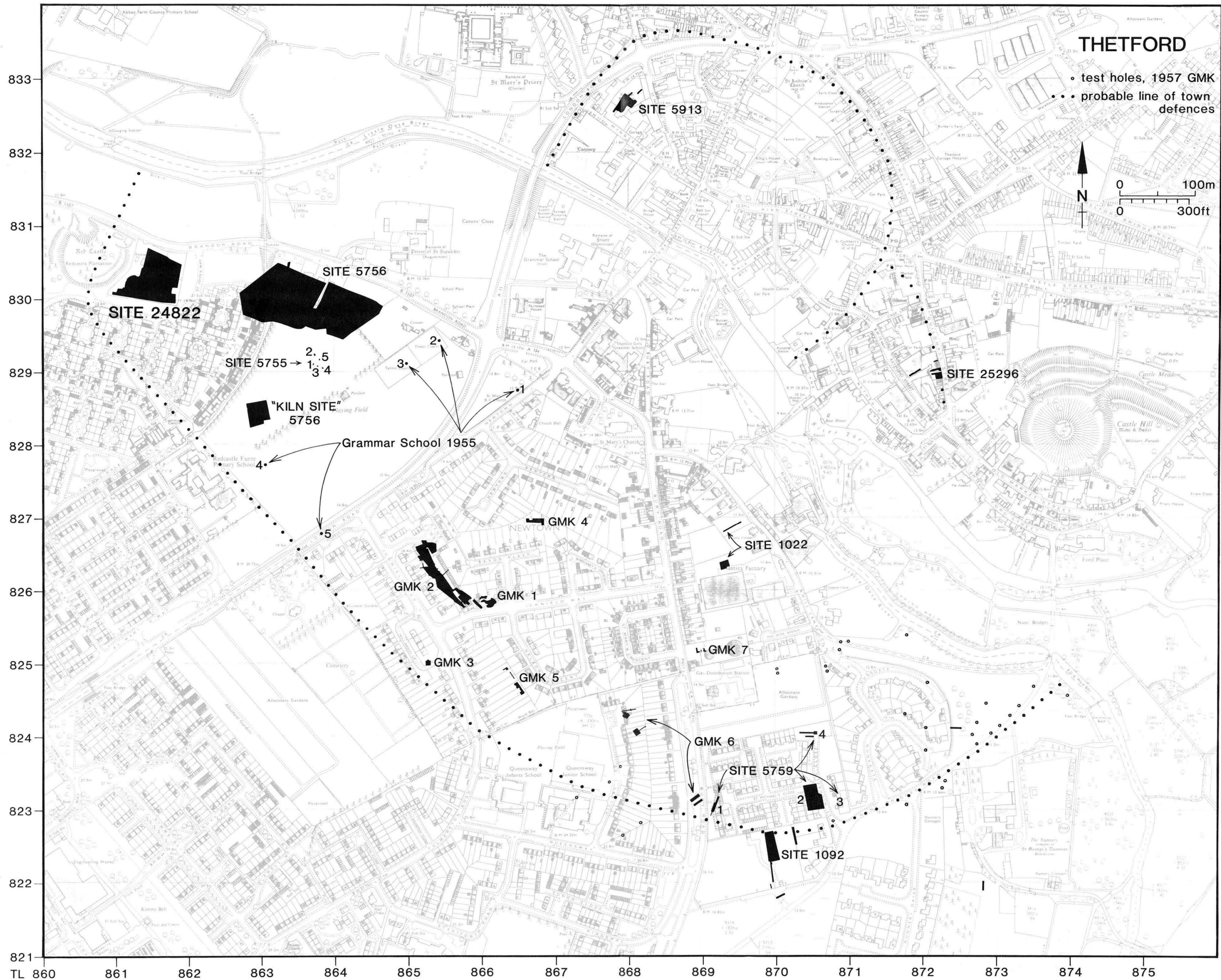


Figure 2 Map of Thetford. Scale 1:5000.

Chapter 1. Introduction

I. Summary

(Fig. 4)

During a six month period between October 1988 and March 1989 an area of approximately 3600m² was excavated prior to redevelopment. Site 24822 lay south of the Little Ouse River and, except for two houses built this century, had probably remained as open ground since the fourteenth century.

The earliest indication of human activity was a scatter of Mesolithic flints, but the first evidence for occupation was in the Roman period. One circular structure, and a small number of pits and ditches probably dated to the first century AD. These are likely to have been part of the same native settlement found by Davison at Brandon Road.

The area was then abandoned until sometime in probably the sixth century, when an Early Saxon settlement was established. Nine sunken-featured buildings, a number of pits, and several ditches belonged to this period. Both Knocker and Davison uncovered parts of this settlement, although its extent, except to the east, remains unknown.

There is increasing evidence that during the seventh to ninth centuries a Middle Saxon settlement developed in much the same area, overlying and perhaps extending to the west of the site of the Early Saxon occupation. It is not known whether there was any continuity between the Early and Middle Saxon settlements, although the locations of both were probably influenced by the existence of a nearby fording point across the Little Ouse River. At Redcastle Furze two shallow ditches and a spread of Middle Saxon pottery were found, and it seems likely that the site lay towards the eastern limit of the settlement.

There is no evidence for Late Saxon occupation on the site until at least 1000AD. Prior to this, it appears to have been open ground which lay at the extreme west end of the area enclosed by the southern defensive circuit. A system of ditched enclosures was the earliest Late Saxon feature. These ditches were subsequently infilled, and replaced by a gravelled street on a different alignment which had a series of plots and enclosures defined by gullies and ditches ranged alongside it. The plots contained buildings and pits, whereas the enclosures were probably for animals. The street was maintained throughout the eleventh century and the enclosures were modified to varying degrees.

Towards the end of the eleventh century Thetford declined in importance. However, the street continued in use and a new system of plots and enclosures was laid out in the middle of the twelfth century. It is not clear how long these remained in use, but a ringwork, today known as Red Castle, was built sometime between c. 1135–50 during the 'Anarchy' (the period of civil war during Stephen's reign after Matilda, Henry I's daughter, invaded from Anjou). A bailey ditch associated with this castle was found in the north-west corner of the site, the construction of which would have partially disrupted any existing plots and enclosures.

The bailey ditch does not appear to have been maintained, and by c. 1200 it had become infilled and built over. At this time, a small building and enclosed yard were constructed along with possibly two outbuildings, one of which was used for malting. This may have been one of several groups of buildings, perhaps farms associated with the nearby Priory of Holy Sepulchre, which were built along the south bank of the Little Ouse River. The remains of similar structures were found by Davison at Brandon Road, and all appear to have gone out of use by the sixteenth century, probably following the Dissolution when property in Thetford belonging to religious houses was seized and turned over to grazing. The site at Redcastle Furze, like much of the area south of the river, subsequently remained undeveloped until the twentieth century.

II. The Site

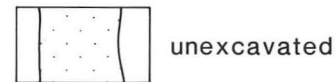
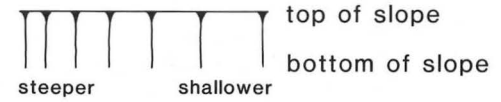
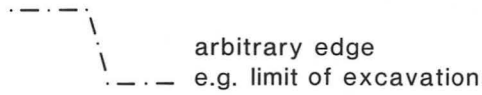
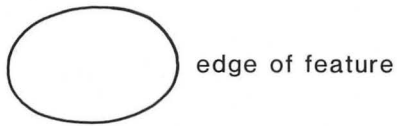
In 1987 an area of approximately 0.6 hectares south of Brandon Road was designated for redevelopment. The site (TL 8615 8305) which lay between Red Castle where Knocker had excavated, and Davison's large-scale excavations at Brandon Road, was one of the last areas within Redcastle Furze not to be intensively built on. The likelihood of finding well-preserved archaeological deposits of Early Saxon to medieval date, important for understanding the development of Thetford, led the Norfolk Archaeological Unit to approach the site developers for money to fund excavations. The developers, A.W. Hardy and Co. Ltd. of Southend-on-Sea, Essex, generously agreed to cover the cost of the excavation, as well as arranging for the removal of spoil from site, and providing on-site accommodation. Post-excavation funds were provided by a grant from the HBMC.

An area of approximately 3600m² was excavated during a six month period from October 1988 to March 1989 with a team of between thirteen and sixteen people. The finds have been deposited with Norfolk Museums Service (Acc. No. 1994.4).

III. Geology

The site lies on the west side of Thetford, immediately south of Brandon Road, at a height of approximately 14m OD. It is 100m south of the Little Ouse River, on a flat area on the edge of the former flood plain. The flood plain has largely been reclaimed in this area by in-filling and is now grassed over. River gravels, probably derived from glacial sand and gravel, overlie chalk which occurs at a depth of approximately 4.5m, although none of the excavated features penetrated to this depth. The gravel was covered by discontinuous spreads of fine to medium textured sand up to 0.3m deep which in some places were mixed with the gravel. The sand, which was probably a wind-blown deposit, had weathered from a yellow to a yellowish

Plans Key



Sections Key

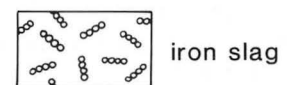
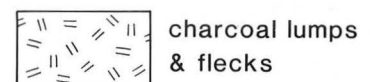
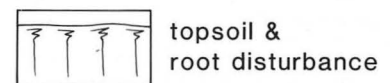
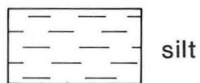
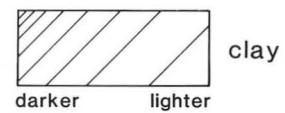
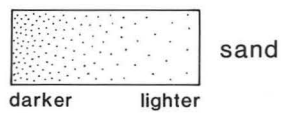
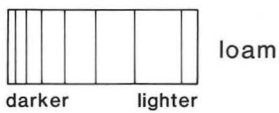
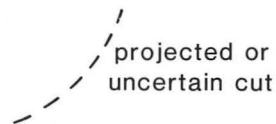
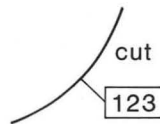


Figure 3 Key to plan and section conventions.

brown colour in the upper 0.1m–0.2m. The water table was not encountered in any of the excavated features.

IV. Excavation Methods

It was envisaged that as much as possible of the area available would be stripped and investigated. However, limitations were placed on this by the existence of tree preservation orders on many of the trees around the perimeter of the site, and the need to retain a large garage and access to it in the north-west corner of the site. Immediately to the south of this garage was a small swimming pool which was left as it had destroyed any archaeological deposits. Two small areas were also left in the north-east and north-west of the site for spoil disposal.

The aim of the excavation was to excavate and record a large area, but in order to do this satisfactorily with the time and resources available, a sampling strategy had to be adopted. It was therefore decided prior to excavation that rather than excavate entire ditches, sections would be removed to establish stratigraphic relationships and recover dating evidence, and that pits would only be half-excavated, unless total excavation was deemed necessary or worthwhile.

Topsoil was removed using a mechanical excavator with a ditching bucket. The overburden was only 0.3m deep in the south-west of the site, but became slightly deeper to the east where it was 0.45m deep. It was deepest along the north edge of the site, (up to 0.6m), where the ground surface had been built-up along the edge of the river valley. Over much of the area it was possible to strip the overburden straight down to just above the underlying natural sand or gravel, although flint and chalk walls, and stratified archaeological deposits did survive towards the north-east corner of the site. The topsoil was a fairly uniform greyish brown sandy soil, usually slightly darker towards the surface, and was clearly differentiated from the underlying sand and gravel. Where stratified deposits occurred, these were usually recognised by the presence of medieval or earlier pottery and animal bone, and also by the relative absence of modern finds. There had been very little disturbance caused by modern intrusions, although much of the site, and in particular the archaeological features, were affected by the presence of many small-to-medium sized tree roots. There was no evidence for ploughing of the site after it had been abandoned, and in some places the chalk and flint walls lay only 0.2m below the surface. During removal of topsoil a metal detector was used to scan as much material as possible, and a number of artefacts were recovered in this way.

A grid of 10m squares was established over the site, and each square metal-detected prior to any further work. Artefacts within 0.05m of the surface were recorded two-dimensionally and retrieved (experience on sites in and around Thetford has shown this to be a necessary exercise in order to pre-empt unauthorised, clandestine operations at night and weekends). After this had been completed, the site was cleared using hoes and trowels. A few contexts were planned prior to excavation, but planning was mostly carried out after excavation of a feature or area had been completed. Features and layers were numbered as part of a continuous context numbering system.

V. Site Phasing

Many of the smaller features, particularly post-holes, could not be phased, either because they were not stratified, or contained no datable finds. However, most of the larger features could be phased with reasonable confidence, though it was clear that many contained varying amounts of residual material, and some had intrusive finds in their upper fills. The intrusive material, often only a single sherd of pottery, had in some cases come from later features which cut earlier features, but where their edges could not be recognised. Elsewhere, particularly where the intrusive sherds were small, it is likely that material had slipped-down voids left by decayed tree roots, or had been introduced by way of animal disturbance.

Some features which could not be phased by their stratigraphic relationships or from finds have been assigned to periods or phases on the basis of their morphology and location relative to other features. Several of the gullies and smaller ditches have been phased in this way.

The following phasing has been adopted:

- Period 0 - Prehistoric
- Period I - Roman (first century AD)
- Period II - Early Saxon (sixth-to-seventh century)
- Period III - Middle Saxon (eighth-to-ninth century)
- Period IV1 - Late Saxon (early-eleventh century)
- Period IV2 - Late Saxon (early-to-mid eleventh century)
- Period IV3 - Late Saxon/Early Medieval (late-eleventh century)
- Period V - Early Medieval (mid twelfth century)
- Period VI - Early Medieval (mid twelfth century)
- Period VII - Medieval (thirteenth-to-fourteenth century)

Dating relied primarily on pottery, and to a lesser extent on coins, metalwork and other finds. This proved relatively easy for Periods 0, I, II, III and VII, but less so in distinguishing between Periods IV, V and VI. The latter group spanned the early-eleventh to the mid-twelfth centuries, and although separated stratigraphically this was not clearly reflected in the finds assemblages. Further details on dating are contained within the excavation and finds chapters, but certain indicators are noted here.

Period IV, divided into Phases 1, 2 and 3, was characterised by eleventh-century pottery and coins, with a virtual absence of tenth-century material. There is very little Thetford Ware and no coins of this date. The earliest of the nine Late Saxon coins was minted after 1024, and found lying on a Period IV2 street surface. The remainder, with one exception, were minted before 1066. Although five of the coins were metal detector finds from unphased contexts, they seem to highlight the eleventh-century flavour of the ceramic assemblage from Period IV. Unfortunately, only Stamford Ware Fabric B from amongst this assemblage is more closely datable. The lack of later eleventh-century coins may reflect an economic rather than chronological change, for approximately 66% of the Stamford Ware is in Fabric B which is dated to the later eleventh century; some of the Thetford Ware and Early Medieval Wares are probably of similar, even early twelfth-century date, but this remains uncertain. Period V features have been dated to the mid-twelfth century on the basis of containing Unglazed Grimston Ware. However, the apparent gap of half a century or so between Periods IV and V may have been much shorter, if it existed at all,

if Period IV extended further into the twelfth century and Period V began earlier than has been allowed for here. The small Period VI assemblage comprises largely residual finds, but there is nothing later than the twelfth century.

The most difficult task was in assigning features to phases 1, 2 and 3 of Period IV, and this depended almost entirely on the stratigraphic sequence since very few could be allocated to phases on the basis of the finds they contained. As Period IV broadly spanned the eleventh century, the dating of the phases has been done on a 'best fit' basis, though it is conceivable that Period IV1 began slightly later, and continued longer than has been allowed for here. If so, Period IV2 would have commenced nearer

the middle of the eleventh century, a possibility not contradicted by either the pottery or coin evidence, but perhaps unlikely given the amount of activity that would have to be assigned to the second half of the eleventh century at a time when the town is known to have been in decline.

The report below is ordered so that the features are grouped and described by period, and this is then immediately followed by a discussion of that period. This has been done in order that the description and discussion for each period might be more easily related to each other. A general conclusion has been placed at the end of the report.

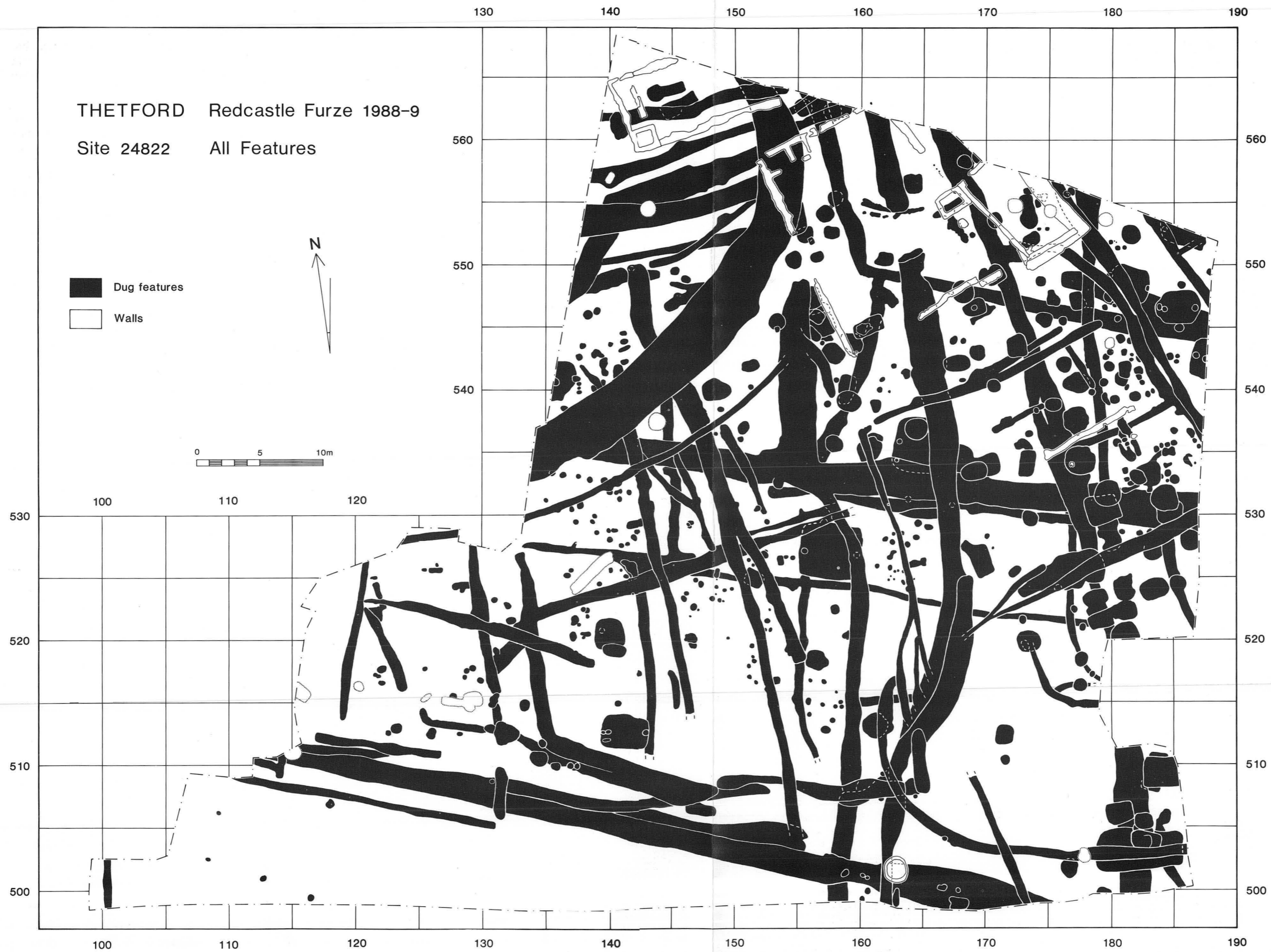


Figure 4 Plan all features. Scale 1:300.

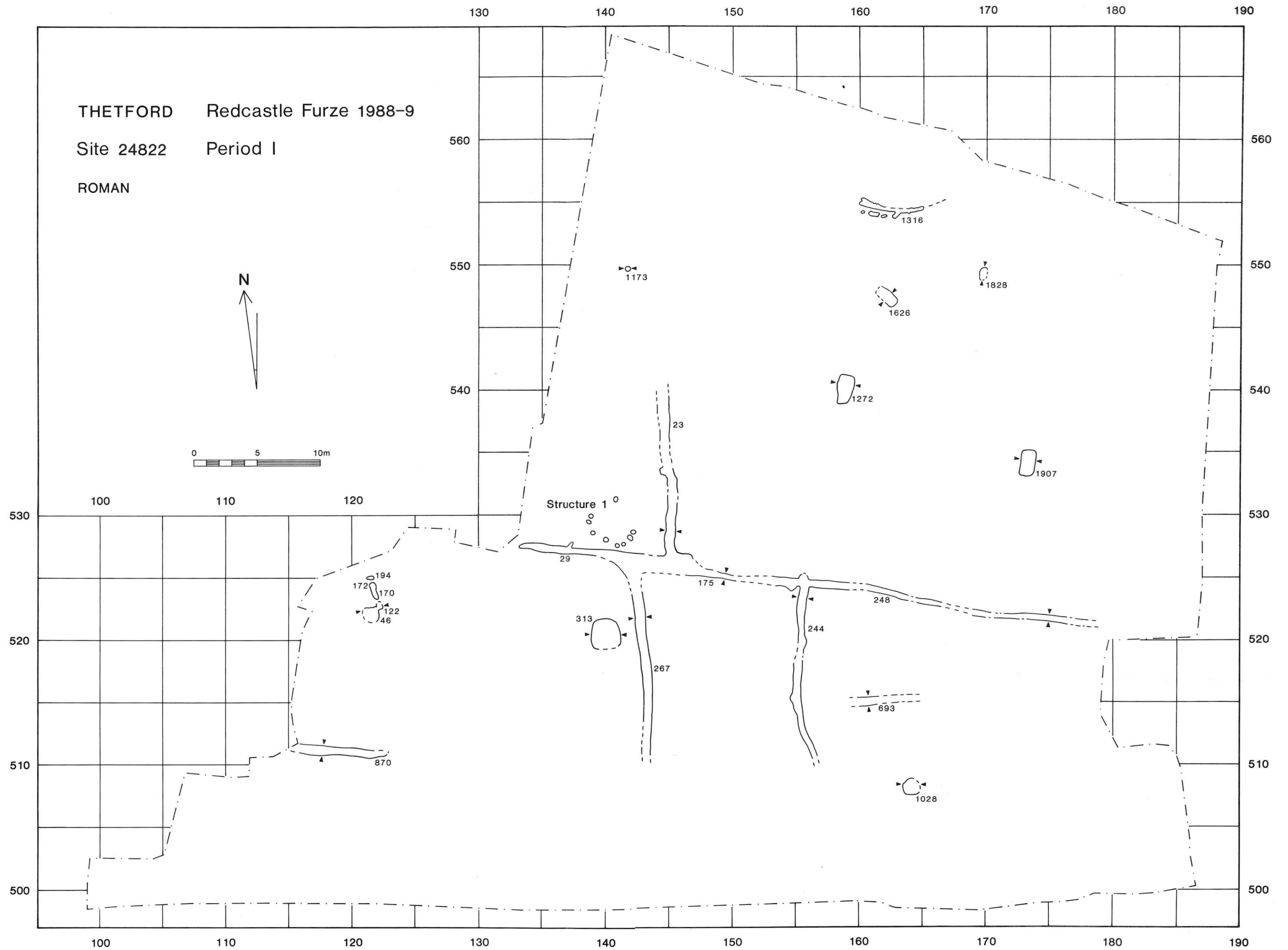


Figure 5 Plan Period I features. Scale 1:300.

Chapter 2. The Excavations

I. Period 0—Prehistoric

No prehistoric features were certainly identified, although pits 1626 and 1828 described under Period I (see below, p.9) may have been earlier. Both were small features filled with pinkish brown sandy loams and much gravel. Pit 1828 contained no finds, but pit 1626 contained an assemblage of struck flints comprising seventeen flakes, six blades and four spalls of probable Mesolithic date (Table 1 microfiche).

Flints of probable Mesolithic date were also recovered from a variety of other features across the site, but all were residual in later contexts. The most notable concentration was in context 1339, a mixed layer overlying natural towards the west end of the site around grid point 130/545. Forty-eight flakes, three blades, one proximal end blade, nine microblades, one trial piece, one single platform blade core and four spalls were recovered from this layer.

The total assemblage of flints which included several spalls does indicate that there was some flint knapping on or in the vicinity of the site during the Mesolithic period, but whether there was any contemporary occupation remains conjectural.

II. Period I—Roman

(Fig. 5)

Occupation probably dating to the first century AD was indicated by a circular post-built structure, several pits and shallow ditches, and a few other features. The lack of dating evidence from most of these make it uncertain as to whether all were contemporary, or indeed belong to Period I. However, all were stratigraphically early, and are described together below.

Structure 1

(Fig. 6)

This comprised a southern arc of eight post-holes, with one other post-hole to the north. The internal diameter of this structure would have been only 3m. The post-holes in the southern arc were between 0.1m and 0.8m apart, and up to 0.15m deep. They all had steep or near-vertical sides, and were filled with dark sandy soil and gravel. None contained any datable finds.

Ditches

(Fig. 7)

A series of shallow ditches aligned either parallel or at 90° to each other appear to have formed a system of field or plot boundaries. An east-to-west alignment comprising three possibly separate lengths of ditch (29, 175 and 248) was traced for a distance of 46m, although the original length would almost certainly have been greater. At 90° to this ditch alignment were three further ditches; 23 to the north, and 244 and 267 to the south. All were at least 12m long, ditch 23 having been cut away by a later feature, and ditches 244 and 267 'fading-out' perhaps having been truncated by ploughing. These ditches were between

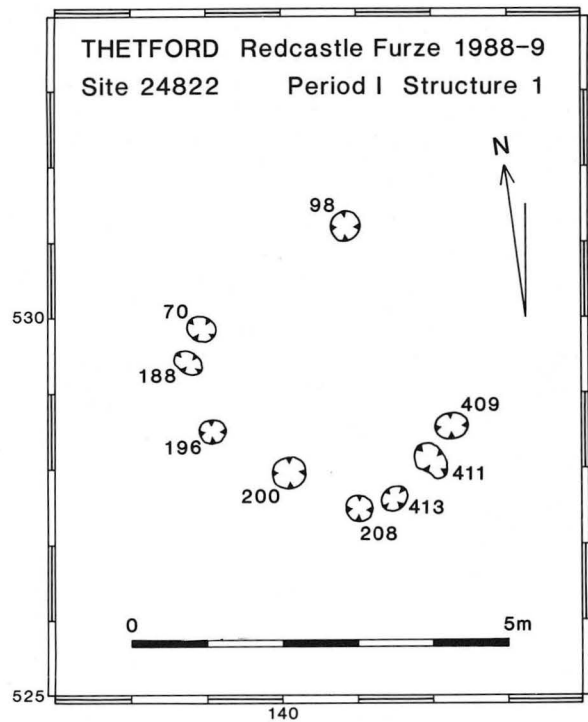


Figure 6 Plan Structure 1 (Period I). Scale 1:100.

0.35m and 1.4m wide, and were up to 0.2m deep. They were filled with a light-to-medium brown sandy soil with some gravel. The fills sometimes had a slightly 'silvery' appearance, and those to the south-west were sandier than those to the north-east. Two other short lengths of ditch (693 and 870) may also have been contemporary.

A very few intrusive sherds of Late Saxon pottery were found in these ditches, but there were no other finds.

Pits

(Fig. 8)

Two pits (1272 and 1907) were morphologically similar and oriented north-to-south. They were sub-rectangular, approximately 2m long, 1m wide, and up to 0.75m deep. Although both were weathered around the top, they had straight sides sloping slightly inwards to a flat bottom. Pit 1907 had a homogeneous fill of dark yellowish brown soil, and pit 1272 a similar lower fill, but a darker upper fill. Pit 1907 contained a single sherd of early Roman storage jar. Pit 1272 contained no datable finds, but it was cut by an Early Saxon ditch (1658). A cattle skull was found on the floor of pit 1272 in the north-west corner (Fig. 8). It had been placed upright, and faced inwards towards the centre of the pit. The dating and significance of this deposit are discussed further below.

A smaller, sub-circular pit (1028) approximately 1.2m in diameter and 0.45m deep, contained a number of sherds of a Claudio-Neronian carinated-bowl (Fig. 82 no. 1). Pit 1028 had been cut by several later features, and it is possible that the vessel had originally been placed in the pit complete. The pit was filled with a sandy loam which

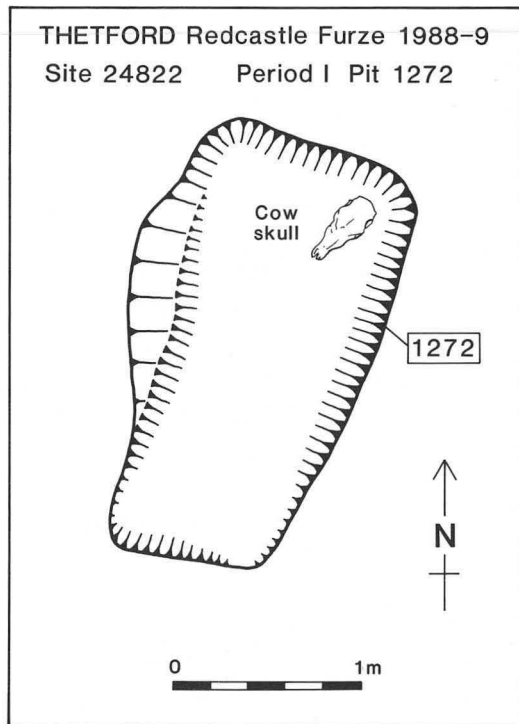


Figure 8 Plan pit 1272 (Period I). Scale 1:40.

contained some burnt flints, and patches of charcoal staining and orange (?burnt) sand.

Two other pits (1626 and 1828) lay towards the north of the site. Pit 1626 had been partially cut-away by Early Saxon ditch 1658, but appears to have been sub-rectangular, up to 1.8m long, 0.95m wide, and up to 0.45m deep. It had irregular sides and bottom, and was filled with a slightly pinkish-brown sandy loam with much gravel. The only finds were a small assemblage of struck flints. Pit 1828 was a small, oval pit, 1m long, 0.55m wide and up to 0.25m deep. It had a similar fill to pit 1626, but contained no finds. Both of these pits may have been prehistoric rather than Roman features.

Other Features (Fig. 9)

A small pit or post-hole (1173) 0.4m in diameter and 0.35m deep, contained a tightly-packed group of disarticulated human bone along with some animal bones, several of which showed evidence of having been burnt (see below, p. 121). The dark grey soil which filled this feature contained several black patches which may have been comminuted charcoal, but there was no ash or charcoal flecking. Apart from the bone, there were no other finds.

A similar assemblage of human and animal bone was found in a shallow elongated cut (170/172), although none had been burnt. Cut 170/172, oriented north-to-south, was 1.4m long, 0.45m wide and 0.12m deep (Fig. 9). Two shallow holes (172 and 194) at either end of this feature may have been continuations of it, although neither contained human bone. All of these features were filled with a very dark grey sandy soil with some gravel. A sub-circular cut (46) may have been associated with these features although it cut feature 122. Cut 46 had a similar fill, but contained no datable finds. Both features 46 and 122 were cut by Period IV3 ditches.

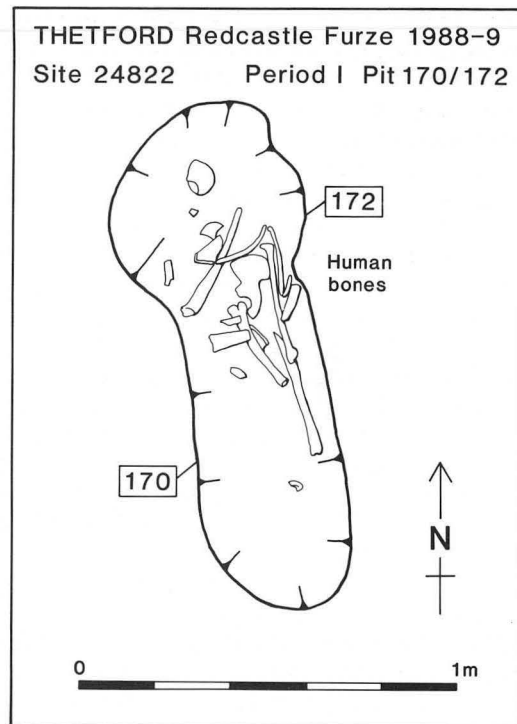


Figure 9 Plan pit 170/172 (Period I). Scale 1:20.

Approximately 20m to the east of this group of features was a shallow sub-square feature (313) 2.4m square and up to 0.1m deep. It was filled with a mid-to-dark grey brown soil with dark grey mottling. It contained no datable finds, but was cut by a possible Early Saxon feature.

The only other features which might be assigned to Period I were an irregular curving slot or gully (1316) and an arc of possible post-holes which lay to the outside of it. These 'post-holes' were up to 0.5m deep and filled with brown sandy silt loam, with occasional large flints. However, their irregularity and lack of clearly defined edges perhaps make it unlikely that they were structural features, particularly as projection of the arc of post-holes would describe a circle 16m in diameter and no other part of such was found. It is perhaps more likely that these features had been created by localised weathering of the natural.

A small quantity of Roman pottery was recovered from some of the Early Saxon sunken-featured buildings, and this is discussed below. A few sherds of late Roman (third to fourth century) pottery were recovered as residual finds in later contexts, but there is no evidence to suggest that the site continued to be occupied beyond the end of the first century AD.

Discussion

Few of the features assigned to Period I produced any datable finds, but it is suggested that all were broadly contemporary and should be dated to the first century AD. This accords with the date given to the earliest features at Brandon Road (Site 5756), where a date in the mid-first century has been proposed for the ten circular structures and two pits found there (Dallas 1993). No Iron age pottery was found at either Brandon Road or Redcastle Furze. At Redcastle Furze there was only a single, small circular structure, apparently set within the angle of two shallow ditches which formed part of a field system towards the

south-west corner of the site. The small size of the structure (3m in diameter compared to a 4.6m to 10.35m range at Brandon Road) makes it unlikely that it was used for living in, although its function remains uncertain.

Of the other features, pit 1028 is noteworthy for the large sherds of carinated bowl it contained, and pits 170/172, 1173 and 1272 for the human and animal remains. The disarticulated human remains in cut 170/172 may have come from a burial which had been disturbed and re-interred, either from the same spot or elsewhere. The north-to-south alignment of the 'grave' in which these remains were placed may be significant. The disposal of a group of infant bones in feature 1173 is characteristic of Roman burial practice. Dead neonates and infants were often buried away from established burial grounds, sometimes placed in graves beneath buildings or disposed of with less ceremony in pits (Jacqueline McKinley pers. comm.). The group of bones in 1173 is of additional interest as some of them show signs of burning which had clearly taken place before they were deposited, and also because of the presence of bones of domestic fowl. Human bones and bird bones were found together in some Iron Age pits at Danebury, Hampshire, although these associations were found not to be statistically significant (Grant 1984, 540). A feature similar to 1173 was found in Thetford at St Barnabas' Hospital (Site 1092); there, a small pit (135) contained a tightly packed group of human bone, and no other finds except for two struck flints (Dallas and Rogerson 1984, 59). No dating for this feature was suggested, although it may also have been Roman. The complete cattle skull placed on the floor of pit 1272 at Redcastle Furze is a characteristic Late Iron age phenomenon. Because of the placement of the skull and lack of evidence for butchery, it should probably be regarded as a special, perhaps ritual, deposit. Special bone deposits of which skulls make up the largest category, have been examined from Danebury (Grant 1984, 533-43). At that site, ninety-nine (61%) of the pits contained skull deposits, and of these, twenty-five contained cattle skulls. Fourteen of the twenty-nine cattle skulls found were in Late Iron Age contexts; skulls placed on the bottom of pits may have been dedicatory offerings.

The field system and deposits of human bone towards the south-west corner of the site, the pits concentrated towards the east side, and the comparative lack of circular structures and domestic refuse together suggest that the site at Redcastle Furze lay towards the west edge of a minor first century AD settlement (Fig. 10). Although the limits of this settlement remain unknown, it is probable that it extended for at least 300m along the south bank of the river Little Ouse. Knocker (1967, 121-2) dug various 'test holes' up to 150m to the west of Redcastle Furze, and Romano-British material was found in several of these. Romano-British finds have also been recovered from the line of the Thetford by-pass up to 500m to the west, but whether these indicate settlement contemporary and perhaps associated with that at Redcastle Furze is uncertain.

Occupation would have been partly contemporary with the major ceremonial or religious centre at Fison Way (Site 5853) which lay just to the north of Thetford and was in use during the late Iron Age and early Roman period before being razed towards the end of the first century AD (Gregory 1992). Although no Iron Age material was found at either Redcastle Furze or Brandon Road, the settlement

THETFORD Iron Age and Roman

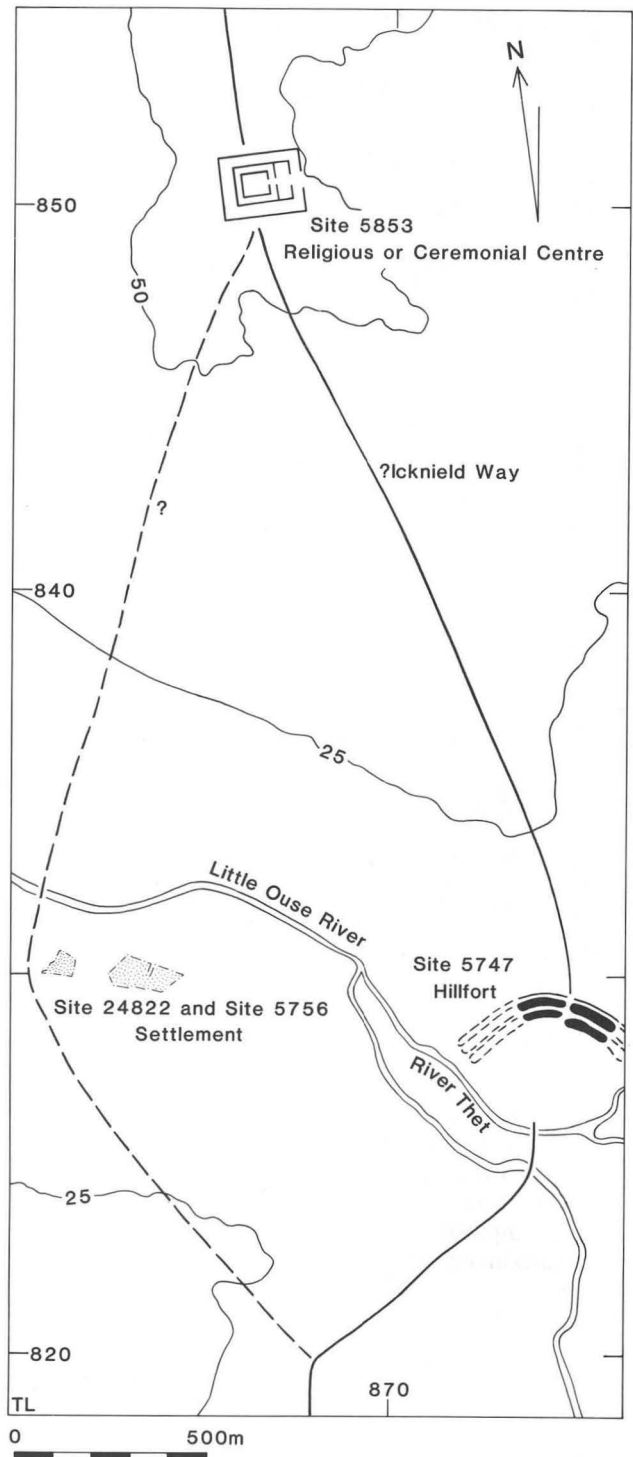


Figure 10 Map of Thetford: Iron Age and Roman topography. Scale 1:20,000.

would seem to have gone out of use at the same time as at Fison Way, and this could also have been a result of the Roman suppression of the Iceni after the Boudiccan revolt. There may also have been contemporary occupation within the hillfort (Site 5747) to the east which had been constructed in the fifth century BC, but insufficient work has been carried out at this site to determine the sequence and nature of the occupation there. It is possible that the Icknield Way, which is thought to have crossed the river

at Nuns' Bridges to the east in the vicinity of the hillfort, may have branched and also crossed the river at a fording point close to Red Castle. If so, then the latter route may have led northwards to the site at Fison Way, and the settlement at Redcastle Furze may have developed on or near to this route and crossing point.

III. Period II—Early Saxon

(Fig. 11)

Nine sunken-featured buildings (SFBs), eleven pits and several ditches were found, all of which have been broadly dated to the sixth and seventh centuries AD. Although there was clearly a sequence of features, it has not been possible to date this closely with any degree of certainty.

Sunken-Featured Buildings

(Figs 12–15)

All SFBs were fully excavated where possible, although parts of several lay outside the limits of excavation. Those which lay within the limits of excavation, and had not been partly destroyed by later features, were excavated in quadrants. Others were excavated in halves or in sections as appropriate. (Distances between post-holes are given from centre to centre). They were all aligned approximately east-south-east to west-north-west, except for SFB 1965 which lay almost exactly east-to-west.

SFB 915

(Fig. 12; Pl. I)

This was one of the larger examples. It measured 5m in length by 4.4m wide and had fairly pronounced right-angled corners. It was 0.6m deep, had a flat bottom, and a 'shelf' up to 0.35m wide around all but the north side. The sides around most of the edge were near-vertical, and the others steeply sloping. There were centrally-placed post-holes (875 and 877) 4.35m apart at either end. Both were approximately 0.4m diameter, and up to 0.4m deep. Post-hole 875 contained a well-defined, tapering post-pipe measuring 0.22m by 0.2m at the top, which was filled with a black loamy soil, and surrounded by a brownish yellow sand. Post-hole 877 had a similar fill, but no post-pipe survived, although there was a post-impression in the bottom which measured approximately 0.3m in diameter.

Along part of the bottom at the west end was a shallow impression 1.7m long and 0.06m wide which terminated

in a shallow post-hole. In addition to this, there were several shallow, irregularly spaced stake-holes or small post-holes in the bottom, and several more cut into the 'shelf' around the edge.

On the bottom of SFB 915 and towards the centre, was a thin spread of dark greyish brown silty loam (352) which contained no coarse components except for a few small clay lumps, some of which appeared to have been slightly burnt. Above this were several layers of yellowish brown sand or sandy loams, notably 795, which contained a variety of finds including a number of unfired loomweights. These were mostly found in the north-east corner of the building, with one group lying almost vertically against the edge of the pit. The uppermost fill (794) was a dark brown sandy loam.

SFB 951

(Fig. 13; Pl. II)

This was 3.7m long, 2.6m wide and 0.5m deep. It had rounded corners, and sides sloping at approximately 45° down to an irregular bottom. At the west end the profile was different; here there was either a more gentle slope, or a 'shelf' around the top edge. There was a single post-hole (923) centrally-placed at the east end, but two (723 and 725) similarly positioned at the west end. Post-hole 923 was sub-rectangular, and the deepest at 0.45m. It tapered towards the bottom and contained a well-defined post-pipe which was D-shaped in plan. The post-pipe measured 0.2m by 0.18m, and was filled with a dark loamy soil. This contrasted with the surrounding post-packing which was a yellowish brown sand containing much gravel. The alignment of the post-hole and post-pipe was skewed slightly to the alignment of the building. At the west end, post-holes 723 and 725 were sub-circular, 0.2m and 0.3m diameter respectively, and approximately 0.3m deep. Post-holes 725 and 923 were 3m apart, and post-holes 723 and 725 0.4m apart. Both the latter were flat-bottomed, and neither contained post-pipes. Post-hole 723 had been dug into the 'shelf' at the west edge of the structure, and 725 into the inner slope, but it is uncertain whether they were contemporary, or whether one succeeded the other.

The lower fill in SFB 951 was a dark brown silt loam (898) which could only be differentiated from the overlying layer (847) by the presence of some purplish mottling. The uppermost fill (811) was a very dark greyish brown silt loam.

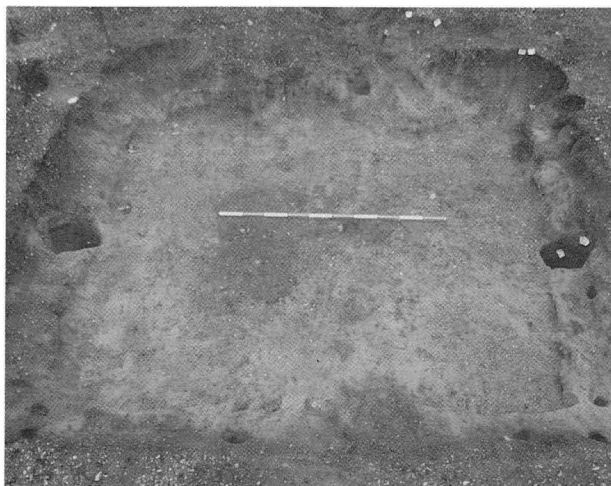


Plate I SFB 915, looking north. Scale: 2 metres.

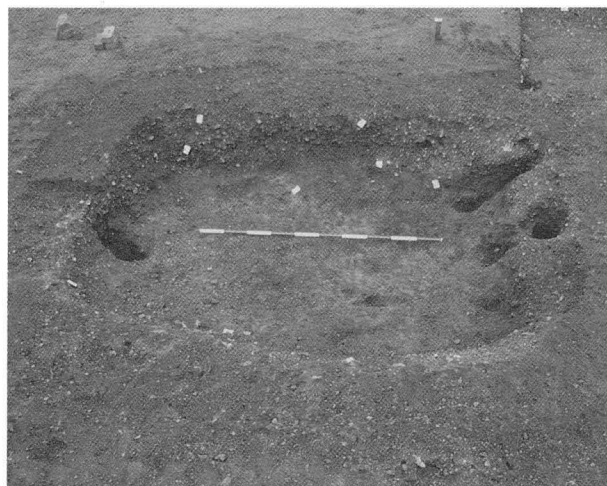


Plate II SFB 951, looking south. Scale 2 metres.

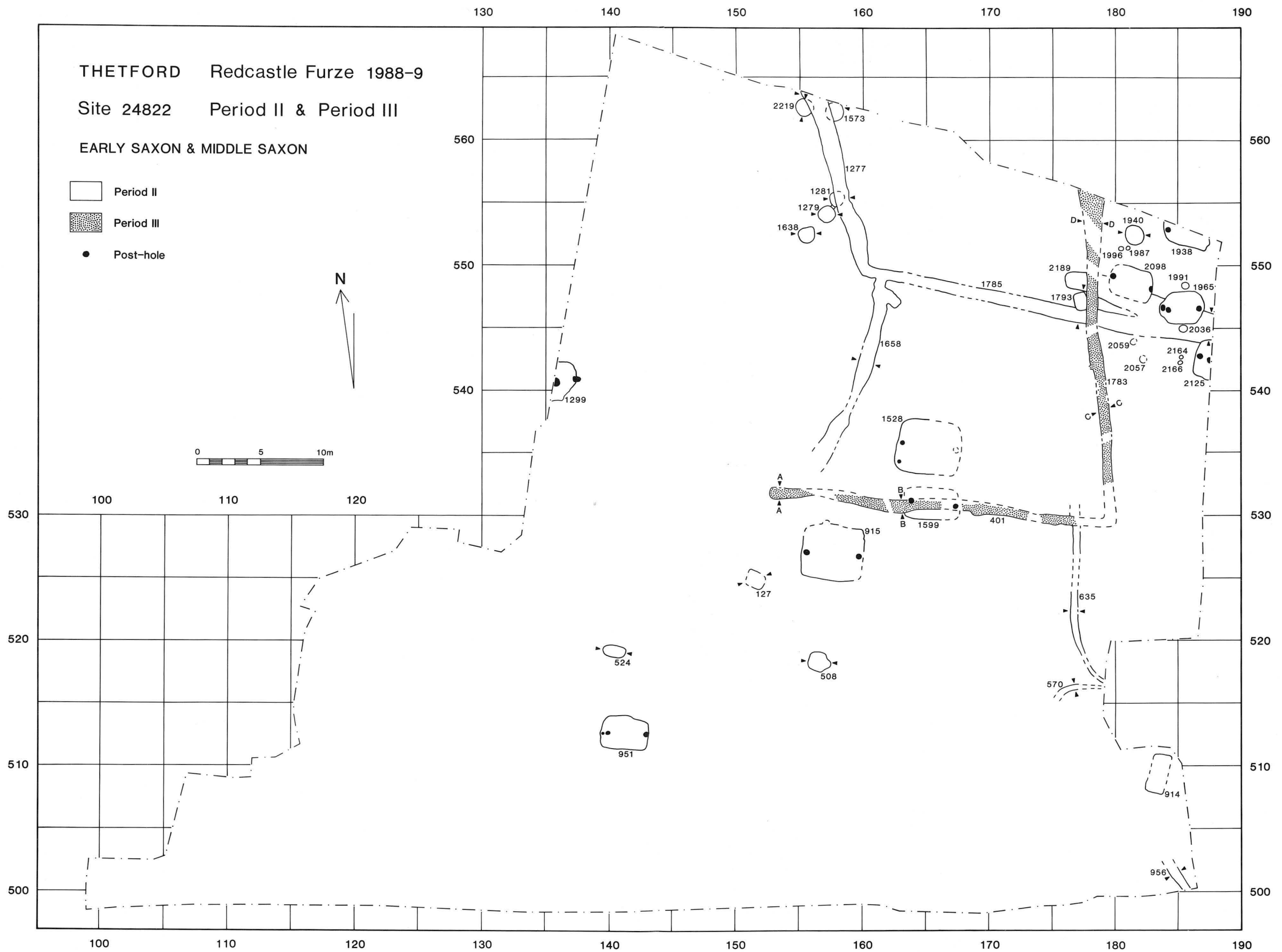


Figure 11 Plan Period II and Period III features. Scale 1:300.

THETFORD Redcastle Furze 1988-9 Site 24822

Period II SFBs

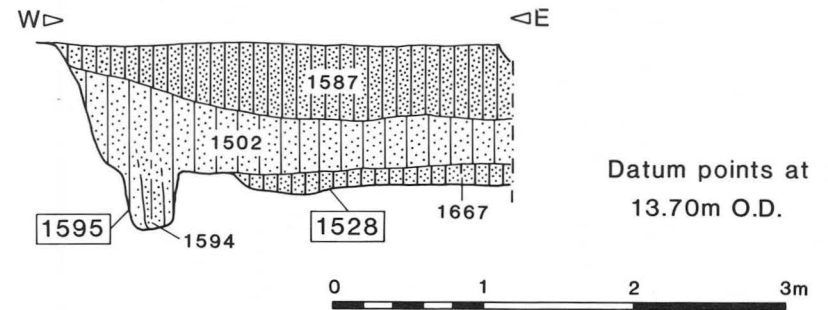
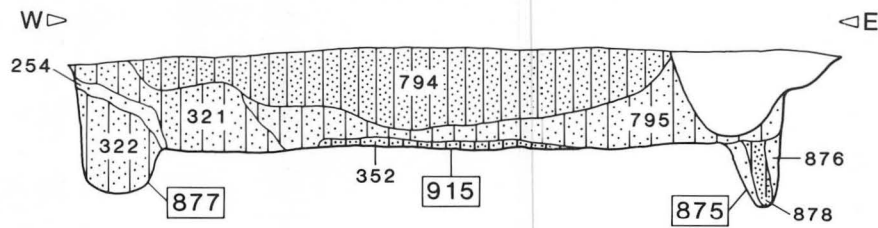
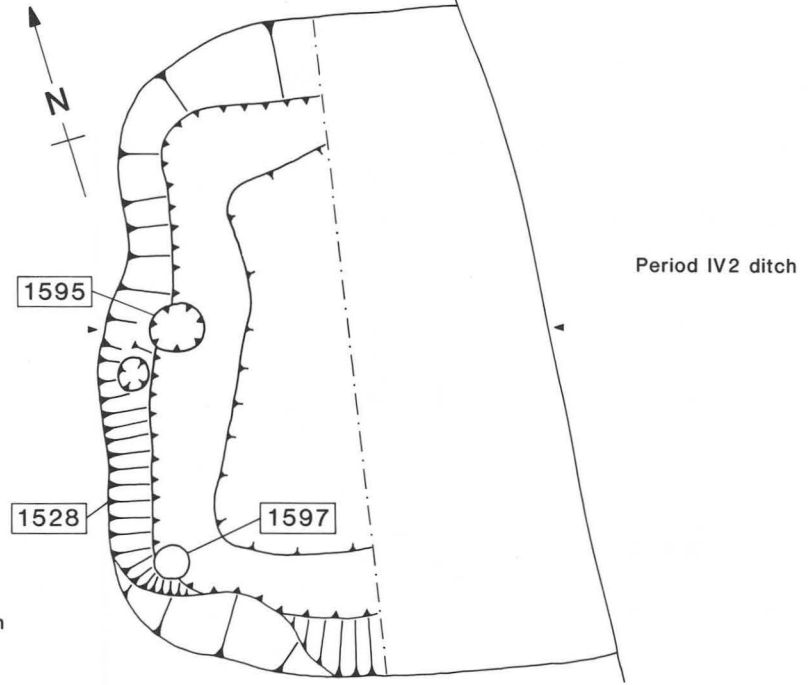
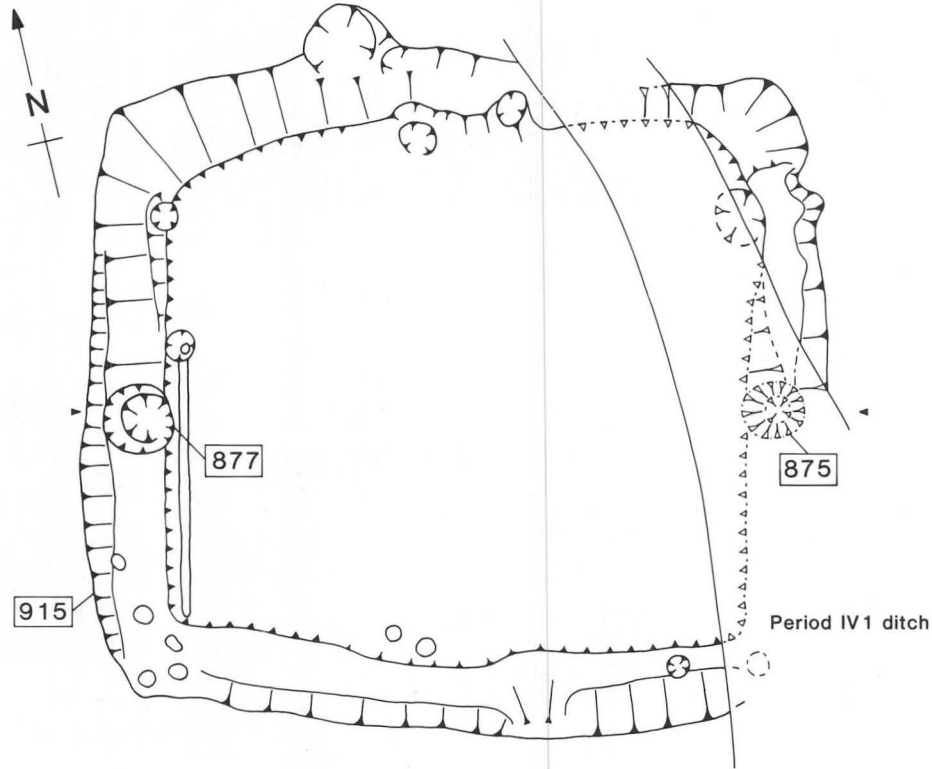
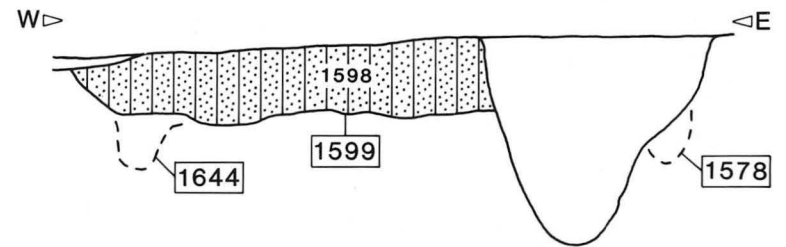
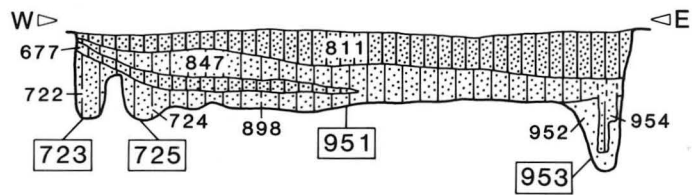
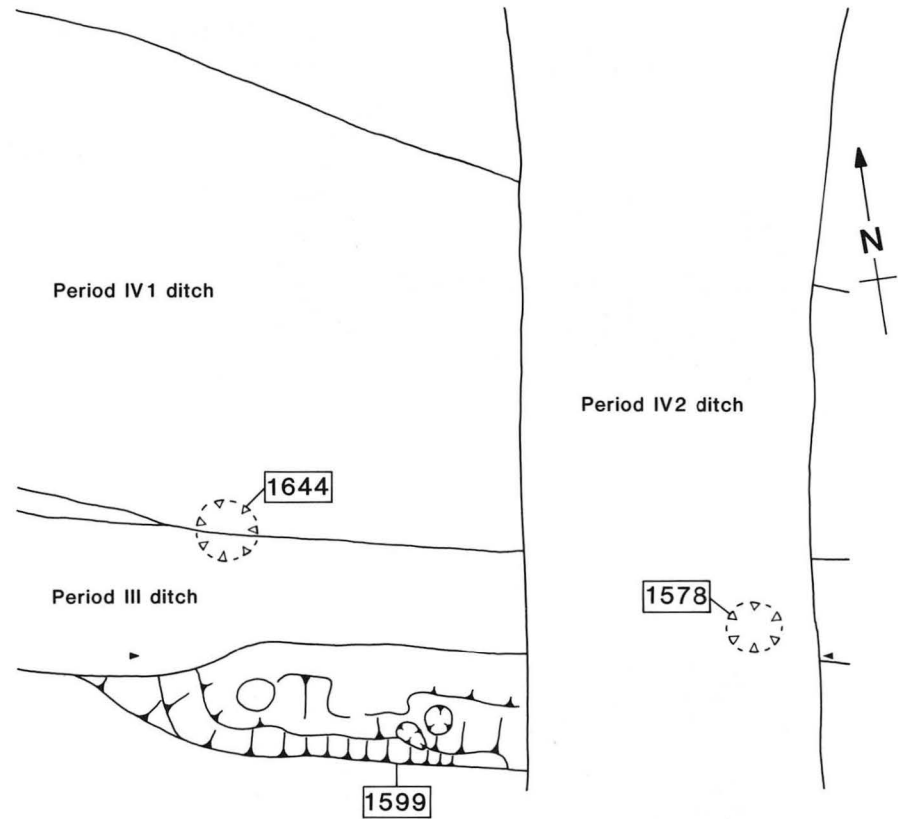
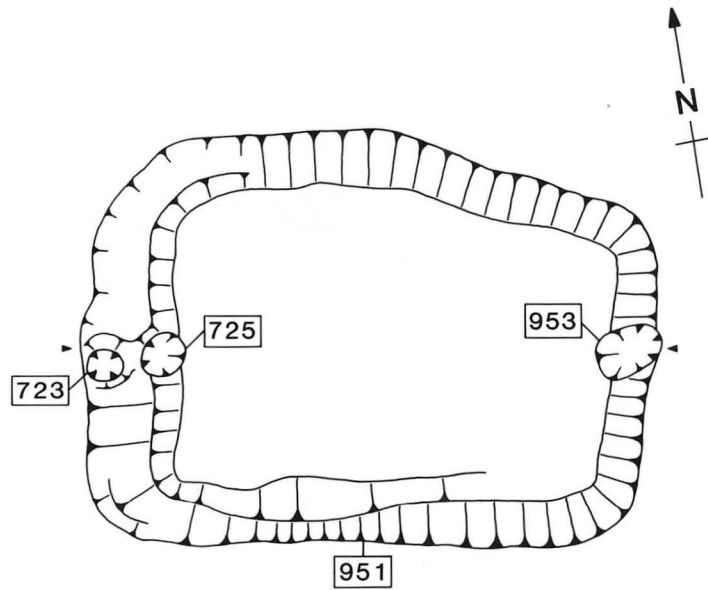


Figure 12 Plans and sections SFBs 915 and 1528 (Period II). Scale 1:50.

THETFORD Redcastle Furze 1988-9 Site 24822

Period II SFBs



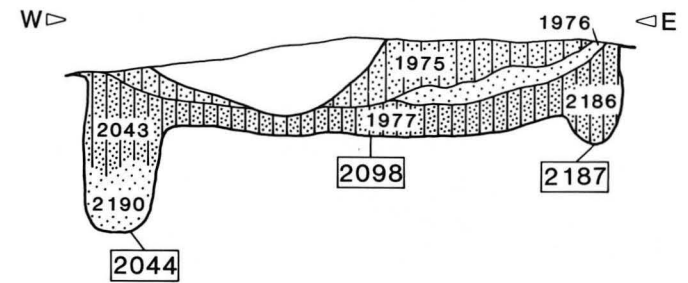
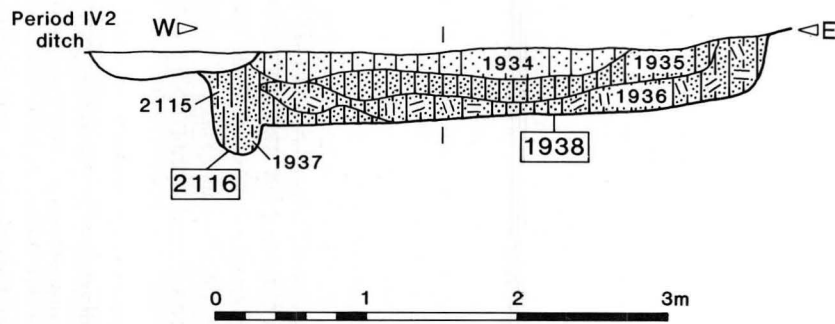
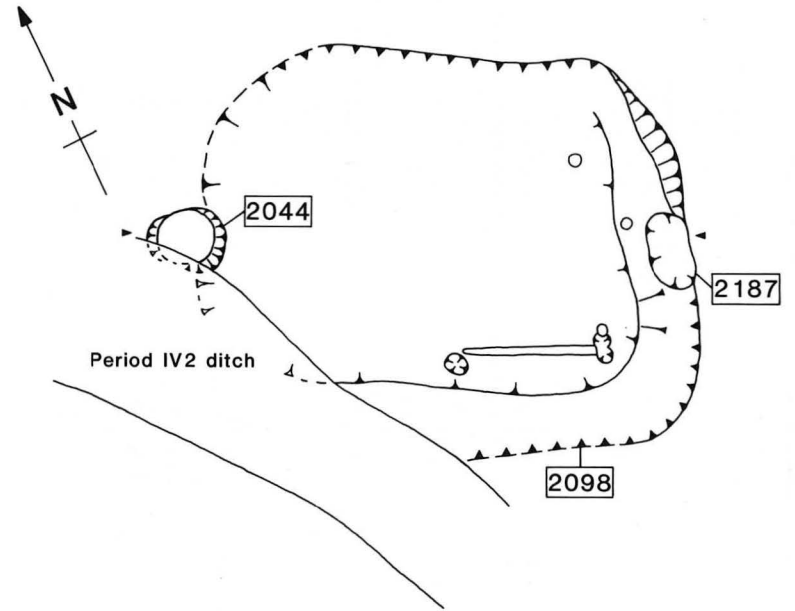
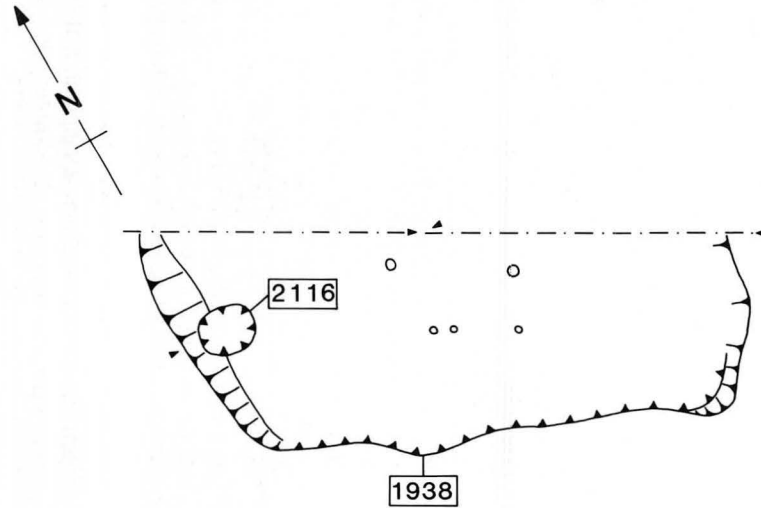
Datum points at
13.60m O.D.



Figure 13 Plans and Sections SFBs 951 and 1599 (Period II). Scale 1:50.

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Period II SFBs



Datum points at
13.85m O.D.

Figure 14 Plans and Sections SFBs 1938 and 2098 (Period II). Scale 1:50.

SFB 1299

(Fig. 15)

Only the eastern end of this SFB could be excavated as more than half lay outside the limit of excavation. It was 3.2m wide and up to 0.5m deep. The south side sloped gently, whereas the north and east sides dropped in a series of steps to a flat bottom. The corners were rounded, and the post-hole at the east end (1297) had been dug partly outside the pit. Post-hole 1297 was a substantial sub-rectangular feature which measured 0.6m by 0.4m and was 0.55m deep. It lay slightly to the north of the centre line through the pit. A second substantial post-hole (1352) had been dug in the bottom of SFB 1299, 1.6m to the west of post-hole 1297. This lay partially outside the limit of excavation, but appears to have been sub-circular with the sides sloping steeply down to a sub-rectangular, flat bottom. Post-hole 1352 was 0.65m deep, and measured 0.6m by 0.5m at the bottom. No differentiation could be detected within or between the fills of post-holes 1297 and 1352, and the fill of SFB 1299 which was a homogeneous brown sandy loam (1298).

SFB 1528

(Fig. 12)

This was a large SFB of which only half survived. The east end had been destroyed and the south edge partially cut-away by Late Saxon ditches. The surviving part was 4.35m wide, between 0.9m and 1m deep and had fairly sharp right-angled corners. It is estimated to have been approximately 5m long. There was a shallow slope around the top along the north side and in the south-west corner, but elsewhere the sides were steeply sloping or near-vertical. A slight, low 'shelf' up to 0.55m wide surrounded the bottom of the pit which was otherwise flat. A sub-circular post-hole (1595) had been dug against the side of the pit at the west end. This was centrally-placed, 0.38m in diameter, 0.38m deep, and had near-vertical sides and a rounded bottom. A post-ghost was detected extending upwards from this in the bottom fill of the SFB. In the south-west corner was a small post-hole or post-impression (1597). This was circular, approximately 0.24m in diameter and 0.12m deep. No corresponding feature was found in the north-west corner.

The bottom fill in SFB 1528 was a dark greyish brown sandy loam 1667 which was up to 0.15m deep around the edges of the pit, and thinner towards the centre. It contained a small amount of charcoal flecking. The post-ghost in post-hole 1595 was lighter and easily distinguishable from layer 1667 and it seems likely that the latter had built-up around the bottom of an *in situ* post. However, the fill of post-hole 1597 was the same as layer 1667. Above 1667 was a layer of light brown sandy loam (1502) up to 0.4m deep. This layer contained a moderate amount of small and medium flints, particularly towards the centre. Finally, there was a substantial layer of dark greyish brown sandy loam (1587) in which several lenses of sand and a thin discontinuous band of small flint pebbles were differentiated.

A shallow, bowl-shaped Late Saxon pit (1529) had been dug into the top of layer 1587, and in places the fills could not be distinguished. The comparatively large number of Late Saxon sherds found in SFB 1587 can almost certainly be attributed to contamination by this feature.

SFB 1599

(Fig. 13)

Very little survived of this SFB, with only the south-west quadrant remaining undisturbed. The north half had been destroyed by a small Middle Saxon ditch and a larger Late Saxon ditch, and the east end by another Late Saxon ditch. However, two post-holes 3.6m apart at either end gave a minimum length for this structure which is estimated to have been at least 2.8m wide. The side sloped gently down to a flattish bottom at a depth of up to 0.5m. The post-hole at the west end (1644) was circular, 0.4m in diameter and 0.4m deep; that at the east end (1578) had been truncated, but the surviving part was sub-circular, up to 0.35m in diameter and 0.3m deep. There were two very shallow post-holes or post-impressions 1.2m apart, towards the bottom along the southern edge of SFB 1599. One was set into the corner of the pit, and it seems likely that both were associated with the structure.

The fill of SFB 1599 features was an undifferentiated yellowish brown sandy loam (1598).

SFB 1938

(Fig. 14)

Only half of this lay within the excavated area. It was 4m long and at least 1.5m wide. The sides were near-vertical or sloped steeply down to a flat bottom which sloped gently to the west. The depth varied from 0.4m to 0.5m. At the west end was a sub-rectangular post-hole (2116) which measured 0.4m by 0.3m and was 0.25m deep. In the bottom of this SFB, and towards the centre, were five small stake-holes which may have formed a rectangular arrangement. A shallow scoop lay to the west of this group.

Over much of the bottom of SFB 1938, and filling the stake-holes and scoop, was a layer of black sandy loam (1936) up to 0.15m thick which contained some small and medium fragments of charcoal. Above this were two layers of light greyish brown sandy loam (1934 and 1935). At the west end was a similar charcoaly deposit (2115) which lay against the edge of the pit and partially underlay layer 1936. Layer 2115 was indistinguishable from the fill of post-hole 2116 and no post-pipe or post-ghost was detectable in either.

SFB 1965

(Fig. 15)

This survived in its entirety, sealed beneath the metallings of the Late Saxon street, and cut a pre-existing Early Saxon ditch. It measured 3.5m by 2.6m and had a slight, bulging extension at the west end. The sides sloped at an angle of approximately 45°, except in the north-east corner where they were steeper. The bottom was slightly irregular and sloped down to the north. There was a D-shaped post-hole, (1972) centrally-placed at the east end. It measured 0.36m by 0.36m at the top, but was 'stepped-down' on the east-side to a depth of 0.42m. No post-pipe was discerned. At the west end were two post-holes (1967 and 1969) of similar size 0.5m apart, 2.5m and 2.9m respectively from post-hole 1272 at the east end. They did not lie on a straight line with post-hole 1972, but were off-set about 0.25m to each other. Both were sub-rectangular, had vertical sides, and were flat-bottomed. Post-hole 1967 was slightly larger, measuring 0.42m by 0.37m and 0.4m deep; Post-hole 1969 measured 0.4m by 0.3m and was also 0.4m deep. The fills of all of the post-holes were mid greyish brown sandy loams, indistinguishable from the bottom fill

in the SFB. No post-pipes or post-ghosts were apparent. There was no indication from the stratigraphy as to which, if either, of these post-holes was earlier, although the location of post-hole 1969 within the 'bulge' at the west end of the SFB might indicate that this was an addition to or a replacement of post-hole 1967.

The bottom fill in SFB 1965 was a mid greyish brown sandy loam with some gravel (1964). Towards the centre and lying on the bottom, was a large nodule of flint which measured 0.3m by 0.18m by 0.15m. Above this was a similar layer which contained more gravel and was lighter in colour (1963). The top fill (1962) was a compact light orange brown sandy loam with some gravel. The colouration of this layer may in part have been due to iron panning caused by the overlying Late Saxon metalised street surface.

Outside of, and centrally-placed along the north and south sides of SFB 1965 were two shallow features (1991 and 2036). Feature 1991 was irregular in plan, had a maximum length of 0.55m, and sloped to a depth of 0.22m; in the bottom was a small, possible post-impression. Feature 1991 was filled with a compact deposit of fire-cracked flints in a black sandy loam, mixed with a considerable amount of charcoal flecks and larger pieces. Feature 2036 was sub-rectangular, measured 0.64m by 0.58m, but was only 0.07m deep. It contained a mid brown sandy loam. Although the fills of features 1991 and 2036 were quite different, their location in relation to SFB 1965 suggests that they may have been associated with it.

SFB 2098 (Fig. 14)

The east end of this was sealed beneath the Late Saxon street, but the west end had been partially destroyed by two of the ditches which flanked the street. From the surviving parts, SFB 2098 would appear to have measured 3.6m by 2.6m, and had steeply sloping or near-vertical sides, down to a depth of 0.6m. The bottom was flat, although there was a slight 'shelf' up to 0.3m wide at the west end which may have continued around the south and east sides. There was a single post-hole centrally-placed at each end, 3.2m apart. That at the east end (2187) was sub-rectangular, measured 0.48m by 0.2m, and was 0.2m deep. It had sloping sides and a rounded bottom. Post-hole 2044 at the west end was much more substantial. It was irregular at the top, but sub-circular towards the bottom where the diameter was 0.38m. It was 0.7m deep, had vertical sides and a flat bottom. In the bottom of this SFB, in the south-east corner, were several shallow, but well-defined impressions. These comprised a slot 0.9m long and 0.04m wide parallel to the south edge of SFB 2098 with a group of one or more small post- or stake-impressions at either end.

The fills in SFB 2098 were similar to those in SFB 1965. The bottom fill was a brown loamy sand (1977) which also filled the post-holes and other impressions. No post-pipes or post-ghosts could be distinguished within the fill. Above this was a lighter grey sandy layer which contained a noticeably higher amount of gravel (1976) and finally, a very compact brownish orange loamy sand (1975).

SFB 2125 (Fig. 15)

Most of this lay outside the limits of excavation, but the east end was exposed, sealed beneath the Late Saxon street. It was 3.2m wide, had fairly steeply sloping sides, and a very slightly bowl-shaped bottom. Its depth varied from 0.2m to 0.25m. There was a sub-circular post-hole (2128) centrally-placed at the west end, 0.37m in diameter and 0.37m deep, with steeply sloping sides and a slightly rounded bottom. On the edge of the excavation, and dug into the bottom of SFB 2125, was an irregularly-shaped post-hole (2131). This lay 0.4m to the east of post-hole 2128, had an estimated maximum width of about 0.4m, vertical sides, and was 0.41m deep. It may originally have been circular, but there had been some collapse of the sides. The fills of post-holes 2128 and 2131 were clearly differentiated from the lowest fill in the SFB. Post-hole 2128 contained a circular post-pipe (2126) which tapered from 0.17m at the top to 0.10m at the bottom, and was inclined inwards at an angle of 16° to the vertical. It was surrounded by a packing of sand and gravel. Post-hole 2131 contained a homogeneous fill of greyish brown slightly loamy sand, sealed by a thin layer of fine gravel.

The bottom fill in SFB 2125 was a mid greyish brown loamy sand with some gravel (2124). This lay below a light orange brown sandy loam which contained a higher concentration of gravel (2123) and above this was a further layer of mid greyish brown loamy sand (1973). These layers were all quite compact, and sealed by the Late Saxon street surface.

Summary of Associated Finds

Only SFBs 915, 951, 1299, 1938 and 2098 contained finds other than pottery and animal bone, though several produced one or more sherds of Roman Colour-Coated Ware. SFB 915 was by far the most prolific. It contained various objects associated with spinning and weaving comprising a chalk spindle whorl (s.f.249), twenty-eight near complete or large fragments of clay loomweights, a bone thread picker or pin beater (s.f.168), and an iron needle or awl (s.f.257). There were various other iron objects including a D-shaped buckle (s.f.160), a knife (s.f.268), a ring (s.f.229), a hinge with hanging eye (s.f.150), two nails (s.fs 270 and 271), a tapering object (s.f.151) and fragments of sheet and bar (s.fs 258 and 269 respectively). There was also 0.405 kg of smithing slag and a fragment of possible Roman tile (s.f.163). Some of the loomweight fragments were unfired, and several of the near-complete examples were found in a line extending vertically up the east side of the SFB pit. These possibly indicate a collapsed floor followed by abandonment. Some of the finds may represent the subsequent use of the SFB pit for rubbish disposal, and the relatively organic nature of the fills may support this interpretation.

None of the other Early Saxon features, with the possible exception of SFB 951, contained such a concentration of finds and most were filled with fairly sterile sandy fills. SFB 951 contained a double-sided comb fragment (s.f.205), an iron bucket mount (s.f.295), a nail shank or spike (s.f.216), and a copper alloy sheet with four rivets (s.f.239). A complete hearth bottom weighing 0.568 kg was also found. There was a single loomweight fragment and at least fourteen smooth, rounded stones. The stones were glacial erratics, but had apparently been deliberately collected perhaps for use as smoothing stones

THETFORD Redcastle Furze 1988-9 Site 24822
 Period II SFBs

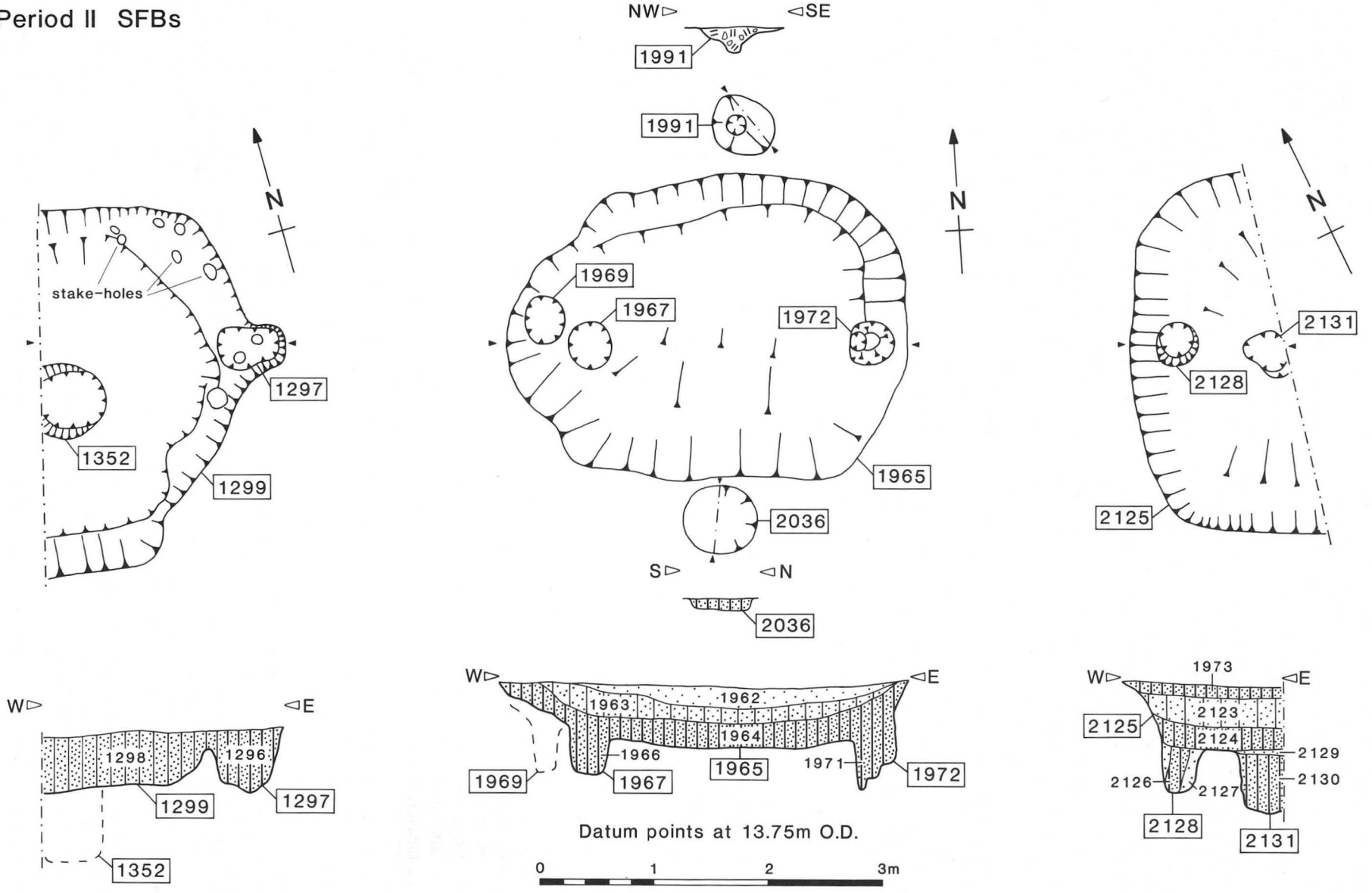


Figure 15 Plans and Sections SFBs 1299, 1965 and 2125 (Period II). Scale 1:50.

or weights. Of the other SFBs, 1299 contained a millstone grit quern fragment (s.f.571) and a fired clay spindle whorl (s.f.649), 1938 contained two loomweights, and 2098 produced a Roman coin (an Antoninianus of Tetricus II; s.f.1218).

The Sunken-Featured Buildings: Discussion

All of the nine SFBs excavated at Redcastle Furze appear to have been of the two-post type, although several had been partially destroyed by later features, and it is not possible to be certain of their original form. Using the classification employed by West (1985, 113–115) for West Stow, the SFBs at Redcastle Furze have been divided into Type A and Type A1, two-post and two-post derivative respectively. It is possible that at least two of those classified as two-post type, notably SFBs 1528 and 1599, may have been two-post derivative or even six-post type. However, insufficient of these survived to be certain, and the additional corner and side post-holes and post-impressions were relatively insubstantial compared to the end post-holes. At West Stow, two-post derivative and four-post types had post-holes of similar size, with the end post-holes not necessarily any larger than the others (e.g. West Stow, SFBs 2 and 3).

Type A: Two-Post

Seven SFBs have been attributed to this type, and these varied considerably in detail. Five were sub-rectangular in plan with rounded corners (SFBs 951, 1599, 1938, 1965, and 2098). The other two were also sub-rectangular, but had square corners, more steeply sloping sides, and were both larger and deeper (SFBs 915 and 1528). Two examples (SFBs 951 and 1965) each had a pair of adjacent post-holes at their west ends, but the post-holes may not have been contemporary, and perhaps represented the replacement of one post by another. SFB 1965 also had shallow, possible post-holes mid-way along either side, outside of the pit, although it is not certain whether these were associated with the SFB. (At West Stow, SFB 8 had post-holes set mid-way along the sides, but these were set into the slope of the pit rather than outside of it, and both were as large as the end post-holes).

The measurements between post centres ranged from 2.5m (SFB 1965) to 4.25m (SFB 915), with an average distance of 3.3m. The lengths of the pits varied from 3.25m to 4.9m, and the widths from 2.6m to 4.5m, although SFBs 915 and 1528 were each at least 1m longer and broader than any of the other examples. The depths of the pits as measured from the top of existing natural were on average approximately 0.5m, although SFB 915 was slightly deeper at 0.6m, and SFB 1528 substantially deeper at 0.9m. The size and profiles of the post-holes varied considerably. They were generally circular or sub-circular in plan, although a few were sub-rectangular, and varied from 0.3m to 0.5m in diameter. Depths ranged from 0.6m to 1.1m below the top of natural. Four contained post-pipes approximately 0.15m in diameter, which compares with diameters mostly between 0.15m and 0.2m at West Stow. Two SFBs (951 and 1965) had stepped post-holes or post-pipes. As at West Stow, the end post-holes were either at the junction of the pit wall and floor, or mid-way in the slope. SFBs 2098 and 1299 (Type A1) had post-holes at the top of the slope, a situation occasionally noted at West Stow (e.g. SFBs 1 and 19).

Several SFBs had features in the floor or sides of the pit. SFBs 915 and 2098 had shallow slots, possibly plank impressions, along part of one side at the bottom. In SFB 915 these extended from a corner across the width of the pit, and in SFB 2098 along the length. Both slots appeared to be associated with small, shallow circular impressions (SFB 12 at West Stow provides a parallel for these. In this example, there were four shallow slots between 1m and 1.5m long which extended from corner post-holes along the bottom of the slope on the long sides of the pit. These slots were interpreted by the excavator as having held a lining to the pit). SFB 1938 had an approximately rectangular arrangement of stake-holes in the centre of the bottom of the pit, and both the fill of the stake-holes and the bottom fill of the pit was a dark, charcoaly soil. These may have held stakes which perhaps formed a small, wattle-lined enclosure on or beneath the floor of the SFB, but no parallels for this are known. (Stake-holes were recorded in the bottoms of some of the SFBs at West Stow and also at Brandon Road (Dallas 1993), but no patterns have been recognised. At Brandon Road, SFB 1 had internal stake-holes, and a possible small slot; SFB 3 had numerous stake-holes in the bottom, and a 'sand-filled groove' which ran diagonally from the north-east corner).

Type A1: Two-Post derivative

Two examples have been classified under this type (SFBs 1299 and 2125). Both lay partly outside the excavated area, and therefore only partial plans and sections were recovered. They have been distinguished from Type A by the presence of at least one substantial post-hole in the floor of the pit in addition to the end posts. The positions of these posts, up to 1.5m within the edge of the pits, make it unlikely that they preceeded or replaced the end posts, and it is most probable that they were contemporary. At West Stow, only four out of a total of seventy SFBs had end post-holes within the pit, clear of the slope, but none as far as 1.5m from the bottom edge of the slope. The position and size of the post-holes at Redcastle Furze make it probable that they held structural posts, but no parallels for this arrangement are known.

Except for the possible exception of SFB 1965 no traces of any stake-holes, post-holes, or gullies were found outside the SFB pits which may have formed part of the structures. Some did have stake-holes or small post-holes in the vicinity, but none of these could be securely dated, and no coherent patterns were discerned. It is uncertain whether any related features have subsequently been destroyed by ploughing. However, where SFBs were preserved beneath the Late Saxon street in the north-east corner of the site it appears unlikely that much has been disturbed or removed from the top of the original ground surface. If any structurally-related features had existed they must have been extremely shallow, or else the timbers rested directly on the ground surface.

The fills of the SFBs varied considerably. Some contained dark sandy loams which were relatively soft, and others had more compact sandier material. A few had homogeneous fills, but most contained more complex stratigraphy. The distinct division into 'two layers' often recorded at West Stow was not present in the Redcastle Furze examples. Compared to those at West Stow, the SFBs at Redcastle Furze and Brandon Road contained few finds, and these appear to have been distributed

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Period II Ditches and Pits

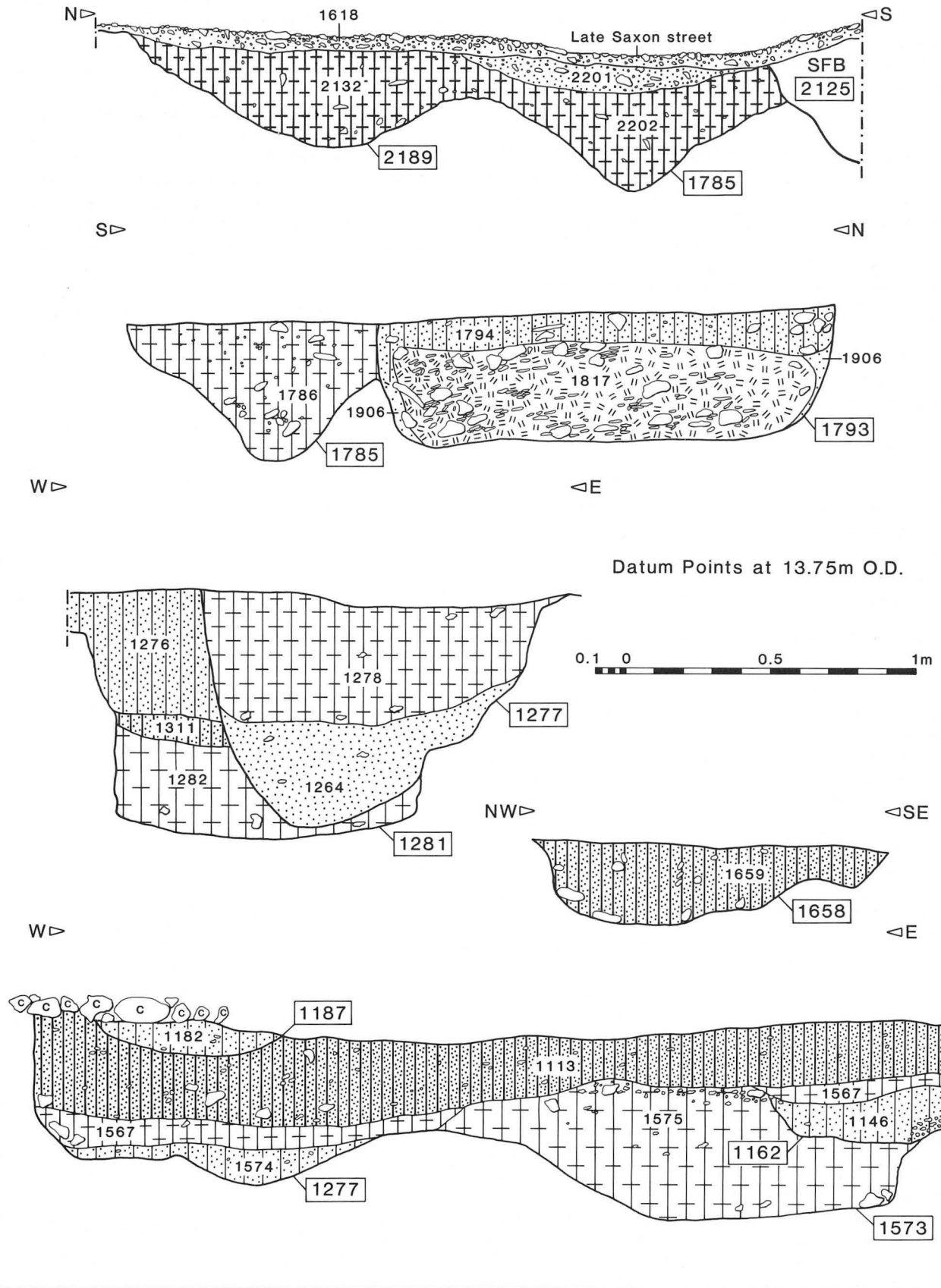


Figure 16 Sections ditches and pits (Period II). Scale 1:20.

throughout the fills. No hearths were found either on the floors of the pits, or within their fills. Several had layers of clean sand, sand and gravel, or yellowish brown loam within them which was probably material which had been blown or washed-in. In SFBs 951 and 1528, post-ghosts were detected in the lower fills of the pits suggesting that either material had accumulated against the posts whilst the structures were still in use, or that the posts had been left *in situ* for some time after the structures had been abandoned.

A detailed discussion and interpretation of the SFBs at West Stow has been presented by West (1985, 116–21). He argues for them having had suspended floors at ground level, with the pit being left as an open space below to facilitate air circulation and thereby a dry atmosphere within the structure. Several of the examples at Redcastle Furze might support this interpretation. In SFB 915 a line of five or six unfired loomweights lay in a line extending near-vertically up the east edge of the pit, and it would seem likely that they had collapsed into this position rather than having been discarded later after the SFB had been abandoned. Other indications that at least some of the SFBs had suspended floors is provided by the lack of trampled material on the bottoms of the pits, the preservation of the sides of the pits with little evidence for collapse even where the natural was very sandy, and the lack of any steps down into the pits which would have facilitated easier access. The ‘shelves’ around the edges of several may also have been associated with floors. This interpretation differs from that of the four SFBs excavated at Brandon Road (Dallas 1993). The latter were all two-post types, and in these examples it is considered that the bottoms of the pits may have been floors, with two having had possible entrance ‘steps’.

It is not clear what the fills of the SFBs represent. If some had suspended floors, then the darker fills in the bottom of SFBs 915 and 1528 may have been derived from material filtering between the floor planks. The dark fill which contained charcoal at the bottom of SFB 1938 may have come from the destruction of the building, although there was no burnt daub. (A similar fill was found at West Stow towards the bottom of SFB 17, and this also included some burnt thatch. This structure is considered by the excavator to have perhaps been partially burnt down, and subsequently rebuilt). Whatever the form of their original construction, it is likely that some of the SFBs provided suitable receptacles for domestic refuse following their abandonment and demolition. The upper fills in several were probably derived from this source.

Ditches

(Figs 16 and 17)

Several ditches and small gullies were excavated which perhaps belonged to two separate systems of enclosures.

The more substantial features formed a group which lay in the north-east corner of the site, and comprised ditches 1277, 1658 and 1785. Ditch 1785 ran approximately east-to-west on the same alignment as most of the SFBs. A 28m length was exposed which extended from the east edge of the excavation to a point where it turned northwards at an angle of 115°; it then continued for a further 15m as far as the edge of the excavation, at 90° to the edge of the river valley. This latter section is numbered as 1277. Ditches 1785 and 1277 were up to 1m wide, 0.7m deep, and had V-shaped profiles. They were

filled with a yellowish brown silty loam containing varying amounts of gravel, but very few finds. At the east end of ditch 1785 was a short length of ditch (2189) of similar size, profile and fill. This lay adjacent to, and north of ditch 1785 and diverged slightly from it. Together, ditches 1785 and 2189 may have formed a double-ditch. A 12.5m length of 2189 was investigated including a terminus at the west end. Ditches 1785 and 2189 were cut by SFBs 1965, 2098, and 2125, but ditch 1277 cut Early Saxon pits 1281, 1573 and 2219. Towards the west end of ditch 1785, and at 90° to it, was a shallow ditch (1658) up to 1.4m wide and 0.3m deep. Ditch 1658 was at least 15m long, and appears to have been contemporary with the other ditches.

In the south-east corner of the site were three curving gullies (570, 635 and 956), of which 570 and 635 appear to have been associated. These gullies were shallow, up to 0.6m wide and 0.2m deep, with only short lengths surviving or traceable. They were filled with brown sandy loam. The relationship, if any, between the two groups of ditches and gullies is not clear.

Pits

(Fig. 18)

A total of eleven pits has been assigned to this period, although it is possible that two of these (508 and 524) were not Early Saxon. Of the eleven, there was one group of five pits, and another group of three pits which were typologically similar.

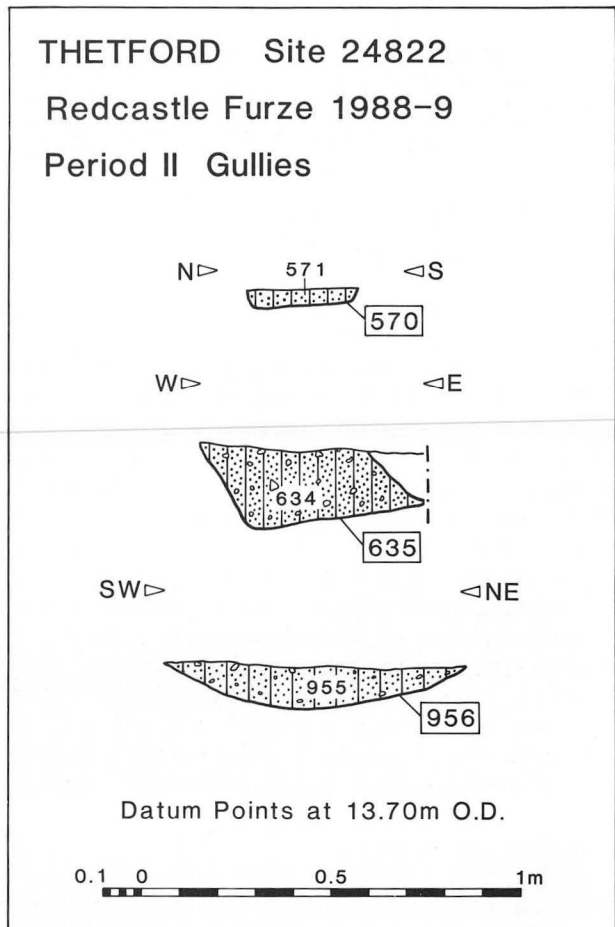


Figure 17 Sections gullies (Period II). Scale 1:20.

The group of five pits were clustered towards the north of the site within 10m of each other, but 17m from the nearest SFB found. This group comprised pits 1279, 1281, 1573, 1638 and 2219. All were circular or sub-circular in plan, between 1.1m and 1.4m in diameter. They had vertical sides, flat or near-flat bottoms, and were up to 0.6m deep. Pits 1573, 2219 and to a lesser extent 1281 had been cut away by later features, although enough survived to show that all of them had similar fills. The sequence usually comprised of a lower fill, up to 0.3m thick, of yellowish brown silty loam which contained some small gravel, overlain by dark brown sandy loam, also with some small gravel. None of the pits produced many finds, but several small sherds of Early Saxon pottery were recovered.

The shape of the pits, and the good preservation of the sides towards the bottom might be an indication that they had originally been at least partially lined, but their function is unknown. They were almost certainly all contemporary, and pre-dated the ditch system in that area.

The second group of pits comprised 127, 924 and 1793. These were sub-rectangular and fairly shallow. Pits 127 and 1793 measured approximately 1.5m by 1.2m, and pit 924 3m by 1.5m. They were all approximately 0.4m deep. Pit 127 lay close to SFBs 915, 1528 and 1599, towards the centre of the site, and pit 1793 lay close to SFBs 1938, 1965, 2098 and 2125 in the north-east corner of the site. Pit 924 lay in the south-west corner, not close to any of the excavated SFBs, but other SFBs may have lain just outside the excavated area. None of these pits had the same orientation, and none were on the same alignment as the SFBs. However, their stratigraphic relationship demonstrates clearly that they were Early Saxon. All were filled with charcoal fragments up to 20mm in size, with occasional larger pieces, mixed with a large quantity of fire-cracked flints. The charcoal has been identified as heather (*Calluna*). None of the pits contained any finds.

The fills of these pits and their proximity to the groups of SFBs suggests that they were either used as cooking pits, or contained the debris from hearths or cooking.

Three other pits (508, 524 and 1940) have been assigned to this period.

Pit 508 was a comparatively large feature, 1.5m square and 1m deep. It had steeply sloping sides with some undercutting on the east side, and a fairly flat bottom. The bottom fill (553) was a thin layer of very dark greyish brown silty sand mixed with pale grey ash. This was sealed by a layer of redeposited or slumped natural sand. Above this layer in the east half of the pit was a substantial deposit of dark greyish brown, ashy silty sand (510), and in the west half were a series of similar layers. The lower of these (51 and 549) contained what appeared to be comminuted charcoal. These layers were sealed by a layer of dark yellowish brown sandy loam with some small gravel (556), perhaps a deposit which had been washed or blown into the pit. Above this was a mixed layer which contained some ash (551), and finally a layer of silty sand which was probably windblown material. The only datable find from pit 508 was a small sherd of Late Saxon pottery which was probably intrusive; the lack of finds in a pit of this size on the site suggests that it is unlikely to have been Late Saxon, and an Early Saxon date is more probable. Pit 508 cut a small post-hole (554) at the east end, but the latter is unphased. The lower fills in pit 508 suggest that it may have been used to dispose of hearth debris, but unlike pits

127, 924 and 1723 there was little charcoal and only occasional fire-cracked flints.

Pit 524 which lay 15m to the west of pit 508 was a small, oval feature which measured 1.8m by 1m, and was 0.1m deep. It was filled with a mid greyish brown sandy loam with some gravel, and a few large flint nodules up to 0.12m in size. The only finds were a few fragments of animal bone.

Pit 1940 was a very shallow, circular, bowl-shaped feature, 1.5m in diameter and 0.35m deep. It lay within the group of SFBs in the north-east corner of the site, and was filled with a dark brown sandy loam which lay above a thin layer of dark yellowish brown sand. The purpose of this feature is unknown, and it contained very few finds.

The paucity of finds from the Early Saxon pits at Redcastle Furze is paralleled at Brandon Road where there were possibly seven pits (Dallas 1993), and at West Stow where there may have been as many as ninety-nine (West 1985, 55–7). At neither of these sites could functions be attributed to the pits, but the general lack of domestic refuse suggests they were not used for rubbish disposal. At West Stow, the majority were circular or oval, but there was a discrete group of twelve rectangular, vertically-sided, flat-bottomed pits which were filled with homogeneous brown sandy fills. Some of the latter contained slight evidence for linings (West 1985, 55). In many respects this latter group of pits was similar to the group of five circular pits at Redcastle Furze and may have been dug for a specialised, perhaps industrial purpose. No pits filled with charcoal and burnt flints, interpreted here as possible cooking pits, were found at either Brandon Road or West Stow.

Post-holes

Some of the many unphased post-holes probably belong to this period, but only a small group sealed beneath the Late Saxon street in the north-east corner of the site can be ascribed to this period with any certainty. These were post-holes 1987, 1996, 2164, 2166, and possibly also 2057 and 2059, but none formed any pattern and their purpose is unknown.

General Discussion

The Early Saxon features at Redcastle Furze belonged to a settlement on the south bank of the Little Ouse River. This settlement extended 200m to the east, and an unknown distance to the south and west. The eastern limit was probably located by Davison at Brandon Road (Dallas 1993) and evidence for occupation having extended to the west was found by Knocker at Red Castle (Knocker 1967, 125 and 131). The location of this settlement is likely to have been influenced by the existence of a nearby fording point on the river. This ford may have been a focus within the settlement, but it is not known whether occupation extended to the north bank of the river.

Early Saxon burials have been found at several places in Thetford: at the site of St Margaret's church (Dunmore with Carr 1976, 5), beneath the present golf course to the south of Brandon Road (Dunmore with Carr 1976, 5), and to the north at Brunel Way (Penn forthcoming). These burials lay to the south, west, and north respectively of the settlement, and may have been contemporary with it. No other Early Saxon occupation sites are known in the vicinity.

The dating of the settlement remains somewhat problematic due to the lack of closely dateable finds. The Early Saxon pottery from Redcastle Furze is all hand-made and locally produced, with only a single rusticated sherd and no stamped wares. One sherd of faceted-angle pottery was found by Knocker at Red Castle, but there is no other material of recognisable fifth-century date. There is a possibility that early wares may have reached the settlement in small quantities, or not at all, and therefore their absence does not necessarily preclude a fifth-century date for occupation. There is also a comparable lack of stamped wares, the presence of which might be indicative of sixth-century occupation. Again however, the absence of such material does not certainly mean that there was no occupation at that time.

The environmental evidence from the Early Saxon features does not indicate any continuity between the Roman and Saxon periods (see below, p.131), and though negative evidence should always be treated with caution, it does lend slight support to the suggestion that the settlement dated to the later rather than the earlier part of the Early Saxon period.

None of the Early Saxon features contained Ipswich Ware, which was introduced around the middle of the seventh-century. Ipswich Ware was found in small quantities across the site, and its absence in the Early Saxon features suggests that none of them dated to much beyond the first decades of the seventh century. Furthermore, several of the Early Saxon SFBs and ditches were cut by features which did contain Ipswich Ware, none of which bore any relation to the earlier layout of the site.

The existence of a system of Early Saxon ditches is considered below to be indicative of late occupation, that is, during the later sixth and early seventh centuries.

In conclusion, there appears to be limited evidence for the settlement having been in existence during the sixth and early seventh centuries, with a later rather than earlier date being more likely.

There was clearly a sequence of Early Saxon occupation at Redcastle Furze which conceivably spanned a period of two centuries, but probably considerably less. This sequence is best illustrated by the group of circular pits which had been cut by a ditch system, which in turn cut by several SFBs. It is not possible to say which if any of the SFBs excavated were contemporary with the pits and ditches, although some were clearly later. It is possible that the nature of the site changed from being an area given over initially to pit digging, followed later by the excavation of a series of ditches, and finally by the construction of SFBs, but this is considered unlikely.

The SFBs belonged to at least two groups, with each group perhaps representing a sequence of structures on more or less the same site. None of the SFBs within each group overlapped, although some lay very close together, and thus it is possible that more than one may have stood at the same time. A group of four which comprised SFBs 1938, 1965, 2098 and 2195 lay in the north-east corner of the site, and a group of three SFBs which comprised 915, 1528 and 1599 lay towards the centre of the site. SFBs 1965, 2098, and 2195 of the first group cut ditches 1785 and 2189, but the relationship between the ditch system and the second group is unknown. It may be of significance that the two largest SFBs (915 and 1528) belonged to this second group, and this may reflect a chronological or functional difference between the

groups. Both groups of SFBs had pits tentatively interpreted as cooking pits in close proximity (Pits 1793 and 127 respectively). A further possible cooking pit (924) which lay in the south-east corner of the site probably indicates the presence of another group of SFBs just beyond the excavated area. Of the other SFBs, 951 lay on its own and not apparently associated with any others, and 1299 lay on the west edge of the excavation and may therefore have been one of a group which lay outside the limits of excavation.

Although a substantial area was excavated at Redcastle Furze, no post-built timber halls were found which may have been associated with the SFBs. There were a large number of unphased post-holes, but no patterns have been recognised which might be interpreted as marking the sites of timber halls of the type found at West Stow (West 1985, 10). The apparent absence of such structures at both Redcastle Furze and Brandon Road, suggests that this Early Saxon settlement at Thetford comprised perhaps entirely of SFBs, with few if any associated post-built timber halls. It is most likely therefore that at least some of the SFBs were for domestic occupation as well as being used for ancillary functions such as weaving.

At West Stow, the development of an irregular system of boundary ditches has been assigned to the latest phase of the settlement, in the seventh century (West 1985, 151). At Redcastle Furze the ditches were post-dated by several SFBs, and this may mean that either these SFBs were relatively late in date, or that the ditch system was created earlier, in the sixth century. Such boundaries are unknown in the earlier phases of other Early Saxon sites in England, and thus by analogy, this might indicate that Early Saxon occupation at Thetford continued into the seventh century. However, the ditches were not maintained and had been cut by several SFBs which suggests that they did not define any form of regular plots and boundaries which are characteristic of rural settlements of the Middle Saxon period. Thus at Redcastle Furze there was no evidence for there having been any continuity between the Early and Middle Saxon settlements, and it is probable that there was an occupation hiatus during the seventh century.

IV. Period III—Middle Saxon

(Figs 11, 19 and 20)

Two slightly irregular, shallow ditches (401 and 1703) aligned east-to-west and north-to-south respectively, lay at 90° to each other in the north half of the site. They cut several Early Saxon features, and were cut by numerous Late Saxon pits and ditches which had destroyed any junction between them. Ditch 401 was an estimated 27.5m in length, and ditch 1783, which extended beyond the edge of the site to the north, somewhat longer. Both ditches were generally between 0.6m and 0.8m wide, and up to 0.55m deep, although ditch 1783 became broader at the north end where it was almost 2m in width (Fig. 20). Ditch 401 was filled with a dark brown sandy loam containing some small gravel, and ditch 1783 with a light greyish brown sandy loam. Ditch 401 contained a single sherd of Ipswich-type Ware, several residual sherds of Early Saxon pottery, and two intrusive sherds of unglazed Grimston Ware. Ditch 1783 contained one sherd of Ipswich Ware.

No other Middle Saxon features were identified, although some of the numerous unphased post-holes may have belonged to this period.

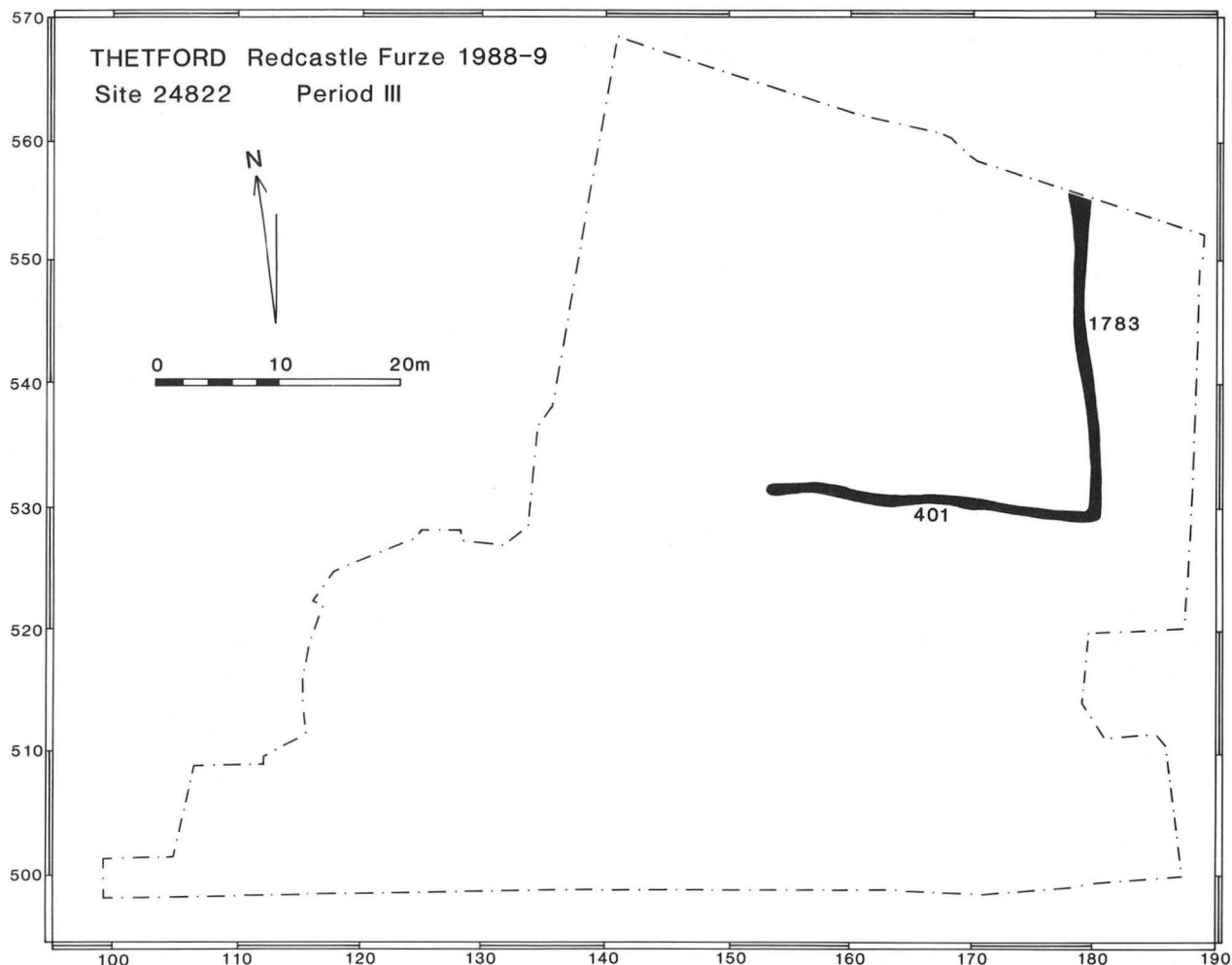


Figure 19 Plan ditches (Period III). Scale 1:600.

A total of fifty-one sherds of Middle Saxon pottery were recovered, mostly from the west half of the site, but with the exception of the two sherds noted above, all occurred either as a surface scatter or were residual in later features.

Other Middle Saxon finds included a copper alloy mount (Fig. 67, no. 25) from ditch 401, a pin (Fig. 67, no. 24) and an enamelled disc brooch (Fig. 66, no. 14), the latter two items both being residual in Late Saxon contexts.

Discussion

Only two shallow ditches were assigned a Middle Saxon date, and fifty-one sherds of Middle Saxon pottery recovered from the excavations at Redcastle Furze. However, this small number of features and finds should be seen in context with the numbers found on other sites in Thetford. At Red Castle immediately to the west, sixty-eight sherds of Middle Saxon pottery were recovered from several small trenches (Knocker 1967, 137; Dallas unpub.), but at the extensive excavations at Brandon Road to the west, only six sherds were found (Dallas 1993). The only other Middle Saxon pottery recorded from excavations in Thetford is a single sherd of probable Ipswich-type Ware from Site 2 North (Rogerson and Dallas 1984, fig. 179, 396), nine rather abraded sherds of Ipswich-type Ware from Thetford Castle (Site 5747), seven of which came from the upper fill of the outer ditch

of the Iron Age fort (Davies and Gregory 1992), and a few sherds from recent excavations north of the river at Minstergate and St Nicholas Street (Sites 5913 and 1134 respectively; Andrews and Penn forthcoming).

The only other site where possible Middle Saxon features have been recognised was at Red Castle (Knocker 1967, 131), but some doubt remains over these as a result of the re-attribution of some of the pottery originally assigned a Middle Saxon date (Dallas unpub.). The distribution of pottery indicates a general fall-off from west to east, and this is reflected in the distribution at Redcastle Furze where the pottery mostly occurred as residual material in later contexts in the west half of the site.

Ditches 401 and 1783 probably marked boundaries, and perhaps formed two sides of an enclosure. This enclosure is likely to have extended up to the edge of the river valley which lay just beyond the limit of excavation to the north, but no boundary was found to the west. Whatever the purpose of these ditches, they were insubstantial and had not been re-cut. They can be broadly dated to between the seventh and ninth centuries, and thus represent the first certain evidence for Middle Saxon occupation in Thetford. No associated structures were recognised, although some of the many unphased post-holes may have been contemporary.

It is likely that the site at Redcastle Furze lay on or near the eastern limit of a Middle Saxon settlement which

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Period III Ditches

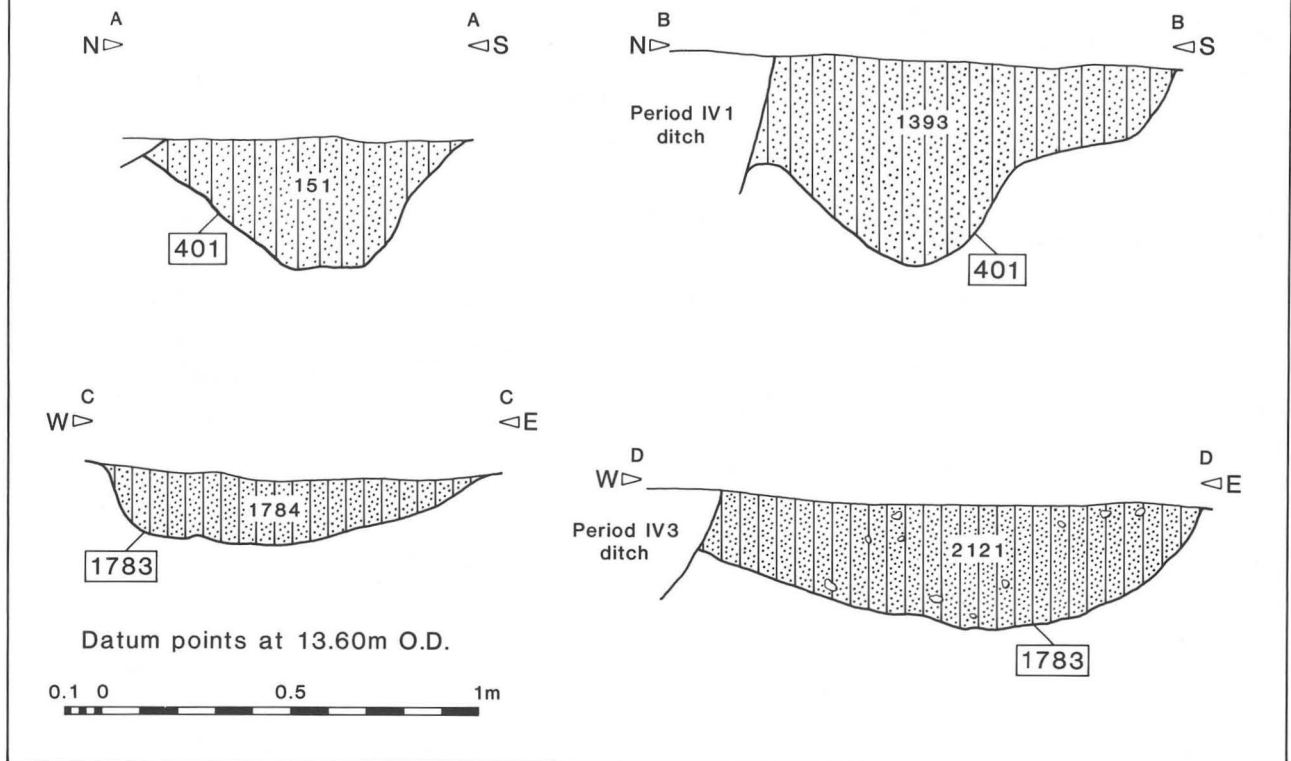


Figure 20 Sections ditches (Period III). Scale 1:20.

extended an unknown distance to the west (Fig. 21). Metal detector finds made up to 850m to the west during construction of the Thetford by-pass in 1988-9 included several items of Middle Saxon metalwork (two strap ends, a pin and a brooch) and possibly nine or more eighth and ninth-century coins. Pottery and animal bones have also been reported from the same area, and at least forty-seven of the pottery sherds were Ipswich-type Ware (Sites 24849 and 24850). Some uncertainty surrounds the provenance of the coins, which also included several Late Saxon issues, particularly as many have not been seen either by archaeologists, or by numismatist Michael Bonser. All that can be said is that some at least are probably from Thetford. A list of the Middle and Late Saxon coin finds from the Thetford by-pass site is given in Appendix I. Most of the finds reported would appear to have been made in the area marked as Site 24849 in Fig. 21, an area which was used by the road building contractors for stockpiling sand and gravel, and for mixing concrete. However, some finds were probably recovered from elsewhere along the route of the by-pass (Site 24850).

Other Middle Saxon finds from Thetford south of the river include a Series R sceat from the excavations at Red Castle (Knocker 1967, 148), two stycas of Aethelred II, one from Site 1092 and another as a surface find in an allotment 235m to the north (Pagan 1984, 68), a pin and a brooch fragment from salvage excavations at the Priory of Holy Sepulchre (Site 11521), and a nummular brooch from the vicinity of Thetford Castle. The styca from Site 1092 on the south edge of the Late Saxon town was found

in a residual context, and it is uncertain as to how it reached there as no other Middle Saxon finds except for the other Aethelred II coin are recorded from the vicinity. However, the finds from Red Castle and the Priory of Holy Sepulchre were all made within or near to concentrations of Middle Saxon features and finds.

A few sherds of Ipswich-type Ware, a ninth-century Carolingian denier probably minted in Dorestad, a fragment of vessel glass, a brooch, and part of a linked pin are all Middle Saxon items found in recent excavations north of the river at Minstergate (Site 5913) and St Nicholas Street (Site 1134), but no contemporary features were identified.

These discoveries suggest that a Middle Saxon settlement may have extended for at least 850m along the south bank of the Little Ouse River and perhaps, like the Early Saxon settlement, developed around a fording point on the river. Trial excavations in 1990 (Site 24849) within this area revealed a series of shallow ditches and pits of Middle Saxon date, thereby confirming the presence of occupation to the west of the postulated fording point. Little more is known of the chronology, nature and layout of this Middle Saxon settlement at present, but it would appear to have overlapped only slightly with the Late Saxon town which developed on an almost entirely different site to the east. The small quantity of Middle Saxon pottery recovered from very limited excavations on the Iron Age fort defences to the west hints at the possibility of the fort having had some function during the Middle Saxon period. It lies immediately to the north of

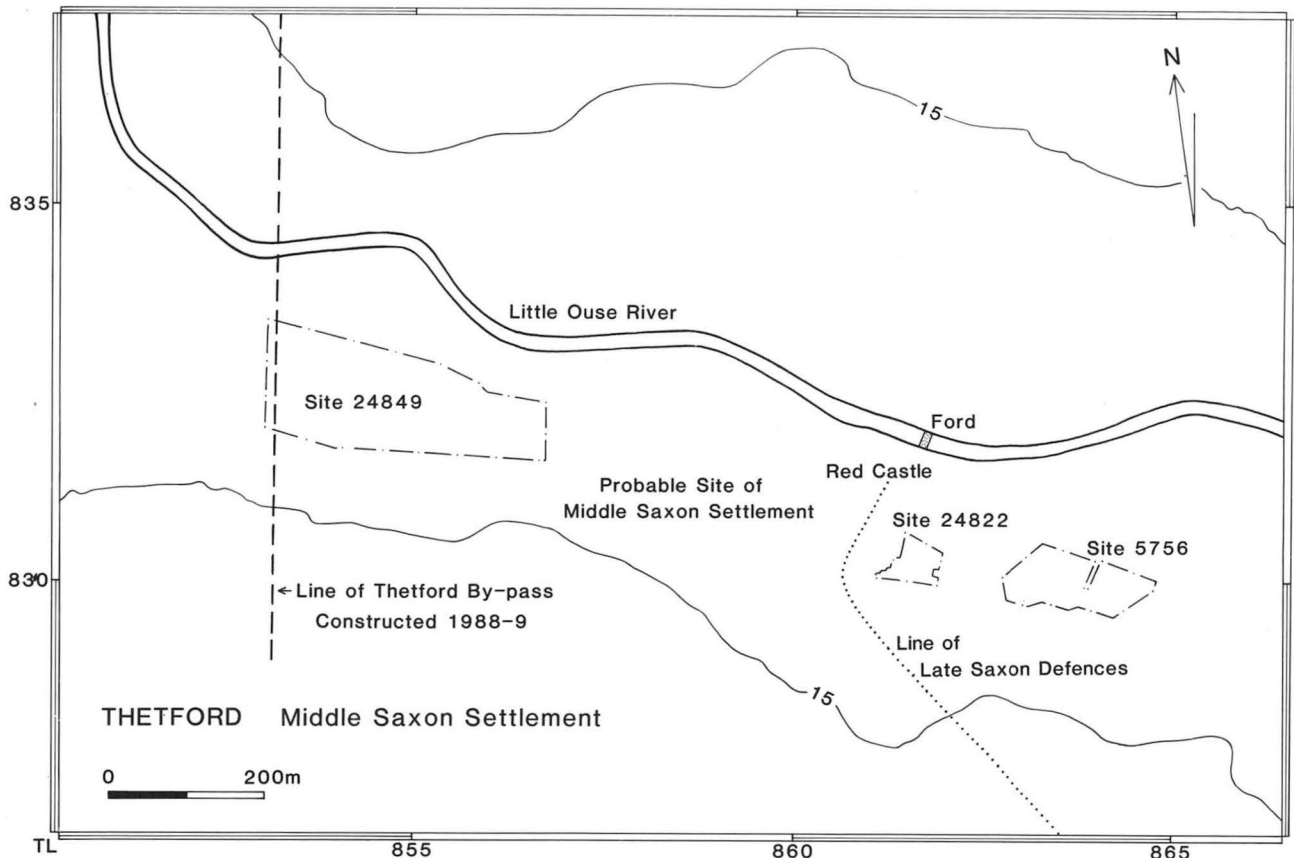


Figure 21 Map of Thetford: location of Middle-Saxon settlement. Scale 1:10,000.

an important river crossing at Nuns' Bridges, and like Iron Age forts elsewhere (*e.g.* Hod Hill) may have been a site where exchange took place (Metcalf 1984, 54). Any future excavations there should consider the possibility that the site was exploited during the Middle Saxon period as a possible exchange or market site, particularly as important Middle Saxon sites have recently been discovered and excavated at Middle Harling 7 miles to the east (Rogerson forthcoming), and at Brandon a similar distance to the north-west (Carr *et al.* 1988).

The location of Middle and Late Saxon settlements on mutually exclusive sites within the same area is now well known as a result of recent work in other towns including Southampton (Brisbane 1988, 101-8), London (Hobley 1988, 69-82) and York (Hall 1988, 125-132), and Thetford may prove to be another example where a shift in settlement has taken place.

V. Period IV1-Late Saxon (Fig. 22)

Ditches

(Figs 23-25; Pl. III)

A series of ditches were laid-out in a roughly rectilinear pattern, although not all of the elements of this system were in use at the same time; some ditches were re-cut, others were not maintained, and elsewhere additional sections were dug (Fig. 22, Phases 1a and 1b). However, the basic layout of the ditch system survived.

Ditches 928, 867, 1224 and 1395 formed the major east-to-west elements of the system, and ditches 1234 and 1641 the major north-to-south elements. Ditches 583, 1150 and 1152 were probably secondary components.

Ditches 1224 and 1395 formed a continuous east-to-west line across the centre of the site, and extended beyond

the limits of excavation. They were up to 3m wide, 1.5m deep and V-shaped in profile. Both had two shallow parallel slots in the bottom indicating that they had been re-cut, although this was not always evident in their fills. The bottom fills were brown to yellowish brown sands or slightly loamy sands, which were overlain by grey or dark grey sandy loams. Very few finds were recovered from any of the lower fills. Above the lower fills, approximately half-way down the ditches, was a layer of very dark grey or black sandy loam which contained numerous small fragments of daub and flecks of charcoal. This appeared as layer 1255 in ditch 1224, and layer 1333 in ditch 1395. This layer was concentrated around the junction of these ditches with ditch 1234 to the north, and was up to 0.35m thick. It extended as a discontinuous spread at least 10m along each of these ditches, and was present in 1231, the re-cut of ditch 1234 to the north, and perhaps also in ditch



Plate III Central southern area of site, ditch 1224 under excavation in foreground, looking south.

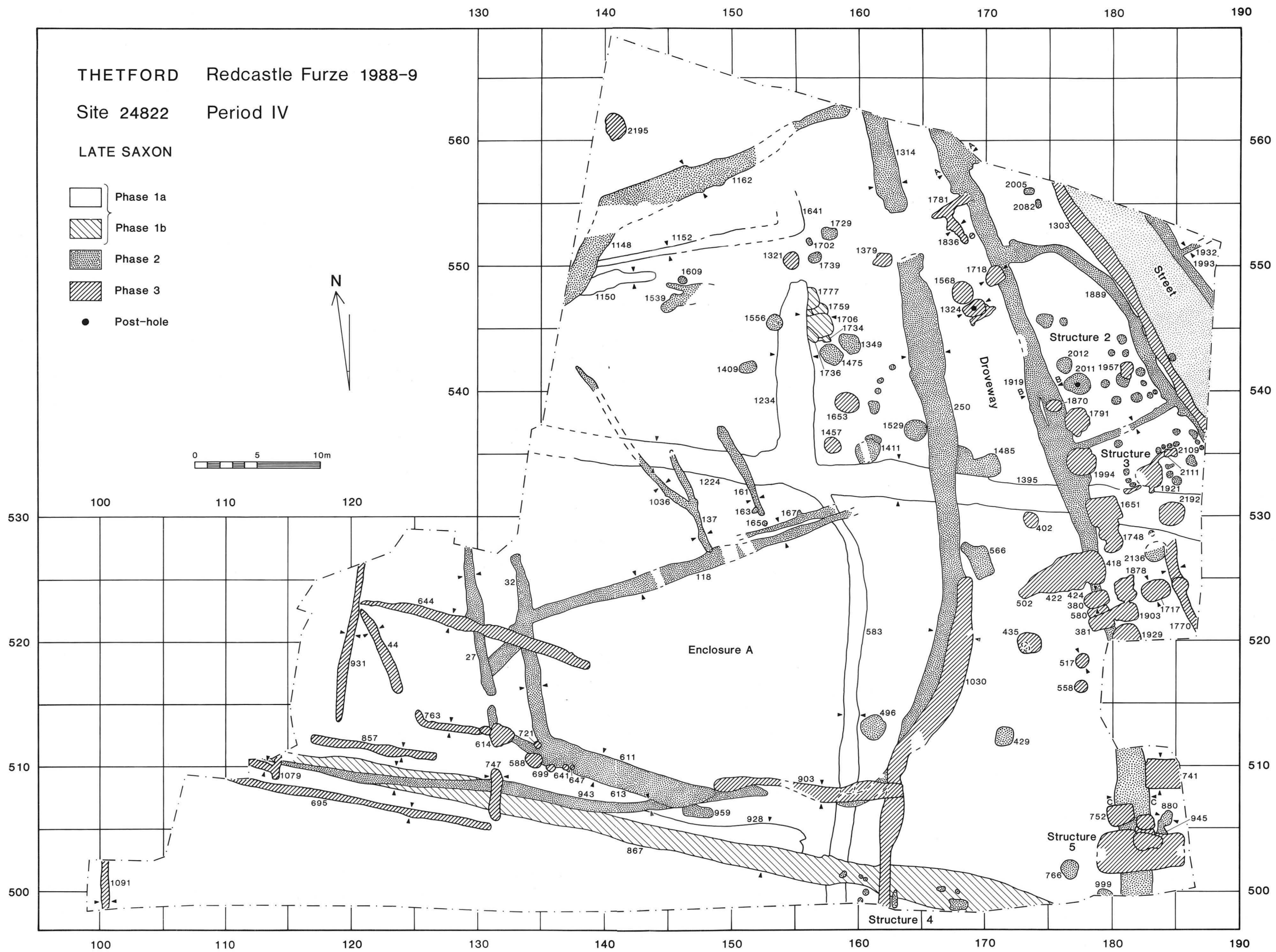


Figure 22 Plan Period IV features. Scale 1:300.

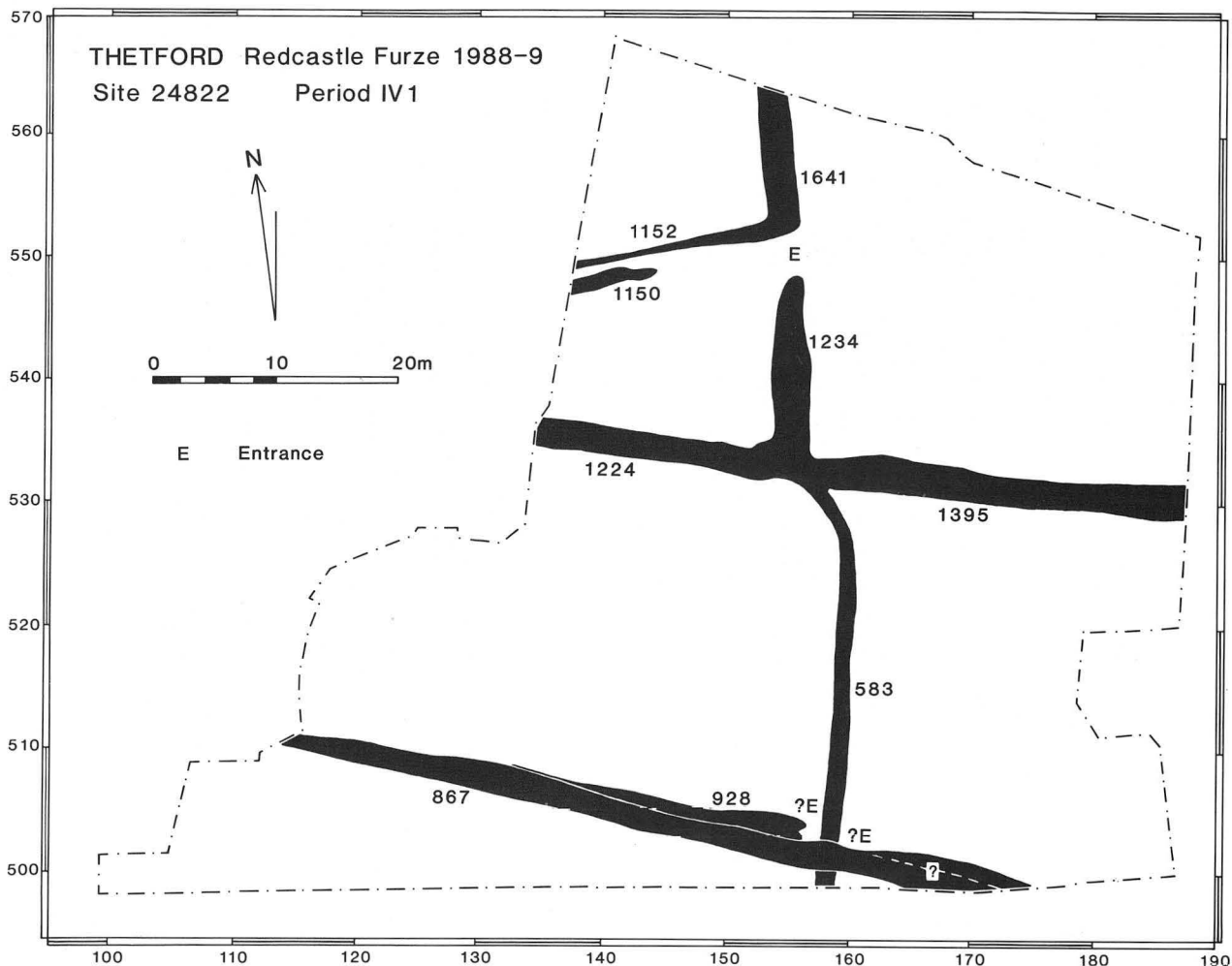


Figure 23 Plan Period IV1 ditches. Scale 1:600.

583 to the south. In ditch 1395 this layer had been clearly deposited from the north side. The upper fills in these ditches were generally brown sandy loams, but in places there were deposits of wind-blown sand.

Ditch 1234 lay at 90° to the north of ditches 1224 and 1395 and was similar to them in both size and profile. It extended for approximately 15m, at which point there was a gap of 3.5m, and then continued further to the north; the latter part has been numbered as 1641. Ditch 1641 appeared to be aligned at a slightly different angle to 1234, but most of it had been destroyed by the Period VI bailey ditch (see below). Both ditches 1234 and 1641 had parallel slots in the bottom, similar to those in ditches 1224 and 1395 but more pronounced, and the evidence of a re-cut (1231) was clearly visible in the fill of ditch 1234. No distinctions could be made between the fills of ditches 1224, 1234 and 1395, and this and the continuity of the slots in the bottom suggest that they were contemporary.

At the south end of ditch 1641 was a small ditch or gully (1152) which had been dug at 90° to the east of it. Although the junction had been partially destroyed, enough survived to show that ditch 1152 was a later addition. It extended for 18m to the edge of the excavation, at which point it was only 0.5m wide and 0.3m deep. Parallel to this ditch and immediately to the south was a short length of a deeper, but more irregular ditch (1150). This was up to 1.4m wide and 0.7m deep, and was filled

with a dark greyish brown sandy loam which contained more gravel towards the top.

Ditch 583 extended to the south of the junction of ditches 1224, 1234 and 1395, but was off-set to the east of ditch 1234, and joined ditches 1224 and 1395 at an angle of approximately 45°. It extended for more than 30m to the south, beyond the limit of excavation. It was considerably smaller than the other ditches, being up to 1.5m wide and 0.5m deep. It was originally V-shaped in profile, although a single slot had been cut along the bottom indicating a re-cut. The fill was a uniform mid greyish brown sandy loam which contained some flecks of burnt clay or daub towards the top at the north end. This burnt clay or daub may have been a continuation of layers 1255 and 1333 in ditches 1224, 1234, and 1395 to the north. No chronological relationship could be established between ditch 583, and ditches 1224 and 1395, but it is perhaps most likely that it was a later addition, dug when ditches 1224 and 1395 were re-cut.

Along the southern edge of the site was a succession of east-to-west ditches which ran at a slight angle to ditches 1224 and 1395 in the centre. The earliest was ditch 928 which extended for 42m from the edge of the site to a terminus. There may then have been a gap of 6m or so before a continuation to the east, but any evidence for a continuation had been obscured by later ditches. Ditch 583 bisected the postulated gap, and it is most likely that ditch 583 was later than ditch 928. Ditch 928 was up to 1.5m

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Period IV1 Ditches

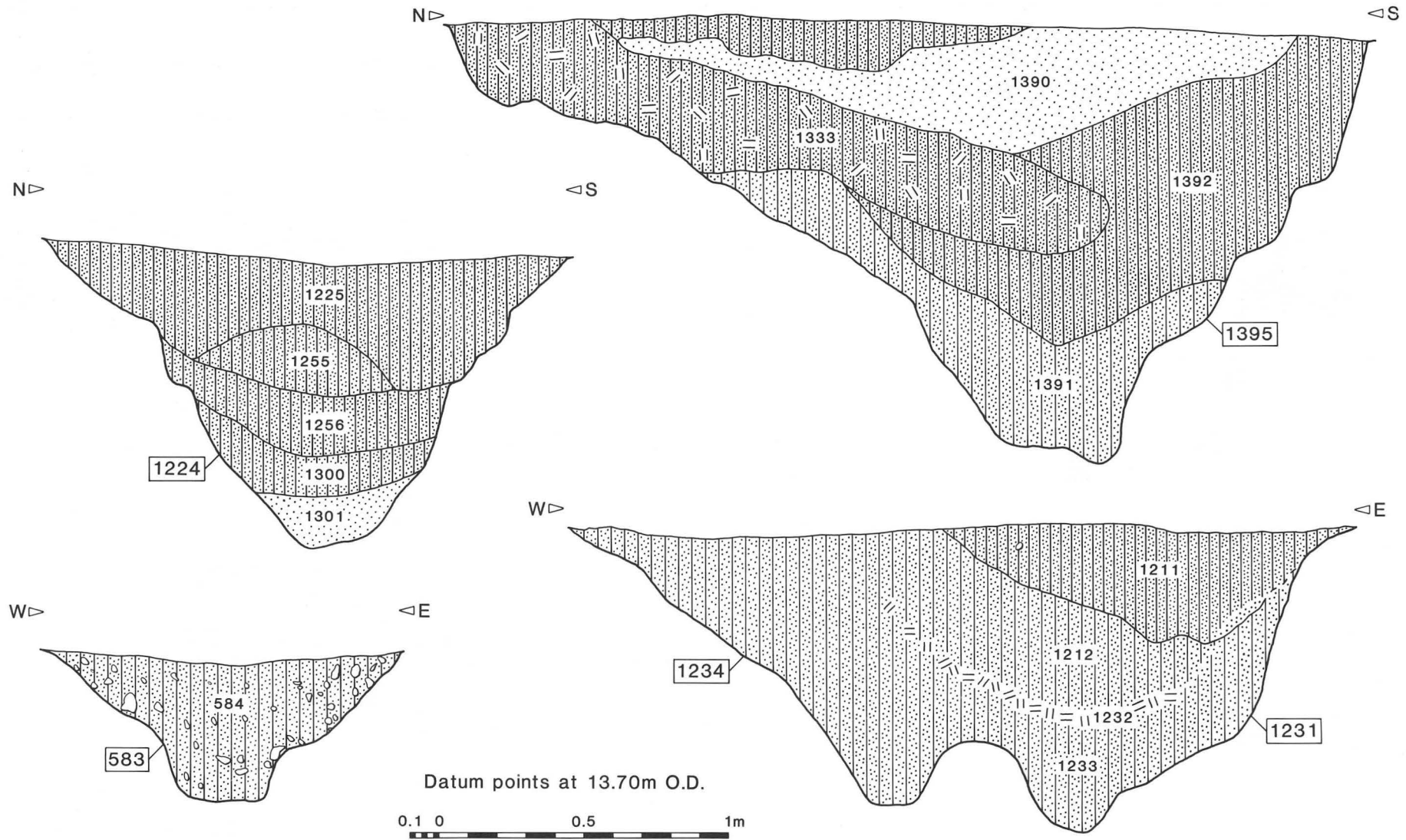


Figure 24 Sections ditches (Period IV1). Scale 1:20.

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Period IV1 Ditches

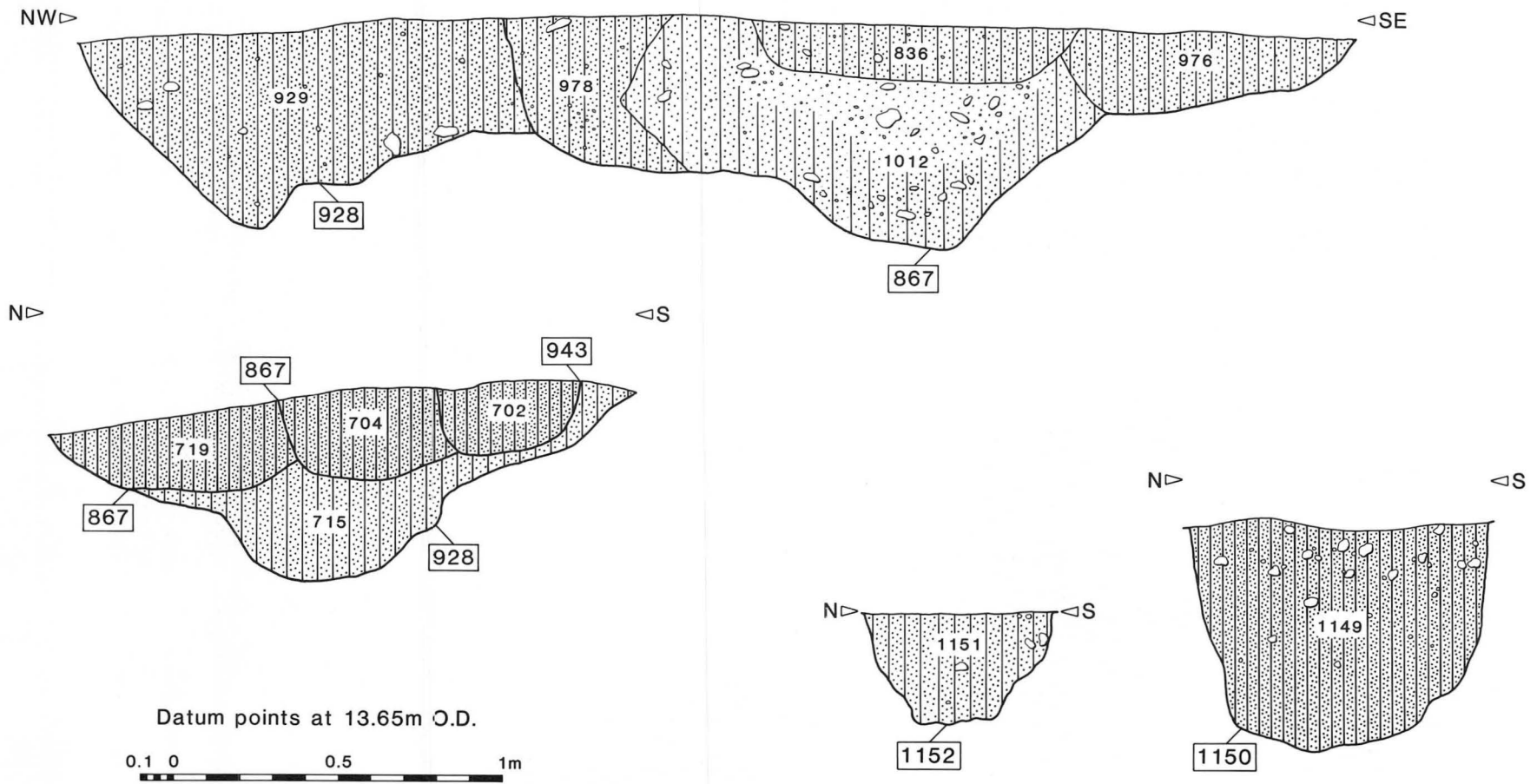


Figure 25 Sections ditches (Period IV1). Scale 1:20.

and 0.6m deep, and had been re-cut at least once before being replaced by ditch 867. Ditch 867 extended for a distance of 60m. At the west end of the site it was only 1m or so wide and 0.25m deep, but towards the east it was up to 3m wide and 0.7m deep. Ditch 867 appeared to have been re-cut at least once, but this was not always clear in either the profile or the fills. The succession of ditches along the southern edge of the site all had more rounded profiles compared to the other major ditches of this phase, and none had any clearly defined slots in the bottom, characteristic of ditches 1224, 1234 and 1395. Their fills comprised mainly of brown sandy loams which were only distinguishable from each other by the amounts of flint they contained, and by the presence of varying concentrations of sand which usually occurred in fairly well-defined patches.

No structures could be assigned to Period IV1, but the presence of debris including some burnt daub in the upper fills of ditches 1224, 1234, 1395 and possibly also 583 suggests the existence of at least one structure in the vicinity. The distribution of debris indicated a likely location within the angle formed by ditches 1234 and 1395. The remains of a hearth or oven (1275) cut by a Period IV2 pit were found there, but no contemporary arrangement of structural features.

Pits

A group of pits comprising 1706, 1759, 1777 and 1779 lay towards the centre of the site, and formed an uncertain relationship with ditch 1234. No cut lines could be distinguished, and the pits and ditch appeared to share common fills (Fig. 26). However, the alignment of individual pits and the group as a whole might suggest they should be assigned to Period IV2 rather than Period IV1. The earliest of the group were pits 1759 and 1779, but

these had largely been cut away by pits 1706 and 1777, and therefore little could be determined about their original shape or size, although the surviving fills were similar to those in pits 1706 and 1777. Pits 1706 and 1777 were sub-square, had steeply sloping sides, and near-flat bottoms. Pit 1706 was 2m square, and pit 1777 slightly smaller at 1.7m square, but both were 0.8m deep, and appear to have formed a pair. At the south end of pit 1706 were two small pits or large post-holes (1734 and 1736) which appeared to have been contemporary with the pit as no differences between the fills could be distinguished. Pit 1706 contained a homogeneous fill of very dark greyish brown sandy loam with some small gravel, mixed with an appreciable amount of charcoal, some iron slag and small fragments of burnt clay or daub. Pit 1777 had two fills, the lower similar to that in pit 1706, but the upper was lighter and contained little charcoal and no burnt clay or daub. The presence of charcoal and burnt daub in these pits might suggest that their digging and infilling was broadly contemporary with the re-cutting and infilling of ditches 1224, 1234, and 1395.

Discussion

The ditches and pits assigned to Period IV1 have been dated to the beginning of the eleventh century. The ditches probably marked field boundaries in an area enclosed within the defensive circuit which had remained as open ground and not been built over. The ditches in the northern part of the site were aligned to the edge of the river valley which lay immediately to the north, and those in the southern part to the line of the defences which lay up to 100m to the south of the site. The evidence for several re-cuts in some of the ditches indicated that they had been maintained for some time before they eventually became infilled. The paucity of finds in the ditches probably

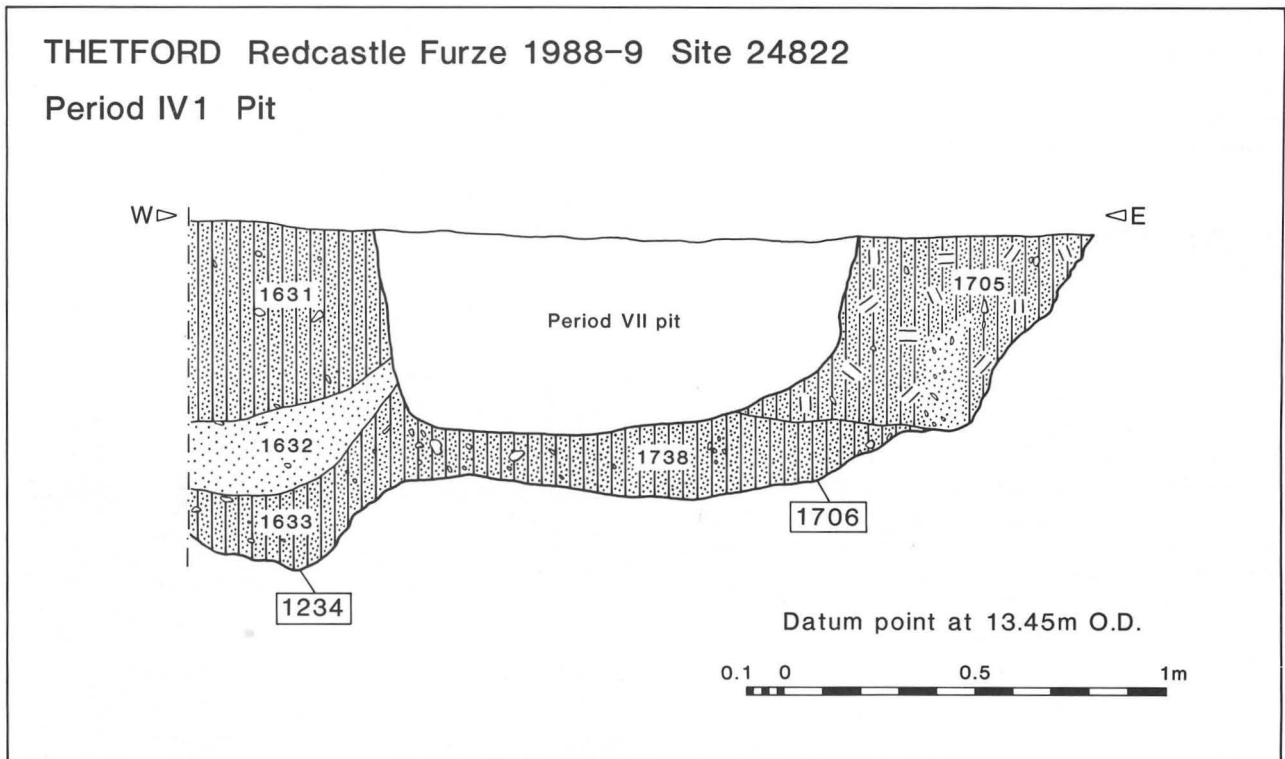


Figure 26 Section pit (Period IV1). Scale 1:20.

reflects their distance from any area of dense occupation. However, the presence of a group of pits and the burnt daub found in the nearby ditches suggests that there was at least one structure in the vicinity, although no trace of this survived.

The pits within the group were of unusual form compared to others on the site, being square, vertically-sided and flat-bottomed, but it is uncertain whether their form represents a chronological or functional difference. Environmental samples provided no information in this respect and ultimately they appear to have been used for the disposal of domestic refuse and perhaps some industrial debris as evidenced by the presence of charcoal and iron slag.

The existence of a field system within the defences was also uncovered at Brandon Road (Dallas 1993). The west half of that site, closest to Redcastle Furze, differed markedly from the east half in that a sequence of enclosure and boundary ditches or gullies was present (Dallas 1993, fig. 4). These have been dated from the tenth to the twelfth centuries, and perhaps indicate the extent to which the town had been built-up by the end of the tenth century, with the western half of the site remaining as fields until further expansion took place in the eleventh century. Amongst the earliest of the ditches were a group which pre-dated the street system, and delineated a large enclosure approached by a trackway or driveway from the south (Dallas 1993, fig. 7). These ditches had been re-cut on two or three occasions, and the enclosure contained several post-built structures, although the structural sequence remains unclear.

The ditches and enclosures assigned to Period IV1 at Redcastle Furze were probably part of the same system as was uncovered on the west half of the site at Brandon Road. The existence of enclosures or fields defined by quite substantial ditches, and presumably also banks (perhaps with fences set in them), makes it most likely that these were for animals, although other areas could have been set aside for growing crops. This system may have been characteristic of the more peripheral parts of the town in the tenth century, which retained a semi-rural appearance, prior to being subsumed by urban expansion during the eleventh century.

VI. Period IV2–Late Saxon

(Fig. 22)

The Street

(Figs 27 and 28; Pl. IV)

The major development during this phase was the laying-out of a metalled street, which was exposed in the north-east corner of the site. It was not possible to determine the relationship of this street to any of the Period IV1 ditches as the projected junctions lay beyond the limits of the site. However, it is considered most likely that the street post-dated these ditches.

The street was aligned north-west to south-east and was between 5m and 5.5m in width. A length of approximately 20m was exposed, and all of this subsequently removed down to natural. Four Early Saxon SFBs and several contemporary features lay beneath it, but no Late Saxon features were found. In some areas the gravel metalling directly overlay natural sand and gravel or the fills of the features, but elsewhere there was a layer up to 0.05m thick of disturbed natural in-between. The

earliest metalling (1618) comprised a hard-packed, fairly level layer of well-sorted small flints (mostly less than 0.02m in size) mixed with some grit. In most areas this layer was only one or two flints thick. Several wheel-ruts were clearly visible, four of which could be traced over the entire length of street exposed. The ruts appeared to belong to two parallel sets which diverged towards the north, and were between 0.1m and 0.6m wide, and up to and 0.12m deep. In places they had worn through to the underlying natural, but no attempt had been made to repair them.

Immediately above metalling 1618 was a thin spread of dark gritty soil (1216) which contained a coin of Cnut, two sherds of St Neot's-type ware, one sherd of early medieval ware, and a variety of iron objects including several fragments of horseshoes and a number of small nails.

Either side of the street were two shallow ditches (1889 and 1919) which appear to have delineated properties; these are discussed further below.

The Structures

Traces of three small rectangular post-built structures were identified, two of which were probably re-built during Period IV3. It is likely that some of the many unphased post-holes belonged to Period IV2, and may also represent structures, but it has not been possible to assign any of these to either a period or a structure.

Structure 2

(Fig. 28)

This lay within a small ditched enclosure adjacent to, and on the west side of the street. The enclosure delineated by ditches 1889, 1919 and 1925 was approximately sub-rectangular with one rounded, and three square corners. It enclosed a plot which measured 15m by 7m, and covered an area of approximately 100m². A group of post-holes lay towards the south-east corner of this enclosure, and these can be tentatively assigned to a structure which probably would have measured up to 8m long and 3m or 4m wide. The post-holes were mostly sub-circular with diameters between 0.3m and 0.9m, and several of the larger ones contained post-impressions indicating posts 0.3m in diameter. Depths varied between 0.1m and 0.3m.

The surviving pattern of post-holes was extremely irregular, and no floors or hearths survived. It is therefore impossible to be clear about the form and layout of this structure except that it was aligned parallel to the street.



Plate IV Street surface 1618, later ditch 1303 to right, looking south-east. Scale 2 metres.

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Period IV Street

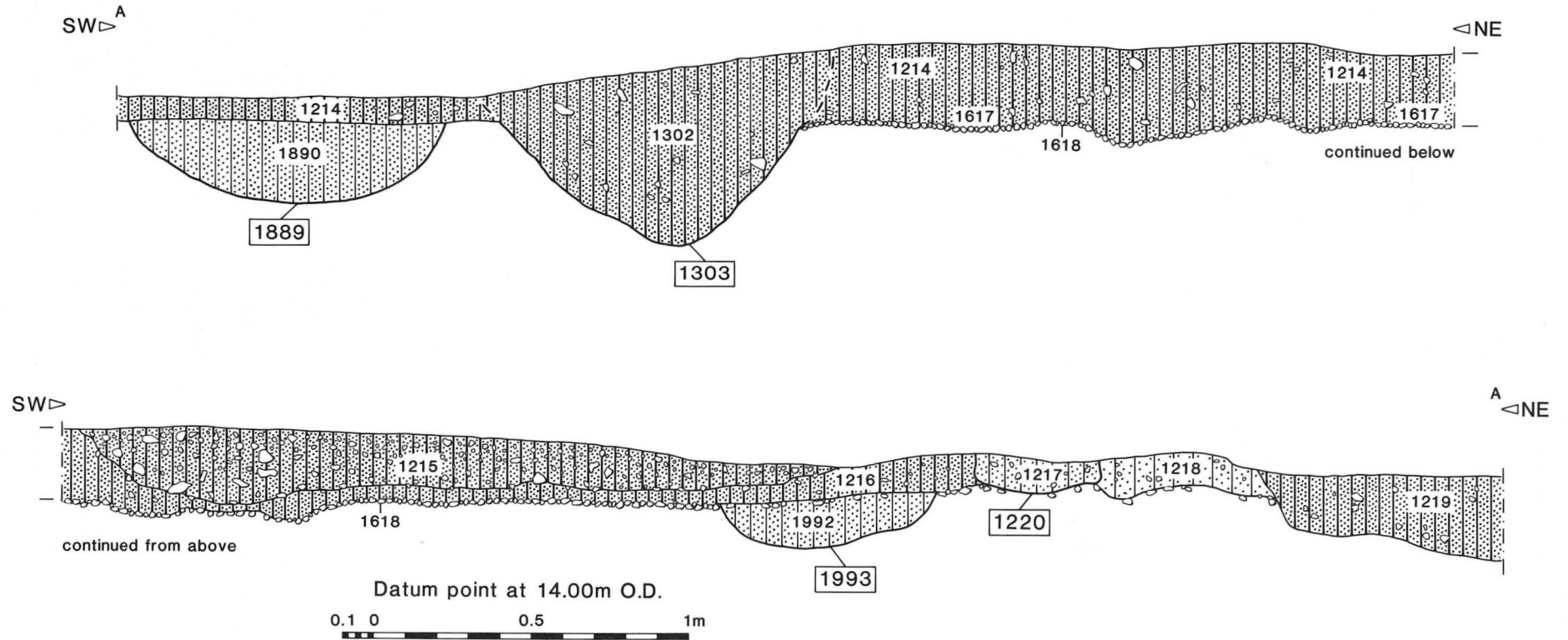


Figure 27 Section street (Period IV2). Scale 1:100.

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Period IV2 Structure 2

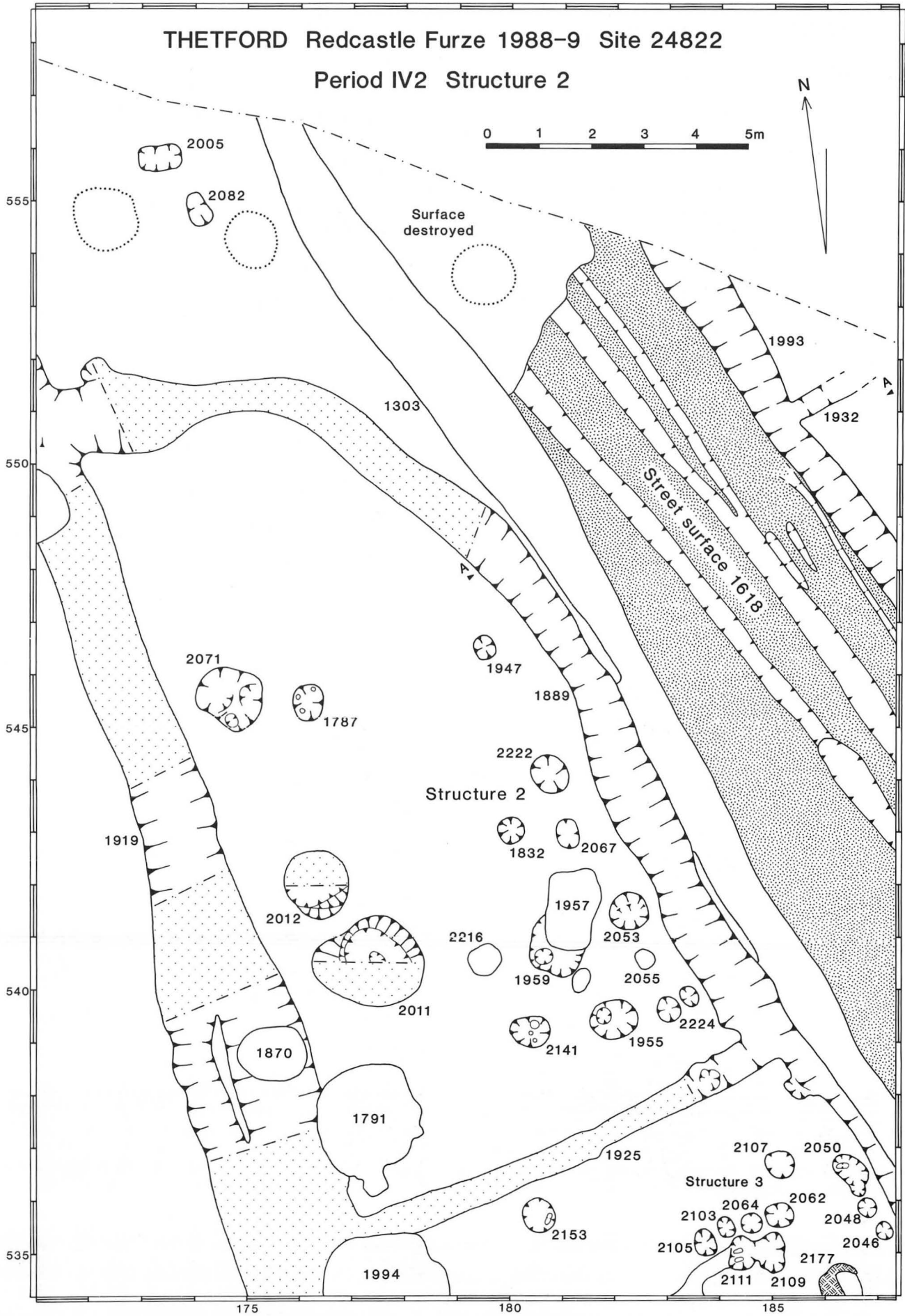


Figure 28 Plan Structure 2 (Period IV2). Scale 1:100.

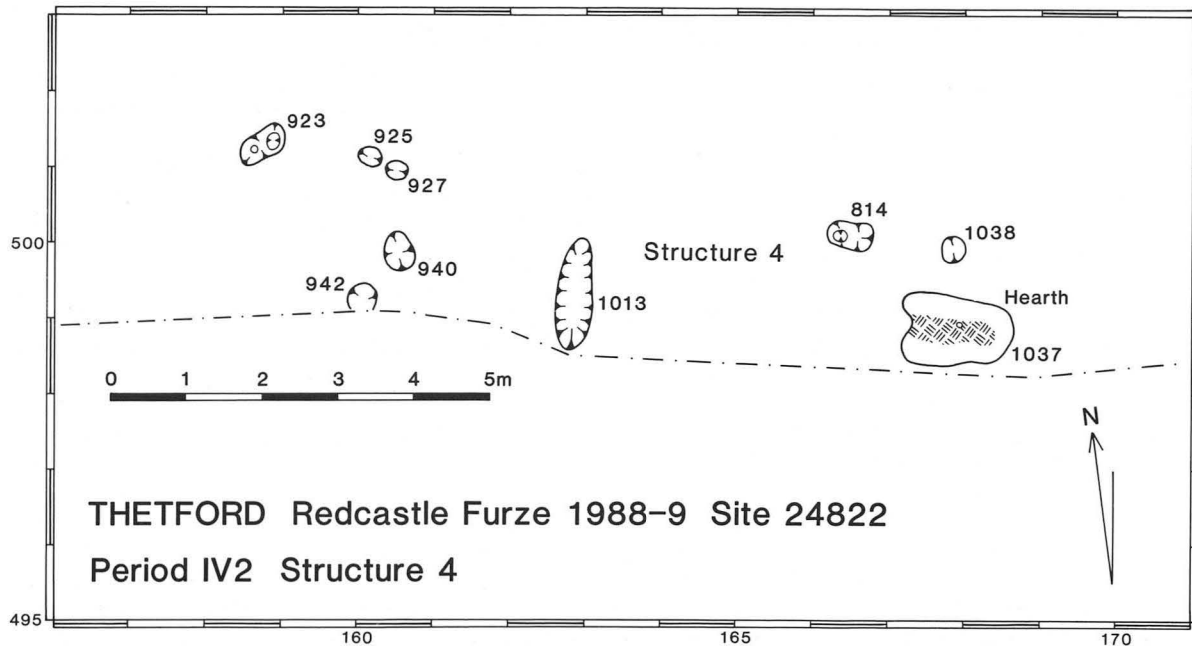


Figure 30 Plan Structure 4 (Period IV2). Scale 1:100.

Post-holes 2053, 2055, 2067, 2222, 2224 and possibly also 1947 may have marked the north-east wall adjacent to the street, and all lay less than 1m from enclosure ditch 1889. Post-holes 1789, 2141 and 2216 could have marked the line of the south-west wall, with 1823, 1955 and 1959 perhaps holding ridge posts.

A post-hole complex to the north-west of Structure 2 was probably contemporary, but of uncertain purpose. It comprised three shallow inter-cutting post-holes (2071).

Two pits lay within the enclosure and may have been associated with Structure 2. Pit 2011 was oval, measured 2.1m by 1.6m, had near-vertical sides, and was 1.6m deep. Centrally-placed in the bottom was a sub-circular post-hole, 0.25m in diameter and 0.1m deep. Pit 2012 was sub-circular, 1.2m in diameter, had vertical sides, and was 1.65m deep. The pits lay within 0.5m of each other, between Structure 2 and enclosure ditch 1919. Both contained fairly undifferentiated sequences of fills of brown or greyish brown sandy loams, with few finds.

Structure 3 (Fig. 29)

This lay to the south of Structure 2 in an enclosure also delineated by ditches 1889, 1919 and 1925. It would appear that this enclosure was larger than that to the north, but its extent to the south was not determined. The evidence for a structure within this enclosure was unequivocal, although it extended beyond the limits of excavation.

A group of ten post-holes lay towards the north corner of this enclosure, and marked the north-west end of a small structure which was at least 6m long, 3m wide and aligned parallel to the street. Most of the post-holes were sub-circular, between 0.3 and 0.5m in diameter, and up to 0.35m deep. A few were slightly larger. Their spacing was irregular, ranging between 0.5m and 1.5m apart, and all contained dark brown sandy loams. No post-ghosts were detected, although there was a sub-rectangular post-impression 0.25m by 0.1m in the bottom of post-hole 2050. The north-east wall line was marked by post-holes

2046 and 2048, the south-west line by 2113, 2170 and 2172, and the north-west line by 2062, 2064 and 2103. Post-holes 2050 and 2105 probably held corner posts.

A centrally-placed hearth or oven (2177) lay within the structure, 2m from the line of the wall at the north-west end. This feature comprised a partially-surviving crescent-shaped area of clay which measured 1m by 0.8m, and had been burnt to a red colour over much of the inner face. Hearth or oven 2177 was overlain by a quantity of burnt daub with wattle impressions. This daub may have come from the walls of Structure 3, but its localised occurrence in the vicinity of hearth or oven 2177 suggests that it may have come from a superstructure associated with the hearth or oven. No floor surface survived within Structure 3.

Several other post-holes lay outside Structure 3 and were not apparently associated with it. These included post-hole 2107 to the north-west, and post-holes 1896, 1944 and 2153 to the south-west.

A single pit (2136) which lay within the enclosure and to the south-west of Structure 3 may have been contemporary.

Structure 4 (Fig. 30)

This lay towards the south-east corner of the site, partly outside the excavated area. It would have been at least 20m from the street, and was not aligned to it. Instead, it followed the same alignment as ditch 867, an infilled Period IV1 ditch which it overlay. Structure 4 was at least 8m long and 2.5m wide, and comprised of a series of shallow post-holes, a slot, and a hearth. The survival of the hearth suggests that comparatively little of these post-holes have been destroyed by later activity. The north wall line was marked by post-holes 925, 927, 814, 1038 and possibly also 923, and the west wall line probably by post-holes 940 and 942. The post-holes varied in shape and size, with most between 0.2m and 0.4m in diameter. None were deeper than 0.15m. Two of the larger ones (923 and 814) contained post-impressions 0.2m in diameter. A

slot (1013) 1.5m long, 0.5m wide, and up to 0.2m deep lay at 90° to the north wall line. All of the post-holes were filled with dark greyish brown sandy loams which contained considerable quantities of charcoal, but the slot had a different fill of brown sandy loam. A hearth (1037) had been constructed 0.6m from the north wall line, towards the east end of the structure. This hearth was sub-trapezoidal in plan, up to 1.5m long, and between 0.75m and 0.95m wide. It survived as a slightly raised platform of chalk mixed with clay and had been burnt to a reddish colour in the centre. The edges were slightly raised, but it is uncertain as to whether any super-structure existed as has been suggested for hearth or oven 2177 in Structure 3. No associated floor levels survived.

It is impossible to be certain of the form and layout of Structure 4 from the surviving evidence, particularly as only part of it lay within the excavated area. If post-hole 923 held a corner post, then post-holes 940 and 942 may have marked an internal division. Slot 1013 is best interpreted as an internal division, but would not have divided the structure into equal areas. The location of the hearth indicates that it was not centrally-placed, but off-set to one side perhaps towards the east end of the structure.

Structure 4 was not enclosed by any ditches, and it is not possible to associate any of the surrounding pits with it. However, it lay only 5m to the south of an entrance into a large enclosure (Enclosure A) which was probably contemporary, and the two may have been associated. This is discussed further below.

Ditches

(Fig. 31)

A variety of ditches and gullies of differing lengths and profiles were excavated. These have been divided into two groups; one group alongside the street which formed a series of small enclosures interpreted below as plot or property boundaries, and the other group which lay away from the street to the west which have been interpreted as contemporary boundaries delineating a larger enclosure (Enclosure A).

The first group of ditches formed the enclosures which contained Structures 2 and 3 (Figs 28, 29 and 30). Ditch 1889 adjacent to the street was shallow, up to 1m wide and 0.25m deep, and filled with a brown sandy loam containing few finds. Towards the north end it curved round to the west to meet ditch 1919 which ran approximately parallel to it, up to 10m to the west. Ditch 1919 was larger than ditch 1889, between 1.5m and 2.5m wide, and up to 0.55m deep. It was exposed over a length of 60m, and towards the south changed alignment and ran north-to-south, perhaps reflecting a change in alignment of the street. In some places ditch 1919 appeared to comprise of two separate ditches, but this distinction could only be detected in plan and not in the fill, which was indistinguishable from that in ditch 1889. A small ditch or gully (1925) at 90° between ditches 1889 and 1919 separated the two plots which contained Structures 2 and 3.

On the north side of the street there was evidence for a similar system of plot enclosures, but insufficient of the area could be exposed to locate any structures within them. A shallow ditch (1993) up to 1m wide and 0.15m deep ran alongside the street, and a smaller ditch or gully (1932) extended at 90° to the north-east of this. Both ditches contained brown sandy loams and few finds.

Enclosure A

(Figs 32 and 33)

Set back from the street to the west was an enclosure of different character to those adjacent to the street. It was much larger, and no clear evidence for structures was found within it. The series of ditches which comprised this enclosure have been divided into two sub-groups, with an earlier system of ditches delineating a primary enclosure which was subsequently made smaller or divided up by a second group of ditches. In its earlier form (Fig. 32a), this enclosure measured at least 60m by 50m. It extended beyond the edges of the excavation to the north and west, with ditches 250 and 1314 marking the east limit, and ditch 943 the south limit. It had at least two entrances, one on the south side and one on the east side, 5.5m and 3.5m wide respectively. Ditches 250 and 1314 were subsequently retained, and probably re-cut, but ditch 943 to the south was replaced by ditches 611 and 613, although a 10m wide entrance was retained in the same position as before. Ditches 27 and 32 to the west were a continuation of 613 and 611 respectively, and it was probably at this time that ditches 148 and 1162 to the north were dug.

The earlier group of ditches (250 and 1314, and 943) only partially reflected the alignments of the preceding Period IV1 ditches. Ditch 943 to the south followed much the same line as ditches 867 and 928, but ditches 250 and 1314 cut across ditches 583 and 1395 to run approximately parallel to the street and the adjacent plot or property enclosures.

Ditches 250 and 1314 diverged from enclosure ditch 1919 towards the south leaving a gap, possibly a driveway, varying between 3.5m and 10m in width between them. Ditches 250 and 1314 were both probably approximately 1.5m wide when originally dug, but this was not certain as they had been re-cut. Both were up to 0.9m deep, and filled with a homogeneous yellowish brown sandy loam which contained few finds. Ditch 943 was smaller than ditches 250 and 1314, and was up to 1m wide and 0.5m deep. It had a similar fill except towards the west end where the soil was much darker and contained some charcoal. This might have been derived from a deposit of refuse or destruction debris, and thus may indicate the location of a building in the vicinity. However, most of the post-holes in the area remain unphased and none formed any coherent structural plan. A child inhumation (964) was found near to the east terminus of ditch 943, aligned east-to-west, and apparently placed in a shallow grave. No grave cut could be distinguished within the fill of the ditch, and it is considered most likely that the body was buried in the partially infilled ditch rather than at some later date after the ditch had been filled-up and gone out of use. An adult inhumation (961) had been placed in a grave (959) less than 0.5m to the east of ditch 964. Both burials are discussed further below (pp 44 and 120).

At a later date Enclosure A was modified (Fig. 32b). This probably involved making it smaller, although it could have remained the same size but been sub-divided into several smaller enclosures. A series of ditches of varying size and profile were dug, and subsequently re-cut on at least one occasion. The northern ditches (1148 and 1162) varied from 0.5m to 2m in width, and were up to 0.55m deep. They were irregular in plan and section, and ditch 1162 had been re-cut once. Ditch 1162 became narrower to the north-east (perhaps because it had been

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Period IV2 Ditches

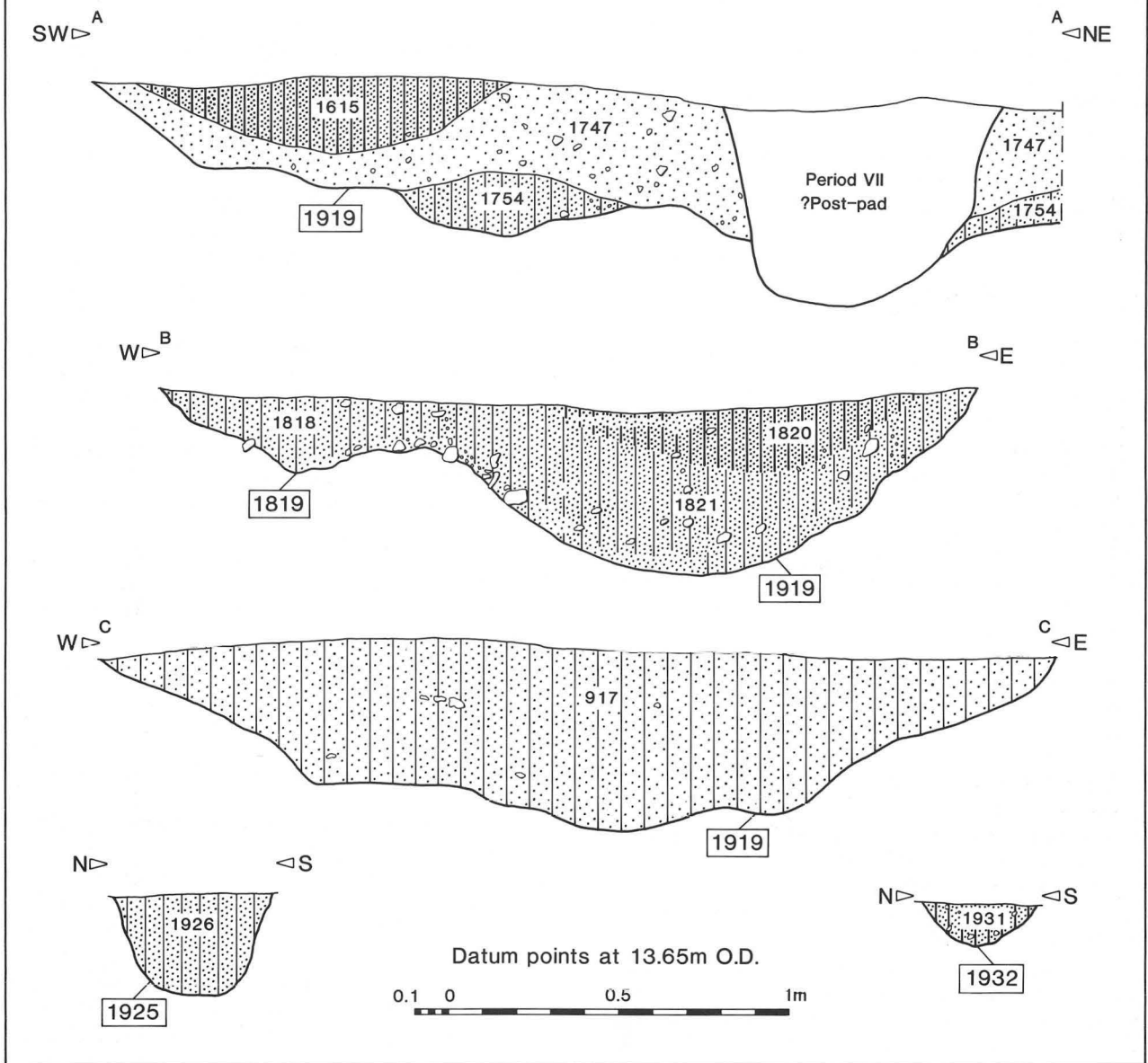


Figure 31 Sections ditches (Period IV2). Scale 1:20.

truncated during the building of Period VII structures) and appeared to terminate 1m short of ditch 1314. Ditch 1162 was continuous with ditch 1148 which may have marked part of the west boundary to the enclosure. The other part of this boundary was defined by two parallel ditches (27 and 32), with ditch 27 probably having been the earlier. Ditches 27 and 32 continued as ditches 613 and 611 respectively to the south. These replaced ditch 943, and probably marked the new south limit to the enclosure. A terminus to ditch 32 was found near to the edge of the excavation, and this may have marked the location of another entrance perhaps created when the enclosure was further sub-divided towards the end of Period IV2 (Fig. 32c). This division was marked by a shallow ditch (118) which had been dug east-to-west parallel to ditch 1162 across the south part of the enclosure. It is not certain

whether this ditch extended across the entire width of the enclosure, for it 'faded-out' towards the east leaving a gap of at least 6m between it and the east edge of the enclosure marked by ditch 250. This gap may have been an entrance allowing access between the north and south parts of the enclosure. No distinction could be made between the fills of ditches 32 and 118, and it is likely that they were contemporary. Both these ditches, as well as ditches 27, 611 and 613 were of similar size and fill. All were apparently 1m wide, less than 0.2m deep, and filled with dark greyish brown sandy loam with variable amounts of gravel, and few finds. Immediately to the north of ditch 118 which divided the enclosure, were several gullies or small ditches aligned either parallel or at 90° to ditch 118. These features comprised gully 167 which was at least 8m long, and gullies 137 and 161 which were also

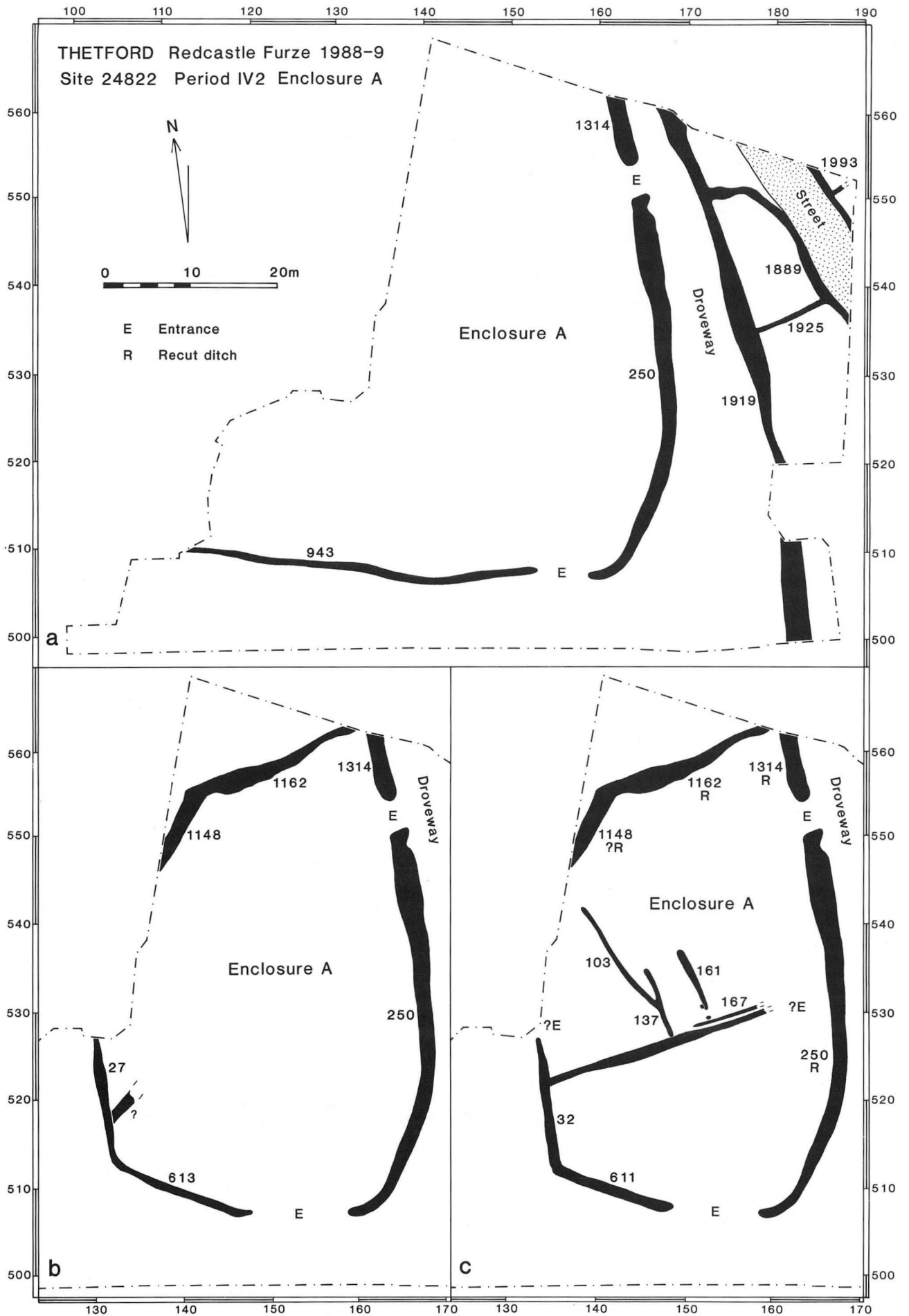


Figure 32 Plans Enclosure A (Period IV2). Scale 1:600.

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Period IV2 Ditches Enclosure A

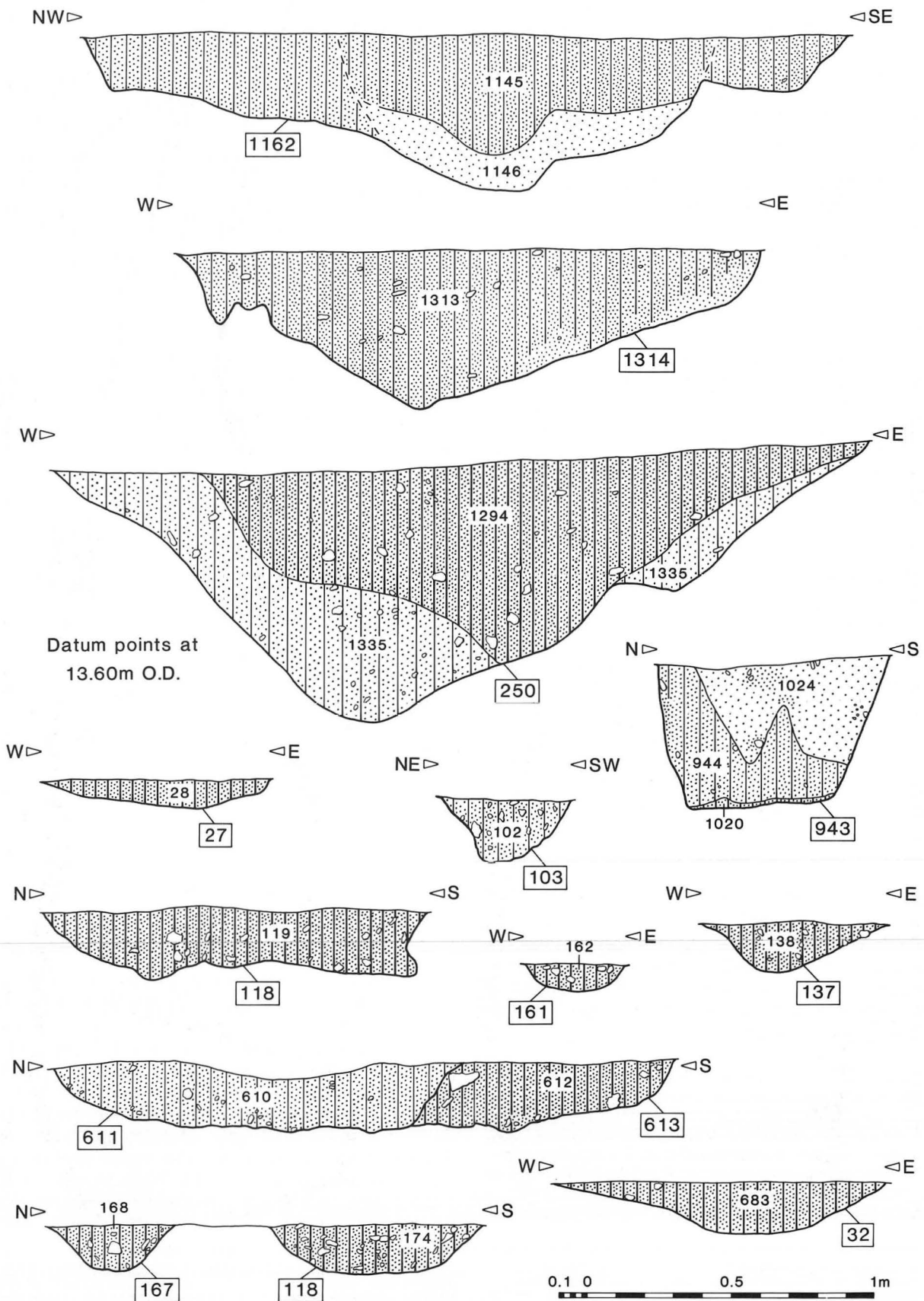


Figure 33 Sections ditches Enclosure A (Period IV2). Scale 1:20.

approximately 8m long, parallel to each other, and 4m apart. In addition to these, there was a 15m long gully or ditch (103) which extended from the west side of gully 137 to the north. Two post-holes (163 and 165) lay at the south end of gully 161 and appear to have been associated with it. The gullies or ditches were generally less than 0.5m in width, up to 0.15m deep, and had sloping sides and flat bottoms. All were filled with mid to dark greyish brown sandy loam containing up to 40% small and medium gravel. A few fragments of animal bone were the only finds recovered.

The ditches or gullies and post-holes, with the possible exception of gully 103, may have marked the location of a structure within the enclosure, but it is impossible to deduce much more from the surviving evidence. It appears unlikely that any such structure would have been used for domestic occupation, and it is more probable that it was some form of outbuilding.

Several small post-holes, an irregularly-shaped hollow (1539) and a possible hearth (1556) have all been assigned to Period IV2 and lay within the north half of the enclosure. The relationship between them is uncertain, but it may be significant that these and several broadly contemporary pits were all confined to the same area, and the southern half of the enclosure was apparently devoid of features with the exception of a single pit (496).

Pits

(Fig. 34)

Nineteen pits have been assigned to Period IV2 on the basis of their stratigraphic relationships, and where these are uncertain or absent, on the basis of the pottery assemblages recovered from their fills. Period IV2 pits were characterised by generally containing less pottery than the Period IV3 pits, with Thetford Ware constituting a larger, and St Neot's-type Ware and early medieval wares a smaller proportion of the totals.

The pits are listed below in context order, and a brief summary provided of their shape, size and fills, with a note made of any relevant finds. This is followed by a discussion of their possible functions and groupings.

Sections of a small number of Period IV2 pits have been published here in order to illustrate the range of types present, and a further group from Period IV3 are included below (see Figs 40 and 41). A large number of Late Saxon pits from Thetford has already been published (Rogerson and Dallas 1984; Dallas 1993). It was therefore deemed unnecessary to include further examples from Redcastle Furze which would not increase the range already excavated and published.

429. Sub-square; 1.5m by 1.4m; dug 0.45m below natural; sloping sides; flat-bottomed; filled with dark greyish brown sandy loam.

496. Sub-circular; diam. 2m; dug 1.45m below natural; near-vertical sides; flat-bottomed; filled with dark to very dark greyish brown sandy loam; pit 496 may have truncated an earlier pit, 526; only the bottom of this possibly earlier pit survived, at a depth of 0.6m below natural; the latter contained some burnt clay.

566 (Fig. 34). Rectangular; 2.5m by 1.5m; dug 0.4m below natural; near-vertical sides; flat-bottomed; filled with sand and gravel (redeposited natural); a shallow, sub-rectangular extension at the north-west corner was probably contemporary.

766 (Fig. 34). Sub-circular; 1.5m by 1.3m; dug 0.3m below natural; bowl-shaped; filled with very dark greyish brown sandy silt loam; contained a quantity of smithing slag and charcoal.

880 (Fig. 34). Irregular; 1.2m by 0.9m; dug 1.05m below natural; steeply sloping sides; flat-bottomed; filled with brown sandy loam, which also filled possible pit 945, adjacent to the south-west.

999. ?Sub-circular; diam. ?1m; dug 0.2m below natural; bowl-shaped; lay partially outside the limit of excavation; filled with very dark greyish brown sandy loam which contained some smithing slag.

1089. ?Sub-rectangular; approx. 1m by 1.5m; dug 1.8m below natural; flat-bottomed; only lower 0.6m survived as it had been truncated by pit 948 (Period IV3); filled with very dark greyish brown silty loam.

1349 (Fig. 34). Irregular at top, but rectangular at bottom; 1.7m by 1.5m, dug 2m below natural; irregular, near-vertical sides; rounded bottom; filled with dark greyish brown sandy loams, except at the bottom where the fill was a yellowish grey loamy sand; the upper fill contained fragments of hearth lining, some smithing slag, and several patches and lens of charcoal.

1409. Oval; 1.4m by 0.9m; dug 0.3m below natural; sloping sides; irregular bottom with small possible post-hole; filled with dark greyish brown sandy loam.

1411. Sub-rectangular; 2m by 1.6m; dug 0.2m below natural; sloping sides; irregular bottom; filled with brown sandy loam; had cut away most of an earlier hearth or oven.

1475. Irregular at top, but rectangular at bottom; 2m by 1.5m; dug 1.4m below natural; irregular, near-vertical sides; rounded bottom; filled with dark and very dark greyish brown sandy loams; the upper fill contained a few fragments of hearth lining.

1485. Rectangular; 2m by 1.5m; dug 1.1m below natural; steeply sloping sides; flat bottomed; filled with brown sandy loam.

1529. Circular; diam. 1.75m; dug 0.75m below natural; bowl-shaped; filled with dark greyish brown soil which contained some burnt clay and several lumps of burnt limestone.

1729. Rectangular, 1.2m by 0.9m; dug to a depth of 0.2m below natural; sloping sides; flat bottomed; filled with brown sandy loam.

2011. Circular, with oval extension to the west; 2.1m by 1.6m at the top; diam. 1.6m lower down; dug to a depth of 1.6m below natural; near-vertical sides; oval post hole, 0.3m by 0.2m, and 0.1m deep centrally placed within flat bottom; pit and post-hole filled with a homogeneous brown sandy loam.

2012. Circular; diam. 1.2m; dug 1.65m below natural; near-vertical sides; flat bottomed; filled with greyish brown sandy loam, with much redeposited sand and some gravel towards the bottom.

2136. Sub-circular; 1.5m diam.; dug 0.75m below natural; bowl-shaped; filled with dark greyish brown sandy loam.

All of the Period IV2 pits lay in the east half of the site, within 40m of the street. This distribution reflects the peripheral nature of the site, and the probable lack of any occupation further to the west in an area which is likely to have remained as open ground.

The pits were of varying shape and size, and dug to a maximum depth of 2m below natural. They were of comparatively shallow depth, particularly compared to many of those excavated by Knocker further to the east towards the centre of the town where depths of at least five or six metres were not uncommon (Rogerson and Dallas 1984, 19). The pits excavated by Davison at Brandon Road (Dallas 1993) were also generally deeper than those at Redcastle Furze, and given that the natural at all of the sites was sand and gravel in varying proportions, it is not unreasonable to assume that the greater depths reflect a greater density of occupation, and therefore less available space for pit digging at these other sites. It has not been possible to compare densities of pits during different phases between Redcastle Furze and other sites in the town, as elsewhere the pits have generally only been ascribed a broad date range spanning the tenth and eleventh centuries. However, the apparently greater densities of pits at Brandon Road and in particular at Sites 1 and 2 excavated by Knocker may be attributable to a longer period of Late Saxon occupation at these sites, perhaps twice as long as at Redcastle Furze.

None of the pits contained any evidence for having had linings. No traces of wattle, timber or clay survived, and the irregular shape and profiles of many suggest that they had not been dug with the intention of being lined, unless the linings had subsequently been removed and the sides collapsed, although this is considered unlikely. A possible

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Period IV2 Pits

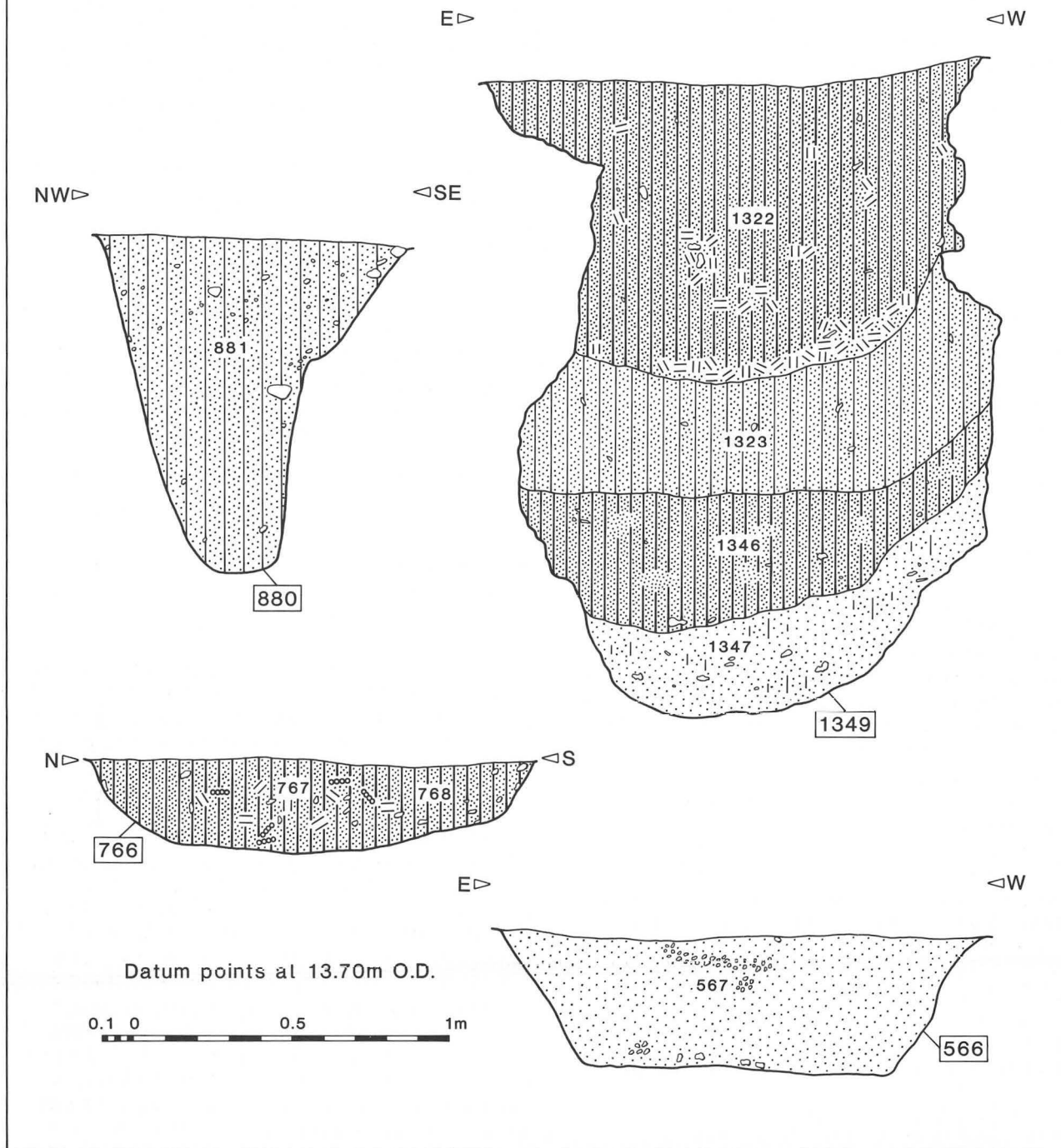


Figure 34 Sections pits (Period IV2). Scale 1:20.

exception was pit 2011 (interpreted below as a latrine pit) which had near-vertical sides showing little evidence of weathering and erosion, although this may have been prevented by some form of cover or structure built over the top.

No wells were found, and it is unlikely that any of the pits would have reached the water-table even if it were higher in the past, as is probable.

All of the pits were filled with a variety of sandy loams, sometimes with layers of sand, or sand and gravel, particularly near the bottom. Such layers may have been a result of deliberate infilling, or perhaps from natural infilling either as wind-blown sand, or as a result of weathering and erosion of the sides of the pit. No complex sequences of fills were encountered, and it is probable that most pits were filled fairly rapidly; slumping resulting

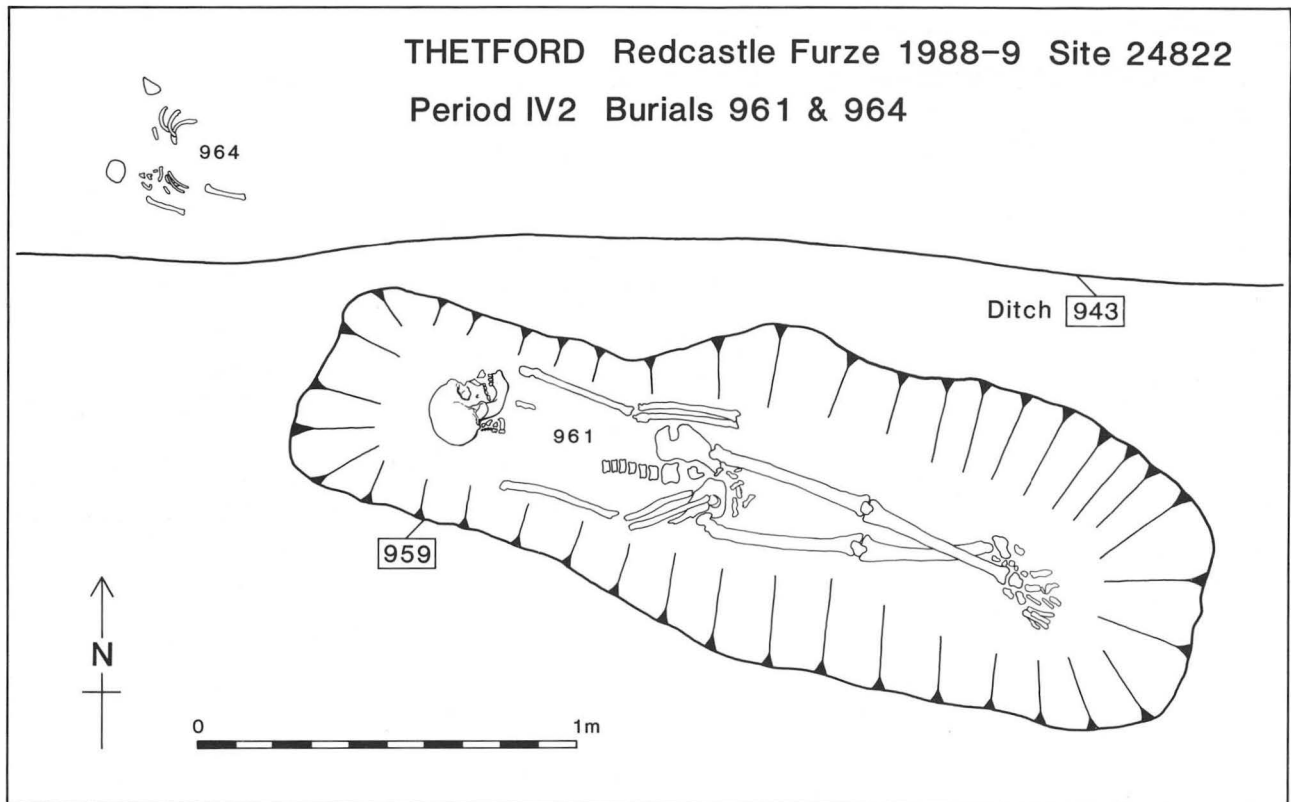


Figure 35 Plan Burials 961 and 964 (Period IV2). Scale 1:20.

from post-depositional settling of the contents only occurring in the larger, deeper pits.

It is difficult to designate certain pits or types of pit with particular functions, but the variations in shape and size do imply that some at least were originally dug for some purpose other than rubbish disposal for which most were ultimately used.

Pit 2011 is considered to have been a latrine pit, with the central post-hole having held a post which supported a platform or some other form of superstructure above the pit. Pit 1324 assigned to Period IV3 was similar, and pits with central post-holes, sometimes with posts surviving *in situ* have been found elsewhere, though not apparently in Thetford. Several Middle Saxon examples are known from Southampton (Morton 1992, 46). There were no obvious 'cess' layers in pit 2011, but the environmental evidence from pit 1324 which contained a similar fill is not inconsistent with such a function (see below, p.134).

Pit 566 was unique in that it was filled with redeposited natural which contained no finds. This, coupled with its shape and size, suggests that it may originally have had some industrial or storage function, though what, remains uncertain.

Pit 766 contained a notable concentration of smithing slag, but the pit is unlikely to have been associated with iron-working.

The other pits can be roughly differentiated on the basis of size and shape into two groups, those such as pits 496, 1349, 1475, 1485, 2011, and 2012 which were relatively large, and others such as pits 429, 766, 1411 and 1529 which were smaller and shallower. Some, for example pits 566 and 880, fitted into neither group, and insufficient remained or could be exposed of one or two others to be certain of their form. However, other than this,

it is not possible to determine anything further of the original functions of these pits.

With the exceptions of pits 2011, 2012 and 2136 which lay within the enclosures containing Structures 2 and 3 respectively, it is not possible to associate any of the other pits with particular structures or properties. Several lay within the possible droveway, but would not have obstructed access, and a group of others had been dug within the south-east corner of the north half of Enclosure A. Two pits in this latter group (1349 and 1475) may have been dug as a pair as they lay adjacent to each other and showed several similarities in their shape, size and fills.

Burials

(Fig. 35)

Two inhumations, the only articulated human remains to be discovered, were found on the southern boundary of Enclosure A close to the entrance. They comprised an old adult male (961) and a neonate (964) placed in shallow east-to-west aligned graves less than 0.5m apart. Neither was accompanied by grave goods.

Burial 961

This has been placed in an approximately rectangular grave (959) which was 2.4m long, between 0.55m and 0.8m wide, and 0.35m deep. The grave was broadest at the east end, and had fairly steeply sloping sides. Burial 961 lay at an angle of 73° in an extended position, legs crossed, and hands together at the waist. Most of the bone was in good condition, although the upper vertebrae and ribs had not survived. The constricted nature of the burial indicates that it may have been placed within a coffin, although no timber stains or coffin nails were found.

Burial 964

This lay within the upper fill of ditch 943, probably in a shallow grave cut into the partially infilled ditch, although no grave cut was detected. The burial was apparently sealed by the upper fill in the ditch. Only some long bones, a few ribs, and several fragments of skull had survived, and these were somewhat dispersed, although remaining in correct positions relative to each other. This suggests that the body had not been placed in a coffin, but may have been wrapped in a shroud.

Discussion

The relationship of Burial 961 to ditch 943 of Enclosure A was uncertain, although Burial 964 lay within it. However, ditch 613 which was part of a later development of Enclosure A and superseded ditch 943, cut the edge of grave 959, and lay above Burial 964. No finds came from grave 959, but the stratigraphic relationships between the burials and ditches would place them in Period IV2, that is during the first half of the eleventh century.

Isolated burials, or small groups of burials not apparently associated with any church are common occurrences in Thetford (Rogerson and Dallas 1984, 198); at Brandon Road a single example and a further group of three were found more than 100m apart. Most of these burials appear to have been Christian, and it has been suggested (Rogerson and Dallas 1984, 198) that either these were Late Saxon burials associated with unrecorded or as yet undiscovered churches, or that parts of the deserted Late Saxon town south of the river were used for burials later during medieval times. The burials at Redcastle Furze appear to have been indisputably of eleventh century date, but no evidence for a church was found or had survived in the immediate vicinity. The nearest known church was that excavated by Knocker at Red Castle approximately 120m to the north-west (Knocker 1967), but the burials found associated with this church appeared to have been fairly closely grouped around it, and are unlikely to have included those found at Redcastle Furze. It therefore seems likely that the burials at Redcastle Furze, as well as some possible Late Saxon burials from other sites, may have been buried singly or in small groups away from any church in unofficial burial grounds.

The reason or reasons for this are unclear; the existence of at least twelve pre-Conquest churches and associated burial grounds within the town are known, all of which are likely to have been in use in the eleventh century (Davison 1993). Furthermore, the burials were laid out in regular graves with no evidence of hurried disposal or concealment, and no indications of having met death by violent means. The occasional groupings such as the two at Redcastle Furze, and the three at Brandon Road, may be of significance, but at present no explanation can be offered as to the reason for the distribution of such burials.

VII. Period IV3–Late Saxon/Early Medieval (Fig. 22)

The Street

(Fig. 27)

The earliest surface (1618) may have continued in use for some time, but a build-up of soil and domestic rubbish eventually led to it being obscured, and apparently no attempt was made to clear it. Layers 1214 and 1216 which comprised this build-up were greyish brown silty sandy

loams containing frequent small flints, and were between 0.1m and 0.15m thick. Some twelfth, thirteenth, and fourteenth-century pottery was found in these layers, particularly towards their edges, but it is considered most likely that these sherds were intrusive, from continued use of the street during later periods.

The street was subsequently re-metalled, but the new surface (1215) was quite different in character to the earlier surface. Surface 1215 comprised a thin spread of small flints in a matrix of greyish brown silt loam, the latter possibly derived from underlying layers 1214 and 1216. This new street surface was much less solid than its predecessor, and its limits less well defined. The main spread was approximately 2m in width, although thinner more discontinuous spreads extended one metre or so either side of this. The metalling survived best towards the south-east, but had largely been truncated or perhaps worn away to the north-west. Over much of the latter area it was exposed directly beneath the machined level, so it is uncertain to what extent it may have been disturbed or destroyed by later activity.

The earlier ditches (1889 and 1993) on either side of the street had become infilled by this time, but both were replaced. Ditch 1303 was dug immediately to the north-east of ditch 1889 on much the same alignment, except towards the north-west it continued parallel to the street rather than curving round to the west as ditch 1889 had done. At this point it cut away the edge of the earliest metalling (1618) which was presumably obscured by the build-up of debris. Ditch or gully 1220 was dug parallel to the street, immediately to the north-east of ditch 1993.

The Structures

Structures 2 and 3, erected within small enclosures alongside the street during Period IV2, may have remained in use during Period IV3 or been replaced. The only possible structural feature which can be attributed to a later phase was a large post-hole or small pit (1957) which was dug within the area of Structure 2. However, it is conceivable that some of the Period IV2 post-holes may have been later, and this has been obscured by the sometimes uncertain stratigraphic relationships; most of the post-holes were overlain by a layer of dark greyish brown sandy loam (1805) in which cut features were difficult to detect. Layer 1805 contained an assemblage of pottery which spanned the eleventh to thirteenth century, but the later material may have been intrusive as in only one area was this layer clearly sealed by a later deposit. The latter (1804) was a thin but even spread of very dark greyish brown sandy silt loam which contained a considerable amount of charcoal. It survived mainly within the limits of the earlier ditches (1889 and 1919) but did in places extend over ditch 1889 and it is likely that it was originally more extensive than the surviving area of approximately 3m by 2m indicates. It also lay above ditch 1925 which had earlier delineated a division between the two enclosures associated with Structures 2 and 3. Layer 1804 can perhaps be interpreted as the remains of a floor level or occupation surface, although no clearly associated structural features were found. If this were so, then it is clear that the earlier division into two enclosures did not survive. Further support for the continuation of occupation along the street frontage is provided by the number of pits that were dug in the vicinity. Several of these cut through infilled enclosure ditch 1919, and most appear to have

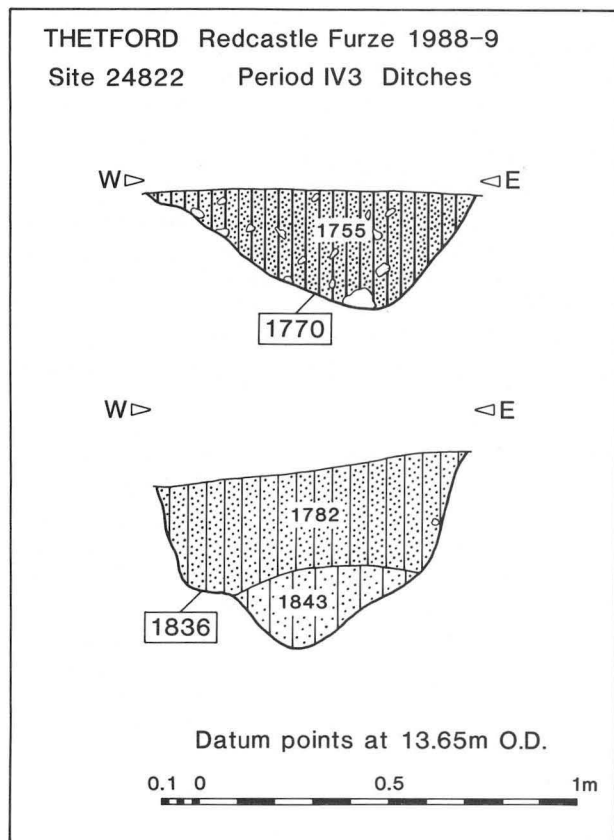


Figure 36 Sections gullies (Period IV3). Scale 1:20.

been used for cess or rubbish disposal. None were dug in close proximity to the street frontage, and the area previously occupied by Structure 2 remained clear of pits. The presence and distribution of these pits would together suggest that if Structures 2 and 3 were replaced in Period IV3, then a new structure, represented by possible occupation or floor level 1804, replaced them and covered the area previously occupied by Structure 2 and the north-west part of Structure 3.

Three other features may provide further evidence for structures alongside the street during Period IV3; two ditches or gullies (1781 and 1836) at 90° to each other may have been structural features (Fig. 36), and a 7m length of curvilinear gully (1770), perhaps dug in two sections and up to 0.9m wide and 0.2m deep, could also conceivably have been associated with a structure. These lay to the north and south respectively of the site of the possible structure discussed above.

It is possible that some of the shallow ditches dug at the south-west corner of Enclosure A during Period IV3 (see below) may have had a structural function or been associated with one or more structures, but in the absence of further evidence this cannot be supported.

Structure 5

(Fig. 37)

One other feature which may have been part of a structure was 785. This was a sub-rectangular shallow hollow which lay in the south-east corner of the excavated area, was aligned east-to-west and cut ditch 1919, a Period IV2 feature. It measured 7m by between 3.5m and 2.5m, and was up to 0.25m deep. The sides sloped sharply to an irregular bottom which cut into the top of the gravel underlying natural sand. A large sub-rectangular post-hole

(829) was centrally-placed 5m from the east end of hollow 785. It had been partly cut away by two later Period IV3 pits (948 and 1089), but measured 0.4m by at least 0.5m, and was 0.25m deep. Two other features (831 and 833), possibly small post holes, lay towards the south-east corner of hollow 785, but both were small and ill-defined. At the west end of hollow 785 were a series of shallow cuts and shelves dug into the natural gravel; the most clearly defined being a sub-rectangular cut (987) which measured 1m by 0.55m, and was 0.2m deep. The bottom fills (874 and 950) in hollow 785 were dark grey or dark greyish brown sandy or silt loams which were restricted to the more irregular area at the west end of the feature. These, and the natural gravel at the end, were partially overlain by a thin spread of black loam containing considerable charcoal flecking (848). Probably contemporary with this spread were two more substantial dumps of charcoaly soil (993 and 994). These were all overlain by a layer of dark greyish brown sandy loam (786) up to 0.3m deep which extended over all of hollow 785, and represented its final infilling. Layer 786 contained considerable quantities of domestic refuse including pottery and animal bone, and was cut by ditch 882, a Period V feature, although the cut was difficult to distinguish in many places.

No other features resembling hollow 785 were found at Redcastle Furze, nor apparently at Brandon Road. The closest parallels in Thetford were found by Knocker at Sites 1 and 2 (see for example, Rogerson and Dallas 1984, figs 49 and 51, Huts 17 and 18). At these sites, various features called huts by the excavator often comprised an irregularly-shaped hollow up to 1m deep with occasional post-holes set in or around it. Clay floors and hearths sometimes survived within these hollows. No traces of a floor were found within hollow 785, but it is possible that layer 848 represented the destruction and collapse of a raised floor, similar to those postulated for some of the Early Saxon sunken-featured buildings. However, layer 848 may simply have been a spread of material unassociated with, and post-dating, hollow 785.

In conclusion, the size, shape, associated post-hole(s), and fill might together be taken to suggest that hollow 785 was a form of sunken-featured building, constructed in the latter half of the eleventh century. Although similar features have been recognised on some other sites in Thetford and described as huts, this interpretation must remain tentative until further evidence is forthcoming. They may have been a particular form of domestic structure, possibly in some cases outbuildings, but they do not closely resemble the characteristically Late Saxon cellared structures which have also been found at Thetford (Rogerson and Dallas 1984, figs 54 and 55, Hut 21; Dallas 1993).

Ditches

(Figs 38 and 39)

Ditch 1303 which replaced ditch 1889 alongside the south-east edge of the street was exposed over a length of 24m. It was between 0.75m and 1.5m wide, up to 0.4m deep, and filled with dark greyish brown sandy loam and a considerable amount of small to medium gravel, presumably derived from the street. Towards the north-west, ditch 1303 contained a marked concentration of pottery and animal bone which gave the appearance of

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Period IV3 Structure 5

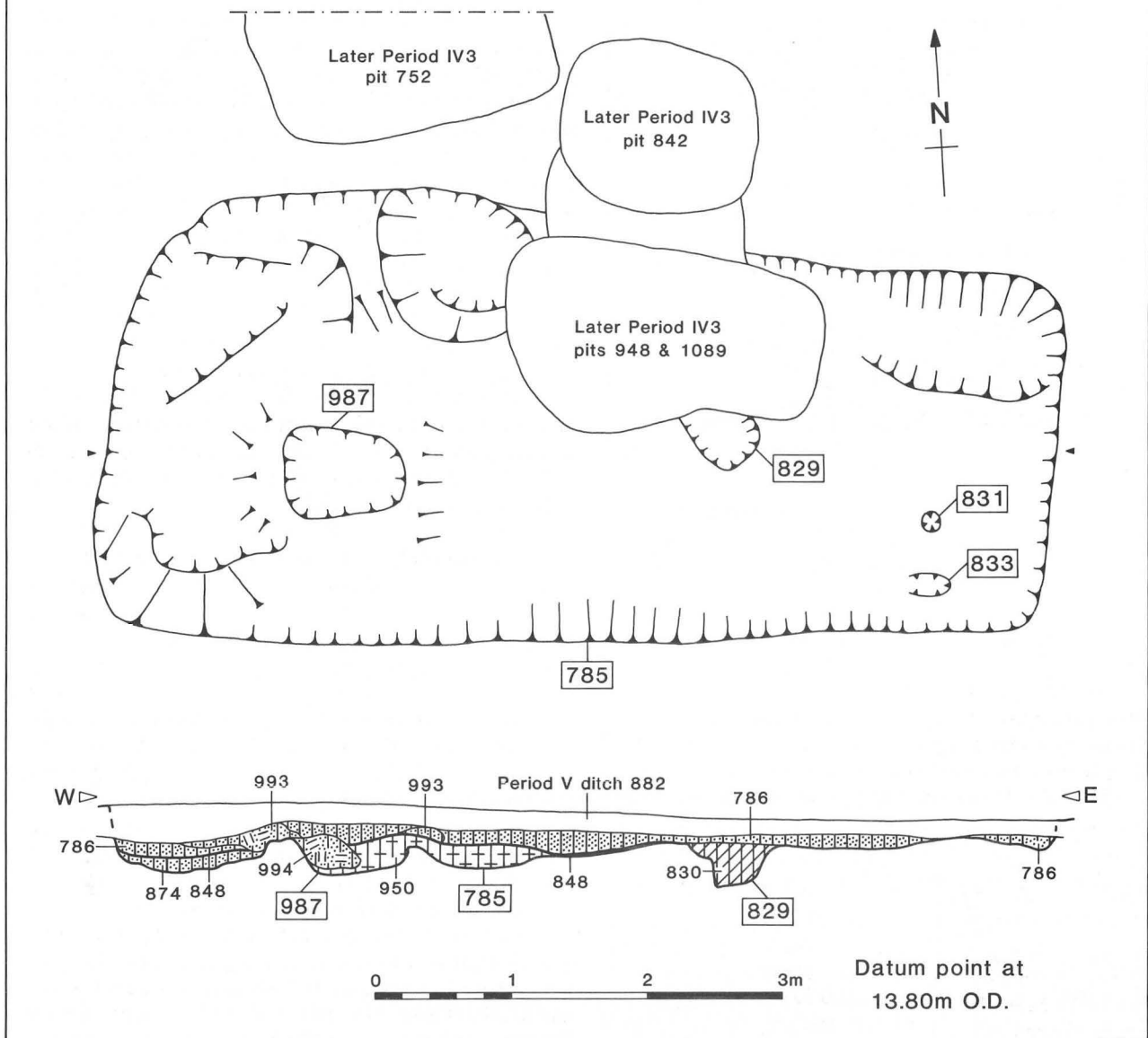


Figure 37 Plan and Section Structure 5 (Period IV3). Scale 1:100.

having been deliberately deposited in the ditch either as a single dump or over a longer period of time.

No other ditches were dug in the vicinity of the street, with the possible exceptions of features 1781 and 1836 (the earlier ditches which had enclosed Structures 2 and 3 had by this time become filled up and were not re-cut). Features 1781 and 1836 were two short, irregular gullies aligned at 90° to each other. They were up to 0.5m wide, 0.45m deep, had vertical sides and irregular bottoms, and were filled with a homogeneous dark brown sandy loam and some medium flints. The relationship of gully 1781 to gully 1836 and their morphology, make it perhaps more likely that they were structural features, possibly timber slots, rather than ditches. However, the lack of any associated features, with the possible exception of a small post-hole to the north-east of gully 1836, make it

impossible to be certain whether they marked a corner of an enclosure or structure adjacent to the street.

Enclosure A laid out in Period IV2 was retained, but was modified and extended during Period IV3 (Figs 38 and 39). Ditches 250 and 1314 which delineated the east edge of the enclosure continued in use and were possibly re-cut, and ditches 1148 and 1162 to the north may also have continued in use and perhaps been re-cut. Changes were however made to the south and the west. Ditch 250 was extended to the south by the digging of ditch 1130, and the south entrance of the enclosure was subsequently blocked by a short length of irregular, shallow ditch (903). Ditches 32 and 611 which marked the earlier east and south boundaries respectively were replaced by a complex of features which extended Enclosure A to the east and possibly also the south. These comprised a series of

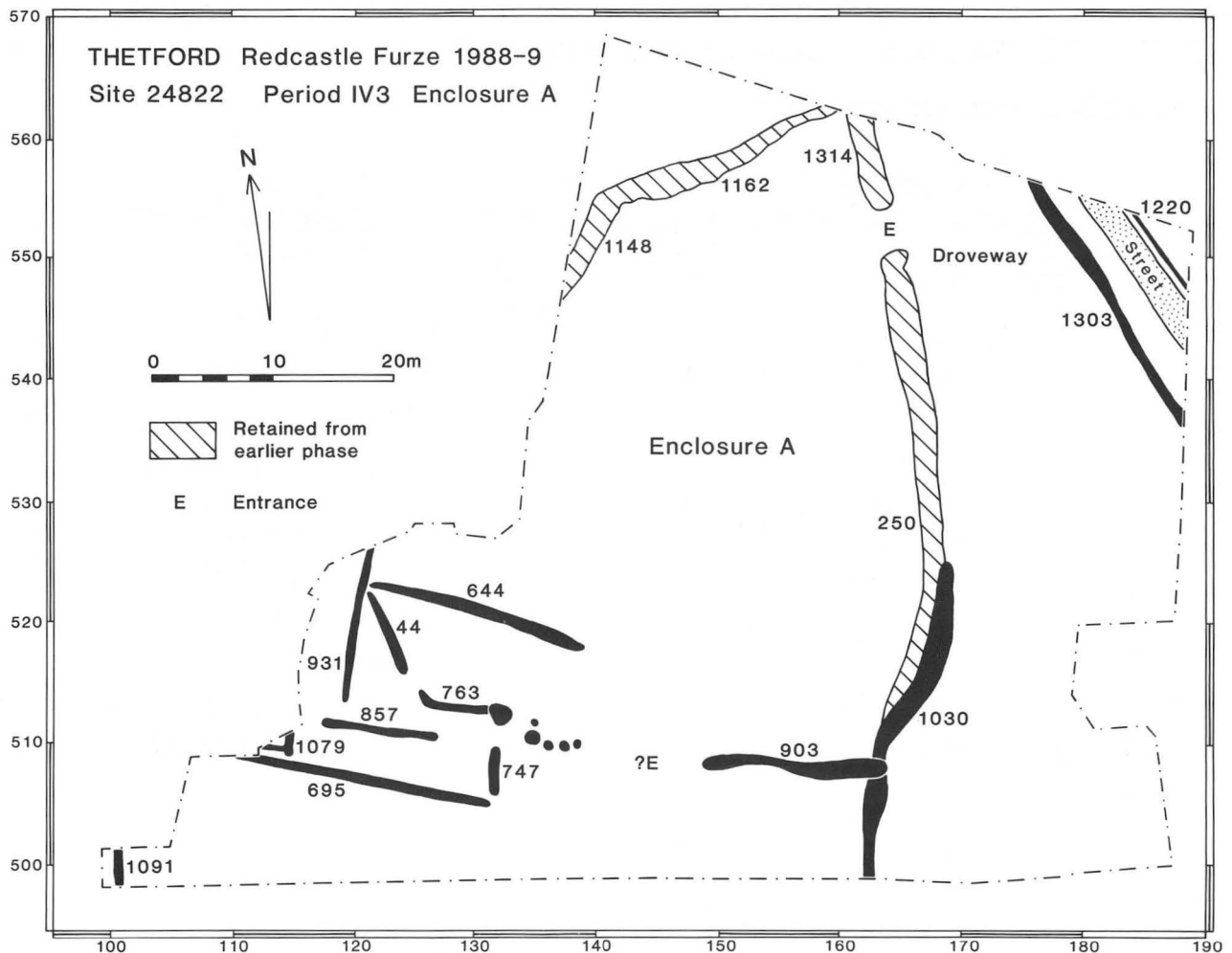


Figure 38 Plan ditches Enclosure A (Period IV3). Scale 1:600.

shallow ditches between 0.5m and 1m wide, generally less than 0.2m deep, and filled with dark greyish brown sandy loam with variable amounts of gravel. None produced more than a few fragments of pottery and animal bone. Ditch 763 and a series of shallow possible post-holes or pits (588, 614, 641, 647, 699 and 721) were dug on the same alignment as the earlier southern boundary, and along with ditch 903 either marked a new boundary to the south, or a division within Enclosure A which was extended further to the south (this is discussed further below). Whichever was the case, an 11m wide entrance appears to have been left between possible post-hole 647 and ditch 903. Towards its west end, ditch 763 turned to the north-west where there was an entrance 2m wide, and then continued as ditch 44. Ditch 44 was 7m in length and ran at a slight angle to earlier ditches 27 and 32 to the east. Ditch 44 terminated just before it met ditches 644 and 31, the latter probably marking a new west limit to Enclosure A, and the former being an internal division which delineated a small area within the south-west corner of the enclosure. Ditches 644 and 931 lay at 90° to each other, and were aligned parallel and at 90° respectively to ditch 763 and the associated possible post-holes which marked the new south limit to, or division within, Enclosure A.

To the south of this complex of features were a further group of shallow ditches similarly aligned. These comprised ditches 695, 747, 857, probably 1079, and

possibly also 1091. With the exception of ditch 1091, all these ditches appear to have been related to each other, as well as to those to the north. They formed a discontinuous rectangular arrangement, which in conjunction with those ditches to the north may have delineated one or more areas, the purpose of which remains unknown. Both ditches 695 and 1079 extended beyond the edge of the excavation to the west, and along with ditch 1091 may indicate that Enclosure A was extended to the west and the south during Period IV3. If this were so then ditches 1031 and 1091 would have marked the east and west boundaries to this southern extension.

The Pits

(Figs 40 and 41)

Thirty-five pits have been assigned to Period IV3, although the number is approximately forty if several possible re-cuts are included. They have been assigned on the basis of their stratigraphic relationships, and where these are uncertain or absent, on the basis of the pottery assemblages recovered from their fills. Period IV3 pits were generally characterised by containing larger quantities of pottery than the Period IV2 pits, with St Neot's-type Ware and Early Medieval Wares predominant.

380 (Fig. 40). Sub-rectangular; 2m by 1.3m (0.7m wide below a depth of 0.9m); dug 2.4m below natural; near-vertical sides below 0.9m; flat-bottomed; appears to have been one of a pair with pit 381; the bottom fill (1974) was a virtually sterile light brown sandy loam up to 0.45m

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 Period IV3 Ditches Enclosure A

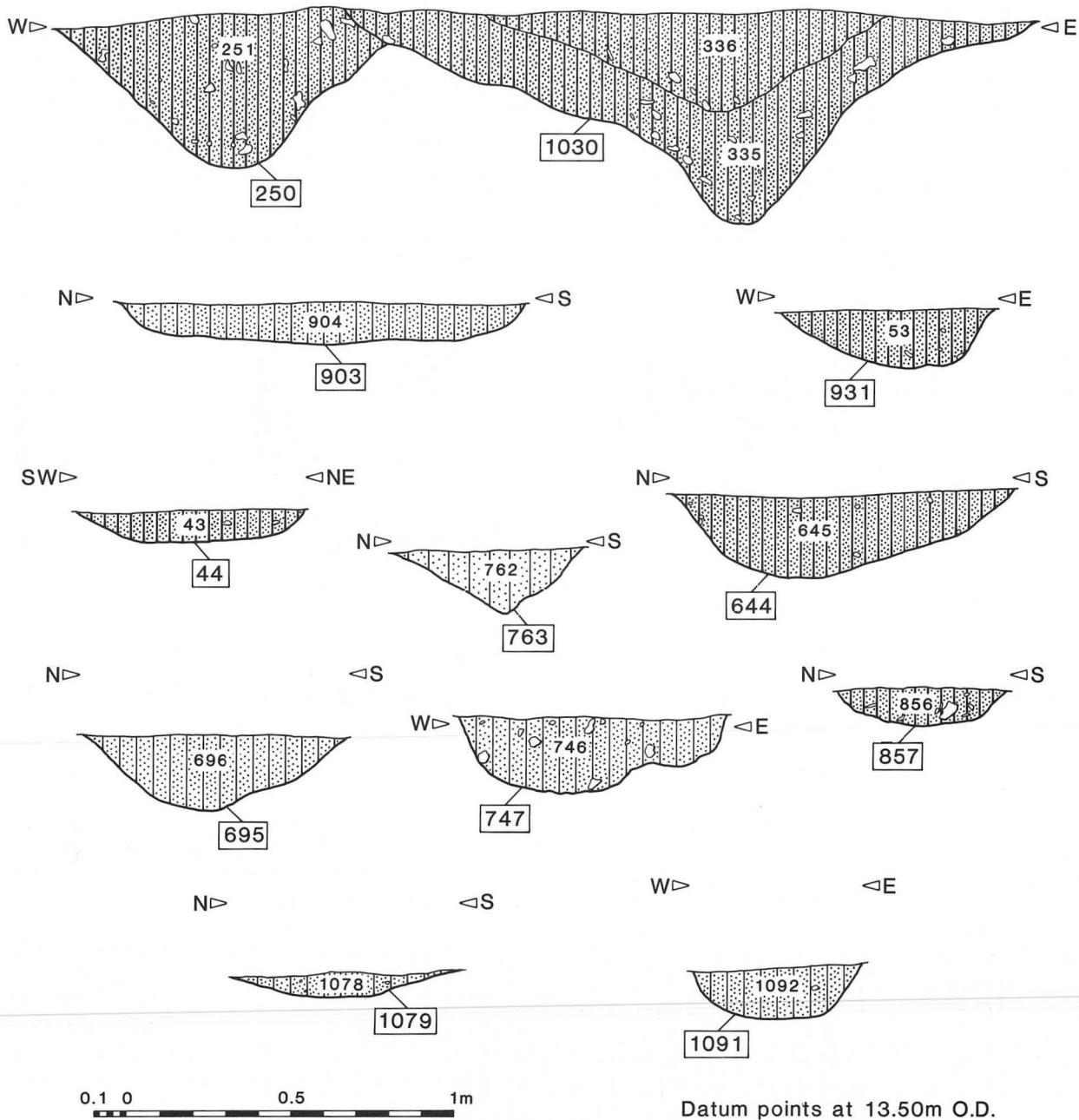


Figure 39 Sections ditches, Enclosure A (Period IV3). Scale 1:20.

thick; this was overlain by a thinner layer (1961) of dark grey sandy loam with some pea grit and a fair amount of charcoal flecking; above this was a layer of sterile sand (1984) which had either been washed or blown in, or, perhaps less likely, was derived from weathering of the pit sides; above this were two layers (564 and 565) of dark greyish brown and dark grey sandy loams 0.95m thick which contained considerable charcoal flecking; upper fill (518) of dark brown sandy loam up to 0.75m thick which contained a quantity of pottery and animal bone; all of the fills in this pit were quite loose, particularly those at the bottom.

381. Sub-rectangular; 2m by 1.2m; dug at least 1.5m below natural (not bottomed); near-vertical sides; appears to have been one of a pair with pit 380; the lowest excavated layers (462 and 482) were light and very light brown, loose, loamy sands at least 0.6m thick; these were overlain by a thin layer of dark brown sandy loam which contained charcoal flecking; above this were two layers (383 and 396) of dark brown and dark greyish brown sandy loams up to 0.95m thick which contained considerable charcoal flecking; pottery and animal bone were concentrated in these upper layers.

THETFORD Redcastle Furze 1988-9 Site 24822

Period IV3 Pits

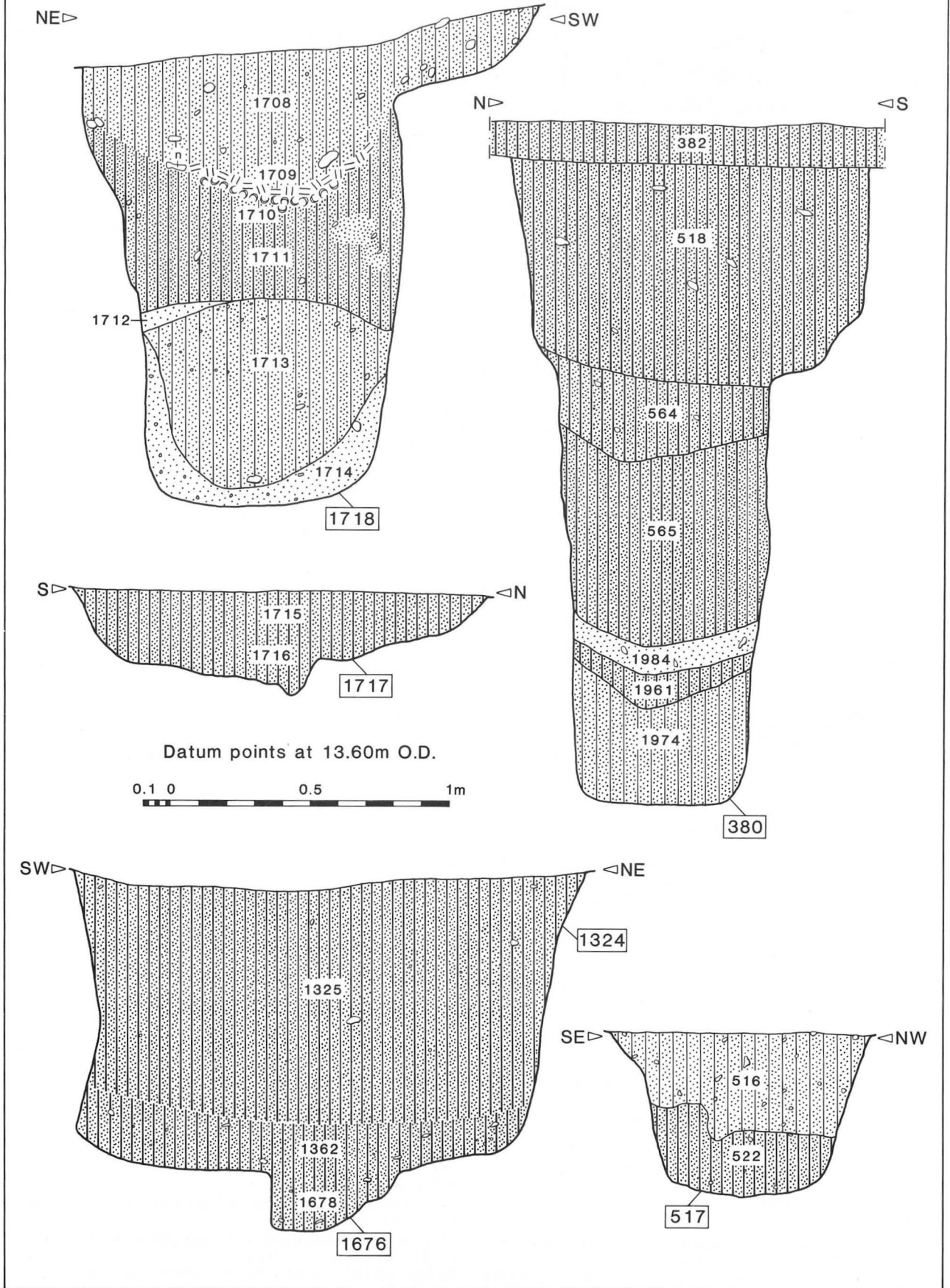


Figure 40 Sections pits (Period IV3). Scale 1:20.

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Period IV3 Pits

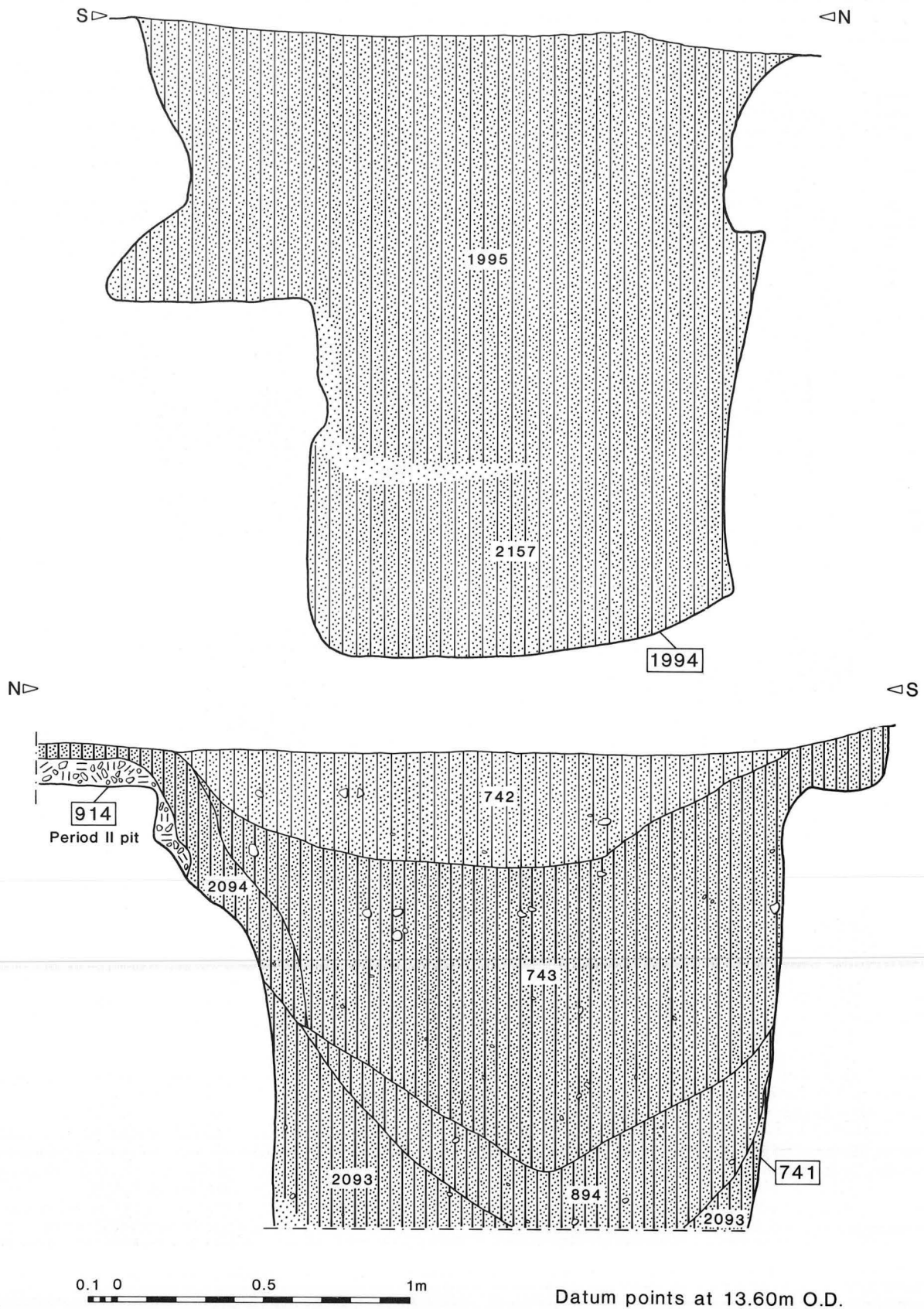


Figure 41 Sections pits (Period IV3). Scale 1:20.

402. Sub-circular; diam. 1.2m; dug 1.2m below natural; near-vertical sides; flat-bottomed; bottom fill (407) was a thin layer of sand and gravel, probably weathered and eroded natural; overlain by thin layer of very dark greyish brown sandy clay loam; upper fills (403 and 404) were very dark greyish brown and brown sandy loams containing some gravel.
418. Oval; 2.8m by 1.8m; dug 1.8m below natural; irregular, near-vertical sides; flat-bottomed; the bottom fills (504 and 506) up to 0.75m thick were dark greyish brown sandy loams, with the earlier fill (506) being slightly greyer and less stony; a large wedge of collapsed natural lay within these layers; the upper fills comprised a largely undifferentiated layer up to 1.2m thick of greyish brown sandy loam, which appeared to extend across the top of adjacent pits 422 and 424, and perhaps also pit 502.
422. ?Oval; 2.5m by 1.5m; dug up to 1m below natural; steeply sloping sides; flat bottom sloping down gently to the north-east; possibly largely cut away by a later pit (420) dug in much the same position; if so, the fills of both (421 and 419 respectively) were much the same although a possible cut was detected; filled with very dark greyish brown and greyish brown sandy loams; top fill as in pit 418.
424. ?Oval; 3m by 1.2m; dug 2.2m below natural; irregular, steeply sloping sides; rounded bottom; the bottom fill (525) was a loose, greyish brown sandy loam up to 1m thick which contained several pockets of sandy gravel, presumably derived from collapse of the sides; top fill as in pit 418.
435. Sub-circular; diam. 1.7m; dug 0.25m below natural; sloping sides; flat-bottomed; filled with greyish brown sandy loam. A rectangular cut (443) lay towards the south-west corner of pit 435 and may have been associated, or truncated by it; cut 443 was rectangular; 0.7m by 0.5m; 0.5m deep; flat-bottomed with near-vertical sides; filled with very dark greyish brown sandy loam.
502. Sub-rectangular at south-west end, otherwise irregular; 3m by between 0.9m and 2m; dug 0.4m below natural; steeply sloping sides; flat-bottomed; filled with homogeneous greyish brown sandy loam, probably the same as that in the top of pits 418, as well as in pits 422 and 424. Pit 502 appeared to comprise more than one feature in plan, but there was no evidence for this either in its profile or fill.
- 517 (Fig. 40). Sub-circular; diam. 1m; dug 0.5m below natural; bowl-shaped; filled with a very dark greyish brown sandy loam; contained complete St. Neot's-type Ware jar lying on its side within fill.
558. Sub-circular; diam. 0.9m; dug 0.45m below natural; bowl-shaped; filled with mid greyish brown sandy loam.
580. ?Circular; ?diam. 1.5m; dug 0.75m below natural; near-vertical sides; flat-bottomed; filled with dark brown sandy loam containing considerable small gravel. Most of this pit had been cut away by pits 380 and 381.
- 741 (Figs 41 and 42). Rectangular; at least 2.7m by 2.3m; dug at least 1.8m below natural (not bottomed); vertical sides with square corners; there was a shelf up to 0.3m wide around the top of the pit, with possible small post-holes or stake-holes in the two corners exposed within the excavated area; the fills showed evidence of considerable slumping; the lowest fill exposed was a layer of sand, probably a deposit which had been deliberately thrown into the pit, perhaps as a sealing layer, or had been blown into the pit — there was no evidence for the sides of the pit having been weathered and eroded; above this was a loose light grey loam with occasional charcoal flecking (895); this was separated from the next major layer by a thin deposit of dark brown loam containing considerable charcoal flecking - this layer was up to 0.03m thick and was probably derived from a deposit which had been spread over the pit and had slumped, rather than from a lining; the upper fills in the pit (layers 742, 745, and 894) were up to 1.7m thick and comprised of dark grey and dark greyish brown sandy loams and loam which increased in compactness with depth; frequent bands of charcoal and burnt flints were probably derived from an Early Saxon pit (914) cut by pit 741; the upper fills in particular produced a large quantity of pottery, animal bone and other finds.
752. Sub-rectangular; 2.1m by 1.7m; dug 0.5m below natural; steeply sloping sides; rounded bottom; filled with very dark greyish brown sandy loam.
842. Sub-rectangular; 1.4m by 1.2m; dug 1.7m below natural; circular in plan lower down with steeply sloping sides; rounded bottom; bottom fill (873) was a loose, light yellowish brown (?windblown) sand 0.7m thick; the upper fills (843 and 849) were dark greyish brown sandy loams.
948. Sub-rectangular; 2.2m by up to 1.5m; dug 1.75m below natural; near-vertical sides; there is a possibility that the lower 0.6m of this pit was part of an earlier pit (1089), the upper part of which had been truncated by pit 948 - if not, then pit 948 had a 0.75m wide step at the east end; flat bottom(s); the upper and lower fills (947 and 1090) were not clearly differentiated; both were dark greyish brown sandy loams, with the bottom fill (1090) containing several lumps of chalk.
1321. Oval; 1.4m by 1.2m; dug 0.2m below natural; gently sloping sides; irregular (root disturbed) bottom; filled with dark brown sandy loam.
- 1324 (Figs 40 and 43). Trapezoid; 1.7m by 0.8m (min.) and 1.4m (max.); dug 1m below natural; steeply sloping sides; flat bottom with a centrally-placed post-hole (1676), 0.36m diam. and 0.2m deep; the bottom and lower sides of the pit (though not the post-hole) were stained pale green, and had a 'crusty' feel; the pit and post-hole were filled with a homogeneous dark greyish brown sandy silt loam with some small gravel; comparatively few finds; a shallow, irregular, rectangular-sectioned slot along the south-east side of the top of the pit may have been associated with it.
1379. Sub-rectangular, with a small bowl-shaped extension in the south-west corner; 1.3m by 1m; dug 1.2m below natural; the sides at the east and west ends sloped gently to a depth of between 0.3m and 0.4m; below this and on the north side, the slope was near-vertical; rounded bottom; the lower fills (1374 and 1376) were brown and dark greyish brown sandy silt loams, and were separated from a similar group of fills (1372 and 1373) by a layer of redeposited sand and gravel (1375); the upper fill (1342) was a dark brown sandy loam up to 0.6m thick.
1457. Oval; 1.4m by 1.2m; dug 0.2m below natural; gently sloping sides; flat, slightly irregular bottom; filled with dark greyish brown sandy loam.
1568. Oval; 1.8m by 1.6m; dug 0.5m below natural; bowl-shaped; filled with dark greyish brown sandy loam.
1651. Sub-rectangular; 2.6m by 2.1m; dug 1.45m below natural; fairly square-cut corners and steeply sloping sides; flat-bottomed; filled with a homogeneous very dark greyish brown to black sandy loam (1701) containing abundant pottery, animal bone and other finds, particularly in the upper fill; on and near the bottom on the north-west side were two substantial tips of sand and gravel (1840 and 1846) — perhaps deliberately deposited as there is no evidence of the sides having collapsed.
1653. Oval; 2m by 1.5m; dug 0.35m below natural; bowl-shaped; filled with black sandy silt loam; a flat, oval-shaped hearth (1293) was set into the top of the pit — this comprised a layer of clay up to 0.07m thick (which had been burnt to a reddish colour all over) laid over a base of flint cobbles.
- 1717 (Fig. 40). Sub-rectangular; 2.2m by 1.6m; dug 0.45m below natural; bowl-shaped; filled with very dark greyish brown sandy loam.
- 1718 (Fig. 40). Sub-oval; 1.6m x 1.4m; dug 1.6m below natural; near-vertical sides; flattish bottom; the bottom fill (1714) was a brownish yellow sand with some gravel — probably derived from weathering and erosion of the sides; above this was a layer (1713) of brown sandy loam up to 0.65m thick; the upper fills (1708 and 1711) were brown and dark greyish brown sandy loams separated by a thin layer of ash and charcoal (1709) overlying a lens of mussel shells (1710).
1748. Irregular at top, sub-rectangular below 0.2m; at least 2.2m by 1.5m; dug 1.1m below natural; steeply sloping sides; rounded bottom; the bottom fill (1829) was a layer of brown sand up to 0.35m thick — probably derived from weathering and erosion around the top of pit; overlain by a layer (1757) of very dark greyish brown to black sandy loam up to 0.65m thick — this layer was virtually identical to that in adjacent pit 1651 (layer 1701), and may have been the same; the top fill (1749) was a very dark greyish brown sandy loam.
1791. Irregular at top, circular below 1m; diam. 2.2m; dug 1.1m below natural; steeply sloping sides; rounded bottom; two layers (1838 and 1839) of yellowish brown and brown sandy loam lay on the bottom in the east half of the pit — these were probably derived from weathering and erosion of the sides; above these was a layer of very dark grey sandy silt loam (1831) up to 0.8m thick sealed by a layer of redeposited sand (1830); the upper fill was a very dark greyish brown sandy loam.
1871. Oval; 1.3m by 1m; dug 1.2m below natural; steeply sloping sides; rounded bottom; filled with a homogeneous dark yellowish brown sandy silt loam.
1878. Irregular; 2m by 1.4m; dug 0.9m below natural; perhaps a pit complex comprising pit 1872, and a series of later cuts (1872, 1877 and 1888); irregular sloping sides; rounded bottom; the lowest fill (1875) was a dark brown sandy loam, which perhaps represented the truncated remains of the earliest pit; above this were two layers of collapsed or redeposited natural (1874 and 1876); the upper fills were dark greyish brown and very dark grey sandy loams (1853 and 1854).
1903. Sub-rectangular; 1.8m by 1.5m; dug at least 1.6m below natural (not bottomed); steeply sloping sides; the lowest fill excavated was a brown sand (2174), possibly redeposited or eroded natural; above this was a homogeneous layer (2173) of dark brown sandy loam up to 1m thick; the top fill (1902) was a dark greyish brown sandy loam.
1921. Irregular; 2m by 1.8m; dug 0.3m below natural; probably comprises two or more intercutting bowl-shaped pits (1921 and 1923); irregular, gently sloping sides; irregular bottom; filled with very dark greyish brown sandy loam.
1929. ?Sub-circular; 2.3m x ?; dug 1.35m below natural; near-vertical sides; rounded bottom; the bottom fill (2033) was a yellowish brown

sand, probably derived from weathering and erosion of the sides; above this was a layer of dark brown sandy loam (2017) sealed by a deposit of dark yellowish brown sand (2016) probably derived from ditch 1919 through which pit 1929 was cut; the top fill (1930) was a very dark greyish brown sandy loam up to 0.9m thick.

1994 (Fig. 41). Sub-rectangular; 2.4m by 2.2m; 2.1m below natural near-vertical but irregular sides, with extensive undercutting (up to 0.7m) near bottom; flat-bottomed; the bottom fill (2157) was a homogeneous brown sandy loam; this was separated from the upper fill (1995) by a thin layer of sand, probably weathered and eroded from the sides; the upper fill (1995) was a homogeneous layer of pale brown sandy loam which contained large blocks of natural sand and gravel derived from erosion and collapse of the sides; few finds.

2192. Sub-square; 2m square; dug 0.4m below natural; bowl-shaped; filled with dark greyish brown sandy loam.

2195. Sub-oval; 2.2m by 2.6m; dug 0.95m below natural; steeply sloping sides; rounded bottom; filled with homogeneous dark greyish brown sand loam with considerable small to medium gravel.

There was no break in occupation between Periods IV2 and IV3, nor any sudden change in character or layout of the settlement. Instead, there was a gradual change which involved the resurfacing of the street, the probable replacement of buildings by new structures, and modifications and extensions to the system of enclosures. This pattern of gradual, small-scale change is reflected in the pit sequence where no clear-cut differences either in typology, function, or fills exist between pits of Period IV2 and those of Period IV3. Indeed, none such should be expected for the occupation sequence apparently extended without any hiatus from the beginning to beyond the end of the eleventh century. The division of pits between Periods IV2 and IV3 is therefore somewhat artificial, for some dug during Period IV2 would still have been in use during Period IV3, and this may in part explain the fact that approximately twice as many pits have been attributed to the latter phase. Other explanations may play a part, such as the comparative length of Periods IV2 and IV3, differing densities of occupation, and perhaps a change in the nature of rubbish disposal, but none of these can be related with any certainty to the number of pits being dug.

As with the Period IV2 pits, all Period IV3 pits, with a single exception, lay in the east half of the site within 40m of the street. This supports the suggestion that occupation did not extend into the extreme western corner of the area bounded by the town defences south of the river, but remained as open ground. At Brandon Road (Dallas 1993) the overall site plan showing all features does give the impression that pits were concentrated in a band up to 40m either side of the streets, but they were also dug further back in the areas in-between, perhaps to the rear of properties or yards.

The Period IV3 pits did show some general similarities to those of Period IV2, although there were also some differences apparent. The range of shapes and size was much the same, but there were several larger examples up to 2m deep (e.g. pits 380, 381, 418, 741, 1651, and 1791). Of these, only pit 741 showed reasonably clear evidence of having been lined, and may perhaps also have had some form of superstructure. The sides were vertical with very square-cut corners, and there was no indication of any weathering and erosion; the step, and stake- or post-holes round the top could have held a platform or cover, or perhaps an associated above-ground structure. Pits 380, 381, and possibly also 1651 may have been lined, but this is uncertain, and 418 and 1791 were almost certainly not lined. In the latter two examples, large blocks of collapsed, rather than deliberately redeposited, natural within the fill indicate periodic collapse of the sides whilst the pit was still in use, although it is considered possible, though unlikely, that this collapse occurred after the removal of an original lining. In pit 1719, the largest on site, this collapse resulted from extensive undercutting of the sides, perhaps following flooding. In pit 380, the deposit of sterile sand near the bottom was probably a layer of windblown material, the presence of which might indicate that although one might expect pits to have been kept covered, this might not always have been the case; in the Breckland, wind-blown sand could have very rapidly

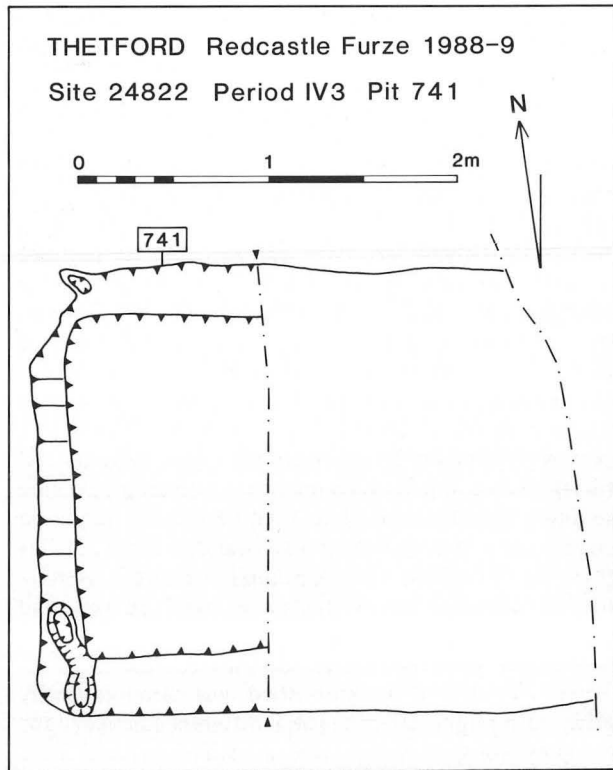


Figure 42 Plan pit 741 (Period IV3). Scale 1:40.

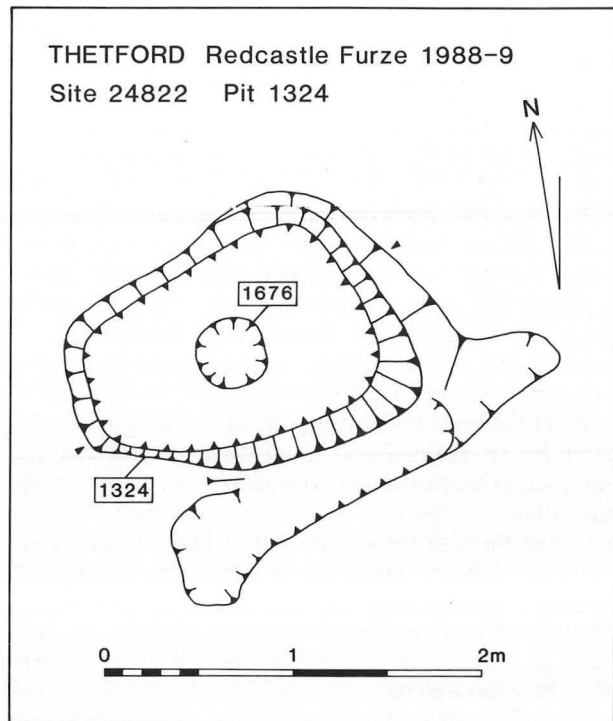


Figure 43 Plan pit 1324 (Period IV3). Scale 1:40.

filled open features such as pits or wells, and some sort of wattle or timber cover would have been necessary to prevent this happening. In other pits, natural sand and gravel could have been deliberately deposited to seal off noxious layers.

Pit 1324 was virtually identical in shape and size to pit 2011, a Period IV2 feature, and also had a centrally-placed post-hole in the bottom and a homogeneous fill. It may have been lined. Like pit 2011, it is interpreted as a latrine pit, and the shallow slot along the south-east edge may have been associated with a superstructure. The environmental remains corroborate this suggested function, but it should be noted that all of the samples taken from the lower layers in Period IV pits would indicate that these were used for cess disposal at some time.

The remainder of the Period IV3 pits were of varying shape in plan, and ranged in depth from about 0.2m to about 1.5m. Many of the large ones had near-vertical or steeply sloping sides and flat bottoms, while several of the smaller examples were bowl-shaped. None showed any evidence of having been lined. Most contained fairly simple sequences of fills, the majority being sandy loams sometimes with occasional layers of sand and gravel either deliberately deposited or derived from weathering and erosion of the sides. As with the Period IV2 pits, most were probably filled fairly quickly, although some of the larger ones may have persisted as hollows as the contents settled. Such hollows would have provided convenient receptacles for the deposition of domestic refuse.

Again, it is virtually impossible to ascribe particular functions to individual pits although the variety of shapes and sizes suggests that they may have originally been dug with specific, but differing, purposes in mind. None however appear to have been dug as wells, and none show any evidence for having had any industrial function. Virtually all, whatever their original purpose, were at some later stage used for rubbish disposal.

The distribution of the Period IV3 pits was broadly similar to those of Period IV2; the absence of pits more than about 40m to the west of the street except for a single outlier (2195) has been noted above. The continued existence of Enclosure A perhaps restricted the area given over to pit digging, and the few that were dug there (pits 1321, 1379, 1457, and 1653) were generally small, shallow, and confined to the north-east part of the enclosure as they had been during Period IV2.

East of Enclosure A, towards the street, there appears to have been two or more clusters of pits which probably respected, and may have been associated with, structures which lay alongside the street. The existence of one structure (see above, p.46) is largely argued for on the basis of the presence and distribution of pits in the vicinity. It would have extended over parts of the areas occupied earlier by Structures 2 and 3, but it seems clear that the plot enclosures associated with these structures had by then fallen into disuse, and a number of Period IV3 pits were dug through the ditches which had defined these enclosures. It is uncertain whether the suggested droveway immediately to the east of Enclosure A remained in use, but the group of pits (1324, 1568 and 1718) near the entrance in the east side would have effectively blocked it.

The main group of pits lay less than 10m to the south of the street and may have formed a continuous zone alongside it. Some may have been associated with

Structure 3 which perhaps continued in use, or a replacement, but others are likely to have been associated with structures which lay alongside the street, beyond the limits of excavation. Some of the pits intercut, and with others formed broad alignments which may have partially reflected the earlier plot enclosures, particularly on the west side which was previously marked by ditch 1919. From north to south, pits 1870, 1791, 1994, 1651, 1748, 1878, 1903 and 1929 all lay approximately in a line cutting or just to the east of ditch 1919. Pits 380, 381 and 580 also lay in a line, and cut ditch 1919. Further to the south, pits 842, 948 and 1089, and possibly also 741 and 752 showed a similar trend. One line of pits comprising 418, 422, 424, and 502 were clearly dug at 90° to the other alignment, and could have marked a property boundary. This possibility is strongly indicated by the subsequent digging of a Period V boundary ditch on the same alignment across the top of these pits (see below, p.65). It may be of significance that the three pits (1717, 1921, and 2192) which lay closest to the street were quite large but shallow, and thus were probably not dug as cess or rubbish pits, but for some other purpose.

VIII. Period IV—General Discussion

The finds, notably the pottery and coins, indicate that Late Saxon occupation at Redcastle Furze did not begin any earlier than the beginning of the eleventh century, perhaps a century or more after the town was founded. Knocker's excavations (Rogerson and Dallas 1984, 197) found no clear evidence for occupation prior to c.900, but none of his sites lay close to the centre of the town which is presumed to have been around the bridging point across the river. Nevertheless, at whatever date the town was founded, occupation at Redcastle Furze began relatively late. The site lay within the area bounded by the town's southern defensive circuit, which was probably constructed in the late ninth or early tenth century, and initially would have been an area of open ground within the town, albeit a peripheral one.

The earliest Late Saxon activity at the site (Period IV1) comprised the digging of several ditches which probably delineated a series of fields or enclosures. The alignments of the ditches appear to have reflected the edge of the river valley to the north, and the line of the defences to the south. Their comparatively large size, and evidence for perhaps two or more re-cuts suggests that they were maintained for some years. Few finds were recovered from any of them, but a spread of burnt material close to the small group of probably contemporary pits towards the centre of the site provides some evidence for there having been one or more structures in the vicinity. It is probable that Period IV1 features pre-date the laying-out of the street, although the crucial relationship between ditches and street lay outside the limits of excavation. If so, then Period IV1 might be broadly equated with Period 3 at Brandon Road (Dallas 1993, fig. 7) which also pre-dated the street system. However, the layout of ditches as well as pits and structures at Brandon Road did not bear much resemblance to that at Redcastle Furze. This might be because Period 3 at Brandon Road was chronologically earlier, or it might reflect a spatial difference between the two sites. Most of the ditches at Brandon Road were restricted to the west half of the site, and the pits to the east half, a division which might reflect the extent to which

occupation had spread by the beginning of the eleventh century. The distribution of structures at Brandon Road was not apparently restricted to either end of the site at this time, although their phasing is somewhat ambiguous. Therefore, the east half of the site at Brandon Road may have been given over to structures and associated pits, and the west half to fields or enclosures and associated structures, which extended west to Redcastle Furze and the line of the town defences.

The Period IV1 ditches at Redcastle Furze may have been field rather than enclosure boundaries, particularly as they showed some indication of rectilinearity, but it is uncertain as to whether these fields or enclosures were used for crop or animal husbandry. Whichever, they must have given a perhaps rather atypical rural flavour to that part of the town.

During the first decade or two of the eleventh century the pattern of occupation was dramatically altered by the laying-out of a gravelled street, one of a number which either extended an earlier system, or replaced it with a new one. (The layout of streets in Thetford is discussed further below). The street exposed at Redcastle Furze, which probably ran to a nearby fording point on the Little Ouse river, would have extended across the infilled Period IV1 ditches and lay on a different alignment to them. Contemporary with this were a series of small enclosures or house plots along either side of the street. These contained structures which were almost certainly domestic buildings, although the relatively scanty remains of only two of these (Structures 2 and 3) were found along the short length of street frontage exposed. This arrangement was not apparently repeated along the much longer lengths of street frontages investigated at Brandon Road, the reasons for which are unclear. Contemporary with the house plots and structures at Redcastle Furze was a series of ditches delineating a large enclosure (Enclosure A) which was periodically modified. This enclosure is most likely to have been used for animals given its layout, entrances, and location adjacent to a suggested driveway, and it probably remained in use up to c. 1100 or just before. It was later replaced by a series of Period V enclosures. Enclosure A bore some similarity to the Period III enclosure at Brandon Road, although the latter was larger, earlier, and clearly pre-dated the street system there. The enclosure at Brandon Road contained one or more post-built structures and thus may have been some form of farm complex, whereas that at Redcastle Furze did not apparently contain any structures and is most likely to have been associated with a nearby structure, possibly one of those excavated outside the enclosure.

Only fragmentary structural remains of three buildings survived or lay within the limits of excavation, but these indicated that the buildings were fairly small (probably less than 10m by 4m), were post-built with wattle and daub walls, and probably had thatched roofs. Two contained hearths, although no floors or other details of the internal arrangements survived. The few buildings found at Redcastle Furze were smaller than those at Brandon Road, and little can be done to offer any sort of structural interpretation. However, all are likely to have been domestic rather than ancillary buildings, and may have been representative of the smaller structures in the town. Structure 5, if it was a structure, may have been built for some other, possibly ancillary purpose. It probably dated to around the middle of the eleventh century, and bore

some resemblance to several of the 'huts' excavated by Knocker at Sites 1 and 2, although these were probably earlier. It is interesting to note that no similar features were found at Brandon Road. The lack of Late Saxon cellared structures at Redcastle Furze is also of interest; two were excavated at Brandon Road, and others by Knocker at sites 1 and 2. Their absence may have been because the area excavated was a peripheral one, but it may also reflect a chronological difference if such structures were characteristic of the tenth rather than the eleventh century.

Most of the enclosure and other ditches were very shallow, and only occasionally showed evidence for having been cleaned out or re-cut. The inference is that the ditches and any accompanying banks would not in themselves have been substantial enough to act as field or enclosure boundaries for either crop or animal husbandry. It is likely therefore that they originally held fences or hedges. Small post-holes were sometimes found cut into the bottoms or sides of the ditches, very occasionally in pairs, and these provide some evidence for fences although it was rarely clear if the post-holes were associated with the ditches.

The layout of the street, ditches, and structures at Redcastle Furze shows some elements of regularity within the relatively small area investigated. This may in part have been due to a natural tendency to align ditches and structures to the street in order to make the most economic use of the land available, but it seems likely that there was also some degree of control in the apportioning of land. Such control may have followed the laying-out of a series of new streets. Only slight evidence for a buried soil survived beneath the street and below the hearths within the structures, and it is possible that the ground surface was partially cleared of topsoil prior to the laying-out of the street and the construction of buildings. It was not possible to identify any stake- or post-holes which might originally have held markers used in the laying-out of the street and ditches, but some of the many unphased post-holes may have been dug for this purpose, others were probably destroyed, and small stake holes may not have been detected in the sandy subsoil.

The pits, which were dug mainly during Periods IV2 and IV3, appear to have been for domestic purposes such as the disposal of cess and household refuse, although these may have been secondary functions of some. If any did have specific non-domestic purposes, it was not possible to identify what these may have been. The pits were almost exclusively confined to an area alongside the street, close to the structures. There were only occasional intercutting groups, which in Period IV3 often continued to maintain boundaries which in Period IV2 had been marked by ditches, subsequently infilled. No wells were found, perhaps a reflection of the nature of the area excavated and the small number of structures, but possibly also because of the proximity of the river. The pits were generally less deep than has been found at other sites in the town, and show no indication of having been cleaned out. The comparatively small volumes of the pits at Redcastle Furze, although impossible to quantify and compare chronologically with other areas of the town, is probably a further indication of both a shorter period and a less dense occupation than elsewhere. There is also the possibility that rubbish in this peripheral area was more easily disposed of on fields or in the river, either within or outside the town.

There was only limited evidence for industrial activity at Redcastle Furze, but this is unsurprising given the small number of structures present and the likely association of at least some with crop or animal husbandry. However, a few kilograms of smithing slag and hearth debris indicates iron working; several fragments of crucibles, and a stone ingot mould suggest small-scale copper alloy working; three punches were also metalworking tools; numerous heckle teeth, and a few loomweights and spindle-whorls show that wool and cloth were being prepared; and a variety of awls, needles, and creasers provide evidence for leather working.

Although textile and leather working may have been domestic activities, metalworking was more specialised, and would probably have involved the production and repair of items for more than a single household. Unfortunately it is not possible with the limited amount of evidence available to assign any of these particular activities to a specific structure. As at all other sites excavated in Thetford, except for Site 1092, there was a conspicuous lack of evidence for bone or antler working. Evidence for pottery production was also absent, and this contrasts with sites excavated by Davison at Brandon Road, and elsewhere by Knocker, where well-preserved kilns survived along with large quantities of wasters. The locations of these sites suggest that pottery production took place around the southern periphery of the town, but the lack of evidence from Redcastle Furze can neither be used to support nor contradict this.

Nothing in the archaeological record clearly demonstrates any decline in the town towards the end of the eleventh century, although some changes certainly occurred which perhaps heralded its subsequent demise. The street remained in use, but there was some build-up of debris over the surface which was not apparently kept clean. However, a new, albeit less substantial, metalling was laid over the top. It may be significant that no wheel-ruts had cut into this new surface, in contrast to the earlier one, which was heavily rutted. This, together with the nature of the new metalling, could be taken to indicate that this route and the nearby fording point had become of lesser importance. The number of pits suggests the continued presence of structures alongside the street, although virtually no evidence for these survived. The small enclosure ditches around the earlier structures alongside the street fell into disuse, and the divisions marked by them may have only partially survived, but Enclosure A continued in use and was modified and extended. It was not until Period V, from c. 1150, that there was a clear change in the layout and nature of occupation which can probably be directly correlated with the demise of the town and the resulting decline of the settlement south of the river. However, such a change is unlikely to have been instantaneous, and would have been a response to a gradual decline over preceding years or decades which would be extremely difficult to detect in the archaeological record.

The Street System

(Fig. 44)

The term 'streets' has been used throughout this volume to refer to gravelled routes which lay within the town, and the term 'roads' for routes, metalled or otherwise, which lay outside of the town.

It has previously been noted (Rogerson and Dallas 1984, 198) that the layout of Anglo-Saxon streets in Thetford remains largely unknown due to the absence of an intact street pattern south of the river surviving into recent times, the lack of pre-eighteenth-century cartographic evidence, and the limited archaeological investigations; furthermore, it is now probably too late to discover whether Thetford developed as a planned or unplanned town. Such a view is perhaps unduly pessimistic. There are some areas not yet built-over where the archaeological deposits are likely to survive relatively intact despite later ploughing, and other areas, now built-over, where sufficient of the deposits may remain to make them worthwhile excavating in the future in order to elucidate details of the town's layout.

It is possible from the lengths of streets exposed during excavations and observations to postulate certain elements of the Anglo-Saxon street system, some of which is preserved in the present layout of streets in Thetford, particularly north of the river. In the latter area, continued occupation from the eleventh to the twentieth century is likely to have resulted in the preservation of the most important routes.

Streets a, b, c, and d (which today are marked by Bridge Street, Whitehart Street, Minstergate, and King Street respectively) would have formed a cross pattern, centrally placed within the northern defensive circuit and broadly aligned to the river. Streets a and b would have been an important north-east to south-west alignment, probably the route to Mundford, which crossed the river and provided the major link with the town on the south bank. Streets c and d would have extended beyond the town to the west and east respectively, the latter as the route to Norwich.

Streets a and b are likely to have continued to the south-west of the river on a line marked as e which deviates slightly to the south of the present London Road. This alignment is suggested by the location of a pre-Conquest church (St Margaret's) immediately outside the defences, and by Late Saxon finds made in the same area, in what is now the municipal cemetery. Together, these indicate the presence of an extra-mural suburb which is likely to have developed alongside a street or road. Significantly perhaps, no Late Saxon finds were made at excavations approximately 100m to the north-west of this on a site (Site 5756; London Road) which lay adjacent to London Road and immediately outside the defences. This supports the suggestion that the present line of London Road does not follow a Saxon route, but is the result of a shift which took place during the medieval or post-medieval period.

Street f aligned north-to-south and today marked by the line of Bury Road, would have been the route to Bury St Edmunds. Its existence is suggested by the spread of features beyond the infilled town ditches at Site 1092, 80m to the east of Bury Road, possibly indicating the presence of a suburb, and also by the probable convergence nearby of street k with street f at the point where the latter would have crossed the defences.

The extent of street g to the west is uncertain. Almost 30m of this street was recorded at Site 11521 during observation work, but it is not known whether this continued further to the west than its postulated junction with street l. If it did, then it probably followed the edge of the river terrace on the same line as present-day

Brandon Road, to the west of the postulated junction with street l. However, no trace of any Late Saxon metallings was revealed when an underpass was constructed across Brandon Road at the point marked by a ? on Fig. 44.

The line and extent of street h which diverged to the south of street g is more certain, although none of it is preserved in the street system today. A length of 120m was exposed during excavations at Brandon Road (Site 5756), and shorter lengths immediately to the west during observation work, and to the east at Site 5865 in similar circumstances. A short length may also have been found during small-scale excavations between Site 5756 and Site 5865. This street probably continued in use at least until the post-medieval period as the route to Lakenheath.

An intra-mural route, marked by streets i, j, and k, which lay approximately parallel to and up to 100m within the south-west line of the southern defensive circuit is postulated on the basis of various lengths of street excavated at Sites 1, 2, 6, and Redcastle Furze (Site 24822); lengths of approximately 100m, 12m and 20m respectively. This route would have crossed the river to the north of Redcastle Furze at a ford which may have lain just within the southern defensive circuit, immediately to the east of where this terminated at the river. It would then have extended to the south-east as far as the point where it joined street f close to where the latter crossed the

defences, a total distance in excess of 1200m. This route would have crossed, and thereby linked, two or possibly three streets (e, h, and g if the latter extended that far to the west) which extended beyond the town to the west and south-west.

Streets l and m lay entirely within the town, and were internal elements of the system. Street l, exposed over a length of 50m at Brandon Road (Site 5756), formed a 90° junction with street h, and may have joined street g to the north at a similar angle. Street m, which extended to the east of the postulated junction between streets e and k at an angle of approximately 45° to both, has been located at Sites 2 and 4 where lengths of 15m and 16m respectively were exposed. The line of street m projected to the east would have met street f at 90°, but whether or not it extended beyond this is unknown.

Clearly, the pattern of streets postulated here is incomplete. However, it includes all of the likely major routes except for one which may have crossed the rivers Thet and Little Ouse at fording points at the extreme east end of the southern defensive circuit, close to what is now Nuns' Bridges. The site of St George's church, a pre-Conquest foundation, immediately to the south of this and outside the line of the defences might, like the site of St Margaret's, indicate the existence of a suburb which developed along a route out of the town. Many other routes

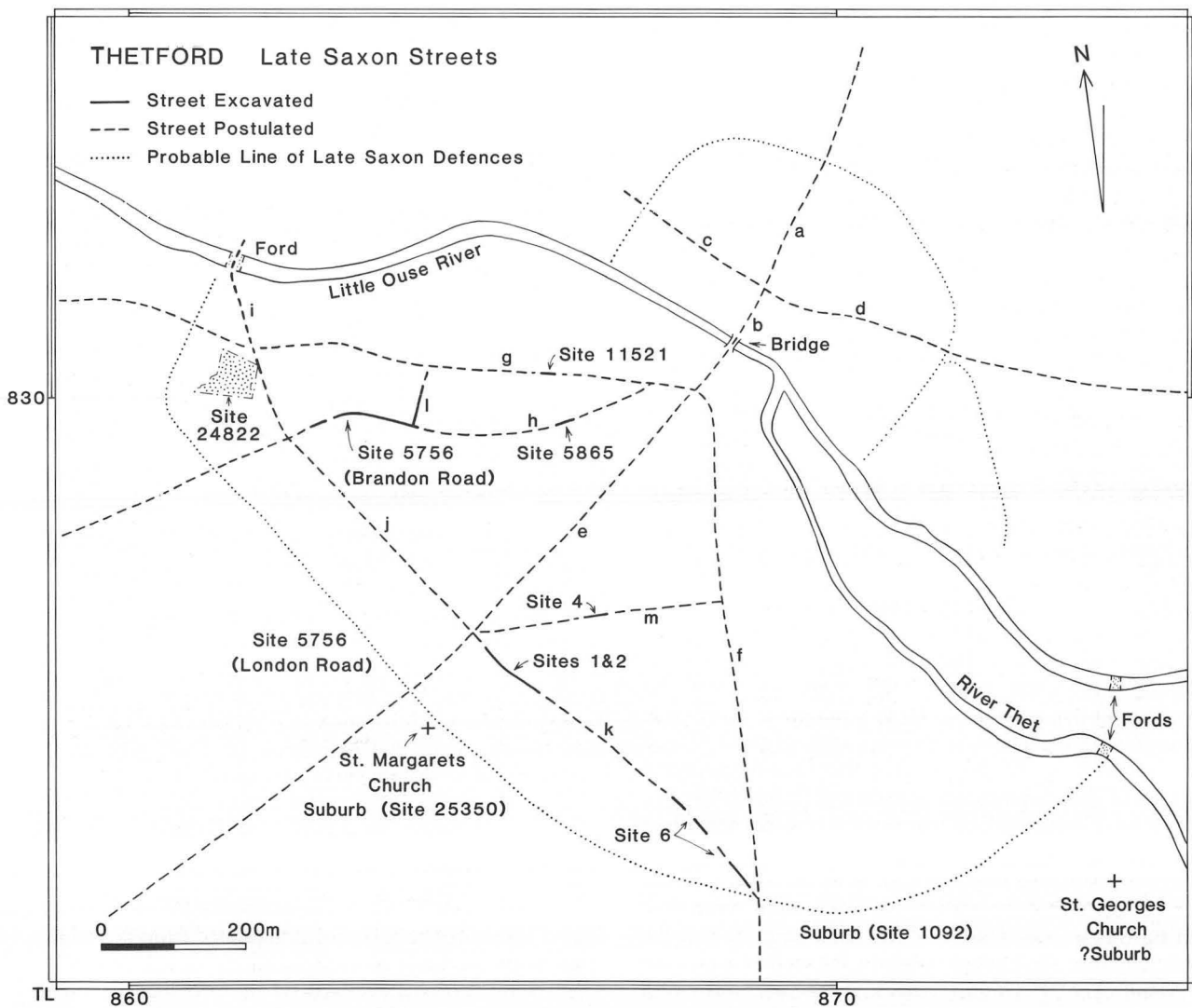


Figure 44 Map of Thetford postulated Late Saxon street system. Scale 1:10,000.

of variable size and importance are likely to have existed within the town; some may have been little more than paths or alleyways, others more substantial, but all would have enabled access to various parts of the town.

If the street pattern postulated here is broadly correct, then it emphasises the importance of the river crossings, and in particular that point in the centre of the town where a bridge is likely to have afforded a route across the river and linked the settlements on the north and south bank. The major route (a) on the north bank, and at least three (e, f, and h) on the south bank all converged on this point. The fording points at the extreme east and west ends (near Nuns' Bridges and Red Castle respectively) of the town defences are likely to have been significant, but of lesser importance. All of the routes to the river crossings probably developed as unplanned elements in the system, and some may have followed the lines of well-established earlier routes.

However, a certain degree of regularity and elementary planning is discernible in the street pattern at Redcastle Furze (Site 24822) and Brandon Road (Site 5756) where streets i and l extended at 90° to street h. These two streets lay up to 450m apart, but excavations suggest that there were no intervening streets. Access to buildings and areas in-between must have been either by paths, alleyways, or less well-defined thoroughfares which have not retained any metallings, if indeed they ever had any. The streets in this area were all fairly straight, approximately 5m wide, and had well-laid, regular metallings with no evidence for piece meal patching up. There were some spreads of rubbish on the early surfaces, but whilst they remained in use no pits or structures encroached upon them.

These aspects of the street system towards the west of the town contrast with that uncovered further to the south by Knocker at Sites 1, 2, 3 and 6. At these sites, the layout appeared more irregular, the streets less straight, the metallings less consistent, and there was more evidence for the encroachment of structures and pit digging. Such encroachment may have been the result of a greater density of occupation and competition for space, and the existing evidence would suggest that the street frontages in this area were more heavily built-up than those to the west at Brandon Road and Redcastle Furze. These differences may reflect both chronological and spatial differences between the two areas, but it is the former which is considered here to have had a more important effect on the development and nature of the street system within the Late Saxon town.

At Sites 1 and 2 three superimposed street surfaces were traced over a length of approximately 100m. These all followed a similar line with only slight deviations, although in some places they were separated by intervening deposits of soil up to 0.6m thick; these were considered to have been deliberate dumps of material used to raise the levels of the streets, rather than representing periods of abandonment (Rogerson and Dallas 1984, 14). The lowest street surface was not the primary feature in the sequence for it sealed two groups of post-holes, some associated soil, and two pits. Dating of the street surfaces has indicated that the earliest was laid out at some time during the second quarter of the tenth century, and the route continued in use until perhaps the second half of the eleventh century. This suggests that the street system in this area was superimposed on an earlier settlement pattern, and perhaps did not follow any pre-existing,

possibly unmetalled thoroughfares. This system may have been extended from the earliest nucleus of Late Saxon settlement which is likely to have been established around the bridging point on the river prior to, or contemporary with, the construction of the town defences in the late ninth or early tenth century.

Until the late tenth century much of the area towards the west, within the southern defensive circuit, was probably open ground divided by ditches into fields and enclosures used for crop and animal husbandry. During the late tenth and early eleventh centuries a rapid expansion in population of the town appears to have begun, evidenced at both Brandon Road and Redcastle Furze by the laying-out of streets (h and l, and i respectively), the construction of buildings, and the digging of pits in areas not previously occupied. At Site 1092 an expansion of settlement over and beyond the town defences took place, perhaps indicating that there was no space left within the confines of the town. The streets excavated at Redcastle Furze and Brandon Road can be seen as part of this expansion, perhaps even as elements of a deliberately planned system conceived to control the nature of the growth. This would have extended the earlier street system rather than replacing it.

At Site 5865, street h overlay Late Saxon deposits and features which were perhaps associated with the earliest settlement of the town, but at Brandon Road the first metalling on street h overlay ditches which delineated a large enclosure and its entrance. It may be significant that the street at the latter site followed the same line as the western approach to the entrance of this enclosure, and thus its location may at least in part have been determined by an earlier route. No build-ups of occupation deposits were found beneath the streets either at Brandon Road or Redcastle Furze, nor any clear evidence for a buried soil. A thin greyish brown layer which survived in places beneath the street at the latter site may have been the truncated remains of such a layer, perhaps largely cleared before the street was laid out. No stake- or post-holes were detected beneath the streets which might have been associated with the laying-out of these streets, or have marked any un-metalled precursors. The large quantity of well-graded gravel used for the metallings on these new streets provides further evidence that they were laid out as part of a planned system under some form of official control.

It is unlikely that this development of the street system occurred prior to c. 1000 AD, and in all probability it took place during the first decade or two of the eleventh century. This would have been at a time when the size and importance of Thetford made it effectively the capital of East Anglia. Ulfcetel, perhaps the earldoman of East Anglia, may then have used it as a base from which to organise the administration and defence of the area. The later development and expansion of Thetford's street system might be in some way attributed to him.

IX. Period V—Early Medieval (Fig. 45)

Period V features have been differentiated from Period IV features on the basis of their stratigraphic relationships. They were also characterised by the presence of small quantities of unglazed Grimston Ware in their fills, a group absent from earlier contexts, except for a few possibly

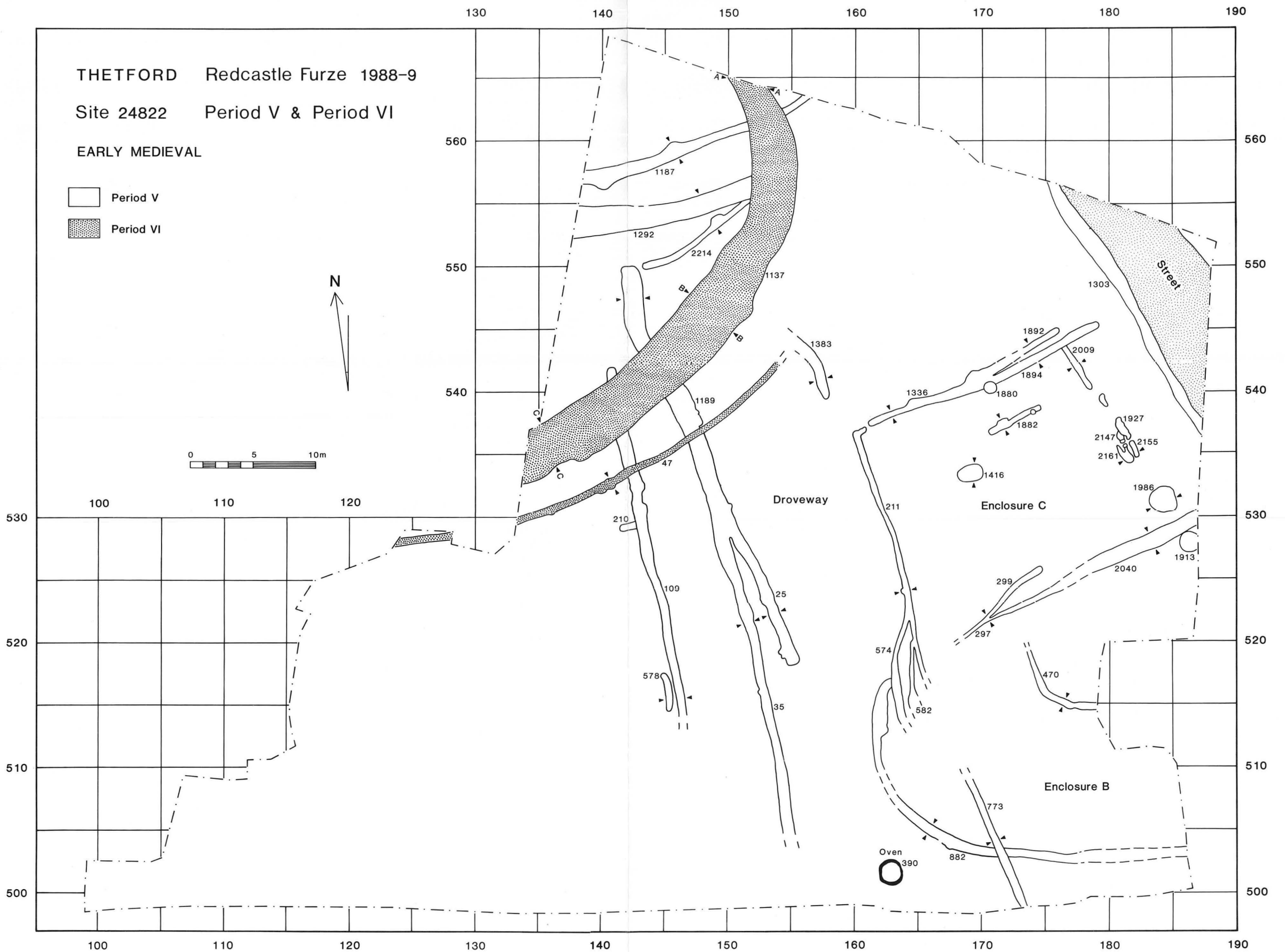


Figure 45 Plan Period V and Period VI features. Scale 1:300.

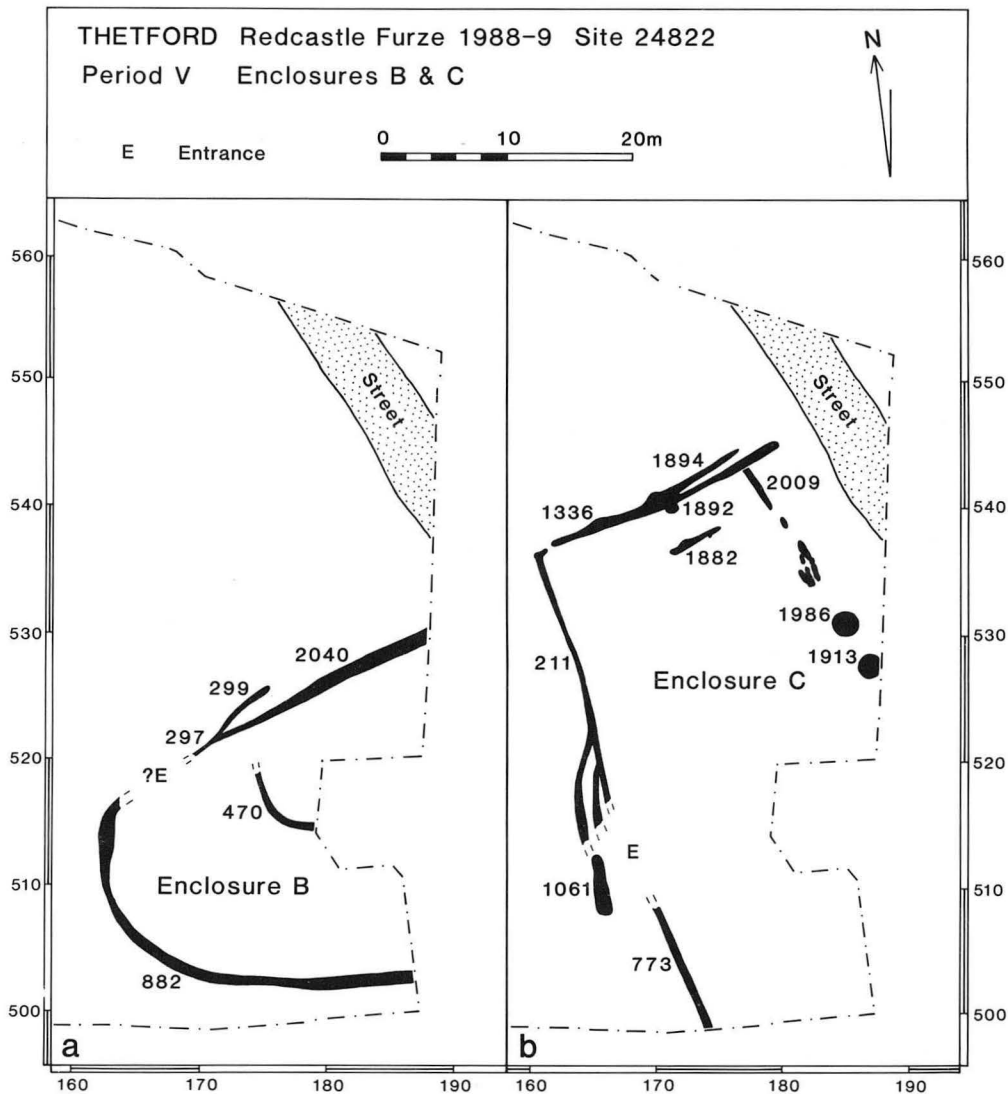


Figure 46 Plans Enclosures B and C (Period V). Scale 1:600.

intrusive sherds. The presence of this group suggests that Period V should be dated to c.1150 onwards.

The Street

The Period IV street appears to have continued in use in Period V, although no new metallings can be assigned to this period. It is possible that any later surfaces were destroyed by subsequent activity, and thus have not survived. Some spreading of the earlier metallings appears to have occurred where these were exposed along the east side of the street, a process which may have begun earlier during Period IV3. The width of the street could thus have been approximately 6m, although it may have appeared only as a linear spread of trampled soil with occasional patches of gravel from earlier metallings exposed at the surface. The presence of unglazed Grimston Ware and later groups in the upper fill of ditch 1303 (a Period IV3 feature) alongside the street to the west indicates that this ditch was still open. There was no ditch along the east side of the street.

No certain evidence for any structures was found alongside the street, but two enclosures and a series of ditches all aligned parallel or at 90° to the street, and several pits, all provide circumstantial evidence for the existence of structures.

Ditches

Enclosure B

(Figs 46 and 47)

This comprised two lengths of ditch or gully (297/2040 and 882) which may originally have been continuous, and bounded the west end of an irregularly-shaped enclosure at least 30m by 23m in size. At the west end, this enclosure took the form of a flattened oval; the east end lay outside the limits of excavation, but probably extended as far as the street.

Ditch 297 was very shallow at the west-end, and it was not possible to determine whether it was continuous with ditch 882. A gap of approximately 6m between them may have marked the location of an entrance. Ditch 297 was approximately 0.3m wide and less than 0.15m deep at this point, but bifurcated to the east into two similar sized and approximately parallel ditches (299 and 2040). Ditch 299 was only 6m long, but ditch 2040 continued to the edge of the excavation and was at least 18m long. The latter widened considerably to the east where it was up to 1.3m wide and up to 0.5m deep, and comprised two parallel ditches, one perhaps a replacement of the other.

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Period V Ditches Enclosure B

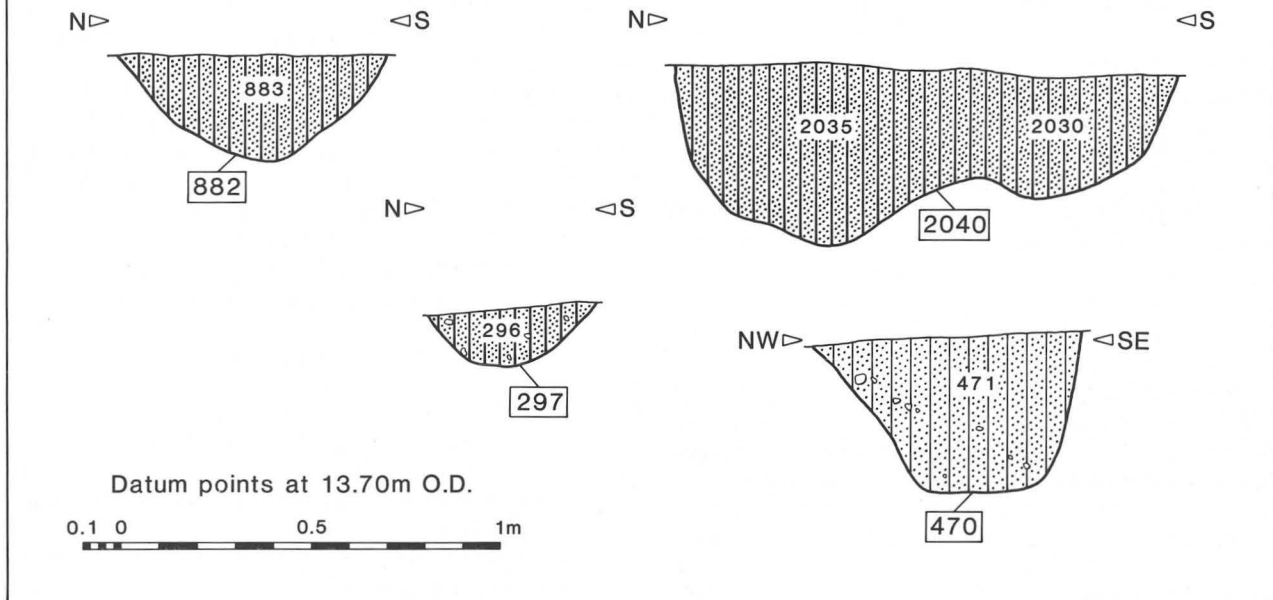


Figure 47 Sections ditches Enclosure B (Period V). Scale 1:20.

Ditch 882 was curvilinear, somewhat irregular in plan and section, and at least 35m long, although sometimes difficult to follow where it cut across earlier features. It was between 0.5m and 1m wide, up to 0.3m deep, and was rectangular or rounded in section. No evidence for any re-cut within this ditch was apparent.

The fills of ditches 297, 299 and 2040 were very dark greyish brown sandy loams which contained a quantity of pottery and animal bone; these contrasted with the lighter fill of ditch 882 which contained comparatively few finds.

Within Enclosure B was a further length of curvilinear ditch (470). This was at least 8m in length, up to 0.5m wide, and 0.4m deep. At the north end it was shallow, but towards the east it became deeper with near-vertical sides, and in the bottom were two post impressions, 0.5m in diameter and 1.2m apart. There appears to have been a gap of up to 3m between the north end of ditch 479, and ditch 297. Ditch 470 was filled with a dark brown sandy loam which contained some pottery and animal bone, and also some small pieces of burnt daub.

Enclosure C

(Figs 46 and 48)

This was later than Enclosure B, although the latter may have been incorporated into the new layout. Enclosure C was approximately rectangular, at least 45m long, and between 20m and 30m wide depending on whether or not it extended up to the street frontage. As with Enclosure B, it was bounded by a series of shallow ditches or gullies. To the north it was marked by ditch 1337 which bifurcated into ditches 1892 and 1894, of which 1892 may have been the earlier. These ditches were all shallow, flat-bottomed and somewhat irregular in plan, and were filled with dark or very dark greyish brown sandy loams. Ditches 1337 and 1892 were together 17m in length, and ditches 1337 and

1894 20m in length. They extended up to 6.5m and 3.5m respectively from the street.

The west side of the enclosure was bounded by two ditches (211 and 773), 21m and 12m long respectively, which may originally have been one single length, although a 12m gap between them might have marked the location of an entrance. They were between 0.3m and 0.7m wide, up to 0.25m deep, and had steeply sloping or near-vertical sides and flat bottoms. Both were filled with sandy loams, with that towards the north end of ditch 211 being appreciably darker. It was clear however, that ditch 773 cut ditch 882 which formed part of Enclosure B. Immediately to the north of the gap, ditch 211 bifurcated twice, and two lengths of shallow curvilinear ditches (574 and 582) extended to the outside of the enclosure. The southern extent of these ditches where they were cut into the tops of earlier features was uncertain, but a short length of ditch (1061) may have been a continuation of them. Ditch 1061 took the form of a large slot, 5m long, 1m wide and 0.5m deep, with steeply sloping sides and a flat bottom. It is uncertain whether these ditches were contemporary, but together may have been part of an entrance to Enclosure C.

Enclosure C may originally have been open on the east side adjacent to the street, or perhaps ditch 1303, a Period IV3 feature alongside the street, may have continued in use as boundary; the presence of unglazed Grimston Ware and later pottery groups in its upper fill has been remarked on above. However, at a later date a series of discontinuous, irregular, shallow ditches or gullies and slots were dug in a line parallel to the street, and set back approximately 6m from it. It may have been coincidental but two shallow pits (1913 and 1985) also lay on the same alignment. The various features which comprised this series of features (1927, 2009, 2147, 2161 and 2165) lay on a line which if projected to the north coincided with the

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 Period V Ditches Enclosure C

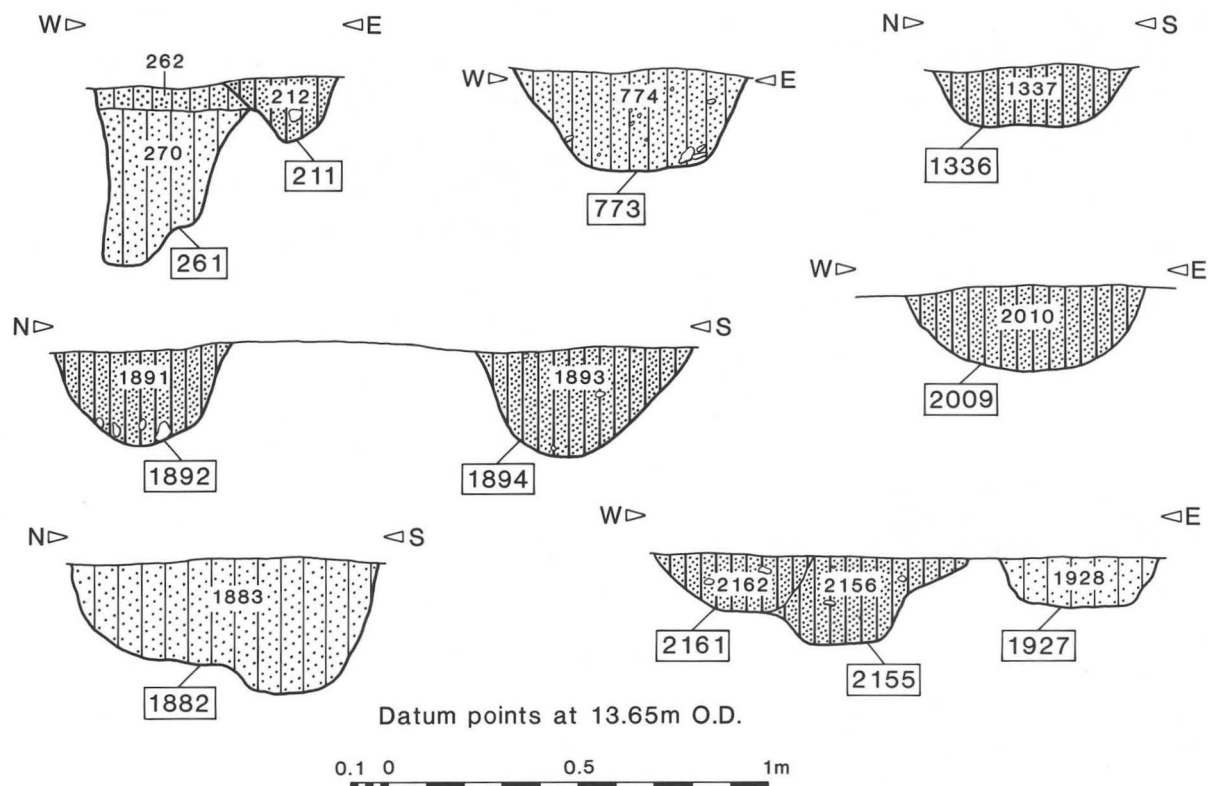


Figure 48 Sections ditches Enclosure C (Period V). Scale 1:20.

end of ditch 1892, the postulated later of the two ditches marking the north side of the enclosure. Ditch 2009, at least 4m in length, was morphologically similar to ditch 1892, and together with 1882, another similar ditch, may have defined a small area in the north-east corner of Enclosure C. This area, marked by these three unconnected lengths of ditches (1882, 1892, and 2009) would have measured approximately 8.5m by 4.5m. There was a gap of 4m in the south side, and nothing to mark the west side, although a shallow, circular post-hole (1880) which cut ditch 1894, and a possible corresponding feature which formed part of ditch 1882 may have been associated with the arrangement of features in this corner of Enclosure C.

The pits (1334, 1913 and 1985) which lay within Enclosure C are discussed further below.

Ditches Outside Enclosures B and C
 (Figs 45 and 49)

Various ditches lay to the west and north-west of Enclosures B and C, and perhaps like the enclosures can be divided into two groups, although it is not clear whether or not these can be equated chronologically with Enclosures B and C; all may have been contemporary with one or other of these enclosures. Those ditches which probably comprised the earlier group were 25, 35, 1187, 1189, 1383, and 2214; those belonging to the later group were 1292, and perhaps also 109 (Figs 45 and 49).

Ditch 1189 lay approximately parallel to the street, showed a slight sinusoidal curve at the north end, and bifurcated into two slightly diverging ditches (25 and 35) towards the south. Ditch 25 extended for only a further 11m, but ditch 35 extended at least 25m to the south where it faded out, probably destroyed by later activity. Together, ditches 35 and 1189 were at least 50m in length. Ditch 1189 was up to 2m wide, and ditch 35 between 0.6m and 1.2m wide, the narrower width attributable to partial truncation. Ditch 25 was up to 1m wide. All were fairly shallow, up to 0.25m deep, with gently sloping sides and rounded or flat bottoms, and were filled with dark greyish brown sandy loam.

Ditch 1383 was up to 0.9m wide and 0.2m deep, and lay 10m to the east of ditch 1189. Although only 6m were traced, it showed a similar sinusoidal curve which corresponded with that in ditch 1189. A clear terminus to the south was found, and it is thought unlikely to have extended much further to the north. The position of ditch 1383 in relation to the north-west corner of Enclosure C would suggest that the former was contemporary with or later than the enclosure.

At the north end of ditch 1189, a small shallow, curving ditch (2214) extended 10m to the north-east where it was cut by ditch 1292. Ditch 2214 was up to 0.5m wide and 0.2m deep, and filled with brown sandy loam. Probably contemporary with this was ditch 1187 which ran north-east to south-west across the north-east corner of the

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Period V Ditches

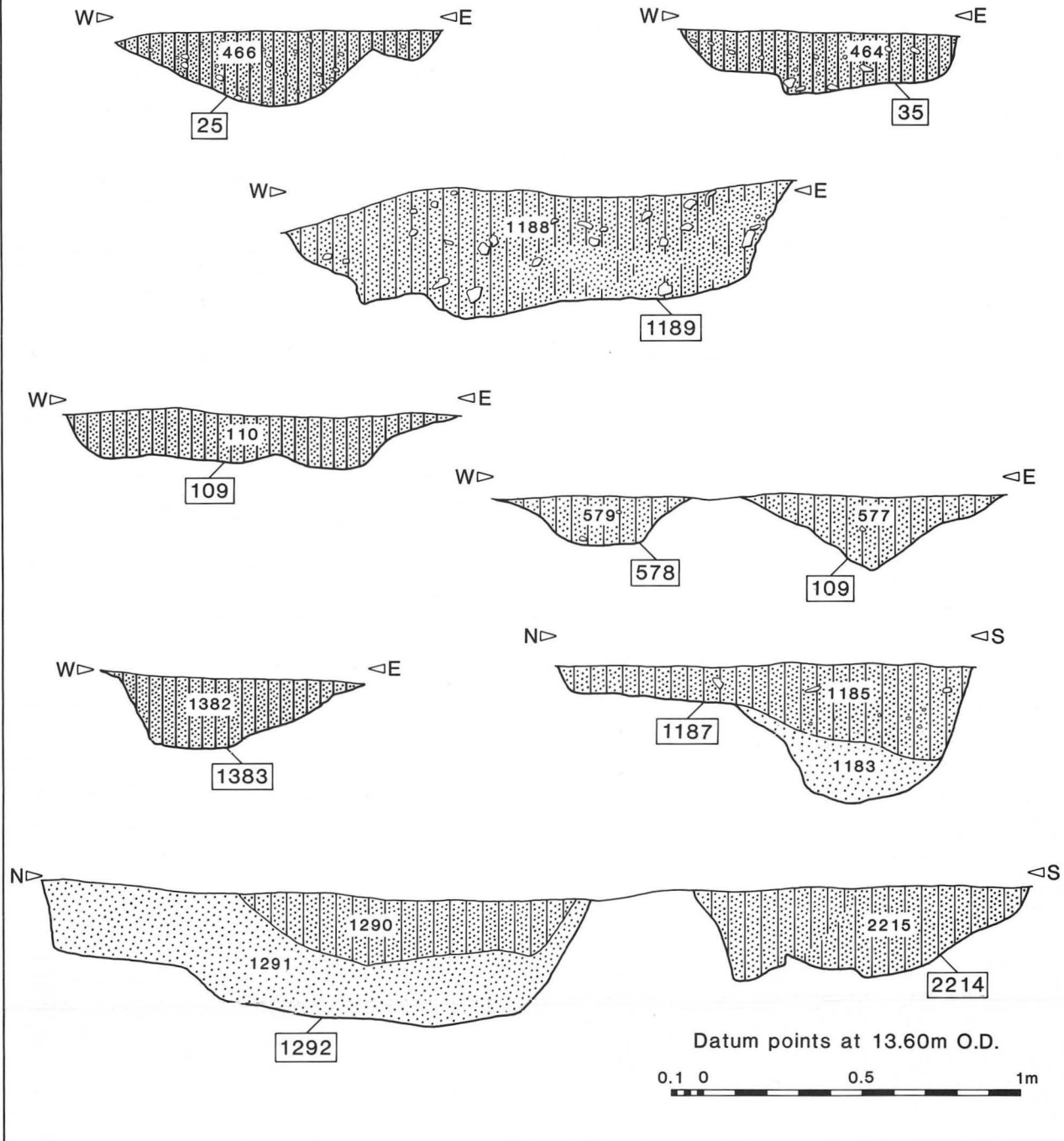


Figure 49 Sections ditches (Period V). Scale 1:20.

excavation, approximately 6.5m from the north end of ditch 1189. A 20m length of ditch 1187 was exposed; it decreased in width from 1.2m towards the south-west to 1m in the north-east where it may have been truncated by later activity, or not been dug so large near the edge of the river valley. Ditch 1187 was up to 0.4m deep, and filled with a primary fill (1183) of sand overlain by a layer (1185) of dark yellowish brown sandy loam.

The relationship of ditch 109 to ditch 1189 which lay to the east is uncertain; it is considered here to have been

later, although it could equally have been contemporary or earlier. It ran approximately parallel to ditch 1189, and was traced over a length of 30m. There was a clear terminus at the north end, but it faded out to the south. It was up to 0.9m wide and 0.2m deep, and was filled with a very dark greyish brown sandy loam which contained few finds. Feature 210 was a short, shallow projection to the east of ditch 109, and probably contemporary with it as no distinction could be made between the fills. Further to the south, and less than 0.2m to the east of ditch 109, was a

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Period V Pits

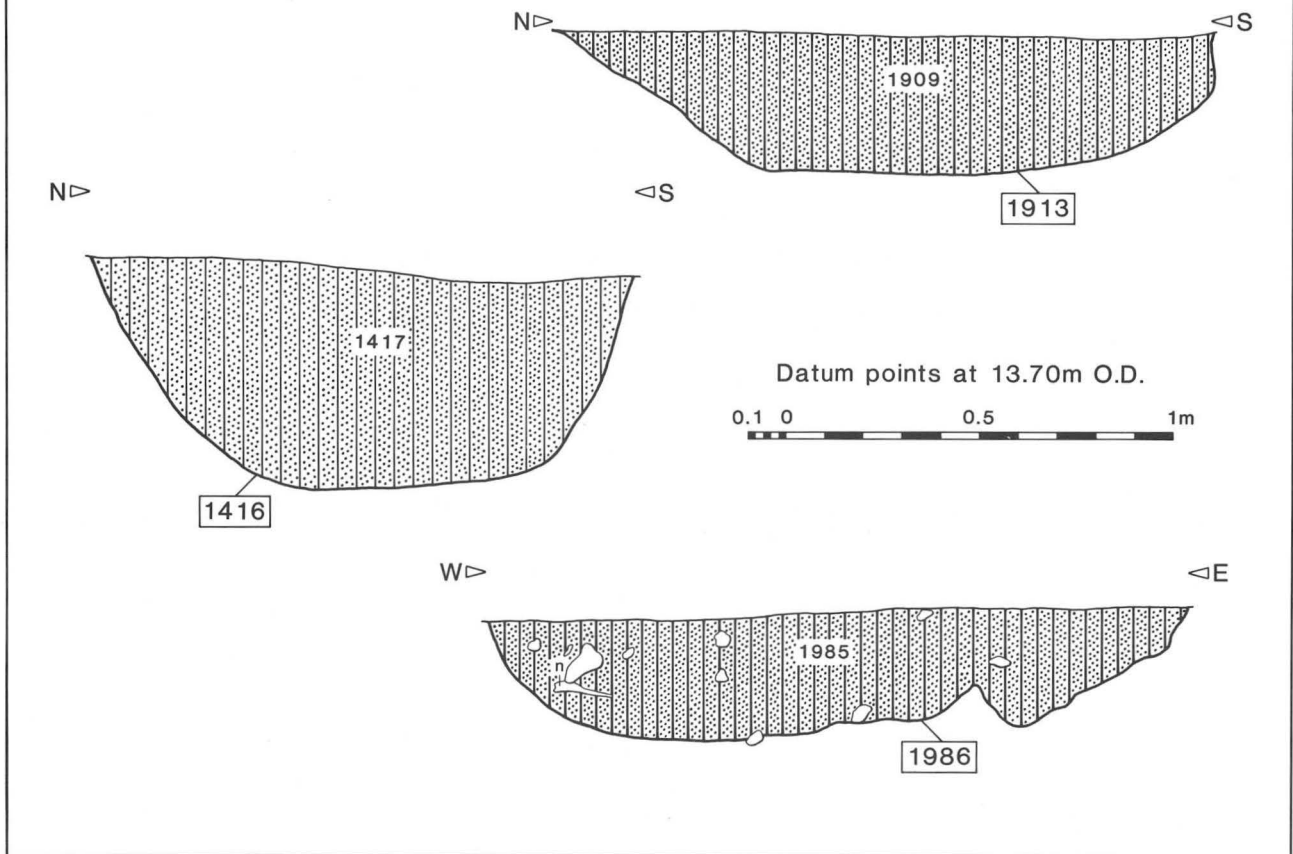


Figure 50 Sections pits (Period V). Scale 1:20.

shallow, curved feature (578). Feature 578 was 3m long, 0.5m wide, and filled with a brown slightly loamy sandy gravel which contained no finds. Its position relative to ditch 109 suggests that they were contemporary.

Ditch 1292 towards the north-east corner of the site cut ditch 2214 and was almost certainly later than the others. A 15m length up to 2.5m wide and 0.5m deep was exposed, which extended from the west edge of the excavation, and was cut by the Period VI bailey ditch (1137). It did not extend to the east beyond this. Ditch 1292 had irregular sides and a flat bottom and, like ditch 1187 to the north, was filled with a sandy lower fill (1291) overlain by a layer of brown sandy loam (1290).

Pits

(Fig. 50)

Only three shallow pits (1416, 1913 and 1986) have been assigned to Period V, all of which had been dug within Enclosures B and C.

Pits 1416, which lay towards the north-west corner of Enclosure C, was oval; 2m long, 1.5m wide and 0.4m deep. It was bowl-shaped, and filled with dark brown sandy loam.

Pits 1913 and 1985 lay in a line parallel to the street along the east side of Enclosure C. Pit 1913 was circular, 1.5m in diameter, and 0.3m deep. Pit 1986 was sub-circular, 2m in diameter, and 0.35m deep. Both had sloping sides and flat bottoms, and were filled with dark

greyish brown sandy loam. The fill of pit 1986 also contained some patches of pale grey ash.

Oven 390

(Fig. 51)

This was an approximately circular feature which lay close to the south edge of the excavation, 3m outside of Enclosure B. It was constructed above an infilled Period IV3 ditch, and could be assigned stratigraphically to either Period V, VI or VII. It is considered most likely to date to Period V, although it might also be of Period VII.

Feature 390, interpreted below as an oven, comprised an approximately circular wall of clay and flint pebbles, 2m in diameter, 0.3m thick, and surviving to a height of about 0.2m. The inner face of the clay had been fired a red colour to a depth of 0.07m, and many of the exposed flints were reddened or cracked by heat. The wall was slightly concave in profile suggesting that it had originally formed a dome. There was an opening, probably a stoke-hole, up to 0.6m wide in the north-west side where the clay wall was absent, although it is conceivable that the wall had been destroyed at this point by tree roots. The floor of the oven was a thin surface of baked clay which sloped very gently towards the centre.

The primary fill was a very thin, discontinuous spread of silt and charcoal (769 and 771), overlain by a further thin spread of silty sand (624). The remainder of the oven

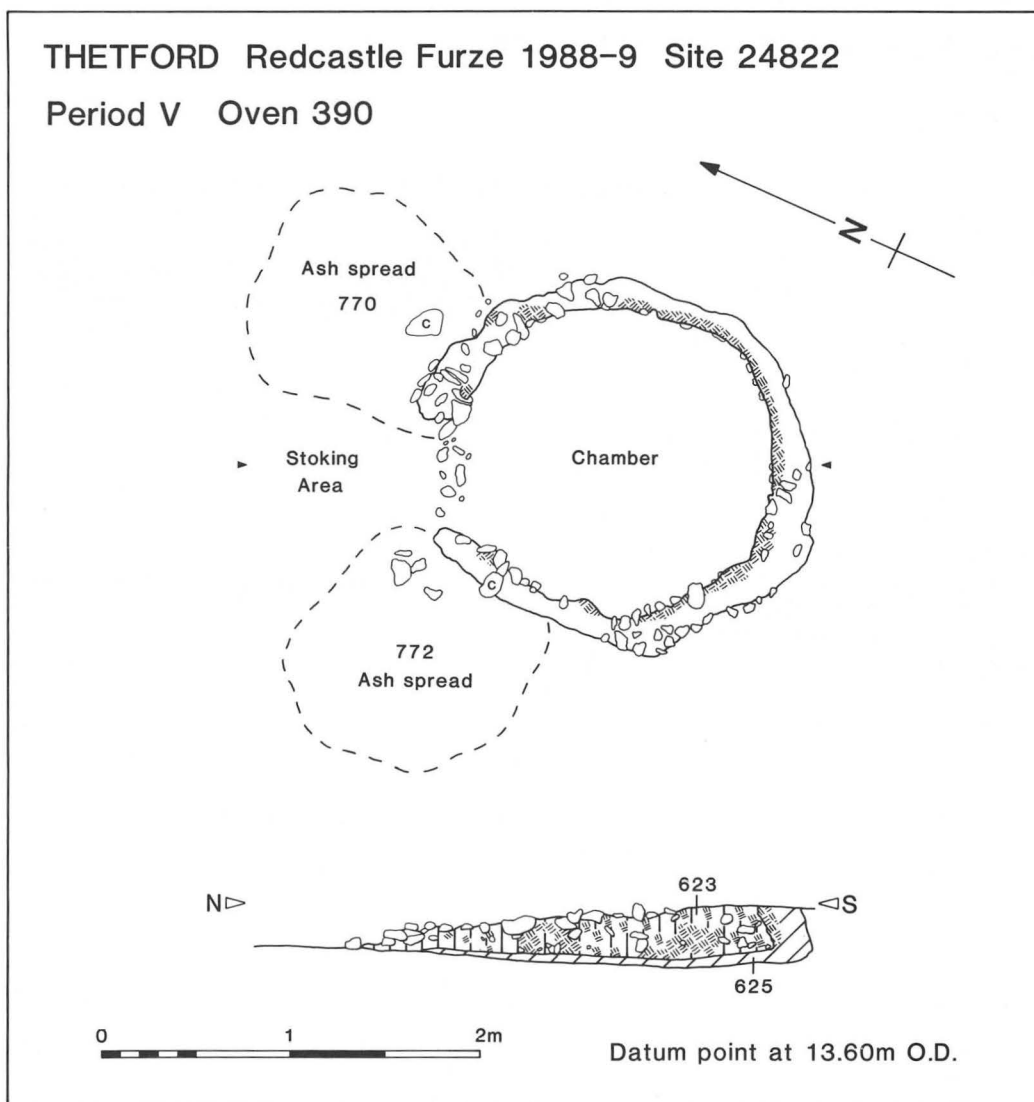


Figure 51 Plan and Section oven 390 (Period V). Scale 1:40.

was filled with a mixed layer of burnt and unburnt clay with flints which contained patches of sandy loam (623).

The lower layers (769, 771 and 624) probably relate to the use and subsequent abandonment of the oven, with layer 623 deriving from a collapsed, domed superstructure. Two spreads of charcoaly loam (770 and 772) heavily disturbed by roots, around the outside of the stoke-hole, may also have derived from the use of the oven, and probably lay either side of a stoking area.

Discussion

Period V, which has been dated here to the mid-twelfth century, may represent a continuation of occupation from Period IV with no intervening hiatus. However, this remains uncertain. The street continued in use, perhaps wider than before, but with no new metallings, or none at least surviving. Patches of earlier metallings may have been exposed at the surface of what might otherwise have been a fairly muddy thoroughfare. No new ditches were dug adjacent to the street.

A completely new system of ditches was dug which reflected the alignment of the street, but did not otherwise bear much relation to the preceding arrangement of ditches. Two groups of ditches defined an earlier and a

later enclosure, Enclosures B and C respectively. Both fronted onto the street with Enclosure C incorporating or more likely superseding Enclosure B. The north side of Enclosure B defined by ditches 297, 299 and 2040, did cut through the tops of a line of Period IV3 pits comprising 418, 422, 424 and 502. Such a coincidence of features is unlikely to have been accidental, and this is perhaps the only example where a Period IV boundary, other than those determined by the street edges, continued into Period V.

The ditches were without exception small, and should perhaps be classed as gullies or slots. None would have provided very substantial boundaries on their own, and it is likely that they were dug to hold fences or perhaps for hedges. Slight bulges in the sides of some may provide evidence for the former, although post-impresions and post-ghosts were absent except in ditch 470, an internal division within Enclosure B. The north sides of both enclosures were re-cut, and the complex of ditches around a possible entrance in the west side of Enclosure C may also represent one or more re-cuts. Both enclosures may have had entrances towards the rear, and presumably also had access from the street frontage. This could not be determined for Enclosure B, but in its earliest phase

Enclosure C appears to have been open to the street. Subsequently, a series of discontinuous ditches, gullies or slots, and perhaps two pits were dug in a line parallel to but set back from the street, although what form this boundary took above ground is uncertain.

No structures were located within either enclosure, although some form of internal division existed in both, and three shallow pits, possibly for rubbish disposal, were found in Enclosure C. The pits, the darker fills in the ditches near the street, and the greater quantities of pottery and animal bone recovered from these latter areas together strongly hint that structures did exist in these areas, but evidence for them either did not survive or was not detected. Oven 390, if it was a Period V feature, would provide further support for the enclosures being associated with domestic occupation rather than agricultural activity. The oven, with indications of having been domed and having had a stoke-hole in the north-west side, is most likely to have been for baking bread.

West and north-west of Enclosures B and C were a series of shallow ditches which were not all contemporary. Ditch 1187 to the north-west probably marked the north limit of any fields or enclosures, and followed much the same lines as the Period IV ditches in that area. However, the layout of the other ditches did not bear any relationship to those of Period IV, and appears to represent a major change in the organisation and layout of the fields or enclosures. It is not clear from the area excavated how these were arranged, although the stretch of ground 12–15m wide between the rear of Enclosure C (marked by ditches 211 and 773) and ditches 35 and 1183 may have been a driveway parallel to the street, which linked the area to the north-west of Enclosure C with areas to the south. If so, then oven 390 would have lain in the middle of this, unless it was an earlier feature associated with Enclosure C (which may have pre-dated the driveway), or it was later. Ditches 1187 and 2214 were probably contemporary with the postulated driveway, and may have provided access between the area to the north-west of Enclosure C, as well as the street, and an extensive open area to the west perhaps extending beyond the line of the infilled defences.

Ditch 1292, and ditch 109 if it was later, probably represent a subsequent, partial remodelling of the ditch system.

The arrangement of ditches might indicate that the areas surrounding Enclosures B and C were given over to animal rather than crop husbandry, and together with the other excavated and finds evidence would suggest that although the street system survived, occupation from the beginning of the twelfth century was on a reduced level. The relatively dense occupation in the eleventh century, attested by the presence of plot enclosures, structures, and pits along the street frontage, was probably replaced by a much more open settlement plan. This change was probably a reflection of the decline of the town from the late eleventh century. It represented the beginning of large-scale depopulation which led soon after to near-abandonment of the area south of the river.

X. Period VI–Early Medieval (Fig. 45)

Only two features (47 and 1137) have been assigned to Period VI, and these are considered below to have been

part of the Red Castle defences. Both lay in the north-west corner of the site, cut Period V features, and were sealed by Period VII walls.

Ditch 1137 was a large curvilinear feature, exposed over a length of approximately 40m, which extended beyond the limits of excavation. It was up to 4.5m wide and 1.8m deep. Three sections between 2m and 3m wide were excavated; one towards each end and one in the middle of the exposed length (Fig. 52). In the middle section, the ditch was a shallow V-shape in profile with both sides sloping at approximately 35°. In the west section, the profile was a more pronounced V-shape with the inner (north) side sloping at approximately 45°, and the outer (south) side at approximately 50°. It is uncertain whether several 'steps', particularly pronounced towards the top of the inner side, were created during the digging of the ditch or were a result of partial collapse of the sides. In the north section, the ditch was less than 1m deep, and was a shallow, irregular V-shape in profile. There is no evidence from either the profiles or fills that ditch 1137 was ever cleaned out or re-cut.

The sequence of fills in the middle and west sections of ditch 1137 were broadly similar, and only those in the former are described and illustrated here. The primary fill (1203) was a clean, slightly silty sand; probably material which had been blown in or derived from weathering and erosion of the sides. Above this was a sequence of layers comprising 1155, 1156, 1163, 1185 and 1186, all up to 0.4m thick, which filled the ditch except on the south-west side. Layer 1163 was a thin deposit of sand, probably wind-blown material. All of the other layers except for 1186 had been deposited or accumulated from the north-west side. Layers 1155 and 1185 were yellowish brown to brown sands with some small gravel, and 1156 was a dark grey sandy loam. Layer 1186 was a dark greyish brown sandy loam which interleaved with 1185. This interleaving suggests that layers 1185 and 1186 were contemporary, and perhaps deposited over a fairly short time span, as possibly were the other layers in this sequence. The upper fill (1138) in the ditch was a dark greyish brown sandy loam. This lay in the south-west, towards the outside of the ditch, and probably represents material which accumulated after the main infilling of the ditch had taken place.

The north section of the ditch was filled with an undifferentiated brown to yellowish brown sandy loam.

None of the fills of the ditch contained many finds, and most of these are considered likely to have been residual.

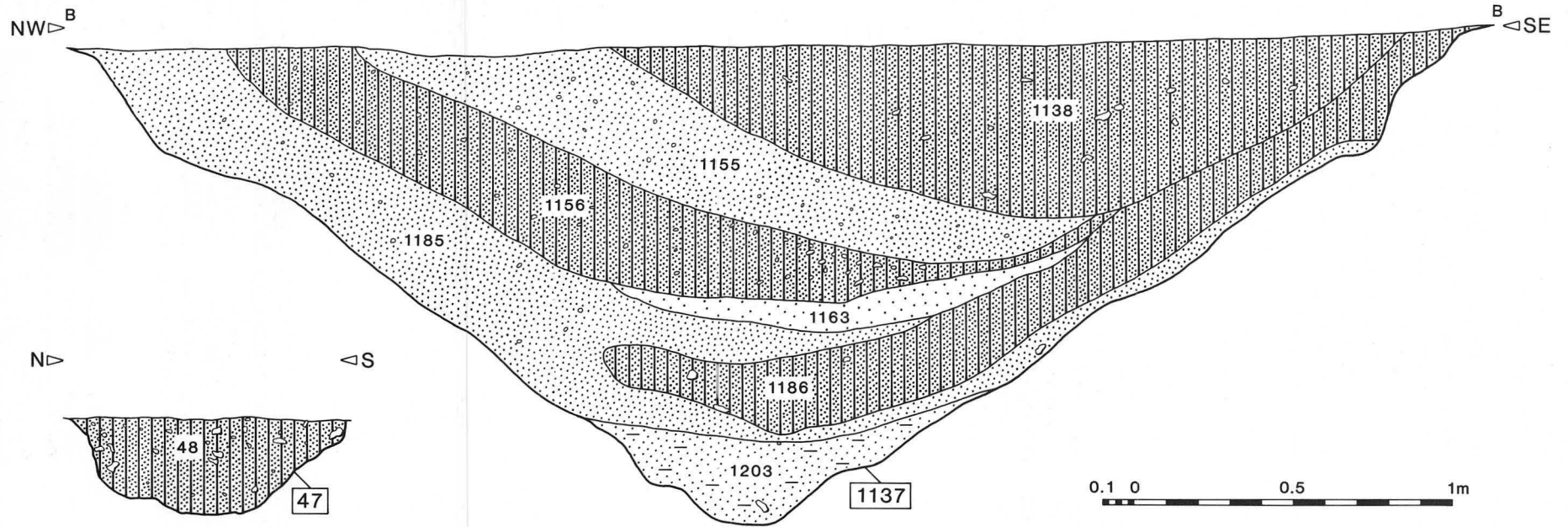
Ditch 47 was a shallow, curvilinear feature which lay approximately parallel to, and up to 4m outside (south-west) of, ditch 1137. It was traced for a distance of 35m, but faded out to the north-east. It was up to 0.8m wide, 0.3m deep, with sloping or near-vertical sides, and a flattish bottom (Fig. 52). There were several irregularly spaced bulges along the length of this feature, and occasional possible post-impressions were recorded in the bottom. However, no post-ghosts were detected in the fill which was a homogeneous dark brown sandy loam with some gravel.

Discussion

The large curvilinear ditch (1137) found at Redcastle Furze is likely to have been associated with the ringwork known as Red Castle which lies immediately to the west (Fig. 53). This ringwork survives today as a sub-circular

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Period VI Ditches 47 & 1137



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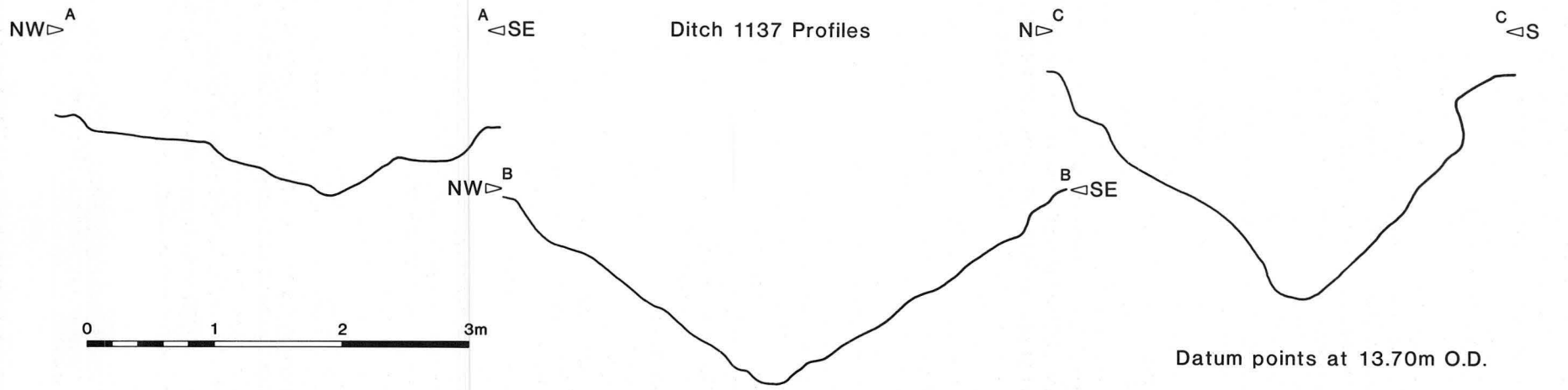


Figure 52 Section ditches (Period VI). Scale 1:20.

earthwork covering approximately 1.1 hectares. It has been cut into by Brandon Road, but would originally have extended further to the north. It has been further damaged by a large hollow dug into the north-west corner, perhaps a result of sand and gravel digging in the eighteenth century. The distance across between the crests of the surviving bank is approximately 80m; the bank still survives to a height of at least 2m, and would have been more than 12m across. The surrounding ditch was up to 12m wide and 4m deep; it still survives to almost that depth to the west, but has been infilled to the east and south. Knocker (1967) excavated various parts of the interior, and cut several sections across the ditch and bank which elucidated various details of its construction and showed there to have been a metalled 'perimeter track' up to 10m wide immediately inside the line of the bank. As a result of the excavations at Redcastle Furze it can now be suggested that the ringwork had a small bailey (or barbican) on the north-east side, delineated by ditch 1137. The location of this bailey meant that it could have protected the postulated entrance in the north-east side of the ringwork (Knocker 1967, 133) which may have been afforded by way of a bridge across the ditch. It is possible that the bailey ditch was also bridged, though no evidence for this survived within the excavated area. The shallowing of the ditch at the north edge of the excavation may indicate the location of an entrance nearby, although it might also be related to the proximity of the flood plain, where ditch maintenance may have been more difficult. Other irregularities in the plan and profile of the ditch may be the result of it having been dug in a series of adjoining lengths.

No *in situ* bank associated with the bailey ditch survived, but the fills of the ditch are best interpreted as the remains of a bank which was deliberately slighted prior to the construction of several Period VII structures, perhaps at the end of the twelfth or beginning of the thirteenth century. The nature of the fills, their inclination, and the dearth of finds, particularly of twelfth or thirteenth century date, would all suggest that the bailey ditch was not left to silt up naturally or used for the disposal of domestic refuse. The lack of domestic refuse reflects an absence of contemporary occupation in the vicinity. The ditch may therefore have only been open for a few years or decades at most, and seems not to have been re-cut.

The small ditch or gully (47) which lay to the outside of the bailey ditch, and ran approximately parallel to it, may have been either a marking-out ditch or more likely associated with some form of additional defensive arrangement. Occasional bulges in plan and several possible post-impressions in the bottom suggest that it may have been a palisade trench contemporary with the bailey ditch. If so, then it may have been constructed as a first line of defence. It is unclear why it did not survive to the north-east, but it is possible that the ground was levelled slightly in that area prior to the construction of Period VII buildings, thus removing any trace of what was a relatively shallow feature.

The pottery recovered from the bailey ditch was predominantly Late Saxon, but it occurred in small quantities, and was almost certainly residual. The stratigraphic relationships are more useful for they clearly show that the ditch was cut through several Period IV and Period V ditches and gullies which have been dated to the

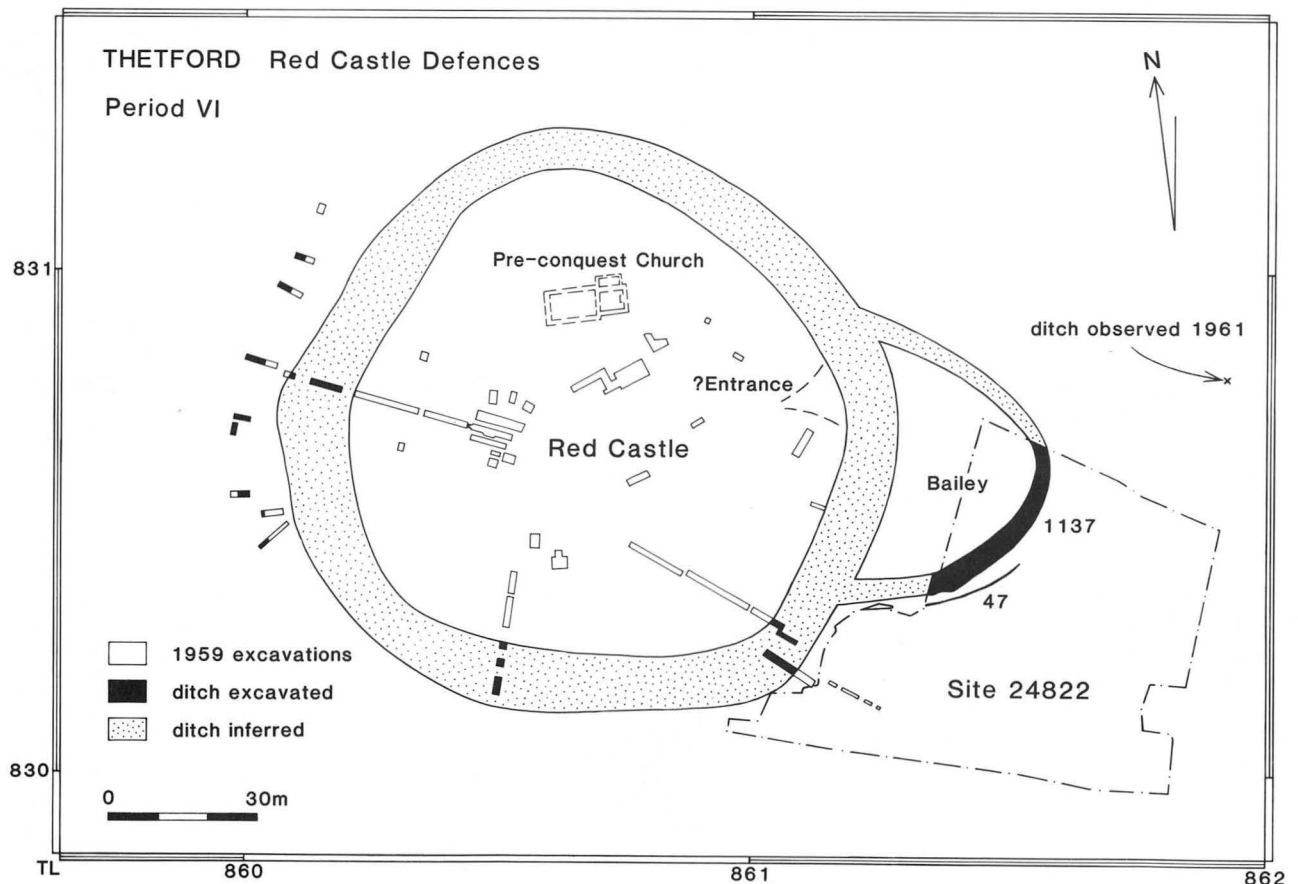


Figure 53 Location plan Red Castle excavations. Scale 1:1500.

eleventh and mid-twelfth centuries, and was sealed by several walls of Period VII structures dated to the thirteenth and fourteenth centuries. This would thus support a date sometime before or during the latter half of the twelfth century for the construction of Red Castle. The period of the Anarchy (1135–54) is thus the most likely candidate. Renn (in Knocker 1967, 134–5) was inclined towards a date several decades earlier, shortly after 1066, but allowed for both earlier or later dates. However, more recent writers (Rogerson and Dallas 1984, 201) have considered a mid-twelfth century date during the Anarchy more probable.

It is relevant to point out here that a ditch found by Knocker to the west of Red Castle (Knocker 1967, figs 2 and 7a) reportedly contained twelfth-century pottery in its bottom fill, and thus might also have been associated with the castle. This ditch, approximately 6m wide and 1.8m deep, ran parallel to and immediately outside the line of the Red Castle ditch and may have provided an additional defence on the west side of the castle. Unfortunately, the small size of the trenches excavated make it difficult to be more certain than this. Alternatively, the ditch may have been part of the Late Saxon town defences which ran beneath Red Castle (Rogerson and Dallas 1984, fig. 104), although the later pottery which it apparently contained is difficult to explain if this were so.

Mention should also be made of the large ditch-like feature observed by Rainbird Clark in 1961 to the east of Red Castle and shown in Fig. 53 in the position marked by Rogerson and Dallas (Rogerson and Dallas 1984, fig. 104). This feature was thought to be aligned north-to-south, but no trace of such was found in this position at Redcastle Furze. If it was a north-to-south aligned ditch this might be explained by its original position having been incorrectly recorded, and thus it may have been located either further to the east or further to the west. If it lay to the west, excavations at Redcastle Furze would not have located it; if it lay 50m to the east then it is conceivable that it was part of the bailey ditch that was observed. The large size would be accounted for by the section through it having been at an oblique angle.

Blomefield (1805, 7–9) says that Red Castle belonged to and stood in the fee of Earl Warenne, who also founded the nearby Priory of Holy Sepulchre during the reign of King Stephen, probably soon after 1139 (Hare 1979, 190). Blomefield gives no reference for this assertion, but if true it may also have been Earl Warenne who was responsible for the construction of Red Castle. It is probable that the Late Saxon town defences had been infilled at least a century earlier (Rogerson and Dallas 1984, 63) and therefore the siting of Red Castle on the line of the defences may have been fortuitous. However its location, like the Late Saxon defences at this point, may have been related to the nearby fording place, less than 100m to the north on the River Little Ouse. It has been argued above that the Late Saxon street exposed at Redcastle Furze led to this fording place, and also that this route continued in use into the medieval period (see below). Red Castle, constructed on the edge of the flood plain and facing north-east, would thus have been ideally placed to guard both the fording place and the street leading to it, for the edge of the bailey ditch lay within 20m of the street. Furthermore, the castle would have been strategically placed to control river traffic, as well as one or more east-to-west land routes out of Thetford. A Late Saxon

street which probably continued in use and became known as Lakenheath Way lay approximately 130m to the south, and if the King's Highway (now Brandon Road) was in existence, then it may have been blocked or obstructed by the construction of Red Castle, and the route perhaps diverted around the north side of the castle (Fig. 65; for a map of the conjectural Saxon and Medieval topography of Thetford, see fig. 175 in Dallas 1993).

No evidence for any structures was found within the area of the bailey, nor any evidence that the bank was revetted, although this was probably the case with the bank associated with the main castle ditch (Knocker 1967, 133). The temporary nature of Anarchy castles and the restricted space within them is often the reason why any structures were small and insubstantial; the bailey at Red Castle may never have contained any buildings, although its full extent has not been investigated. The main ringwork at Redcastle did however encircle a pre-existing stone church which had probably been constructed in the eleventh century (Knocker 1967). It is possible that this was done deliberately so that the stone structure of the church formed an integral part of the fortification, and could have been used as a refuge if necessary. Two pairs of parallel flint footings were also found within the ringwork. One of these pairs (Knocker 1967, 132) was aligned east-north-east to west-south-west, and comprised of two lines of loose flints 4m apart and more than 6m long. They were found in association with roof and floor tiles, and some medieval pottery. This and the other pair of footings, which were less clear, provide evidence for two further buildings, probably of timber with flint footings, within the ringwork. However, whether these were constructed in the twelfth century or later is uncertain.

The closest parallel to Red Castle in Norfolk, both in construction and date is the ringwork at New Buckenham (Renn 1960, 232). In its earliest form this comprised a simple ringwork 65m in diameter, with an oval outer enclosure or bailey to the east defended by a ditch and bank. It was probably constructed c.1146 (Renn 1960, 232).

XI. Period VII—Medieval (Fig. 54)

During Period VII there would have been a substantial change in the appearance of the site as a result of the construction of a range of buildings which were partially built in stone. These buildings overlay the infilled Period VI bailey ditch, although the main part of Red Castle enclosed by the ringwork survived. The principal buildings (Structures 6 and 7) lay to the north-west of Enclosure C of Period V and did not overlap with it, and all were aligned to the street which clearly survived in some form. Isolated patches of cobbling were found on the street to the east of Structure 6, but later disturbance has rendered it impossible to determine whether these were contemporary with Structure 6, and if so whether they represented a re-metalling of the street.

Structure 6 (Figs 55, 58 and 64; Pl. V)

This comprised a main building, and an associated yard which contained a detached kitchen and other ancillary features. The main building measured at least 15m by

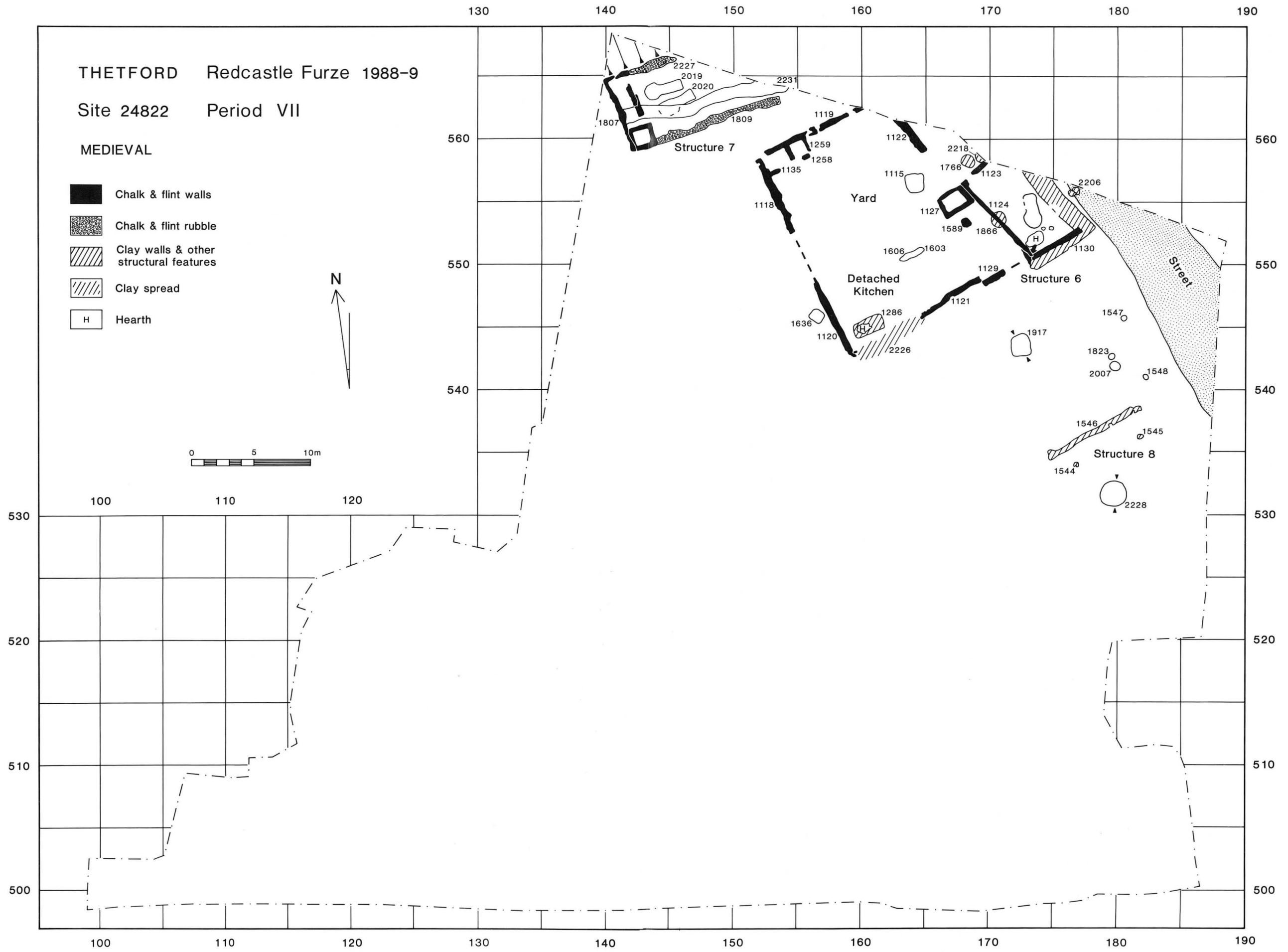


Figure 54 Plan Period VII features. Scale 1:300.



Plate V Structure 6 and walled yard, looking north-east.
Scale: 2 metres.

3.5m internally, was aligned north-west to south-east, and fronted directly onto the street. The north-east corner lay outside the limits of excavation, but much of the rest survived to an extent which enabled many details of the construction and layout to be elucidated.

There is a possibility that an earlier phase to Structure 6 existed, represented by a series of small bowl-shaped pits (1766, 1866 and 2218), and also by several patches of mixed clay and chalk, sometimes associated with one or more small blocks of chalk (2206, 2208, 2210 and 2225). The latter group, with the exception of feature 2206 which lay outside of the building, were all sealed below wall 1133; the former group was sealed beneath floor surface 1399. Pits 1766 and 2218 both had thick layers of floor 1399 filling their upper parts to a depth of 0.25m. The remainder of pit 1766 was filled with a layer of black silty loam which contained some smithing slag, some burnt clay, and a twelfth or early thirteenth-century sherd. Pit 2218 was filled with layers of brown and yellowish brown sandy loams (1747 and 1754) which contained two sherds of medieval unglazed ware. Pit 1866 lay partly beneath wall 1124 and was filled with a series of thin chalky layers up to 0.05m thick, sometimes separated by lenses of black ashy soil. No finds were recovered from this feature. It remains uncertain as to whether any of these features were associated with Structure 6, or related to a preceding unrelated phase of activity.

Structure 6 was of unusual construction in that the wall (1133) which fronted the street, and the outer part of the south end wall (1130) were of mixed clay and chalk, and the rear walls (1122 and 1124), and the inner part of the south end wall were of flint, or chalk and flint. It is possible that walls 1130 and 1133 survived from an earlier clay and chalk building which was subsequently partially rebuilt in stone (walls 1122, 1134, and 1131), but there is no certain evidence for this. The structural sequence of Structure 6 is discussed further below, where this possibility is explored.

Wall 1133 which fronted the street was 1.25m wide, and survived to a height of up to 0.25m. It was made from a mixture of yellowish brown clay and small chalk fragments generally less than 10mm in size. The edges were sharply defined with no spreading of the material apparent on the outside, although layer 1168 on the inside, which comprised mainly of chalk rubble with some clay, may have been collapsed wall material. No internal structure was detected within wall 1133, nor any evidence for any timber lacing or stakes around which the clay and

chalk mixture may have been built up. Instead, it comprised a single undifferentiated mass of material which continued without a break to the south-west as wall 1130.

Wall 1130 marked the south-east end of Structure 6. It was 5m long, up to 0.8m wide, and like wall 1133 had sharply-defined edges with no evidence for spreading. It too survived to a height of 0.25m, but an additional wall (1131) constructed mainly of chalk lumps and some flints set in a soft, yellowish brown mortar, had been built along the inside of wall 1130. Wall 1131 was 4.6m long, 0.5m wide, and had clearly been 'cut into' the inner face of wall 1130, so that the two butted together along their length. The north-east end was similarly 'cut into' wall 1133. In both cases, the cut made for the construction of the wall did not extend down to the underlying natural, but was such that stone wall 1131 rested on, or was supported by clay and chalk walls 1130 and 1133 which may have acted as some form of foundation. There was a small sub-rectangular area of chalk lumps (2212) which butted the outside towards the south end of wall 1131.

The rear wall of Structure 6 was marked by walls 1122 and 1124. Wall 1124 was 8m long, up to 0.4m wide, and constructed mainly of chalk lumps, with some flints set in soft, brownish mortar. It was somewhat irregular in plan, and at its south-east end had been 'cut into' and butted against wall 1131. Subsequently, a short, 1.5m length of wall (1134) had been butted to the outside of wall 1124 and the ends of walls 1130 and 1131. At its north-west end, wall 1124 turned through 90° to the north-east, but did not continue for more than 0.5m. There was no clearly defined terminus, but the wall faded out at this point, perhaps destroyed by later disturbance. This line was continued 1m to the north-east by wall 1123, but this was of later construction.

Wall 1122 continued the same alignment as wall 1124, but 4m to the north-east and offset slightly to the south-west. It was also of different character, being constructed almost exclusively of roughly-coursed flint cobbles set in a fairly hard, pale grey mortar. A 4m length was exposed which extended beyond the limit of excavation to the north-west. It was up to 1.1m wide, with a fairly flat inner face, but a much more irregular outer face. The south-east end was not neatly finished, and originally it may have continued further to the south-east. Wall 1122, like all of the others, was not set in a foundation trench.

A floor (1399) which comprised a mixture of clay and chalk similar to that used in walls 1130 and 1133, extended over most of the area within Structure 6. In some places it had been worn away, but elsewhere it either directly overlay natural or earlier features. There was no intervening layer of soil. Floor 1399 was up to 0.15m thick where it filled hollows in the ground surface, but elsewhere was approximately 0.05m thick. In some places it appeared to form a continuum with clay wall 1130, and lay beneath stone wall 1131. Elsewhere it appeared to be abutted by the stone walls. There was a fairly clear edge to floor 1399 in the gap in the rear wall between walls 1122 and 1124. Several small lumps of chalk were set partially into 1399 along this edge, and another group had been embedded in the floor in a line at 90° to this.

In the south corner of Structure 6 was an approximately oval-shaped hearth (1857) which measured 1.5m by 1m, and was set into a hollow dug into natural.

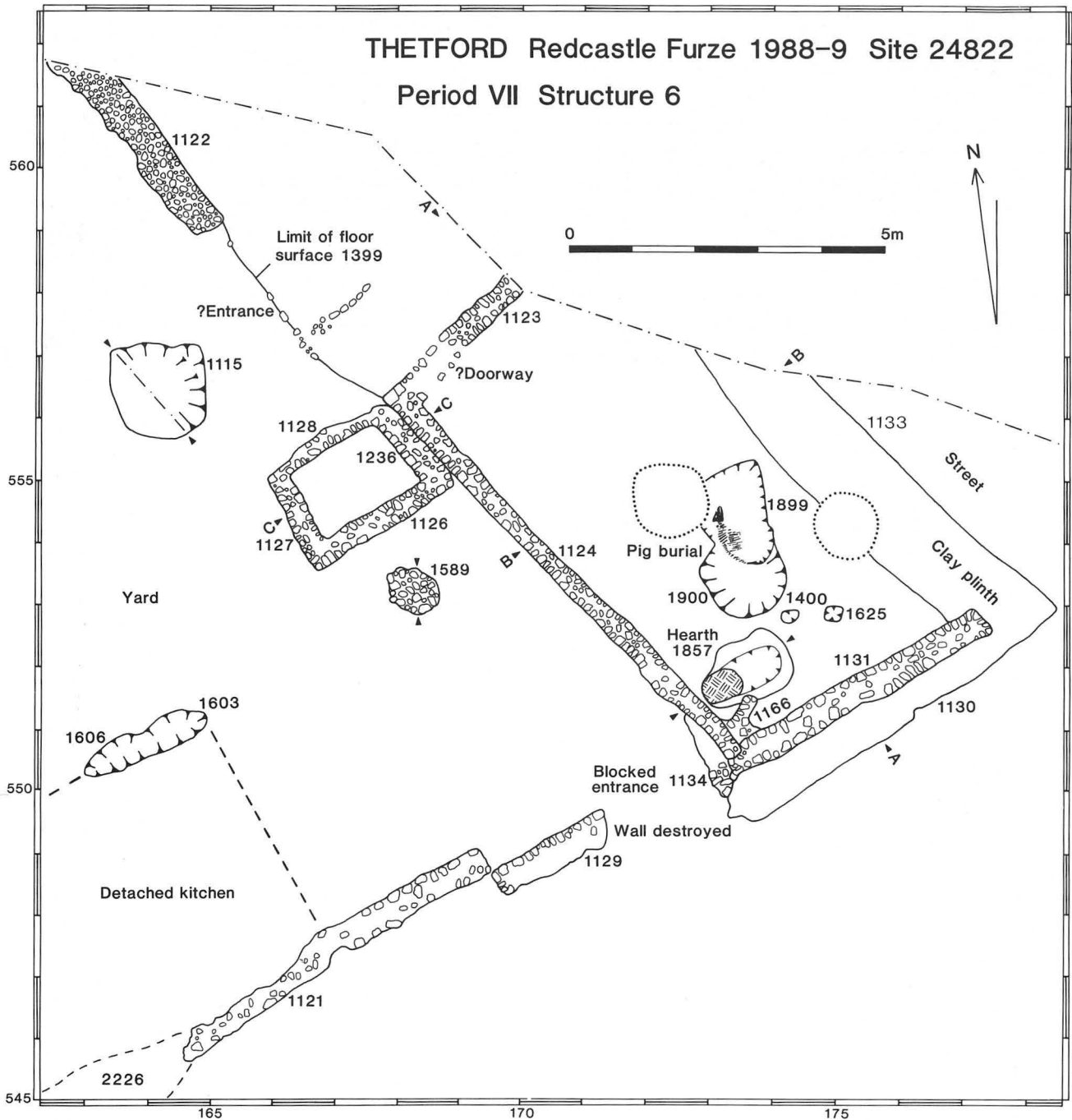


Figure 55 Plan Structure 6 (Period VII). Scale 1:100.

The fill, up to 0.25m thick, was a clay and chalk mixture, similar to floor 1399. It had been laid as a flat surface with a slight rim around the edge, except to the rear where there was a more pronounced upturn so that the inner edge was flush with the inside line of Wall 1124. In this area there was a reddened oval of burning which measured 0.65m by 0.5m.

Sealed beneath floor 1399 was one or possibly two conjoining pits (1899 and 1900) which formed a keyhole-shape in plan. These were centrally-placed towards the south-east of Structure 6, and aligned almost exactly north-to-south. Both pits had steeply sloping sides, flat bottoms 0.5m below the top of natural, and fills which indicated that they had been open and subsequently infilled contemporaneously. At the south end, on the

bottom of pit 1900, was a thin spread of ashy soil, and at the north end, on the bottom of pit 1899 and partly overlying the spread of ashy soil, was the well-preserved skeleton of a pig (1690) with all four limbs and feet missing (Fig. 56; Pl. VI). The body had evidently been laid out on its side with the head to the north. Overlying and surrounding it was between 0.1m and 0.15m of dark greyish brown sandy loam (1691), which was in turn covered with a thin layer of lime (1692). The remainder of pits 1899 and 1900 were filled with a homogeneous dark brown soil (1520), although there were traces of a thin sandy mortar in some places around the sides. Towards the bottom of layer 1520 in pit 1900 was the articulated remains of approximately one third of a human foetus or neonate. The small quantity of pottery recovered from the

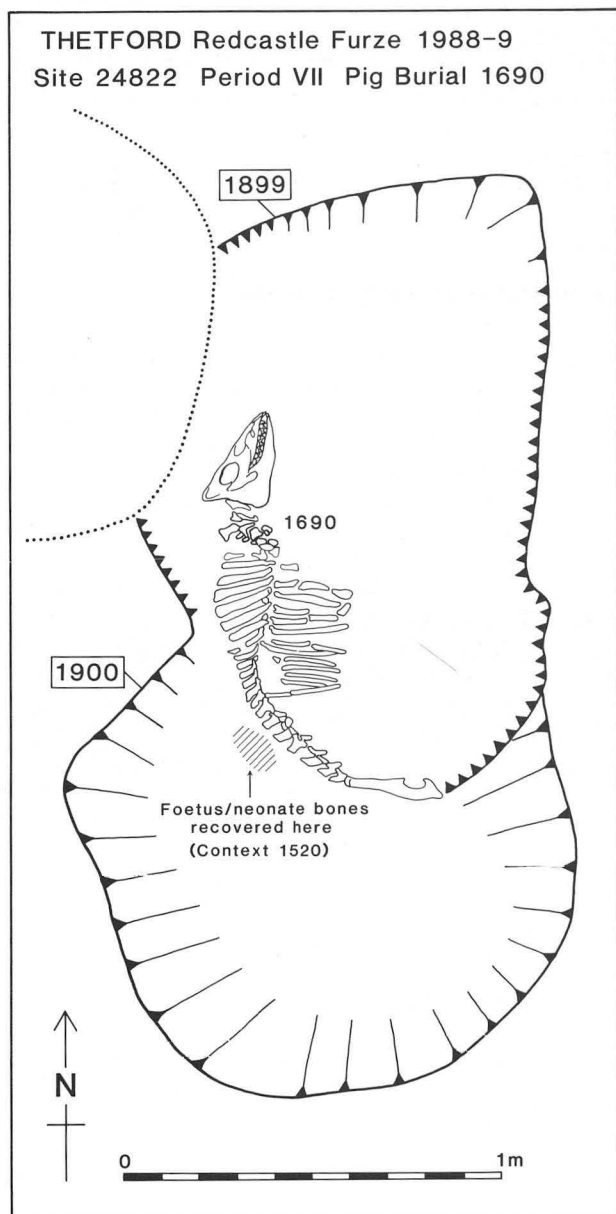


Figure 56 Plan pig burial 1690 (Period VII). Scale 1:20.

pits was all residual, but the slumping of floor 1399 into the top fill suggests that this floor did not post-date the infilling of the pits by long.

Floor 1399 was subsequently replaced by clay surface 1338 which extended over much the same area, and was characterised by being a pale creamy yellow colour, and containing inclusions of reddish burnt clay. These inclusions ranged from less than one to several centimetres in size. This new floor surface was up to 0.06m thick, but in some places could not be clearly differentiated from the underlying floor, and nowhere was there any intervening occupation deposit. In the south corner of Structure 6 was a well-defined rectangular spread of light brown clay mixed with some chalk, which measured 1.8m by 1.5m, and overlay hearth 1857. There was no evidence of burning on the surface of this spread.

Above floor 1338 was a further clay surface (1195) which was pale brown in colour, and contained numerous small flecks of chalk. This was not a continuous surface,

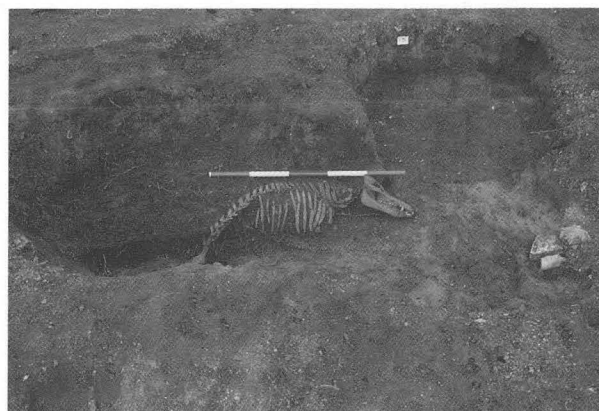


Plate VI Pig burial 1690, looking west. Scale: 1 metre.

and in some places underlying floor 1338 was exposed. Again, there was no intervening occupation deposit. An irregular area of burning, centrally placed and partially underlying later wall 1123, hinted at the existence of a central hearth.

The final phase in this sequence was represented by the insertion of wall 1123 which either divided Structure 6 into two, or perhaps was part of a general rebuilding which resulted in it being made smaller. Wall 1123 continued the same line as wall 1124 where it turned to the north-east, but was later, as floor surfaces 1195, 1338 and 1399 extended beneath it; elsewhere these appeared to run up to walls 1124, 1131 and 1133. An ill-defined, possibly disturbed area approximately 1m wide between walls 1123 and 1124 may have marked the location of a doorway. There was a short, narrow projection of flints set in mortar (1166) in the angle of walls 1124 and 1131 which was also constructed at this time. Several patches of possible mortar floor (1193) overlay floor 1195 and were probably associated with this final phase. An irregular patch of burnt clay (1198) may have been the remains of a central hearth.

Layer 1154, which directly overlay the patches of mortar surface (1193), comprised a jumble of chalk lumps with some patches of clay. This layer, up to 0.2m thick, was confined to the area delineated by walls 1123, 1124, 1131 and 1133. It contained a rowel spur which has been dated to the late fifteenth or first half of the sixteenth century (see below, p.96). To the north-west of wall 1123 was a deposit of grey sandy loam with some small chalk fragments (1114). Both layers 1114 and 1154 were sealed by a layer of dark greyish brown sandy loam (1093) which contained two post-medieval sherds towards the top, and which in turn lay below 0.3m-0.35m of topsoil.

Abutted to the rear wall (1124) of Structure 6 was a sub-rectangular arrangement of walls which measured approximately 2m by 1.5m, and comprised walls 1126, 1127, 1128 and 1236. All of these walls were bonded together, and constructed of roughly-coursed chalk lumps and flints set in a soft, yellowish brown mortar. Walls 1236, and parts of Walls 1126 and 1128 had been built into a shallow cut in the top of natural, but none survived to a height of more than 0.3m. Wall 1128 was a maximum of 0.3m wide, and the others between 0.4m and 0.5m wide. Contained within these walls was a layer (1205) up to 0.2m thick of grey sandy clay loam with some chalk flecking. This lay below a layer of chalk rubble (1108) which contained several nails.

Less than 1.5m to the south-east of wall 1126 was a large circular post-hole (1589) 0.6m in diameter at the top, and 0.6m deep. The sides sloped fairly steeply, and towards the bottom there was a post-impresion 0.2m in diameter and 0.2m deep. The lower fill (1619) was a brown sandy silt loam, but the upper fill (1588) comprised tightly-packed chalk lumps with occasional flints.

Yard

The area to the rear (south-west) of Structure 6 was occupied by an enclosed yard of trapezoid-shape which measured 17m by between 11m and 16m; an area of approximately 230m². The boundary of this yard was defined by a series of walls built of chalk lumps with some flints set in a yellowish grey mortar, and in one area by a clay wall which survived only as a spread. The chalk and flint boundary walls which comprised 1118, 1119, 1120 and 1121 were much like those of the main building, but contained less stone. They were up to 0.5m wide, survived to a maximum height of 0.35m, and were irregularly coursed, although wall 1120 showed some evidence for regularity particularly on the inner face. There was a slight indication that the walls were broader at the bottom and narrowed higher up, but it was clear that all had been laid directly onto the existing ground surface and had not been constructed within foundation trenches.

Originally there would have been a 3.5m wide entrance in the south-west wall of the yard, between the end of wall 1121 and the south corner of the main building, but this was subsequently blocked, or perhaps narrowed, by the

construction of wall 1129. The central gap between walls 1118 and 1120 in the south-west side may also have marked the location of an entrance, but recent tree planting had destroyed any wall and thus any clear evidence for an entrance at this point. Access would probably have also been possible through or from the main building by way of the gap between walls 1122 and 1124. This gap was 3.5m wide, although what form the entrance took is uncertain.

Detached Kitchen

(Fig. 57)

In the south-west corner of the yard was a structure interpreted below as a detached kitchen. This was bounded on two sides by walls 1120, 1121 and 2226, the latter built of clay between walls 1120 and 1121, but surviving only as a linear spread up to 1.4m wide and 0.15m thick. No traces of walling were found along the other two sides, but two shallow, irregular, conjoining features (1603 and 1606) aligned parallel to wall 1121 may have been post-holes which marked the north corner of the postulated structure. If so, then it would have measured 9m by 4.5m. Set in the south corner of this structure, within the angle formed by walls 1120 and 2226, was a rectangular hearth (1286). Hearth 1286 lay 0.75m from both walls, and comprised an 0.08m thick pad of yellow clay (1283) which measured 2.5m by 1.25m. Towards the south-west end was a sub-circular area of red burning (1284), approximately 0.55m in diameter, surrounded by an irregular, partially-burnt zone (1285). The face from a Grimston

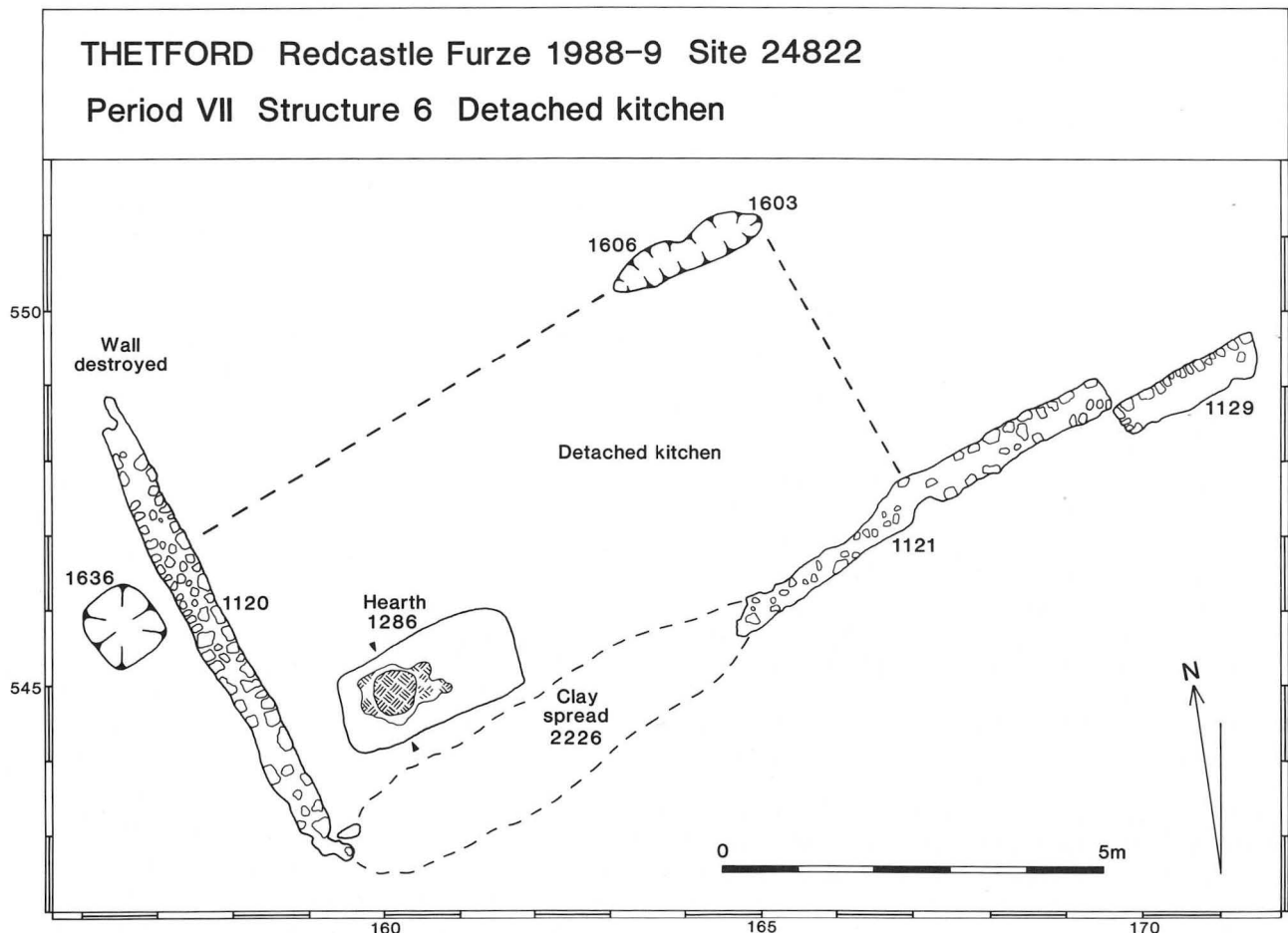


Figure 57 Plan Structure 6 detached kitchen (Period VII). Scale 1:100.

THETFORD Redcastle Furze 1988-9 Site 24822 Period VII Structure 6

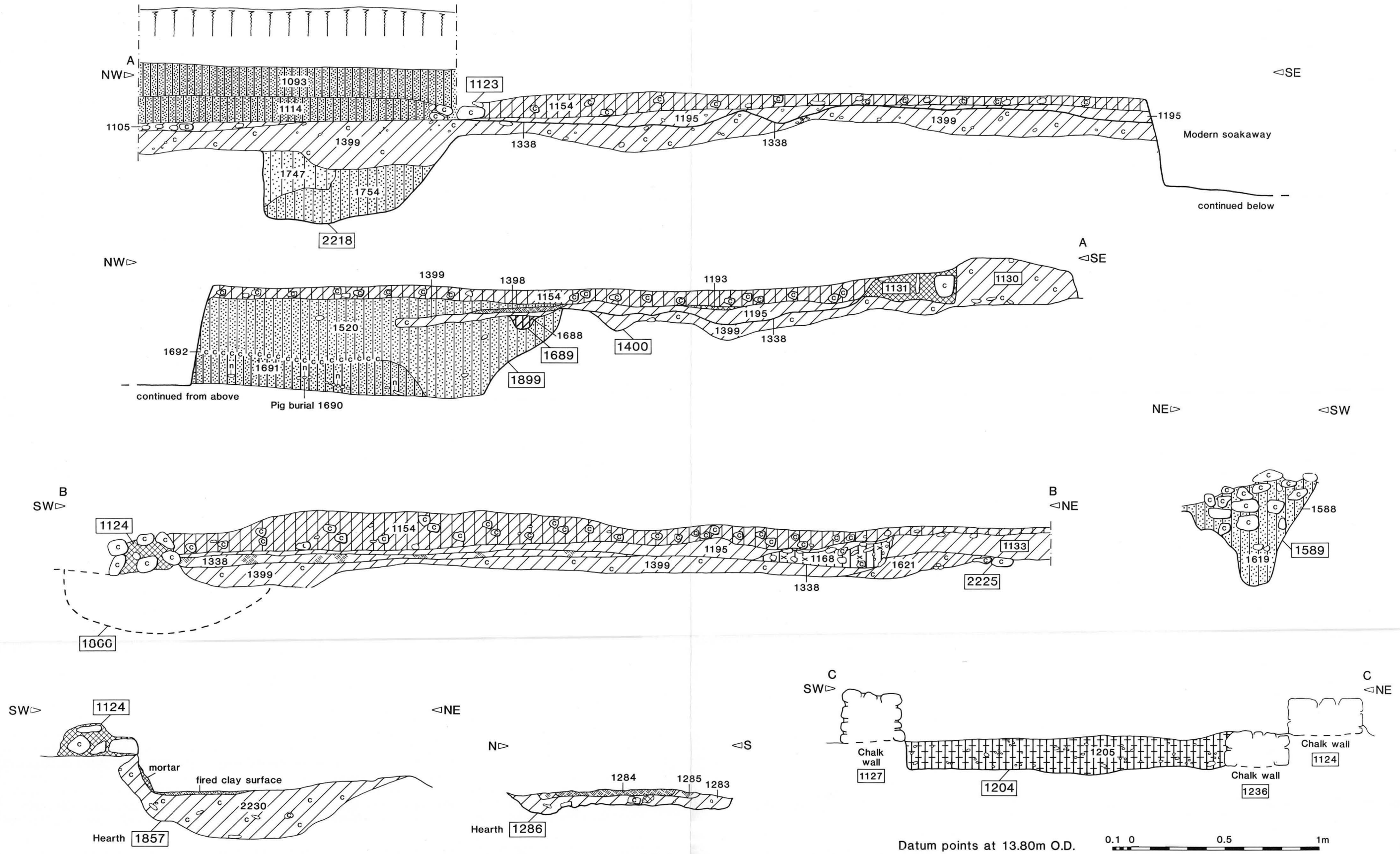


Figure 58 Section Structure 6 (Period VII). Scale 1:20.

THETFORD Redcastle Furze 1988-9 Site 24822

Period VII Pits

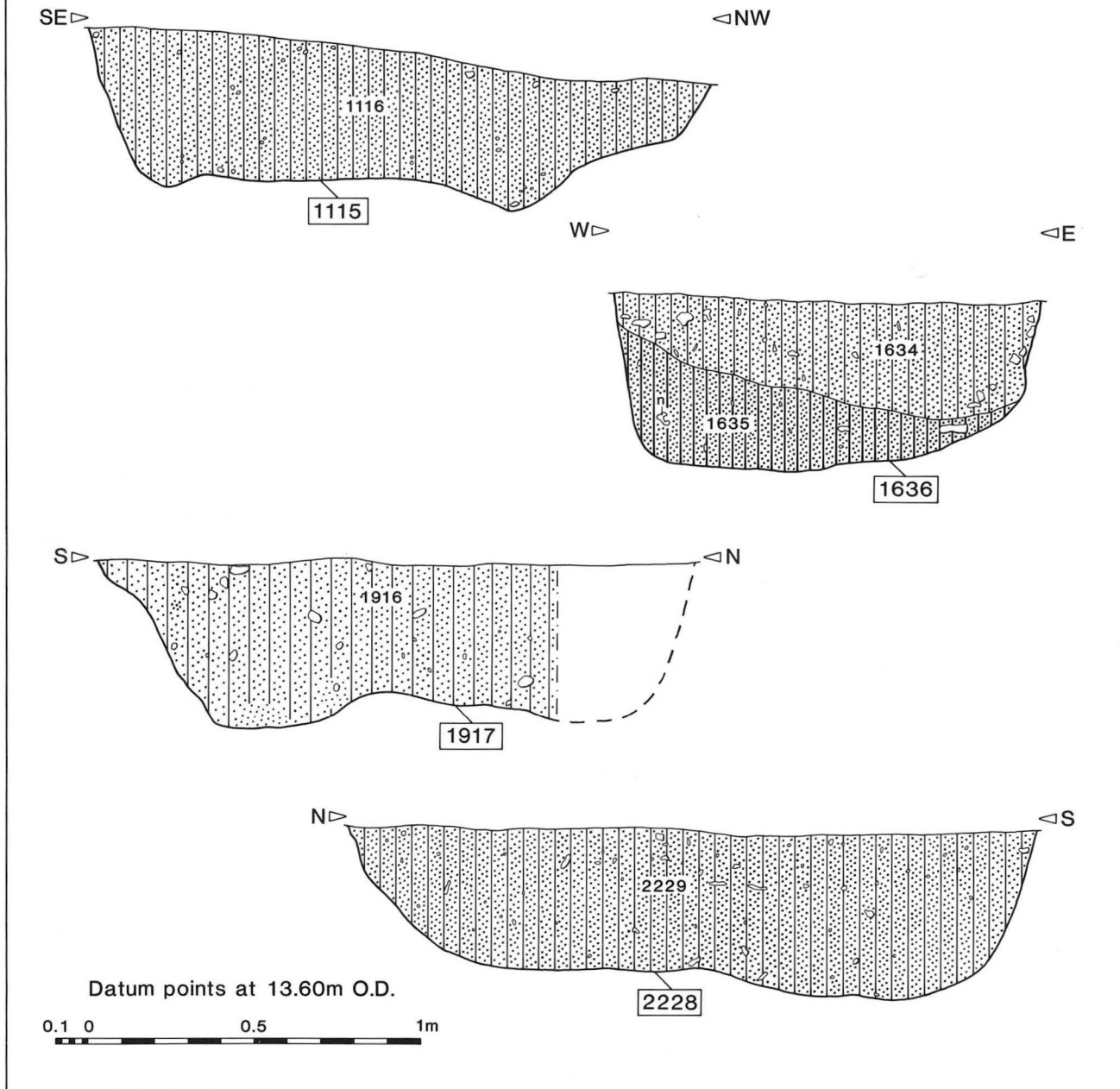


Figure 59 Sections pits (Period VII). Scale 1:20.

Ware face jug was found completely embedded within the yellow clay. No surfaces associated with this hearth were found, although the surrounding area was slightly compacted.

In the north-west corner of the yard were two small areas enclosed by lengths of wall bonded to walls 1118 and 1119. These areas, which lay adjacent to each other, measured 2m by 1.2m, and 1.2m square respectively. Walls 1135, 1257, 1258 and 1259 which enclosed them survived to a maximum height of 0.2m but, like wall 1119, had been disturbed by tree planting.

No surfaces, gravel or otherwise, were located within the yard which was covered with a fairly homogeneous spread (1102) of very dark greyish brown soil up to 0.2m

thick. This spread contained variable quantities of chalk lumps, flints, and mortar flecking, mainly concentrated around the edges adjacent to the walls. The thickest spread was immediately to the rear (south-west) of the main building, and this was also where the greatest concentration of finds was recovered. These included pottery, a concentration of iron nails and a bone comb.

An irregularly-shaped pit (1115), 1.9m by 1.75m and up to 0.4m deep lay within the yard, and a smaller sub-square example (1636), 0.9m square and 0.5m deep, immediately outside to the south-west (Fig. 59). A further pit (1917) lay 5m to the south of the blocked entrance. This pit was of irregular shape, measured 1.8m by 1.5m and was up to 0.5m deep. These pits contained homogeneous

fills of dark greyish brown, brown, or yellowish brown sandy loams, and few finds.

Structure 7

(Figs 60 and 62; Pl. VII)

This structure lay approximately 3m to the south-west of wall 1119 which bounded part of the yard associated with Structure 6, and was on the same alignment. The north-east part of Structure 7 lay outside the limit of excavation, but it measured at least 13m by 5m, and was built with its shorter side nearest to the street. To the north-west, the ground surface sloped away down towards the flood plain



Plate VII Structure 7, west end, malting kiln 2020 and stone-lined pit 1989, looking south-west. Scale 2 metres.

in a series of shallow steps at an angle of between 5° and 10°.

It was clear from the surviving remains that Structure 7 had been built in two differing fashions. The walls at the south-west end were constructed of chalk lumps and some flints set in mortar, whereas the remains of the side walls comprised chalk and flint rubble footings.

Some scarping of the earlier ground surface may have taken place prior to the construction of this building, evidenced by the possible truncation in this area of ditch 1187 (Period V) and ditch 1137 (Period VI). This would have provided a level surface on which to build. The earliest walls were 1811, 1813, 1814, 1815 and 1816. Wall 1811 was a short length of well-constructed, free-standing wall comprising mainly chalk lumps set in a creamy yellow mortar. It was 1.75m long, 0.5m wide and survived to only one course in height. Walls 1813, 1814, 1815 and 1816 were bonded together and formed the lining of a large flat-bottomed pit (1989), 1.25m square and 1.6m deep. They comprised up to sixteen courses of fairly regular sized chalk lumps, very occasional flints, and a single block of sandstone set in a creamy yellow mortar. The walls were 0.4m thick, vertical, and set against the sides of the pit. The similarity of the mortar used in the various walls, their relatively substantial construction, and the location of stone-lined pit 1989 in relation to wall 1811 suggests that they were built as part of a single operation. Walls and wall footings 1807, 1808, 1809 and 2227, although differing in construction may also have belonged to the same phase of building.

Wall 1807 marked the south-west end of Structure 7. It was 5.5m in length, up to 0.55m wide, but irregular in

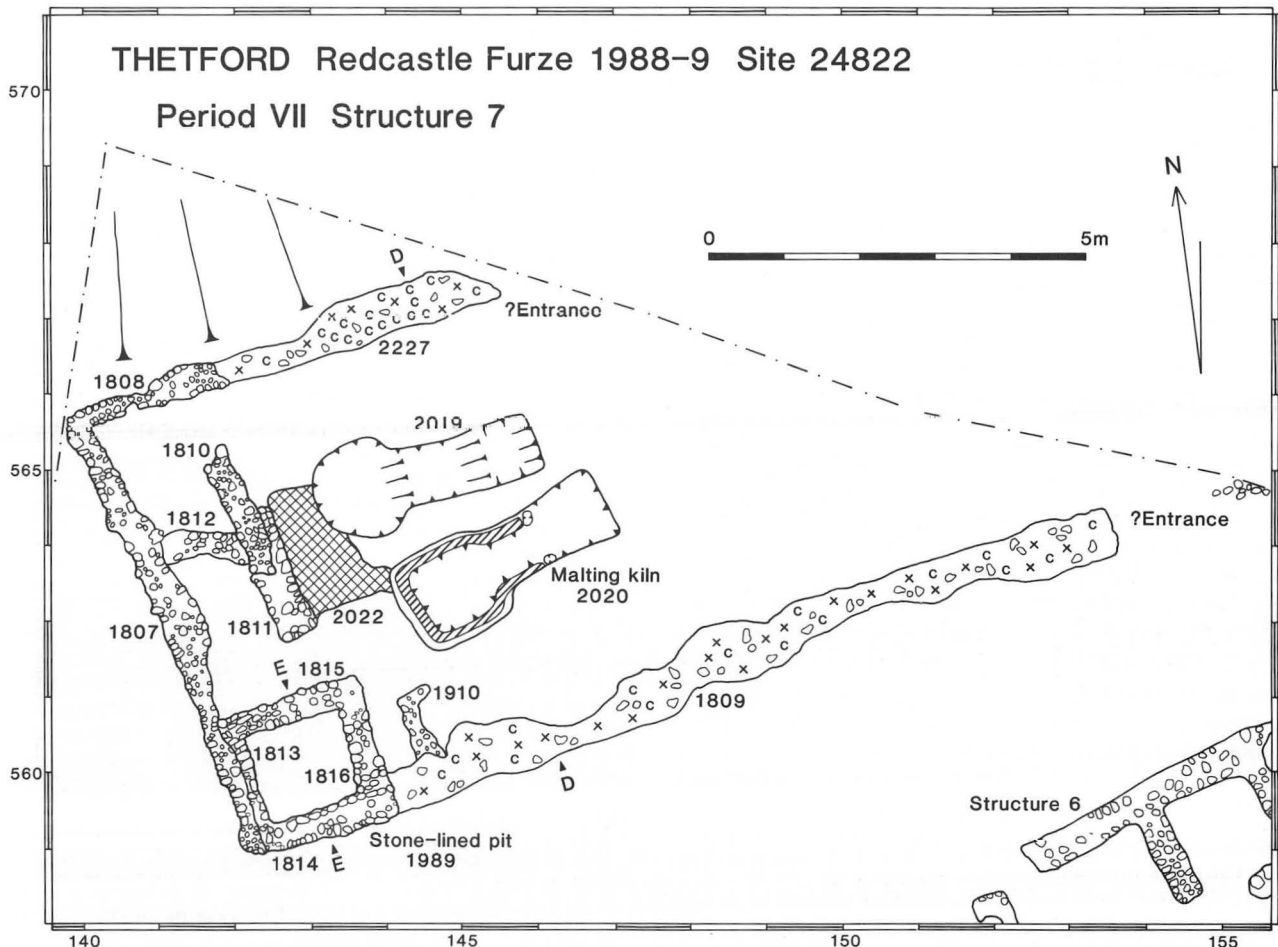


Figure 60 Plan Structure 7 (Period VII). Scale 1:100.

plan. It was constructed of roughly-coursed chalk lumps with some flints set in a soft, greyish brown mortar, and survived to a maximum height of 0.3m. At the south-east end it directly overlay wall 1813, and extended as far as the corner of stone-lined pit 1989. At the north-west end, wall 1807 was of better construction and was bonded to wall 1808. The latter was of similar construction and extended at 90°, 2m to the north-east. Neither wall 1807 nor wall 1808 was constructed in a foundation trench. The line of wall 1808 was continued to the north-east as an irregular concentration of chalk and flint rubble with occasional patches of mortar (2227). This line was 3.75m long, and appeared to stop just short of the edge of the excavation. Parallel to rubble 2227, and 6m to the south-east, was a similar irregular line of chalk and flint rubble (1809). This was 10m long, and extended from the south-east corner of stone-lined pit 1989, on the same line as wall 1814. There appeared to have been a break of approximately 1.5m close to the edge of the excavation, and then a continuation in a possibly more substantial form. These two chalk and flint rubble alignments (1809 and 2227) marked the south-east and north-west edges of Structure 7.

Features 2019 and 2020

(Fig. 61)

Centrally-placed towards the south-west end of Structure 7 were two adjacent, keyhole-shaped features (2019 and 2020) cut into natural.

Feature 2019 was 3m long, 0.8m wide at the narrowest point and 1.25m wide at the broadest point. At the north-east end it was no more than 0.12m deep, but there were two shallow steps down to a maximum depth of 0.5m at the south-west end, where it was sub-circular in plan and bowl-shaped in profile. Feature 2019 was completely filled with a later clay floor surface (2018) which had been laid over the area, and there was no evidence for any lining or earlier fill.

Feature 2020, interpreted below as a malting kiln, was 3m long, 0.7m wide at the narrowest point, and 1.3m wide at the broadest point. In plan it differed from feature 2019 in that it was sub-rectangular rather than sub-circular in plan at the south-west end. Feature 2020 was 0.35m deep at the north-east end, and sloped by way of two shallow steps to a depth of 0.65m at the south-west end. The sides around the top sloped at approximately 60° but were near-vertical lower down. The lower parts of the sides and the floor of all but the north-east end were lined with a fairly uniform layer of creamy yellow clay (2175) up to 0.12m thick. A small, irregular area of reddish burning was present on the lining of the floor at the narrowest point of the feature, and there were two post-impressions (2087 and 2089) on either side in the natural immediately beyond where the lining stopped. Feature 2020, like 2019, was largely filled with a later clay floor surface (2018), but spread over the bottom at the south-west end was a thin deposit (2021) of black charcoaly material which contained several patches of burnt clay.

A thin mortar surface (2022) extended between wall 1811, and features 2019 and 2020, but no other possible surface was found which may have been contemporary.

The thick layer of clay flooring material (2018) which filled features 2019 and 2020 extended over most of the area within Structure 7. Layer 2018 was greyish cream in colour, contained some chalk fragments, and was very

compact. There was a burnt sandy lens within this layer above feature 2020, but elsewhere it appeared as an undifferentiated deposit up to 0.4m thick with a smooth but undulating upper surface. It extended up to walls 1807 and 1808, the walls of stone-lined pit 1989, and in places beneath the lines of chalk and flint rubble (1809 and 2227), although in many areas around the edges it was very thin and discontinuous. It partly covered wall 1811, but the latter was subsequently replaced by wall 1810 on the same alignment. Wall 1810 partly overlapped wall 1811, but was offset to the north-west. The two walls were separated by a layer (2091) of greyish brown sandy loam up to 0.07m thick, which lay in uncertain relationship to clay flooring 2018. Wall 1810 was similar to walls 1807 and 1808, but was of later construction.

Within Structure 7 were two irregular, short lengths of possible wall (1812 and 1910). Wall 1812 was an ill-defined, partly-mortared group of chalk lumps and flint which extended between walls 1807 and 1810; wall 1910 was similar, 0.8m long, and lay at 90° to rubble alignment 1809.

Along the south-east side within Structure 7, adjacent to the line of chalk and flint rubble (1809), was a fairly compact layer of chalk lumps and mortar (1844) up to 1.5m wide and 0.3m thick. This layer appeared to have been cut through or worn away on the north-west side by an irregular, shallow gully (2231) up to 1m wide and 0.25m deep. Gully 2231 extended the entire length exposed of Structure 7, cut away the south-east end of wall 1810, and created a linear depression in clay floor 2018. There was a hint that it extended to the south-west beyond Structure 7, although it had not cut through wall 1807 at that end of the building. Gully 2231 was filled with a layer of yellowish brown sandy silt loam (1305) which also extended over clay floor 2018, and this in turn was sealed by a layer of sub-soil (1304) containing brick, tile, and other finds of recent date.

Pit 1989

(Fig. 62; Pl. VIII)

The stone-lined pit (1989) in the south corner of Structure 7 probably remained in use throughout the life of this building, having been constructed as part of the earliest building phase. It was built of regularly-coursed chalk lumps with occasional flints set in a creamy yellow mortar, and appears never to have been rebuilt or repaired. The flat bottom was covered with a continuous but irregular layer of greyish white mortar (1723) up to 0.1m thick. Above

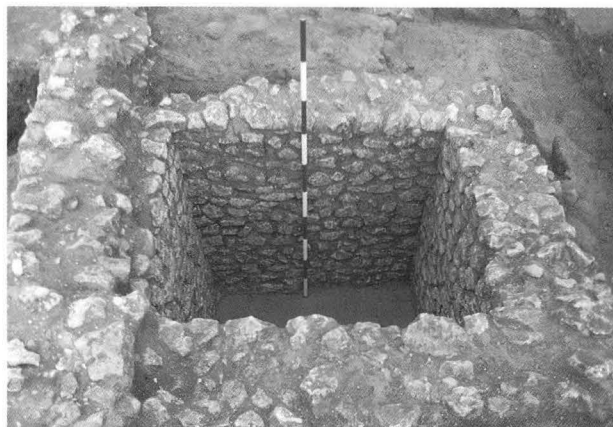


Plate VIII Stone-lined pit 1989, looking north.
Scale: 2 metres.

THETFORD Redcastle Furze 1988-9 Site 24822
 Period VII Feature 2019 & Malting Kiln 2020

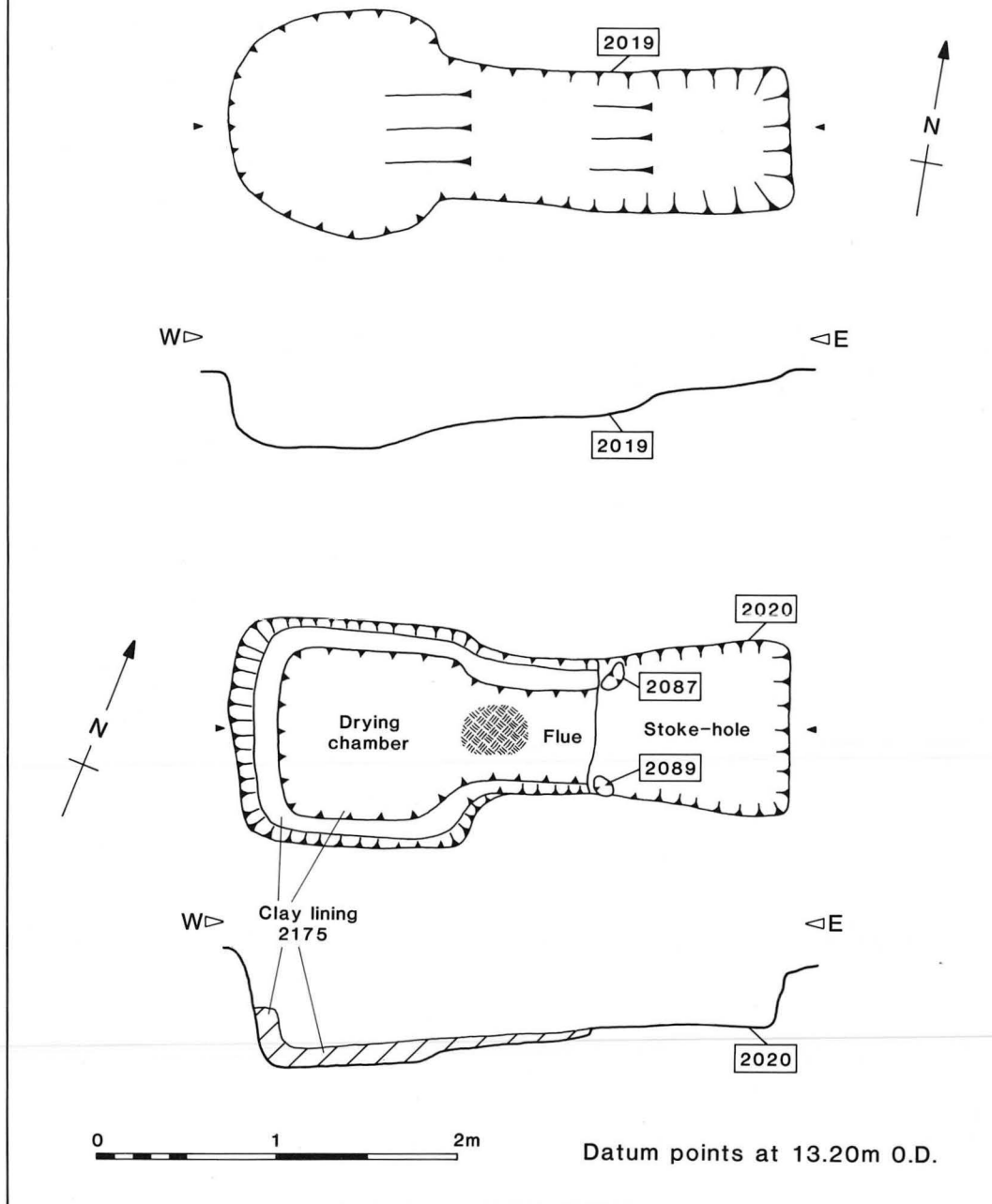
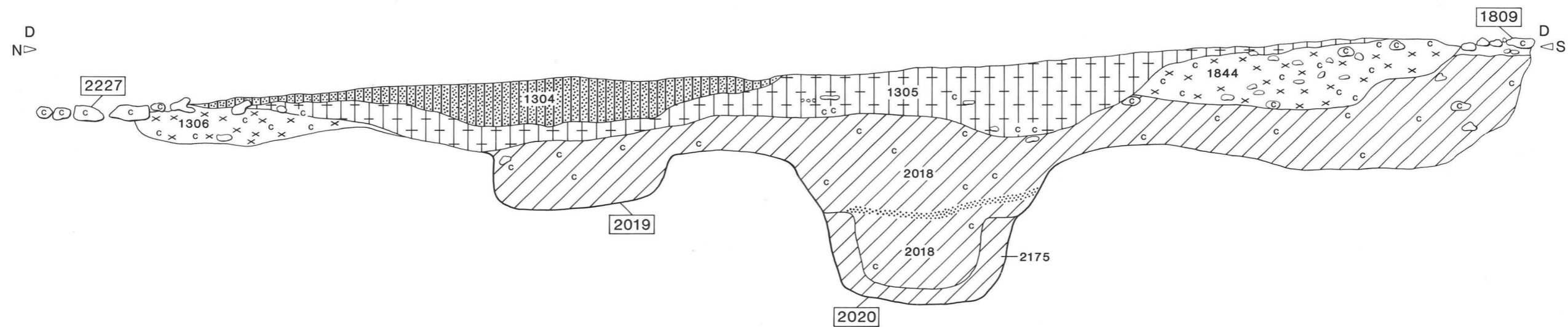


Figure 61 Plans and Sections feature 2019 and malting kiln 2020 (Period VII). Scale 1:40.

this was a layer of lime (1720) up to 0.1m thick, heavily iron-panned towards the top and bottom (layers 1719 and 1722), which contained several large pieces and smaller fragments of textile. This deposit was sealed by a homogeneous layer of brown silty loam (1687) up to 0.45m thick which contained a quantity of thirteenth- or fourteenth-century pottery. The upper two-thirds of pit 1989 was filled with a series of layers (1640, 1670, 1671, 1672 and 1684) largely comprising varying amounts of chalk rubble, occasional flints, and mortar. These contained thirteenth- or fourteenth-century pottery, and

the upper fill (1640) a single sherd of fifteenth-century ware. A compact layer (1844) of chalk lumps of mortar sealed the upper fill, and extended over the tops of the stone walls which lined pit 1989. The environmental evidence, discussed further below, indicates that this pit had initially been used for cess disposal.

To the north-west of Structure 7, the surface of the natural sloped away gradually at an angle of between 5° and 10° in a series of steps down towards the flood plain of the Little Ouse River. A layer of brown sandy silt loam (1306/1367) overlay the natural in this area, and extended



Datum points at 13.50m O.D.

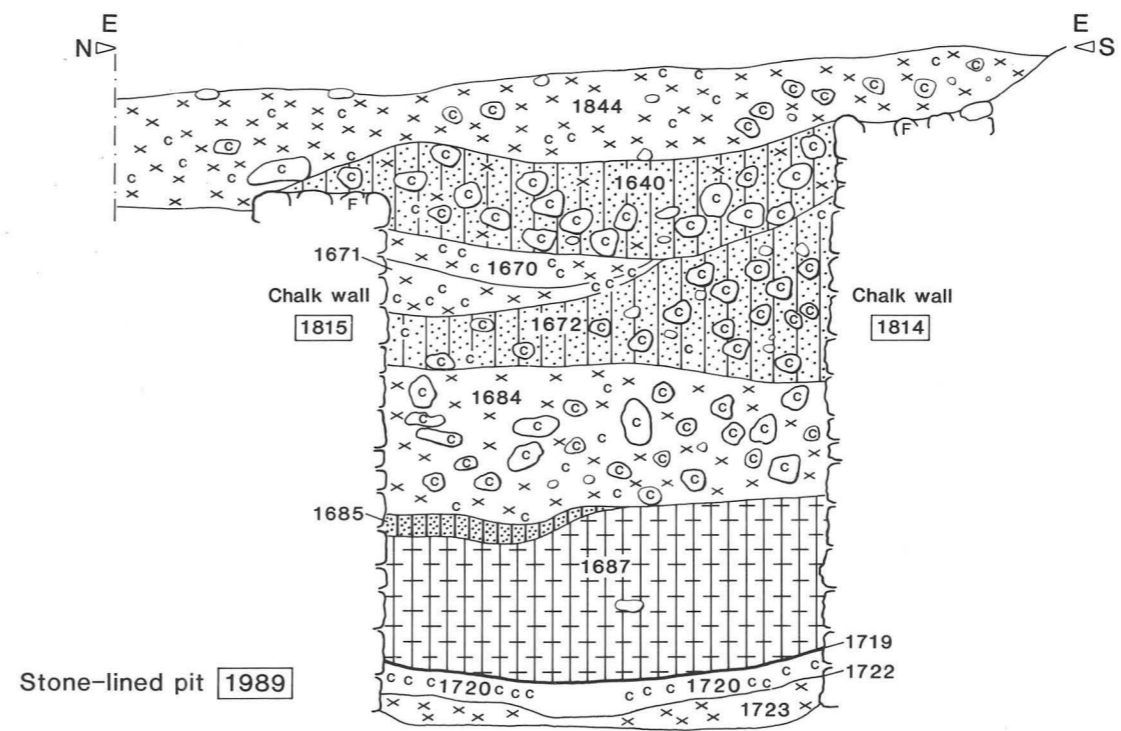
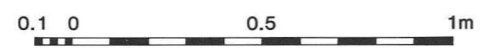


Figure 62 Sections Structure 7 (Period VII). Scale 1:20.

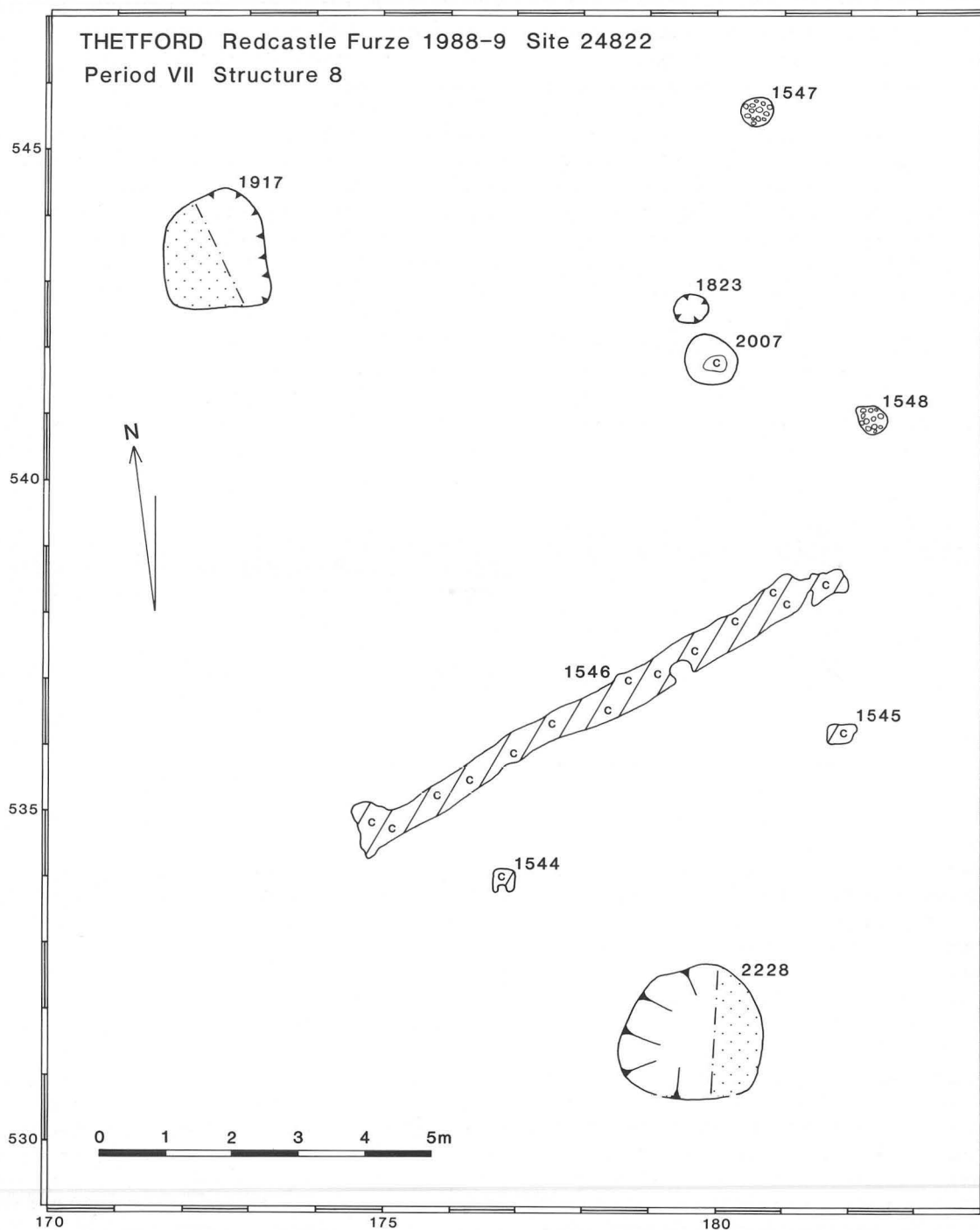


Figure 63 Plan Structure 8 (Period VII). Scale 1:100.

from immediately north of Structure 7 to the north-east corner of the site where it was 0.4m thick. This layer contained a quantity of thirteenth- or fourteenth-century pottery, a halfpenny of Edward III (minted 1344-51), and a Papal Bulla of Pope Benedict XII (1336-42).

Structure 8

(Fig. 63)

This number has been assigned to several features, not all of which may have been contemporary or have formed part of a structure. However, for convenience they are considered here together. All lay to the south-east of Structure 6, in close proximity, and aligned either parallel or at 90° to the street.

One group which probably were associated with each other comprised features 1544, 1545 and 1546. These were all thin, but fairly well-defined areas of brown clay containing numerous flecks of chalk. Feature 1544 was 0.3m square, and 1545 measured 0.45m by 0.25m. They lay 5.5m apart, 1m and 1.5m respectively to the south of 1546, a linear spread 5.5m long and up to 0.6m wide.

To the north-east of spread 1546 were two shallow, circular hollows (1547 and 1548) which lay 5m apart, and were packed with flints and occasional lumps of chalk. Possibly associated with these were two shallow, sub-circular holes (1823 and 2007) which lay adjacent to each other, one of which (2007) contained a block of chalk set into the top.

Discussion

Structures 6, 7 and 8 probably formed a single complex of buildings which post-dated the infilling of the Red Castle bailey ditch (Period VI), and whose occupation can be broadly assigned, on the basis of the ceramic evidence, to the thirteenth and fourteenth centuries.

Structure 6 would have been the main domestic building, and lay adjacent to the street, although no certain evidence for any contemporary metallings survived. The building sequence of Structure 6 remains somewhat uncertain despite its good state of preservation (Fig. 64). It is not clear whether the group of three shallow pits (1766, 1866 and 2218) were contemporary and perhaps in some way associated with its construction, or whether they were related to an earlier phase of occupation. The occurrence of smithing slag in pit 1766, and powdered chalk or possibly lime in pit 1866 might support the former possibility; iron building fittings may have been manufactured on site, and either lime prepared to provide a weatherproof surface for the clay walls, or mortar for the same purpose or for the construction of the stone walls.

The patches of clay and chalk which lay below or just outside of clay wall 1133 may have been post-pads associated with its construction, but no evidence for any form of timber lacing or other internal structure was found. The clay contained some small inclusions of chalk, but these were probably accidentally incorporated during the digging of the clay rather than from any deliberate introduction during its preparation. There was no evidence for the strengthening of the clay by, for example, the inclusion of chopped straw, nor for the use of clay lump, or the shuttering of cob, and neither clay wall was set upon any foundation.

The width (1.25m) of wall 1133 was almost three times the average width of the fifteenth-century clay walls excavated in Norwich at Alms Lane (Atkin *et al* 1985, 245) and twice that in surviving clay-walled cottages of the seventeenth century (Clifton-Taylor 1972, 287). However, the possibility should be considered that wall 1133 did not originally extend up to the full height of the building, but may have been a plinth upon which a timber-framed structure was built. Perhaps this was also the purpose of stone walls 1122, 1124, and 1131 combined with clay wall 1130. The narrow and irregular nature of wall 1124 in particular makes it likely that this was intended as a plinth for a timber-framed structure. If this was so, then it goes some way to explaining the curious mixture of clay and stone walls surviving at ground level, for these would not have stood to full height, but merely been the footings on which a timber superstructure was built. The different materials used may have reflected the orientation of the building, with its front wall facing onto the street and exposed to the open river valley beyond to the north-east. Clay may have been preferentially used in this wall to provide a more weatherproof barrier than might be afforded by stone.

The possibility remains that the stone walls represent a replacement of earlier clay walls, but the lack of evidence for any clay walls beneath walls 1122 and 1124 makes this less likely. However, it is possible that there was no clay or stone plinth at the rear of the building, and a timber superstructure rested directly on the ground surface, or upon post-pads which have subsequently been removed or destroyed during later rebuilding. Several structures dating to the thirteenth and fourteenth centuries excavated

at Alms Lane in Norwich had well-defined clay floor surfaces, but no evidence for any associated walls, and there it is suggested that timber-framed walls were set on timber sleeper beams (Atkin *et al* 1985, 149).

The sequence of floors within Structure 6 indicate that originally it may have measured up to 17m in length by 3.5m to 4m wide. The earliest floor surface (1399) extended over the entire area exposed within the building with no evidence for any division apparent, although some form of internal support or partition is likely to have existed in a building of this length. A hearth (1857) lay in the south corner of the building, but this was perhaps superseded or augmented by one that was centrally-placed. The gap between walls 1122 and 1124 probably indicates the position of a rear entrance; the rough end to wall 1122 suggests that it had been either partially robbed-out, or that a narrow entrance was later substantially widened, a possibility considered further below. An entrance in a corresponding position in the front wall is likely to have existed and perhaps a screens passage between the two. The two alignments of small chalk lumps set into floor 1399 at 90° to each other might be a further indication of this arrangement.

Structure 6 may have been subsequently reduced to approximately half of its original size by the insertion of wall 1123, or else this may have simply been built as a substantial partition within the building. The former explanation is preferred for the reasons discussed below and it is further suggested that Structure 6 was converted from a single to a two storey building.

The north-west end of wall 1124 may have been re-built to form a corner to the building in line with wall 1123, with a possible gap left between them to provide a side entrance. The original rear entrance may have been enlarged by the removal of part of wall 1122; this would have facilitated access to the yard from the street, and may have coincided with the blocking of the side entrance to the yard by wall 1129. The rectangular arrangement of walls abutted to the rear of the north-west of the building may have formed the plinth for a stair turret constructed of timber. If an upper floor had been inserted in the south-east end of the building, this would have had the effect of maintaining more or less the same floor area as before, although the building would have occupied half the area (8m by 3.5m–4m); the function of post-hole or post-pad 1589 is unknown, but may have been associated with this phase of development. Two superimposed floor surfaces of clay and mortar respectively (1195 and 1193) were apparently confined to the south-east end of the building and did not extend beyond wall 1123 to the north-west; no corresponding new surfaces were found to the north-west of wall 1123, possibly indicating that this area had fallen into disuse or disrepair, and was perhaps subsequently used as some form of barn or byre. Finally, although no evidence for any internal supports for an inserted floor were found, the south corner of the building appears to have been strengthened by the addition of two short lengths of wall (1134 and 1166) abutted to the outside and inside.

It must be emphasised that the postulated development of Structure 6 from a single-storey to a two-storey building remains speculative, and is somewhat dependent on the interpretation of the rectangular arrangement of walls abutted to the rear of the structure as the base of a stair turret; they may have had some quite different purpose.

THETFORD Site 24822 Period VII Structure 6 Suggested Structural Sequence

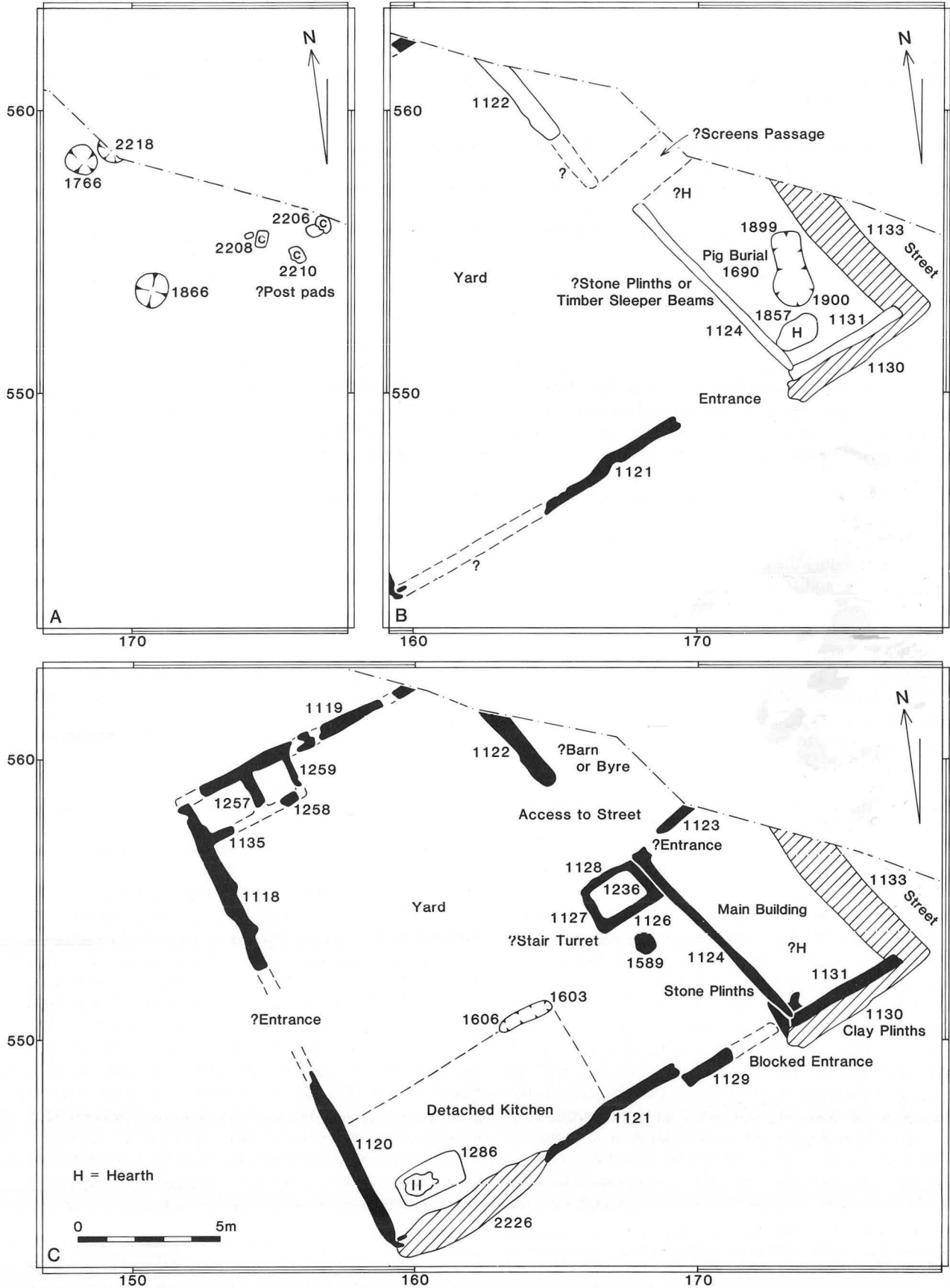


Figure 64 Plan Structure 6 structural sequence (Period VII). Scale 1:200.

Access to an upper storey or loft would however have been possible by way of stairs or a ladder within the building, evidence for which has not survived.

It is possible that all of the stone walls were built at the same time as part of a general rebuilding of Structure 6, and did not date to an earlier phase. These walls would have provided support for a timber superstructure which at the rear had previously rested directly on the ground-surface or on post-pads. The different construction and slightly different alignment of walls 1122 and 1124 might then be explained by them never having belonged to the same structure, but instead were part of an ancillary building, possibly a barn or byre, built immediately adjacent to Structure 6 during this rebuilding. Such a rebuilding might have taken place after a period of abandonment, and it is perhaps of significance that there is little pottery of the mid-thirteenth century (see below, this section).

The roof of Structure 6 was probably thatched using reeds or straw. A single stone roof-tile and a few fragments of ceramic floor and roof-tile were found, but these are likely to have come from later dumping of rubbish on the site. Three fragments of possible medieval window glass may also have been derived from the same source.

An area, interpreted here as a detached kitchen, lay in the south corner of the yard to the rear of Structure 6. The principal evidence for this was hearth 1286 set in the angle between wall 1120 and clay spread 2226, the latter of which was probably the remains of a collapsed clay wall. Post-holes 1603 and 1606 marked the north-east corner of the structure which was either open to the north-west and north-east, or at least partly enclosed by walls which have left no trace. Such walls may have been temporary, and only erected to provide shelter when necessary. The kitchen covered an area of 9m by 4.5m, and is likely to have had a thatched roof. The obviously deliberate inclusion of a face from a Grimston Ware face-jug within the clay of hearth 1286 was probably intended as a charm of some sort. Elsewhere, similar finds are thought to have been deposited to ward-off evil spirits from entering a building through a chimney (Edwin Rose pers. comm.) Although the kitchen in this case is unlikely to have had a chimney, there was probably an opening in the roof to allow smoke out.

It is uncertain as to whether this detached kitchen was constructed during the earlier phase of Structure 6, or subsequently following the postulated shortening of the building, and the insertion of an upper floor. However, the dating evidence for the building sequence (discussed below) makes the latter more likely.

The purpose of the two small, adjacent walled enclosures in the north-west corner of the yard is unknown, but they may have been for storage, particularly if the buildings were primarily an agricultural complex.

The pig burial (1690) beneath the floor of Structure 6 is an extremely rare occurrence. Only one other example is known from Norfolk, and that was at least 400 years later from beneath the floor of an early eighteenth-century cottage at South Wootton near King's Lynn (Site 18628). It has been suggested that the latter was a stolen animal, deliberately concealed, but such an explanation seems extremely unlikely for that at Thetford. At Thetford the animal was laid out with its head to the north in a pit, or two conjoining pits (1899 and 1900) which had apparently been deliberately dug as a grave. It was covered with a layer of lime in order to reduce any noxious smells as the

carcass decayed and the pit fill settled. The central location of the grave towards the south-east end of the building, its north- to-south orientation, and the fact that only the torso of the pig appears to have been buried, are all features of this unusual deposit which may have a significance as yet unguessed at. It may, like the inclusion of a face from a Grimston Ware face-jug in hearth 1286, have some charm value intended to ward off evil spirits, and therefore have been a deliberate burial of a superstitious nature. The articulated skeletal remains of most of the right half of a human foetus-neonate found near the bottom of pit 1900 may have been unrelated to the pig burial. It perhaps represents the reinterment, deliberate or otherwise, of a disturbed inhumation or body less ceremoniously disposed of in an earlier pit. How much earlier is uncertain, but the articulated nature of the bones suggests that this occurred not long after they were initially deposited. However, the possibility remains that the occurrence of the pig and foetus-neonate within the same pit or pits may have been more closely related.

Structure 7 is likely to have been constructed and in use at the same time as Structure 6. However, it shows no evidence of having been built for domestic use and is interpreted here as an ancillary building, probably a barn. There was no indication of there ever having been any clay walls, but perhaps like Structure 6, it may initially have had a timber superstructure which rested directly upon the ground. No post-hole footings or post pads were found which might be related to such a structure. Wall 1811 and stone-lined pit 1989 belonged to this earliest phase, as did features 2019 and 2020, the latter of which is interpreted below as a malting kiln. The relationship of the various features to each other, and the presence of a malting kiln suggest that they did lie within a structure of some sort.

Walls 1807 and 1808 at the south-west end may have been constructed at this time, or possibly later and would have provided stone plinths for a timber superstructure. The north-east end of the building might also have been constructed in a similar fashion. The side walls would have rested on chalk and flint rubble footings (1809 and 2227). Structure 7 was at least 14m in length, and probably had an entrance centrally-placed in the north-west side and another in the south-east side. It may have extended as far as the street, but it is more likely that it was set back from the frontage, or separated from it by an additional structure.

The interpretation of feature 2020 as a malting kiln is based on its structure and the environmental evidence. It comprised of a feature which can be divided into three parts: a stoke-hole, a flue, and a drying chamber. All but the latter were lined with clay, and the area of burning on the floor of the flue indicated the location of a hearth which would have heated the kiln. Two shallow post-holes or post-impressions at the entrance to the flue suggest that it had an arched cover of some form. The lack of burning within the chamber provides evidence that it was used for drying, rather than for baking or some other purpose which would have required a more intense heat. On the floor of the drying chamber was a thin deposit of carbonised, sprouted barley, mixed with a small amount of burnt shell and fishbone (see below, p.134). The presence of sprouted barley is indicative of malting, although the burnt fishbone suggests that the kiln was also used for drying other things.

Feature 2019 closely resembled malting kiln 2020 in form, but had no lining and showed no evidence of burning. The location of the two features adjacent to each

other suggests that either they were contemporary, and that feature 2019 had some purpose other than a malting kiln, or more likely that it was dug to replace malting kiln 2020, but never used.

Above the drying chamber of the malting kiln would have been a floor or cloth (kiln hair) on which the sprouted grain would have been spread to dry. Wall 1811 may have been built to support the floor or cloth, and the gap between it and the end wall (perhaps 1807) might then have provided access so that the grain could be spread, raked, and collected after drying.

Malting would first require the grain to have been steeped in water, and then spread-out on a floor to germinate. Water could have been obtained for this purpose from the river nearby, or from a well. Several wells of this period were found at Brandon Road (Dallas 1993), but none were found at Redcastle Furze, although these may have lain outside the excavated area. The grain could have been steeped in above-ground containers or tanks made of wood or lead, or in lined pits. Pit 1989 may have been used for this purpose, but it would have required some form of impermeable lining to retain liquid. The bottom was covered in a layer of mortar, but no traces of this or clay were present on the sides of the pit, and thus if the sides were lined, this was most likely to have been with timber. The environmental evidence (see below, p.134) indicates that whether or not this pit did originally have a function associated with malting, it was subsequently used as a cess pit, and no indication of any earlier purpose has survived.

After the grain had been steeped, it would have been spread on a malting floor to germinate; regular raking would have ensured even growth. A malting floor could have occupied the north-east end of Structure 6, close to the kiln for convenience. The grain would then have been dried in a kiln for between one and four days depending on the type of malt required. Drying burnt off the shoots, arrested growth and converted the barley to malt. It had the additional effect of hardening the grain thereby making it easier to grind. After grinding, the malt could have been made into ale in the same building, or taken or sold elsewhere for brewing. The absence of evidence for hearths over which the malt may have been boiled suggests that ale was not brewed at the site although such installations could have lain outside the limits of excavation, perhaps in another structure adjacent to the street.

The clay floor subsequently laid over the interior of Structure 6 filled the malting kiln, and there is no evidence for the later use of this building for malting or brewing, unless this clay surface was used as a malting floor and a new kiln constructed towards the north-east end of the building, beyond the limit of excavation. The shallow, irregular gully 2231 worn in the surface of floor 2018 might have been created to channel water off the malting floor, but in the absence of further evidence this must be considered unlikely.

It seems probable that stone-lined pit 1989 was still open at this time, and there can be little doubt that it was used as a cess pit. The irregularities in the surface of the mortar which covered the bottom suggests that it may have been cleaned out on at least one occasion. The bottom fill, containing numerous calcareous nodules (probably lime) which had in places been cemented by iron-pan, probably represented the remains of a cess deposit, sealed or mixed with lime, which had largely seeped away. Parasitological investigations of this deposit (layers 1719 and 1720)

showed it to contain ova of the whipworm *Trichuris*, probably of the species found in humans. This, and the crushed nature of the fishbone recovered from the same deposit indicate that it had been faecal material. Layer 1687 above this may also have had the same origin, although it contained comparatively little calcareous material. The upper fills of pit 1989 contained considerable quantities of chalk rubble with some mortar, and presumably derived from the demolition or collapse of Structure 6.

Little can be said about Structure 8. It is reasonable to assume on the basis of their similarity that the clay and chalk spreads (1544, 1545 and 1546) were associated with each other, as were the two flint-packed post-pads (1547 and 1548). However, it is difficult to speculate further on what type of structure or structures they were part of. They are probably best interpreted as having belonged to one or more fairly insubstantial structures, possibly sheds, shelters or pens, contemporary with Structures 6 and 7. However, the possibility cannot be ruled out that they were associated with something more substantial.

The four, shallow pits contained few finds, and may have been dug for purposes other than rubbish disposal. Most of the domestic refuse appears to have been disposed of either in the yard, where it may have formed middens which were periodically cleared, or away from the buildings. Very little medieval material was recovered from the immediate vicinity of Structures 6, 7, and 8, except in the north corner of the site where there is evidence that domestic rubbish was being dumped on the edge of the river valley. Otherwise, it is likely that material was carted away and used as manuring on fields.

Fairly large quantities of finds were recovered from the yard to the rear of Structure 6, and a lesser quantity from the north corner of the site on the edge of the river valley adjacent to Structure 7. Only very small amounts were recovered from within the buildings. Most of the Period VII contexts which contained appreciable numbers of finds were not sealed deposits, but surface spreads containing varying amounts of residual as well as a smaller amount of intrusive finds. However, the ceramic assemblage indicates that the occupation sequence extended up to the mid-fourteenth century with a possible hiatus during the middle of the thirteenth century.

It is impossible to date precisely the construction of the Period VII buildings, but sometime during the late twelfth or early thirteenth century is most probable. Two of the earlier floor surfaces (1105 and 1338) in Structure 6 produced a few small sherds of pottery which included unglazed and glazed Grimston Ware, and unglazed and glazed Cambridgeshire-type Ware. These wares might indicate a slightly later date than is suggested above, but they did not come from the very earliest surface (1399), and may only have been deposited towards the end of use of a particular surface which had previously been kept clean.

The early stone-lined pit (1989) in Structure 7 contained a few sherds of medieval unglazed ware in the mortar lining (1723) at the bottom, and several large joining fragments from an early medieval ware vessel in layer 1687, probably a cess deposit, near the bottom. The former can be assigned to the thirteenth century, and the latter to the twelfth century. Textile fragments recovered from the bottom fill (1719) have been broadly assigned to the thirteenth or fourteenth century (see below, p.119).

The face from a Grimston Ware face jug, embedded in the clay hearth (1286) of the detached kitchen, is likely to

be of thirteenth century date, and probably later rather than earlier during this period. This kitchen may therefore have been a secondary development of Structure 6, possibly during a general phase of partial rebuilding in stone following a period of abandonment around the middle of the thirteenth century.

The spreads of material within the yard of Structure 6, and to the north of Structure 7 contained mixed pottery assemblages of thirteenth- and fourteenth-century date, and a range of small finds including a coin of Edward III, a Papal Bulla of Pope Benedict XII, and several buckles and fittings which can be broadly assigned a similar date range. The apparent lack of mid-thirteenth-century pottery may be the result of a period of abandonment alluded to above, but could equally have alternative explanations.

What does seem clear is that there is a dramatic fall-off in finds from around the middle of the fourteenth century onwards. There were a few sherds of Late Medieval Transitional Ware scattered across the area of Structures 6 and 7, but none in sealed contexts except for a single, possibly intrusive sherd in the top fill (1640) of Pit 1989. This layer was probably debris from the collapse or demolition of Structure 7, and post-dated its use. A rowel spur dated to the late fifteenth or sixteenth century (see below, p.96) came from a layer (1105) interpreted as debris from the collapse or demolition of Structure 6. It therefore seems certain that the lack of later material can be attributed to the abandonment of the structures, rather than to any changes in patterns of rubbish disposal which involved the majority being dumped away from the site. This concurs with the lack of evidence for any later rebuilding of Structures 6, 7, and 8, or for any other subsequent structures.

The site is likely to have reverted to agricultural use during the later medieval and post-medieval periods, and finds of this date are likely to result either from the manuring of fields, or in the case of the two copper alloy bells (cat. nos 33 and 34) from its use for grazing.

The group of structures excavated at Redcastle Furze are most likely to have constituted a small farm complex comprising a farmhouse and an enclosed yard (Structure 6), at least one barn (Structure 7), and perhaps several

ancillary buildings (Structure 8). These appear to have been in use from the late-twelfth century or early-thirteenth century until the mid-fourteenth century, and in all probability were the property of the canons of the Priory of Holy Sepulchre which lies approximately 250m to the east of Redcastle Furze. This small religious house was founded by William Warenne, third Earl of Surrey in 1148. The Survey and Valer of the Priory's possessions carried out in 1338 (TBA/C1/10,325) shows it to have possessed a number of messuages in the vicinity, including four on the north side of Brandon Road, and seven, apparently in a row, on the south side. It is possible that the fragmentary remains of several stone structures excavated by Davison on the north side of Brandon Road, and dated to the thirteenth and fourteenth centuries (Dallas 1993), might have been some of those referred to.

Martin (1779, App. 28) gives a copy of the will of Simon le Goos in which a yard called *Berneyard* is said to be near the common way leading from the south towards a ford recorded as *Jushelford*. This ford is elsewhere referred to as *Insshelforthe*, perhaps named after Agnes Inshall, one of the tenants of the seven properties on the south side of Brandon Road, and is almost certainly that to the north of Redcastle Furze (see Dunmore with Carr 1976, 9; and Davison 1993 for discussions relating to the naming of this ford). A fourteenth-century reference quoted by Martin (1779, App. 28) makes it clear that a road approached Red Castle towards *Inselford* from the south, cutting across the *King's Highway* (Brandon Road). This road probably also cut across the Lakenheath Way, and could have been the common way referred to in the will of Simon le Goos (Fig. 65). If Davison (fig. 172 in Dallas 1993) is correct in his placing of the messuages and routes in the vicinity of Redcastle Furze, then it is probable that the line of the Late Saxon street uncovered there was maintained at least into the fourteenth century as the common way leading to the ford. Structure 6 would have been adjacent to this street, across from the *Berneyard* on the opposite side. Beyond the latter would have been the messuage of Simon le Goos, with the site of St Laurence's church beyond that, and granges and barns close by. These may have had access to the *King's Highway* to the north and the Lakenheath Way to the south, both of which, like the common way, probably originated as Late Saxon streets.

Although the names of the occupiers of the structures at Redcastle Furze are not recorded in the survey of 1338, it is likely that they were tenants of a property owned by the canons of the Priory of Holy Sepulchre; a suggestion supported by the finding of a Papal Bulla of Pope Benedict XII on the site. The tenants may have been engaged in both crop and animal husbandry, as well as producing malt or ale for some time at least. This produce would in part have gone to support the nearby priory.

It is possible that the property was not mentioned in 1338 because it had already been abandoned. The abandonment might be attributable to a decline in the fortunes of this small religious foundation, or if it was slightly later, to the Black Death which led to further depopulation south of the river during and after 1348–51. The pottery cannot be closely dated, but the ceramic sequence does not extend beyond the mid-fourteenth century and thus accords with abandonment at this time, rather than following the Dissolution almost two centuries later.

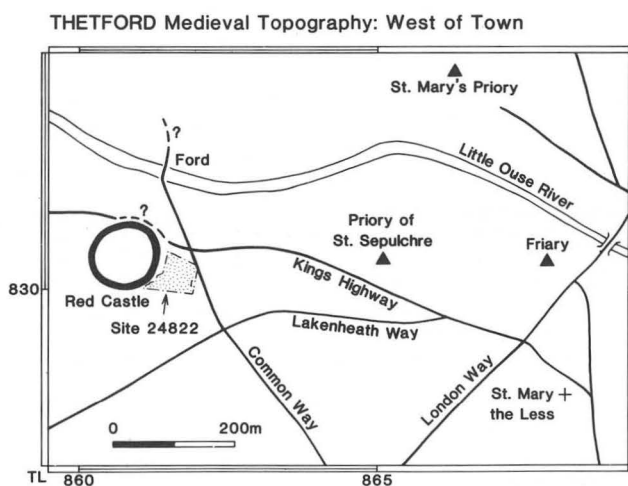


Figure 65 Map of Thetford: medieval topography.

Chapter 3. The Finds

I. Introduction

by Alexandra Little

The artefacts from the excavation at Redcastle Furze date from the Roman, Early Saxon, Middle Saxon, Late Saxon, medieval and post-medieval periods. Roman and Middle Saxon finds are not prolific and occurred mainly as residual finds in later contexts. The Early Saxon material derives largely from the sunken-featured buildings; the Late Saxon and early medieval material from pits, ditches and the area of the street; and the medieval and later material from layers across the site, and in particular from Structures 6 and 7 and the associated yard. Extensive use was made of a metal detector and many of the finds, and in particular the coins, were recovered in this way. All metalwork, worked bone and worked stone have been given small find numbers. Only the metal detector finds, however, have been given co-ordinates.

In the following catalogue the finds have been grouped by material and within that by function, but objects of all periods have been treated together within their class of material. Dates have been suggested for finds wherever possible. Only those items of intrinsic interest, or datable by typology, or distinctive within the site are catalogued in the main text. (Objects prefaced by n.i. are not illustrated). This catalogue is supplemented by the microfiche and the archive. Finds in the microfiche are listed by excavation period and phase.

Individual contributors to the main text are credited at the head of each section.

II. Coins and Jettons

(Pl. IX)

by Marion Archibald

Roman Coins

- n.i. Tetricus II, AD 270–4; *antoninianus*
Identified by John A. Davies
Obv. C PIV ESV TETRICVS CAES
Rev. SPES PVBLICA
Cologne mint. Ref. Elmer 769
From bottom fill of sunken-featured building 2098, Period II, s.f.1218.

Anglo-Saxon Coins, Medieval Coins and Jettons

Illegible parts of the inscriptions are recorded within square brackets only from the evidence of die duplicates. Die identities have been sought for all the coins without success unless stated. The dates and references are to J.J.North, *English Hammered Coinage* Vol. I, London 1980, and Vol. II 1975. The likely deposition dates of the Anglo-Saxon coins are considered in the general discussion.

1. Cnut (1016–35)

Penny (fragment), Helmet type 1024–30, moneyer E— at London.
Obv.: [] RE []
Rev.: +E [] DEN
Wt: 0.37g(5.7gr) Die axis: 180°.
Ref.: North I, 787.

This coin comprises a fragment of about a third of the coin plus a tiny fragment. There are several moneyers at London whose mint signatures are as long as LVNDEN. No die identity has been found among them.

Street surface 1216, Period IV2; s.f. 702.

2. Cnut

Cut-farthing. Short Cross type 1030–35, uncertain moneyer at Colchester.

Obv.: [] T / []

Rev.: + [] N COL (only part of + and N visible)

Wt: 0.30g(4.6gr) Die axis: 270°.

Ref.: North I, 790.

The known moneyers at Colchester in this type are Godric and Wulfwine, the latter being the more likely on spacing but, without a die identity, it is not possible to be certain.

Top fill of pit 741, Period IV3, s.f. 1326

3. Harold I (1035–40)

Cut-halfpenny, Fleur-de-lis type 1038–40, moneyer —ric at London.

Obv.: [] L: / D RE []

Rev.: [] RIC: / on LI / []

Wt: 0.52g(8.1gr) Die axis: 270°.

Ref.: North I, 804.

There are several moneyers at London with names ending in —ric in this type and so, without a die identity, it is not possible to say which of them struck this coin. The king's head on this coin is rather unusual in having the hatching of the hair extended along the jaw-line and into the neck, but as the style of the rest of the coin seems normal, it would appear to be an official English issue.

Metal detector find, Unphased, s.f. 1213

4. Edward the Confessor (1042–66)

Penny, Expanding Cross type (heavy issue, bust d with additional three-pelleted ornament).

1051–5, moneyer Ælfwine at London.

Obv.: +EDPE. / .RD REX:

Rev.: +ÆFPINE ON LVNDEN

Wt: 1.60g(24.7gr) Die axis: 90°.

Ref.: North I, 823. Same obv. die as British Museum ex Mogan ex Evans 1915–5–7–2128.

Metal detector find, Unphased, s.f. 344

5. Edward the Confessor

Cut-halfpenny (bent, corroded and chipped), Expanding Cross type (heavy issue bust d) 1051–3, moneyer —fwine at an uncertain mint.

Obv.: hardly anything visible as a result of the corrosion.

Rev.: [] FPINE [] (E only partially visible).

Wt: 0.56g (8.3gr chipped) Die axis: uncertain.

Ref.: North I, 823.

There are a large number of moneyers in this type whose names end in —fwine, and the coin is too corroded for die comparison.

Layer 1102, Period VII, s.f. 640

6. Edward the Confessor

Cut-farthing, Expanding Cross type (heavy issue bust d) 1051–3.

Obv.: +EDP[E / . RD REX:]

Rev.: +[BRICSIE ON LV]ND:

Wt: 0.30g(4.6gr) Die axis: 0°.

Ref.: North I, 823. Same obv. die as BMC 917 (reverse a different die as this moneyer); same rev. die as British Museum 1946–10–4–211.

Metal detector find, Unphased, s.f. 364

7. Edward the Confessor

Cut-halfpenny, Helmet type 1053–6, moneyer Wulfwine at Hereford.

Obv.: +EDPER.[]

Rev.: +PVLFF [] EFOR

Wt: 0.65g(10.0gr) Die axis: 270°.

Ref.: North I, 825.

Metal detector find, Unphased, s.f. 352

8. Edward the Confessor

Cut-halfpenny (broken in two pieces), Pyramids type 1065–6, moneyer Godric at an uncertain mint.

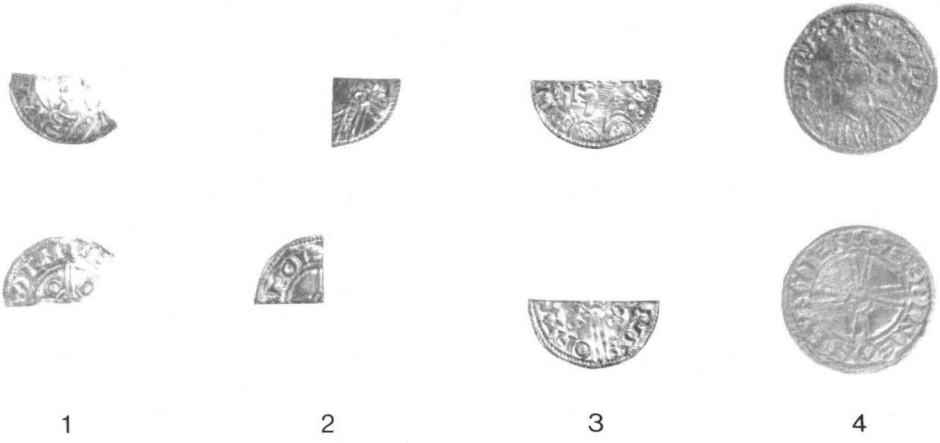


Plate IX Anglo-Saxon and later coins (numbers refer to catalogue nos.). Scale 1:1.

Obv.: [JRD REX
 Rev.: +GODRIC O []
 Wt: 0.51g(7.8gr) Die axis: 180°.
 Ref.: North I, 831.

A moneyer Godric is known at several mints, but no identity of dies has been found.

Metal detector find, Unphased, s.f. 114

9. **William I (1066–87)**

Cut-halfpenny, BMC VIII 1083–6, moneyer Ælwi at London.

Obv.: [PILLE]LM RIEX. (*sic* RIEX for REX)

Rev.: [+IEP]I ON LII[NDEI]

Wt: 0.58g(8.9gr) Die axis: 0°.

Ref.: North I, 850. Same dies as BMC 773.

The dating of the thirteen types of 'King William' are not certain, and BMC VIII may extend into the reign of William II, or may even have been instituted as his first type. The procedure of replacing one type by the next seems to have been carried out fairly comprehensively at this time, so this coin is likely to have been deposited by the early 1090s.

Top fill of pit 1736, Period IV1, s.f. 948

10. **Edward III (1327–77)**

Halfpenny, Florin Issue 1344–51, London mint.

Obv.: +EDWARDVS R[EX]Ln

Rev.: [CI]VI / [TA]S / LOn / DOn

Wt: 0.46g(7.1gr) (Die axes not quoted for late medieval coins)

Ref.: North II, 1132

This coin is unclipped but is considerably worn. Its condition suggests that it was lost around 1400, but an earlier or later deposit (to c. 1420) remains possible.

Layer 1415, Period VII, s.f. 710

11. **English jetton c. 1325–50**

Obv.: A rosette and a pellet alternately in place of inscription. Lion walking to left, head front, ground line cutting off a sector of the inner circle, covered with random pellets; four fleurs-de-lis in the field around the lion, all within the inner circle.

Rev.: Large pellets in place of inscription, two in each quarter. Long cross fleurée extending to the edge of the flan, with a large pellet in each angle within the inner circle. In place of the usual identifications (the sign on English jettons to signify their non-currency status), this piece has been rather roughly indented slightly off centre on an arm of the cross.

Wt: 1.25g. Diameter: 20mm. Die axis: regular. Metal: latten.

Ref.: Not in Mitchiner or Berry.

This jetton has not been previously published, and the obverse with a realistic lion walking the 'flowered' ground is unusually pictorial for English jettons of this period which are normally more formally heraldic in their treatment of the lion(s) of England. The reverse is an unremarkable English type.

Layer 1105 — tumble within yard, Period VII, s.f. 580

12. **French jetton, c. 1490.**

Obv.: +VIVE LE ROI VIVE LE ROI. A cinquefoil between each word and two at the end.

Four fleurs-de-lis within a lozenge within a four-lobed tressure, with three pellets in each angle, all within the inner circle.

Rev.: +VIVE AMANT VIVE AMOVS. A cinquefoil between each word and one at the end.

A cross pattée fleurée within a four-arched tressure with a trefoil on each cusp and a fleur-de-lis in each angle, all within the inner circle.

Wt: 4.60g (71.0gr). Diameter: 22mm. Die axis: 135°. Metal: latten.

Ref.: Mitchiner, 207, no.584.

This jetton, from its superior style and execution, is an official issue belonging to the earliest phase of the type for which the order to the mint survives, dated 1488. This particular example is well preserved and is in much better condition than the one of similarly fine style illustrated by Mitchiner.

Layer 1093 sealing Structure 6, Period VII, s.f. 399.

Eleventh-century mints:

Colchester	1
Hereford	1
London	4 or 5
uncertain	2 or 3

The higher proportion of small denominations normal among excavation finds is even more pronounced than usual at Redcastle Furze with just two whole pennies, but seven cut fractions. This probably reflects an increased recovery rate of small denominations through the use of a metal detector on this site. It might suggest that the transactions which were going on there were relatively small-scale ones, or ones which required the smaller denominations. As usual, the cut-denominations are often underweight.

All the Anglo-Saxon coins here could have been lost during the period of their issue or within a few years afterwards. However, a number of hoards buried at the end of the reign of Edward the Confessor still have significant proportions of earlier coins in them, of types back to the period of Cnut. The earlier types in these hoards are not visibly more worn than the later ones, nor do the hoards look obviously like savings over this long period. This suggests that the system of periodic renewal of the currency was not being carried out so comprehensively as had been the case earlier, and would be again after the Conquest. Also, longevity is in any case more pronounced among cut fractions. (The earliest coin in a hoard is often one of the cut coins.) It has to be borne in mind therefore that the earlier Anglo-Saxon coins from Redcastle *could* have been deposited at any time from the date of their issue until the 1050s, or even up to 1066.

However, the widespread distribution of coins on the site from contexts perhaps up to half a century apart in date make this unlikely. Furthermore, the three coins of the Expanding Cross type might argue against all being as late as the end of the reign, as then one might have expected a few more of the later types.

These Anglo-Saxon coins must have been deposited long before the William I coin. The coins do suggest a decline in coin-using in that particular area after 1066. Given the strong representation in the 1050s, one coin from William's reign before the Paxs type might have been expected, if activities on the site had been going on as previously.

There is also a noticeable absence of local bias among the mints represented. The mints of two or three coins are not identifiable, but local mints are not likely to be more highly represented among them than among the identifiable coins, and the moneyers' names involved make this unlikely anyway. There are no East Anglian coins, no midlands coins, one from Essex, four or five from London and one stray from Hereford (which could have come up from the metropolis too). The numbers are admittedly small, but this dominance of London at 4 or 5 to 2 exceeds what would be expected on the basis of output where London accounts for half, or just over half, the total. This suggests that a lot of money was coming into the area from London at this time. Again it might well have arrived gradually over the period from Cnut onwards, but it was in the middle of the eleventh century that trade seems to have really taken off, so here again the earlier coins have reached Thetford in the 1050s, or even to 1066.

Discussion

Reign	Type	1d	1/2d	1/4d	Total
Cnut	Helmet	1	-	-	1
	Short Cross	-	-	1	1
Harold I	Fleur-de-lis	-	1	-	1
Edward	Expanding Cross	1	1	1	3
	Helmet	-	1	-	1
	Pyramids	-	1	-	1
William I	BMC VIII	-	1	-	1
		2	5	2	9

III. Non-Ferrous Metal Objects

Figs 66–67

Objects are ordered according to function. Only those objects of particular interest or not paralleled elsewhere are catalogued and illustrated here. All objects published below are copper alloy with the exception of nos 2, 12, 17, 22 and 35. Most of the lead is unidentifiable. However, there are two pot-mends which are both Late Saxon/early medieval, and two weights of 34gm and 110gm respectively.

Non-illustrated objects are entered according to period and phase in the microfiche.

1. **Copper alloy buckle** and plate with repoussé decorated frame and two rivets; fifteenth or sixteenth century; from layer 1142, Period VII, s.f.343.
2. **Pewter buckle**; double looped; no pin; similar to example from Pottergate, Norwich (Margeson 1985, 204–5, fig. 35:10); from layer 1143, Period VII, s.f.326.
3. **Single buckle plate** with slightly decorative border in simple stamped design; has four rivets; thirteenth or fourteenth century; from layer 1109, Period VII, s.f.579.
4. **Thin plate**, ?buckle plate, with four rivets; from upper fill of sunken-featured building 951, Period II, s.f.239.
5. **Fragment of ?D-shaped buckle frame** with round section; probably medieval; from layer 1295, Period VII, s.f.593.
6. **Fragment of ?buckle frame** with openwork decoration; gilded; ?thirteenth or fourteenth century; unstratified, s.f.9.
7. Strap-end with a forked spacer between two shaped plates; lower end terminates to diamond-shaped point; not decorated; fourteenth century from layer 1102, Period VII, s.f.386.
8. **Belt fitting** with repoussé design and border; gilded; sixteenth century; very similar to example from Norwich (Williams, 1988, 63–4, fig. 55:8); from layer 1415, Period VII, s.f.891.
9. **Ornamental stud** pressed into domed flower-shape; central hole; medieval; from layer 1143, Period VII, s.f.328.
10. **Ornamental stud** pressed into domed hexagonal-shape; two rivets in place; medieval; from layer 1102, Period VII, s.f.389.
11. **?Stud** pressed from sheet; squarish with central hole; from layer 1102, Period VII, s.f.329.
12. **Pewter stud** with pelleted border; late medieval; from layer 1842, Period VII, s.f.340.
13. **Fragment of Rosette brooch** of 'keyhole' type; disc originally probably had repoussé plate attached; Roman, mid first century AD (similar to Hattatt 1985, fig. 19:285); from layer 1103, Period VII, s.f.379.
14. **Disc brooch**; raised lines outline a recessed cross; traces of enamel in sunken part; Middle Saxon; similar to example from Knocker's excavations (Goodall 1984, 68, fig. 109:7); from upper fill of pit 742, Period IV3, s.f.1176.
15. **Thin disc** with no means of attachment; crudely incised cross within a border; convex bosses at the centre and at the points of cross; folded; similar to example from Knocker's excavations (Goodall 1984, 68, fig. 109:8); Late Saxon; from layer 1143, Period VII, s.f.331.
16. **Disc** with attachment scar on back; crudely incised design, ?cross, with convex bosses at the centre and at the four quarter points of the design; no traces of enamel; from middle fill of ditch 1162, Period IV2, s.f.346.
17. **Pewter annular brooch** with iron pin; thirteenth or fourteenth century; from layer 1102, Period VII, s.f.392.
18. **Penannular ring** with tapering ends; finger ring or earring; Late Saxon; unstratified, s.f.16.
19. **Penannular ring** with overlapping ends; from layer 1213, Period VII, s.f.525.
20. **Bracelet fragment** with edge nicks; light bangle type; Roman, fourth century; from fill of ditch 1641, s.f.899.
21. **Horse harness pendant**; circular; gilded on convex side only; inside roughly finished; possibly thirteenth or fourteenth century, unstratified, s.f.66.
22. **Silver hooked tag** with three perforated holes and two engraved rings; Late Saxon; unstratified, s.f.107.
23. **Hooked tag**, partially tinned; Late Saxon; unstratified, s.f.100.
24. **Pin** with domed head and incised decoration on the shaft; round in section; Middle Saxon; from upper fill of ditch 1395, Period IV1, s.f.586.

25. **Mount**, slightly curved; three holes — one situated at the back, these holes are not aligned suggesting that both sides were intended to be seen; one terminal has ring and dot stamped ?zoomorphic decoration; slightly domed head; probably Middle Saxon; from lower fill of ditch 401, Period III, s.f.722.
26. **Decorative mount** with slightly hollowed back; possibly soldered; similar to mount from St Martin-at-Palace Plain, Norwich (Williams 1988, 63, fig. 56:11; possibly Late Saxon; from layer 1215, Period IV3, s.f. 381.
27. **Decorative mount** with engraved decoration and perforated scalloped edge; from layer 1102, Period VII, s.f.436.
28. **Fitting**; appears to have had loop; incised decoration; function uncertain; from pit 1899, Period VII, s.f.1184.
29. **Fittings** with traces of iron rivets; two pieces, perhaps part of the same object; very thin and badly corroded; from lower fill of ditch 1137, Period VI, s.f.517.
30. **Fitting** with iron rivet; probably medieval; from layer 1102, Period VII, s.f.387.
31. **Spatula**; leaf-shaped with flat bowl; stem is curled over at the top; has fine incised line around border; used for soft materials or as a measuring spoon; probably medieval; from layer 1103, Period VII, s.f.370.
32. **Key** with circular bow and simple stem with hollow tip; (LMMC 136, Type II); ?thirteenth century; from fill of cut 1823, Period VII, s.f.1212.
33. **Bell**, flattened; fifteenth or sixteenth century; from layer 1741, Period VII, s.f.1071.
34. **Bell** found to contain now separated from iron suspension loop; fifteenth or sixteenth century; from layer 1741, Period VII, s.f.1337.
35. **Lead seal** (Pl. IX); Papal Bulla; reverse has two bearded faces and an inscription SPA SPE (Sanctus Paulus and Sanctus Petrus); obverse has inscription Bene Dictus pp XII (Pope Benedictus, 1334–1342); from layer 1306, Period VII, s.f.890.

IV. Iron Objects

(Figs 68–74)

Objects are ordered according to function. Not all objects have been illustrated because similar examples are published by Goodall (1984, 76–106; and Goodall and Ottaway 1993). A full list is available in the microfiche.

Metalworking Tools

(Fig. 68)

1–4 **Punches**. Four examples were recovered and all are illustrated. Two have no heads. Lengths vary from 45mm to 67mm.

1. Fill of pit 741, Period IV3, s.f.230.
2. Fill of pit 651, Period IV3, s.f.985.
3. Layer 1214, Period IV2, s.f.607.
4. Layer 1741, Period VII, s.f.1092.

Textile Manufacturing and Clothworking Tools

(Fig. 68)

- n.i. A large group of **comb-teeth** were recovered from a variety of contexts of all periods. (No bindings were recovered). Seventy examples with either a rectangular or round section were found. None are illustrated (similar examples can be found in Goodall 1984, fig. 119:22–30). Lengths vary from 45mm to 151mm. s.f.s 166, 178, 182, 217, 218, 231, 260, 317, 319, 462, 472, 523, 524, 527, 609, 631, 632, 636, 656, 665, 680, 690, 692, 699, 736, 759, 766, 778, 782, 789, 803, 822, 853, 862, 863, 869, 915, 971, 988, 997, 998, 1000, 1002, 1004, 1013, 1023, 1054, 1055, 1061, 1062, 1064, 1072, 1080, 1081, 1083, 1085, 1102, 1105, 1110, 1125, 1133, 1135, 1181, 1182, 1242, 1266, 1267, 1272, 1281, 1290.
5. **Needle** with bent shank and broken tip. Fill of pit 2195, Period IV3, s.f.1306.

Leatherworking Tools

(Fig. 68)

- 6–9. **Awls**. These have rectangular sections and taper from a central expansion. Eleven examples, four of which are illustrated. Lengths vary from 48mm to 138mm.
6. Layer 1741, Period VII, s.f.1022.
7. Fill of sunken-featured building 1528, Period II, s.f.898.
8. Fill of pit 1929, Period IV3, s.f.1284.
9. Fill of pit 1986, Period IV3, s.f.1259.

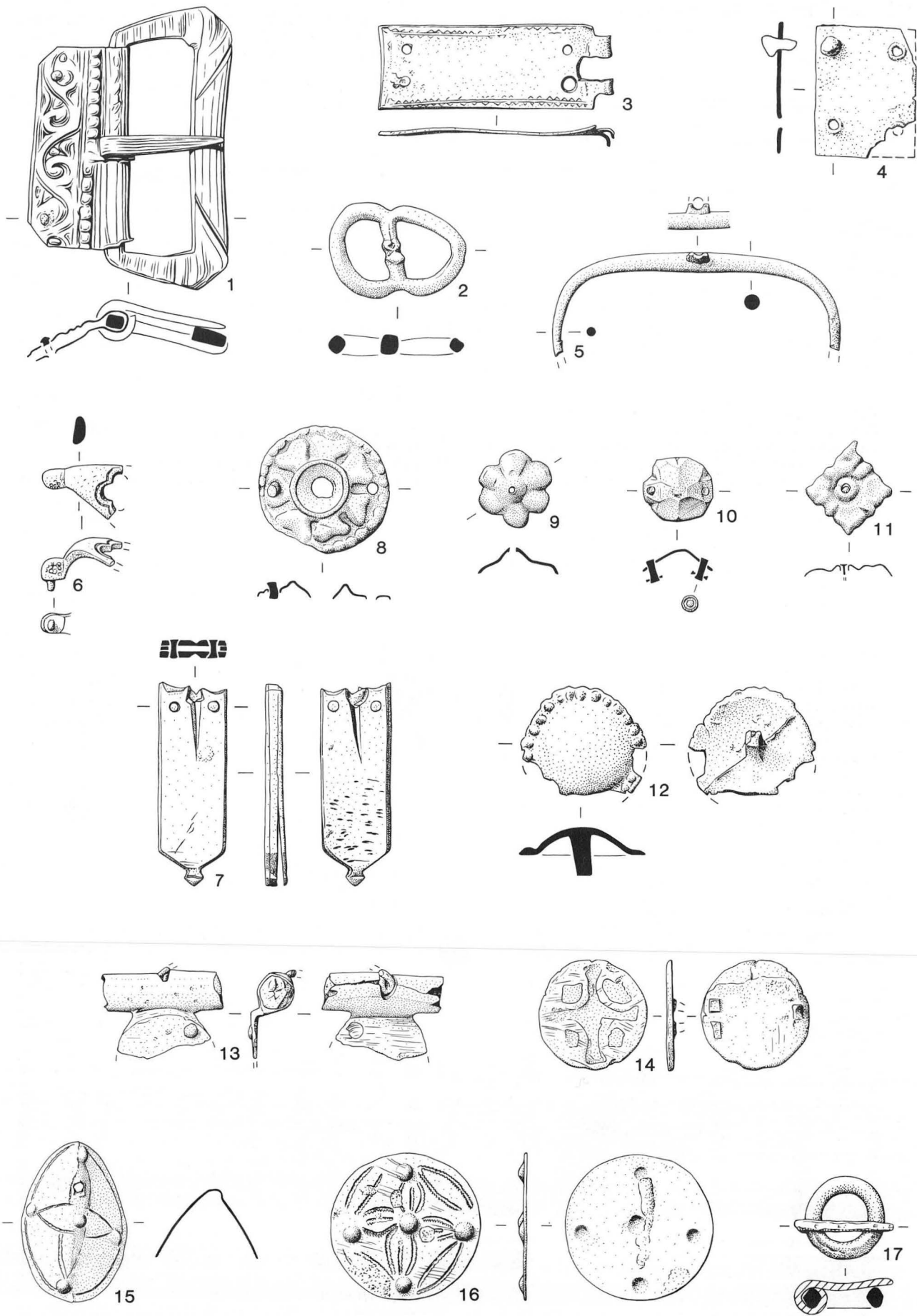


Figure 66 Copper alloy objects. Scale 1:1.

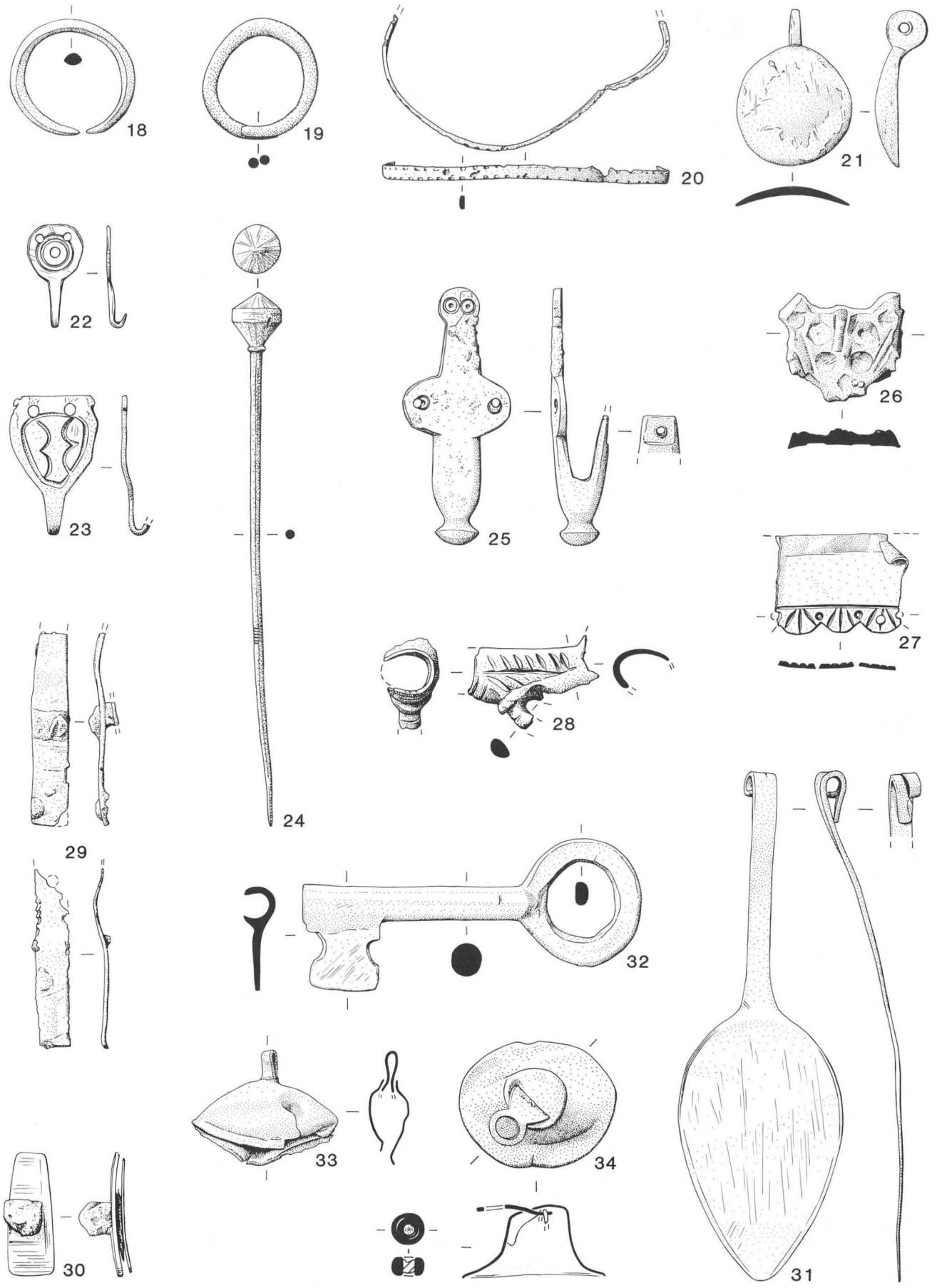


Figure 67 Copper alloy objects. Scale 1:1.

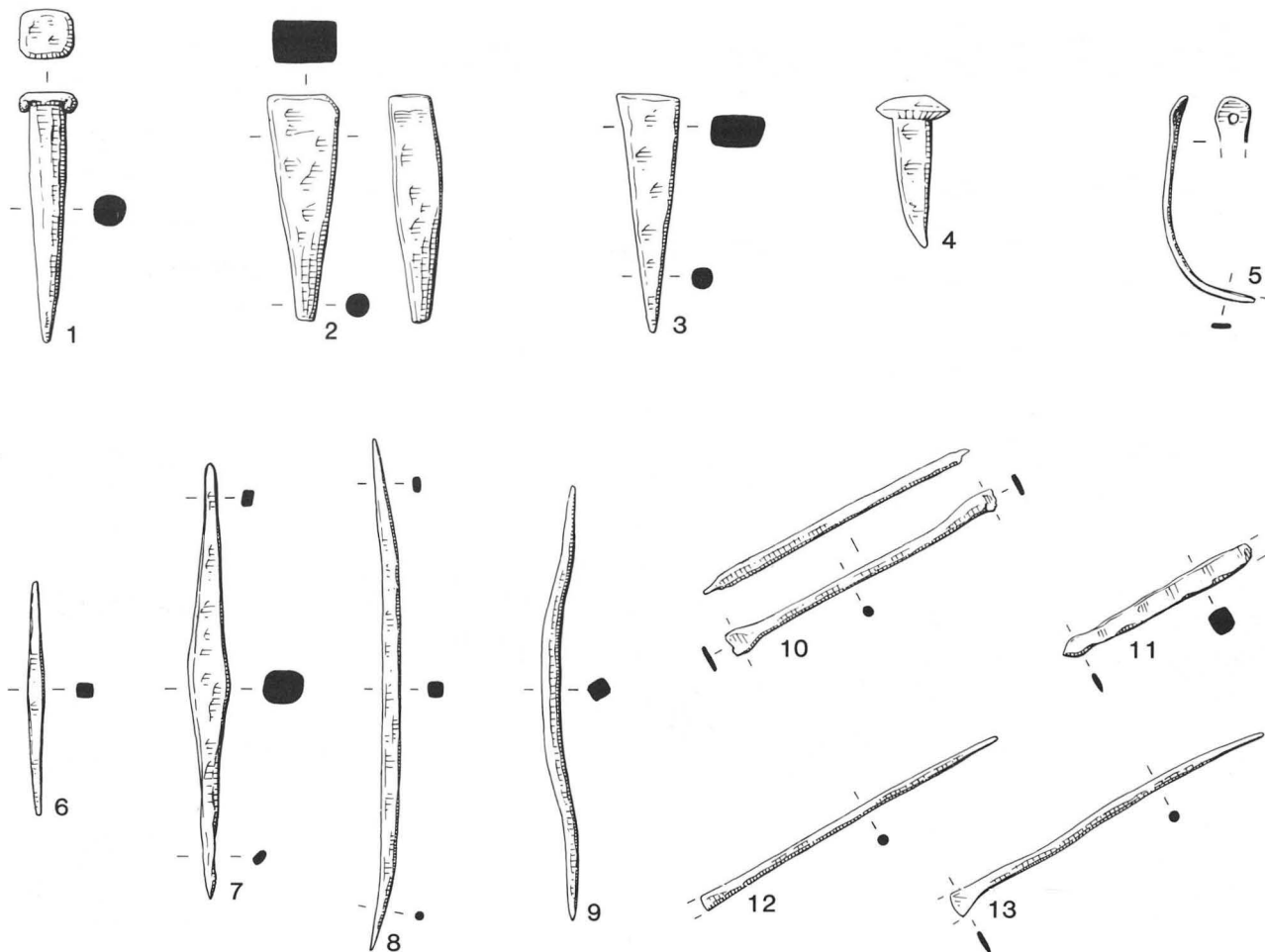


Figure 68 Iron objects: metalworking tools, textile manufacturing, clothworking and leatherworking tools. Scale 1:2.

- n.i. s.f.s 491, 617, 987, 1011, 1103, 1276, 1292. 10-13.
10- Creasers. Six examples were recovered and four are illustrated.
13. Lengths vary from 59mm to 93mm.
10. Fill of ditch 250, Period IV2, s.f.900.
11. Layer 1673, Period VII, s.f.983.
12. Top fill of pit 1994, Period IV3, s.f.1297.
13. Gully 470, Period V, s.f.1131.
 n.i. s.f.s 195, 1308.

are illustrated. The other illustrated examples are from Late Saxon features unless otherwise stated.

Whittle-tang

Type 1. Angled back. The back slopes up from the shoulder to a little beyond its mid-point before sloping down again to the tip. Three examples, two of which are illustrated. Length 70mm to 112mm.

- 15.** Layer 1142, s.f.353, Period VII.
16. Rivet at junction of blade and tang; layer 1662, Period VII, s.f.365.
 n.i. s.f.604.

Agricultural Tools

(Fig. 69)

- 14. Ploughshare.** Blade point broken and socket missing, (similar to Goodall 1984, fig. 121:43); layer 1519, Period IV3, s.f.856.
 n.i. **Ploughshare.** 100mm across; central hole in back of blade; post-medieval; layer 1737, Period VII, s.f.376.

Knives

(Fig. 70)

A total of thirty-nine knives have been recovered and of these, thirty-three are complete. The complete examples range in length from 56mm to 181mm. Thirty-four knives have whittle-tangs and the remaining four have scale-tangs. The whittle-tang knives have been grouped by blade shape after types identified by Goodall (Goodall and Ottaway 1993). Four different types have been recognised. Only a selection of blades belonging to each type have been illustrated because there are already a large number of published examples. Two examples of whittle-tang knives were excavated from Early Saxon features and one example was excavated from a Middle Saxon ditch. These

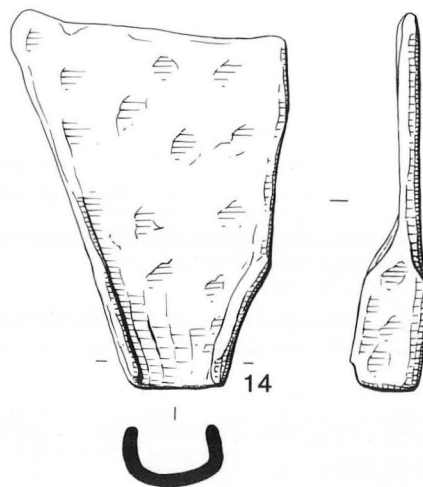


Figure 69 Iron objects: agricultural tools. Scale 1:2.

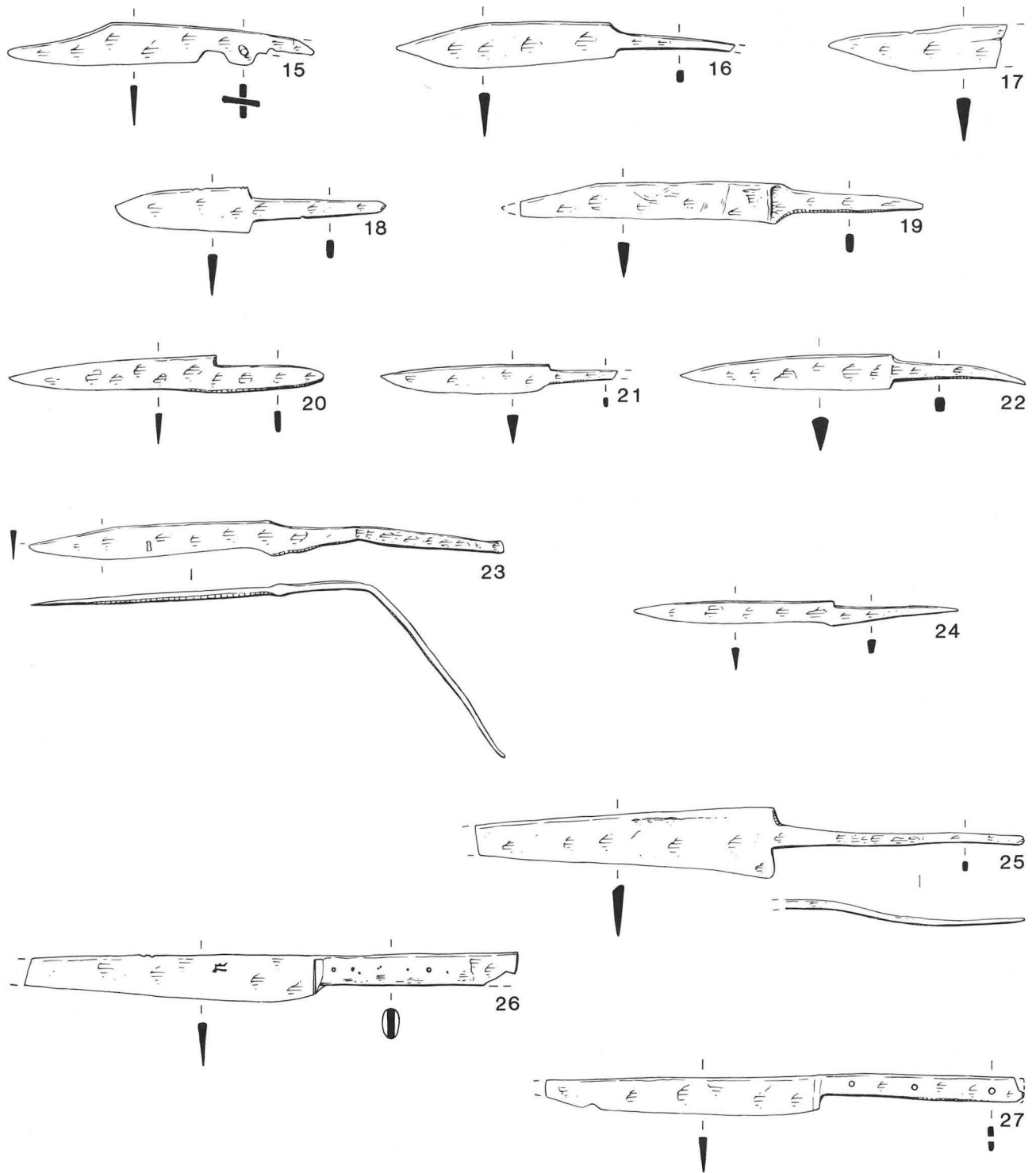


Figure 70 Iron objects: knives. Scale 1:2.

Type 2. The backs are straight and horizontal before they slope down to the tip. One example. Length 56mm.

17. Layer 1584, Period VII, s.f.824.

Type 3. The backs and cutting edge are straight and parallel before both curve towards the tip. This type is the most common type present. Twenty-four examples. Seven are illustrated including two S-shaped blades. Length 68mm to 157mm.

18. Top fill of sunken-featured building 2125, Period II, s.f.1301.

19. Traces of wooden handle; bottom fill of sunken-featured building 793, Period II, s.f.268.

20. Fill of ditch 401, Period III, s.f.841.

21. Layer of 1216, Period IV2, s.f.843.

22. Top fill of pit 1994, Period IV3, s.f.1280.

23. S-shape; top fill of pit 1651, Period IV3, s.f.976.

24. S-shape, fill of 785 (Structure 5), Period IV3, s.f.1143.

n.i. s.f.s 520, 839, 842, 845, 909, 911, 925, 995, 1049, 1134, 1248, 1271, 1282, 1287, 1288.

Type 4. The backs and cutting edges taper from their junction with the tang. One example. Length 181mm.

25. Layer 1170, Period VII, s.f.518.

Scale-tang

Examples have rivets which were for attaching the handle. Two are illustrated. Lengths vary from 71mm to 162mm.

26. A cutler's mark on the blade; layer 1844, Period VII, s.f.1171.

27. Layer 1142, Period VII, s.f.431.

n.i. s.f.s 426, 984.

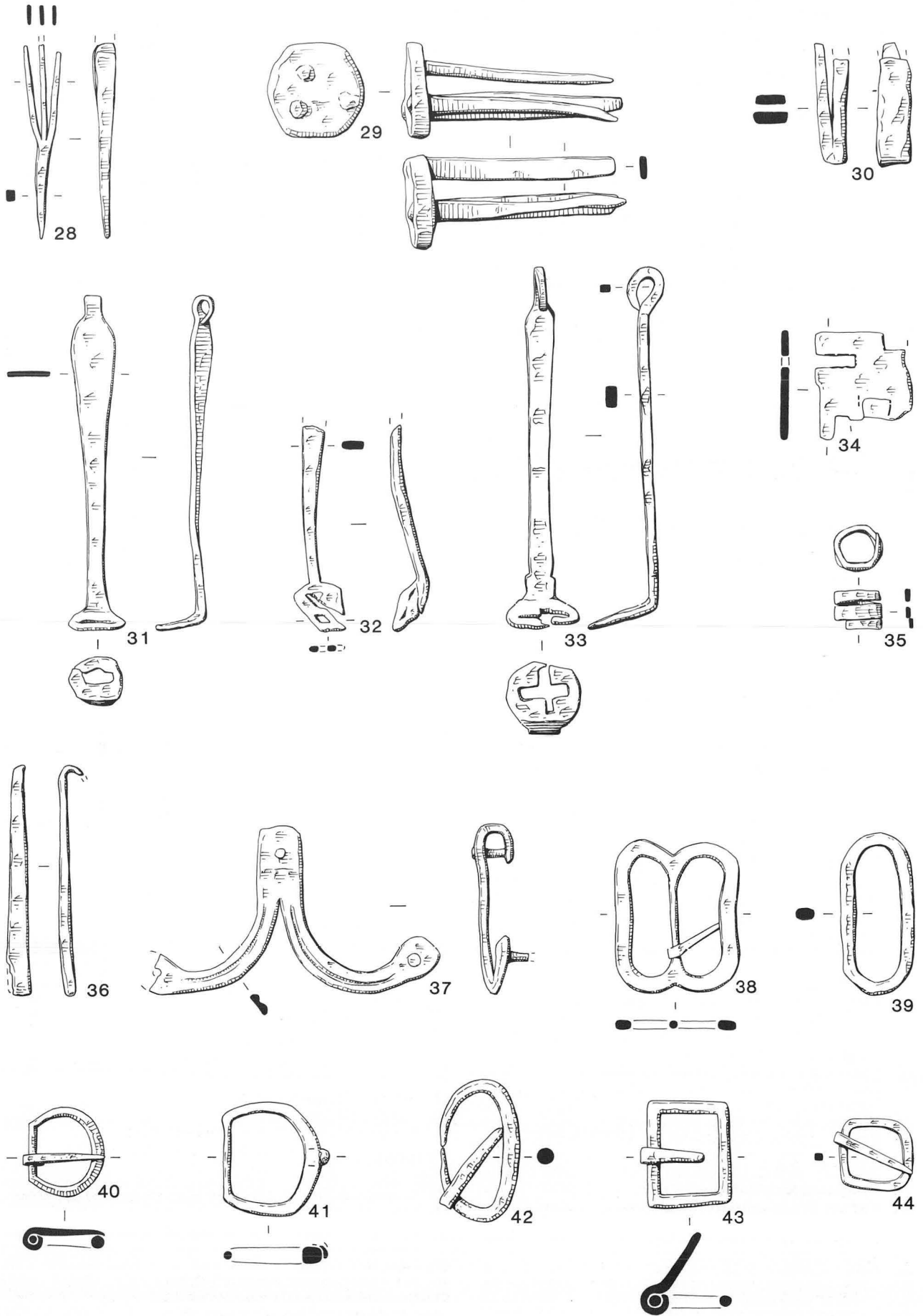


Figure 71 Iron objects: building ironwork and fittings, household ironwork, buckles. Scale 1:2.

There is a notable absence of recognisable shear blades from the site. It is possible that fragmentary pieces may have been overlooked, but none of the blades classed as knives are from shears.

Building Ironwork and Fittings

(Fig. 71)

- n.i. **Building staples.** Rectangular or U-shaped, with straight or intumed arms. Nineteen examples from Periods IV and VII. Three are rectangular with straight arms, nine are U-shaped with straight arms, five are rectangular with intumed arms and two are U-shaped with intumed arms. (Similar examples can be found in Goodall 1984, figs. 127 and 128:114–31). s.f.s 171, 206, 655, 709, 741, 744, 852, 871, 1068, 1073, 1075, 1091, 1112, 1115, 1167, 1179, 1191.
- n.i. **Nails.** 305 have been recovered from a variety of contexts of all Periods. 249 are complete. Shanks and heads are either rectangular or round. They range in size from 12mm to 101mm for complete examples and 18mm to 104mm for incomplete examples.
- n.i. **Clench bolts and roves.** Sixteen examples from Periods IV and VII. (Similar to Goodall 1984, fig. 129:136 and 137). s.f.s 175, 385, 669, 683, 763, 815, 829, 840, 956, 1020, 1120, 1121, 1160, 1190, 1291.
- n.i. **Hinge pivots.** These are L-shaped and have a rectangular section. Five examples from Periods IV and VII. (Similar to Goodall 1984, fig. 129; 138–45). s.f.s 596, 633, 740, 814, 1313.
- n.i. **Hinges and strap fragments.** The hinges have hanging eyes and one has rivets *in situ*. Fourteen hinges and two strap fragments have been recovered mainly from Periods VII, but one from Period II. (Similar to Goodall 1984, figs. 129 and 130; 146–55). s.f.s 93, 150, 324, 342, 356, 489, 500, 592, 614, 624, 635, 679, 743, 804, 881, 1273.
- n.i. **Binding strip.** Two holes visible. (Similar to Goodall 1984, fig. 129; 156–61). s.f.388.
- 28– **Barrel lock springs.** Five examples of which three are illustrated.
- 30. All have rounded closing plates. (Similar to Goodall 1984, fig. 131:170–2).
- 28. Fill of pit 741, Period IV3, s.f.261.
- 29. Layer 1306, Period VII, s.f.967.
- 30. Top fill of pit 517, Period IV3, s.f.196.
- n.i. s.f.s 1123, 1169.
- 31– **Padlock keys.** All have laterally set bits and are of post-Conquest type. (Similar to Goodall 1984, fig.132: 180–1).
- 31. Expanded shank and hooked terminal; ditch 1303, Period IV3, s.f.589.
- 32. Broken shank; layer above street 1215, Period IV3, s.f.962.
- 33. Plain shank and hooked terminal; fill of pit 429, Period IV2, s.f.181.
- 34. Key fragment? no shank; plated; layer 1741, Period VII, s.f.1063.
- n.i. Door latch/gate hook. Two examples, both from Period VII deposits. Nineteenth or twentieth century. s.f.s 348, 330.

Household Ironwork

(Fig. 71)

- n.i. **Hooks.** Twelve examples from Periods IV and VII, with round or rectangular sections. One example is twisted at the top. (Similar to Goodall 1984, fig. 133:198–201). Lengths vary from 25mm to 110mm. s.f.s 443, 501, 619, 674, 689, 729, 802, 806, 808, 1016, 1018, 1021.
- n.i. **Chain links** of various forms. Periods IV and VII. Lengths vary from 36mm to 124mm. s.f.s 170, 496, 846, 1111.
- n.i. **Rings.** Four examples which are unphased except 748 which is from Period IV. One other is probably modern. Diameters vary from 13mm to 35mm. s.f.s 46, 97, 424, 748.
- 35. **Coiled ring.** Fill of pit 741, Period IV3, s.f.229.
- n.i. **Ring and hook.** Length 41mm and diameter 39mm. Layer 1584, Period VII, s.f.811.
- 36. **Bell clapper.** Pit 741, Period IV3, s.f.1258.
- 37. **Binding or fitting from bucket or tub.** Early Saxon. Forked strip with curved terminals; one rivet-hole remains; other terminal-hole broken; also rivet-hole through central shaft. Bottom fill of sunken-featured building 951, Period II, s.f.295.
- n.i. **Ferrules.** Two examples both from Period VII. (Similar to Goodall 1984, fig. 135; 215–20). Lengths 92mm and 61mm. s.f.s 1128, 810.

Buckles

(Fig. 71)

Eleven examples of which seven are illustrated. 38 is butterfly-shaped, 39–41 are D-shaped, 42–43 are rectangular and 44 is squarish. The unillustrated examples are three D-shaped and one rectangular. These are from Periods IV and VII.

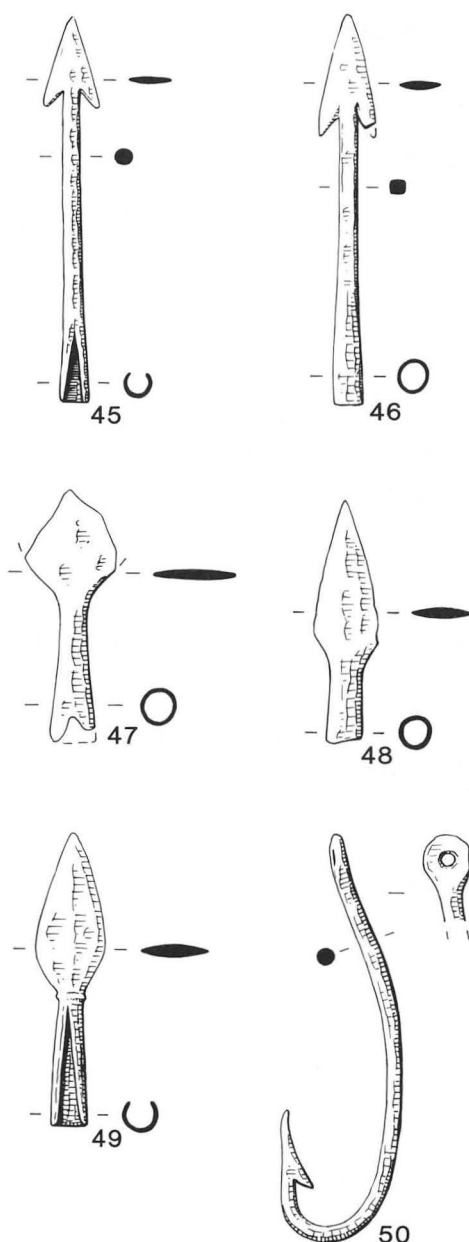


Figure 72 Iron objects: weapons. Scale 1:2.

- 38. Layer 1143, Period VII, s.f.1338.
- 39. Layer 1102, Period VII, s.f.481.
- 40. Fill of pit 1379, Period IV3, s.f.427.
- 41. Layer 1143, Period VII, s.f.325.
- 42. Top fill of sunken-featured building 915, Period II, s.f. 160.
- 43. Fill of ditch 1189, Period V, s.f.378.
- 44. Layer 1143, Period VII, s.f.334.
- n.i. s.f.s 207, 294, 734, 1279.

Weapons

(Fig. 72)

- 45– **Arrowheads.** Five examples all of which are socketed. 45–46 are barbed and 47–49 are lozenge-shaped. Barbed arrowheads were developed in the twelfth or thirteenth century for use in hunting (Goodall 1993).
- 45. Layer 1184, Period VII, s.f.531.
- 46. Fill of post-hole 1358, Period IV3, s.f.704.
- 47. Layer above street 1215, Period IV3, s.f.555.
- 48. Fill of ditch 1292, Period V, s.f.637.
- 49. Layer 1584, Period VII, s.f.861.

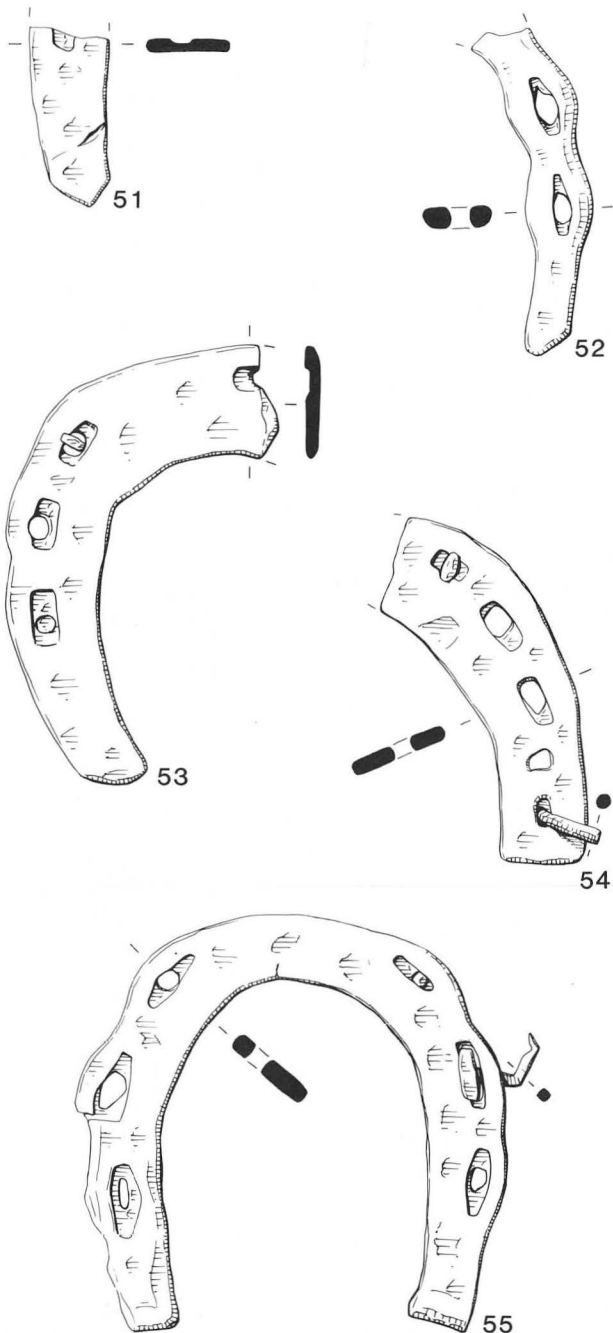


Figure 73 Iron objects: horse furniture. Scale 1:2.

Fishing Hook

(Fig. 72)

50. Barbed hook ?fishing gaff. Looped terminal. Fill of pit 1409, Period IV2, s.f.724.

Horse Furniture

(Fig. 73)

51- Horseshoes. Twenty fragments of horseshoes were recovered from 55. a variety of contexts. Only five examples have been illustrated and all of these were found on or were associated with cobbled street surface 1215, Period IV3. Three types have been identified.

Type 1: countersunk holes, wavy edge. Horseshoes with countersunk nailholes are found from the ninth to fourteenth centuries. Horseshoes with a marked wavy edge are a post-Conquest or 'Norman' type and continued in use until the thirteenth century. Fourteen examples of which five are illustrated.

51. Above street 1215, s.f.661.

52. Above street 1215, s.f.377.

53. Above street 1215, s.f.965.

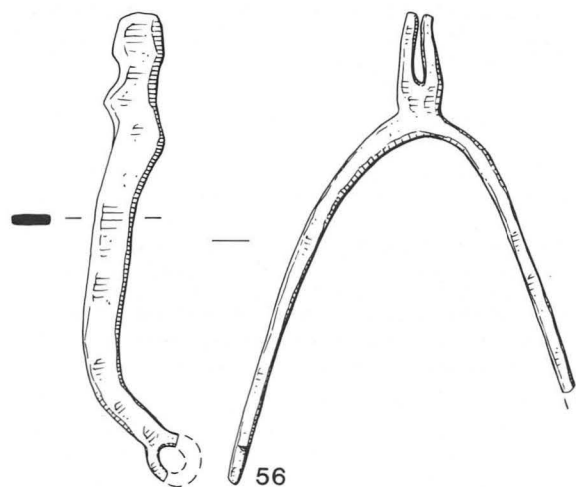


Figure 74 Iron objects: horse furniture. Scale 1:2.

54. Above street 1215, s.f.691.

55. Adjacent to street 1215, s.f.383

n.i. s.f.s 35, 112, 123, 273, 360, 490, 502, 505, 585, 877, 965, 981, 1012, 1094, 1162.

Type 2: with square holes, thin in section. Late medieval. Five examples. None illustrated.

Type 3: round holes, smooth edge. Probably modern. Two examples. None illustrated.

n.i. Fifty-two horseshoe nails have been recovered from a variety of contexts. They vary in length from 15mm to 48mm.

56. Rowel spur

(Fig. 74)

by Blanche Ellis

Iron, almost completely rusted within adhering soil. The sides lie horizontally straight alongside the wearer's foot, with only their front ends turned upwards. They appear to have been of flat or flattened-D section. Only the lower part of one broken ring survives of a terminal. It is fairly large suggesting that it might have been a single-ring terminal; the other terminal is missing. The short, straight neck of the spur is divided for two-thirds of its length by the rowel box. The rowel is missing. Overall length about 125mm. Length of neck 27mm. Typologically 1480-1550. Probably first half of the sixteenth century, although the straight sides which only curve up at their front ends developed on the late fifteenth-century long spurs, so this could be a contemporary short spur. Layer 1105, Period VII, s.f.486.

Other Objects

251 iron objects have been recovered which are fragmentary or unrecognisable. They include iron strips, sheet, wire and rectangular bars. These come from a variety of contexts and periods, and were mostly recovered by metal detector. A full list is contained in the archive and fiche.

V. Metalworking Evidence

by Phil Andrews

The excavations produced a total of almost 21kg of slag which included smithing slag, fuel ash slag, hearth lining, and dense iron slag.

The most frequently occurring type was smithing slag which was found as small, irregular lumps, and as whole and fragmentary hearth bottoms, plano-convex 'buns' of slag which collected at the bottom of the blacksmith's hearth. Three hearth bottoms were recovered, up to 13cm in diameter and 5cm deep, the largest weighing 0.9kg. Fuel ash slags, derived from the fluxing of silicate-rich materials such as clay or sand at high temperatures, were also relatively common and probably formed in iron-working hearths. A quantity of hearth lining was also recovered, most commonly as small fragments of vitrified

clay with slag attached, but one complete and one possible tuyère hole were also found, the former having a diameter of 25mm. A few fragments of dense iron slag were recorded which may have been derived from smithing or possibly from some small-scale smelting process.

Only 41gm of slag came from Period I, and there is a possibility that this was intrusive. By contrast, 1.68kg of debris was recovered from Period II (Early Saxon) contexts, which included almost 1kg of hearth lining and slag from pit 1279 and a hearth bottom from sunken-featured building 1951. No material came from any Middle Saxon features. More than half (11kg) of the metallurgical debris recovered was from Period IV (Late Saxon) contexts. Only 1.59kg of this occurred in Period IV1, and the rest was fairly evenly distributed between Period IV2 and IV3. This was mostly found in features adjacent to the street, with a possible concentration in the south-east corner of the site, where the complete tuyère hole was found. Together these suggest sporadic small-scale iron-working, probably smithing. Some of the 1.17kg and 0.16kg of slag and hearth lining from Periods V and VI respectively is likely to have been residual, as is some of the 6.77kg from Period VII. However, pits 1766 and 1911 produced 1.72kg and 1.37kg respectively of iron slag and hearth lining indicating that at least some iron-working, probably smithing, took place on the site during the thirteenth or fourteenth centuries, perhaps associated with the construction and maintenance of Structures 6 and 7.

A small number of crucible fragments and part of a stone mould for casting copper ingots (see below, p.98; Fig. 77) were found in Period IV features, and attest to small-scale copper alloy working in the vicinity during the eleventh century.

VI. Stone Objects

(Figs 75–78)

Hones

(Fig. 75)

A total of nine hones have been recovered. The range of stone types is limited to two types: blue phyllite and micaceous quartz sandstone. All but one example are similar to hones from Knocker's excavations (Moore and Ellis 1984, 107–111) and thus are not illustrated. Fig. 75 is unparalleled at Thetford.

A full list of hones is available in the microfiche.

1. **Grindstone**; micaceous quartz sandstone; the grinding edge is very smooth; similar to example from a seventh to tenth century site at Kiondroghad, Isle of Man (Gelling 1969, 81); from lower fill of ditch 1292, Period V, s.f.485.

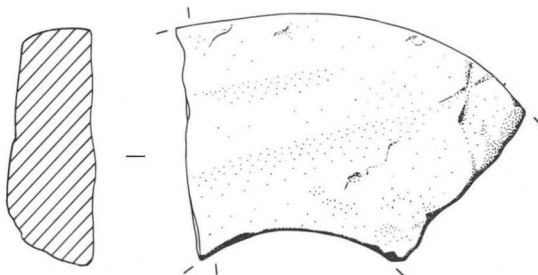


Figure 75 Stone objects: hone. Scale 1:2.

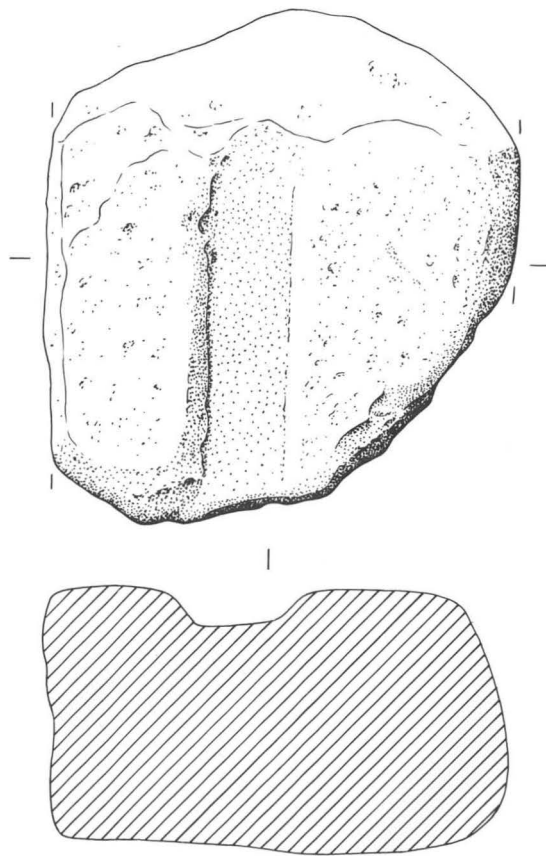


Figure 77 Stone objects: ingot mould. Scale 1:2.

Querns

A total of 259 quern fragments were recovered from various contexts across the site. 94.6% by weight of these are of Rhineland lava and the remaining 5.4% are of Millstone Grit. A full list of querns is contained in the archive.

Spindle-whorls

Two chalk spindle-whorls were found in Late Saxon contexts. Both are listed in the microfiche.

Loomweights

(Fig. 76)

1. Chalk; weight 202gm; fill of ditch 1303, Period IV3, s.f.570.
2. Chalk; weight 657gm; unphased, s.f.154.

Moulds

(Fig. 77)

1. Shelly limestone; probable ingot mould; a groove at least 95mm long and 10mm wide has been cut into the top surface and there are traces of a copper alloy deposit on one corner; weight 1.4kg; top fill of pit 1873, Period IV3, s.f.1157.

Miscellaneous Worked Stone

(Fig. 78)

1. **Limestone**; roof tile; wall 1127, Period VII, s.f.892. There are eighteen other worked fragments. These are listed in the microfiche.

The Flint

(Not illustrated)

I am grateful to John Wymer for identifying the flint.

The composition of the struck flint is shown in Table 1 (microfiche). Most of the material was probably residual

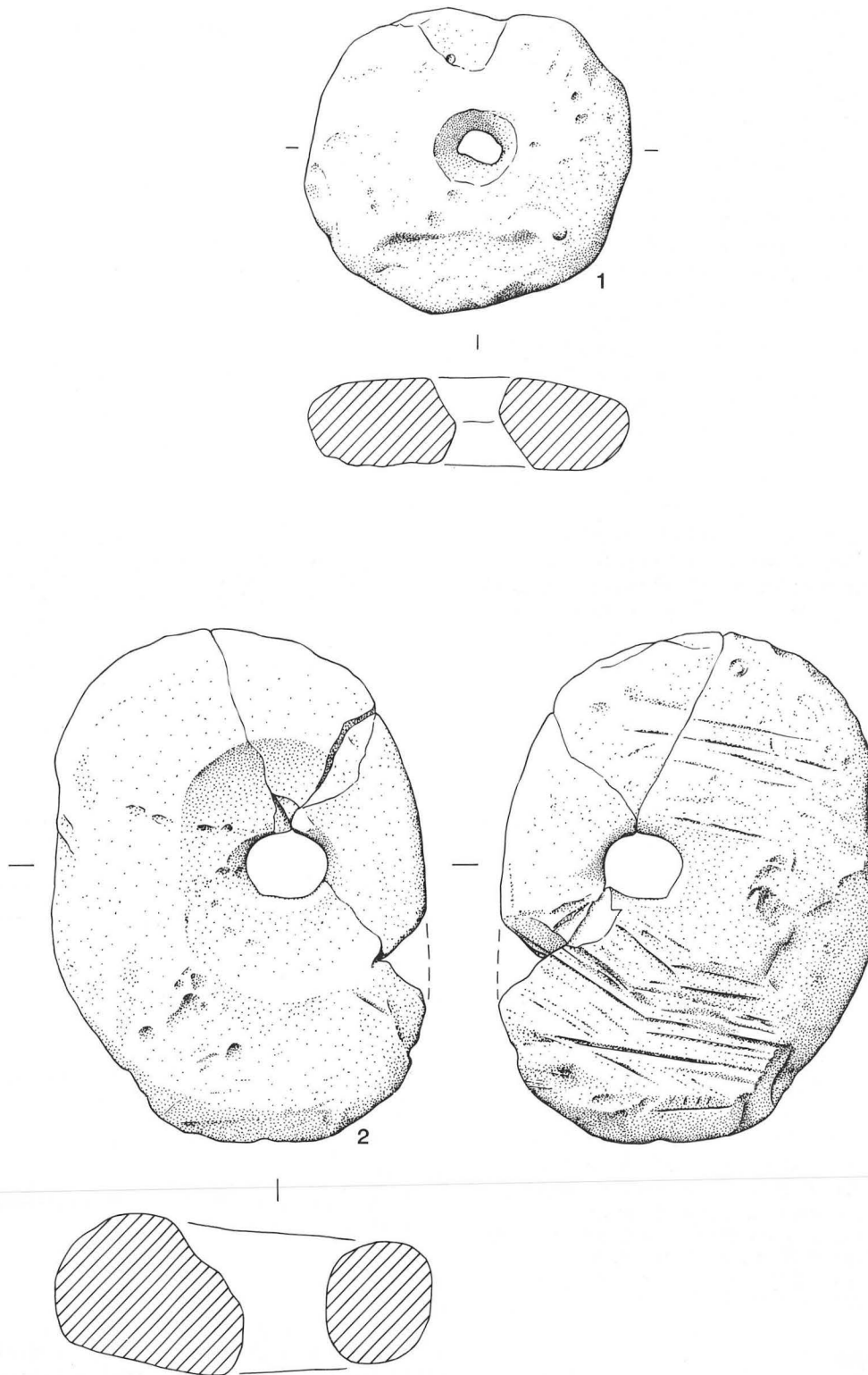


Figure 76 Stone objects: chalk loomweights. Scale 1:2.

in the contexts in which it was found. Concentrations of flint have been recovered from ditch 1148, layer 1339 and cut 1626, the latter of which may have been a prehistoric feature. Of particular interest are two single platform blade cores, one rod microlith, one discoidal scraper with retouch all round, and one end scraper. A large proportion of the flintwork is Mesolithic, and the rod microlith indicates Late Mesolithic. The fresh spalls and flakes suggest *in situ* knapping.

VII. The Glass

(Not illustrated)

Only fifty-six fragments of window and vessel glass have been recovered and of these, fifty-three are modern and three are probably medieval window glass.

There are three glass beads. One is ?Victorian, and two are Early Saxon and came from sunken-featured buildings. Of the latter, one is cylindrical, creamish/

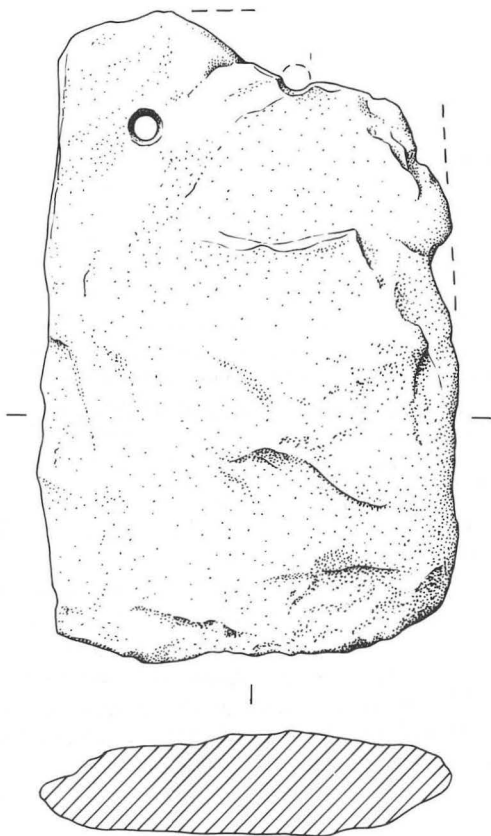


Figure 78 Stone objects: limestone roof tile. Scale 1:2.

yellow, opaque, with raised crossing trails, s.f.1332; (similar to one from West Stow; West 1985, 74, fig. 276:14). The other example is broken and only half remains; it is globular, dark green and opaque, s.f.1330.

A full list of all the glass finds is available in the archive.

VIII. Ceramic Objects

Spindle-whorls

(Fig. 79)

- 1. Fired clay, cracked; weight 26gm; fill of SFB 1299, Period II.
- n.i. Fired clay, cracked; weight 29gm; fill of SFB 1938, Period II.
- n.i. Thetford Ware base (similar to Rogerson and Dallas 1984), fig. 152:5; weight 91gm; fill of ditch 1669; Period IV3.
- n.i. Thetford Ware base (similar to Rogerson and Dallas 1984, fig. 152:3); weight 24gm; fill of pit 752, Period IV3.

Clay Loomweights

(Fig. 80)

- 1. Loomweight in three fragments; unfired; weight 581 gm; fill of SFB 1938, Period II.
- n.i. Fragment; fired; weight 70gm; fill of SFB 915, Period II.
- n.i. Four fragments; fired clay; weight 151gm; unphased.
- n.i. Three fragments fired; weight 293gm; fill of SFB 915, Period II.
- n.i. Fragment of loomweight; fired clay; weight 58gm; fill of SFB 951, Period II.
- n.i. Five fragments; unfired; weight 267gm; fill of SFB 915, Period II.
- n.i. Half loomweight; fired; weight 245gm; fill of SFB 915, Period II.
- n.i. Five fragments; fired; weight 173gm; fill of SFB 915; Period II.
- n.i. Fragment; fired; weight 48gm; unphased.
- n.i. Fragment; fired; weight 70gm; fill of SFB 915, Period II.
- n.i. Six halves and two fragments of loomweight; unfired; weight 2.011kg; fill of SFB 915; Period II.
- n.i. Half loomweight; fired; weight 144gm; fill of SFB 915; Period II.

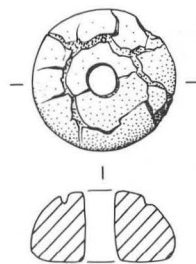


Figure 79 Ceramic objects: spindle-whorl. Scale 1:2.

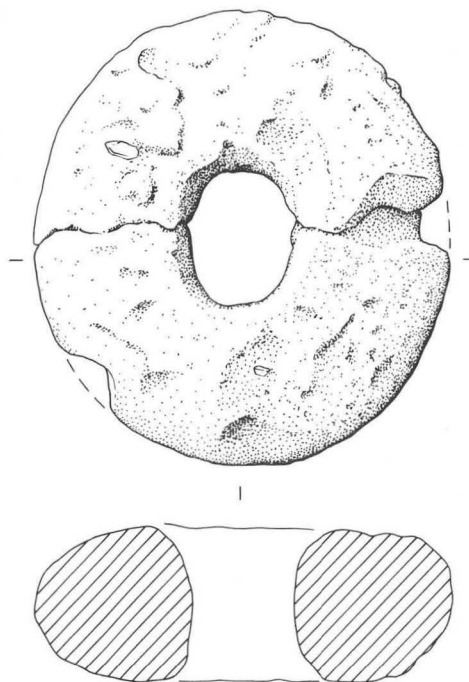


Figure 80 Ceramic objects: loomweight. Scale 1:2.

- n.i. Thirteen fragments; unfired; weight 183gm; fill of SFB 915, Period II.
- n.i. Fragment; fired clay; weight 50gm; fill of SFB 915, Period II.
- n.i. Seven fragments; unfired; weight 116gm; fill of SFB 915, Period II.
- n.i. Fragment; fired; weight 15gm; fill of SFB 915; Period II.
- n.i. Loomweight in five fragments; unfired; weight 581gm; fill of SFB 1938, Period II.
- n.i. Loomweight in two halves; unfired; weight 568gm; fill of SFB 1938, Period II.

Tile

(Not illustrated)

Sixty-eight fragments of tile weighing 4.482kg have been recovered from various contexts across the site. A probable Roman fragment came from a Period II sunken-featured building, the remainder from Period IV and later contexts. There are seven Roman, twenty one medieval peg, twenty post-medieval peg, and sixteen pantile fragments. A full list of tiles by context is given in the microfiche.

Brick

(Not illustrated)

Forty-two fragments of brick have been found. These weigh 5.653kg. A full list of bricks by context is given in the microfiche.

Fired Clay and Daub

(Not illustrated)

59.358kg of fired clay and daub has been recovered from various contexts across the site. This has been recorded by context and is listed in the archive.

IX. The Pottery

Introduction

A total of 11,092 sherds weighing 152.46kg was found in the excavations. This pottery ranges in date from the first to the eighteenth and possibly nineteenth centuries AD. The sherds have been divided by fabric type and form type. Fabric types are ordered chronologically beginning with Roman sherds. Form types are discussed within their specific fabric types. Figures below represent sherd counts and although a weight count was undertaken, figures are not given. Figures for weight counts are available in the site archive.

Fabrics have been defined by their visual characteristics using a $\times 20$ hand-lens. Some of the fabrics could not be sourced and so have been given full fabric descriptions. In order to avoid repetition not all forms have been illustrated. It was decided to illustrate only complete profiles and form-types not previously illustrated. Date ranges have been suggested for fabric types but, in the absence of independent dating on the site, reliance is made on dates established elsewhere. The reports of previous excavations in Thetford, and in particular Knocker's excavations (Rogerson and Dallas 1984), Davison's excavations in Brandon Road (Dallas 1993) and Knocker's excavations within the Red Castle (Knocker 1967, 119–186), have been cited for comparison.

No attempt has been made to phase the pottery although Figure 81 does show the percentage of each fabric type within each stratigraphic phase.

Roman

(Fig. 82)

A total of seventy-nine sherds were found ranging in date from the first to the fourth century AD. The earliest group has been attributed to features of the first century AD. The rest are residual or unstratified. Fine and coarse wares are present. The fine wares are similar to those found in Norwich (Gregory 1981, 9) and appear to be common imports to the Norwich area. Fine wares present are: Samian, Nene Valley Colour Coated, Much Hadham Redware, Oxford Red-Slip type C51.2 (Young 1977, 160) and Oxford White-Slip mortarium (Young 1977, 122). Much Hadham pottery was also found in the Davison excavations (Dallas 1993).

The majority of the Roman Pottery is grey ware, assumed to be local, but from unknown kiln sites. The most notable coarse ware is a Claudio-Neronian carinated bowl (Figure 82:1). The fabric is hard and smooth with moderate quartz grains, a grey/brown interior and burnished exterior. The form is very similar to forms found in the Davison excavations (Dallas 1993) and at Fison Way, Thetford (Gregory 1992).

Early Saxon

(Fig. 82)

A total of 375 sherds have been found of which 162 are from sunken-featured buildings (SFBs). A further

twenty-seven sherds are from features ascribed to this period and the rest are residual or unstratified.

Dallas (Dallas 1993) subdivided fabrics into nine types. An attempt has been made to classify fabrics within these subdivisions. The following types have been identified:

Type I – sandy with quartz (177 sherds)

Type II – fine sandy (one sherd)

Type III – sandy with mica (seventy-one sherds)

Type IV – sandy with quartz and white inclusions (104 sherds)

Type V – gritty, abundant quartz (ten sherds)

Type VI – calcitic inclusions with voids (five sherds)

Type IX – flint gritted (seven sherds)

Most of the sherds are black or brown although a few are grey/brown or reddish brown. External burnishing is very common, but there are also five sherds with grooving, three sherds with incising, one sherd is bossed, and one sherd has rustication (Fig. 82:7) similar to types from West Stow (West 1985, fig. 295). Unfortunately, there is not enough of the pattern to identify the type.

There are forty-two rims in the group of which seventeen are jars, twenty-one are bowls and four are cooking wares of uncertain form. The jars are all bi-conical with wide-mouths (Fig. 82:2 and 3) except one where the rim is pulled out (Fig. 82:4). The majority of the bowls are open and upright with either a thin wall (*cf.* West 1985, fig. 192:1) or a thick wall (Fig. 82:5). There is, however, one wide-mouthed bowl (*cf.* West 1985, 151:5), one upright bowl with a slightly rolled rim (Fig. 82:6) and one upright bowl with rustication (Fig. 82:7). The uncertain forms all have pulled out rims.

Eight bases are present of which four are flat with a rounded basal angle, three are rounded and one is flat. All are burnished externally.

In many cases the distinction between Iron Age and Early Saxon pottery is unclear. However, it is most likely that the 162 sherds excavated from the SFBs are Early Saxon. The pottery from this assemblage is very similar to sherds excavated by Davison (Dallas 1993). Dallas, too, had difficulty in dating sherds, but considered the majority to be Early Saxon. Close dating within the Early Saxon period is difficult and, unlike at Red Castle (Knocker 1967, 137), there were no stamped sherds.

Middle Saxon

Ipswich-type Ware

Fifty-one sherds can be ascribed to this distinctive ware which was made from c.650 AD to c.850 AD. Unfortunately, with the exception of two sherds, all were found in residual contexts. All four fabric types classified by Hurst (Hurst 1976, 299) have been identified:

a – hard sandy with smoothed or burnished surface (seventeen sherds)

b – sandy, unsmoothed surface (nine sherds)

c – hard with larger grits, rough surface (fifteen sherds)

d – hard with many grits, harsh pimply surface (ten sherds)

All of the sherds are grey or greyish brown. All are undecorated, except one example which has incised decoration. One sherd is burnished.

All the ten rims recorded are from jars. These have been identified using West's classes (West 1963, 248, fig. 41), but none of the rims is illustrated.

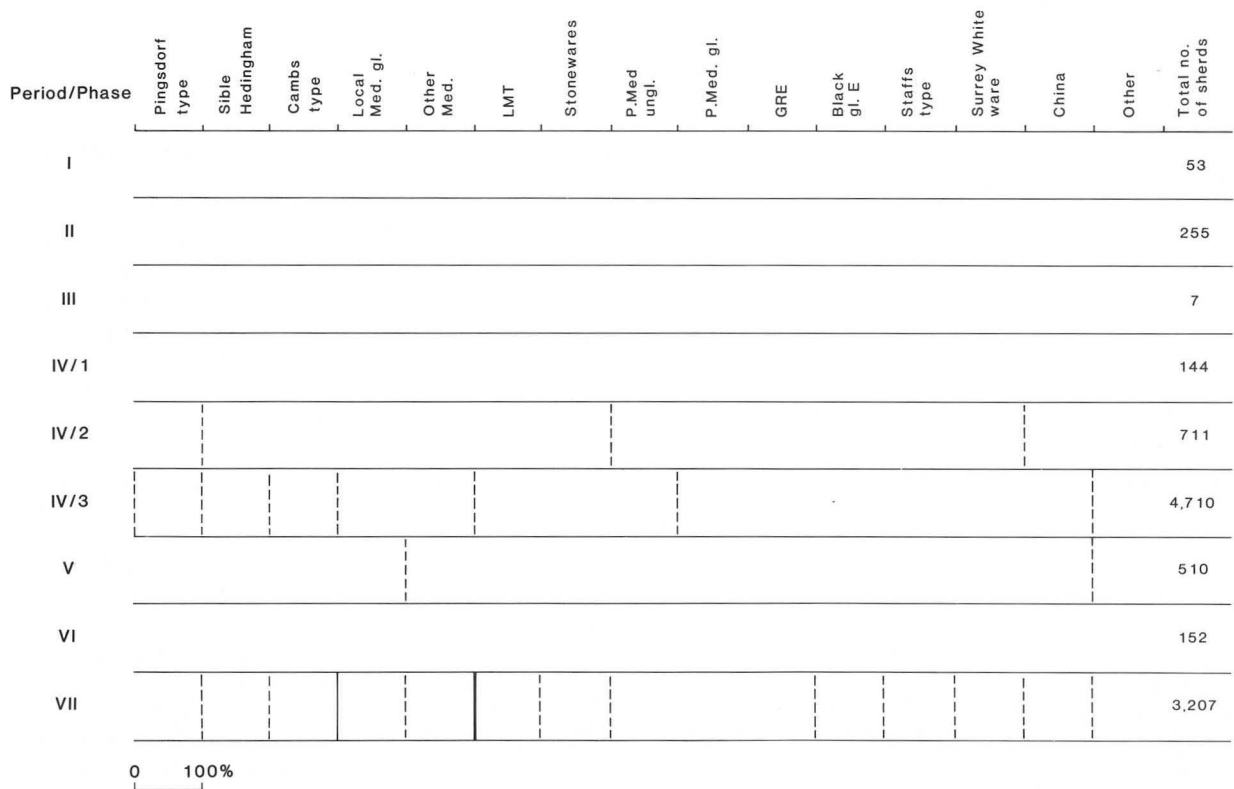
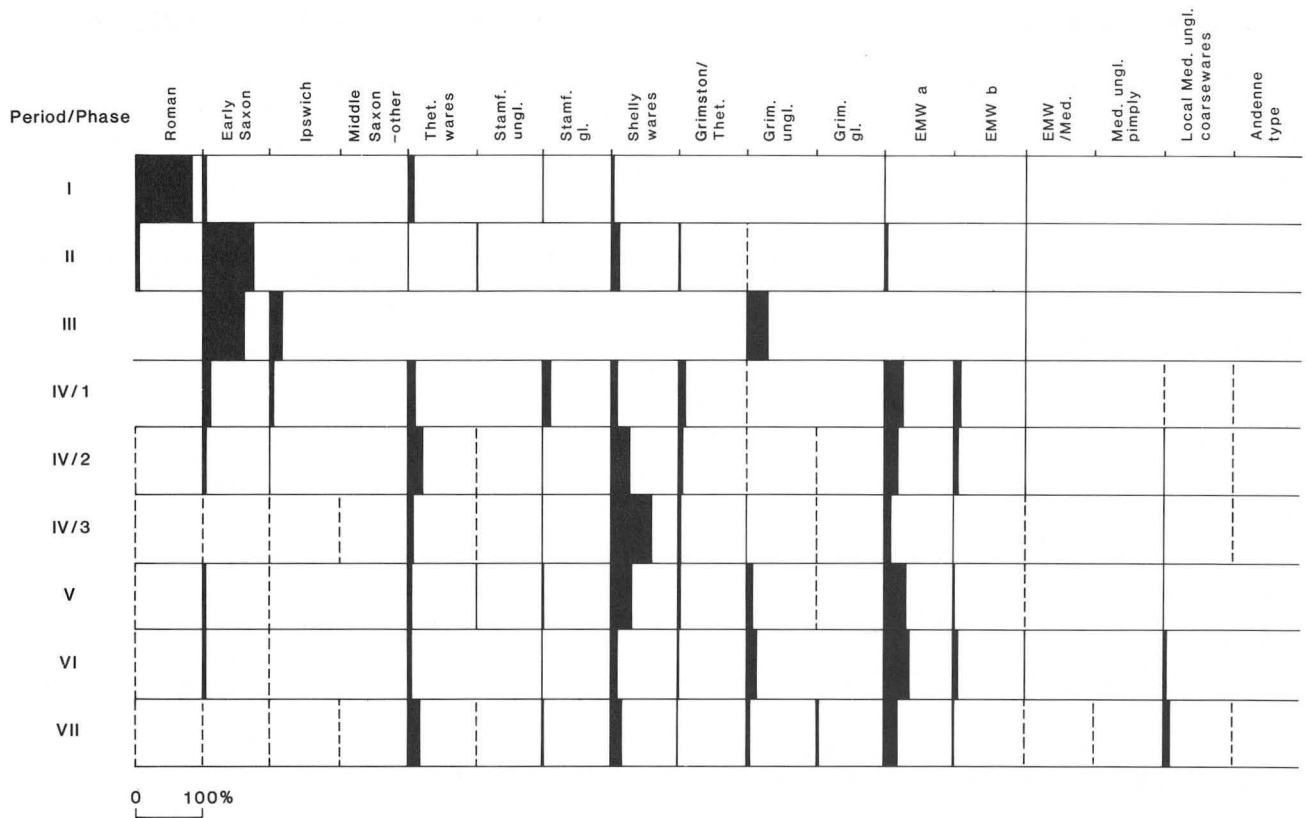


Figure 81 Pottery serigraph.

The following groups are present:

Group One – simple upright or everted rims (nine examples)

Type A – rounded in section (four)

Type B – bevelled internally (one)

Type C – bevelled externally (two)

Type E – squared (two)

Group Two – with internal hollow (one example)

Type G – incurved

There are seven bases, all slightly sagging.

Middle Saxon Wares – Imported sherd

I am most grateful to Cathy Coutts for examining this sherd (from context 947, pit 948, Period IV3) She has contributed the following note:

The sherd is possibly a continental import of the Middle Saxon period. However the fabric is not similar to Northern French Black Ware types that were imported into East Anglia in some numbers during the period. The burnished surface suggests it could be an early import (the Mayen tradition — see Redknapp 1984), although the hard grey fabric indicates that it might be a Frankish Grey Ware of uncertain date (Hodges 1981).

Thetford Ware

(Fig. 82)

A comprehensive study of Thetford Ware has been undertaken by Dallas (1984) and full use of this report has been made. Reference has been made also to Dallas's report on the Davison excavations at Brandon Road (Dallas 1993) which produced large quantities of Thetford Ware. The Redcastle Furze excavations, unlike the earlier excavations, produced much less. Only 1501 sherds, amounting to 13.5% of a total sherd count of 11,092. At Brandon Road, Thetford Ware accounts for 59.5% of the phased site material and from the Knocker excavations they account for 96.6% of the total pottery (Dallas 1984, 118). It is significant that Knocker's excavations at Red Castle produced similarly small quantities of Thetford Ware (16.8%).

Dallas identified four main fabric types (Dallas 1984, 118) and all of these are present within the assemblage:

Smooth (thirteen sherds)

Fine (sixty sherds)

Medium (710 sherds)

Coarse (191 sherds)

However, many of the sherds (527) did not fall into these categories. It is likely that these sherds were manufactured at Thetford, but were products of an industry in decline. Therefore they tend to be non-standard often with a grey core and brownish exterior. The fabric is consistently sandy but quartz inclusions are more common and irregular. The surface of the fabric is quite rough to touch.

There are seventy-six examples of decorated sherds. The most common have applied clay strips (fifty-nine examples) and diamond-notched rouletting (thirteen examples). Two sherds have incised line decoration: wavy line and zig-zagging. The remaining two sherds have thumb-printing below the rim. Decoration is often form specific. For example applied clay strips and thumb-printing below the rim occur most frequently on large jars and storage jars, but diamond notched rouletting is most common on small jars. All these decorative types

are present in the Knocker excavations (Dallas 1984, 122) and in Davison's excavations (Dallas 1993).

There are 111 rims in the assemblage. The majority of the rims have parallels in Dallas (1984, 128–159) and thus are not illustrated. Codes given to form types by Dallas are used here. The most common vessel form is the jar. This has been subdivided into six types by Dallas (1984, 120). All of these types are present in this assemblage and numbers are given below in parentheses: small jars, (AA, seventeen examples), medium jars (AB, fifty-one examples), spouted jars (AD, three examples), handled jars (AE, two examples), large non-handled jars (AF, seven examples) and storage jars (AG, twenty-seven examples).

Only four examples have been identified as bowls (BB), three as spiked lamps (DA), and three as balusters (DB). One of the balusters is illustrated (Fig. 82:9). Dallas (1984, 128–159) has further classified forms into rim types. The following rims are present here:

Small jars: AA1 (three examples), AA2 (one example), AA5 (two examples), AA7 (seven examples), AA8 (two examples) and AA11 (two examples).

Medium jars: AB1 (four examples), AB2 (four examples), AB3 (one example), AB4 (one example), AB6 (six examples), AB7 (eleven examples), AB8 (thirteen examples) and AB13 (six examples).

Spouted jars: AD6 (two examples) and AD9 (one example).

Handled jars: AE6 (two examples).

Large non-handled jars: AF1 (seven examples).

Storage jars: AG6 (twenty-seven examples).

Bowls: BB5 (one examples), BB7 (two examples).

Only one rim of a bowl has been illustrated (Fig. 82:8). This has no parallel. It shows traces of an applied clay strip decoration.

There are sixty-five bases and all are sagging. Base radii vary from 3cm to 30cm. There are thirty-five handles of which nineteen are strap, eleven have a central ridge, two have a double ridge, one is multi-ridged, one is plain and one is unrecognisable. No spouts were recovered.

Precise dating of Thetford is not possible, and Dallas had to rely on the presence of Stamford Ware types and of Early Medieval Wares. She was able, however, to demonstrate differences between eleventh-century material and that pre-dating it. For example, 'standard' Thetford Ware (*i.e.* Medium fabric, jar types AB7 and AB13, the carinated bowl type BB12 and spouted jar type AD3) was found to be common in earlier (tenth-century) deposits. Deposits containing eleventh-century material produced mainly fine and smooth wares with jars of plain or upright rims, storage jars, large non-handled jars and lamps. The absence in the Redcastle Furze assemblage of BB12 is significant. Storage jars are common, and both smooth and fine wares are present, albeit in small quantities. The presence of quite high numbers of less standardised Thetford Ware with great varieties of fabrics and colouration also indicates a later date. The occurrence of later material, including Grimston coarse wares, Shelly Wares and Early Medieval Wares, in contexts containing Thetford Ware is indicative of an eleventh-century industry in decline. The end of the industry is still obscure. Thetford Ware occurs in Periods IV, V, VI and VII at Redcastle Furze site making it impossible to define the point at which Thetford Ware ceased to be produced. However, with the increasing presence of other coarse

wares it is unlikely that production continued much beyond the early twelfth century.

Late Saxon Wares – other

(Fig. 82)

One rim has been identified whose form is very similar to Thetford AA7 (Dallas 1984, 128), but whose fabric is not similar to Thetford Ware. The fabric is finer. It is rouletted (*cf.* Dallas fig. 183:142; Dallas 1984, 163). It is quite possible that this is a Thetford Ware sherd although the fabric does not indicate this. The form is illustrated (see Fig. 82:10) but has been placed after the Thetford Wares in the catalogue because of its uncertain source.

Six sherds have been identified which probably come from a Saxo-Norman vessel. The fabric is orange with yellowish margins, and sandy with sparse quartz inclusions. A very thin, yellow slip has been applied externally. There is one rim which is from a jar. It is of an everted type which has been expanded to form a wedge (*cf.* Thetford type AA12; Dallas 1984, 129). It is not illustrated.

Stamford Wares

(Fig. 82)

Mahany's fabric classification (Mahany, Burchard and Simpson 1982, 56) has been used to identify Stamford Ware sherds as it proved impractical, without microscopic examination, to adopt Kilmurry's fabric type series (Kilmurry 1980, 8–9). Mahany, using only macroscopic examination, identified three fabric types:

A – Normally cream or white, but may be pinkish. Hard, sandy with quartz and clay pellet inclusions.

B – Oxidised cream or pale pink. Finer and smoother than A. No sand. Quartz and clay pellet inclusions.

C – Whiter than B. Softer and finer than B. Few quartz inclusions.

Fabric A corresponds to mainly coarse wares of the tenth and eleventh centuries, whereas Fabric B is linked to the developing fine ware industry which became the mainstay of Stamford Ware production by the late eleventh century. Fabric C spans a period from the mid-twelfth century to the end of pottery production in the thirteenth century.

Mahany also identified three main glaze types:

1. Pale yellow or light green characteristic of Early Stamford Ware. Mainly on Fabric B.

2. Dull grey-green and sparse. Characteristic of some vessels occurring towards the end of the Early Stamford range. Normally occurring on Fabric B.

3. Lustrous dark green 'copper' glaze characteristic of Developed Stamford. Occurring on Fabrics B and C. Introduced in the mid-twelfth century.

All three glaze types are lead based, but Glaze 3 has the addition of copper filings giving a mottled or speckled apple green colour usually on a pale yellow/orange background.

There are 318 sherds of Stamford Ware: 102 sherds in Fabric A; 206 in Fabric B, glaze 1; eight in Fabric B, glaze 2; and two in Fabric C, glaze 3.

Stamford Ware forms are fabric related, although stylistic changes can also be demonstrated (Kilmurry 1980, 130–1). Jars, bowls, storage jars and costrels are common in Fabric A (Mahany, Burchard and Simpson 1982, fig. 32). Jars especially, are reduced to a light grey.

Fine ware vessels in the Early Stamford Ware range include pitchers, jars, flanged bowls and jugs. Developed Stamford Ware forms include tubular spouted pitchers, bottles and bowls (Mahany, Burchard and Simpson 1982, 156).

A total of thirty rims are present of which fourteen are in Fabric A and sixteen are in Fabric B, glaze 1 (numbers are given in parentheses). Only one, a complete profile is illustrated.

Stamford A:

Crucibles (Kilmurry 1980, type 16) (two examples)

Ovoid vessels (Kilmurry 1980, type 19) (one)

Bowls (Mahany 1982, A9) (nine)

Jars (Mahany 1982, A1) (one)

Jars (Mahany 1982, A3) (one)

Stamford B1:

Bowls (Mahany 1982, B10) (two examples)

Spouted Pitchers (Mahany 1982, B1) (eleven including Fig. 82:11)

Jugs (Mahany 1982, B11) (one)

Jugs (Mahany 1982, B13) (one)

There are no rims present in Developed Stamford Ware. All the forms are typical of the tenth- and eleventh-century coarse ware tradition and the early fine ware tradition, except the two jugs which were produced in Stamford from the mid-twelfth century onwards.

Only nineteen bases were recovered of which seventeen are sagging and two are flat. Seven of these are in Fabric A and the remainder in Fabric B1. There are only three handles, all of which are strap and in Fabric B1. Decorated sherds are rare within this group. There are only three examples of decoration and all are incised. Kilmurry types M21 (one example) and M23 (two examples) are represented (Kilmurry, 1980, 22).

Fine wares are present in higher numbers (67.9% of the total sherd number). The forms are mainly representative of the eleventh-century Stamford Ware industry. The only two exceptions are the two jugs. The range and number of forms, however, is limited. Cooking wares are not well represented. Crucibles and ovoid vessels occur rarely.

The date range represented in this group is very similar to that from the Knocker excavations (Kilmurry 1984, 124). Here there was a wider range of forms including cooking wares and large straight-sided bowls which are not present in the Redcastle Furze group. In Davison's excavations (Dallas 1993) a date range of eleventh and twelfth centuries was given for the Stamford Wares, although the rims were mainly of eleventh-century types. Coarse wares were present in slightly greater quantities (45% of the total sherd number) than fine wares (30%).

It is difficult to assess the importance of these comparisons because the numbers of sherds are small. The evidence from these sites, however, does show that there were trading relations between Stamford and Thetford in the eleventh and early twelfth centuries. Kilmurry suggests that the decrease in Stamford Ware from the mid-twelfth and early thirteenth century might reflect a general reduction in the occupation of Thetford south of the river, (Kilmurry 1984, 124). At Redcastle Furze the density of occupation does not decrease significantly until after the twelfth century when activity is restricted to the house and its outbuildings (Structures 6, 7 and 8). The numbers of Developed Stamford Ware, however, are very

small and may suggest a decline in trading relations between the two towns during the twelfth century.

Shelly St Neot's-type Wares

(Figs 82 and 83)

The classic soapy St Neot's-type Ware predominates with a very small number (less than ten) of a sandier, later shelly ware. St Neot's-type Ware has a very wide distribution and is found in Northamptonshire (McCarthy 1979, 256), Bedfordshire (Baker *et al* 1979, 165), Cambridgeshire (Hurst 1976, 323) and Lincolnshire (Adams 1977). Shelly Wares in Lincolnshire have been classified into four types and the fine-shelled type 1 wares belong to the same tradition as St Neot's-type Wares (Adams 1977, 2). Hunter (1979, 240) has suggested a strong correlation between the outcropping Jurassic geology and the distribution of St Neot's-type Ware. This is supported by scientific analysis. Unfortunately, in the absence of known kiln sites, the number of actual sources can only be guessed at. However, it is likely, that production was fairly small scale, and distribution confined to relatively limited local areas.

The Shelly Wares at Redcastle Furze represent 38.9% of the total assemblage (11,092 sherds). They are probably from a source in the Cambridgeshire or Huntingdonshire area. The fabric has a grey/black core with either red or brown margins. It is soft, often friable, and soapy to touch. It has abundant calcareous inclusions (predominantly shell) and occasionally sparse quartz. A small number of sherds (less than ten) are hard and sandier. These are characteristic of a twelfth century shelly ware (Hurst 1976, 323).

There are three main forms present and all are noted by Hurst as being common within the Late Saxon period (Hurst 1976, 323):

1. Deep bowl with a bold inturned rim, sloping sides and a sagging base. (Thirty-nine examples, see Fig. 83:120–22).
2. Shallow dish with slight sagging base and hammerhead rim. (forty-one examples, see Fig. 83:25).
3. Small, everted jars which are either plain flared (217 examples), and without an internal hollow (165 examples), or with an internal hollow (fifty-two examples, see Fig. 82:12); or expanded to a wedge (313 examples) and without an internal hollow (183 examples, see Fig. 82:14); or with an internal hollow (130 examples, see Fig. 83:15).

To these main types can be added the following rim types:

4. Straight-sided bowl (six examples, *e.g.* Fig. 83:23–24).
5. Jars. Plain flared with external groove (six examples, *e.g.* Fig. 82:13), rounded with lid seating (five examples, *e.g.* Fig. 83:16), curving with rim pulled down internally (seven examples, *e.g.* Fig. 83:18), expanded to wedge with finger-printing on rim (three examples, *e.g.* Fig. 83:18, and plain flared with a wavy top (three examples, *e.g.* Fig. 83:13).
6. Spouted bowl with inturned rim (two examples, *e.g.* Fig. 83:26). This type was noted by Hurst as very rare (Hurst 1956, 46).

There are no jug rims present in this assemblage, although some of the handles may derive from jugs. There are 224 bases, all of which are sagging. Many are knife trimmed. Sooting is frequent and often heavy, demonstrating domestic use. There are eighty-six fragments of handles of which twenty-three are flat,

forty-seven are strap, twelve are strap with a central ridge, one is strap with a finger-printed central ridge and three have a double ridge with finger-printing. The handles belong either to jugs or storage vessels which both occur late in the series. Decoration is rare: applied thumb-strips on one body sherd; finger-printing on four handles and on two rims.

Small jars and bowls with inturned flanges which are both common during the Late Saxon period (Hurst 1976, 323) predominate within the assemblage (over 90% of the total rims (641 examples)).

At Northampton, St Neot's-type Wares were associated with pennies of St Edmund (McCarthy 1979, 156), and a starting date of *c.*900 was suggested. In Lincolnshire, wheel-made Shelly Wares occur in large numbers from the tenth century (Adams 1977). It is unlikely that the Shelly Wares at Redcastle Furze are ninth- or even tenth-century because of the absence of other material, such as coins, of this date. The majority of shelly wares on this site are eleventh-century.

There are a small number of later forms present in this assemblage, for example bowls with upright rims (*e.g.* Fig. 83:23 and 24), jars (*e.g.* Fig. 83:17–19) and ?jugs. It is probable that the change from Late Saxon to medieval forms was gradual, although it may have occurred by the early twelfth century. The demise of this fabric is noted at Goltho towards the middle of the eleventh century (Coppack 1987, 164), and in Lincoln numbers decrease significantly after the eleventh century (Coppack 1973).

Grimston Coarse Wares

There are 938 sherds of Grimston coarse wares of which 495 sherds are Grimston/Thetford and 443 are Unglazed Grimston. Fabric descriptions for these wares are given in Little (1994). Grimston/Thetford ware has been recognised within the later deposits of Knocker's Site 2 (Dallas 1984, 118) but is not common. It also occurred in small quantities in Davison's excavations at Brandon Road. It is difficult to assess the presence of Unglazed Grimston in the assemblages from earlier excavations because prior to the reclassification of Grimston coarse wares (Little 1994), all coarse wares were known as Grimston/Thetford ware. It is likely however, that Unglazed Grimston is present within these other groups from Thetford, albeit in small amounts.

A total of sixty-six rims were counted. The majority of the rims can be classified after types identified by Little (1994) and are not illustrated. The following rims are present:

Grimston/Thetford Ware

Jars: Plain flared with internal hollow (JB) (three examples)

Expanded to wedge, no internal hollow (JC) (seven examples)

Multi-handled jars with applied rim (HJB) (eleven examples)

Bowls: Straight-sided (BK) (two examples)

Out-turned, flaring (two examples)

Expanded to wedge (one example)

Unglazed Grimston Ware

Jars: Expanded to wedge, no internal hollow (JC) (one example)

Expanded to wedge with internal hollow (JD) (four examples)

Flat top with internal hollow (JG0) (three examples)

Spouted jars: Expanded to wedge (SJA) (two examples)

Handled jars: Expanded to wedge (HJA) (four examples)

Multi-handled applied rim (HJB) (sixteen examples)

Bowls: Rolled and pulled in (B1) (eight examples)

Rim pulled down internally (two examples, *e.g.* Fig. 85:57)

Twelve bases are present and are all sagging. Four of the bases are Unglazed Grimston and the others are Grimston/Thetford. There are three examples of knife trimming, but otherwise no decoration. All of the thirty-two handles are strap, of which twelve also have a central ridge and one has three rows of stabbed dot decoration. The majority of the handles are Unglazed Grimston (twenty-six examples). Decoration on body sherds is limited to applied clay strips with thumb-printing. This occurs on multi-handled storage jars in both fabrics.

Problems in dating Grimston coarse wares have been discussed (Little 1994). Grimston/Thetford can be seen as an earlier product and was probably produced during the eleventh century. Unglazed Grimston represents a change towards more medieval styles, although some forms do show a continuing use from the earlier fabric, for example the multi-handled jars and the jar forms JC and JD. Unglazed Grimston has been given a tentative date range from the mid-twelfth centuries to the early thirteenth centuries.

Early Medieval Wares

(Figs 83 and 84)

There were 2066 sherds of these local wares, falling into two basic fabric divisions:

E.M.W.A. Dark grey/black core with brown or red exterior surfaces. Sandy, rather coarse fabric with common quartz inclusions. Often micaceous, (1840 sherds).

E.M.W.B. Dark grey/black core with reddish brown margins. Coarse fabric with common quartz and calcitic inclusions (226 sherds).

Dallas (Dallas 1984, 123) identified a third fabric; a pimply fabric with dominant quartz particles. This fabric has been recognised in the Redcastle Furze assemblage, but is included within the medieval coarse wares because its related forms are stylistically medieval.

The majority of the forms are jars (78.4% out of a total of 199 rims). The forms have been divided into the following groups:

1. Small jars (sixty-eight rims). These have plain flared rims and are thin walled. All but two examples are in fabric A. Only two sherds are decorated and these have traces of finger-nail prints on the rim. An example of this type is illustrated (Fig. 83:27).

2. Large jars with expanded tops (sixty-three rims). The rim is either expanded to a wavy top (forty-six examples, *e.g.* Fig. 83:28) or expanded to a wedge (six examples, *e.g.* Fig. 83:29). These two forms only occur in Fabric A. There are five examples of decoration and all have finger-printing on the rim. Again, vessel walls tend to be thin, although there are a few examples with thicker walls.

3. Other large jars. Four types have been identified whose forms are stylistically medieval, but whose fabrics are early medieval. It is likely that they represent a transitional

period from early medieval to medieval. These forms do have parallels within the medieval coarse wares of this assemblage. The rim is either expanded to a triangular section (nine examples, *e.g.* Fig. 83:30), expanded and pulled out (two examples, *e.g.* Fig. 83:31), expanded and slightly rolled (eighteen examples, *e.g.* Fig. 83:32), or expanded and has a collared neck and an internal hollow (one example, *e.g.* Fig. 84:33). Both fabrics are represented by these forms. Vessel walls and rims tend to be thicker than the small jars. Decoration is limited to incised wavy lines on type e jars.

4. Ginger jars. There are only two examples of this form, of which one is illustrated (Fig. 83:34). In both examples the vessel walls are thin and they are decorated with thumbing around the outside of the rim.

5. Bowls. These are not common (only 15.6% of the total rims). The rims are either plain or expanded, and occur in both fabrics. There are two types of plain rim, rounded (two examples) and squared (ten examples); and five types of expanded rim, wedged (six examples), internally expanded (three examples), rolled internally (one example), pulled out slightly (six examples) and triangular section (two examples). All of these types are illustrated except plain rounded, expanded pulled out and expanded triangular section, which are the same as the jar rims (see Fig. 84:35–39). Decoration is not common. There is one example with a hole made approximately 1cm below the rim, two examples of incised decoration and five examples of grooved rims.

6. Spouted bowl. There is only one example, in Fabric A. The rim is incomplete but it is probably from a spouted bowl. It is decorated with incised lines.

Decoration is not common on Fabric A body sherds and is confined to incised wavy lines (four sherds) and diamond-notched rouletting (two sherds). There is no decoration on Fabric B body sherds. Bases are rare in Fabric A. There are only five examples of which two are rounded and the other three are slightly sagging. It is likely that these come from large jars. There are ten bases in Fabric B of which nine are slightly sagging and the other is rounded.

It has been suggested that the small plain jars and ginger jars are diagnostic of the eleventh and possibly early twelfth century (Dallas 1984, 124). This is based on their similarity to certain Thetford-Type Ware forms. The larger jars with their thick walls are considered to be twelfth century. Both these suggestions seem likely. The other large jars show similarities to medieval forms, and are twelfth century. The plain flared small jars are stylistically Late Saxon.

The shortage of ginger jars is curious and especially so because a similar dearth has been noted from Knocker's excavations at the Red Castle (Dallas unpublished). It is difficult to assess whether this general lack of ginger jars is significant or is coincidental. It is unlikely to be explained chronologically because of the presence of the small jars, but it is possible that the function of these two sites precluded this specific form type. In Davison's excavations at Brandon Road however, only eight ginger jars were recovered (Dallas 1993), and considering the large extent of the excavation this too is a low figure. It seems probable that ginger jars were rarely used in Thetford.

Early Medieval Wares are represented at Redcastle Furze from their earliest forms in the eleventh century and

continue into the twelfth century. Over this period stylistic changes can be seen. The early forms are very similar to Late Saxon forms from Thetford (Dallas 1984, 124), but the larger jars resemble some of the medieval forms (for example, Fig. 84:33 is similar to Fig. 85:49). There does not appear to have been a break in the supply of these local wares and this pattern is seen also at Red Castle (Dallas unpublished).

Local Medieval Unglazed Coarse Wares

(Figs 84 and 85)

Local coarse wares are represented at Redcastle Furze probably from the twelfth century. They are part of a continuing development of locally produced wares following on from the Early Medieval Wares. Only 362 sherds can be ascribed to these local wares, of which fifty-two are of the pimply fabric identified by Dallas (Dallas 1993). Two fabric types have been identified which are described below:

Fabric C: Grey or grey with buff margins. Coarse, hard fabric, slightly sandy with moderate quartz inclusions (310 sherds).

Fabric D: Grey or grey/buff. Coarse, hard fabric with common abundant quartz inclusions creating a 'pimply' surface (fifty-two sherds).

Decoration is not common. Four sherds showed wavy-line incising on the rim, two had finger-prints on the rim and one had thumb-prints below the rim (see Fig. 85:51). The last example is a common form of decoration on coarse wares from Suffolk, although no production centre has been found. It is also similar to decoration found on Thetford Ware large jars; for example Dallas type AF7:258 (Dallas 1984, fig. 167).

111 rims have been found of which eighty-eight are jars, twenty-one are bowls and two are jugs. Many of the forms overlap with Early Medieval Ware forms as mentioned earlier and because of this are placed earlier in the sequence of illustrated types. The following rim types have been found:

Jars: Jars account for the majority of the form types. Most of the rims are expanded, with only four plain types. All of the plain rims have internal hollows (not illustrated) and three are in Fabric D. The expanded rims are rectangular-sectioned (six examples, *e.g.* Fig. 84:40), square-sectioned (five examples, *e.g.* Fig. 84:41), square-sectioned but with a collared neck one example, *e.g.* Fig. 84:42), wedged and beaded (twenty-six examples, *e.g.* Fig. 84:43), wedged (thirteen examples, *e.g.* Fig. 84:45), triangular-sectioned with internal hollow (four examples, *e.g.* Fig. 84:46), triangular-sectioned without internal hollow (five examples, not illustrated), grooved and with internal hollow (three examples, *e.g.* Fig. 84:46 and 48), with rim externally and internally protruding (three examples, *e.g.* Fig. 85:49), with rolled rim (five examples, *e.g.* Fig. 84:47), and curved inwards (one example, not illustrated). Wedged and beaded, wedged, and triangular sections with internal hollow rims occur in both fabrics, but the other types only occur in Fabric D.

Bowls: Bowls are not as common as jars. They occur in seven different rim types: expanded to triangular section (five examples, *e.g.* Fig. 85:50), expanded to triangular section with grooved rim (three examples, *e.g.* Fig. 85:51), with rim pulled upwards (three examples, not illustrated), plain flared (one example, not illustrated), protruding

internally and externally (one example, *e.g.* Fig. 85:52), with rim internally pulled down (six examples, *e.g.* Fig. 85:53) and straight-sided with internal hollow (two examples, *e.g.* Fig. 85:54). The rims are similar to jar rims but have a wider mouth and are not everted. All but one of the rims are in Fabric C.

Jugs: Two rims are probably jugs although there is not enough of them remaining to be certain. Both rims are illustrated, see Figs 85:55 and 56. Fabrics C and D are represented.

There are fifty-five bases of which five are in fabric D. All are sagging. Knife-trimming is quite common and many of the bases show heavy sooting. There are two examples where finger-prints can be seen on the interior of the pot. There are only three handles of which one is a rod decorated by stabbed incised lines, one is a strap, and one is a strap with a central ridge. The rod handle is in Fabric D but the other two are in Fabric C.

Although no definite dates can be given for these local wares they appear in large numbers until the fifteenth century (Jennings 1981, 41). Typology is not distinct, although differences in style are noticeable between the medieval coarse wares and the Early Medieval coarse wares particularly in vessel size and thickness. The assemblage appears to be earlier in the series because there is a distinct overlap in style between the Early Medieval and the medieval coarse wares. Only Fig. 85:53 is typically high medieval. Fabric C is probably more typical of a transitional period between Early Medieval and medieval because sand is still being used (albeit in small quantities) as a temper. The thirteenth- and fourteenth-century coarse wares are not sandy, but have dense quartz inclusions. Fabric D has been suggested by Dallas as belonging to the mid-to late twelfth century and possibly the early thirteenth century (Dallas 1993).

Medieval Imports

There are only two imported wares represented in the assemblage: Pingsdorf type Ware and Andenne-type Ware.

Pingsdorf-type Ware

This ware has been described by Jennings (1981, 29). It spans the tenth to thirteenth centuries. Only one body sherd was found.

Andenne-type Ware

Described by Jennings (1981, 30). This ware was imported from the eleventh to the thirteenth century. Thirty-six sherds could be ascribed to this ware, of which seven are rims (not illustrated). All but one of the rims are probably spouted jars. The other is probably a bowl. The spouted jars have a collared rim (*c.f.* Jennings 211 and 213; Jennings 1981, 30). The bowl also has a collared rim with an internal seating. All of the rims have traces of orange glaze.

It is interesting to note that there were few imported sherds from the Knocker excavations (Dallas 1984, 124) and the same was noted in Davison's excavations (Dallas 1993). It is clear that few imports were reaching Thetford.

Medieval Glazed Wares

Two glazed fabrics have been identified to source, Grimston Glazed and Hedingham Wares. There are, however, ten fabric types which cannot be sourced, but are probably locally-made. One is similar to fabrics found in

West Norfolk and termed Cambridgeshire Type (Little forthcoming). Medieval glazed wares represented here are defined as follows:

Grimston Glazed Ware

(Fig. 85)

This fabric is discussed fully by Little (1994). The 116 sherds found here correspond to Grimston glazed type A. Eight rims were found of which two are illustrated (Fig. 85:58 and 59). Six rims come from jugs and are either straight-sided as GGB, or straight-sided with external cordons (two examples, *e.g.* Fig. 85:59). One rim comes from a bowl as GBG, and one rim comes from a jar with a lid-seating (*e.g.* Fig. 85:58). There are thirteen handles of which four are strap, three are strap with a central groove, two are plain with central stabbed dots, one is plain with a central groove, one has three grooves, and two have a double ridge. There are eight bases, all but one sagging. Decoration is limited. Two body sherds have applied clay strips with a brown iron oxide slip covering and one has a raised flower pattern in a yellow glaze. There is also one incomplete example of a face jug. Glazes, either patchy and thin, or uniform and thick, are usually applied externally although occasionally internally (*e.g.* Fig. 85:58).

Other Medieval Green Glazed Wares

Sixteen sherds have a green glaze similar to Grimston but differ in fabric. This is grey often with red margins, coarse, hard, and with moderate to common quartz inclusions.

No rims are present.

Sible Hedingham Ware

Seventeen sherds are very similar to a fine fabric identified by Dallas as having been produced in kilns at Sible Hedingham, Essex (Dallas 1984, 124).

The fabric is orange/brown, smooth and fine with abundant mica. The glaze is yellow to olive brown.

Two of the sherds are decorated. One has applied pellets in a reddish orange glaze and the other has applied strips in a similar glaze.

There are nine sherds which are coarser, with abundant quartz inclusions, but are similarly glazed and decorated. It is not certain if these were produced at Sible Hedingham, but they were also recorded from the Knocker excavations (Dallas 1984, 125).

No rims have been found in this fabric but there is one strap handle in the fine ware which is glazed and decorated by wavy incised lines, and also one base in the same fabric. The base is sagging and has spots of yellow/brown glaze. Hedingham Wares are dated to the twelfth and early thirteenth centuries.

Medieval Glazed Wares: other

A total of twenty-eight sherds have been identified which were probably locally produced but cannot be sourced. It is impossible to establish any definite dates for these wares but they probably span the thirteenth and fourteenth centuries.

The fabrics are coarse except for two sherds which are smooth and hard and have a high quartz content. Fabric colour varies from grey often with red margins to pinkish or orange/brown. The glaze can be pale yellow to green and is either uniform or patchy.

Only one rim and two bases have been found. The rim is from a jug (not illustrated) and both the bases are sagging. None of the sherds are decorated.

Cambridgeshire-type Ware

This ware is common in West Norfolk, and may also be unglazed. It is distinguished by the additions of small calcitic particles which are probably chalk. Only twenty-two sherds have been identified of which only six are glazed. The glaze is green but tends to be patchy.

This ware has been recognised at Barton Bendish (Little forthcoming) and at King's Lynn. At King's Lynn it was labelled 'Grimston software' (Clarke and Carter 1977), but it was not produced at Grimston (Little 1994).

Late Medieval Transitional Wares

(Fig. 85)

This name was applied by Jennings (1981, 61) to a large and varied group of wares covering the period between the early fifteenth to later sixteenth centuries. Production centres have been found in north-east Suffolk. These wares occur in reasonable quantities and there are several different fabric types. In this assemblage, 136 sherds and eight different fabric types have been identified.

All of the fabrics are hard and slightly sandy, but the quantities of quartz inclusions vary as does the feel of the fabric which can be either smooth or coarse. The colour and glaze also varies as described in Jennings (1981, 61). None of the sherds are decorated.

Ten rims have been found of which seven are jugs, one is a bowl and two are jars. Four rim types have parallels in Jennings (1981, 61–71). Jennings' numbers (1981, fig. 27) 452 (three rims), 456 (one rim), 461 (one rim) and 464 (two rims) have been identified. The bowl has an out-turned rim. One of the jars is internally bevelled (see Fig. 85:60).

There are eight bases of which six are sagging and two are flat with rounded basal angles. One of the bases has pairs of thumb-prints around its base. There are fourteen handles of which six are strap, two are strap with a central ridge, one has a double ridge, two have multiple ridges, two are plain and one is a rod handle with a triangular section. Three of these handles are from either pipkins or skilletts. One handle is decorated by three incised lines.

Stonewares

There are ten stoneware sherds, and all are either Langerwehe or Langerwehe/Raeren. There is one proto-stoneware base which is probably Langerwehe and can be dated to the thirteenth and fourteenth centuries. The others are body sherds of uncertain date, although such wares occur in Norwich in late fourteenth, fifteenth and possibly sixteenth century contexts (Jennings 1981, 109–112).

Post-Medieval Wares

A total of 174 sherds are of post-medieval or later date. Both unglazed and glazed sherds are present. Twenty-nine of the sherds are Glazed Red Earthenware described by Jennings (1981, 157), and were produced from the first half of the sixteenth century to the end of the eighteenth century. There are three rims present: a dish of Jennings type 1119 (1981, fig. 65), a large bowl of Jennings type 1214 (1981, fig. 69) and a ?lid of Jennings type 1322

(1981, fig. 79). There is one strap handle which is incomplete.

There are four sherds of Black Glazed Ware of which one is a pedestal base (Jennings 1981, 150). The only other identifiable wares are Iron Wash Glazed Ware (one sherd), Late Stonewares (eight sherds) and china (103 sherds).

There are twenty-four sherds which can not be sourced but are characteristically post-medieval. Thirteen of these sherds are unglazed.

Unidentified Sherds

There is a small group of nineteen sherds which could not be identified. They are described below:

Group 1 (seven sherds)

These sherds have a similar orange fabric which is smooth, slightly sandy, with small white inclusions. Vessel thickness varies. The colour is not always uniform. Two sherds are grey with orange margins.

Group 2 (two sherds)

This fabric is blue/grey and has black iron ore inclusions. The rim is flat and curves slightly inwards. Probably imports.

Group 3 (one sherd)

This fabric is buff with a pinkish core, smooth and hard with sparse iron ore inclusions.

Group 4 (one sherd)

This fabric is cream with a pinkish core, slightly sandy with a few clay pellet inclusions.

Group 5 (one sherd)

This fabric has a grey core with an orange lower margin and a brown upper margin. It is smooth and very hard with moderate quartz inclusions and sparse red clay pellets. There is a deposit on the inner surface.

Group 6 (one sherd)

A thick-walled vessel. The fabric is buff, smooth and very hard, with moderate quartz inclusions. The sherd is covered both internally and externally by a thick, yellowish brown glaze, and is decorated with an applied clay strip which has been thumbled. Probably medieval.

Group 7 (two sherds)

This fabric is pale pinkish buff or orange, smooth and hard with small reddish brown inclusions. It has a yellowish/green glaze which is very patchy on one of the examples. The handle is a small, plain rod.

Group 8 (one rim)

This fabric is pinkish orange, coarse and hard with common quartz inclusions. A greenish-yellow glaze has been applied internally. The everted rim is from a jar. Probably medieval.

Group 9 (one handle)

This fabric has a blueish grey core with pinkish buff margins, is smooth, very hard and sandy, with sparse quartz and iron ore inclusions. A green glaze has been applied though this is patchy. The handle is a simple strap. Medieval.

Group 10 (two sherds)

These are thick-walled. The fabric is dark grey, smooth, very hard and sandy with sparse quartz and small white inclusions.

Group 11 (one sherd)

This fabric is greyish buff, coarse and hard with moderate quartz inclusions. A greenish glaze has been applied both internally and externally. Probably late medieval.

Quantities of Fabric Types

The quantitative analysis was done by counting and by weight. Figures for weight (available in archive) are not presented here because they show results almost identical to the figures for count. Figure 81 illustrates each fabric type as a percentage of the total number of sherds for each period and phase. The fabric types are arranged chronologically from left to right, with the earliest period at the top of the serigraph. The total number of sherds for each period is also given. The periods are based on stratigraphy alone and do not take into account any evidence from the pottery. However it is acknowledged that the serigraph presented can only show fabric types in relation to each other, and their position along the horizontal axis is therefore based on dates taken from either their production sites or from other sites where dates have been obtained.

The serigraph illustrates that in general terms the earlier a fabric occurs within the sequence, the earlier its stratigraphic period. Probable residual and intrusive sherds have not been excluded from the calculations, and it is likely that many of the anomalies observed are due to these sherds. For example, Periods I to III contain very small quantities of Thetford Ware, Stamford Ware, Shelly Wares, Early Medieval Wares and Grimston coarse wares which are all intrusive. Percentages do not always reflect true figures. For example in Period III, Unglazed Grimston is represented by a relatively high percentage, but in reality accounts for only two sherds. It is difficult to assess at what point sherds become residual. Period VII is especially likely to contain many residual sherds because it includes several layers of mixed origin.

The serigraph demonstrates a bias towards those fabric types which occur earlier within the sequence, during the eleventh and twelfth centuries. In particular, Thetford Wares, Shelly Wares, Early Medieval Wares and Grimston coarse wares are well represented. All of these fabrics have date ranges between the early eleventh and end of the twelfth century. In contrast, medieval wares are not well represented. This may suggest that occupation was densest before the thirteenth century or that there was a change in disposal patterns. Excavations indicate the former to have been the case.

Presence of Main Fabrics within each Period and Phase

Roman

Roman pottery occurs most frequently in Period I. Amounts decrease significantly after this, although several sherds of Colour Coated Ware were found in sunken-featured buildings.

Early Saxon

Early Saxon pottery occurs most frequently in Period II. In Period III the percentage figure is distorted because of

the low total sherd number; only four sherds were found in Period III.

Ipswich and other Middle Saxon Wares

Ipswich and other Middle Saxon Wares do not occur until Period III. In general terms they are more common in the north-west part of the site, but only two sherds were found in Period III features. The remainder were residual in later contexts.

Thetford Ware

These wares were probably first used on the site in Period IV1. The numbers of these wares peak in Period IV2, but occur in relatively large amounts up to Period V. In Period VI there is a significant decrease, but the increase in Period VII is probably an anomaly, the result of layers of mixed origin being included in the calculations. It is difficult to infer at what point these wares ceased to be used but they are probably residual by Period V and certainly by Period VI.

Stamford Ware

This ware is not well represented within the assemblage. It occurs most frequently in Period IV1 but decreases significantly after this period. After Period V it is probably residual.

Shelly/St Neot's-type Wares

Shelly/St Neot's-type Wares show a similar pattern of deposition to Thetford Ware. Numbers peak in Period IV3 and are probably residual after Period V.

Grimston Wares

Grimston/Thetford Wares demonstrate different patterns of deposition to Unglazed Grimston Wares. Grimston/Thetford Wares occur earlier in the stratigraphic sequence, and are most frequent in Period IV1. Unglazed Grimston does not occur frequently until Period V by which point Grimston/Thetford Wares have decreased in number.

Early Medieval Wares

These wares do not show any clear patterns of deposition and tend to occur in relatively large amounts from Period IV1 to VII. Period VII figures, however, are distorted by the inclusion of several layers of mixed origin. It appears that there was a steady supply of local coarse wares from Period IV until Period VI.

Local Medieval Unglazed Wares

These wares do not occur in any significant amounts until Periods VI and VII. It is likely that they are intrusive until Period VI.

Medieval Glazed Wares (including Grimston, Hedingham)

These wares are not well represented within the assemblage. They occur in very small quantities from Period IV2 to Period VII. Numbers present are too small to infer patterns of deposition.

Late Medieval Transitional Wares

These wares are not very well represented in the assemblage and do not occur in any significant quantities until Period VII.

Post-Medieval Wares

These wares occur in very small quantities and it is very unlikely that they were in use until after Period VII. They probably derive from material dumped on the site after occupation had ceased.

The Site Sequence

Only 512 sherds (4.6% of the site total) are pre-Late Saxon. The small amount of Roman pottery (seventy-nine sherds) indicates that there was no major Roman occupation in this area of Thetford. 375 of the sherds are Early Saxon and represent occupation associated with the sunken-featured buildings. The amount of Middle Saxon pottery is also meagre (fifty-eight sherds), but is comparable with the quantities found in the Red Castle excavations and in Davison's excavation at Brandon Road. At Red Castle (Knocker 1967, 119–186) sixty-eight sherds of Ipswich-Type Ware were found, but in Davison's excavations (Dallas 1993) only six sherds were recovered suggesting that the main area of Middle Saxon occupation lay to the west of Red Castle.

There does not appear to have been any tenth-century occupation on the site. This is indicated by the relatively small amount of Thetford Ware compared to Knocker's sites (Dallas 1984, 117–166) and Davison's sites (Dallas 1993), and by the absence of certain early Thetford Ware forms such as BB12 (see above). The coin evidence also indicates a post-tenth-century date for Late Saxon occupation. It is likely that occupation of the site began in the eleventh century and continued through to the mid-twelfth century. Late Saxon and Early Medieval Wares form the bulk of the pottery assemblage, comprising 82.4% of the total assemblage.

The majority of the medieval and later material at Redcastle Furze derives from the house and its outbuildings (Structures 6, 7 and 8) which were part of a group of dwellings, perhaps farms, along Brandon Road (Davison 1993). The meagre quantities of medieval wares, comprising only 575 sherds (5.2%), might suggest that by the thirteenth and fourteenth centuries occupation had shifted, or they could reflect a change in patterns of disposal. McCarthy noted that in medieval Northampton, householders were expected to keep their own property and street frontage clean and that there were frequent complaints that they did not do so (McCarthy 1979, 225). In 1568 rubbish disposal was forbidden in the town, and common dunghills were specified outside the gate. Similar sites were allocated at Cambridge and Gloucester (McCarthy 1979, 225).

Discussion

The ceramic assemblage is remarkable because of the large quantities of eleventh and twelfth century material. The lack of tenth-century Thetford Ware is intriguing when compared to the quantities of tenth-century Thetford Ware found in Davison's excavations (Dallas 1993). Redcastle Furze lies almost adjacent to the area excavated by Davison at Brandon Road and so one would expect similar patterns of occupation. Davison has demonstrated eleventh-century occupation along street frontages (Dallas 1993), similar to the eleventh-century occupation at Redcastle Furze, but it is interesting that no features can be assigned to the tenth century at Redcastle Furze. It is possible that the material from the kiln discovered in Davison's excavations may have distorted the respective

proportions of pottery, and Dallas has noted (Dallas 1993) that material from the kiln accounted for over half of the Thetford Ware found on the site. However, the overall picture from the two assemblages is different and the Redcastle Furze assemblage does appear to indicate an absence of occupation in the tenth century which was present at Brandon Road. A similar pattern of occupation is revealed in the ceramic assemblage from Red Castle (Knocker 1967, 119–186). Thetford Ware is rare and the bulk of the assemblage comprises Early Medieval Wares (Dallas, unpublished).

None of the sites excavated in Thetford have produced much late thirteenth- and fourteenth-century pottery. Preliminary examination of material from excavations north of the river at Guildhall Street and Minstergate demonstrates a similar dearth of later pottery. It has been suggested above that a possible reason for this lack of later material is a change in the patterns of disposal. It appears that Redcastle Furze was occupied until the mid-fourteenth century and so one would not expect later medieval and post-medieval pottery in large numbers. However, there is very little pottery represented in the assemblage from the mid-thirteenth century, and it does seem more likely that most household rubbish was being dumped away from the site after this time. It is also possible that metal cauldrons replaced ceramic vessels and therefore less pottery was in use.

The assemblage from Redcastle Furze reflects domestic occupation, and includes cooking wares (often heavily sooted), storage vessels and tablewares. Cooking wares account for 90.2% of the rims (out of a total of 1246), and tablewares and storage vessels only 4.3% and 5.5% respectively. There are only two industrial vessels, both crucibles.

The paucity of continental imported wares at Redcastle Furze is curious, but not surprising in the light of other excavations in this part of Thetford. Knocker's excavations at Red Castle and Davison's excavations at Brandon Road also produced few imported wares. Dallas has suggested three reasons as possible explanations for this (Dallas 1993): There was only limited occupation or activity at these sites at the time the pottery was being imported; the local pottery was of a high standard making expensive imported wares unnecessary; the sites were too distant from the river frontage where commercial and trading activities might be expected to have been located. At Redcastle Furze the general range of forms is very limited and it is possible that imported wares would not have been in great demand or might have been too expensive for householders. Further work in the area of river frontage may help gauge the numbers of continental imports arriving in Thetford.

The ceramic assemblage contains a variety of fabrics, and includes local wares as well as wares from outside the immediate area. The Redcastle Furze group, compared to Davison's and Knocker's groups, reflects an increase in the quantity of wares other than Thetford Ware, suggesting perhaps that by the eleventh and twelfth centuries there was greater trade between other settlements in Eastern England. It is impossible to be certain whether this increased trade was the result or the cause of the demise of the Thetford industry. However, although it is likely that the cessation of ceramic production in Thetford, in the early twelfth century or before, was related to the dramatic overall decline of the town at this time, a general tendency

in early medieval England for pottery production to quit urban surroundings for the countryside must be called into account.

The Pottery Catalogue

Figure 82 Roman Coarseware

1. Carinated bowl. Grey brown; burnished exterior. From fill of pit 1028, Period I.

Figure 82 Early Saxon Wares

2. ?jar. Dark grey; burnished exterior. From fill of ditch 583, Period IV3.
3. Jar. Brownish black; burnished exterior. From fill of sunken-featured building 915, Period II.
4. Small jar. Possibly Late Iron Age. Black, orange margins; burnt. From fill of pit 1789, Period IV3.
5. Bowl. Black; burnished exterior. From fill of sunken featured building 951, Period II.
6. ?Bowl. Dark brown; burnished exterior. From fill of ditch 583, Period IV1.
7. Bowl. Dark brown; burnished exterior. Rusticated. Unstratified.

Figure 82 Thetford-type Ware

8. Bowl. Grey, buff margins. From layer 1221, Period VII.
9. Baluster lamp. Grey, buff margins. From layer 1519, Period IV3.

Figure 82 Late Saxon Wares – other

10. Jar. Dark brown. From fill of cut 1781, Period IV3.

Figure 82 Stamford Ware

11. Spouted Jar. Creamish buff; thick green glaze with orange patches applied all over. From fill of ditch 867, Period IV1.

Figures 82 and 83 Shelly/St Neot's-type Ware

12. Jar. Black core, brown margins. From fill of pit 517, Period IV3.
13. Jar. Black core, red margins. From fill of pit 1651, Period IV3.
14. Jar. Black core, red/brown margins. From fill of pit 1651, Period IV3.
15. Jar. Black core, red/brown margins. From layer 1761, Period VII.
16. Jar. Black core, red/brown margins. Unstratified.
17. Jar. Black core, red margins. From fill of ditch 1137, Period VI.
18. Jar. Black core, red/brown margins. From layer 1170, Period VII.
19. Jar. Black core, red/brown margins. From layer 1673, Period VII.
20. Bowl. Black core, red/brown margins. From fill of pit 741, Period IV3.
21. Bowl. Black core, red/brown margins. From fill of pit 1911, Period VII.
22. Bowl. Black core, red/brown margins. From fill of pit 1791, Period IV3.
23. Bowl. Black core, brown margins. From fill of pit 1636, Period VII.
24. Bowl. Black core, red/brown margins. From layer 1673, Period VII.
25. Dish. Black core, red/brown margins. From fill of pit 424, Period IV3.
26. Spouted bowl. Black core, red/brown margins. From fill of ditch 1889, Period IV2.

Figures 83 and 84 Early Medieval/Medieval Wares

27. Jar. Grey, reddish upper margin. From layer 1213, Period VII.
28. Jar. Grey, red/brown margins. From layer 1761, Period VII.
29. Jar. Grey, red/brown margins. From layer 1213, Period VII.
30. Jar. Grey. From fill of ditch 1292, Period V.
31. Jar. Grey, red margins. From fill of ditch 1303, Period IV3.
32. Jar. Grey, red/brown margins. From layer 1737, Period VII.
33. Jar. Grey, red/brown margins. From layer 1213, Period VII.
34. Ginger jar. Grey, red/brown margins. From layer 1213, Period VII.
35. Bowl. Grey, red/brown margins. From layer 1213, Period VII.
36. Bowl. Grey, red margins. From fill of ditch 1137, Period VI.
37. Bowl. Grey/brown, red margins. From layer 1673, Period VII.
38. Bowl. Grey, brown margins. From fill of pit 1989, Period VII.
39. Bowl. Grey/brown, red margins. From layer 1673, Period VII.

Figures 84 and 85 Medieval Unglazed Coarsewares

40. Jar. Grey. From layer 1761, Period VII.
41. Jar. Grey/brown. From layer 1567, Period VII.
42. Jar. Grey. From fill of ditch 1303, Period IV3.
43. Jar. Grey, brown exterior margin. From layer 1102, Period VII.
44. Jar. Grey, buff margins. From Structure 6 1108, Period VII.
45. Jar. Grey/orange. From layer 1673, Period VII.

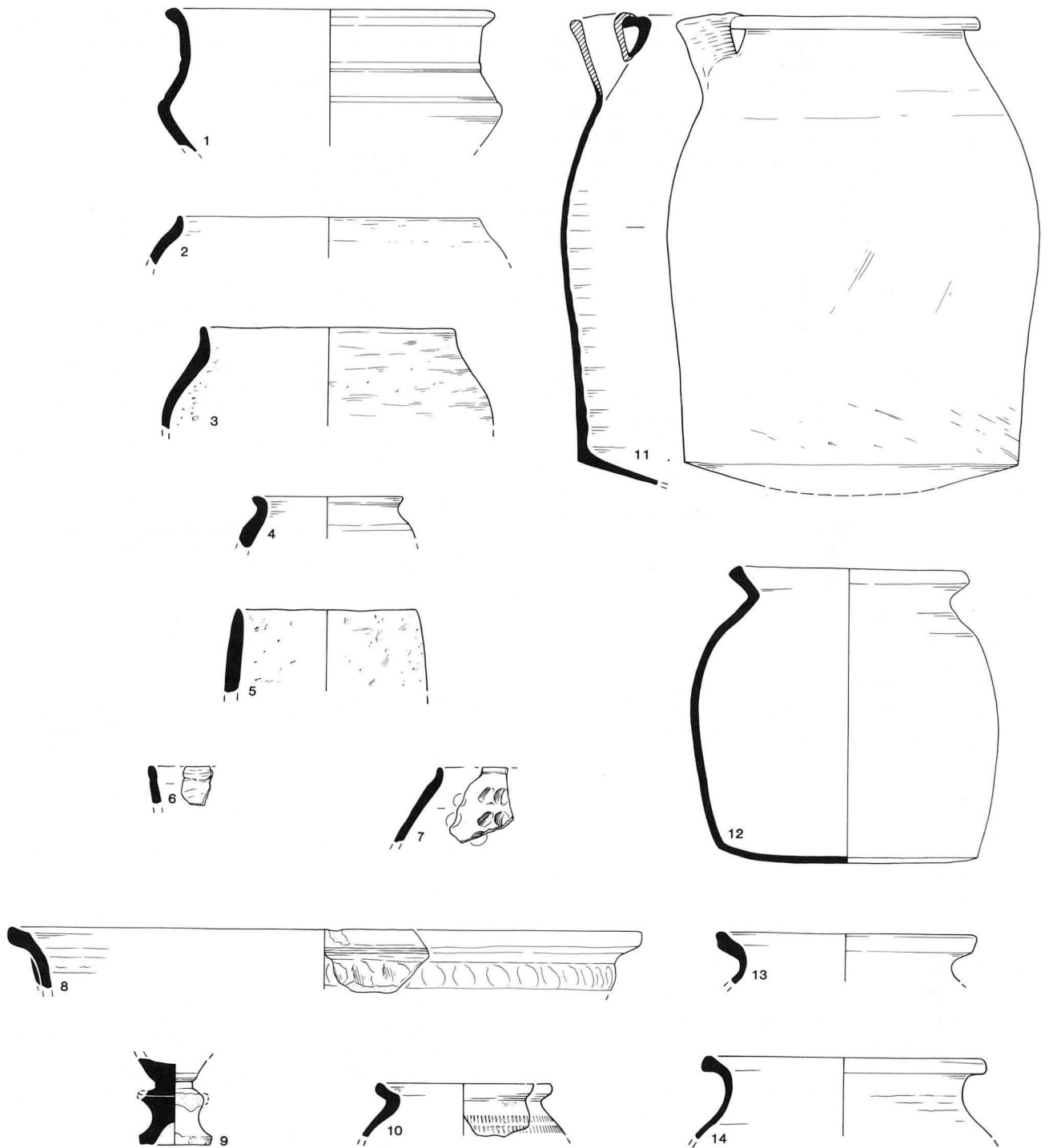


Figure 82 Pottery. Roman Coarsewares, Early Saxon Wares, Thetford Ware, Late Saxon Wares – other, Stamford Ware, Shelfly/St Neot's-type Wares.
Scale 1:4.

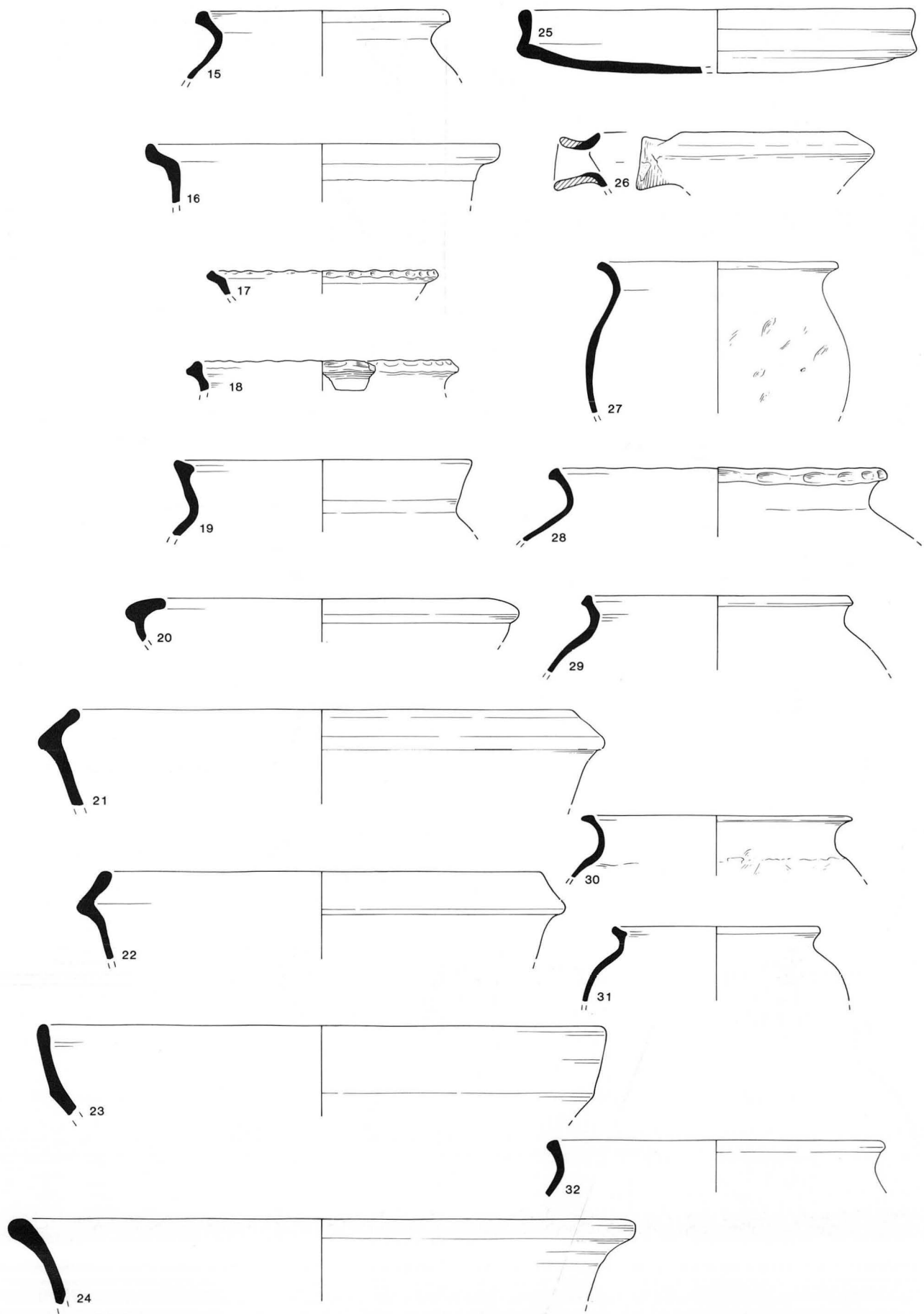


Figure 83 Pottery. Shelly/St Neot's-type Wares and Early Medieval/Medieval Wares. Scale 1:4.

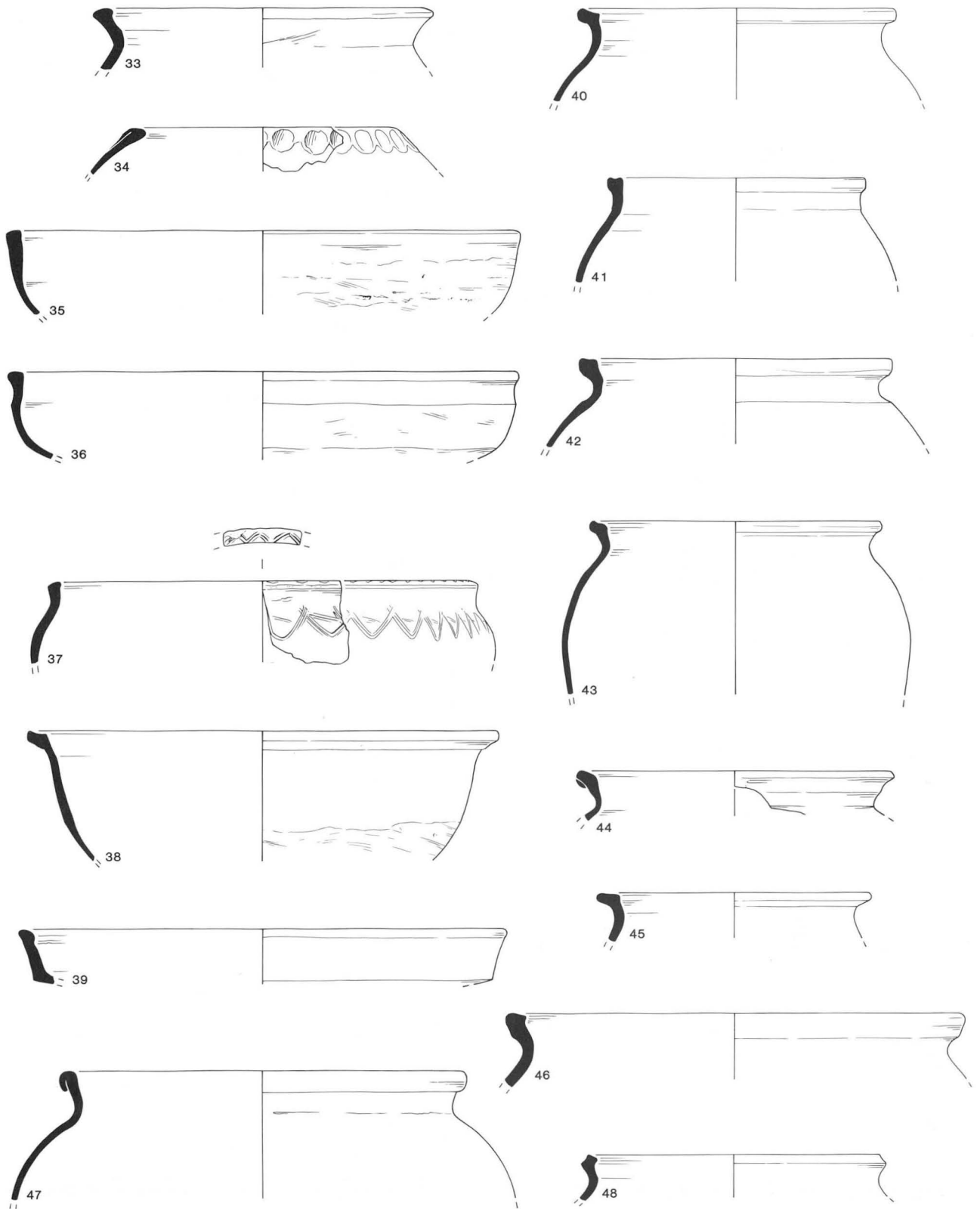


Figure 84 Pottery. Early Medieval/Medieval Wares and Medieval Unglazed Coarsewares. Scale 1:4.

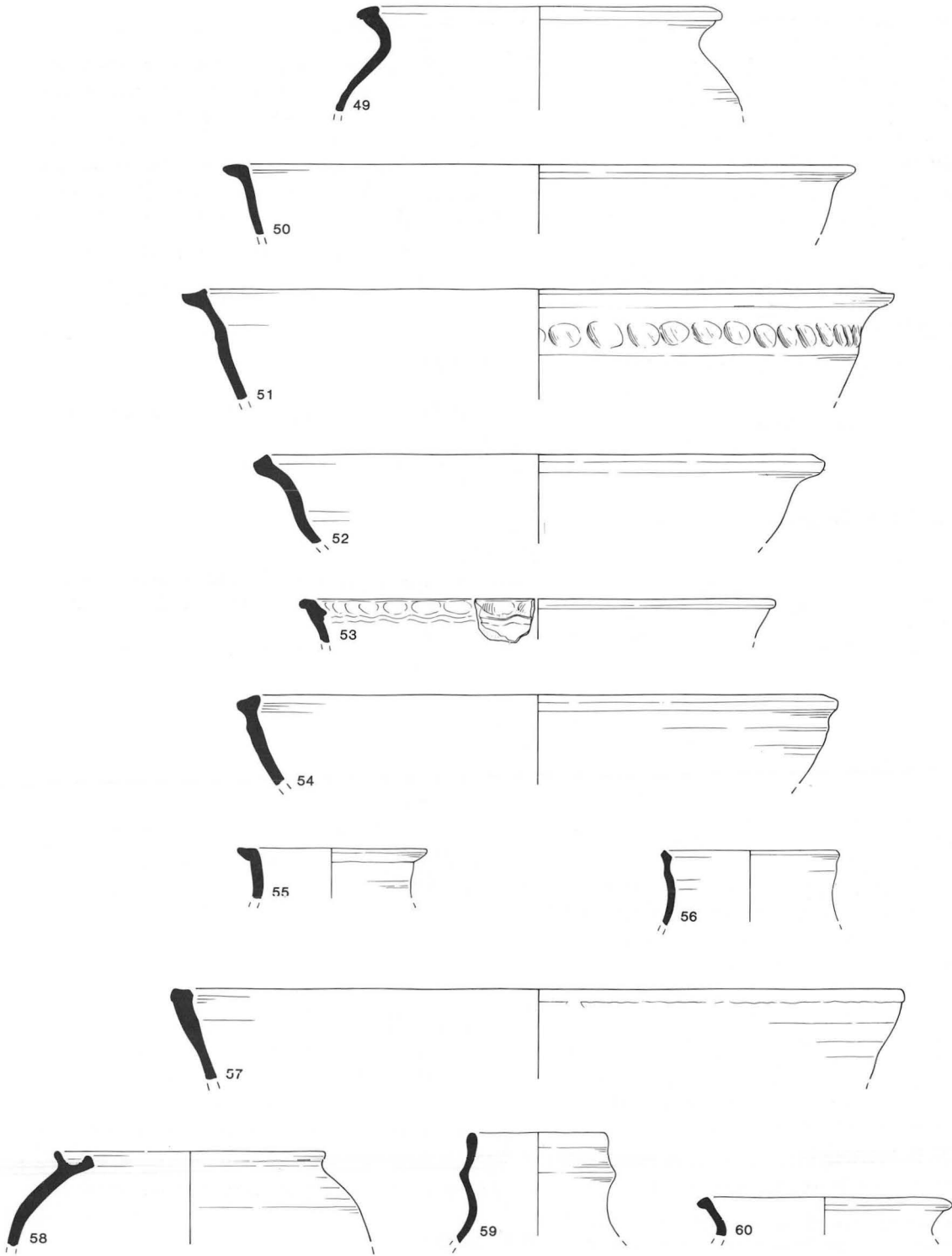


Figure 85 Pottery. Medieval Unglazed Coarsewares, Grimston Ware and Late Medieval Transitional Ware. Scale 1:4.

46. Jar. Grey/brown. From layer 1543, Period VII.
47. Jar. Grey core, buff margins. From layer 1213, Period VII.
48. Jar. Reddish brown. From layer 1214, Period IV2.
49. Jar. Grey, red margins. From layer 1102, Period VII.
50. Bowl. Grey, red margins. From layer 1805, Period VI.
51. Bowl. Grey, brown margins. From fill of pit 1989, Period VII.
52. Bowl. Reddish grey. From layer 1287, Period IV3.
53. Bowl. Grey. From fill of pit 1791, Period IV3.
54. Bowl. Grey, brown margins. From fill of pit 1636, Period VII.
55. Jug. Grey. From fill of ditch 1303, Period IV3.
56. Jug. Grey/orange. From layer 1673, Period VII.

Figure 85 Grimston Ware

57. Unglazed bowl. Grey, reddish margins. From fill of ditch 1303, Period IV3.
58. Jar. Grey; green glaze applied externally and internally. From layer 1109, Period VII.
59. Jug. Grey; green glaze applied externally. From layer 1102, Period VII.

Figure 85 Late Medieval Transitional Ware

60. ?Jar. Brown/buff; mottled green glaze patchily applied. From layer 1107, Period VII.

X. Antler and Bone Objects

Figs 86–87

I am grateful to Rosemary Luff of the Faunal Remains Unit, Cambridge and Tony Stuart of Norwich Castle Museum for helping with the identification of the bone and antler.

Combs

(Fig. 86)

All of the combs are made of antler except no. 4, which is ?whale bone. They are double-sided with the exception of no. 4, and are of the composite variety. All rivets are iron. All combs are described. The structural terminology used here is after Galloway (1976, 154–6).

The combs with the exception of no. 4 are probably Early Saxon as they were recovered from the sunken-featured buildings. Plain connecting plates and connecting plates with ring and dot decoration are common features of combs from West Stow (West 1985, 127). No parallel could be found, however, for no. 3. No. 4 is probably late medieval. It is interesting to note the absence of combs from Late Saxon contexts.

1. Part of comb, found surviving as seven separate fragments: end of comb with one tooth remaining, and one hole with rivet; five fragments of connecting plate, one with rivet; one tooth; from fill of SFB 1938, Period II, s.f. 1229.
2. Part of comb; three surviving holes with two rivets; ring-and-dot incised decoration on the faces of both connecting plates; from fill of SFB 915, Period II, s.f. 1324.
3. Part of tooth segment; one surviving hole with rivet; remains of connecting plate on one side; incised decoration and three holes which appear to be decorative rather than functional; from fill of SFB 951, Period II, s.f. 205.
4. Double-sided simple comb; no decoration; layer 1109, Period VII, s.f. 398.

Needles and Pins

(Fig. 87)

Two needles and one pin were recovered. The needles are incomplete, and the pin broken but complete. All are probably Early Saxon (Period II) and derive from the sunken featured buildings.

5. Point and part of eye missing; from ?pig fibula; from fill of SFB 1938, Period II, s.f. 1228.
6. Point and part of eye missing; from ?pig fibula; from fill of SFB 1938, Period II, s.f. 1228.
7. Eight tiny holes pierced in head; from ?pig fibula; from fill of SFB 915, Period II, s.f. 1331.

Double-ended Implements

(Fig. 87)

This class is characterised by being pointed at one end and broad at the other. The broad end tends to be flat. None of the examples here are decorated although most are highly polished. Examples here have been recovered from Early Saxon and medieval contexts. The Early Saxon examples may be weaving tools such as pin beaters or thread pickers.

8. Fragment of pointed end; from ?horse metapodial; from fill of SFB 915, Period II, s.f. 1321.
9. Broad and broken; from ?horse metapodial; from fill of SFB 915, Period II, s.f. 168.
10. Fragment of broad end; from ?horse metapodial; from layer 1662, Period VII, s.f. 1322.

Spindle-whorl

(Fig. 87)

One spindle-whorl was recovered from a Late Saxon context.

11. Weight 8gm; from ?proximal end of horse femora; from layer 1618, Period IV3, s.f. 1193.

Toggle

(Fig. 87)

These objects are common on Late Saxon sites (Lawrence 1984, 182) and the one example here is from a Late Saxon context.

12. One transverse hole; from ?pig metacarpal; from top fill of ditch 1919, Period IV2, s.f. 1044.

Spoon

(Fig. 87)

13. Spoon or spatula with domed terminal; stem is decorated, at junction of stem and bowl with raised zig-zag design, in the centre of the stem with raised bands, at the top of the stem with a smaller raised zig-zag design. The bowl is long, narrow and flat, and looks worn. (The nearest parallel is LMMC pl. XXV no. 2). Probably late eleventh or twelfth century but datable examples are rare. From fill of pit 1986, Period IV3, s.f. 1220.

Flute

(Fig. 87)

by Graeme Lawson

14. Musical bone pipe, part of, comprising distal portion with three finger-holes, cut laterally by knife. The gradually tapering internal bore has an irregular cross-section, part natural, part worked, enlarged slightly at its narrower end. The bone is sheep/goat metapodial, probably metacarpal, the surfaces much etched due to exposure consistent with its context in a disturbed layer. The unusual choice of bone makes close comparison with other instrument finds difficult, but the general form is otherwise broadly consistent with a Late Saxon/medieval date range. Full details and discussion in microfiche. From layer 1761, Period VII, s.f. 1174.

XI. Textile

(not illustrated)

by E. Crowfoot

with a contribution by H.M. Appleyard

One piece of folded fabric was recovered, from the bottom of stone-lined cesspit 1989 (Period VII). Elisabeth Crowfoot has contributed the following note:

The thick wad of fabric, folded in at least five layers, measures approximately 12.4cm × 8cm overall. The folds are tightly compressed, on one side (upper) clean, on the other (under) stained with reddish patches of metal corrosion and lighter adhering particles, possibly of plaster or cement. Attempts to relax the folds without breaking were unsuccessful, but the layers are all clearly parts of one fabric.

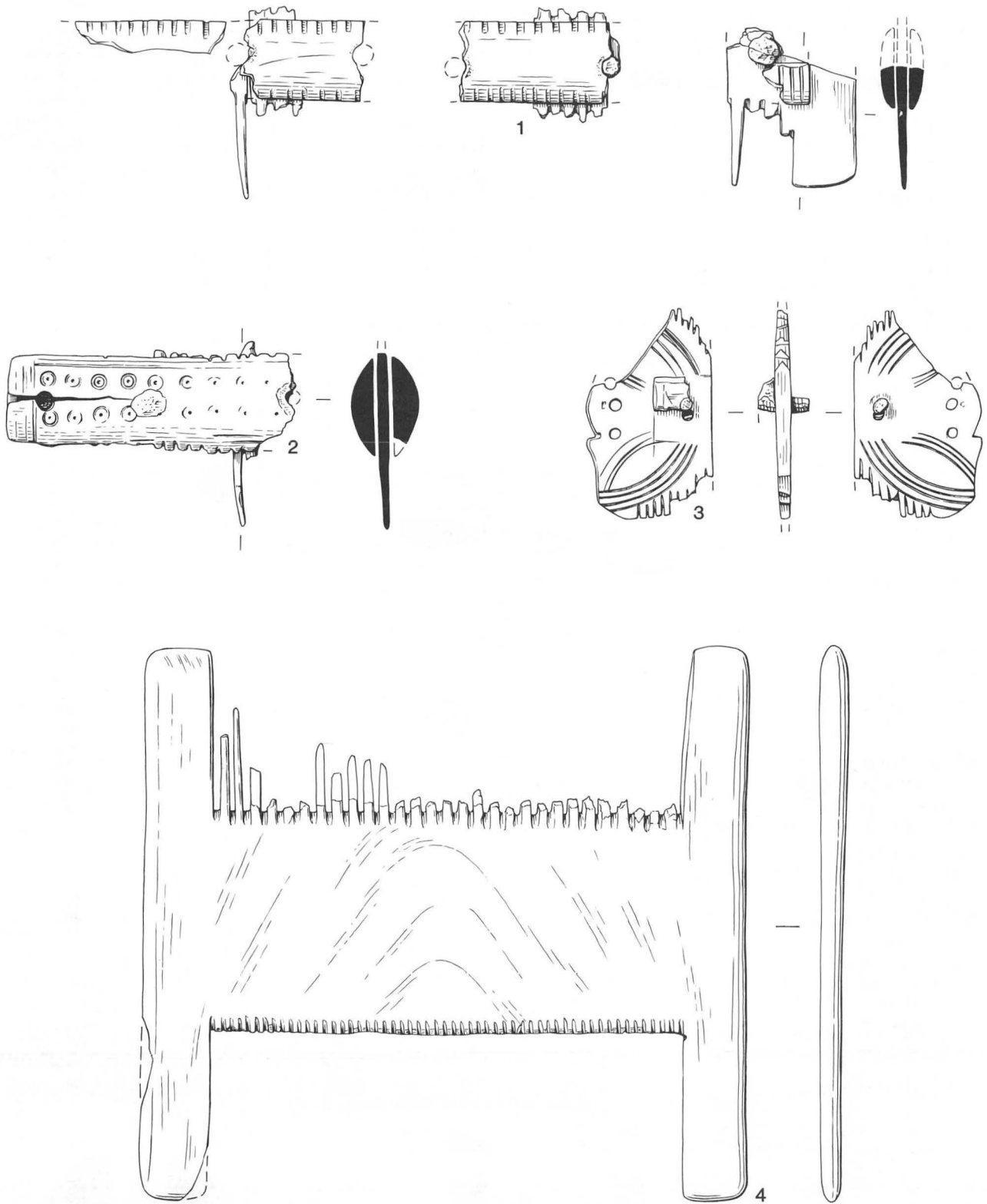


Figure 86 Bone and antler combs. Scale 1:2.

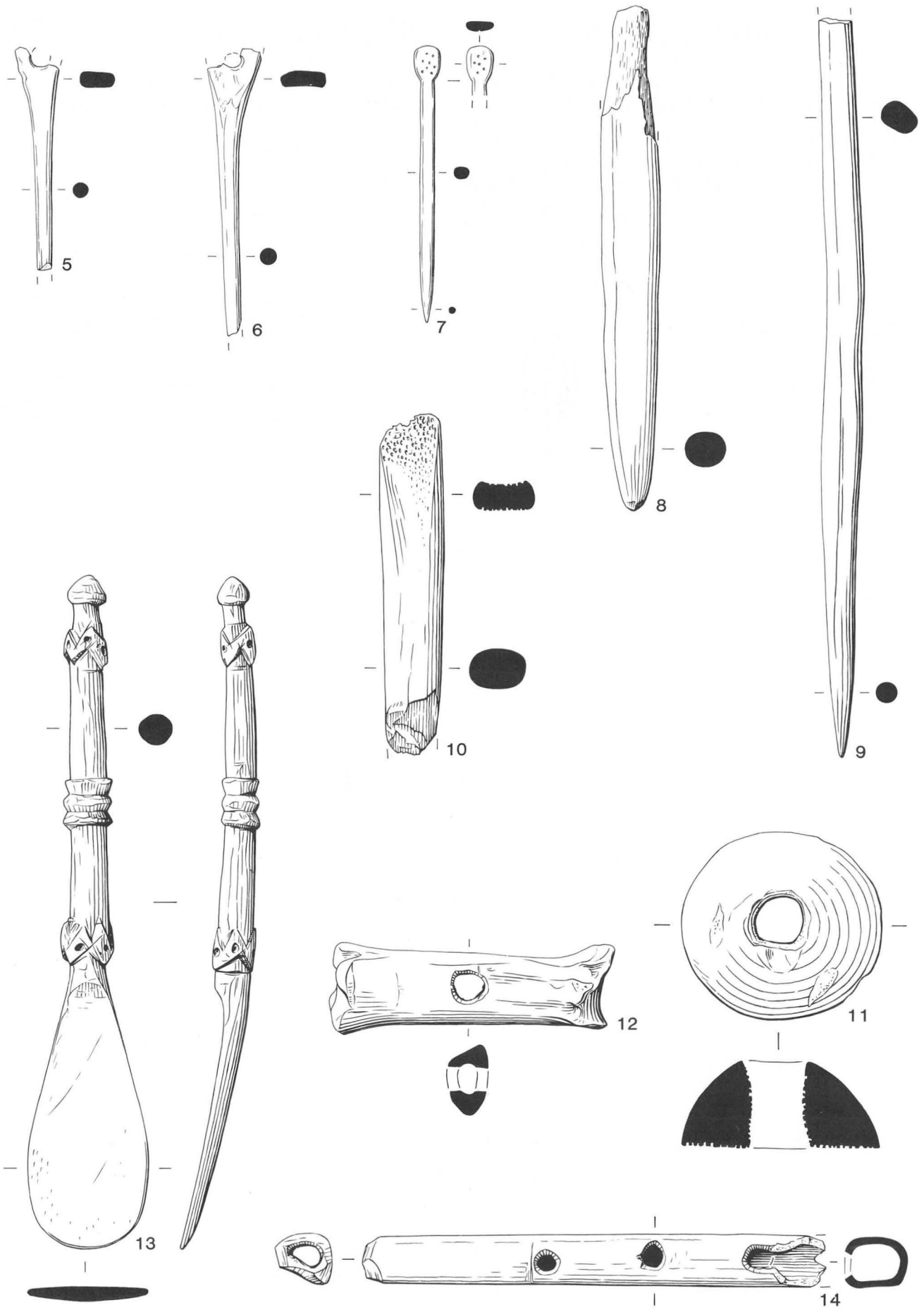


Figure 87 Bone objects. Scale 1:2.

Fibre: Flax (identification by H.M. Appleyard).

Spinning: Z both systems, medium spin, sometimes slightly looser in warp, both threads fairly even.

Weave: Tabby, close and regular with thread counts per 1cm of 14/12, 14–15/13 (underside), and 15–16/13, 16/14 (upper side); selvedge (under side) simple, with one edge cord of two warps, then warps packed for 5mm, 15 threads.

Holes lie in pairs (upper side), and may come from sewing threads or pin-holes, but do not bear any obvious relation to the folds. The selvedge is present, damaged, for approx 7cm under another incomplete layer, clear for 1.4cm where this has been broken off. A diagonal fold lying for 6cm on the upper surface is possibly part of a seam; in broken-off fragments a double fold is visible, but too deteriorated for stitches to be visible.

This linen is of rather better quality than the examples nearest in date from the Norwich excavations (Pottergate, Cat. 296–7, c.1400; Pottergate Cat. 299–300, c.1400–1550; Crowfoot 1993, 53); it is a flax garment weave, probably part of a good shirt rather than household sheeting or napery. Its present appearance suggests that of other folded lumps, some possibly used as jar-stoppers, others perhaps to wedge into wall-cracks, or loose joints in the woodwork of houses — a use that is perhaps suggested by the ?plaster and rust stains on this Thetford piece (see Crowfoot 1993, 46; Crowfoot forthcoming). H.M. Appleyard comments: Examined under low power the stain appears to consist of very small particles on the surface of the fabric. Some of these bits are very bright in colour, and others are reddish brown which could be rust particles.

Chapter 4. Zoological and Botanical Evidence

I. Human Bones

by Jacqueline I. McKinley

Human bone from twelve contexts was received for examination. Only two of the contexts were articulated skeletons from graves (961 and 964), one incomplete skeleton (from 1520) was found articulated in a pig burial, and the rest of the bones were either redeposited or residual material.

Method

Age of immature individuals was assessed from the stage of tooth development and eruption (van Beek 1983), the stage of epiphyseal fusion (McMinn and Hutchings 1985), and the length of long bones (Bass 1987). The age of adults was assessed from the degree of epiphyseal fusion (McMinn and Hutchings 1985; Webb *et al* 1985), the pattern of degenerative changes in the pubic symphyses (Brooks 1955), tooth wear patterns (Brothwell 1972), and the general degree of cranial suture fusion and degenerative changes to the bone.

Age categories, rather than age in years are used in view of the difficulties surrounding the accurate assessment of age for adult individuals over 25/30 years (that is following final epiphyseal fusion). Tooth wear patterns and the degree of degenerative changes in the bone may vary considerably, dependent on the individual and/or the group. The categories used are:

- foetus/neonate
- infant - 0-5 years
- juvenile - 5-12 years
- sub-adult - 13-18 years
- young adult - 18-25 years
- mature adult - 25-40 years
- older adult - 40 years +

It was occasionally possible to subdivide the categories if adequate evidence survived, or groups have been linked where insufficient recovery of disturbed skeletons reduced evidence of age.

The sex of the adult individuals was assessed from the sexually dimorphic traits of the skeleton (Bass 1987). Three levels of reliability have been used: ?? for possible, ? for probable, and unquestioned sexing. These levels are necessary because of the paucity of information in some cases.

Cranial index was calculated where possible, and these and other measurements were taken according to Brothwell (1972).

Stature was estimated where possible, using Trotter and Gleser's regression equations (1952; 1958).

Pathological lesions and morphological variations were recorded, and diagnoses suggested where appropriate.

Results

Details of identification are contained in the site archive.

Context 169

Disarticulated skeleton redeposited in probable Early Roman shallow slot (170). Represented by elements of skull, axial, upper and lower limb. About 50% recovery.

AGE: Young adult.

SEX: Female.

Estimated Stature: 157.22cm (5 ft 1 inch)

PATHOLOGY: 1) Morphological variation: Congenital absence of mandibular third molars.

Context 396

Residual in fill of Late Saxon pit (381).

Poorly represented by element of upper limb.

AGE: Adult.

SEX: ??female.

COMMENT: Possibly = context 169.

Context 794

In fill of Early Saxon sunken-featured building (915).

Poorly represented by element of lower limb.

AGE: Young infant.

COMMENT: Possibly = context 964

Context 944

Residual in fill of Late Saxon ditch (943).

Represented by element of upper limb.

COMMENT: = context 964.

Context 961

Articulated skeleton in Late Saxon grave (959).

Represented by elements of skull, axial, upper and lower limb.

About 80% recovery.

AGE: Older adult.

SEX: Male.

Estimated Stature: 176.42cm (5ft 8 inch)

Cranial Index: 69.2. Dolichocephalic.

PATHOLOGY: 1) Excessive tooth wear: Numerous dental caries and abscesses.

2) Slight disc degeneration in margins of cervical vertebrae.

3) Medium-heavy osteophytes on lumbar body margins I-VIth margins of 1st sacral body and on margins of auricular surfaces; slight osteophytes on dorsal margins of radial distal articular surfaces; patellae have slight osteophytosis on medial and inferior margins of articular surfaces.

4) Very slight Schmorl's nodes in superior surface of IInd lumbar vertebrae — 5 × 6mm, shallow.

5) Medium-heavy osteoarthritis in left articular processes of IVth and Vth lumbar vertebrae; slight osteoarthritis in sacral left superior articular process; mild-medium osteoarthritis in both hip joints, especially the left; slight osteoarthritis in both shoulder joints, especially the right; slight lesions in the proximal articular surface of the right 1st proximal foot phalanx.

6) Ulna styloid processes show slight reorganisation. Right particularly affected with considerable pitting and

slight new bone formation, apparently eroding the process.

7) Slight ridge of bone on the right ulna distal medial surface at upper end of attachment for pronator quadratus — c. 15mm long, 2mm high — smooth bone.

8) Morphological variations: ?incomplete ossification of distal portion of posterior arch; inferior articular processes absent from Vth lumbar — left side only, right side damaged — a pseudo-facet has formed on the under-side of the IVth inferior and Vth superior facets, bone heavily pitted; Calcanea, the anterior talal articular facets are so reduced in size they are barely visible.

Context 964

Articulated skeleton in a Late Saxon grave (962). Represented by elements of skull, axial, upper and lower limb.

About 15% recovery.

AGE: Neonate–6 months.

Context 1170

Residual in medieval layer.

Poorly represented by element of upper limb.

AGE: Juvenile

Context 1172

Redeposited in probable Early Roman pit/post-hole (1173).

Represented by elements of skull, upper and lower limb.

About 8% recovery.

AGE: Older sub-adult.

PATHOLOGY: 1) Mild-medium calculus deposits on molar crowns.

COMMENT: Charring of bones suggests accidental burning associated with disturbance.

Context 1520

Articulated skeleton in one corner of a medieval pig burial (1690).

Represented by elements of skull, upper and lower limb.

About 30% recovery.

AGE: Tenth month foetus-neonate.

Context 1912

Residual in fill of medieval pit (1911).

Very poorly represented by element of skull.

AGE: Adult.

Context 1954

Residual in fill of Late Saxon ditch (1953). Very poorly represented by element of skull.

AGE: Older mature/older adult.

SEX: ??male.

Context 2196

Residual in fill of Late Saxon pit (2195).

Very poorly represented by element of lower limb.

AGE: Older sub-adult.

COMMENT: Possibly = context 1172.

A minimum of six individuals were identified:

1 10 month foetus/neonate

1 neonate/6 month infant

1 juvenile

1 older sub-adult

1 young adult female

1 old adult male.

A further two adults, one an older ??male, may also be represented, but only one fragment of vault remains in each case.

Comment

Most of the contexts contained bones derived from disturbed burials; even context 964, one of the two Late Saxon articulated skeletons in graves had been cut by a later ditch.

The foetus/neonate remains (1520) found in one corner of a medieval pig burial was an unusual feature. Apart from the skull, only the bones of the right side were recovered which suggests the burial may have preceded that of the pig and have been disturbed by its deposition, but there is no clear archaeological evidence to support this. As it stands, the rather bizarre nature of the pig burial, which was articulated except for the legs and feet which were missing, does suggest the possibility of some 'ritual' aspect to the infant burial. Alternatively, this may represent the unceremonious disposal of an unwanted stillborn/dead infant.

The considerable charring of the older sub-adult bones (1172) found crammed into a small pit/post-hole, suggests accidental rather than deliberate burning of the bones followed by unceremonious deposition of part of the remains. The bones (169) from the fill of a shallow slot may also represent the redeposition of part of a disturbed burial. Both were probably Early Roman deposits.

There were very few pathological lesions noted except for the older adult male 961, who had degenerative lesions in several joints, and destructive lesions in the alveolus probably associated with pulp infection following excessive tooth wear.

II. Animal bones

by Tristan Wilson

Summary

The faunal remains examined from the Redcastle Furze excavation came mainly from contexts dated to the sixth to seventh century (Period II), the early to middle eleventh century (Period IV2), the late eleventh century (Period IV3) and the thirteenth to fourteenth century (Period VII). Small groups from the first century AD (Period I) and the eighth to ninth century (Period III) were also examined, but not those from the early eleventh century (Period IV1) and twelfth century (Periods V and VI). A total of 14,415 fragments were recorded, of which 13,092 were identifiable to species or class, and 1323 were unidentifiable. Bones of the following species were recovered:

- cow (*Bos*)
- sheep/goat (*Ovis aries/Capra hircus*)
- pig (*Sus*)
- horse (*Equus caballus*)
- cat (*Felis catus*)
- dog (*Canis familiaris*)
- hare (*Lepus*)
- rabbit (*Oryctolagus cuniculus*)
- badger (*Meles meles*)
- roe deer (*Capreolus capreolus*)
- amphibian
- harvest mouse (*micromys minutus*)
- chicken (*Gallus dom.*)

goose (*Anser anser*)

duck (*Anas platyrhynchos*)

Although there is likely to have been some degree of residuality, particularly in Period VII, this is not considered to have had any significant effect on the trends and results determined from this study. In the earlier periods of occupation cow bones predominate in the assemblage. Over time this changes so that by Period VII sheep/goat is the dominant species. The number of pig bones declines through time, whilst horse remains fairly constant. These differences partly reflect the changing character and economy of a small part of the settlement, from eleventh-century urban occupation on the fringe of the town to medieval rural settlement.

Methodology

Virtually all of the bones were recovered by hand, with very few coming from the small number of sieved samples. The identification and examination of the bone took place in three stages using the Cambridge Faunal Remains Unit's comparative collection. Firstly, bones on the following list of skeletal elements were recorded provided that 50% or more of the particular element was present:

horn-core (base or tip)

mandible

glenoid of the scapula

humerus (whole, proximal or distal)

radius (whole, proximal or distal)

radial-carpal

acetabulum of the pelvis

femur (whole, proximal or distal)

tibia (whole, proximal or distal)

metatarsal (whole, proximal or distal)

astragalus

first phalanx (whole, proximal or distal)

These 'indicators' were initially examined to provide a fairly rapid and accurate overview of the species represented on the site. They also provided a rough index of levels of fragmentation since the mandible, glenoid of the scapula, distal humerus, distal radius, distal metatarsal, radial-carpal, acetabulum of the pelvis, distal femur, distal tibia and the astragalus are all relatively robust whilst the remainder are not. This technique is largely based on the work of Binford (1981) and Brain (1981) who have both examined in detail the ways and extent to which carnivore attrition can affect faunal assemblages. The numbers of indicators by period are presented in Tables 2, 3, 8, 11, 16 and 21 (microfiche).

During the first stage of analysis, mandibles, horn-cores, avian and pathological material were removed for subsequent analysis.

The second stage of analysis dealt with the remaining material. These fragments were generally far smaller than the indicators. Bones were identified to parts of anatomy and species regardless of fragmentation. These included elements not on the indicator list, such as skull fragments, carpals, tarsals, second phalanges, third phalanges and loose teeth. Wherever possible every bone was identified to species. If this could not be done with certainty, or if time spent in identification was felt to be disproportionate to the results obtained (for example in the cases of the ribs and vertebrae) then the elements were assigned as closely as possible to species. These groups were as follows:

oxo - cow, horse, red deer

lar - cow, red deer

sma - sheep/goat, pig, roe deer, fallow deer

rum - sheep/goat, roe deer, fallow deer

s/m - small mammal (cat/dog size)

tim - tiny mammal (rat/mouse size)

Finally, the material extracted in stage one was dealt with. The sheep/goat mandibles were aged using Payne's method of dental wear patterns (Payne 1973), whilst the cattle and pigs were aged using Grant's tooth wear patterns (Grant 1982). Both these methods are based on the fact that during tooth life the enamel gradually wears away producing distinctive patterning on its biting surface. The observed patterns can then be fitted into a relative ageing scheme. It was felt that in this study attempting to assign the mandibles absolute ages would be inappropriate since the ingestion of the sandy Breckland soil could accelerate the wear patterns at a rate as yet unquantified. Only the sheep/goat mandibles in Periods II, IV3 and VII were recovered in sufficient quantity for kill-off profiles to be constructed. Jones (G., 1984, 189) has pointed out that it is not justifiable to argue that the age structure of butchered animals represents that of the live flocks as Thetford is a town site. However, it was considered worthwhile in this study since the ageing data can still provide an insight into slaughter trends. Furthermore, in the later periods (V, VI and VII) the nature of settlement at Redcastle Furze changed such that it should not necessarily be viewed as a town site any more.

In other periods, it was often possible to estimate the ages of the incomplete cattle and pig mandibles by comparing them with more complete examples. The age groupings used were juvenile, young adult and mature adult.

Distinguishing between sheep and goat in faunal assemblages is notoriously difficult, though criteria for differentiation have been put forward by Boessneck (1969). For example, the metacarpals can be distinguished metrically, but at Redcastle Furze the number of bones complete enough to allow such measurements to be made was extremely small and thus of little value. However, the large numbers of mandibles especially in Periods II, IV3 and VII included sufficient juvenile examples to allow Payne's morphological distinctions between sheep and goat to be used (Payne 1985).

Cattle and sheep/goat horn-cores were also extracted. The cattle horn-cores were sexed by shape, based on the work of Armitage (1982). Overall however, the sample was small and only tentative conclusions have been drawn. The sheep/goat horn-cores were also differentiated by shape, sheep horn-cores having a more or less triangular cross-section, whilst those of goat are more scimitar-like in cross-section.

In each stage of analysis, evidence of butchery was recorded pictorially, though it was not accorded great importance since it was relatively uncommon and what there was showed very little consistency. Interesting cases of butchery and pathology were extracted (see Tables 29 and 30 (microfiche)). Evidence for bone and antler working was extremely rare, with only a few fragments of bone exhibiting indications of having been sawn or cut. Also recorded was fusion which was used to check the ageing data recovered from the jaws. The method was based on that of Silver (1969), the results are shown in Tables 26–28 (microfiche). The information provided by fusion is much less accurate than that provided by teeth

since, in order to assess the age of an individual, one should ideally be able to look at all the epiphyses of the skeleton. Archaeologically this is rarely possible; firstly for taphonomic reasons, since unfused or late fusing elements tend to be far less robust than fused elements and so are less likely to survive. Secondly because whilst, for example, an unfused cow distal humerus could be said to have been younger than twelve to eighteen months, a fused one could be anything from eighteen months onwards.

Tables of indicators, non-indicators and miscellaneous species were produced for each period (Tables 2–25 (microfiche)), and from these, the various histograms for each period constructed. Results are first briefly outlined by species for each period, after which skeletal element distributions are looked at in order to identify ways in which the carcasses were being utilised. As part of this exercise, meat-bearing and non-meat-bearing elements are compared. Then, the temporal trends and function of the site as a whole are discussed, and in particular, the differences in economic use of the animals identified.

Archaeologically it was felt that any examination of spatial variations within any particular period would not produce worthwhile results due to the comparatively small size of the samples. Such an exercise was carried out with the Period II material in an attempt to discern possible variations between the various sunken-featured buildings, but no evidence of any spatial variation was detected.

The Tables have been left as raw counts of indicator and non-indicator fragments (which added together would give a NISP figure). This has two drawbacks. Firstly, recovery tends to be biased towards the larger mammals. Secondly, different species have differing numbers of bones, for instance, whilst sheep/goats have two metacarpals, pigs have eight. However, as long as these two factors are weighted for, this method of tabulation is the most straightforward and forms a reliable basis for interpretation.

During analysis of the bone, measurements were taken where appropriate (for example on the sheep/goat metacarpal), but the number of suitable bones proved too small to provide statistically valid samples for size estimates to be made.

Recovery during excavation was mostly by hand. This is known to produce an assemblage biased towards the larger mammals, since their larger bones will be relatively more visible to the excavator (see Payne 1975). Conversely, the smaller bones of the smaller mammals, such as sheep/goat phalanges, together with cat, dog, rodent, avian and fish remains are very likely to be under-represented. Hand collected assemblages are still

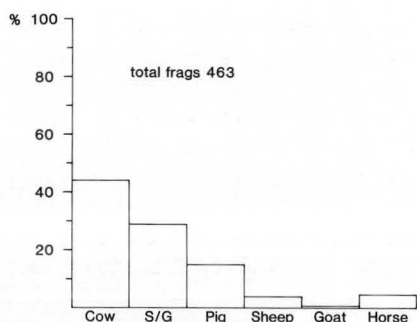


Figure 88 Animal bone. Percentage indicators, Period II.

useful because they can produce valuable information on diet, economy and the nature of the archaeological site in question.

Although a small number of bones from the site was recovered by sieving, it was not a significant amount. The results from the sieved samples are recorded in the archive, since they are not comparable with the main assemblage due to the different methods of collection.

The preservation of the bone was generally good, with the exception of the sieved material. By comparing the percentage lists of indicators with those of non-indicators (especially long bone fragments), levels of fragmentation can be seen to have been high (see Tables 2–25 microfiche). Some of this fragmentation may reflect the domestic nature of some excavated phases (for example Period II), but a certain amount was fresh and thus produced during excavation.

Results

(Figs 88–100)

Period I Roman (first century AD)

The Roman period produced too little bone to provide results of any significance. The small number of fragments is shown in Table 2 (microfiche).

Period II Early Saxon (sixth to seventh century)

In terms of percentages of indicators, the Early Saxon period shows a predominance of cattle which account for just under half the total. Sheep/goat represent about a third of the sample, with pig making up 15% and horse 5%. This picture is to a certain extent corroborated by the percentages of non-indicators, though as with all periods, these suffer from the fact that the various groups cover two, three, four or five different species and tend to exhibit less clearly defined trends (Figs 88 and 89).

Cattle

Thirty-six cattle mandibles were recovered from Period II. Of these, seven had sufficient molar rows to be aged using Grant's method (Grant 1982), whilst sixteen could be roughly divided into juvenile, young adult, and mature adult on the basis of their surviving teeth. The seven mandibles produced mandible wear stages of 2, 12, 13, 23, 38, 41 and 42. The remaining sixteen gave approximate age groups of three juveniles, eight young adults and five mature adult animals. Overall this shows a tendency towards younger rather than older animals, which would argue for a concentration on cattle for production of meat.

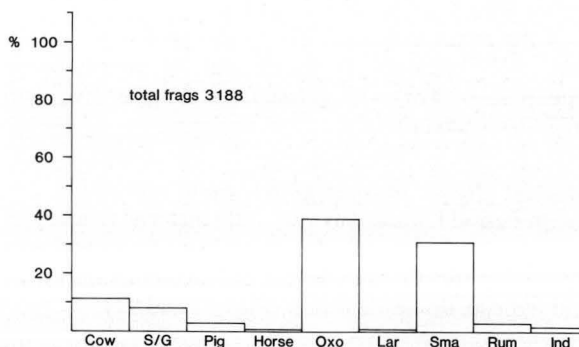


Figure 89 Animal bone. Percentage non-indicators, Period II.

The fusion data generally agree with this, the emphasis falling on younger fusing elements (see Table 26 (microfiche)).

Of the cattle horn-core indicators, six were male and one was female. Five were not identifiable.

Sheep/Goat

Eighteen horn-cores were recovered (twelve of which were indicators). Of these, eight were sheep and six were goat (four were indeterminate). Among the deciduous mandibular dentition one goat was identified as opposed to twenty sheep (after Payne 1985).

Ageing the sheep/goat remains proved less problematic than with the cattle, and a total of forty-four mandibles were assigned to specific wear stages (Fig. 90).

This pattern shows an emphasis on the slaughter of young animals for meat, and older sheep which were probably kept for wool. The epiphysial fusion evidence corroborates these results.

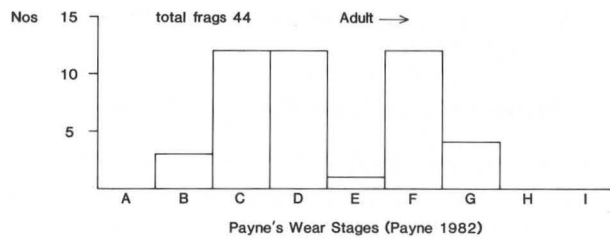


Figure 90 Age distribution of sheep/goat jaws, Period II.

Pigs

Only one of the eleven pig mandibles recovered from Period II had a complete molar row, and this had a mandibular wear stage of 39. Of the remainder, four were estimated to be juveniles, three young adults, two mature adults, and one indeterminate.

The fusion data were also rather limited in terms of sample size, but do to a certain extent confirm that younger animals predominated.

Other species

Twenty-two horse indicators were recovered, a figure which represents 5% of the total number of indicators. Little can be said of this, save to point to the existence of horse on the site.

Two cat bones (a mandible and a radius) and three dog bones (one tibia and two maxilla) were also recovered, together with a badger distal humerus.

Of the avian elements, most were probably chicken rather than pheasant (nineteen out of twenty-seven elements recovered) with goose accounting for five (two were indeterminate).

Period III Middle Saxon (eighth to ninth century)

As with Period I, there was very little material to analyse, though the comparatively large number of oxo and sma remains do reflect a high degree of fragmentation which could indicate domestic refuse (Figs 91 and 92).

Period IV2 Late Saxon (early to middle eleventh century)

The percentages of indicators in the Late Saxon period show an increased emphasis on sheep/goat, which exhibit

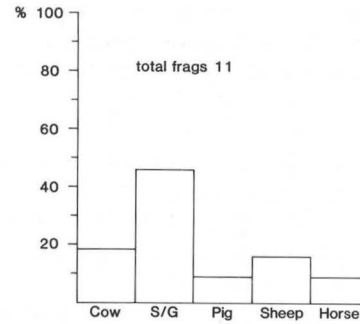


Figure 91 Animal bone. Percentage indicators, Period III.

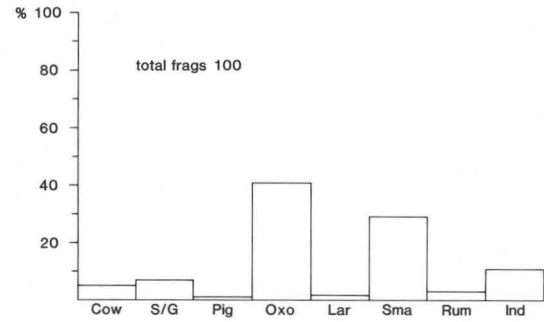


Figure 92 Animal bone. Percentage non-indicators, Period III.

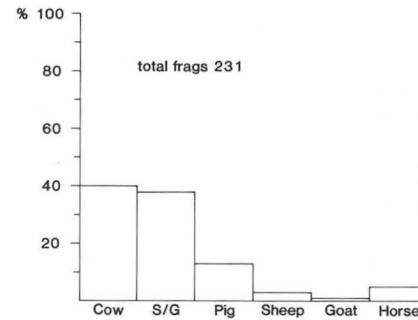


Figure 93 Animal bone. Percentage indicators, Period IV2.

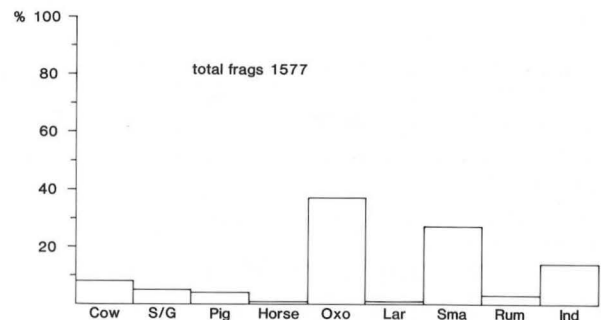


Figure 94 Animal bone. Percentage non-indicators, Period IV2.

roughly the same percentage as cattle (42% and 40% respectively). The percentage of pig declines slightly to 13%, with horse remaining at 5% (Figs 93 and 94).

Cattle

Two of the cattle mandibles recovered produced mandibular wear stages of 26 and 40. The remainder were estimated to be juvenile, one young adult and four mature adults. One mandible was indeterminate. This sample is too small to warrant further comment.

With respect to the epiphysal fusion data most of the skeletal elements were fused, indicative of mature beasts.

One of the two horn-cores recorded for Period IV2 was female and one was indeterminate.

Sheep/Goat

The deciduous dentition of the mandibles revealed one sheep, whilst the horn-cores revealed six sheep, two goats and one indeterminate.

The ageing data from the Period IV2 sheep/goat mandibles showed a distinct bias towards young adults and mature adults which would suggest a concentration on wool rather than meat production. The sample of fifteen mandibles was not large enough to produce a meaningful histogram. Eight mandibles were assigned specific wear stages (1 'C', 3 'E' and 4 'G'), whilst three were estimated as one juvenile and two mature adults, with four being indeterminate. The fusion data for sheep/goat point to the majority of animals being mature.

Pigs

Of the thirteen pig mandibles only two had sufficient dentition to produce a mandible wear stage, one being 8 and the other 29. The latter was half of a complete lower jaw, so its 'partner' can be assumed also to have had a mandible wear stage of 29. Six of the remainder were indeterminate, whilst four were estimated to be young adults. This would suggest a concentration on younger animals, presumably for meat production.

Although the fusion sample was rather small, the majority of the elements were unfused suggesting most slaughter took place between one and three years.

Other species

Horse bones comprised about 5% of the indicators. Both cat and dog were also recovered though in this phase dog seems to have been more common, with thirty-three bones being recovered, compared to only five cat. Of the cat remains, the jaw and skull both came from pit 1389, and thus probably from the same individual. The dog remains seem less likely to have been associated, though concentrations did occur in ditches 250 and 1065.

Also recovered from this phase were one hare tibia and one rabbit tibia. As rabbit was only introduced after the Norman Conquest, it is likely to represent an intrusion, a reasonable assumption as the rabbit is a burrowing animal. The hare however, lives in a surface scrape and so may well not be intrusive.

The avian species represented were goose and probably chicken, with the latter predominating.

Period IV3 Late Saxon (late eleventh century)

By the late eleventh century the indicators point to the predominance of sheep/goat, which make up half the total.

Cattle now constitute about a third of the total, with pig 11% and horse 4% (Figs 95 and 96).

Cattle

None of the thirteen cattle mandibles had enough teeth to allow ageing (after Grant 1982). It was estimated that two were juveniles, three were young adults and six were mature adults (two were indeterminate). As with all the smaller samples of mandibles little can be said, particularly in view of the approximate nature of the ageing.

The evidence provided by the fusion data points to the survival of older animals, probably for traction, compared to earlier periods, though there is also some emphasis on adolescents and young adults.

The horn-core evidence showed one female, one male and eight indeterminate.

Sheep/Goat

Examination of the twenty-seven horn-cores revealed twenty-one sheep, five goats, and one indeterminate. None of the juvenile mandibles were goat, but fifteen were sheep (after Payne 1985).

Sixty-seven mandibles, both indicators and non-indicators, produced exact wear stages, and their distribution can be seen in Fig. 97. This shows two areas of concentration in the slaughter patterns, one at an approximately adolescent stage, followed by a larger young adult concentration. Such a pattern may indicate a combination of meat, milk and wool production.

The relative dearth of unfused elements make it difficult to be certain about such a trend on the basis of fusion.

Pig

Thirty-three pig mandibles recovered from Period IV3 produced the following ageing evidence: one had a

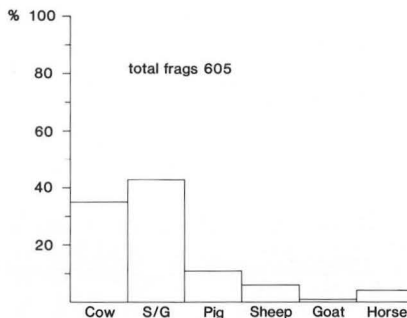


Figure 95 Animal bone. Percentage indicators. Period IV3.

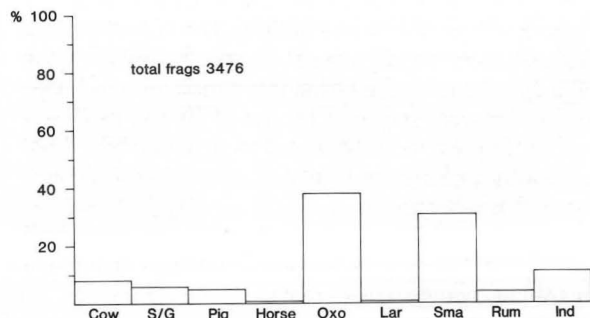


Figure 96 Animal bone. Percentage non-indicators. Period IV3.

mandible wear stage of 19, two had mandible wear stages of 31, nine were estimated to be juveniles, eight were estimated to be young adults, and thirteen were indeterminate. There is a fairly marked dominance of relatively young animals in the kill-off profile.

Other species

Both cat and dog were recovered with dog predominating (eighty-five elements as compared to twenty-nine).

Also present were one rabbit jaw and pelvis, but both of these should probably be regarded as intrusive.

Period IV3 produced the only definite roe deer bone from the site, a metapodial shaft fragment.

Horse remains fell slightly to 4% of the total indicators.

Period VII (thirteenth to fourteenth century)

The thirteenth- to fourteenth-century assemblage illustrates a marked increase in sheep/goat indicators, which now make up 61% of the total. Cattle indicators are less than half this figure, with pig having declined to 7% (Figs 98 and 99).

Cattle

Five of the thirty-nine cattle mandibles recovered from Period VII could be given an exact mandible wear stage. These were 3, 30, 39, 42 and 46. Estimating the remainder produced three juveniles, five young adults, fifteen mature adults and eleven indeterminates. This would suggest that the cattle were being kept for meat and possibly traction.

The fusion points to more of a concentration of adolescents and young adults, though this is an instance where, for example, the sixteen fused scapulas could be of any age from eleven months onwards.

The single cow horn-core from Period VII was female.

Sheep/Goat

The high number of mandibles from this period included only sixteen which had the juvenile dentition necessary to distinguish sheep and goat (after Payne 1985), and all sixteen proved to be sheep. Identification of the horn-cores revealed a ratio of sixteen sheep to three goats.

Period VII produced the largest number of sheep/goat mandibles, of which 109 could be assigned to a specific wear stage.

Figure 100 shows a concentration of mature animals probably kept for wool, and also younger beasts slaughtered at optimum body weight for meat.

Pig

The pig remains in Period VII included a virtually complete skeleton (context 1690), apparently buried in a grave beneath the floor of a building. The jaws from this individual gave a mandible wear stage of 50. Twenty-four other jaws were recovered from this period, of which two had mandible wear stages of 18, one of 19, one of 21 and one of 30. The rest were estimated as eight juvenile, three young adults, one mature adult and seven indeterminates.

The epiphysial fusion data is based on rather a small sample size, but does seem to indicate younger rather than older animals being slaughtered.

Other Species

In Period VII, horse is only represented by twenty-one indicators, 3% of the total.

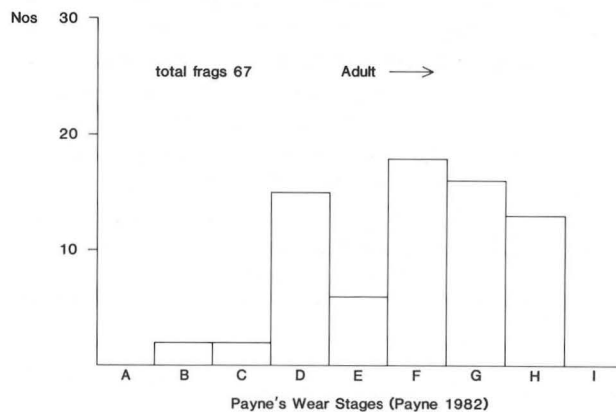


Figure 97 Age distribution of sheep/goat jaws, Period IV3.

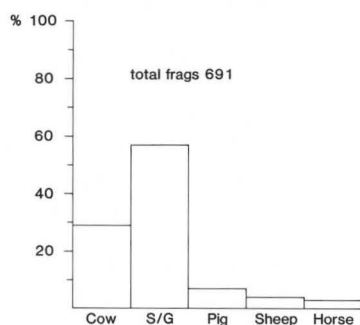


Figure 98 Animal bone. Percentage indicators, Period VII.

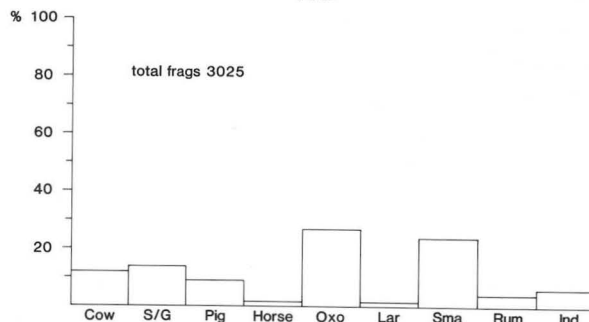


Figure 99 Animal bone. Percentage non-indicators, Period VII.

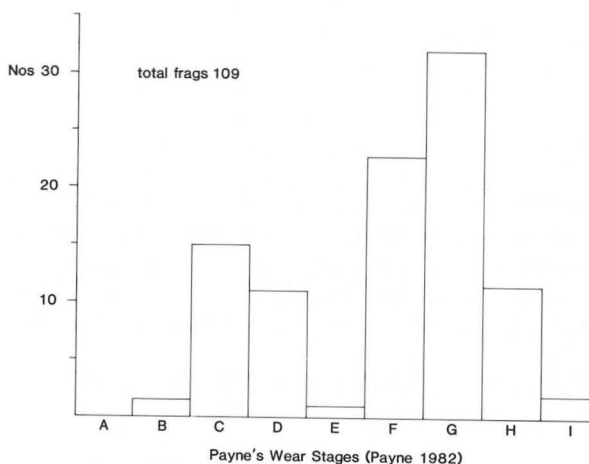


Figure 100 Age distribution of sheep/goat jaws, Period VII.

Dog and cat are present with forty-seven and ten elements respectively.

Of interest is the large increase in rabbit with forty-three elements being recovered. This could possibly reflect the existence of contemporary warrens.

Also recovered were three field mouse bones comprising a skull, a jaw and a whole tibia.

Skeletal Element Distribution

(Figs 101 and 102)

The bones actually recovered from an excavation represent a fraction of the original carcasses. The first factor affecting what does and does not survive is the nature of the bones themselves, allied to soil conditions

(such as pH). Certain bones by their very nature have a greater chance of survival than others. For example, the astragalus being a solid and compact bone will tend to survive better than the blade of the scapula which is thin and relatively fragile. This potential for survival is further affected by a series of taphonomic processes, of which the last is post-depositional degradation.

The extent to which taphonomic processes have affected the assemblage can be seen by comparing numbers of proximal and distal epiphyses of both the humerus and the tibia, since the distal epiphyses of both these bones are far more robust than the proximals. The following index for cow and sheep/goat in the four main periods has been constructed (Table 31).

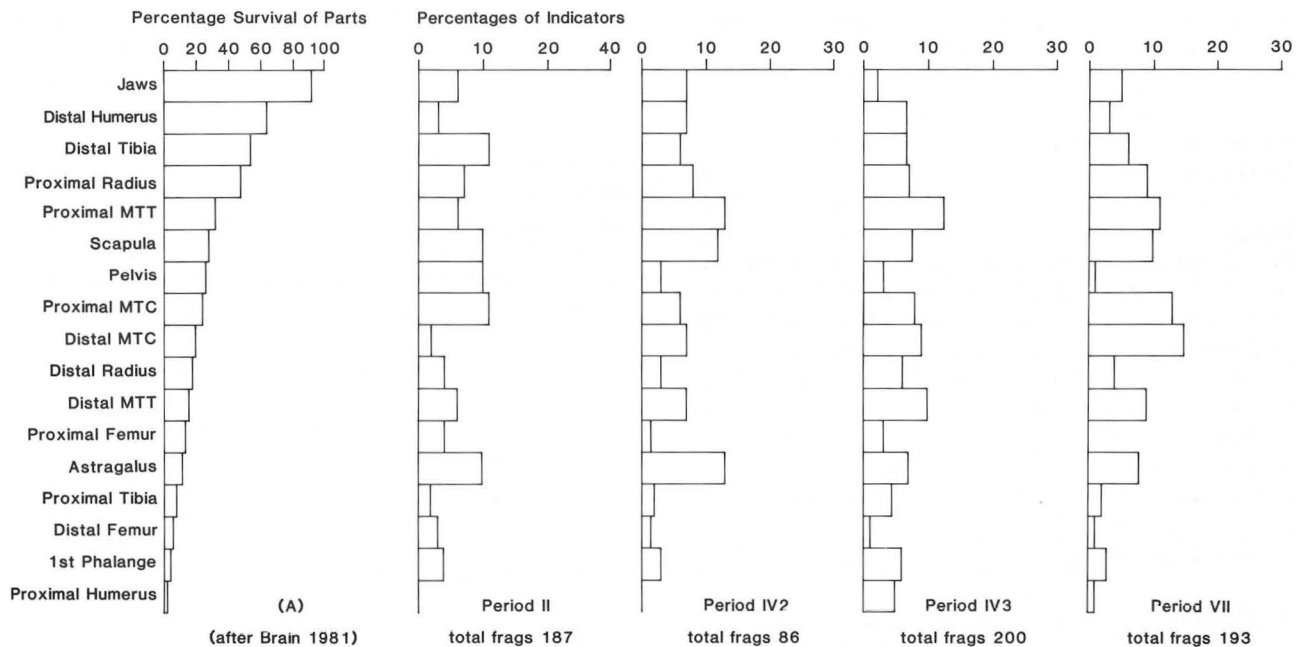


Figure 101 Cow skeletal element indicators by period.

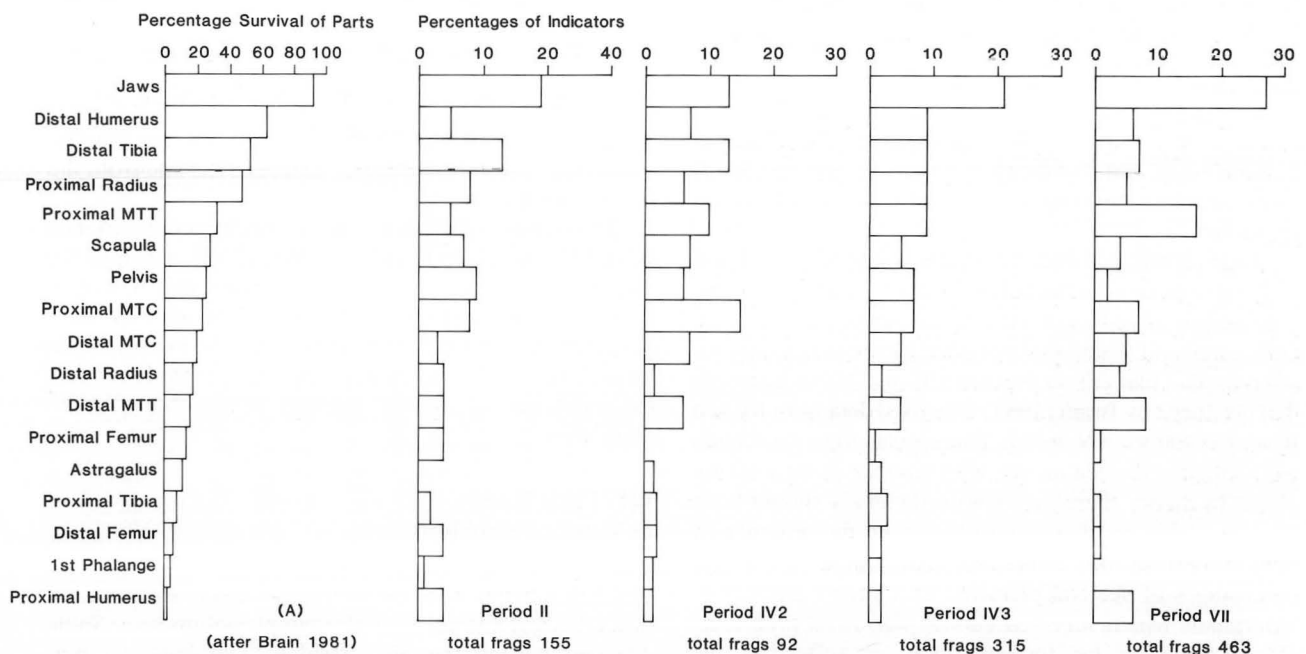


Figure 102 Sheep/goat skeletal element indicators by period.

	humerus proximal:distal	tibia proximal:distal
<i>Period II</i>		
cow	0:6	2:19
sheep/goat	2:9	3:20
<i>Period IV2</i>		
cow	0:6	2:5
sheep/goat	1:8	2:12
<i>Period IV3</i>		
cow	1:13	9:13
sheep/goat	3:25	6:26
<i>Period VII</i>		
cow	1:4	3:11
sheep/goat	2:24	2:30

Table 31 Ratios of proximal to distal humerus and tibia.

All these figures show a high degree of loss of the proximal epiphyses which, given the relatively fragile nature of the proximal ends, is to be expected.

Human intervention can be the single largest modifying factor. For example, in a hunting economy the waste bone such as the skull may be discarded at the kill site. Excavation of a living area may thus reveal very few skulls relative to the post-cranial skeleton, whilst the situation might be reversed were the kill site excavated. If marrow extraction is vigorously pursued then the long bones will tend to survive in a far more fragmentary way than would otherwise be the case. If bone working was carried out, certain skeletal elements from the site assemblage may have been selected for use. The giving of bones to dogs is another factor which could radically alter a faunal assemblage (as shown by Payne and Munson 1985), though this is not significant on the Redcastle Furze site since gnawing evidence is almost totally absent.

So far, discussion has centred on how the nature of the bones, soil conditions and human use can modify the potential bone assemblage. It is also necessary to recognise how patterns of discard can affect what is available for archaeological recovery. If bones are thrown to dogs or dropped almost at random around the site then they are going to end up in a fairly weathered and fragmentary state depending on the prevailing surface conditions — a muddy area will 'swallow' bone far more quickly than a dry clay area. In contrast, if refuse disposal is more organised and bone is buried in pits which are fairly quickly covered over, it will be much better preserved.

Bearing this in mind, the charts below (Figs 101 and 102) have been constructed to look for variations in the distribution of indicator skeletal elements through time. Only cattle and sheep/goat provided large enough samples to be used. Chart (a) on Figures 101 and 102 is based on that produced by Brain (1981) who used data from Kuiseb River Hottentots in Namibia. There, goats from local herds were killed and eaten on site with no trade in meat taking place. In theory therefore, whole skeletons should have been available for deposition. However, the presence of dogs modified this situation. The charts show the percentages of skeletal elements of a known number of individuals which survived various attritional processes. They can thus be looked upon as reflecting the survivability of bone in a controlled situation, against which the Redcastle Furze material may be compared.

Period	Cow m/b : n/m/b	Sheep/Goat m/b : n/m/b
II	76:80	64:74
IV2	31:36	27:55
IV3	68:90	103:173
VII	53:101	97:298

Table 32 Ratios of meat bearing to non-meat bearing skeletal elements for cow and sheep/goat.

Overall, the sheep/goat indicators seem to follow the 'natural' pattern more closely than do the cattle bones, but neither species seems to exhibit any marked deviations. More immediately interpretable were the meat/non-meat bearing elements (though it must be remembered that certain butchery methods treat the scapula and pelvis as waste, and the mandible, distal tibia and phalanges as non-meat bearing (phalanges were weighted to take into account their greater skeletal frequency)). It must be noted however, that this is only a very coarse index, since proximal and distal elements could come from the same bone.

Table 32 indicates an increase through time in the amounts of waste and non-meat bearing bones found on the site. For cattle this is first seen in Period IV3, whilst for sheep/goats, waste begins to dominate in Period IV2. The implication is that either the animals were slaughtered and the meat elements taken off the site, possibly to an urban centre for consumption and deposition there, or that the Redcastle Furze area was being used as a dumping ground for waste from the eleventh century onwards. Both of these explanations may be correct to a greater or lesser extent. However, the more or less equal numbers of meat and waste bones in the earlier periods, notably Period II, are indicative of domestic assemblages.

Comment

The most obvious trend on the Redcastle Furze site is the switch in emphasis from cattle to sheep/goat. Morphological evidence suggests most of the sheep/goat bones were of sheep. The slaughter patterns for the sheep indicate a shift from meat production in Period II to one in which wool was probably the primary concern in Period VII. This trend could reflect the growth in the wool trade with the Continent which is of historical importance for the area. The increase in sheep/goat remains may also be linked to the increasingly open nature of the site from the late eleventh century.

The number of pig bones drops steadily in importance from 15% in Period II to 7% in Period VII, whereas the proportion of horse bone stays reasonably constant throughout all periods of the site. Wild species were generally absent from all periods except VII when rabbit became relatively common, though this probably reflects the existence of nearby warrens rather than a wild population.

III. Fish Bones

by Rebecca Nicholson

The fish remains were recovered by sieving soil samples through a 500 micron mesh (for sample volumes see Table 33) and sorting the Imm residue. The bulk samples originated from pits, including possible cooking pits and cesspits, and the lower fills of sunken-featured buildings.

Period	Sample No.	Context	Soil Volume (litres)	Type
I	28	1271, Pit 1272	36.0	Eel: 2 vertebrae (crushed); Herring: 3 vertebrae (crushed).
II	19	553, Pit 508	15.0	Herring: 1 vertebra.
II	1	844, SFB 915	22.5	Eel: 2 vertebrae.
II	3	795, SFB 915	22.5	Eel: 1 vertebra; Unid.: 2 crushed vertebrae.
II	4	795, SFB 915	22.5	Eel: 5 vertebrae (1 crushed); ?Pike: 1 tooth; Unid.: 2 vertebrae.
II	5	898, SFB 951	24.5	Herring 1 vertebra; 1 burnt: Unid.: 1 frag.
II	6	898, SFB 951	27.0	Herring: 1 vertebra; ?Perch: 1 vertebra; Unid.: 2 frags.
II	8	810, SFB 951	21.0	Unid.: 2 frags.
II	9	1282, Pit 1281	12.0	Herring: 2 vertebrae.
II	14	1667, SFB 1528	72.0	Herring: 4 vertebrae; Unid.: 1 vertebra; Unid. 1 frag.
II	11	1598, SFB 1599	102.0	Eel: 6 vertebrae; Herring: 10 vertebrae; 1 otic bulla; Unid.: 3 vertebrae.
II	21	1817, Pit 1793	18.0	Eel: 1 vertebra; Clupeid: 1 vertebra; Herring: 2 vertebrae (burnt).
II	23	1936, SFB 1938	18.0	Eel: 1 vertebra; Herring: 1 vertebra; Unid.: 3 vertebrae (1 burnt).
II	27	2124, SFB 2125	18.0	Eel: 1 vertebra; Unid.: 1 vertebra.
IVI	15	1705, Pit 1706	27.0	Eel: 15 vertebrae; Herring: 23 vertebrae (some crushed), 1 otic bulla; Pike: 1 vertebra; Unid.: 1 vertebra, 6 frags.
IV3	22	565, Pit 380	13.5	Eel: 62 vertebrae (many crushed), 1 vomer; Herring: 71 vertebrae (4 burnt, many crushed), 1 basioccipital, 2 cleithrum, 2 interopercular, 1 otic bulla; Unid.: 1 tooth, 1 parasphenoid, 20 vertebrae, 11 frags.
IV3	12	1325/1357, Pit 1324	18.0	Eel: 1 vertebra; Herring: 1 vertebra.
IV3	13	1678, Pit 1676	18.0	Eel: 1 vertebra; Herring:
VII	16	1719, Pit 1989	22.5	Eel: 8 vertebrae (some crushed), 1 cleithrum; Herring: 15 vertebrae (1 burnt, some crushed), 1 otic bulla; Clupeid: 11 vertebrae; 3-spined Stickleback: 2 spines, 3 ?basipterygia, 1 skull frag; Cyprinid: 2 vertebrae; ?Perch: 2 vertebrae; Unid.: 2 vertebrae, 17 frags.
VII	17	1720, Pit 1989	13.5	Eel: 2 vertebrae (crushed); Herring: 11 vertebrae (some crushed); ?Ruffe: 2 otolith; Stickleback: 2 spines, 6 basipterygia/pelvic spines; Unid.: 1 cleithra, 8 frags.
VII	25	2021, Kiln 2020	13.5	Eel: 9 vertebrae; Unid.: 1 frag. (All burnt).

Table 33 Details of the fish remains.

The bones thus represent a sample of the original population of skeletal elements deposited in discrete features, and so are valuable as indicators of diet and economy.

Method

Identifications to skeletal element and species, or higher taxonomic level, were made by using the modern comparative skeletal collection housed in the Environmental Archaeology Unit, University of York. As many of the bones were collected from pits, which generally represent discrete, sealed contexts, it was considered worthwhile to record all the identifiable bones individually. A record of this archive is held in the Environmental Archaeology Unit and by the excavator. The nomenclature used in this report follows Wheeler and Jones (1989).

Bones were also recorded with regard to their state of preservation. The categories recorded included:

1. Texture (on a scale of 1 (as fresh) to 5 (very crumbly)).
2. Erosion (on a scale of 0 (none) to 5 (extreme)).
3. Flaking (on a scale of 0 (none) to 5 (extreme)).
4. Condition (The sum of 1–3, above).
5. Gnawing (presence/absence).
6. Pitting (presence/absence).
7. Percentage of the skeletal element represented by the fragment (from 10% to 100% at 10% intervals).

This recording system was developed as part of a research project by the author. Variation in texture, erosion, flaking and the size of bone fragments between or within contexts may indicate differences in the pre-depositional history of the bones. Evidence of

gnawing or crushing of bones, and pitting by the action of acids on the surface can indicate passage through the gut, as Jones has demonstrated (1984a, 1986). Burning was also recorded, but burnt bone was not scored for texture, and therefore condition (as texture is a component) because burning alters the physical and chemical nature of bone.

Results

Out of 418 bones, 329 were identified to species or higher taxonomic level (see Table 33). Most of the unidentified fragments were ribs, rays and spines, although some vertebrae (thirty-four) were not identified. While fish bones were recovered from twenty-one samples (from nineteen contexts) the great majority came from a single context, 565 (176 bones in a sample of 13.5 litres), with contexts 1705, 1719 and 1720 producing forty-seven, seventy-eight and thirty-two bones respectively from samples of 27, 22.5 and 13.5 litres. Other contexts contained very few fish bones.

Preservation

Preservation of bone was moderately good from all the deposits, with most bones from all contexts scoring in the range of 2–5 for condition, although a few bones scored 6–8 (the maximum score recorded was 11, the minimum 1). There was no clear difference in preservation between contexts and little flaking or cracking, suggesting that most of the remains were buried reasonably rapidly. Evidence of erosion and pitting was slight, but many bones were crushed in a manner consistent with passage through the human gut, as illustrated experimentally by Jones

(1984a, 1986) for the herring *Clupea harengus* L. The contexts containing a proportion of crushed bones, notably herring and eel *Anguilla anguilla* L. vertebrae, included 565, 795, 1678, 1719, and 1720. Of these contexts, 565, 1678, 1719, and 1720 were considered to be probable Late Saxon and medieval cesspit deposits by the excavator. The lack of head elements surviving, despite the relatively good preservation of the vertebrae, also supports the conclusion that many of the remains originated in faeces. Context 1325/1357, which the excavator also considered to be a Late Saxon cesspit deposit contained only two bones. Burnt bone was recovered from contexts 1719 (one bone), 2021 (ten bones), 565 (four bones), 1817 (two bones) and one possibly burnt bone from 1936. Of these contexts, 1817 was interpreted by the excavator as the fill of an Early Saxon possible cooking pit, and 2021 as the fill of a medieval malting kiln.

Discussion

The assemblage is similar to several other fish bone groups excavated from sites in East Anglia in that, irrespective of date, the samples predominantly comprised herring *Clupea harengus* L. (fourteen out of twenty-one samples) and eel *Anguilla anguilla* L. (thirteen out of twenty-one samples). Evidently both were important components of the diet and economy of the inhabitants of Thetford from at least Early Saxon times, although herring has not previously been recovered from Early Saxon sites in East Anglia (Peter Murphy, pers. comm.). It is known that herring was fished commercially in the area now known as East Anglia by 709, from the Chronicle of the monastery of Evesham (Samuel 1918). Some sources put the beginnings of the herring industry in East Anglia back to the landing of Cedric the Saxon in 495 AD. In the reign of Edward I, Beccles paid a rent of 30,000 herring to the abbey of St Edmund (Samuel 1918). The herring consumed in Thetford were probably imported as preserved fish, either by salting (ungutted until the thirteenth century) or, from the thirteenth century onwards, smoking (Wilson 1973, 33). In 1086 the *Domesday Book* records that 'Garleston' (now Gorleston, near Yarmouth) possessed three salt pans.

While herring are marine fish, eels inhabit both marine and freshwater environments. The eels are thought to breed in the mid Atlantic, but metamorphose into elvers in coastal waters and enter rivers, many staying in the river mouths and shores. The eels feed and grow in the rivers before reaching sexual maturity (Wheeler 1969). Most eels are captured by trapping or spearing during their migrations into and out of the rivers. The eels represented in the Redcastle Furze samples would probably have been caught in riverine traps. It is known that eels were extremely important in the economy of the Fens in medieval times (Darby 1940), and trapping is the simplest means of capturing large numbers of eels. Eel was the only locally available species in the assemblage represented by more than a few bones.

Other fish, less well represented in the samples, include the Cyprinidae, pike *Esox lucius* L., perch *Perca fluviatilis* L., three-spined stickleback *Gasterosteus aculeatus* (L.), and possibly the ruffe *Gymnocephalus cernuus* L. All these are freshwater fishes, and all the bones except one pike tooth and one perch vertebra (estimated size of fish 40–44cm) were from very small fish (less than 15cm). Fish of this size are not usually

considered food fish, yet their presence in deposits interpreted as cesspits indicate that fish as small as the stickleback may have been considered edible, perhaps like small herring and sprats (whitebait) today.

Stickleback remains have also been recorded from Alms Lane in Norwich, in which context Jones and Scott (1985) concluded that they were probably discarded with the entrails of larger fish. While this is one possible explanation for the presence of very small fish remains at Redcastle Furze, the bones of several stickleback were recovered from two contexts, 1719 and 1720, both considered to be medieval cesspit deposits. These contexts also contained crushed fish vertebrae, and all the available evidence suggests that the fish component of the pit fills were deposited in human faeces.

The assemblage from Redcastle Furze is very similar to that reported by Jones (1984b) from the sieved assemblage from Site 1092 in Thetford, dating to the tenth and eleventh centuries. The evidence from the two sites of herring and eel, and to a much lesser extent small cyprinids, lends support to the suggestion that these fish were important components of the diet and economy of Thetford inhabitants from the Saxon to the late medieval period.

The fish remains from Site 1092 also contained numbers of bones from the Gadidae (cod family), and plaice *Pleuronectes platessa* L. was identified from Sites 1, 2 south and 2 north, in Thetford (Jones 1984b). No large bones were recovered by the sieving exercise at Redcastle Furze, but while sieving recovers small bones which may be missed during even careful trowelling, hand-picking is usually the method which recovers numbers of large bones.

Other sites of Late Saxon and medieval date producing large numbers of herring and eel, small numbers of other small freshwater fish, and also large gadids and flatfish include Norwich Alms Lane (Jones and Scott 1985), Norwich Magistrates Court (Locker undated) and Norwich Whitefriars (Jones 1983). At Redcastle Furze virtually no bones were collected by hand-picking. It is possible that the remains of large fish were disposed of away from the excavated area, while the recovered remains largely represent those bones deposited in faeces, as indicated by the numbers of crushed bones.

The fish represented at Redcastle Furze, in common with the assemblages of fish bones from the sites mentioned above, do not seem to vary through time, despite the changing fortunes of the area. Herring and eel are the dominant species both by number of bones and by number of contexts in which they appear throughout all phases of the site.

While the species remain constant, the number of bones increases dramatically from the Early to the Late Saxon period. This may be a result of the types of deposits sampled; the fills of sunken-featured buildings for the Early Saxon, pits for the Late Saxon. It is interesting to note however, that at Ipswich Jones (1982a) points out that the number of herring bones recovered from contexts dating to the Late Saxon and Saxo-Norman period is far in excess of the number recovered from the earlier Saxon period. Jones postulates that perhaps the introduction of the drift net, or similar technological innovation, was the cause. Alternatively he suggests that the North Sea herring population may have moved further inshore.

Conclusion

The fish remains recovered from Redcastle Furze indicate that herring and eel were the most popular fish consumed during all phases of the site, although the Early Saxon period produced few fish bones. Selected pits from the Late Saxon and medieval periods produced the majority of the small assemblage. While substantial conclusions cannot be drawn from such a small assemblage of bones, it is clear that the fish species consumed at Redcastle Furze were those consumed in other parts of Thetford and in Norwich at a similar date.

Many of the fish bones appear to have passed through the human gut, a conclusion which is supported by the parasitological investigations below.

IV. Molluscs

14.76kg of mollusc shell were recovered from a variety of contexts across the site. Oyster, cockle and mussel have been identified. No context showed any concentrations of shell and therefore the catalogue is confined to the archive.

V. Plant Macrofossils

by Peter Murphy

Introduction

Excavations at Redcastle Furze, close to the periphery of the Late Saxon town, revealed a sequence of features of Roman, Early Saxon, Middle Saxon, Late Saxon and medieval date. Very little is known about Early Saxon agriculture in East Anglia, partly because some important sites were excavated before large-scale flotation techniques were widely applied (*e.g.* West Stow, Murphy 1985a) or because the sites examined were cemeteries, producing only low density scatters of carbonised plant material (*e.g.* Spong Hill and Springfield Lyons, both Murphy in prep.). The opportunity was therefore taken at Redcastle Furze to sample as many Early Saxon settlement features as was practicable. Late Saxon and medieval urban contexts have, however, been much more widely studied, in East Anglia and elsewhere in the country. Some limited sampling of pits and a malting kiln of these periods was undertaken, and the materials extracted were scanned over, without full quantitative analysis, to assess whether these samples would produce familiar types of assemblage or not. It was not thought, following scanning, that the pit samples merited more detailed study, but one medieval feature, the malting kiln 2019 did produce an informative sample.

Methods

Samples of varying size, comprising up to 102 litres of soil, were taken from the lowest fills of most of the Early Saxon sunken-featured buildings (SFBs) and some pits, from pits of Roman, Late Saxon, and medieval date, and from a medieval malting kiln.

The samples were processed in a bulk sieving/flotation tank using 0.5mm meshes throughout. The non-floating residues were sorted without magnification, picking out bone, shell, phosphatic concretions *etc.* The flots were sorted under a binocular microscope at low power. Samples from most Early Saxon contexts were fully sorted, extracting all potentially identifiable macrofossils, whereas portions of the flots from other contexts were initially simply scanned, noting their main components.

Plant macrofossils from the Early Saxon samples are listed in Table 34, from Roman, Late Saxon and early medieval contexts in Table 35, and from the medieval malting kiln in Table 36.

Many of the deposits sampled had been extensively penetrated by modern roots, and consequently some of the flots included a high proportion of fibrous and woody roots. Uncarbonised recent seeds had also been introduced. Most of these were easily distinguished from carbonised specimens and ignored, but seeds of the Chenopodiaceae were more of a problem, particularly since they were frequently fragmentary. Quantification proved impossible. Mineralised seeds were present in some of the flots, but seeds preserved in this way do not float well and, since it was not practicable to sort all the residues under the microscope, retrieval was incomplete. Counts are therefore not given. Shells of *Candidula*, *Cecilioides*, *Cochlicopa*, *Helix*, *Pupilla* and *Vallonia* spp were noted, but most of these were probably intrusive.

Discussion

Context 1271 was from a Roman pit (1272) assigned to the first century AD. A sample was examined, but produced only rather sparse and poorly-preserved carbonised plant remains with some fishbones. One of the cereal grains is of *Triticum spelta* type which would not be inconsistent with an Iron Age or Roman date, but the macrofossils present give no clear indication of the date and function for the feature.

Crop plants identified in samples from Early Saxon contexts are *Triticum* sp. (short-grained hexaploid wheat), *Hordeum vulgare* (six-row hulled barley) and rye (*Secale cereale*). The *Avena* (oat) grains might represent a crop or a weed species. Context 810 produced a single poorly-preserved seed very tentatively identified as a species of flax (*Linum* sp.). The cereal remains present closely resemble material from West Stow (Murphy 1985a, 101) but differ in one significant respect: there are no remains of spelt (*Triticum spelta*). At West Stow it was argued that the presence of this species might be an indication of agrarian continuity from the Roman period. Whilst negative results are always suspect, the Redcastle Furze samples provide no evidence for such continuity.

The assemblages are composed largely of cereal grains with occasional rachis fragments, culm fragments and variable, but generally small, numbers of weed seeds. They therefore seem to represent prime products, carbonised at a late stage in their processing, rather than crop processing waste. The association of this material with fishbones and mammal bone fragments implies that assemblages of domestic waste are represented. The presence of some mineralised plant material in the lowest fills of the SFBs indicates accumulations of organic waste resulting in mineralisation of plant material by biogenic phosphates and calcium. However these lowest fills need not be contemporary with the occupation of the buildings and may just indicate a secondary use for refuse disposal. The pit fills, in general, produced few carbonised plant remains: context 1817 from the so-called 'cooking pit' 1793 contained very large amounts of charcoal but only a few fragments of charred cereal grains and bone.

The macrofossils of wild plants include taxa characteristic of well-drained acid sandy arable soils and heathland (*Raphanus raphanistrum*; wild radish; *Spergula arvensis*, corn spurrey; *Rumex acetosella*,

Sample No.		18	19	1	2	3	4	5	6	7	8	9	10	14	11	21	23	24	27
Context No.		549	553	844	844	795	795	898	898	810	810	1282	1298	1667	1598	1817	1936	1964	2124
Context Type		Pit	Pit	SFB	SFB	SFB	SFB	SFB	SFB	SFB	SFB	Pit	SFB	SFB	SFB	Pit	SFB	SFB	SFB
		508	508	915	915	915	915	951	951	951	951	1281	1299	1528	1599	1793	1938	1965	2125
Cereal indet.	ca.	4	-	2	7	10	10	40	57	33	35	10	3	47	21	-	1	7	4
	ca.fr.	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	c.fr.	-	-	-	-	-	-	-	-	1(cb)	-	-	-	1(cn)	-	-	-	-	-
<i>Triticum</i> sp.	ca.	-	-	-	-	-	-	1	3	1	3	-	-	1cf	6	-	-	7	-
<i>Hordeum</i> sp.	ca.	-	-	3	1	3	4	-	-	-	-	2	-	-	-	-	-	2	2
	rn.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Hordeum vulgare</i> L	ca.	-	-	-	-	-	-	31	43(g)	21	16	-	-	6	13	-	-	-	-
<i>Secale cereale</i> L	ca.	-	-	2	-	1	1	-	1	-	4	-	2	11	4	-	1	-	1
	rn.	-	-	-	-	-	1	fr	-	-	-	-	-	-	1	-	-	-	-
<i>Avena</i> sp(p).	ca.	-	-	-	1cf	1cf	1	3	1	1	-	2cf	-	4	1cf	-	-	-	1fr
<i>Ranunculus</i> sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1cf	-	-
<i>Raphanus raphanistrum</i> L	-	-	-	-	-	-	fr	-	-	-	-	-	-	-	1	-	-	-	-
<i>Spergula arvensis</i> L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
<i>Fumaria officinalis</i> L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
<i>Chenopodium album</i> L	-	-	-	-	-	-	-	+	-	+	-	-	-	-	+	+	+	-	-
Chenopodiaceae indet.	-	-	-	-	-	-	-	+	+	+	-	-	-	-	+	-	-	-	-
cf. <i>Linum</i> sp.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
cf. <i>Malva</i> sp.	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
<i>Vicia/Lathyrus</i> sp(p).	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
<i>Medicago/Trifolium</i> -type	-	-	-	-	-	-	-	1	3	1	-	-	-	-	-	-	9	-	-
<i>Polygonum convolvulus</i> L	-	-	-	1	-	-	-	8	7+fr	4+fr	1	-	-	1	3+fr	-	1	1	1
<i>Rumex</i> sp.	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1cf
<i>Rumex acetosella</i> agg.	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	1	-	-
<i>Urtica dioica</i> L.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3cf	-	-
<i>Corylus avellana</i> L.	-	-	-	-	-	-	-	-	fr	-	-	-	-	-	-	-	-	-	-
<i>Calluna vulgaris</i> (L) Hull	cp.	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	sh.	-	-	-	-	-	-	+	-	+	+	-	-	-	+	-	-	-	-
<i>Solanum nigrum</i> L.	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-
<i>Plantago lanceolata</i> L.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1cf	-	-
<i>Galium aparine</i> L	-	-	-	-	-	-	-	-	-	-	-	fr	-	-	-	-	-	-	-
<i>Onopodium acanthium</i> L.	-	-	-	-	-	-	-	2	2	-	1	-	-	-	1	-	-	-	-
<i>Iris pseudacorus</i> L.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-

Sample No.	18	19	1	2	3	4	5	6	7	8	9	10	14	11	21	23	24	27
Context No.	549	553	844	844	795	795	898	898	810	810	1282	1298	1667	1598	1817	1936	1964	2124
Context Type	Pit	Pit	SFE	SFB	SFB	SFB	SFB	SFB	SFB	SFB	Pit	SFB	SFB	SFB	Pit	SFB	SFB	SFB
	508	508	915	915	915	915	951	951	951	951	1281	1299	1528	1599	1793	1938	1965	2125
<i>Eleocharis palustris/uniglumis</i>	-	-	2	-	1	-	1+cf	1	1	-	-	-	7	2	-	-	-	-
<i>Carex</i> spp.	-	-	-	-	-	-	1+1cf	-	-	-	-	-	-	-	-	1	-	-
<i>Bromus mollis/secalinus</i>	-	-	-	-	-	-	-	-	-	1cf	-	-	1	-	-	-	-	-
<i>Anisantha sterilis</i> (L.) Nevski.	-	-	-	-	-	-	-	-	-	fr	-	-	-	-	-	-	-	-
Gramineae indet.	-	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-
Indet. (carbonised seeds etc.)	-	-	-	2	4	3	8	9	2	1	-	-	6	1	-	8	-	-
Chenopodiaceae (min)	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Malva</i> sp. (min)	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Polygonum convolvulus</i> L. (min)	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
Indet. (min)	4	-	-	-	-	-	+	+	+	-	-	-	-	1	1	-	1	1
Sample volume (litres)	15	15	22.5	22.5	22.5	22.5	25	27	22.5	21	12	18	72	102	13.5	18	25	18
% flot sorted	100	100	100	100	100	100	100	100	100	100	100	100	100	100	125	25	100	100

Unless otherwise indicated taxa are represented by fruits or seeds.

Abbreviations: ca - caryopses; cb - culm bases; cfr - culm fragments; cn - culm nodes; cp - capsules; fr - fragments; g - including germinated grains; min - mineralised; rn - rachis nodes ; sh - shoots.

Table 34 Plant macrofossils from Period II (Early Saxon contexts)

Period	Sample No.	Context	Soil Volume (litres)	Macrofossils
I	28	1271 Pit 1272	36.0	Charcoal fragments; rare carbonised cereal grains, mostly indeterminate, but including <i>Triticum</i> cf. <i>spelta</i> ; carbonised culm fragments and weed seeds (<i>Rumex</i> , <i>Chenopodiaceae</i> , <i>Plantago lanceolata</i> , <i>Bromus</i> etc.); carbonised <i>Calluna</i> remains; fishbone.
IV1	15	1705 Pit 1706	27.0	Charcoal common; carbonised grains of <i>Secale</i> , <i>Avena</i> , <i>Triticum</i> , <i>Hordeum</i> common; carbonised <i>Calluna</i> shoots and flowers; carbonised weed seeds (<i>Agrostemma</i> , <i>Rumex</i> , <i>Eleocharis</i> etc.) carbonised <i>Sambucus</i> seeds; mineralised fruits/seeds including <i>Prunus</i> ; mineralised fly puparia; terrestrial mollusc shells, fishbone, mammal bone.
IV2	26	2015 Pit 2012	18.0	Charcoal fragments; rare carbonised cereal grains and <i>Corylus</i> nutshell; carbonised beetles; small mineralised concretions; mammal bone.
IV3	22	565 Pit 380	13.5	Charcoal fragments common; rare carbonised cereal grains and weed seeds; mineralised plant material common but mostly indeterminate; mineralised concretions, fish, bird and mammal bone.
IV3	12	1325/1357 Pit 1324	18.0	Rare small charcoal frags; rare carbonised cereal grains (<i>Hordeum</i> , <i>Avena</i> , <i>Secale</i>); rare carbonised weed seeds (<i>Agrostemma</i>); rare phosphatic concretions; rare terrestrial molluscs, fishbone and mammal bone. (Sample badly contaminated by modern roots).
IV3	13	1678 Post hole 1676 (in Pit 1324)	18.0	Rare small charcoal frags; rare cereal grains (<i>Hordeum</i> , <i>Secale</i>); rare small phosphatic concretions; rare terrestrial mollusc shells, <i>Mytilus</i> shell, fishbone and mammal bone. (Sample badly contaminated by modern roots).
VII	16	1719 Pit 1989	22.5	Rare small charcoal fragments; abundant mineralised plant material, notably <i>Vitis</i> and <i>Ficus</i> seeds; stem fragments etc; mineralised concretions; mineralised fly puparia; terrestrial mollusc shells, fragments of <i>Mytilus</i> shell, fishbone, mammal bone; scraps of mineralised textile.
VII	17	1720 Pit 1989	13.5	Sample similar in composition to 16, but with abundant small chalk fragments and some avian eggshell fragments.
VII	25	2021 Malting kiln 2020	13.5	See Table 36

The notes given here provide an indication of the main macrofossils present but are not intended as full systematic lists. The flots from these samples have been retained and are available for further study if required.

Table 35 Macrofossils from other contexts

Cereal indet.	ca	10
	ca fr	+
<i>Hordeum</i> sp.(p)	ca	22(g)
<i>Secale cereale</i> L	ca	2(g)
<i>Avena</i> sp.(p)		4
<i>Reseda</i> sp.		1
<i>Chenopodium album</i> L		+
Chenopodiaceae indet.		+
<i>Vicia/Lathyrus</i> sp.		1
Umbelliferae indet.		1
<i>Rumex acetosella</i> agg.		1
<i>Calluna vulgaris</i> (L) Hull sh.		+
Gramineae indet.		4(g)
Indet. (carbonised seeds)		2
Indet. (mineralised seeds)		1
Sample volume (litres)		13.5
% flot sorted		50

Abbreviations as in Table 34.

All the *Hordeum* grains had germinated prior to carbonisation; they show 'sprouts' c. $\frac{1}{3}$ – $\frac{2}{3}$ length of grain. Most are badly deformed, but one is certainly hulled. The sample also produced burnt fishbones and burnt shells of *Candidula* sp, *Nesovitrea hammonis*, *Trichia hispida* gp. and *Vallonia costata*.

Table 36 Plant macrofossils from burnt layer 2021 in bottom of malting kiln 2020 (Period VII)

sheep's sorrel; *Calluna vulgaris*, ling) together with wetland species (*Iris pseudacorus*, yellow flag; *Eleocharis palustris/uniglumis*, spike-rush; *Carex* spp, sedges) as well as more catholic weed and grassland species. Corbett (1973) maps a narrow belt of Freckenham series soils on the terraces in this part of the river valley.

These sandy, excessively-drained soils flank peaty and gleyed soils in the river flood-plain. Not all the seeds of wild plants associated with the cereals from Redcastle Furze need be crop weeds: the remains of *Calluna* and *Iris*, for example, presumably are related to collection of heather, reeds etc., for use as thatching or litter. Nevertheless the range of weed taxa present implies cultivation on the sandy terrace soils, extending down onto the flood-plain.

The samples from Late Saxon and early medieval pit fills were not examined in detail, but are of a type frequently encountered in urban contexts. Carbonised cereal remains are present, in association with mineralised seeds, phosphatic concretions, mineralised fly puparia, bones, avian eggshell and marine mollusc shell. Contexts 1719 and 1720 from the medieval stone-lined pit 1989 produced seeds of grape (*Vitis vinifera*) and fig (*Ficus carica*), but these exotic taxa were not seen in Late Saxon pits. Most of these features seem to represent latrine pits, into which other types of domestic rubbish were also deposited.

The bottom fill (2021) in medieval malting kiln 2020, produced a small assemblage of cereal grains and weed seeds, consisting mainly of hulled barley grains which had germinated before being carbonised. These are thought to represent malted barley accidentally charred due to poor temperature control during parching. Similar deposits came from fourteenth-century ovens at Alms Lane, Norwich, where structural evidence and a find of a millstone supported the interpretation of the site as a maltings and brewery (Murphy 1985b, 231–3). The sample from context 2021 also contained burnt shells of land molluscs, perhaps introduced with oven fuel, and

burnt fishbones. These bones seem to suggest that malting kiln 2020 was not used exclusively for parching malt, but may also have had other functions.

VI. Parasitological Investigations

by Rebecca Nicholson

Introduction

Two large and one small sample of sandy, crumbly concreted material from contexts 1719, 1720 and 1817 were examined for parasite ova as an indication of whether they contained human excrement (Table 37). The first two contexts were considered to be cess deposits by the excavator while the third was the lower fill in a shallow ?cooking pit. All the samples contained some calcareous mineral material, possibly lime, and did not appear to contain organic material.

Sample No.	Context No.	Total Weight	Description
16	1719	135g	Light brown sandy crumbly concretions containing abundant calcareous nodules.
17	1720	95g	As above.
21	1817	6.5g	Mid grey-brown sand silt concretion with charcoal fleck and little calcareous material.

Table 37 Sample descriptions

Methods

As a rapid means of assessing whether the remains contained human faeces, the samples were treated non-quantitatively. A small quantity of each sample was mixed with about 20ml of 1 molar hydrochloric acid and left overnight to disaggregate. Samples 16 and 17 did not dissolve completely, so a small quantity of concentrated hydrochloric acid was added. The resulting solutions contained some mineral matter, which was removed by sieving through a sterilised 250 micron mesh. Slides were prepared by mixing 0.15ml of the filtered solution with three drops of glycerine jelly and sealing with a coverslip.

The slides were scanned under a transmission microscope at $\times 120$, and any parasite eggs examined and measured at $\times 400$. Measurements of length and width were made to the nearest micron, after calibrating the eyepiece graticule to a stage micrometer. The state of preservation of the eggs was noted, for example the presence or absence of polar plugs on *Trichuris* ova. Length measurements on *Trichuris* were both standard length (total length minus the polar plugs), and, where both polar plugs were present, total length. The maximum width measurement was also taken (Table 38).

Results

Both contexts 1719 and 1720 contained ova of the whipworm *Trichuris*, although the ova were rare in 1720. Ten eggs were recorded from seven slides examined for 1720. Twenty-five eggs were recorded from one slide for 1719. No ova were observed on the five slides examined from context 1817.

The eggs from both contexts were moderately well preserved. Only two observed ova were unmeasurable due to their crumpled state (1719). Most ova had one or both polar plugs missing, and only four of the ova were

Context	Sample Number	Total Length	Standard Length	Width		
1719	16		44.64	22.32		
			47.12	27.28		
		57.04	49.60	22.32		
			47.12	24.80		
			47.12	24.80		
			47.12	24.80		
			49.60	24.80		
			44.64	27.28		
			44.64	24.80		
			49.60	24.80		
			47.12	27.28		
			47.12	27.80		
			49.60	24.80		
			49.60	24.80		
			49.60	24.80		
	49.60	27.28				
	49.60	24.80				
	47.12	27.28				
	47.12	27.28				
	48.36	27.28				
	47.12	27.28				
	44.64	27.28				
	52.08	24.80				
	44.64	27.28				
1720	17		54.56	27.28		
			49.60	24.80		
			49.60	24.80		
			44.64	27.28		
			49.60	27.28		
			44.64	27.28		
			59.52	52.08		
			47.12	24.80		
			49.60	44.64		
			47.12	24.80		
		Mean		53.94	47.83	25.78

Mean of total length given by Beer (1976) is 54.8 microns for *T. trichuria* and 62.1 microns for *T. suis*.

Mean of width given by Beer (1976) is 25.5 microns for *T. trichuria* and 30.1 microns for *T. suis*.

The Redcastle Furze *Trichuris* ova measurements therefore clearly fall within the range exhibited by *T. trichuria*.

Table 38 Measurement of *Trichuris* Ova

complete. The trichurids have members which inhabit the intestines of animals other than man, including sheep, pigs, dogs, mice and rats. The human whipworm is very similar in size and appearance to the pig whipworm *Trichuris suis* (Schrank). The measurements on the ova from Redcastle Furze indicate that the ova were probably from the human whipworm *Trichuris trichiura* (L.) based on comparison with modern eggs (Beer 1976, and Table 38). As the material did not appear to be entirely faecal in origin no further quantitative studies were undertaken.

Discussion

Whipworms are intestinal nematodes which produce large numbers of eggs which are passed into the faeces. It is today a very common parasite of communities with primitive sanitation (Jones 1985). Low infestations produce very few clinical symptoms, while large infestations (more commonly found in children) may cause severe illness (Jones 1985). Gut parasites including

Trichuris, as well as the maw worm *Ascaris lumbricoides* (L.), seem to have been prevalent in Britain from at least Roman times until recent improvements in sanitation and hygiene, as finds from urban excavations show (Jones 1982b; Jones 1985).

Until recently it was thought that parasite eggs would only survive in waterlogged deposits, where organic preservation was good. Jones *et al.* (1988) demonstrated that ova could be recovered from dry, mineral-rich sediments, however.

Conclusion

The presence of the whipworm *Trichuris* sp. ova in two of the three samples indicates that these contexts were almost certainly latrine pits. Unfortunately the dilution of faecal material with mineral material, including calcium carbonate (?lime), makes any estimation of the extent of parasite infection impossible.

Chapter 5. Conclusion

The conclusions to the reports of Knocker's and Davison's excavations have helped greatly in clarifying knowledge of the topography and development of Thetford. The results of excavations at Redcastle Furze have enabled our understanding of certain aspects to be further advanced, and highlighted areas where future work may resolve some of the problems of the town's beginnings and subsequent history.

The development of settlement in the immediate vicinity of Thetford has been closely related to the existence of two or more fords, one to the east at present-day Nuns' Bridges where the Icknield Way crossed the Thet and Little Ouse rivers, and one to the west near Red Castle, which may also have been used from early times. The crossing at present-day Bridge Street probably superseded the importance of the other two during the ninth century, but it is not certain whether there was a river crossing here before then.

The presence of a major Iron Age hillfort immediately to the north of Nuns' Bridges on an important river boundary testifies to the strategic location of this site. Limited excavations within the hillfort defences have shown occupation to have probably spanned the fifth to first century BC, and to have been broadly contemporary with a major religious or ceremonial site at Fison Way a short distance to the north. Excavations immediately to the east of the hillfort (Andrews and Penn forthcoming) have demonstrated the existence of Iron Age activity outside the defences, but the nature and extent of this has yet to be determined. The only other place where Iron Age features have been found in Thetford is at London Road where approximately two dozen pits were excavated (Davies 1992), but the nature and extent of this site also remains uncertain.

Excavations at Brandon Road and Redcastle Furze have revealed the remains of circular huts, ditches and pits which belonged to a first century AD riverside settlement, but the finds clearly demonstrate that this post-dated the Roman invasion. There is no evidence for any major Roman occupation in the immediate vicinity of Thetford. However, in addition to the settlement at Brandon Road and Redcastle Furze there may have been later Roman occupation further to the west adjacent to the river, and on the north bank, third to fourth century settlements or farmsteads are indicated by recent work at St Nicholas' Street (Andrews and Penn forthcoming), and further north at Fison Way close to the site where the Thetford Treasure was discovered.

An Early Saxon settlement overlay the Roman site at Brandon Road and Redcastle Furze, but probably extended further to the west, and was centred around the Red Castle ford. The sunken-featured buildings, ditches and pits found have been broadly dated to the sixth and seventh century, and it is clear that there was no continuity between the Late Roman and Early Saxon settlements in the area. Early Saxon inhumations, perhaps contemporary with this settlement, have been found at two sites; on higher ground at Brunel Way to the north of the river where

apparently thirty graves were located (Penn forthcoming), and south of the river around the site of St Margaret's church where several burials are reported from earlier this century.

Middle Saxon occupation, suggested by earlier metal detector finds, has been demonstrated for the first time in Thetford by the discovery at Redcastle Furze of two shallow ditches containing Ipswich-type Ware. Subsequent trial excavations further to the west have established the approximate extent of occupation. Like the Early Saxon settlement, it may have been centred around the Red Castle ford, but the limited archaeological investigations have failed to produce any evidence for continuity of occupation. Coin evidence would suggest that the Middle Saxon settlement developed at the beginning of the eighth century and continued into the ninth century, but only further excavation can refine this chronology, investigate the nature and layout of the settlement, and perhaps establish its relationship to the other sites in the area such as Brandon and Harling.

The beginning in 1988 of what is intended to be a prolonged campaign of excavations in Late Saxon Thetford followed a period of almost two decades during which only two fairly small excavations took place (Rogerson and Dallas 1984, 55–61 and 64–65). One of these provided important evidence concerning the construction of the defences, but only a continued programme of problem-orientated and, where possible, large-scale excavation will further our knowledge of this important Late Saxon town.

The early history of Late Saxon Thetford remains obscure, but is likely to be better understood by excavation of the area around the Bridge Street river crossing. This crossing lies in a central position relative to the probable line of the defences north and south of the river, and it seems likely that it is around this crossing that evidence for the earliest occupation might be found. Whether Thetford began as a Danish camp, either to the north or south of the Bridge Street crossings or elsewhere may never be answered. The remains of what originally may have been a circular earthwork were investigated by Knocker at Weever's Close, south of Nuns' Bridges, but no evidence for its date of construction was found (Rogerson and Dallas 1984, 53–4). However, these were small-scale excavations and the inconclusive results are not therefore surprising. Further investigation of this strategically-sited earthwork may prove rewarding if only to discount the possibility of it having been a Danish camp. What is certain is that the Anglo-Saxon Chronicle *sub anno* 870 states that 'the raiding party...took up winter quarters in Thetford', and Aethelweard in his version of the Chronicle adds that they 'laid out a camp in the winter season at Thetford'. These references indicate the establishment of at least a temporary settlement or camp during the third quarter of the seventh century, on a site that was probably not that of the Middle Saxon settlement which may by then have ceased to exist. The Late Saxon town developed to the east of the latter and even at its

greatest extent only slightly overlapped the earlier settlement. Furthermore, the assemblage of finds from the two sites do not overlap chronologically, and thus on the basis of the present evidence it appears that there may have been a hiatus in occupation around the middle of the ninth century. If so, then it is unlikely that there was any movement of people from one side to the other, nor a time when the two settlements co-existed.

Recent excavations (Andrews and Penn forthcoming) have demonstrated that in addition to the southern Late Saxon defensive circuit, there was a northern circuit, the existence of which was first suggested in 1963. The relationship between the two circuits remains uncertain, but there is now limited evidence to support the contention that the northern circuit may have been contemporary with that to the south which was built in the early tenth century. The evidence for this will be discussed more fully in a future volume (Andrews and Penn forthcoming). It appears that the southern circuit, which enclosed an extension area of nearly 60 hectares, was built around the Bridge Street river crossing to contain an existing settlement that extended from around the Nuns' Bridges ford in the east to the Red Castle ford in the west. These two fords may thus have been protected by the defences. The northern circuit was much smaller and may have formed a regular semi-circle which was focused on the Bridge Street river crossing. The purpose of this may have been strategic, built to protect the important river crossing at its centre. If the defensive circuit north of the river was originally semi-circular in shape, then it may subsequently have been extended to the east to enclose later suburban development; recent excavations have located a Late Saxon ditch, probably of eleventh century date, surviving parallel to and immediately to the south of Guildhall Street (Andrews and Penn forthcoming). If this part of the north circuit was built in the eleventh century then it would imply that the remainder was still maintained after the south circuit has fallen into disuse. Excavations have shown the south bank defences to have gone out of use around the end of the tenth century when they were covered by industrial activity and cut by a ditch of possible eleventh-century date (Rogerson and Dallas 1984, 55).

It is now possible to put forward a suggested layout for some of the streets to the north and south of the river (Fig. 44), though much remains to be tested by excavation and observation, and only to the north is this layout preserved in the existing street pattern. There, the streets formed a cross with St Peter's church at the centre and extended beyond the defences to the north, east and west. Near to the east exit lay St Cuthbert's church with a market possibly located adjacent to a major route immediately beyond the defences. St Cuthbert's and perhaps St Andrew's churches north of the river, and St George's, St Margaret's and the church at Red Castle south of the river may all have been 'gate' churches which were established adjacent to important land routes into the town. The regularity of the streets north of the river may reflect the restricted area within the defences and the possibility that they were part of a later planned development in an area which may have remained underdeveloped during the tenth century.

It has been suggested here that the layout of streets to the south of the river may have been the result of two separate periods of development; a tenth-century period of sprawling development with little or no control of the

layout of streets and properties, followed early in the early eleventh century by the replacement or extension of this system by a layout exhibiting more evidence of deliberate planning. This may have been contemporary with at least a partial remodelling of the defences, which was perhaps a response to Sweyn's activities recorded in the Chronicle in 1004. It was at this time that peripheral areas including Redcastle Furze were first occupied, having previously been open areas enclosed by the defences, and extra-mural suburbs such as that around St Margaret's church developed. This probably reflected the growth of Thetford into a large Late Saxon town of the first rank which is likely to have had a population of several thousand, 943 of whom were burgesses in 1066.

The increased density of occupation is well-illustrated by the archaeological sequence at both Brandon Road and Redcastle Furze, and probably also in Knocker's excavations although the settlement sequence uncovered on these earlier sites is not well understood. The layout and sequence of streets and buildings there, as well as the general character of the sites appears to have been quite different to that of the later excavations to the east at Brandon Road and Redcastle Furze which not surprisingly, given their close proximity to each other, are very similar. It is likely that these differences reflect chronological as well as spatial variations between the two areas, and it is important that any opportunity to re-evaluate the results of the earlier excavations be taken, as well as any opportunity to excavate sites towards the centre of the southern defended area which as yet has been subject to only cursory investigation.

Further investigations in these areas should also provide much new information about the location, nature and importance of industry and commerce within the town. Excavations at Redcastle Furze have unfortunately added little to existing knowledge. Thetford is well known as the production centre of pottery, and there are varying amounts of direct and indirect evidence of iron and copper alloy working, bone and antler working, leather working and textile manufacture. Other crafts such as tanning, baking and brewing have left little or no trace, but it is reasonable to assume that all of these activities were carried out in a town the size of Thetford. It is unclear the extent to which farming played a part in the daily life of the inhabitants, and how much the town relied on its hinterland to provide it with foodstuffs; clearly a town of this size would have drawn on a considerable area to keep it supplied. *Domesday Book* records mills, and there were open areas within the town at least around the periphery, which were probably used for crop or animal husbandry as indicated by the enclosure systems at both Brandon Road and Redcastle Furze. Similar areas may have lain immediately outside the town, but the agricultural hinterland must have been quite extensive. Pigs and domestic fowl could have been kept within the town, but cattle, sheep and goats would have been grazed outside, and large areas must have been given over to cereal and crop production, and perhaps also to forestry.

The importance of commerce within the town may always be difficult to evaluate, though excavation of the commercial waterfront area which probably lay around the Bridge Street crossing may help in this respect. Elsewhere, there is only sparse evidence for continental trade. This includes a few sherds of imported pottery from the general area of the Rhineland, Holland, Belgium and northern

France, honestones from Norway, and quernstones from the Rhineland. Perhaps Thetford had very limited continental contacts, for although it was well placed for land routes in the area, its inland location rendered it initially inaccessible for North Sea or Channel trade. More local trade is indicated by the occurrence of coins minted outside of Thetford and Stamford Ware, shelly wares and other types of pottery not produced in the town. Other items or raw materials which would have been brought into the town from varying distances afield include metals in the form of either blooms, ingots, bars, rods, scrap or finished objects, as well as stone and glass. In addition, bones of herring and other sea fish, and marine mollusc shells indicate links with coastal areas. Exports included pottery which has been found across East Anglia and further afield, and perhaps cloth, leather and wood. However, organic materials rarely survive, and so their economic significance, whether as imports or exports, can rarely be judged. Perhaps excavation of the waterfront area will increase the present meagre assemblage of organic finds recovered from the town.

Thetford's rise to become a major Late Saxon town in the tenth and eleventh centuries, was followed by a rapid decline in the twelfth century. The most likely cause of this decline was the growth in importance of other East Anglian towns, most notably Norwich, during the late eleventh century. This consequently reduced the importance of Thetford, and led to a loss of its ecclesiastical and commercial standing so that by 1086 the number of burgesses had fallen to 720, 223 less than in 1066. This decline was most clearly manifested on the south bank where large areas of the previously densely occupied town were abandoned, streets were not maintained, many of the churches fell out of use, and the cathedral ceased to exist when the see was moved to Norwich. However, the south bank was not completely abandoned but probably contracted, leaving several small areas still occupied. At Redcastle Furze the street survived, perhaps because it was of some importance leading to the nearby ford, and new enclosures were laid out though in a fashion which indicated a lower density of occupation. During the mid-twelfth century the system of enclosures was disrupted by the construction of Red Castle, an 'Anarchy' period castle built to guard the nearby ford and several streets which passed close by. This castle comprised a ringwork and small bailey, with an earlier stone church perhaps re-used as a pseudo-keep.

The declining south bank settlement was supplanted to some extent by development on the north bank, though the twelfth-century and later town never matched its predecessor in extent or importance. The history of the settlement north of the river will be discussed in more detail in a future volume (Andrews and Penn forthcoming), however, it is relevant to note here that the Norman Castle built within the Iron Age defences at the east end of the town was not a royal creation, that there was little new development beyond the earlier line of the defences, and that the mint finally ceased production in the late twelfth century or early thirteenth century, all of which signalled a decline in the town's fortunes. The only significant developments after the beginning of the twelfth century were the establishment of several ecclesiastical foundations perhaps attracted by the pilgrim trade, and the colonisation of the southern part of the castle bailey and also the area between the castle defences and the suggested earlier line of the town defences, the latter area possibly having been a deliberate planned creation.

The structures uncovered at Redcastle Furze which have been dated to the twelfth century and later indicate continued, though limited, settlement along the south edge of the river flood plain. Many of these structures were probably farm buildings associated with the nearby Priory of Holy Sepulchre. Sheep farming, particularly for wool as is suggested from the animal bones, is likely to have been a major occupation, though cereals and other crops would have been grown, and malting, brewing and baking are all indicated by the various types of hearth and oven found at both Redcastle Furze and Brandon Road. The Black Death and Dissolution are likely to have seriously affected the continued operation of these farms so that by the middle of the sixteenth century the area was abandoned and reverted to grazing.

Much of the previously occupied area of the south bank was not built over again until the mid-twentieth century, and even now it is likely that much remains sealed or little-damaged beneath this later development. It is also fortunate that several large areas have never been built on since they were abandoned in the eleventh or twelfth century, and thus the failure of earlier topographic features to be preserved by continuity of occupation is not a serious drawback for it means that archaeological deposits survive to an extent perhaps unequalled in any other Late Saxon town in England.

Appendix I

Anglo-Saxon coins possibly from Sites 24849 and 24850 (Thetford by-pass 1988–9)

	Place of Minting	Date of Minting	Seen by M.Bonser	Remarks
<i>Sceattas</i>				
1) Series R (broken)	?East Anglia	710–740+	X	
2) Series R	?East Anglia	c.715–725?		Identification by Mark Blackburn
3) Series T	?North-east	715–720	X	'Scorum' beneath the 'porcupine'
4) Series X	?Frisia	710–740+	X	
<i>Stycas</i>				
5) AEthelred II	Northumbria	854–862	X	Moneyer Monne
<i>Pennies</i>				
6) Coenwulf	Mercia (E. Anglian issue)	796–821		
7) Ecgbeht	Wessex	802–839		
8) Berhtwulf	Mercia	840–852		?Alpha/Omega type
9) Edmund	East Anglia	855–870		? = <i>Spink Num Circ.</i> Sept.1988, 5419
10) AElfred (halfpenny)	Wessex	871–899		Said to be as Seaby 1127
11) Eadwig	?	955–959		
12) AEthelred II (cut half)	?	978–1016		Hand type
13) Cnut	?	1016–1035		
14) Harold I	?Lincoln	1035–1040		
15) Edward the Confessor	Thetford	1042–1066	X	Moneyer Somerlede. Sovereign/Eagles type
16) Harold II	?	1066		

*Dating of the sceattas is based on Blackburn's revised chronology (1984), and for the other coins on the chronology adopted by North (1980).

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Index

Notes: A page reference in italics indicates an illustration. Finds catalogues have been indexed selectively, and material on microfiche omitted from the index.

- Aethelweard 137
agricultural tools, iron 93, 93
agriculture
 Early Saxon 123–4, 131
 Late Saxon 33, 55, 58, 125, 138
 Early Medieval 66, 125
 Medieval 86, 126, 128, 139
 see also barns; bones, animal; field systems; kilns, malting; livestock
Anglo-Saxon Chronicle 137, 138
Anglo-Saxon period *see* Early Saxon; Late Saxon; Middle Saxon
animals *see* bones, animal; bones, fish; livestock
antler objects 116, 117
antler working *see* bone and antler working
- baking 138, 139
 see also ovens
barns 84
Black Death 139
bone and antler working 56, 122, 138
bone objects 116, 117–18
bones, animal 121–8
 cattle 121, 122, 123–4, 125, 126, 127–8
 skull, Roman 7, 10
 horse 121, 122, 124, 125, 126, 128
 pig 121, 122, 123, 124, 125–6, 128
 burial, Medieval 72, 73, 84, 121, 126
 rabbit 121, 125, 126, 127, 128
 sheep/goat 121, 122, 123, 124–5, 126, 127–8
bones, fish 128–31
bones, human 120–1
 see also inhumations
Boudiccan revolt 10
boundaries *see* ditches; enclosures; field systems
Brandon Road
 excavations (Site 5756) xi, 137, 138, 139
 ditches 54–5
 field system 33
 inhumations 45
 pits 22, 42, 53, 54–5
 pottery from 110–11
 streets 57, 58
 structures 19–21, 54–5, 86
 ?follows alignment of Saxon street 57, 69
 inhumations near 22
 properties along, Medieval 86
brewing 85, 138, 139
brick 100
Bridge Street 56
 river crossing at 58, 137, 138
brooches 90, 91
Brunel Way, inhumations xi, 22, 137
buckles
 copper alloy and pewter 90, 91
 iron 95, 96
buildings *see* structures
burials *see* inhumations
Bury Road 56
byres 84
- castles *see* Red Castle; Thetford Castle
cattle *see* bones, animal
cellared structures, Late Saxon 46, 55
ceramic objects *see* brick; clay, fired; daub; loomweights; pottery;
 spindle-whorls; tiles
cess pits *see* latrines and cess pits
charms 84
clay, fired 101
cloth *see* textiles
cloth-working *see* textile processing
coins 87–9, 88
- ?from Thetford by-pass 140
combs, bone and antler 116, 117
commerce *see* trade
cooking pits 22, 24
copper alloy objects 90, 91–2
copper alloy working, evidence for 56, 98, 138
- daub 101
Dissolution 139
ditches and gullies
 Roman 7, 8, 9–10
 Early Saxon 20, 21, 21, 24
 Middle Saxon 24, 25, 25–6
 Late Saxon 27–33, 27, 29–31, 38, 39, 45, 46–8, 46, 54, 55
 Early Medieval 45, 46–8, 46, 60–4, 63, 65–6
 Red Castle defences 66–9, 67
 see also enclosures
Domesday Book xi, 138
droveways 38, 54, 66
- Early Medieval period (Periods IV3, V and VI) 3–4, 28, 45–69, 46–51, 53, 59–65, 67
Early Saxon period (Period II) 3, 11–24, 11–15, 18, 20–1, 23
enclosures
 Early Saxon 21, 24
 Middle Saxon 25
 Late Saxon
 Enclosure A 38–42, 40–1, 47–8, 48–9, 55
 round structures 33, 35–7, 37, 38, 55
 Early Medieval
 Enclosure A 47–8, 48–9
 Enclosures B and C 60–2, 60–2, 65–6
 Medieval 76, 84
 see also ditches; field systems; Thetford, defences; yards
- farming *see* agriculture
field systems and field boundaries
 Roman 7, 9–10
 Late Saxon 32, 33, 54, 55
 Early Medieval 66
fish bones 128–31
fishing hooks, iron 96, 97
Fison Way, religious or ceremonial centre xi, 10, 11, 137
flintwork 7, 98–9
floor tiles 84, 100
flutes, bone 116, 118
- glass, window and vessel 84, 99–100
goats *see* sheep/goats
Goos, Simon le 86
graves *see* inhumations
Grimston (Norfolk), pottery from *see* pottery
Guildhall Street, excavations near 138
gullies *see* ditches and gullies
- hearths
 Late Saxon 32, 37, 38, 42
 Medieval 71–2, 73, 74–6, 82, 84
Holy Sepulchre, Priory of 69, 86, 139
hones 98, 98
horse furniture
 copper alloy 90, 92
 iron 97, 97
horses 121, 122, 124, 125, 126, 128
- Iceni 10
Icknield Way xi, 10–11, 137
industrial activity 56, 138
 see also bone and antler working; leather working; malting;
 metalworking; pottery production; textile processing
inhumations 38, 44–5, 44, 72, 84, 120–1
 other sites in Thetford xi, 22, 45, 137
Inshall, Agnes 86
Ipswich-type Ware *see* pottery

- Iron Age xi, 10–11, 10
iron objects 90–7, 93–7
iron working 56, 82, 97–8, 138
- jettons 87–9
- kilns, malting 77, 78, 79, 84, 85, 134–5
King Street 56
kitchens, detached 69, 74–7, 74, 84, 85–6
knives, iron 93–6, 94
- Lakenheath Way 57, 69, 86
Late Saxon period (Period IV) 3–4, 27–58, 27–37, 39–41, 43–4, 46–51, 53
latrines and cess pits 43, 44, 46, 54, 55, 79, 85
lead objects 90
leather working 56, 138
tools, iron 90–3, 93
livestock 55, 66, 123–7, 128, 138, 139
see also bones, animal
London Road 56
Iron Age site 137
loomweights
chalk 98, 99
clay 100, 100
- malting 84–5, 139
kilns 77, 78, 79, 84, 85, 134–5
Medieval period (Period VII) 3, 69–86, 70–81, 83
see also Early Medieval period
Mesolithic period 7
metalwork 90, 91–2
see also iron objects
metalworking 97–8, 138
tools, iron 90, 93
see also copper alloy working; iron working
Middle Saxon period (Period III) 3, 12, 24–7, 25–7
mills 138
Minstergate 56
molluscs 131
moulds, stone 98, 98
- needles, bone 116, 118
New Buckenham (Norfolk), ringwork 69
Norwich, Alms Lane, structures 82
Nuns' Bridges 137
ford at 11, 27, 57, 58, 137, 138
- Ouse, Little, river xi, 10
crossing at Bridge Street 137
ford at Nuns' Bridges 11, 27, 57, 58, 137, 138
ford near Red Castle 137
Roman 11
Early Saxon xi, 22, 137
Middle Saxon 26, 137
Late Saxon 55, 56, 57, 58, 69, 138
Early Medieval 69
Medieval 86, 139
- ovens
Late Saxon 32, 37
Early Medieval 64–5, 65, 66
- parasitological investigations 135–6
pewter objects 90
pigs *see* bones, animal
pins, bone 116, 118
pits
?Prehistoric 7
Roman 7–9, 8–9, 10
Early Saxon 20, 21–2, 23, 24
Late Saxon 32, 32, 33, 37, 42–4, 43, 45–6, 48–54, 50–1, 53, 55
Early Medieval 45–6, 48–54, 50–1, 53, 55, 64, 64, 66
Medieval 71, 72–3, 76–7, 76, 82, 85
stone-lined 77, 77–8, 78–9, 80, 84, 85
see also latrines and cess pits
plant macrofossils 131–5
pottery 101–16, 102, 112–15
native
Roman 101, 109, 111, 112
Early Saxon 101, 109–10, 111, 112
Middle Saxon 101–3, 110
Ipswich-type Ware 101–3, 110
Late Saxon/Early Medieval 103–7, 110, 112–14
Grimston Coarse Wares 105–6; Grimston/Thetford Ware 105, 106, 110; Unglazed Grimston Ware 105–6, 110
Shelly/St Neot's-type Wares 105, 110, 111, 112–13
Stamford Wares 104–5, 110, 111, 112
Thetford Ware 103–4, 110–11, 112
Medieval 107–8, 110, 113–14
Cambridgeshire-type Ware 108
Grimston Ware 108, 110, 115, 116; face jug 74–6, 84, 85–6, 108
Late Medieval Transitional Wares 108, 110, 115, 116
Local Unglazed Coarsewares 107, 110, 111–16, 114–15
Sible Hedingham Ware 108, 110
Post-Medieval 108–9, 110
imported
Andenne-type Ware 107
?continental, Middle Saxon period 103
Pingsdorf-type Ware 107
stonewares, Langerwehe and Raeren 108
see also loomweights; spindle-whorls; tiles
pottery production 56, 103–4, 111, 138
Prehistoric period (Period 0) 3, 7, 10
Priory of Holy Sepulchre 69, 86, 139
- querns 98
- rabbits 121, 125, 126, 127, 128
Red Castle xi, 68, 139
church at 45, 69, 138, 139
excavations xi, 25, 66–9, 67–8
ford near *see* Ouse, Little
ringworks *see* Red Castle
roads *see* droveways; streets
Roman period (Period I) 3, 6–10, 7–11
roof tiles 84, 98, 100, 100
- St Andrew's church 138
St Cuthbert's church 138
St George's church 57, 138
St Laurence's church 86
St Margaret's church 56, 138
inhumations xi, 22, 137
St Neot's-type Wares *see* pottery
St Nicholas' Street 137
St Peter's church 138
Saxon period *see* Early Saxon; Late Saxon; Middle Saxon
sheep/goats 121, 122, 123, 124–5, 126, 127–8, 139
wool production 124, 125, 126, 128, 139
Sible Hedingham (Essex), pottery from 108, 110
silver objects 90
slag 97–8
spindle-whorls
bone 116, 118
ceramic 100, 100
chalk 98
spinning *see* weaving and spinning
spoons, bone 116, 118
Stamford (Lincs.), pottery from 104–5, 110, 111, 139
stone objects 98–9, 98–100
stone structures *see* structures
streets, Late Saxon 33, 33–5, 55, 56–8
survival in later periods 45, 60, 65, 69
Thetford, street layout 56–8, 57, 86, 138
structures
Roman, post-built 7, 7, 9–10
Late Saxon 45–6, 47
post-built 33–8, 35–7, 45, 55
Early Medieval 45–6, 47
Medieval
clay and stone 69–74, 71–2, 75, 77–81, 77, 80–1, 82–6, 83
timber-framed 82, 84
see also barns; cellared structures; kitchens; sunken-featured buildings
suburbs, Late Saxon/Early Medieval 56, 57, 138
sunken-featured buildings
Early Saxon 11–21, 11, 13–15, 18, 24
?Late Saxon/Early Medieval 46, 47
Surrey, Earl of *see* Warene
Sweyn, King of Denmark and England 138

- tanning 138
- textile processing 56, 138
 - tools, iron 90, 93
 - see also* weaving and spinning
- textiles 116–19
- Thet, river xi, 57, 137
- Thetford
 - bishopric xi, 139
 - cathedral 139
 - defences, Saxon xi, 54, 57, 69, 137, 138
 - excavations xi, 111, 137
 - see also* Brandon Road; Red Castle
 - inhumations xi, 22, 45, 137
 - maps *xii*, 10, 27, 57, 86
 - mint xi, 139
 - pottery from (Thetford Ware) 103–4, 105, 106, 110–11, 112
 - settlement history
 - Prehistoric and Roman xi, 10–11, 10, 137
 - Early Saxon xi, 22–4, 137
 - Middle Saxon xi, 25–7, 27, 137
 - Late Saxon/Early Medieval xi, 56, 57, 58, 66, 137–9
 - Medieval xi, 86, 86, 139
 - street layout, Saxon 56–8, 57, 86, 138
 - locations in, see individual entries*
- Thetford by-pass, finds from 10, 26, 140
- Thetford Castle
 - Iron Age hillfort xi, 10, 26–7, 137
 - Norman castle 139
- Thetford Treasure 137
- tiles
 - floor and roof, ceramic 84, 100
 - roof, limestone 84, 98, 100
- timber structures *see* structures
- toggles, bone 116, 118
- trade
 - Middle Saxon 27
 - Late Saxon/Medieval 104–5, 111, 138–9
- Ulfcetel 58
- vessel glass 99–100
- Warenne, William de, 3rd Earl of Surrey 69, 86
- weapons, iron 96, 96
- weaving and spinning 17, 24, 56, 116
 - see also* loomweights; spindle-whorls
- Weever's Close, ?circular earthwork 137
- West Stow (Suffolk)
 - boundary ditches 24
 - pits 22
 - sunken-featured buildings 19–21
- Whitehart Street 56
- Wilson, Tristan, contribution by 121–8
- window glass 84, 99–100
- wooden structures *see* structures
- wool production 124, 125, 126, 128, 139
- yards, walled, Medieval 69, 71, 74–7, 85

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Contents

REDCASTLE FURZE, 1988-9