

Hereford City

Excavations Volume 2

**Excavations on and
close to the defences**

by R Shoesmith

1982

Research Report No 46

The Council for British Archaeology

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THE EXCAVATIONS

INTRODUCTION

The microfiche section contains the full reports of all the excavations which have taken place in Hereford between 1965 and 1976, with the exception of those which have already been published and are discussed in the printed volume (main text p 6), and the excavations on Castle Green, which are the subject of Volume 1.

The excavations did not follow any consistent research plan but followed a general policy which developed as sites became available. The main theme throughout was the development of the city defences from the origin of the city until after the Civil War. Several directors were responsible for the work which was organised on behalf of various bodies.

The Hereford Excavations Committee was founded in 1965 to co-ordinate work on the city defences during the construction of the inner relief road, and to obtain funds for excavation. The general direction of archaeological work was undertaken originally by S C Stanford, and after 1966, by F Noble. All the excavations in the city between 1965 and 1969 were under the auspices of this committee. Some have been published (main text p 6) (Stanford 1966; Shoesmith 1967, 1968, 1971; Leach 1971) and the remainder are included in this report.

In 1965 demolition on the southern side of Blueschool Street provided small sites for excavation. The committee, together with the then Ministry of Public Building and Works, organised several small excavations to examine the remains of the three bastions which were known to have existed along the stretch of medieval wall exposed by the demolition works. An abbreviated account of the excavations of these bastions, numbered 9, 10, and 10a (Fig 11:M1.A11) is included in the Minor sites section.

In 1967 the opportunity was taken to examine the defensive works on the western side of the city, which were anticipated to be of several periods. A series of small trial excavations established their

Fig 11 Excavation sites in the northern part of the city

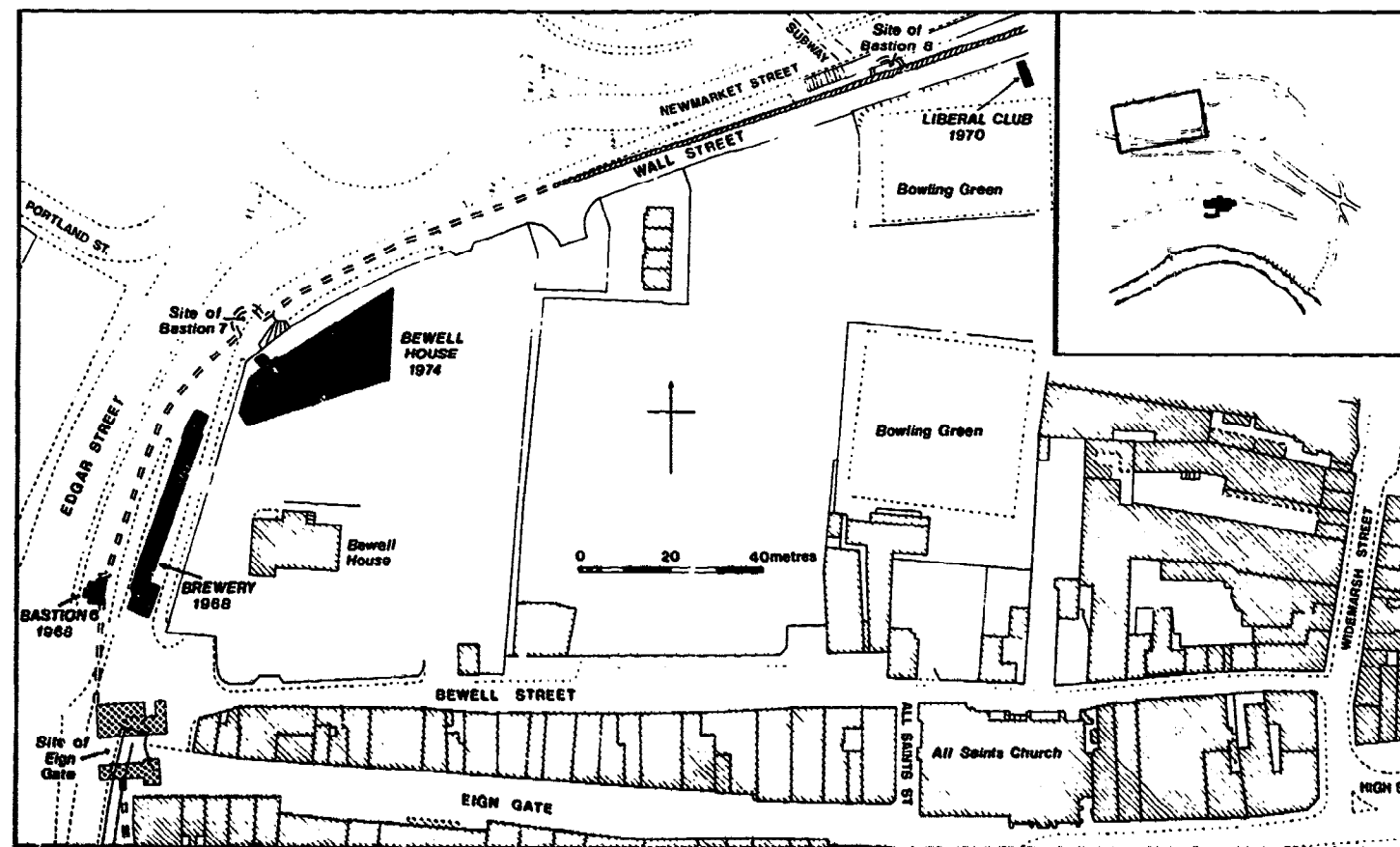
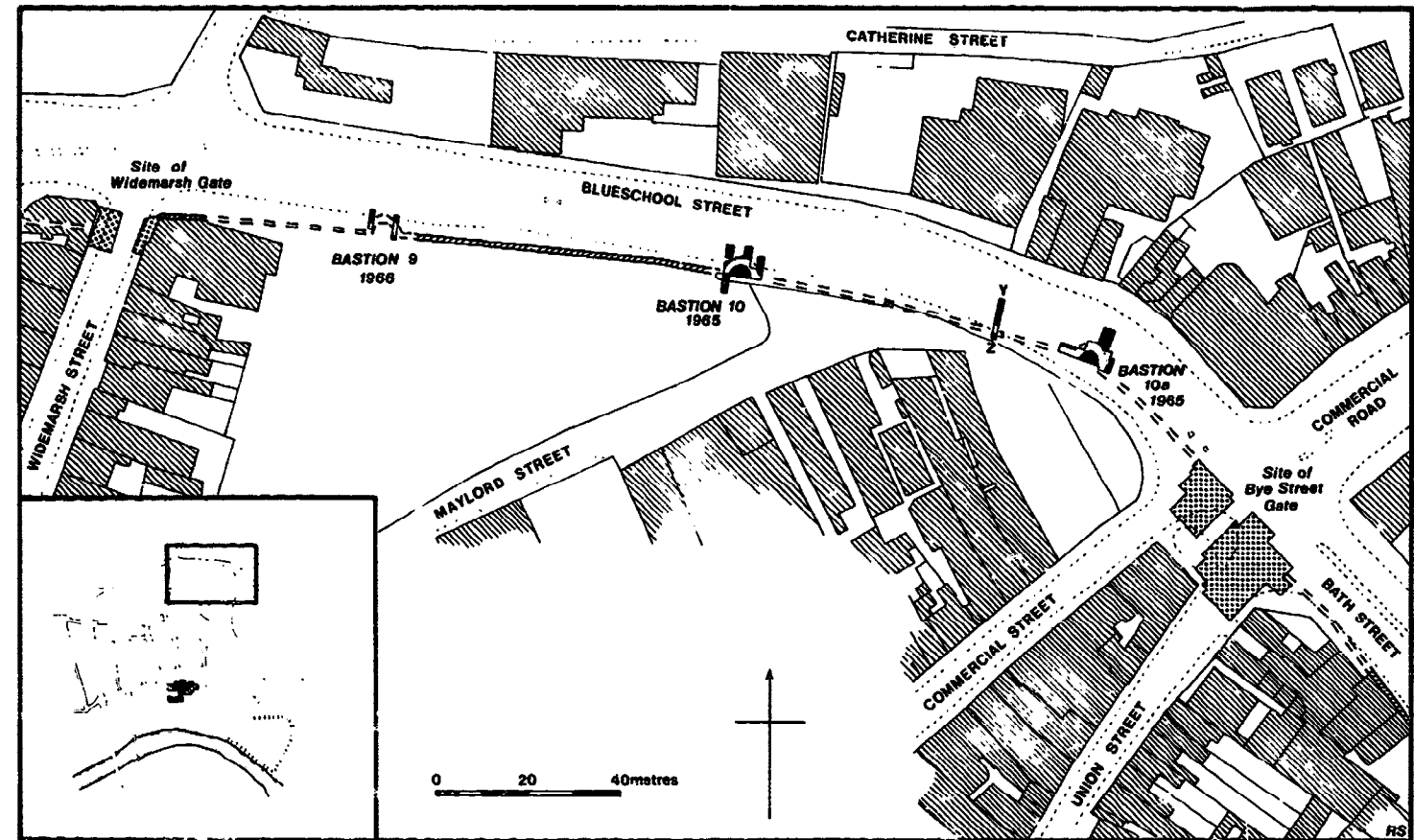


Fig 12 Excavation sites in the north-western part of the city

importance (Shoesmith 1967) but the dating of the various phases was conjectural (Noble 1967). In 1968 P A Rahtz, then lecturer in the School of History at Birmingham University and now Professor of Archaeology at York University, directed an area excavation of part of this western defensive line (Fig 13:M1.A14). The results of the excavation, together with observations made during the cutting of a nearby subway, are described under the heading 'Victoria Street'. Later in 1968, again in advance of the work on the ring road, a long narrow strip of ground behind the medieval wall and immediately to the north of Bign Gate was examined (Fig 12:M1.A11). The excavation, which was directed by Mrs M Gray, is included under the title 'Brewery site'. A small excavation of part of bastion 6, close to the Brewery site, also took place during 1968, and the report is included within the Minor sites section.

The Hereford Excavations Committee was disbanded in 1969, when the work of constructing the relief road was completed, and its remaining assets were transferred to the Woolhope Naturalists' Field Club. Some of this money was used in 1971 for a trial excavation in the grounds of the Liberal Club (Fig 12:M1.A11), and the report is in the Minor sites section. The remaining funds were held in trust for future excavations in Hereford.

Between 1970 and 1974 there was no local organisation directly responsible for archaeological work within the city, and excavations were all carried out under the auspices of the Department of the Environment. The City of Hereford Archaeology Committee was formed in 1974 as a result of a report detailing the archaeological implications of future development in the city (Shoesmith 1974). The committee immediately organised an archaeological unit to work in the city and continues to administer funds provided by the Department of the Environment, the Hereford City Council, and the Hereford and Worcester County Council. Through the unit the committee has organised several excavations in the city and has been responsible for the preparation of this report.

Several of the excavations which are included in this report took place during the six year period from 1970. They include various excavations just within the line of the western defences close to Berrington Street (Fig 13:M1.A14), the investigation of the defensive

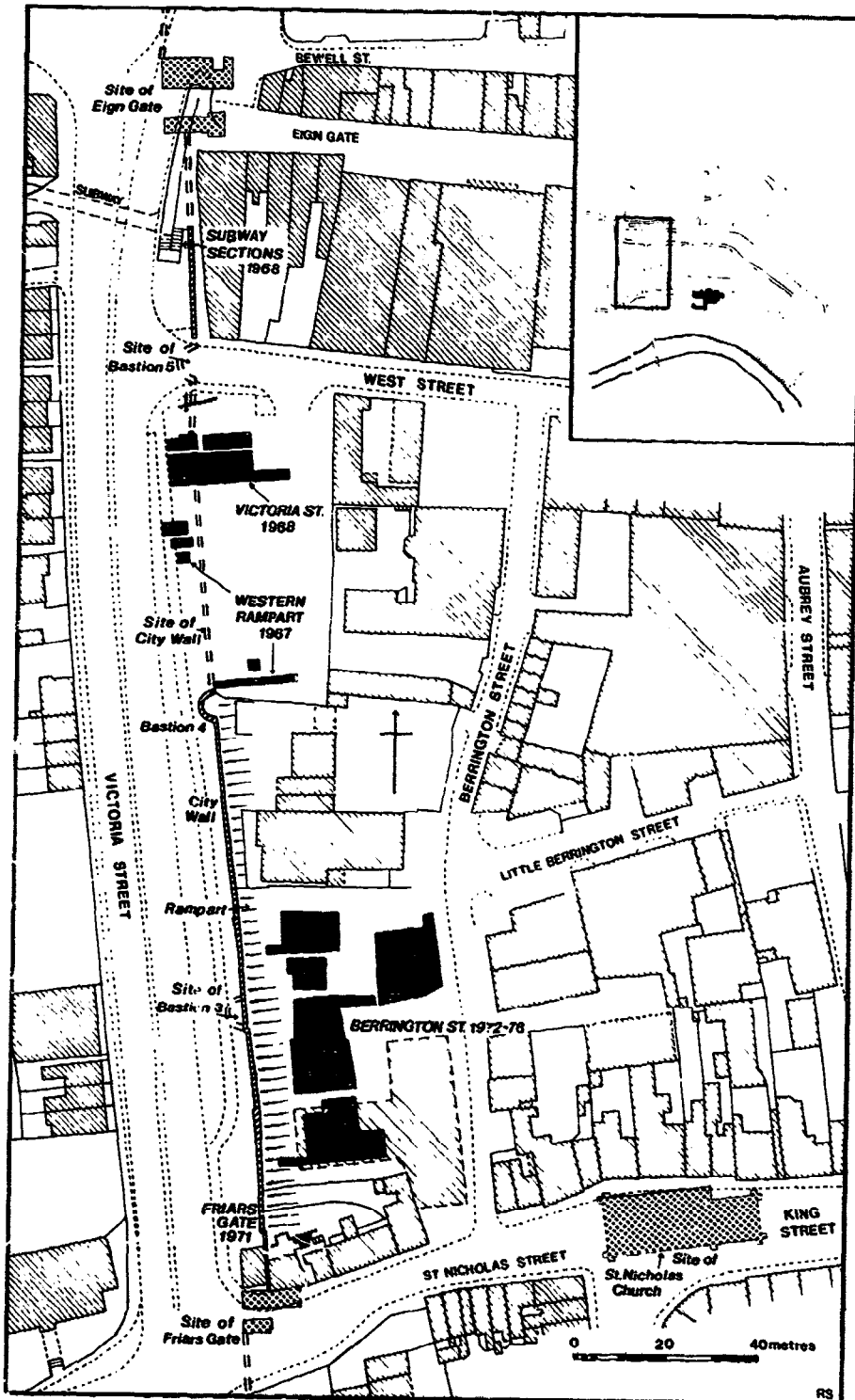


Fig 13

Excavation sites in the western part of the city

sequence at Cantilupe Street (Fig 14,below), and an area excavation, just within the extended northern defensive line, at Bewell House (Fig 12:M1.A11). Watching briefs during this period at Friars' Gate (Fig 13:M1.A14), the Lamb Inn (Fig 14,below), and the City Arms (Fig 7) are included in the Minor sites section.

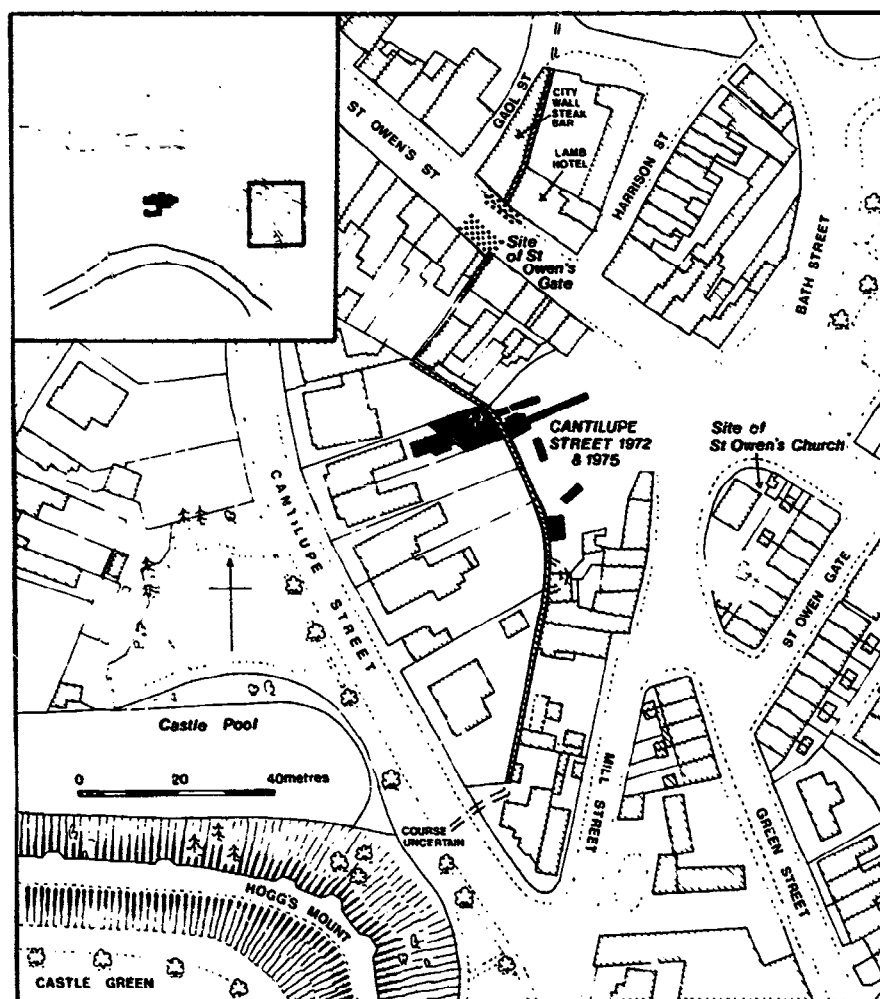


Fig 14 Excavation sites in the eastern part of the city

It is important to appreciate the order in which the excavations took place because the sequence indicates the extent of the knowledge and information available to each director when work commenced. However, the reports which follow are not presented in the order of excavation but are arranged to allow ease of reading and reference. The reports should be considered in three sections. The first, which includes the excavations at Victoria Street and Cantilupe Street, is mainly concerned with the pre-Conquest defences although the former site includes details of the earliest occupation levels so far discovered in the city. The second section includes defensive features but is mainly concerned with the internal development of the city. It contains the four excavations in Berrington Street which are, in part, related to the Victoria Street site, and the excavations at Bewell House and the Brewery site both of which were close to the north-western corner of the medieval walled town. The third section contains reports of the examination of small sites in the city. Most of these excavations were concerned with the construction and development of the city wall, but the section also includes details of watching briefs at other sites throughout the city.

A standard format has been used for each of the reports, and, as far as possible, plans and sections have been prepared to equivalent scales. At the beginning of each excavation report the aims and objectives of the excavation are described and the methods and recording systems which were used on the site are explained. This is followed by the descriptive part of the report which is split into a series of occupation periods. These are particular to the one site only and thus, for example, the occupation periods relating to the Victoria Street site are not the same as those used on the neighbouring Berrington Street site. Included within the descriptive report for each period are sections which contain the evidence for dating and an inventory of the associated finds. The latter is cross-referenced to the full report in volume 3. Each period is concluded with a discussion section where the information from the excavation is interpreted, analysed, and related to earlier and later periods.

There are several problems which may result from separating the descriptive part of the report from the remainder, and to make the text more intelligible and to ensure that it is not inordinately long, several assumptions have been made. It is assumed that the reader is conversant with archaeological features and appreciates that interpretations have been made to allow particular contexts to be described as postholes, postpits, walls, etc. The interpretations are taken a stage further in some of the reports where, for example, a regular collection of postholes may be described as the remains of a fence line or even of a building. Other collective terms used in the descriptive parts of the text include rampart, oven, and furnace. Interpretations of this nature are described in some detail and are justified wherever it is considered necessary.

The individual sites were found to be variable in terms of development and periods of occupation and it was therefore decided that the overall integration of periods into one master scheme would be complex and probably undesirable in the present state of knowledge because such an integration would have concealed the individual stratigraphic and dating problems which are present on several of the sites. This is particularly the case in the earlier periods where there is little or no pottery to provide dating criteria. The integration of these periods within the several excavation reports would have been unwarranted by the facts and the relationships between the various periods on all sites has therefore been considered in a separate section (main text p 70)

However, the defences comprise an important part of the excavation reports and, although their development is considered in detail in the printed volume (main text p 74), it is helpful at this point to appreciate the proposed sequence. Six stages in the development of the defences are postulated and, to aid cross-referencing and to provide a descriptive framework, these stages are listed below and shown in Fig 15:M1.B4. The appropriate defensive stage is indicated in each of the individual excavation reports after the period designation.

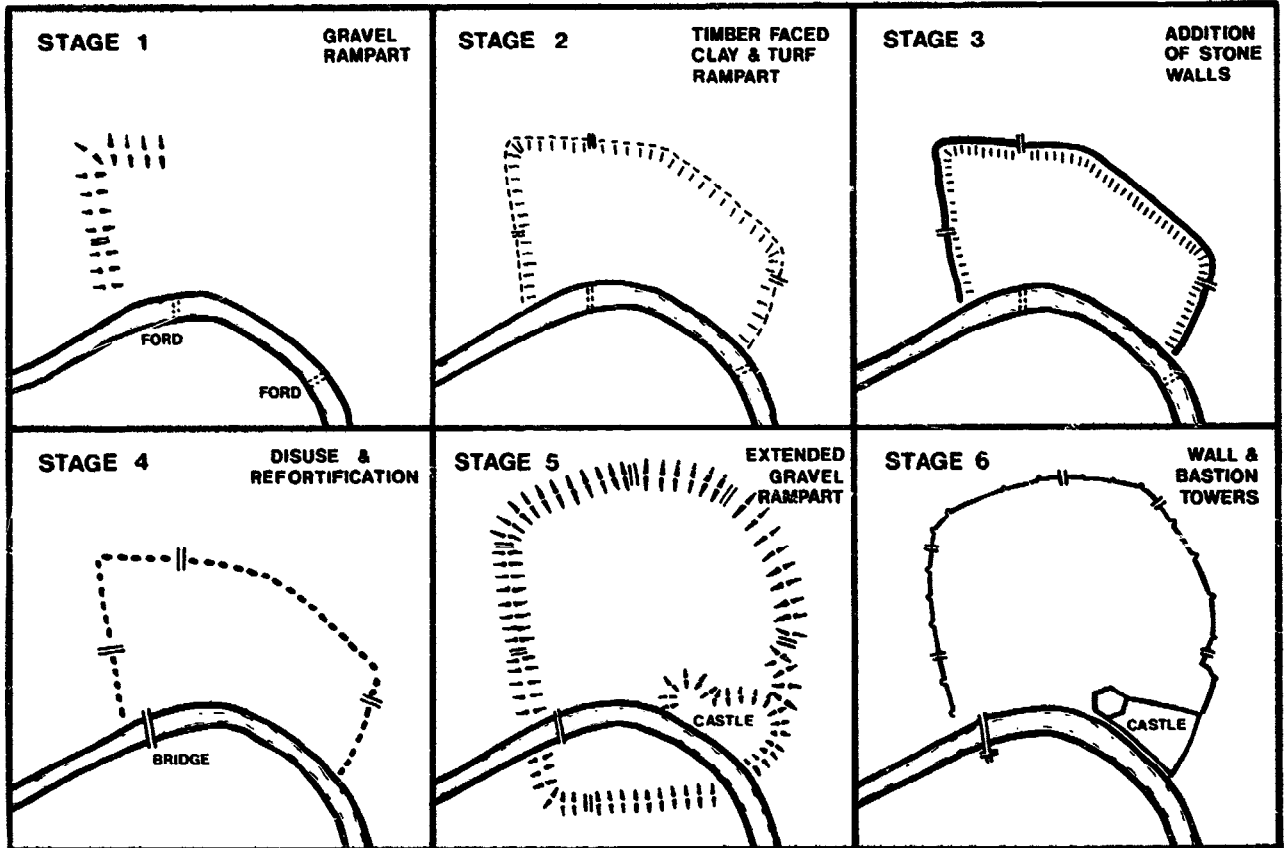


Fig 15 The postulated defensive sequence

STAGE	DESCRIPTION
1	A gravel rampart, probably with an external ditch
2	A turf and clay rampart with timber face, which partly replaced the stage 1 defences and partly extended to the east the area encompassed
3	The addition of stonework and probably an intramural road to the stage 2 defences
4	The disuse of the stage 3 defences and later refortification works on the same alignment
5	A gravel rampart which extended the area encompassed by the defences of stages 2, 3, and 4 to include an additional area to the north of the city and possibly an area to the south of the river
6	The construction of the medieval wall, gates, and bastion towers and the later repair works

RADIOCARBON DATING

The 'Age BP' used in the following reports is the conventional radiocarbon age of the sample based on the old (W F Libby) value of 5570 years for the half-life. Stable isotope corrections are normally taken into account in calculating the 'Age BP' but no consideration has been taken of bristlecone pine corrections to adjust the 'Age BP' closer to the true calendar age. Most of the calibration curves suggest that such a correction, during the Saxon and early medieval periods, is quite small and of the order of ten to fifteen years (info R L Otlet).

Dates are given as 'BP-1950' because they are the standard date used by the publishers of 'Radiocarbon'. They are recorded as dates 'ad', using lower case characters, to emphasise that no corrections have been applied to adjust the result nearer to the true calendar date. The accuracy of the measurement is expressed as one standard deviation and is the error inherent to the measurement process. This means that 68% of all identical samples are expected to give results within two standard deviations. It does not allow for any contamination of the sample or any judgement based on archaeological information.

The most recent value of the half-life is 5730 ± 40 years and a correction allowing for this is obtained by multiplying the 'Age BP' by 1.03. This produces a date nearer to the true calendar date. Such dates are identified by the prefix AD in underlined capitals.

The radiocarbon dates are discussed at greater length in the printed text (p 70).

V I C T O R I A S T R E E T

INTRODUCTION

Small excavations in 1967 on the western defences of Hereford (Shoesmith 1967) revealed the truncated remains of a complex series of ramparts and walls. During Easter 1968 an area excavation was arranged at a point where the defences stood to a greater height, the work being undertaken by the Hereford Excavations Committee in conjunction with the School of History of the University of Birmingham. The excavation was directed by Philip Rahtz and funded by the then Ministry of Public Building and Works.

The site, adjoining Victoria Street (Fig 13:M1.A14), was threatened by works associated with the ring road which involved the demolition of various offices, stores, and warehouses to make room for a dual carriageway leading to the new Greyfriars Bridge. These buildings had been constructed partly on the line of the medieval ditch and partly on the berm and rampart. In places, remaining portions of the city wall had been incorporated into the buildings. The result had been a split-level development with low-level buildings on the ditch line and the area between the ditch and the city wall, and a higher set of buildings on top of the remains of the rampart. As a result little modern ground disturbance had taken place except for that caused by wall foundations.

The development scheme also involved the construction of a car park, east of the line of the defences, between bastion 4 and West Street, and this area was the site of the excavations. A grass bank between the car park and the ring road now indicates the line of, and in parts seals, the remains of the defensive features.

A trench, which had been cut through the defences early in 1968 by machine, indicated the depth of the archaeological deposits. Immediately before the excavation started the rampart was removed from the area to the south of the trench by machine, and the northern edge of the trench was cut back to produce a vertical face. The face was incorporated into a baulk, just over 1m wide, which was kept

throughout the excavation. The area to the north of the baulk was excavated by hand to examine the development of the ramparts, as was the area west of the medieval wall line. A second baulk, running north-south, surmounted by a rampart revetment wall (period 5) was also kept throughout the excavation.

Finds and records from the excavation are deposited in Hereford City Museum (Accession Number 1979/301).

ACKNOWLEDGEMENTS

As well as those people mentioned in the general acknowledgements in volume 1, Philip Rahtz wishes to express his appreciation to Margaret Gray, Catherine Hills, Susan Hirst, Peter Berrett, and Piers Campbell for their help and assistance during the excavation.

METHOD

The excavation was carried out during a four week period in June 1968. Three west-east sections through the defences (A-B, C-D, and E-F, Fig 22:M1.C9) were kept throughout the excavation, and the baulk between the first two was not removed except for a last minute examination of part of flue 320. This baulk and the N-S baulk on which the period 5 wall lay were retained as part of a proposed conservation scheme. It is not now known whether these baulks remain underneath the present grass bank. The retention of these baulks proved to be unfortunate, because they obscured vital evidence especially relating to period 2. A trench was cut eastwards into the car park from the main area (not shown on plan) to investigate the degree of modern disturbance and two additional rampart sections, north of the main area, were examined (Figs 27:M1.D2 and 28:M1.D2). All these parts of the excavation were treated together for recording purposes.

A trench for a subway was cut across the line of Victoria Street (Fig 31:M1.D14) while the excavation was in progress and details are recorded (Figs 32:M1.E2 and 33:M1.E4). This led to some duplication of the records and the subway site has been renumbered

as necessary. It is considered separately from the main site in an appendix.

RECORDING SYSTEM

Site code: Her 68
 Context numbers for Main site 1-110 and 300-383
 layers, features, etc: Subway site 111-184 (renumbered as necessary)
 Datum on sections: 55.05m OD
 Finds: Recorded under layer or feature number

SUMMARY OF CHRONOLOGY AND PERIODS

PERIOD	DEFENSIVE STAGE	DESCRIPTION	PROBABLY DATE RANGE
0		Prehistoric finds and possible features	
1		Grain drying ovens	Mid 7th to 8th century
2		Timber building	Late 8th to 9th century
3		Small ditch and bank	Late 8th to 9th century
4	1	Gravel rampart	Mid to late 9th century
5a	2	Turf and clay rampart	Late 9th to early 10th century
5b	3	Addition of stone wall and road	Early to mid 10th century
5c	4	Decay of ramparts of periods 5a and 5b	Mid 10th to 11th century
6	4	Gravel rampart	Mid 11th century
7	6	Medieval wall	Early to mid 13th century
8		Later disturbances	Post 13th century

THE EXCAVATION

■ PERIOD 0 - Prehistoric finds and possible features (Figs 20:M1.C3 and 22:M1.C9)

A buff-brown clayey soil, layer 36, lay directly above the natural gravel of the site. Several postholes were not seen until after the final clearance of this layer. This is a common problem in the Hereford gravels and it was eventually possible to assign most of the postholes to the timber building postulated in period 2 on the basis of their relationship to its plan. The remainder probably belong to period 2 and are shown on the same plan (Fig 20:M1.C3), but, unless daub or grain derived from the period 1 ovens were present in the posthole, there is no evidence to classify them as later than prehistoric.

The same problem applies to depression 310 which was cut into layer 36 and filled with clean gravel. Section A-B (Fig 22:M1.C9) suggests that this feature could be earlier than, or contemporary with, the period 1 ovens, but the feature has been assigned to period 2 as it is considered to be more likely that it was caused by wear in the entry to one of the rooms of the timber building of that period.

Metalling 110 and the associated clayey layer 102 are also assigned to period 2, but as they sat directly on top of the buried soil layer 36 they could be contemporary with the ovens. However, it is considered more likely that they represent a track leading to the period 2 building rather than a surface level associated with the ovens.

Ten pieces of worked flint were found during the excavation, all in later levels than the buried soil 36. The significance of such flints is discussed in volume 3.

■ PERIOD 1 - The grain-drying ovens (Figs 16:M1.B11, 17:M1.B12, 18 & 19)

The first level at which settled occupation can be demonstrated comprised two grain-drying ovens cut through the original ground surface (layer 36). Each oven consisted of a combined firing

chamber and stoke pit with a long, lateral, stone-lined flue leading out to the north. They were built partly of stone which included fragments of two Roman altars, reused massive Roman building blocks, and many dressed stones coated with a Roman type of mortar, all set in a red clay matrix. They were firmly stratified under all the defensive works and were earlier than, or possibly contemporary with, the postulated timber building of period 2. However, this building had fragments of oven daub, burnt wattle, and carbonized grain within several of its postholes. This material was probably associated with the demolition of the grain-drying ovens rather than with their use so it is more likely that the timber building of period 2 is of a later date than the ovens.

Description

The eastern oven, 309, was nearly 4m long, with a flue, 320, about the same length. The pit was some 2m wide and a maximum of 0.8m deep from the original ground surface. The upper fill, 309A (Fig 17:M1.B12), comprised large pieces of daub mixed with a gravelly soil and some ash, with layer 309B underneath, consisting of a quantity of squared stones, approximately 0.25 x 0.15 x 0.10m in size, with some Roman type mortar still adhering. Under this was 309C, a layer of mixed ash with occasional stones, some clay, and calcined bone, and again a quantity of daub. The western part of the pit had a more gravelly fill, 309D, towards the bottom, whilst the eastern part contained 309E - a blue ash, some grain and only small amounts of gravel. The large stone in the southern part of the pit, which could have been displaced, had some ash underneath its northern edge but was solidly set into the ground to the south. Two iron knives were found in the fill of the pit to the west of this stone. The stones on the north side, which were set in red clay, were apparently in situ but may have been slightly disturbed at the western side by 309F, a posthole assigned to period 2. Several stakeholes, 309G, were found along the southern edge of the pit, mainly at its west end, and a burnt stake from 309D was used for radiocarbon dating (main text: p 71). Little carbonized grain was found in this oven, but quantities were found to the north of the oven in layer 360 which is interpreted as the remains of the period 1 ground level (Fig 22:M1.C9, section E-G-F).

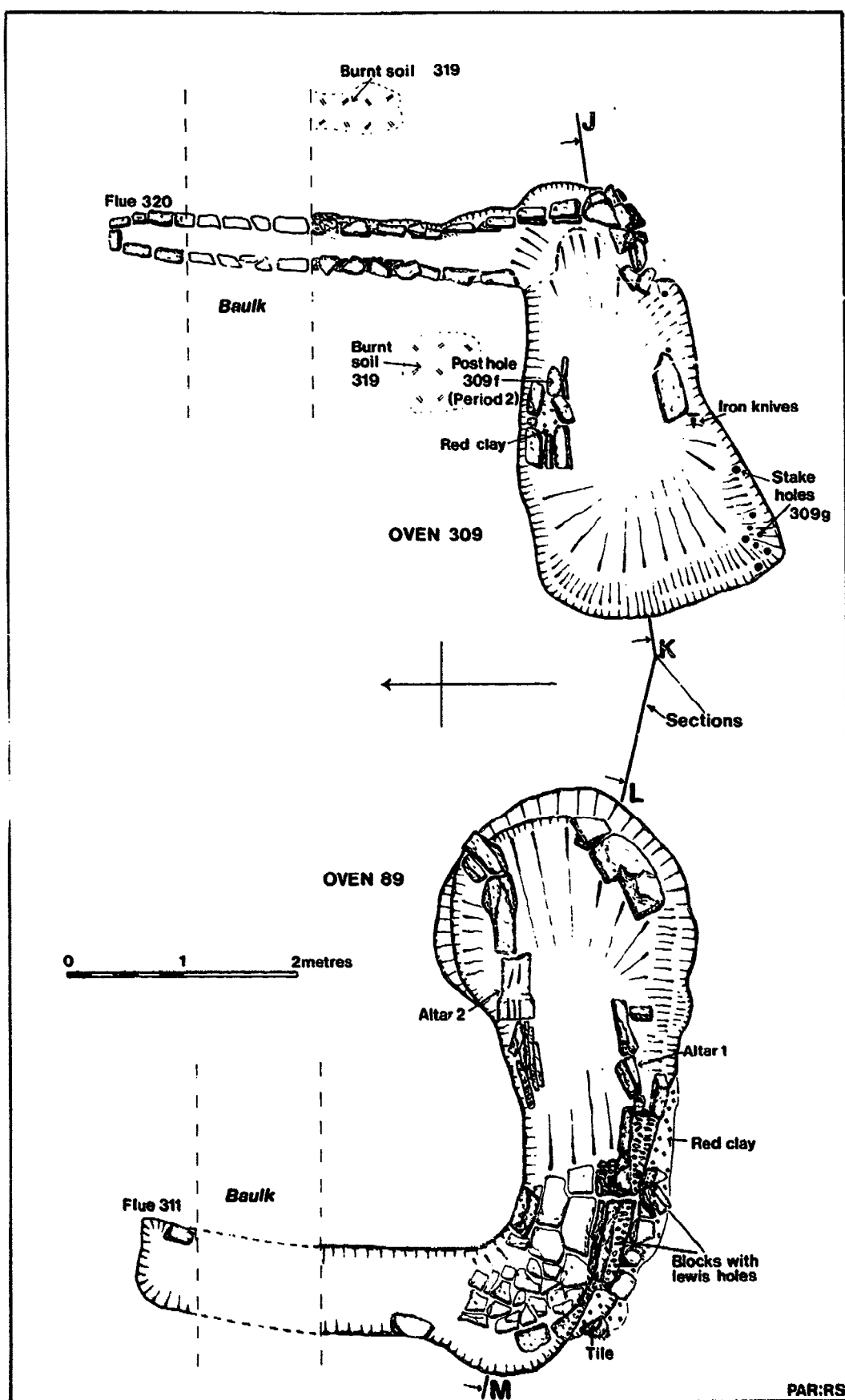


Fig 16

Victoria Street. Period 1. Plan of the grain drying ovens

Flue 320, which led north from the eastern end of the pit, had a floor of yellowish clay which extended back into the main structure. Squared stones were set in red clay on each side and enclosed a fill of mixed clays. On each side of the flue were patches of burnt soil, 319 (Fig 16:M1.B11).

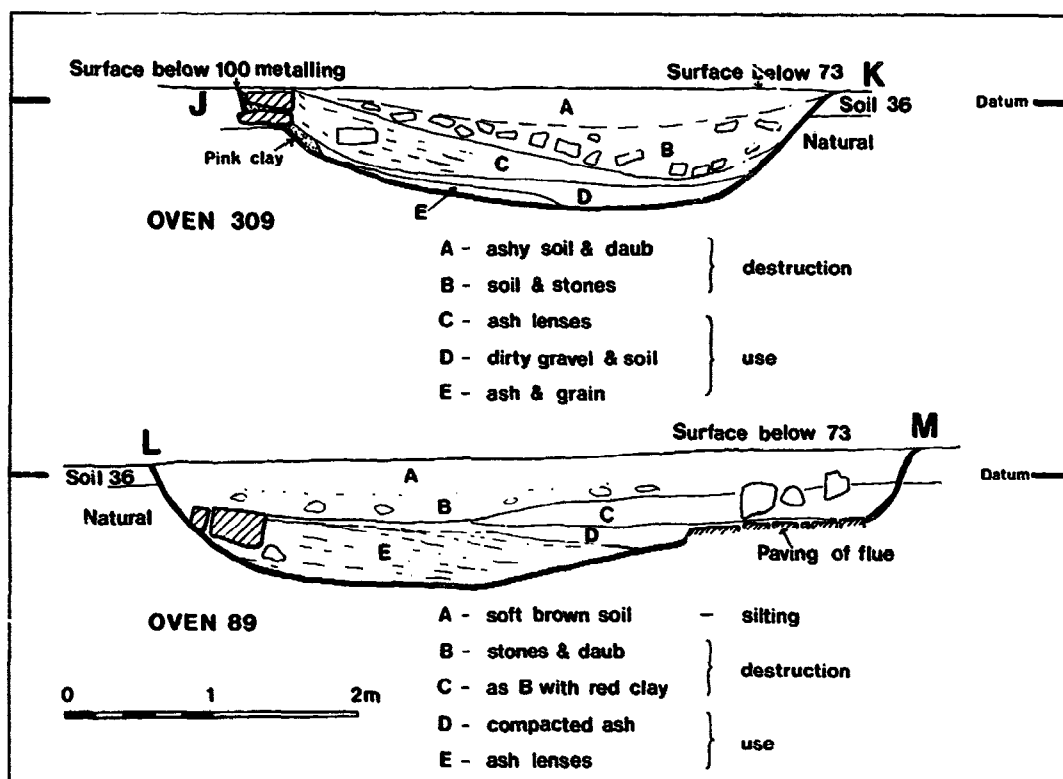


Fig 17 Victoria Street. Period 1. Sections across the grain drying ovens 89 and 309

The second oven, 89, to the west of 309, was of similar construction but with the stoke hole facing the opposite way. It was 5m in length, slightly longer than 309, and had more surviving stonework. The top fill of soft brown silty earth, 89A, sealed the destruction layers 89B and 89C, which consisted of stones, red clay, and much daub (Fig 17, above). Ash lenses, mixed with some soil, burnt grain, and a little daub, 89D and 89E, filled the rest of the pit. The lower part of this layer continued under some of the stones in the south eastern corner of the pit. The stones, many of which showed some evidence of reuse, included two Roman altars and two massive Roman building stones with lewis holes (0.6m^3). The narrow part

of the pit, where it started to turn towards the flue, was paved with flat stones. They were covered with compacted ash, 89D, which continued into flue 311. Only two stones were left of the flue lining, robbing having reduced it to a rounded gully filled with red clay and daub (Fig 16:M1.B11).

Only slight traces of occupation levels associated with the ovens were found in the immediate area. However, to the north of the ovens, layer 360 contained much carbonized grain and probably represented the ground level of this period.

Flue 311 of oven 89 was sealed by layer 37 which covered the western part of the site not occupied by the period 2 building. This layer consisted of dark grey-brown soil with much daub, ash, and charcoal flecks.

Dating

A burnt stake from layer 309D in oven 309 was used for radiocarbon dating (BIRM 111). The uncalibrated date was $ad\ 760 \pm 85$ which, using the most recent half life value, becomes AD 725 \pm 85 (M1.B5)

This date range should be reliable (main text p 70) and from it we obtain the following probabilities for the date of use of the oven.

DATE RANGE	PROBABILITY
pre <u>AD</u> 555	2.5%
pre <u>AD</u> 640	16 %
<u>AD</u> 640-810	68 %
post <u>AD</u> 810	16 %
post <u>AD</u> 895	2.5%

If this is accepted it is unlikely that the ovens were in use before the mid 6th century or after the end of the 9th century.

Inventory (Vol 3)

Small Finds

Metal	Two iron knives	Oven 309	Fig 1.1 & 2
Stone	Roman altars	Oven 89	Fig 9.3 & 4
	Worked flint	L37	Fig 16.2 & 11

Ceramic material

Daub	Fired daub	Ovens 89 & 309
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Environmental material

Organic	Charcoal	Ovens 89 & 309
	Grain	Oven 89 & L360

Discussion

The ovens cut through, and were presumably constructed from, the level of the buried soil 36. Carbonized grain was found in quantity, particularly in 360, an occupation layer which lay to the north of what will be postulated as a later timber building (period 2 below). If the proposed stratigraphic and chronological separation of the ovens and the postholes which comprise this building is accepted (M1.C2) - although it could not be demonstrated stratigraphically that layer 360 belonged to period 1 rather than period 2 - it can be argued that the absence of layer 360, with its grain, in the area of the timber building, was the result of erosion of the layer in the area of the building.

The destruction level for the ovens was represented by layer 37 which sealed flue 311 of oven 89. It is suggested that this level, which was only present in the western part of the site, originally covered the whole area, but was removed during the construction and use of the period 2 building and by the period 5 roadway, 100, to the east (Fig 26:M1.D1). Within the ovens, layers 309B and 89B and C also represent this destruction, the pits finally becoming silted up with the soil layers 309A and 89A. Discussion of the character of the ovens has been anticipated by the names given to their components. It is suggested that the major parts of the pits were covered with a platform of thick wattle and daub, which, after being hardened by an initial pre-firing, would have made firm floors on which the grain, probably in sheaf, could be laid to dry. Spaces would have been left at the stoking ends for the insertion of combustible material under the daub platforms, a draught being provided by the lateral flues, which were probably also roofed with daub, forming narrow tunnels with exits outwards and upwards at their ends. The L-shaped arrangement of the flues may have been designed to slow down the rate of combustion, and to take the fumes well away from the area in which drying was taking place.

Another possibility, which is rather less likely, is that the drying floor was not over the pit (which was wholly a stoking pit), but over the stone-lined tunnels. This would be a good deal smaller in area, but would be more comparable to Roman examples, where the floor is built above a stone-lined channel with a flue at one end and a stoke pit at the other.

There is no evidence to indicate whether the ovens were in use together or not. They could have worked in tandem to give a greater drying capacity, or have been in use separately - it is possible that the opposite orientations of the ovens were to allow an optimum draught to be induced in varying conditions of wind strength and direction. The 'mirror' arrangement of the ovens seems to preclude the possibility that one oven was merely the replacement for the other; rather they seem to have been planned as a coherent double unit.

The function of such ovens, in the more familiar (usually late) Roman contexts or much rarer post-Roman examples like these, is a matter of debate. The conventional interpretation, which is described above, was that the sheaves of grain were laid on the platform to dry. This suggests that they were being gathered while they still had too much moisture content, and were dried for consumption, for storage, or for seed corn. While this theory was accepted it was not surprisingly suggested that this premature gathering was an indication of troubled conditions, in which the grain was cut at the earliest possible moment before it was removed by hands other than those of the rightful owner. Such an explanation seemed to be wholly consistent with the fact that grain drying ovens were built in the late Roman period into the residential rooms of villas and other buildings presumably during periods of insecurity. Such a 'crisis' explanation might of course seem appropriate to a post-Roman Hereford situation with regard to the Welsh threats, especially in a pre-defensive phase. The other possibility is that grain drying in general is not related to drying but to parching. This produces a grain that is more easily milled and of better flavour in cooking. The increased frequency of grain dryers may thus be related as much to social custom as to military threat. The analysis of the grain suggests that the ovens could have been in use for several seasons rather than for one year's drying, which leads to a supposition of settled occupation, if only rural, in the area.

It is difficult to find parallels for the form of the Hereford grain dryers. Most Roman grain dryers are of T-plan with a double flue, commonly of a single component but sometimes double, and none have been found in a similar context to those at Hereford.

■ PERIOD 2 - Timber building (Figs 20:M1.C3 and 21:M1.C4)

The evidence for this structure was not recognized at the time of the excavation, because of the retention of baulks and the consequent failure to open the whole area at one time. Although details of the postholes were recorded in 1968, including many that contained daub or other materials similar to those found in the grain drying ovens, they were not stratigraphically separated from the grain dryer levels, and at that time it was thought possible that they were of a structure in which the grain dryers were the principal features. This perhaps is still just feasible although it is considered very unlikely.

Later analysis has indicated that some at least of the postholes were secondary to the grain dryers, and that most, if not all, were of a building erected over their destroyed remains. The postholes were in two main groups - those that were seen after removal of the rampart level 88, in the surface of the grain dryer destruction level 37; and those that were not seen until later, either when this layer had been removed or when the natural was cleaned. The two groups were apparently randomly arranged across the excavated area with no indication of any logical grouping. While it is possible that the former group might in some cases be contemporary with the grain dryers (the destruction level material having fallen through into the sockets left by the removal of the posts), some at least were demonstrably later, such as 309F which was cut into the upper fill of oven 309. The second group might appear to be earlier than or contemporary with the grain dryers, but they may also have been later, the failure to recognize them at a higher level being due to the similarity of the fills to the surrounding areas and the limitations in excavation techniques.

With these provisos, a timber building is postulated, secondary to the grain dryers, and it is on this assumption that the building may now be discussed as a discrete structure.

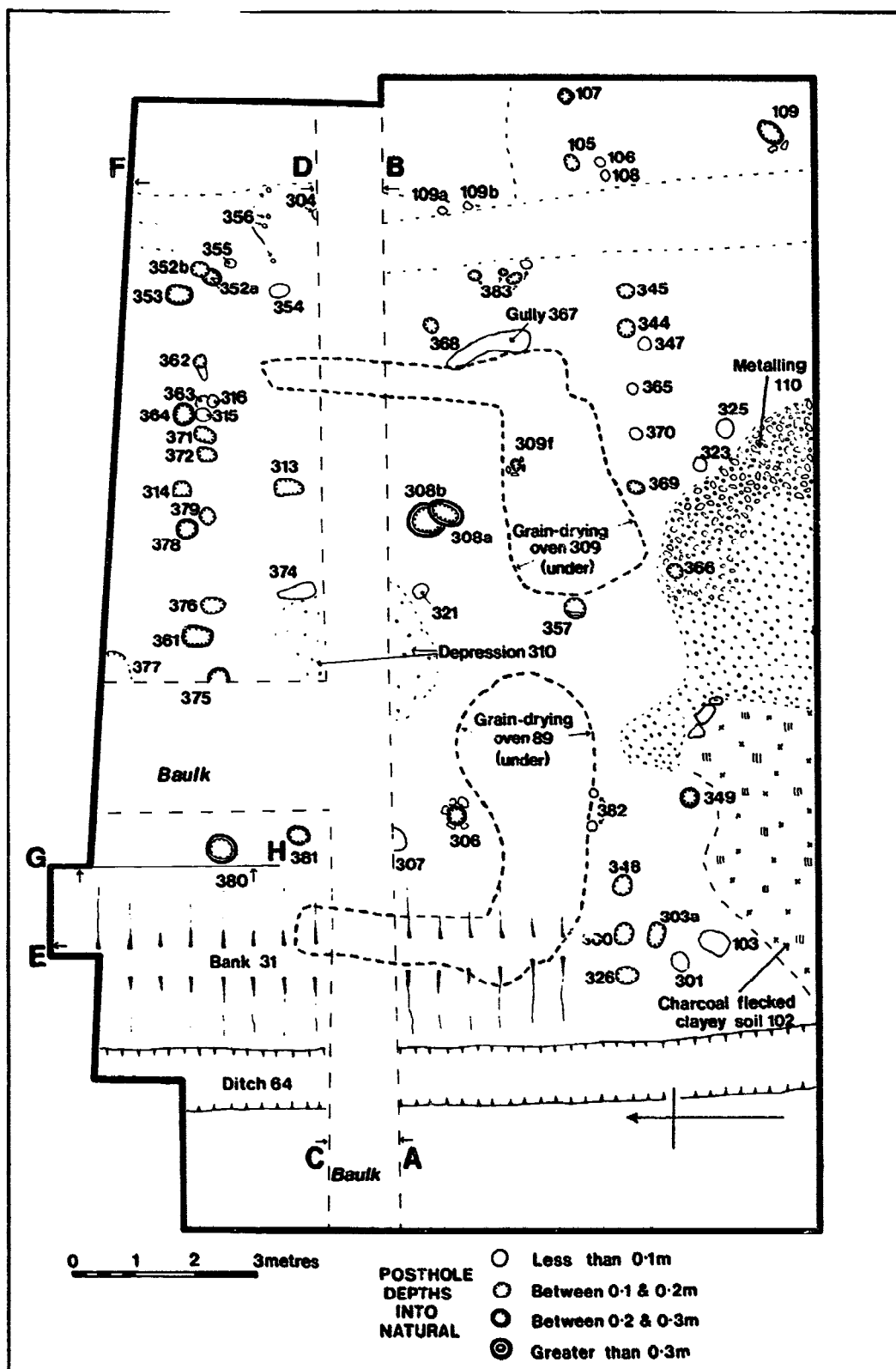


Fig 20 Victoria Street. Periods 2 & 3. The relationship of the postholes of period 2 and the bank and ditch of period 3 with the grain drying ovens of period 1

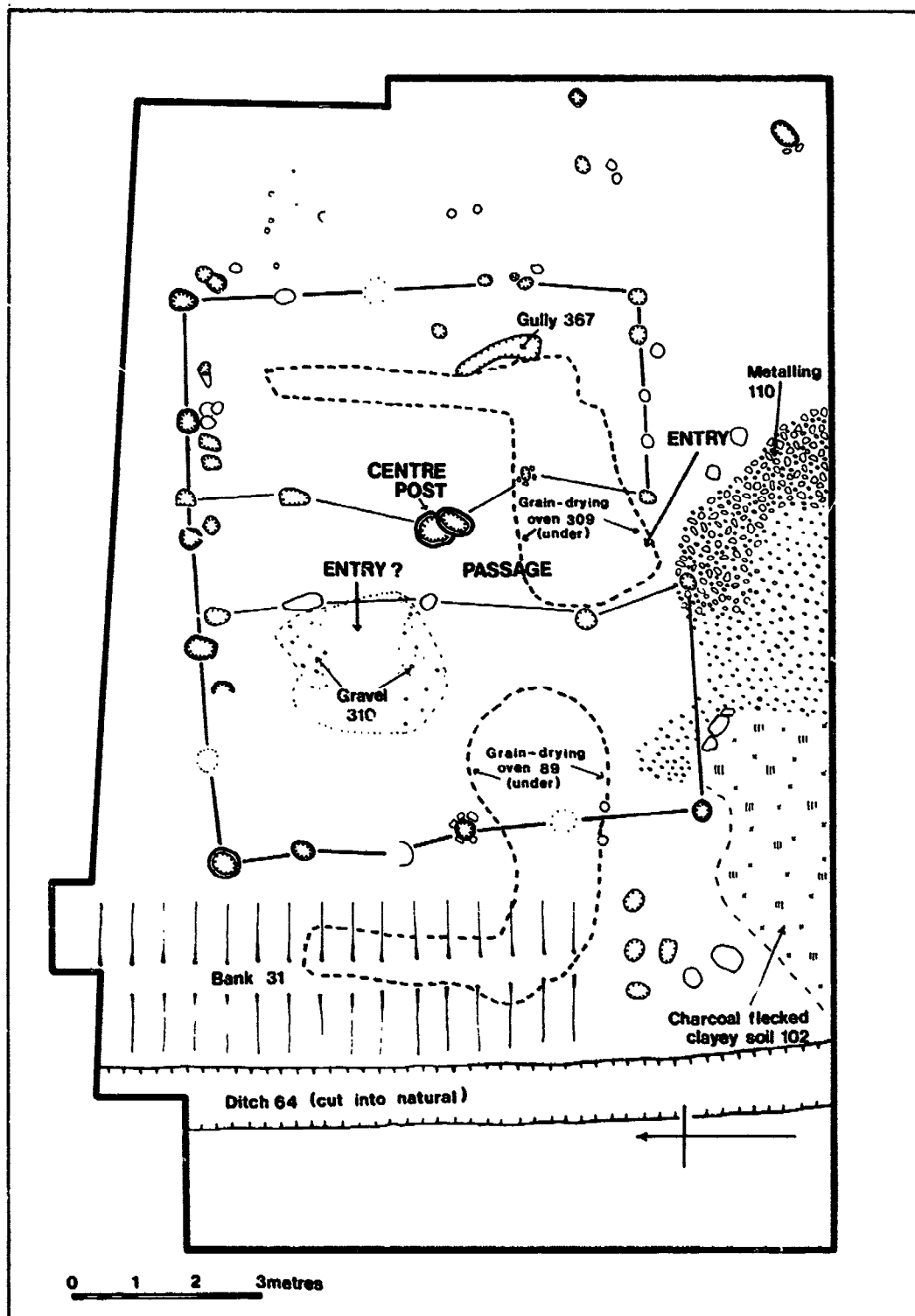


Fig 21 Victoria Street. Period 2. The plan of the timber building showing its relationship to the bank and ditch of period 3 and the grain drying ovens of period 1

Description

The main building is a slightly irregular rectangle 9m long and 7.5m wide. The arrangement of the postholes and areas of apparent wear suggest the presence of a north-south central passage and of lean-tos or extensions on the east and south-east (Fig 21:M1.C4).

The building was constructed around a large central post, 308b, which was replaced at least once as 308a. Both post positions were cut c0.6m into the natural gravel, and contained large pieces of daub. There was some burnt grain in the earlier posthole 308b.

The north wall consisted of a line of main posts, 380, 361, 378, 364, and 353, with gaps of about 1.8m between the centres. The corner postholes were deeply cut (0.28 - 0.35m into the natural) and the others were slightly shallower. Within the main posthole line of the north wall were several shallower postholes, 375, 376, 379, 372, 371, 315, 316, 363, and 362, probably of more than one period. The west wall had less substantial posts, 380, 381, 307, 306, and 349, but again the corner posthole, 349, was quite deep. One posthole may have been unseen in the top of oven 89. The east wall had rather insubstantial postholes, 353, 354, 383, and 345, but one may have been under the baulk. The southern line was in two parts - east, 345, 344, 365, 370, and 369, and west, 366 and 349 - the break presumably being the central passage.

The north side of the passage included the central post 308 and smaller posts, 313, 314, and 309f, the latter being in the top fill of the period 1 oven 309. The south side had shallow postholes, 374, 376, 321, and 357, two of which were elongated along the line of the passage.

Several small postholes at the south-west corner of the building, and a scatter of shallow post and stakeholes to the east, may represent either additions to the main building or fence lines. They had similar fills to the main postholes. Some of the postholes contained burnt and fired daub and two contained burnt timber. Full details of the sizes and depths follow.

POSTHOLE	LEVEL SEEN	FILL	DIMENSIONS (cm)	DEPTH (cm)
103	?	Large daub, clayey soil	?	12
105	Natural	Dirty brown soil	Irregular	10*
106	Natural	Dirty brown soil	?	≤10*
107	Natural	Dirty brown soil, one packing stone	25 x 20	20*
108	Natural	Dirty brown soil	?	≤10*
109	Natural	Dirty brown soil, daub, one packing stone	60 x 40	20*
109a & b	?	?	Small	?
300	37	Charcoal flecked clay	?	25
301	37	Charcoal flecked clay	?	18
303a	37	Charcoal flecked clay	Irregular	28
304	37	Charcoal flecked clay	?	?
306	?	Massive packing stones and burnt timber	?	30 (to top of post)
307	?	Daub & burnt soil	?	?
308a	?	Much large daub	?	62
308b	?	Mixed clay, daub, burnt grain	60 x 40	58
309f	309a	?	?	?
313	Within 73	Burnt timber & daub	35 x 34 (post)	50 below 73
314	73	Soft brown soil	40 x 40	50
315	73	Daub, charcoal flecks	?	?
316	73	Dark soil, daub, charcoal	?	10
321	?	Dark ashy material	?	*
323	36	Burnt soil, charcoal	?	10
325	36	Clayey soil, charcoal	?	20
326	?	?	?	?
344	36	Buff clayey soil, charcoal	30 x 25	15*
345	36	Buff clayey soil, charcoal	18 x 22	10*
347	36	Buff clayey soil, charcoal	24 x 24	12*
348	36	Buff clayey soil, charcoal and mortar	35 x 30	10*
349	36	Buff clayey soil, charcoal	30 x 25	35*
352a	Natural	As 36 plus daub & grain	35 x 35	27*
352b	Natural	As 36 plus daub & grain	27 x 33	10*
353	Natural	Clay, lime, grain, and burnt timber wattle	39 x 35	26*
354	Natural	As 36 plus daub & grain	40 x 30	8*
355	Natural	As 36 plus daub & grain	15 x 12	5*
356	Natural	Four stakeholes filled with 36 material	-	≤12*

(cont)

POSTHOLE	LEVEL SEEN	FILL	DIMENSIONS (cm)	DEPTH (cm)
357	36	Dirty gravel, charcoal, packing stones	?	20
361	360	Stone and daub	post 12 x 12 pit 43 x 35	23*
362	Natural	As 36 plus daub & grain	25 x 33	18*
363	Natural	As 36 plus grain	25 x 27	8*
364	Natural	As 36 plus daub, grain, and burnt wattle	35 x 43	26*
365	Natural	Similar to 36	?	10*
366	In 36	Dark grey soil	?	10*
368	Natural	Similar to 36	?	20*
369	?	Similar to 36	?	20*
370	?	Similar to 36	?	5*
371	Natural	Similar to 36	35 x 28	16*
372	Natural	Similar to 36	29 x 26	12*
374	In 36	Dirty brown soil, charcoal flecks	65 x 30	5*
375	In 360	Similar to 36 plus burnt grain	27 x 18	47
376	?	Similar to 36	25 x 27	15*
377	?	Similar to 36: possibly two postholes	?	22*
378	?	Similar to 36 plus burnt daub, charcoal, & stones	33 x 38	28*
379	?	Similar to 36 with charcoal flecks	28 x 30	14*
380	Through 36	?	42 x 42	30*
381	Through 36	?	34 x 34	20*
382	?	?	?	?
383	?	?	?	?

Postholes 382 and 383 only show on site photographs

Depth marked with an asterisk is measured into natural

Within the outline of the building there was little indication of any floor level. A depression in the eastern room, gully 367, which contained a dark grey fill, was thought to be the remains of a hearth when excavated, and in the western room, depression 310, with a gravelly fill, if associated with this period, could represent the refilling of a hollow in the entrance position. There was no indication of an entrance from the passage into the eastern room. The only other suggestion of a floor was the thin layer of red clay, only noted in section (Fig 22:M1.C9) but sealed by the gravel rampart of period 4.

Above layer 16 was layer 30 (Fig 22:M1.C9 - section A-B) which may represent the latter part of the occupation or the destruction of the building. It consisted of a sticky, grey-buff soil with numerous charcoal flecks, and a few pieces of daub with a few cobbles on top. The latter may have been associated with this period or with the period 4 rampart construction. To the south of the area excavated, and outside the main line of the building, was a metalled surface, 110, of fine cobbling on top of red gravel. It lay over the buried soil 36 and apparently continued to the west as a dirty, clayey area, 102, which was partly sealed by bank 31 of period 3.

Dating

No datable material was found associated with this period or indeed with periods 3 and 4 which follow. On the basis of the chronological framework (main text p 72) a construction date in the late 8th century is proposed.

Inventory (Vol 3)

Ceramic material

Tile	One sherd of Roman tile	PH 348 Unillustrated
Clay	Fired clay objects	PH 361 Figs 64.16 & 65
	(other fragments of similar objects	
	were found in PH 103 & L73)	

Environmental Material

Organic	Charred grain	PH 308 & PH 364
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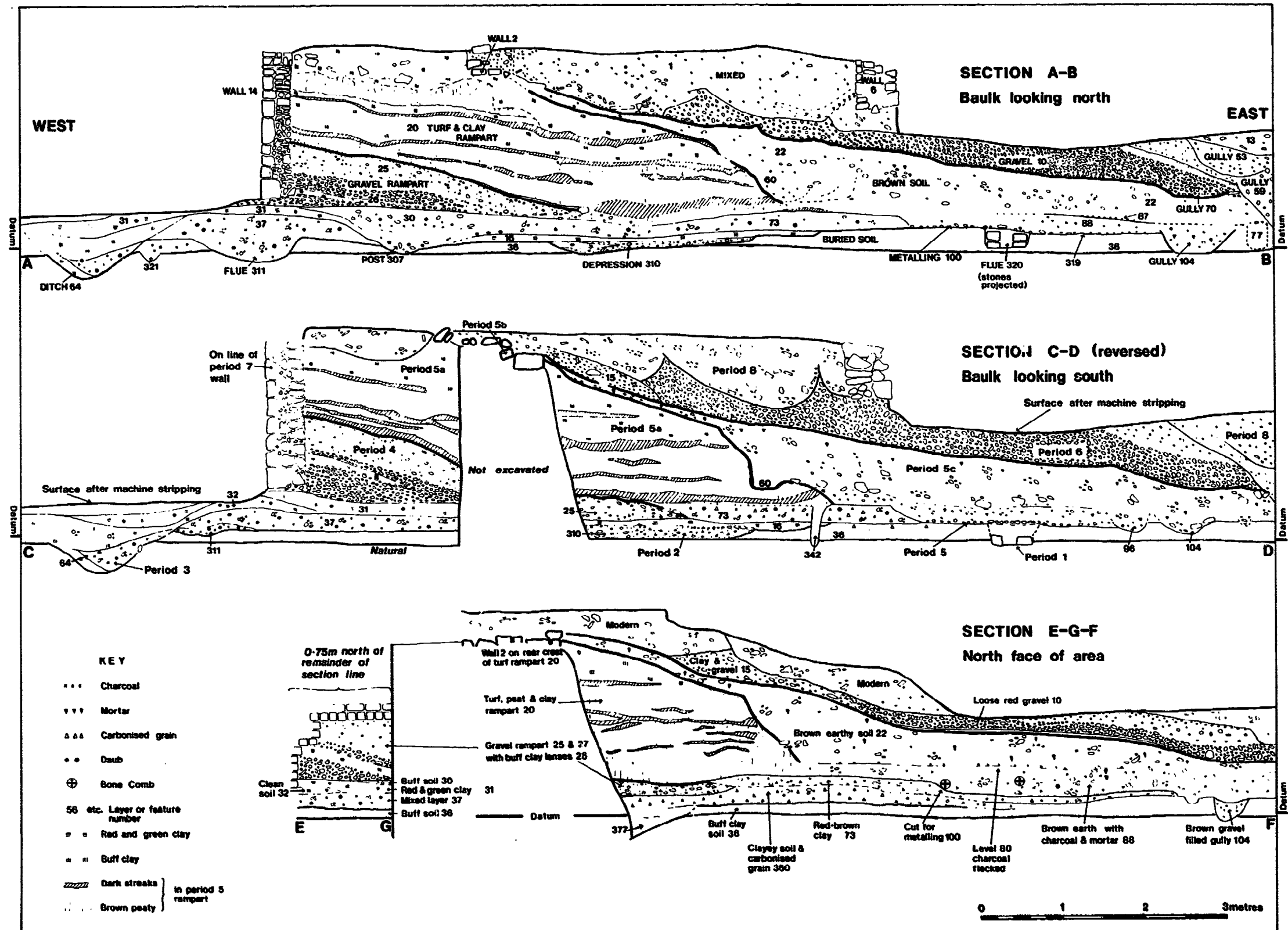


Fig 22 Victoria Street. The main sections A - B, C - D, and E - G - F. The positions of the sections are shown on Figs 20:M1.C3 and 26:M1.D1

Discussion

The building as described and shown on the plan is of two periods with a replaced centre post and possibly a replaced north wall. The construction, which was probably not particularly strong, contained two rooms and a central passage and possibly an internal hearth. The general lack of a floor level in this building suggests either that a considerable amount of wear occurred during the life of the building or that the building possessed a timber floor. If the former was the case then it would account for the lack of burnt grain within the building line as compared with the area just outside the north wall where a better preservation of the earlier levels would have been likely.

Metalling 110 could be associated either with the grain drying ovens of period 1 or with this building, but its position leading to the southern end of the passage suggests that, even if it were in use during period 1, it continued to be used throughout the life of the building.

The building of period 2 may thus be at least tentatively described in plan, though its function must remain obscure. What is clear however, if it is accepted as being secondary to and unconnected with the grain dryers, is that it was a positive and apparently isolated structure (though with comparisons on the Berrington Street site) which lay directly over, and perpetuated the location of the grain dryers.

A north-south linear feature of small bank and ditch (features 31 and 64), described as period 3, but which may be contemporary with the period 2 structure, ran to the west of both the building and grain dryers. Could, then, these structures have been at the northern and western limits of a property?

■ PERIOD 3 - Small bank and ditch (Figs 20:M1.C3 and 22.M1.C9)

When a similar feature to ditch 64 was located to the south in the 1967 excavation (Shoesmith 1967) it was thought to be a marking-out ditch for the gravel rampart of period 4. However, it was clear in 1968 that the buff soil layer 30, behind the bank, and the silting within ditch 64, both of which had accumulated before the period 4 rampart was built, indicated that the feature was open and subject to weathering for some time.

Description

A small bank, 31, with a ditch, 64, on its western side was located to the west of the period 2 building. The ditch cut through layers 37 and 36 into the natural gravel, and the bank sealed layer 37. The ditch contained a brown sticky soil at the bottom sealed by material similar to bank 31. The bank was only slight and consisted of redeposited clayey soil and some daub. Behind it, to the east, was a sticky grey-buff soil layer, 30.

The bank sealed flue 311 of oven 89 and apparently also sealed several postholes, 300, 301, 303a, 103, and 326, and the clayey soil layer 102 which was associated with metalling 110. Posthole 307 of the period 2 building is shown in section (Fig 22:M1.C9, section A-B) as being contemporary with, or later than, bank 31. The bank and ditch were seen to the north of the main excavation (Fig 27:M1.D2, section N-P) but were not evident in any of the subway sections. The feature had become rounded and slight and most of the material of the bank had slipped into the ditch, which by then was partly silted, before the period 4 rampart was built.

Dating

No datable material was found in this period.

Inventory (Vol 3)

Environmental material

Grain & daub

Debris from period 1 grain drying ovens
was found in L30 and L31

Discussion

It should be noted that this feature was definitely stratigraphically later than the destruction of the grain dryers. The destruction layer, L37, was cut by ditch 64, and was incorporated within bank 31 which lay over the northern flue of oven 89. The relationship between the bank and ditch and the building of period 2 is more uncertain. It is stratigraphically possible that the bank was in existence during the lifetime of the building, and, as a landscape feature, was still present when the building had disappeared. This would account for some of the slip from the bank overlying building features.

The precise function of the bank and ditch is uncertain. It could have served to define a boundary or circuit, but would not have had any defensive capacity. It is possible, however, that the bank was a more complex structure than its residue might suggest. There may have been light timbering at the back or front or even a fence embedded in the bank itself. As such it could hardly have had more defensive potential than a garden fence, effective against stray animals or vagrants, but not against serious threat. Apart from the apparent silting of the ditch and erosion of the bank, there was no indication of the length of time the ditch remained open.

The total observed length of the period 3 bank and ditch in all the excavations in this area is about 66m. It was apparently this feature which subsequently determined the line of the western defences throughout the history of the town.

- PERIOD 4 - The gravel rampart (Defences - stage 1) (Figs 22:M1.C9, 23, 24:M1.C14, 27:M1.D2, and 28:M1.D2)

Sealing both bank and ditch of period 3 and layer 30, the possible destruction level for the period 2 building, was a mixed gravel and clay rampart.

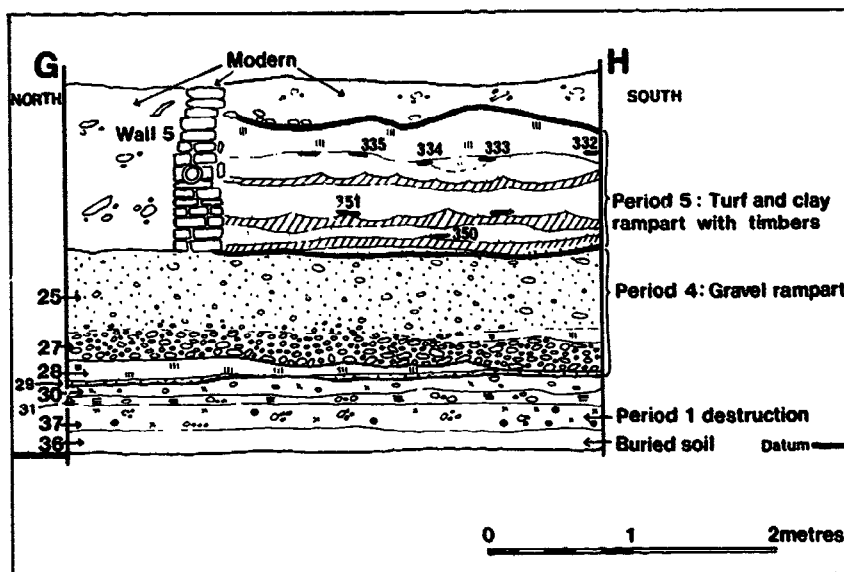


Fig 24 Victoria Street. Section G - H. The position of the section is shown on Fig 26:M1.D1

Description

Only the tail of the rampart survived in Victoria Street. It was constructed of mixed bands of gravel, 25, 27, and 29, with buff clay layers 26 and 28 between. There was a tendency for the gravel to be banded in tip layers with larger pebbles towards the base. The upper margin of the gravel contained occasional bones and small pieces of daub, and on the surface was a thin layer of finer soil.

The occupation level associated with this rampart was very slight. It existed only under the period 5 rampart as a layer of reddish clayey soil and gravel, 73. Further east, later disturbances had removed it, together with all traces of earlier occupation.

The gravel rampart was also seen in section to the north of the main site (Figs 27:M1.D2 and 28:M1.D2), where bands of clay were again apparent amongst the gravel layers. The rampart sealed the relatively clear soil 35. The tail of the rampart was covered with a finer gravel and a dark brown sticky soil, 62, which contained some charcoal and burnt clay. This layer extended over slot 63 which contained similar material.

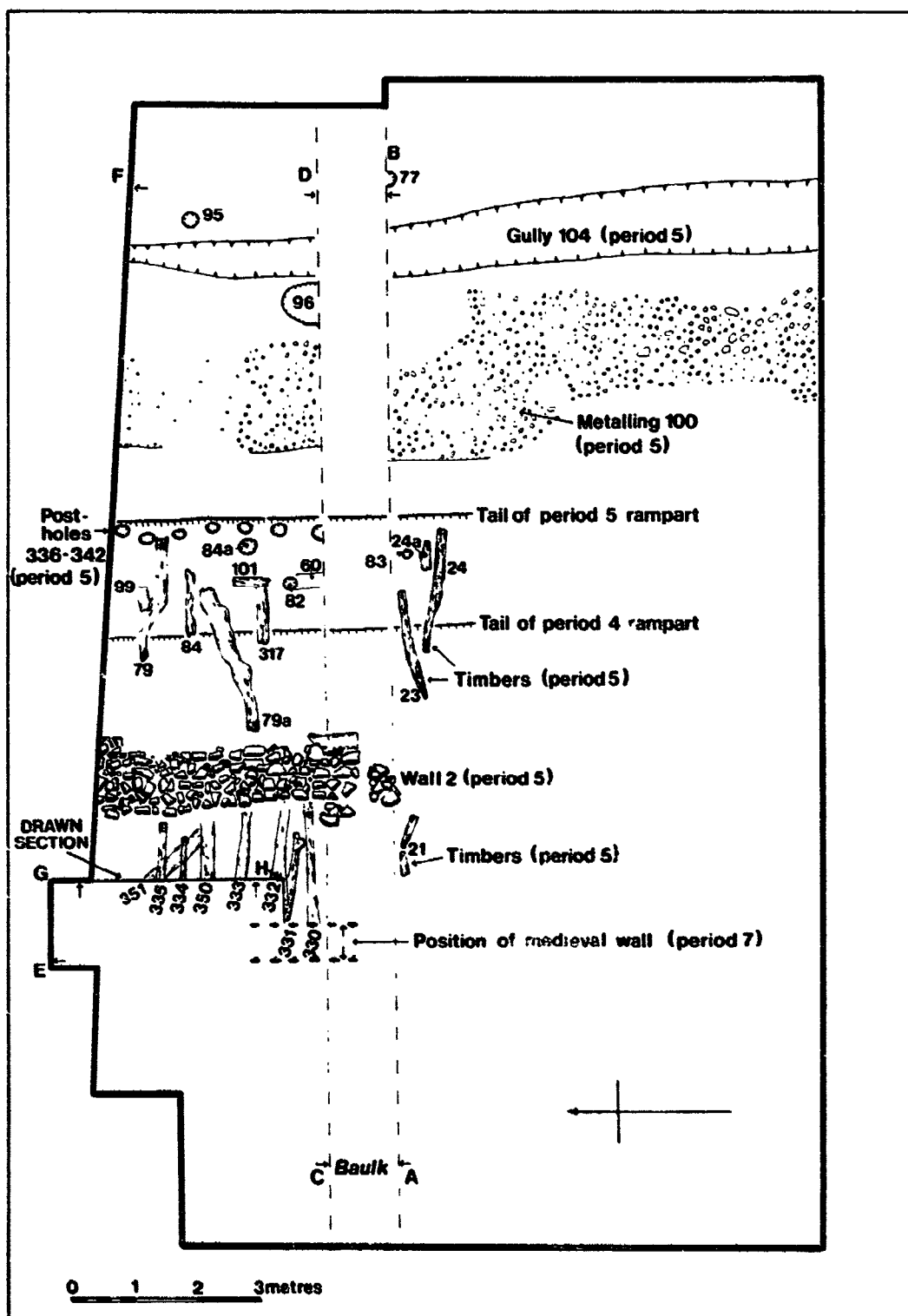


Fig 26 Victoria Street. Features of periods 4 and 5

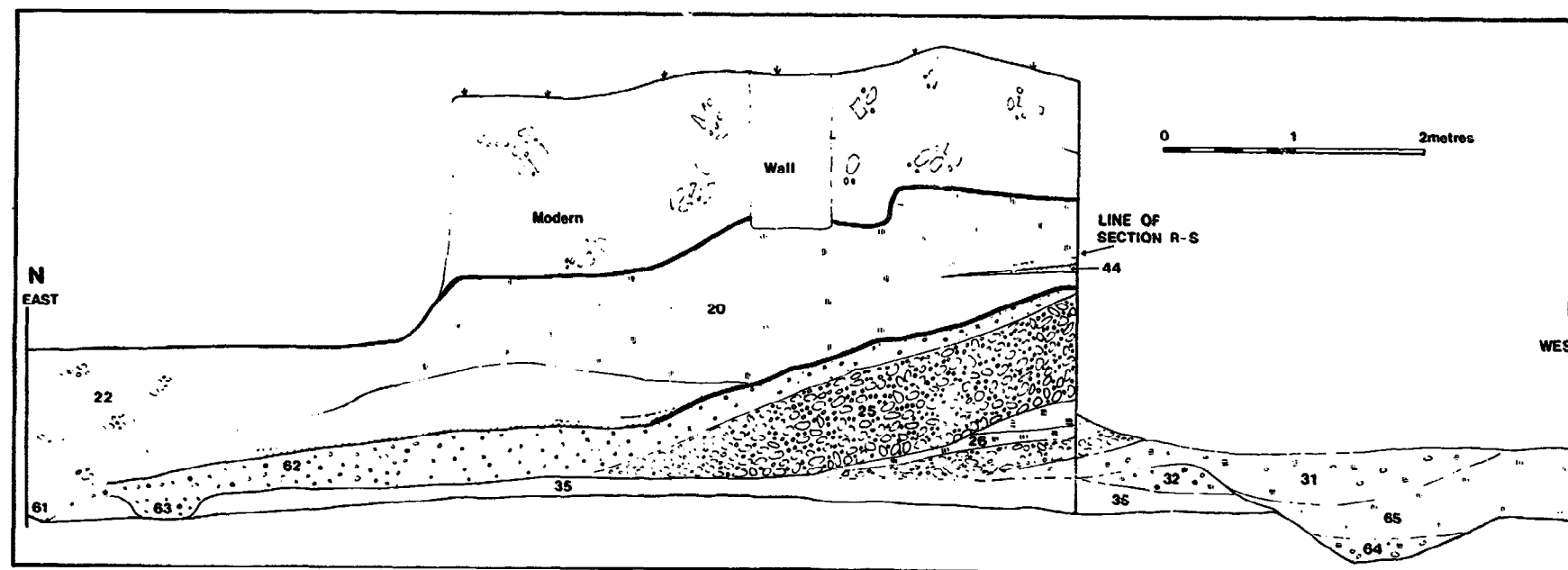


Fig 27 Victoria Street. North section N - P. The position of the section is shown on fig 31:M1.D14

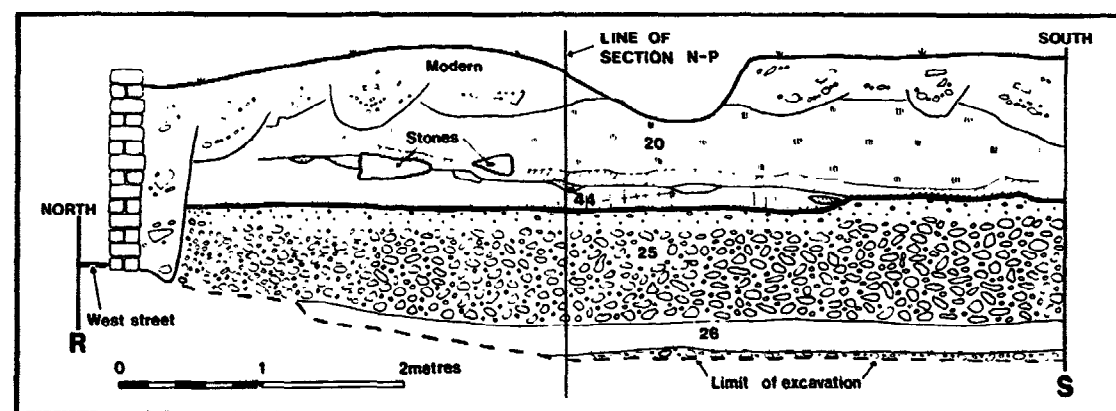


Fig 28 Victoria Street. North section R - S. The position of the section is shown on fig 31:M1.D14

Dating

No datable material was found in this period.

Inventory (Vol 3)Ceramic material

Tile	Several fragments	L62 & L73	Unillustrated
	of Roman tile		

Discussion

The clean material of the rampart, which was presumably taken from the natural gravels in the immediate vicinity, suggests that there must have been a substantial external ditch associated with this defence.

In the 1967 excavation the gravel rampart was considered to be merely a core to the clay and turf rampart (Shoesmith 1967). However, in 1968, indications were found of a consolidated surface on the gravel rampart. This suggests that a reasonable period of time elapsed before it was replaced by the period 5 rampart and indicates that it was not levelled, but served as a nucleus for the new work.

This rampart has now been observed in several sites along the western side of Hereford (see also M3.F4) and apparently turns to the east just north of West Street (Subway section: M1.E1).

■ PERIOD 5 - The turf and clay rampart (Defences - stages 2-4)
(Figs 22:M1.C9, 23 & 26:M1.D1)

There are several phases in the life of this rampart, some of which are represented in this excavation and others at the Cantilupe Street site (M1:E8-G14). Features seen at Cantilupe Street which were not observed in this excavation are not mentioned in the description which follows but may be commented on in the discussion. The three phases considered are 5a - the original construction, 5b - the addition of stone walls, and 5c - disuse and collapse. They are first described and are then considered together as a continuing defensive sequence.

Description

■ PERIOD 5a - The original construction (Defences - stage 2)

The turf and clay rampart was built overlying the gravel rampart of period 4. The front part of both these defences was removed when the medieval wall was built, leaving only the rear part of the crest and the tail.

The rampart consisted of individual layers which showed regular rises or peaks in section (Fig 24:M1.C14). The alluvial clayey soil which comprised the rampart contained darker banks which were of a more peaty nature and rose to the top of the peaks. Occasional trails of gravel were found in between the alluvial layers (eg layer 44, Figs 27:M1.D2 and 28:M1.D2).

In between the regular layers of the rampart material were black fibrous bands up to 20mm thick and 100mm wide. These were examined in section (Fig 24:M1.C14, section G-H) and in plan (Fig 26:M1.D1), where they could be seen to be the remains of branches, apparently laid at random within the layers of the rampart (Fig 25). They were arranged more regularly near the crest of the rampart (330-5, 350-1) than in the tail (23, 24, 24a, 79, 84, and 317).

A series of postholes (336-42), which had contained stakes of c0.15m diameter, was found on the tail of the rampart. They were in a straight north-south line at intervals of about 0.5m and could have been associated with two lateral branches, 60 and 101, which occurred as fibrous traces. Two other postholes, 83 and 84a, were found slightly to the west of the straight alignment. The postholes were seen only in layer 20, the main body of the rampart material (eg post 342, section C-D, Fig 22:M1.C9), and contained a soft dark earth fill.

The rampart material was almost completely stone free, and only two stones of any appreciable size were seen (Fig 28:M1.D2, section R-S).

■ PERIOD 5b - Addition of stone wall (Defences - stage 3) (Figs 22: M1.C9, 26:M1.D1, and 29)

On the rear crest of the rampart a stone wall survived one or two courses high (wall 2). It was lightly mortared and was built partly of reused Roman stones including quern fragments. It could never have been of a great height and there were slight signs of a break towards its southern end.

The metalled path 100 (Fig 26:M1.D1), on the tail of the rampart, could have been constructed at the same time as this wall by cutting away the previous occupation level, 73, to provide a level foundation. The part was up to 3m wide and although it was rather poorly preserved, the cut for it was apparent in all the sections

To the east of the metalled road and apparently of the same period was gully 104, which was filled with dirty brown gravel.

■ PERIOD 5c - Disuse and collapse (Defences - stage 4) (Fig 22:M1.C9)

The thick layer of brown soil on the tail of the clay rampart is perhaps one of the most interesting accumulations on the site. The lowest level, 88, comprising a brown soil with some charcoal and a little mortar, was an accumulation on the tail of the rampart which also covered the metalled road 100. This was in turn sealed by layers 80 and 87, which were areas of concentrated black and reddish soil with much charcoal flecking. Above this was a thick layer of a slightly lighter brown soil, 22, which contained some gravel, stones, and mortar. This layer continued up the back of the turf rampart sealing the posthole line 336-342 and the possible horizontal branches 60 and 101.

Dating

Two samples of the branches from within the rampart were used for radiocarbon dating. The uncalibrated dates obtained were:

BRANCH	BP-1950	REFERENCE
24a	ad 615±67	BIRM 110
317	ad 1250±220	BIRM 159
317 humate	ad 620±200	BIRM 159 humate

The discrepancy between the last two results cannot be explained and they are thus of doubtful value. The reliability of dates obtained from even reasonably large branches is questionable and there are several reasons why such dates would be earlier than the date of deposition. Because of this BIRM 110 cannot be used to indicate the latest possible date for construction of the period 5a rampart. The date, when corrected using the latest figure for the half life, does indicate that there is an 84% probability that the rampart was built after the beginning of the 6th century, but we already know that the period 1 grain drying oven underneath the rampart has a 97.5% probability of being later than the mid 6th century. The BIRM 110 date, therefore, serves only as a rather poor reinforcement of this figure.

The pottery from period 5c indicates that the phase of disuse of the rampart continued at least into the 11th century, before the layers were sealed by gravel during period 6. There was no other evidence for the length of time during which the rampart was disused.

Inventory (Vol 3)

Periods 5a & 5b

Small finds

Stone	Two fragments of quern	W2	Fig 10.1 & 2
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Ceramic material

Pottery	Two sherds Roman	L20	Fig 51.1
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Environmental material

Wood	Timbers in rampart		
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Period 5c

Small finds

Metal	Iron knife	L88	Fig 1.4
	Copper finger ring	L22?	Fig 4.1
Stone	Flint (illustrated)	L22	Fig 16.10
		L88	Fig 16.7 & 8
	Flint (unillustrated)		Nos 13, 14, & 16
Jewellery	Roman melon bead	L22	Fig 20.1
Bone	Two combs	L88	Fig 24.2 & 3

Ceramic materialPottery

Fabric	A1	D1	B1	G1	G3	Fig 46.1 & 2
Sherds	3	5	12	12	2	Fig 51.2-8
Percent	9	15	35	35	6	
Tile	Four fragments Roman			L88	Unillustrated	
Brick	One fragment Roman			L80	Unillustrated	
Fired clay	Loom weight			L22	Fig 64.15	

Discussion

The material of the period 5 rampart is not what one would expect from cutting a ditch and is more likely to have been brought in from more marshy land which could have been peaty in places. It was presumably brought to the site as large clay sods with the turf still adhering and these would then have been piled up to make the rampart which was strengthened and consolidated at various levels with large branches. The peaks seen in section apparently indicate the positions of the individual large sods. They would be caused by the squeezing upwards of the edges of adjacent turves. The trails of gravel could have adhered to the turf when it was cut, or could have been picked up if the sods had been laid in contact with the period 4 gravel rampart. The individual turves are only clearly differentiated in the main Victoria Street site, either because of a difference in character of the deposits from which they had been cut, or because of differences in preservation within the rampart itself, possibly due to wet weather conditions when the turves were stacked.

The posts in the tail of the rampart did not apparently have any structural connection with the branches used for consolidation but could have been associated with the lateral branches 60 and 101. The rampart, towards its tail, was very steep (Fig 22:M1.C9) and would have needed a strong timber construction to prevent its immediate collapse. The secondary postholes, 82 and 84a, may have been inserted at a later date for further strengthening. The timberwork may have been part of the work involved in the period 5b additions to prevent the rampart from collapsing on to road 100. It is possible that the entire rampart was boxed in in timber and that the rear posts were tied to those on the front face by a timber platform.

The Cantilupe Street excavations have since shown that an original timber face to the turf rampart was replaced in stone, but this was not evident in Victoria Street where the front of the rampart was cut away. The rear stone wall was probably no more than a retainer for the flat fighting platform on the summit of the rampart. It could have been a feature of the original defence but may, like the front stone wall, have been a secondary addition. The break shown in the plan of the wall (Fig 26:M1.D1), between its main length to the north and the fragment surviving to the south, appeared to be an original feature of the construction of the wall. This conclusion is supported by the location of the large stone at the south-east corner of the main part of the wall and by further stones to the west of the wall line at this point (Fig 29). This break may indicate either the location of a lateral west-east timber keyed into the wall or perhaps a joint in the construction defined as a result of piece work by different gangs. Similar evidence for constructional breaks was apparent in the front stone wall at Cantilupe Street.

It would seem likely that the rear path 100 was associated with the period 5 rampart rather than the period 3 gravel rampart, as a similar path was found at Cantilupe Street where the gravel rampart was not present. The path could belong to either period 5a or period 5b. Gully 104 to the east of the path, could have been used for path drainage or could have acted as a property boundary, but, although it was found in the 1967 excavation, it was not a feature of the Berrington Street sites. If the period 3 bank and ditch is accepted as a property boundary of an earlier date, then we may see 104 as the line of the new property boundary after the ends of the earlier properties had been obliterated by the rampart construction.

The thick layer at the tail of the rampart would appear to be the result of slip of the rampart material consequent to the collapse of the rear timbering or of the box framing to the rampart. This would have allowed rampart material to spread in a thick layer down the tail and to the rear of the rampart, and would eventually have produced a smooth bank. Mortar flecks, which were more prominent in the upper layer 22 as compared with the lower layer 88, may indicate the eventual collapse of the stone wall.

The impression is of a long period of disuse during which the rampart, timbers and walls gradually collapsed and the defence achieved a stable situation as a smooth bank.

■ PERIOD 6 - Possible gravel rampart (Defences - stage 4) (Figs 22:M1.C9 and 30:M1.D11)

The period 5 defences were eventually sealed by a clean gravel layer which is considered to represent a refurbishment of the defences in the mid 11th century.

Description

The loose reddish gravel, 10, which sealed the defensive features of periods 5a and 5b and the disuse layers on the tail, was very clean and banded with larger pebbles at its base. The full height and extent were difficult to assess because of modern disturbances (Fig 22:M1.C9). Some parts, such as layer 15, contained more clay especially near the crest. A slight trench, 70, cut into layer 22 and filled with gravel, was visible in section A-B. The gravel layers were not seen in the northern section near Wall Street where modern disturbances had removed all the levels down to the period 5 rampart (Fig 27:M1.D2).

Dating

No dateable material was found during this phase of the excavation, but the pottery sealed under the gravel rampart and, more important, the pottery not present under the rampart, allow a date range to be suggested. There was no 12th century pottery, but late 10th and 11th century pottery was present and sealed by the gravel rampart.

Occupation was apparently continuous within the rampart line (see the Berrington Street sites) and it would be surprising not to find the more common 12th century pottery if the gravel rampart were later than this date. In the circumstances, a mid to late 11th century date for the construction of this gravel rampart seems more likely than the late 12th century when the stage 5 rampart was constructed (main text p 82)

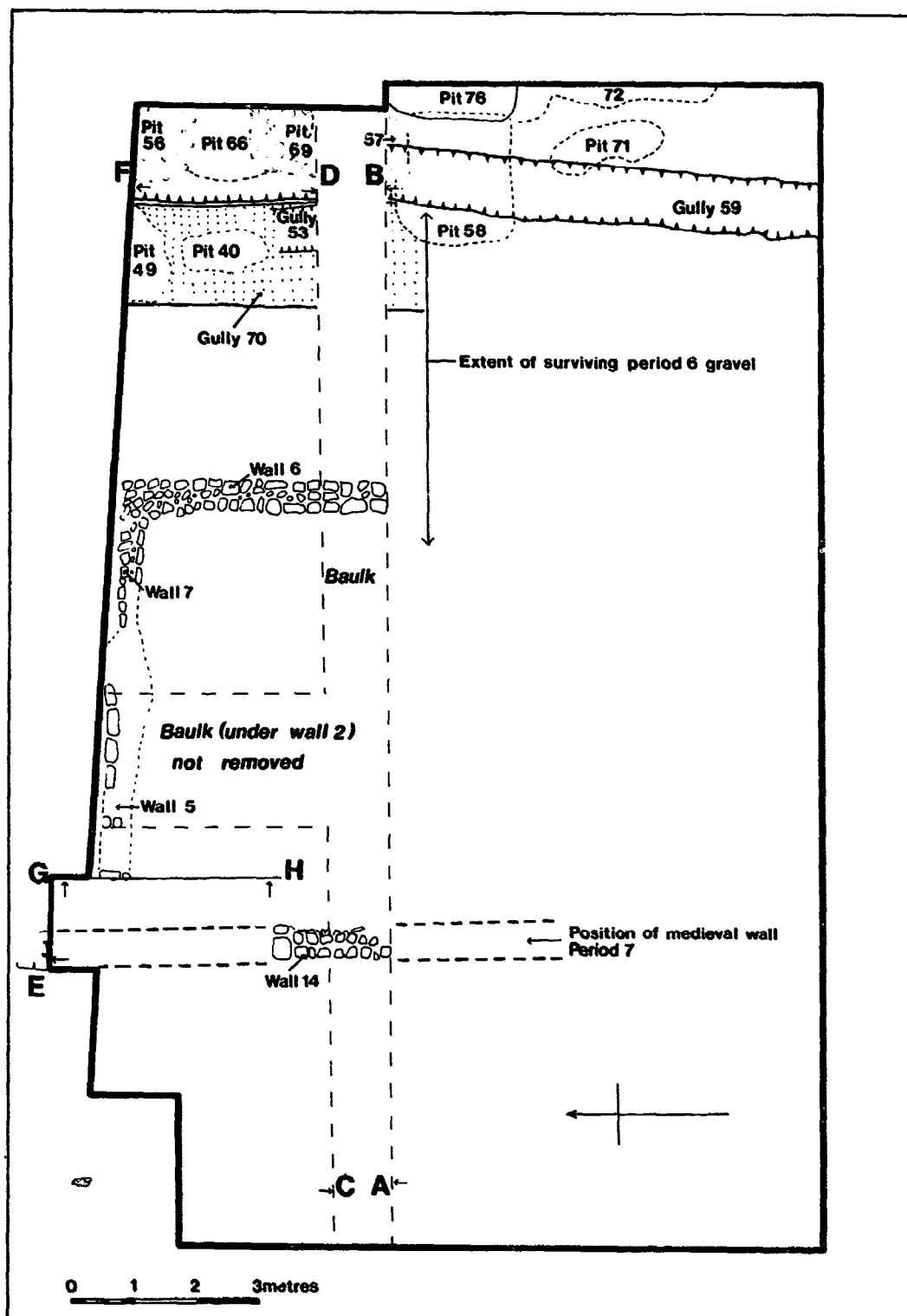


Fig 30 **Victoria Street. Features of periods 6, 7 and 8.**

Inventory

There were no finds from period 6.

Discussion

The clean gravel covering the brown soil, 22, of the turf rampart was presumably the upcast from a large ditch, which completely sealed and ultimately helped to preserve the underlying defences and occupation levels. The trench, 70, seen on the tail may have been for timbering but was more probably a recut of the property boundary 104. The whole work should be seen as a refurbishing of the defences with a gravel bank and large, but unlocated, ditch.

There was no indication in the Victoria Street site of the stage 5 defensive works, but this stage may only have been built as a bank around the extended part of the circuit to the north of the city. The gravel bank may have had a palisade or fence along the crest and similar works may have been a part of the stage 5 refortification.

■ PERIOD 7 - The medieval wall (Defences - stage 6) (Fig 30:M1.D11)

The 13th century city wall had been completely demolished across the whole of the site, but had been replaced in part, on approximately the same line, by wall 14, probably during the 19th century. The medieval wall survives to the south of the site and also to the north of West Street.

■ PERIOD 8 - Later disturbances (Fig 30:M1.D11)

Apart from slight pitting and a build-up of dirty soil and gravel on top of the clean gravel of period 6, most of the disturbances were in the extreme tail of the rampart.

Description

Two north-south gullies crossed the site, both with the same alignment as the period 6 gully 70. The earlier one, gully 59, cut through the period 6 gravel layer 10 and was filled with a dark brown gravelly material, whilst the later one, gully 53, was more shallow and was cut into the mixed material above layer 10. It contained a loose red-brown soil and a quantity of bone.

Two features were probably earlier than both gullies, pit 58 containing brown gravelly soil and some slag, and feature 57, partly in the fill of pit 58, which was a stone lined pit or oven.

Several other pits were found in the eastern part of the excavated area, but in most cases the tops were removed during the machine clearance and the pits were consequently not examined in detail. Pits 56 and 69 were both stone lined and, together with pits 40, 49, and 76, were probably of 18th or 19th century date. Pits 66 and 71 were earlier, but no firm date was established; and feature 72, which was mainly in the section, may have been a further gully.

Above the rampart material the bases of several walls, 5, 6, 7, and 14 were examined, classified as modern and removed in the early part of the excavation.

Inventory (Vol 3)

Ceramic material (P58, P66, P76 and late soil levels only)

Pottery

Fabric	A6	B1	B2	C1	C2	D2
Sherds	2	19	1	2	1	24
Percent	4	40	2	4	2	48

Illustrated sherds

Fig 51.9 to 23

Discussion

The continuity of property boundaries at the eastern edge of the site is noteworthy. Gully 104 (period 5) was replaced by gully 70 (period 6) to be followed successively during period 8 by gully 59 and gully 53.

Inventory of unstratified, illustrated finds (Vol 3)

Small finds

Stone	Flint	Fig 16.1
	Flint (unillustrated)	No 15

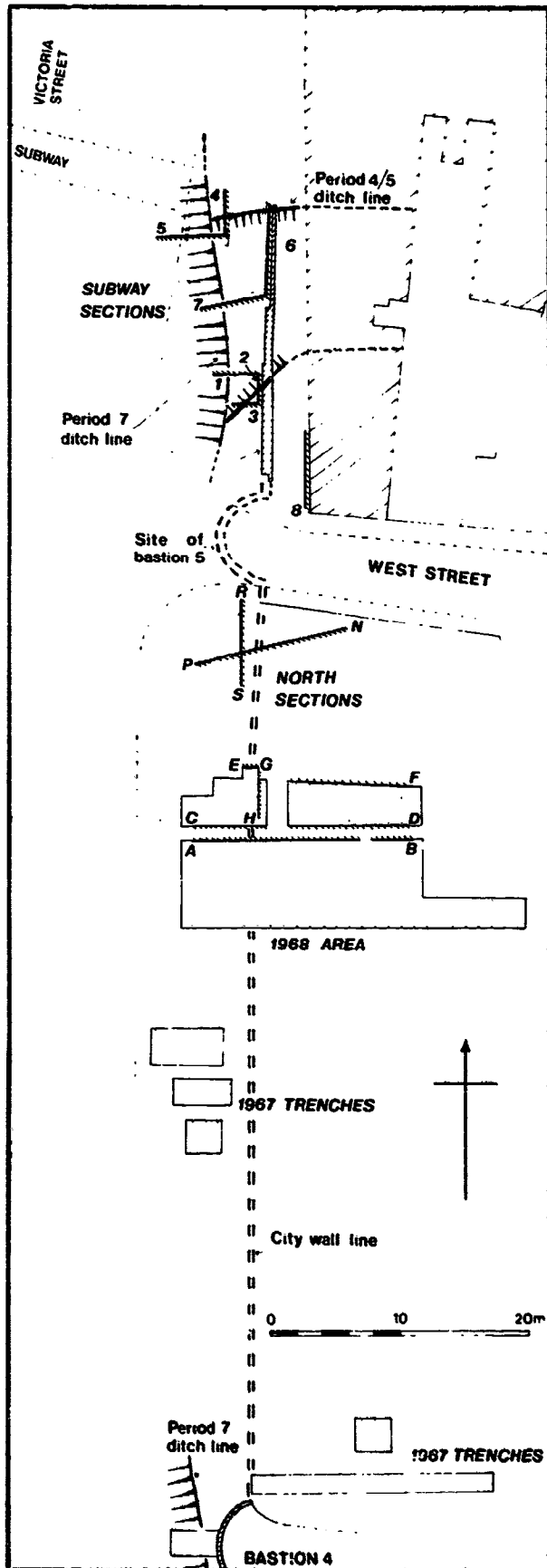


Fig 31 Victoria Street. The position of the 1968 trenches, the north sections, and the subway sections and their relationship with the 1967 excavations. The postulated lines of the period 4/5 and the period 7 ditches are also shown

APPENDIX

THE SUBWAY SECTIONS (Fig 31:M1.D14)

During the Victoria Street excavation massive trenches were being excavated for a subway to run underneath the new ring road about 50m north of the main site on the northern side of the line of West Street (Fig 13:M1.A14). This was the area where the defences of periods 4 and 5 were thought to turn east, slightly to the north of, but following the line of, West Street. Archaeological work in this area had to be limited because of the depth of the machine cut trenches and the resultant need for shoring. As a result sections had to be rapidly cleaned and drawn whenever they were available. The work was done in stages by several different people and the standard varied according both to the time available and to the experience of the people concerned.

The results have been accumulated as a series of sections. The few sherds of pottery which were found as the sections were cleaned are noted in the inventory.

DescriptionSections 1 - 3 (Fig 32:M1.E2)

These sections illustrate the north, east, and south faces of a small trench which abutted the city wall on its western side south of the entrance to the subway (Fig 31:M1.D14).

Feature 170 was seen on sections 2 and 3, cut into the natural gravel and some 0.4m deep and 0.5m wide. It was interpreted as a slot which crossed the trench in a north-east, south-west direction. Overlying the slot was a thick layer 141, which was contained within the south-eastern corner of the trench and ran underneath the city wall. The slot was filled with material similar, though more stony, to layer 141, which consisted of a clean, compact light brown soil similar in texture and appearance to the period 5 rampart material at the Victoria Street site (Stage 2).

Layer 141 was interpreted as the remains of the front face of the period 5 rampart as it curved from a northerly line to an easterly one. The sloping face of 141 was sealed by layer 143 which consisted of clean gravel.

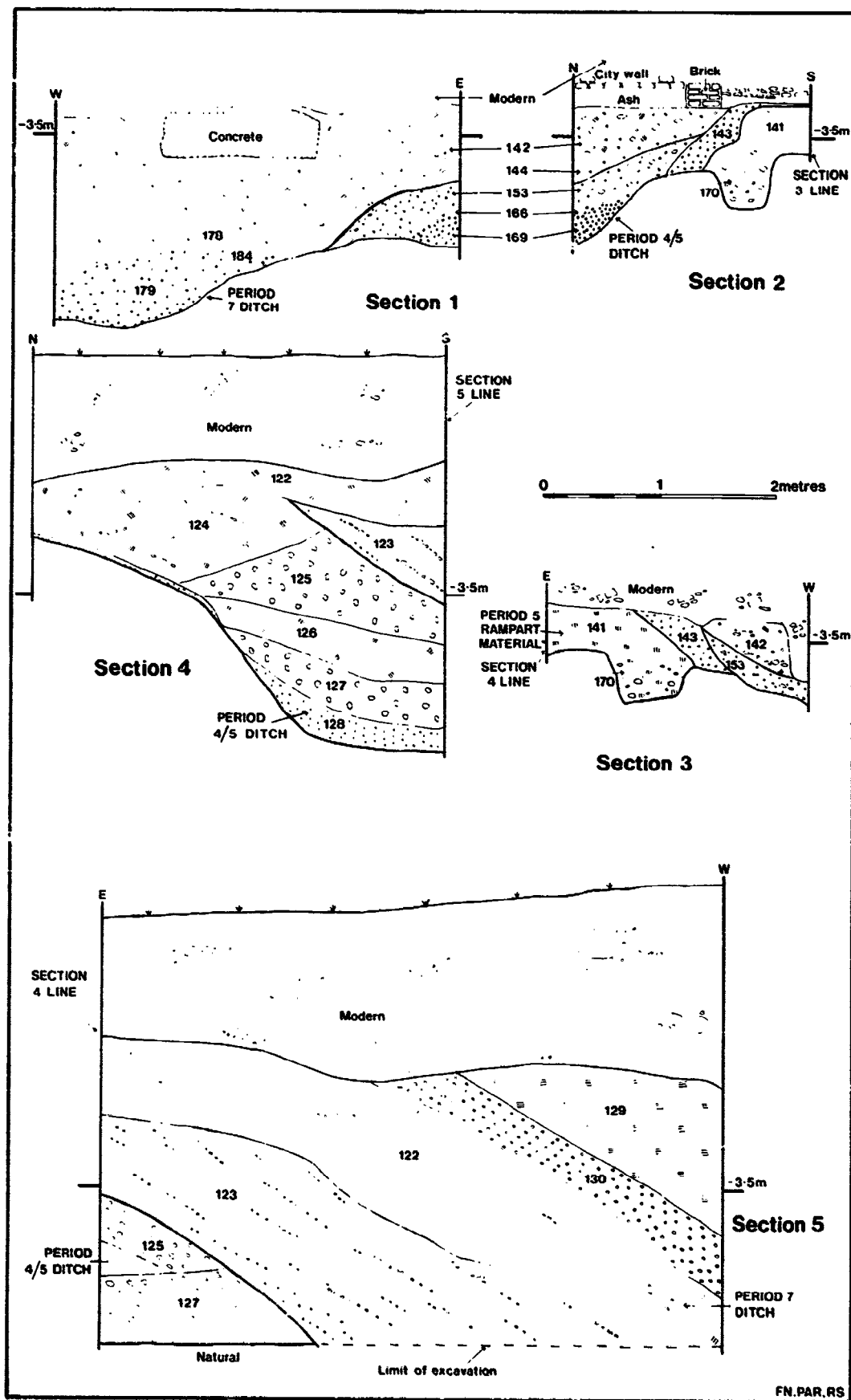


Fig 32 Victoria Street. Subway sections 1 - 5. For position of sections see Fig 31:M1.D14

The north western part of the trench contained a complex feature which was interpreted as a ditch of at least two periods. The earliest ditch, which comprised layers 153, 166, and 169, could have been of the same constructional period as rampart 141 and slot 170, and may have had the same alignment. It had a fill consisting of mixed gravels and silts. The later ditch, which was only seen in section 1, comprised layers 178, 179. and 184, all of coarse, clean gravel and some sand. This ditch apparently continued in a northerly direction. The later fill 142, which covered both ditches, consisted of mixed soils and gravels and continued underneath the city wall.

Sections 4 to 7 (Figs 32:M1.E2 and 33:M1.E4)

These sections comprised the sides of the main cuttings for the eastern entry to the subway. Section 7 continued across the ring road, but could only be drawn for a limited length and depth.

Sections 4 to 7 show the dual sequence of ditches which were suggested in the description of sections 1 to 3 above. The fill of the earlier ditch, comprising layers 125 to 128 on sections 4 and 5 and layers 113 to 115 and 118 on sections 6 and 7, was of mixed bands of clay, gravel, and silt. The sections demonstrate that this ditch turned to the east and section 7 indicates that it continued under the line of the city wall.

The later ditch, which was not examined to its full depth, contained thick layers of mixed gravel and soil. These are shown as layers 122, 123, 129, and 130 on sections 4 and 5 and 112 and 119 on sections 6 and 7. It is evident from section 7 that this ditch was very close to the eventual line of the city wall. Section 5 indicates a deliberate filling of it with the clean gravel of layer 130 and the clean red clay of layer 129.

Section 8 (Fig 33:M1.E4)

The excavation for the subway caused some movement in the walls of a nearby building and a trench was dug to allow underpinning. The excavation did not go down to the undisturbed natural gravel but the opportunity was taken to draw section 8. The lowest level, 147, was a buff clayey soil and above this was more than 1m of clean,

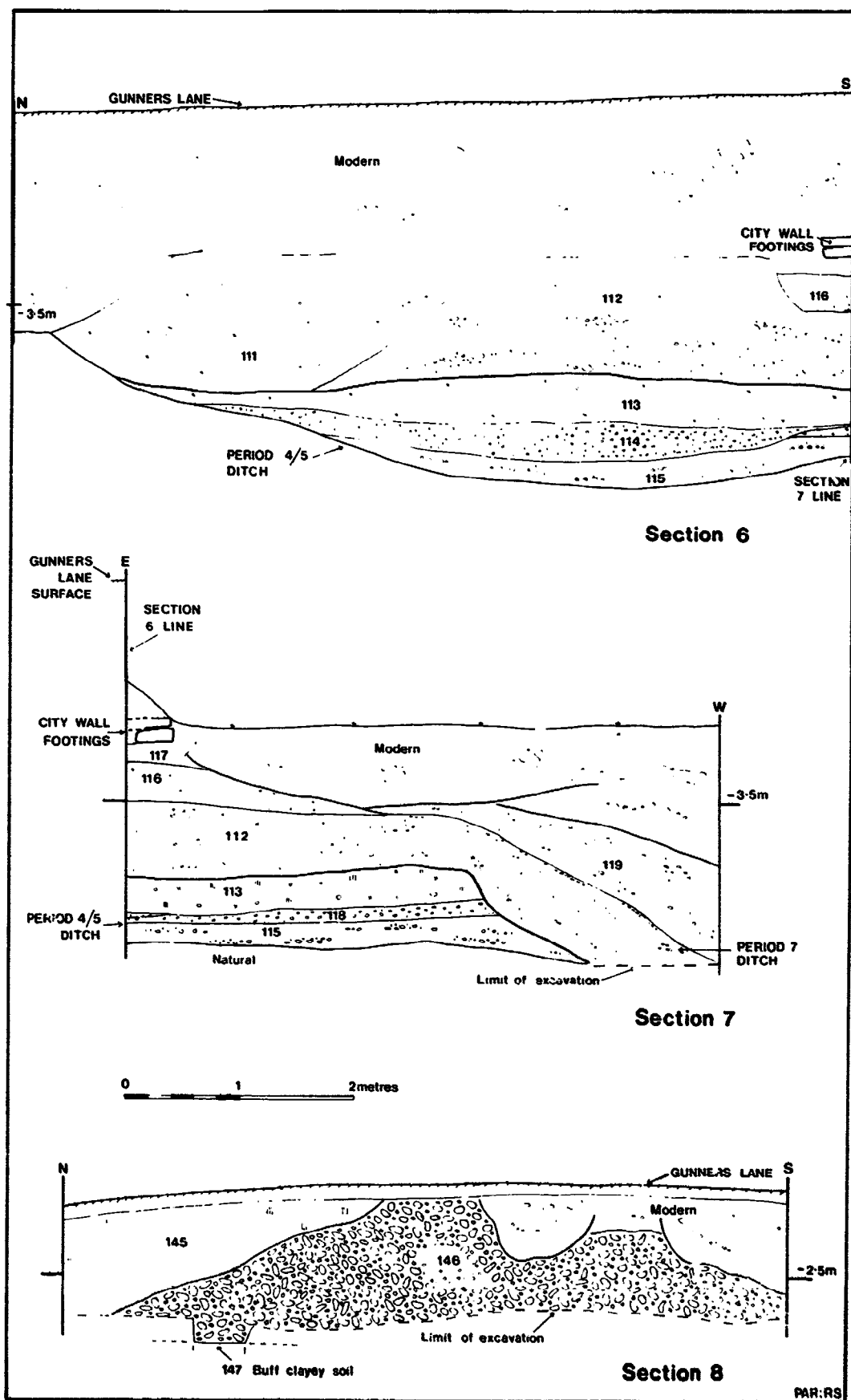


Fig 33 Victoria Street. Subway sections 6 - 8. For position of sections see Fig 31:M1.D14

pebbly gravel. Modern pits cut this gravel at the south of the section, but to the north the gravel had a smooth slope and was sealed by layer 145, which was similar to the Victoria Street period 5 rampart material.

Dating

The few sherds of pottery from this site suggest that the early ditch was filled late in the 12th century or very early in the 13th.

Inventory (Vol 3)

Ceramic material

Pottery - early ditch

Fabric	B1	B2	C1	D2	G3
Sherds	7	1	4	3	1
Illustrated pottery	Fig 51.24, 25, 28, & 29				

Pottery - late ditch

Fabric	A1	A2	A7	B1	B2
Sherds	1	1	1	7	3
Fabric	C1	D1	D2	G3	
Sherds	5	4	2	2	
Illustrated pottery	Fig 51.26 & 27				

Discussion

There was no opportunity to obtain any plan features during the subway excavations and the following interpretations are conditioned by the results of other excavations which have taken place along the early northern defensive line (Shoesmith 1968;1971)

The subway sections are very important in understanding the construction of the Victoria Street periods 4 and 5 defences because they are the only sections close to the western side of the city where the front of the ramparts and associated ditches can be seen.

The period 4 gravel rampart can be equated with layer 146 which underlies period 5 rampart material (section 8). The relationship of these two layers to each other indicates that the section shows the front of the gravel rampart, but the trench was too short to establish

the total width of this feature. There was no direct evidence to show that the early ditch seen on other sections was associated with the gravel rampart, but such a relationship is probable because the ditch would provide a readily available source for the rampart material. The constraints, provided by the line of the ditch and the position of the gravel rampart in the Victoria Street north section, are such that the gravel rampart must have turned sharply at right angles from its northern line to an easterly direction, rather than by a gradual curve. Section 8 thus shows the front of the gravel rampart, at a point very close to the corner, but after the defensive line had turned eastwards (stage 1).

The same section shows part of the turf and clay rampart of period 5 as layer 145, but the front of this defensive bank is apparently shown in sections 2 and 3 as layer 141. Slot 170, just sealed by rampart material, and visible in both sections, could be the emplacement for a timber face to this rampart, or to the gravel rampart. If the former is the case, then the berm between the rampart face and the ditch was less than one metre in width. It is also possible that the slot was a marking-out feature for the corner, well in front of the rampart face. If this is accepted then the material of layer 141, which sealed the slot, could be rampart material which collapsed on to the berm after the defences fell into disuse. The various possibilities apparent from these sections are discussed in more detail (main text p 76) after other sites have been described.

Sections 2 and 3 show a layer of clean gravel, 143, sealing the remains of the turf and clay rampart material, and this may be equated with the period 6 gravel rampart on the Victoria Street site (stage 4). This relationship is important, for if it is accepted, then the sections indicate that the period 6 rampart turned to the east to follow the line of the periods 4 and 5 defences. At present, sections 2 and 3 provide the only direct evidence for this.

The early ditch may have been totally recut at the time when the suggested period 6 rampart was built, but after this it began to silt up with many layers of dirty gravel, silt, and soil. Eventually a new and deeper ditch was dug which established the new extended defensive line (stage 5). The sections suggest that the eastern limb of the earlier ditch remained open, although silted-up, when the new ditch was dug.

It is apparent from the sections that all the features so far described are earlier than the city wall (Stage 6). The wall could not be constructed until the eastern part of the early ditch was filled and indeed the wall was built on top of layer 112 which is contiguous with part of the fill of the later ditch.

5 CANTILUPE STREET

INTRODUCTION

Demolition of various warehouses and sheds at the corner of Mill Street and St Owen Street during 1971 revealed the remains of the medieval city wall along the western side of the area (Fig 14:M1.B1).

The rear gardens of Cantilupe Street, behind the wall and some 2m above the external ground level, created a pressure which caused the wall to collapse in several places. The remains of the wall were roughly shored after demolition was completed.

Early in 1972, the Department of the Environment provided finance for trial excavations in the ditch area in front of the medieval wall and for an exploratory trench in the raised garden of 5 Cantilupe Street, behind the wall line. The latter trench, which was excavated between March and May 1972 (Figs 34:M1.E10 and 35:M1.E13), exposed a series of defensive features which were earlier in date than the medieval wall and have now been shown to be of Saxon origin.

Eventually, in 1975, the Hereford City Council, with grants from the Department of the Environment and the Hereford and Worcester County Council, purchased the eastern part of the garden. This area was fully excavated during October and November 1975 (Fig 35:M1.E13), leaving the defensive features ready for conservation and display.

Previous to 1972 there had been no archaeological work in this part of the city although the rampart nature of the raised gardens of Cantilupe Street had been compared with similar features between Berrington Street and Victoria Street (Watkins 1919b).

Finds and records from the excavation are deposited in Hereford Museum (Accession Number 1979/302).

ACKNOWLEDGEMENTS

The cost of the two excavations was borne by the Department of the Environment with practical help from various departments of the Hereford City Council in the provision of shoring, a hut and fencing.

Permission to excavate on the Mill Street side of the medieval wall in 1972 was granted by Wolverhampton Metal Holdings, and further access was allowed in 1975.

A great debt is owed to Jim Beynon and his entire family for their help and encouragement during both excavations, for their willingness to allow their garden to become an archaeological site and their agreement to sell half of their garden for public display. Their continued cheerfulness as their garden disappeared and their provision of endless cups of coffee and cakes encouraged the whole excavation team.

During 1972, parties of schoolchildren from Redhill and Bishop's schools augmented the labour force. The site supervisors were John Hood, Tim Copeland and Barra Bydell. A small digging team was used in 1975 under the supervision of Eric Smith.

METHOD

In 1972 several machine cut trenches (Fig 34:M1.E10) were examined to the east of the medieval wall to ascertain the depth of stratification and the position of the medieval ditch. Trenches T1 and T4, close to the wall, where a berm was anticipated, were excavated by hand.

The garden excavation to the west of the medieval wall started as a rectangular trench, T5, 8m long and 2m wide, but was extended in width and length when further defensive features were found (Fig 35:M1.E13). During the excavation all the stone walls were left standing within the trench and only the southern part of the rampart was excavated down to the natural surface. Parts of the sides of the trench had to be sloped to prevent collapse and other parts were shored. Because of the limited size of the garden only a short length of the defensive works could be examined. Some 2m of timber face and 3m of front wall were the total lengths available within the confines of the excavation.

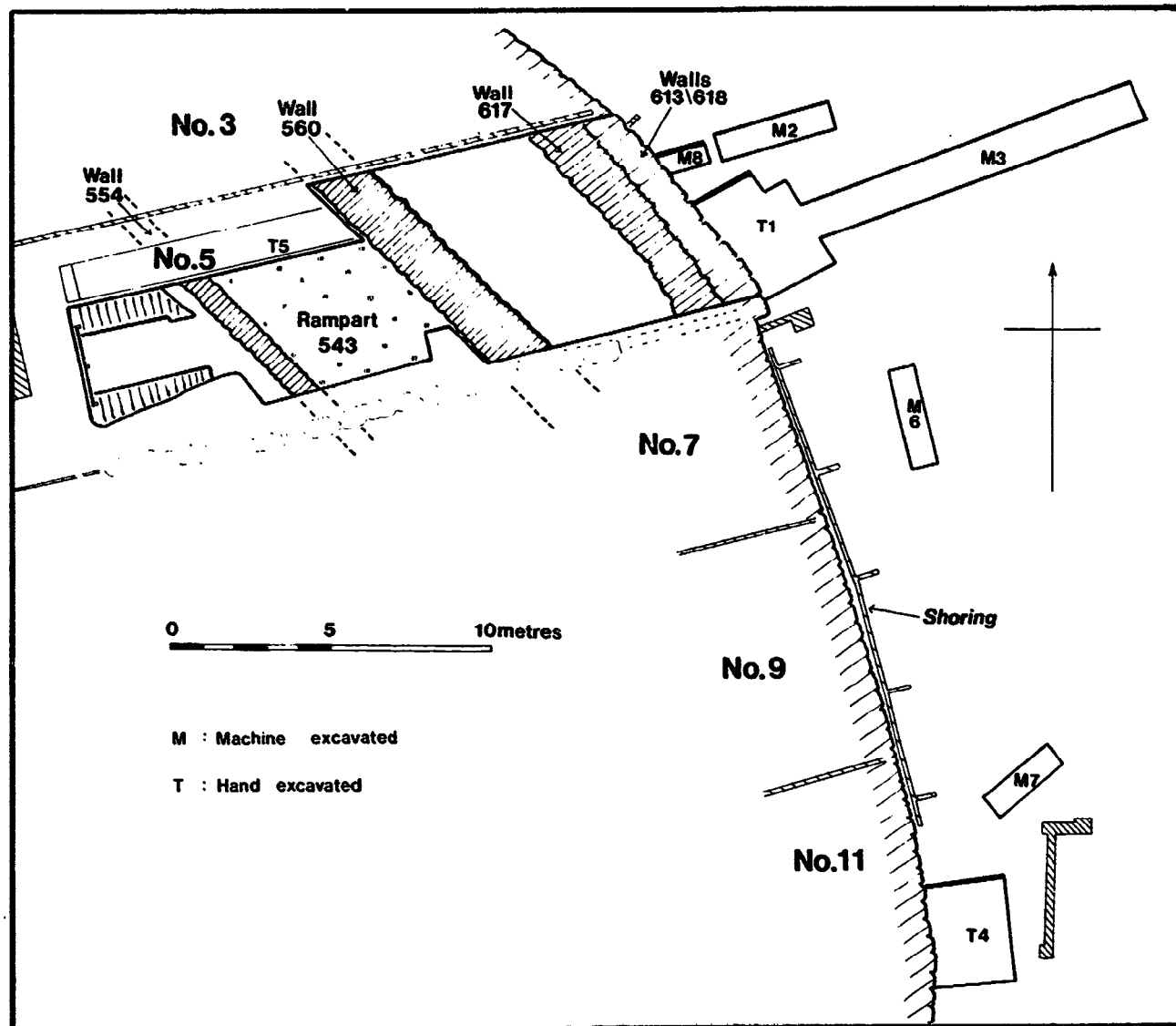


Fig 34 Cantilupe Street. Relationship of the main excavation T5 in the garden of 5 Cantilupe Street with the external trenches to the east of the medieval wall

The 1975 excavation was limited to the area purchased by the City Council, except for a small machine cut trench, M8, in front of the medieval wall. Debris from the 1972 excavations was cleared from the front of the medieval wall and the elevation was drawn. A ramp was then constructed to allow access to the garden by machine, and the garden topsoil was mechanically removed. Careful clearance of the exposed gravel failed to show any signs of associated timbering or indications of postholes so machinery was again used to remove most

of the loose gravel from between the Saxon and medieval walls. The loose gravel infill was shored on either side of the machine cleared area to allow the remaining parts of the area to be excavated by hand for the full width of the garden. Finally the ramp was removed from in front of the medieval wall.

The main part of this report is concerned with the excavation in the garden of 5 Cantilupe Street. The trenches to the east of the medieval wall are considered in an appendix.

RECORDING SYSTEM

Site codes:	1972 - He 72.1
	1975 - He 75 B
Machine cut trenches:	1972 - M2, M3, M6, and M7
	1975 - M8
Hand excavated areas:	1972 - T1, T4, and T5
	1975 - T5

The results from the 1972 excavations have been reindexed to correspond with the continuous recording system used in 1975 and these revised context numbers are used in the text.

Context numbers for layers, features, etc:	Main site:	T5 - 540 to 639
	Eastern trenches:	T1 - 641 a to g
		T4 - 642 a to d
		643
		M8 - 640 a, b, & c

Finds:	Recorded under context numbers
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Datum on sections:	52.26m OD
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SUMMARY OF CHRONOLOGY AND PERIODS

PERIOD	DEFENSIVE STAGE	DESCRIPTION	PROBABLE DATE RANGE
0	-	Pre-defensive soil level	-
1	2	Turf and clay rampart with internal timbers and timber face	Late 9th to early 10th century
2a	3	Addition of stone walls and metalled path	Early to mid 10th century
2b	3	Partial rebuild or strengthening	Mid to late 10th century
3a	4	Disuse	Late 10th to 11th century
3b	4	Refortification	Mid 11th to early 13th century
4	6	Medieval wall and new ditch line	Early to mid 13th century
5	6	Medieval wall rebuild and other later features	17th century onwards

THE EXCAVATION

■ PERIOD 0

The original soil surface, 589, about 0.3m thick, survived under the period 1 rampart and across the existing berm as a very clean, greenish-brown, clayey soil (Figs 37:M1.F1 and 38:M1.F1). There were no signs of any previous occupation within this layer, but pieces of worked flint were found in the period 1 rampart material, 543, and in the collapse layer, 566, of period 3a.

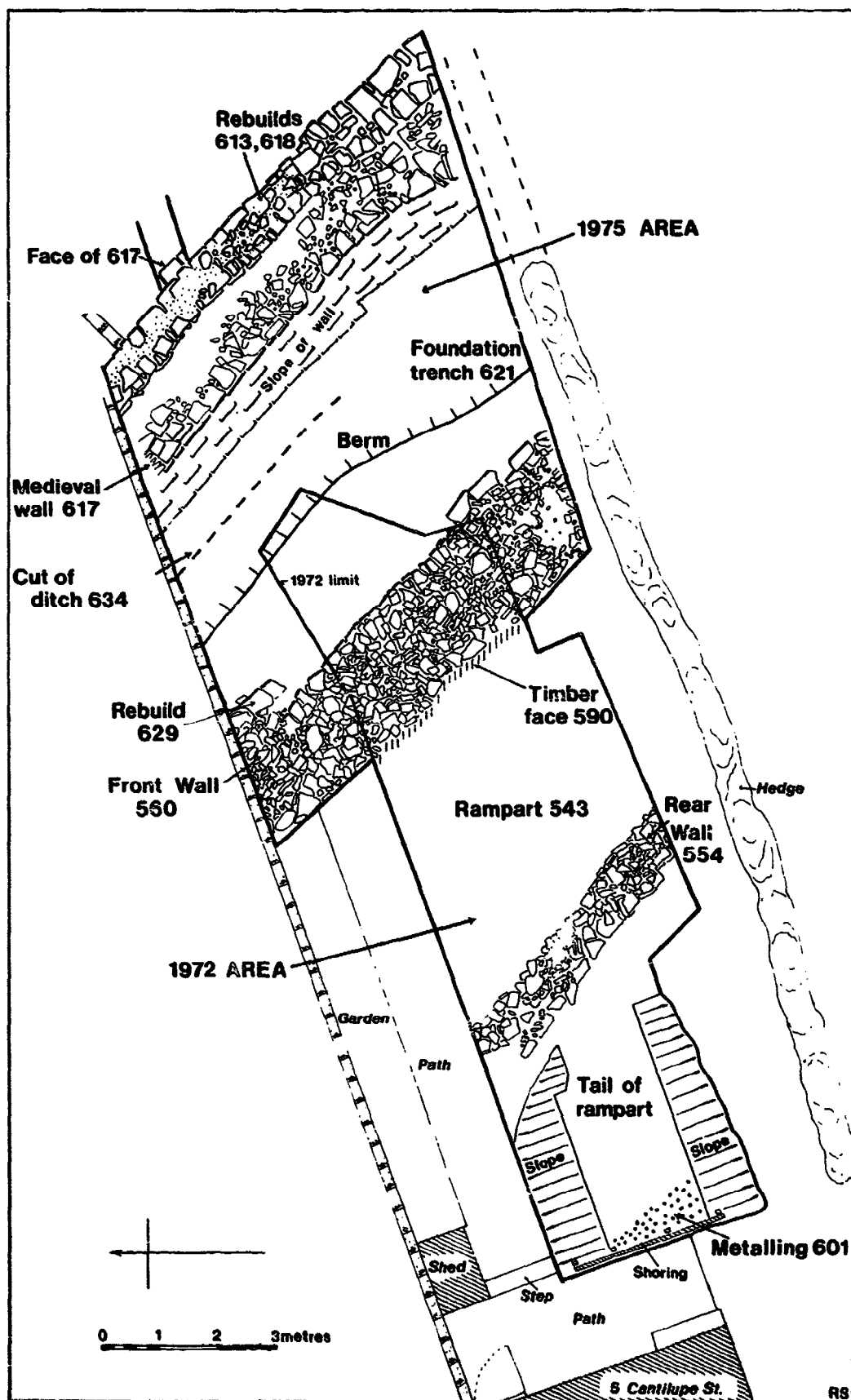


Fig 35 Plan of T5 showing the areas excavated in 1972 and 1975 and the positions of the principal features.

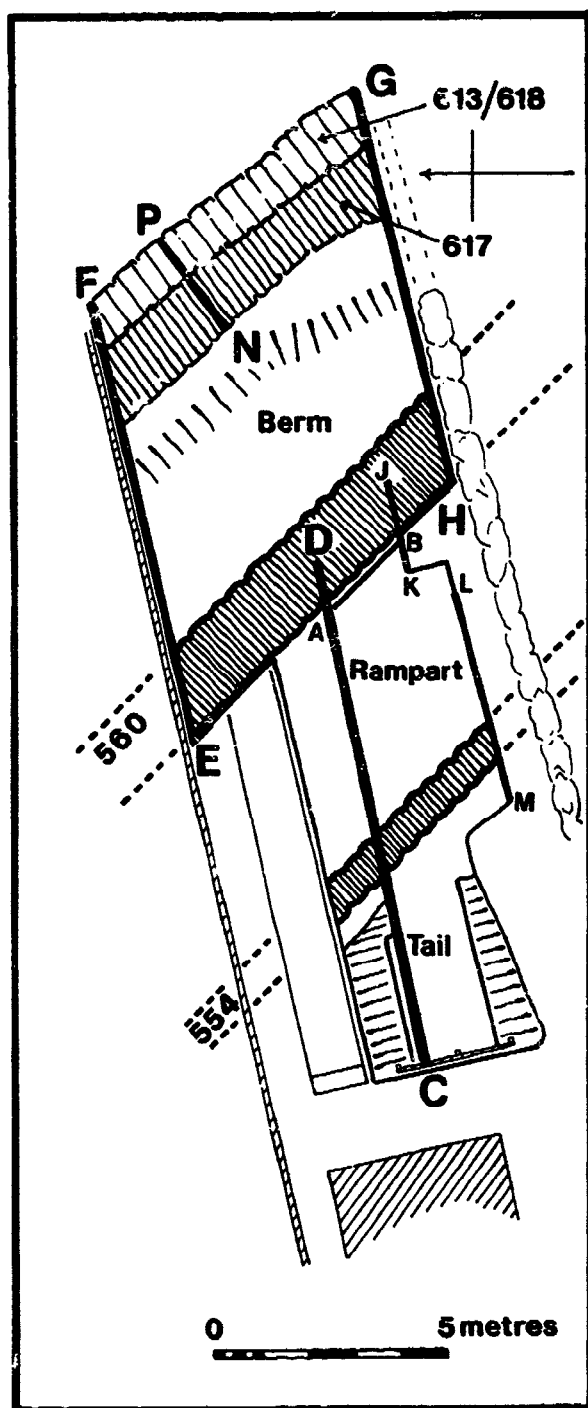


Fig 36

Cantilupe Street.
The position of
the sections

A - B	Fig 40:M1.F5
C - D	Fig 37:M1.F1
E - F	Fig 37:M1.F1
G - H	Fig 38:M1.F1
J - K	Fig 50:M1.G5
L - M	Fig 46:M1.F10
N - P	Fig 53:M1.G9

■ PERIOD 1 - The timber-faced turf and clay rampart (Defences - stage 2)

The main features of this period were examined during the 1972 excavation and little additional information was obtained in 1975. The available width of 4.5m in T5 (Fig 35:M1.E13) was cleared to the top of the rampart, but only a small area, 2m wide, to the south of section C-D (Fig 36, above), could be taken down to the original surface. In the western part of the trench, in the area of the tail of the rampart, the sides of the trench had to be sloped, and again only a 2m width could be fully excavated. A large section of the rampart had to be left under the period 2a rear wall, 554, which was left in situ.

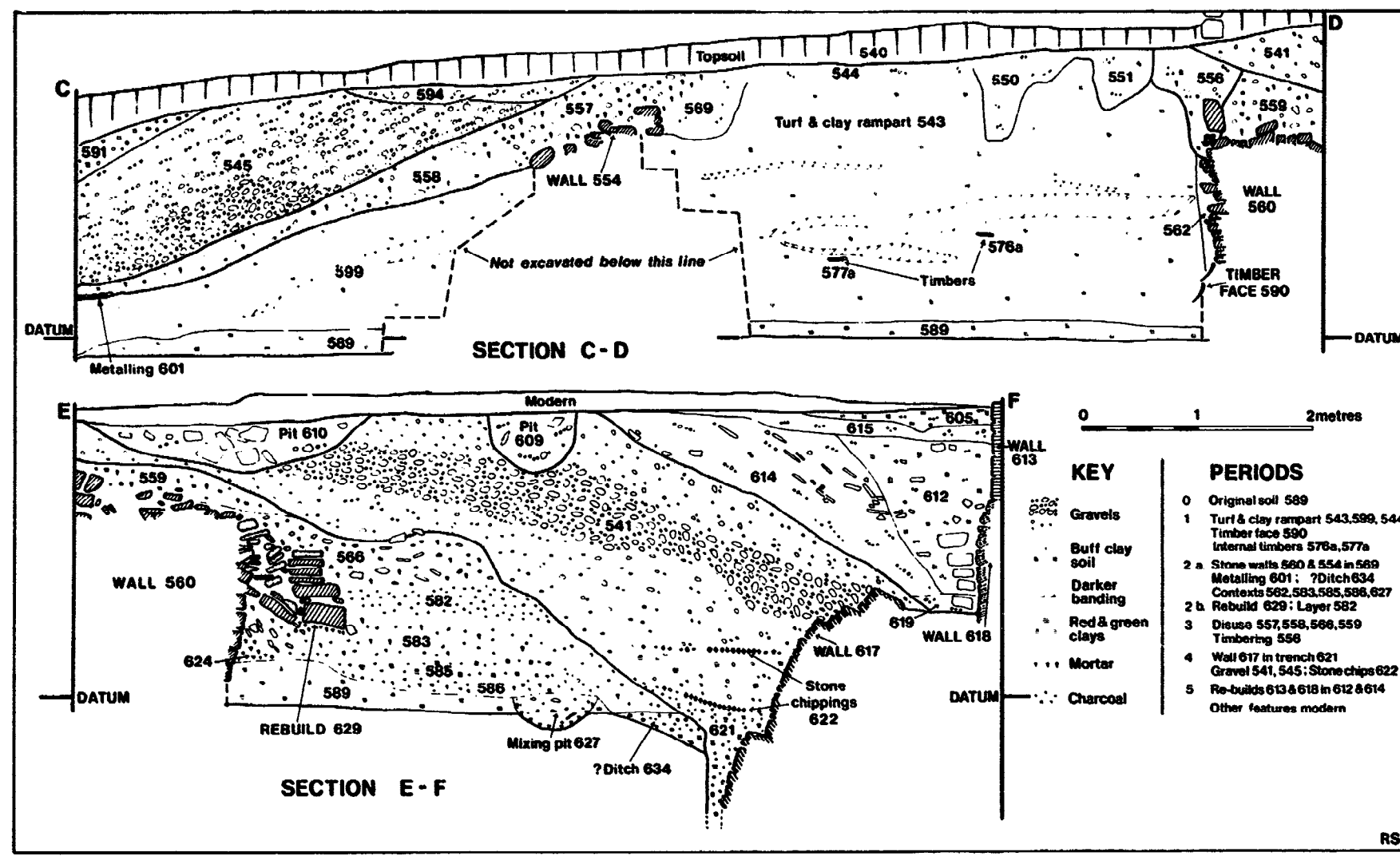


Fig 37 Cantilupe Street. Sections C - D and E - F.

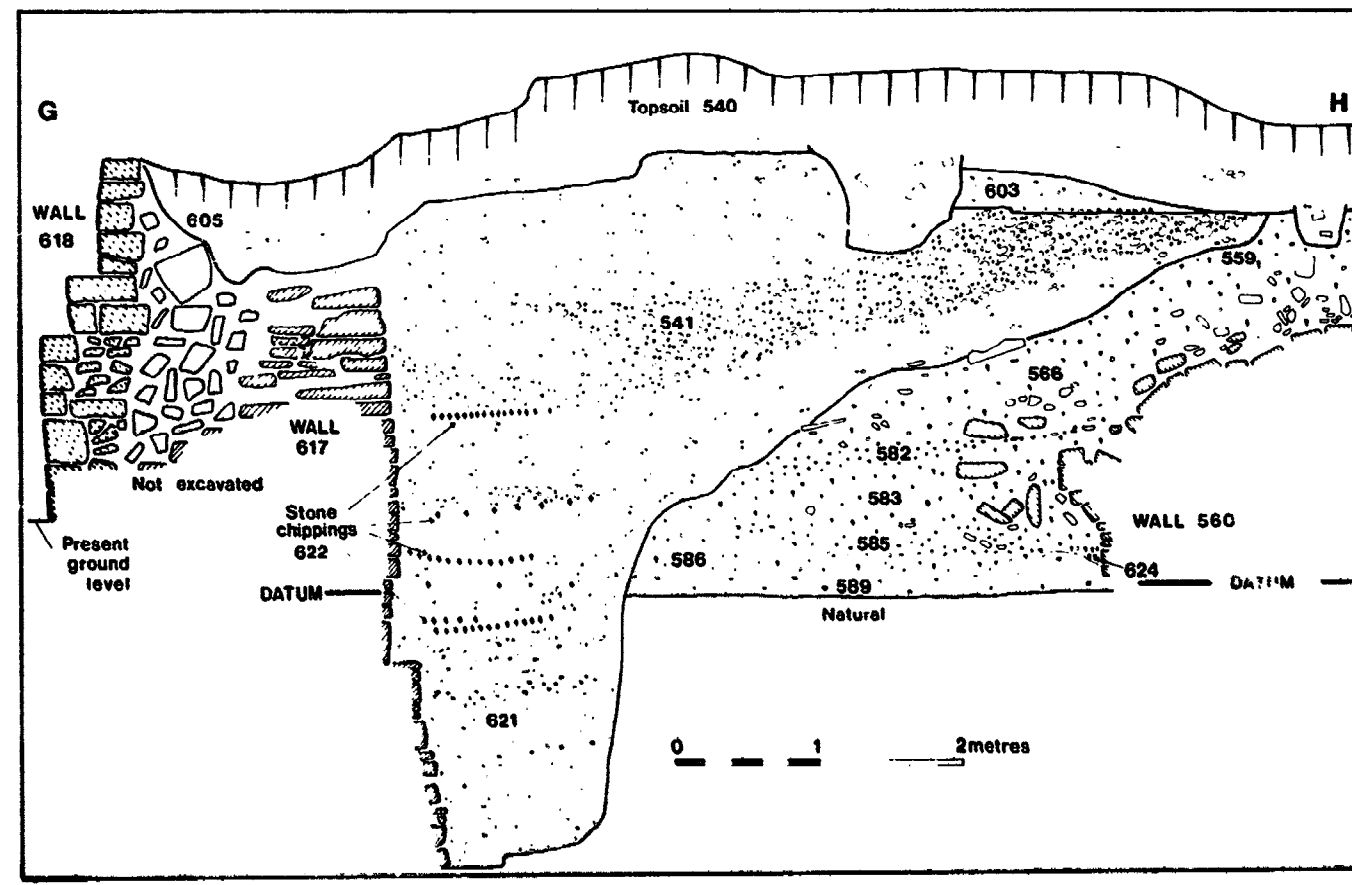


Fig 38 Cantilupe Street. Section G - H

For position of the sections see fig 36:M1.E14

Description

The rampart, context 543 between the walls and 599 towards the tail, which was laid directly on to 589, the undisturbed soil of the site, comprised a clean, heavy, yellowish clay with some darker banding (Fig 37:M1.F1). Impressions of horizontal timbers, which were found within the rampart material as black fibrous bands, were separated into two general layers for recording purposes (Fig 39:M1.F4 - lower level: 577 a & b, 578 a-g; upper level: 574 a-e, 575 a & b, 576 a-c). These black bands were indicative of large branches rather than shaped pieces of wood. They continued under the position of the period 2a rear wall, 554, towards the rampart tail but none were seen west of the line of the wall. All the timbers had an approximate slope of 1:10 downwards towards the tail of the rampart. The heights shown on Fig 39:M1.F4 are above the section datum, which is approximately the level of the original soil surface (Figs 37:M1.F1 and 38:M1.F1).

The front of the rampart was originally built of timber and both postholes and impressions of the horizontal timbers survived between the rampart material and the period 2a wall, 560 (Fig 37:M1.F1). The impressions of the bark of the horizontal timbers started about 0.4m above the buried soil 589 and continued upwards for about 1.0m (Fig 40:M1.F5). Towards the top they were partly cut away by two pits, 636 and 637, belonging to period 2a. The hard-packed rampart clay was cleaned off the dark fibrous bark material leaving the latter in position, adhering to a thin vertical section of brown soil. Above the impressions of the timbers a soft brown soil, 562, continued the alignment as a thin band between the rampart material and the rear of the period 2a wall, 560. Four individual, horizontal timbers, 639 a-d, were identified, each about 0.25m across. The fibrous material curved outwards towards the centre of each timber and, when clearance was completed, the impressions of four semi-circular timbers, laid on top of one another, were apparent (Fig 41).

At this stage in the excavation, the soil below the lowest of the horizontal timber impressions fell away revealing voids which had originally held vertical timbers. The three post positions, 638 a-c, thus revealed, contained a small amount of black cobweb-like material - all that remained of the vertical timbering along the face of the rampart. The posts appeared to have been between 0.13 and 0.25m in diameter and had been set 0.3 to 0.6m into the original ground surface. Both 638a and 638c sloped outwards towards the top, but 638b, which was in a shallower hole, sloped slightly inwards towards the rampart.

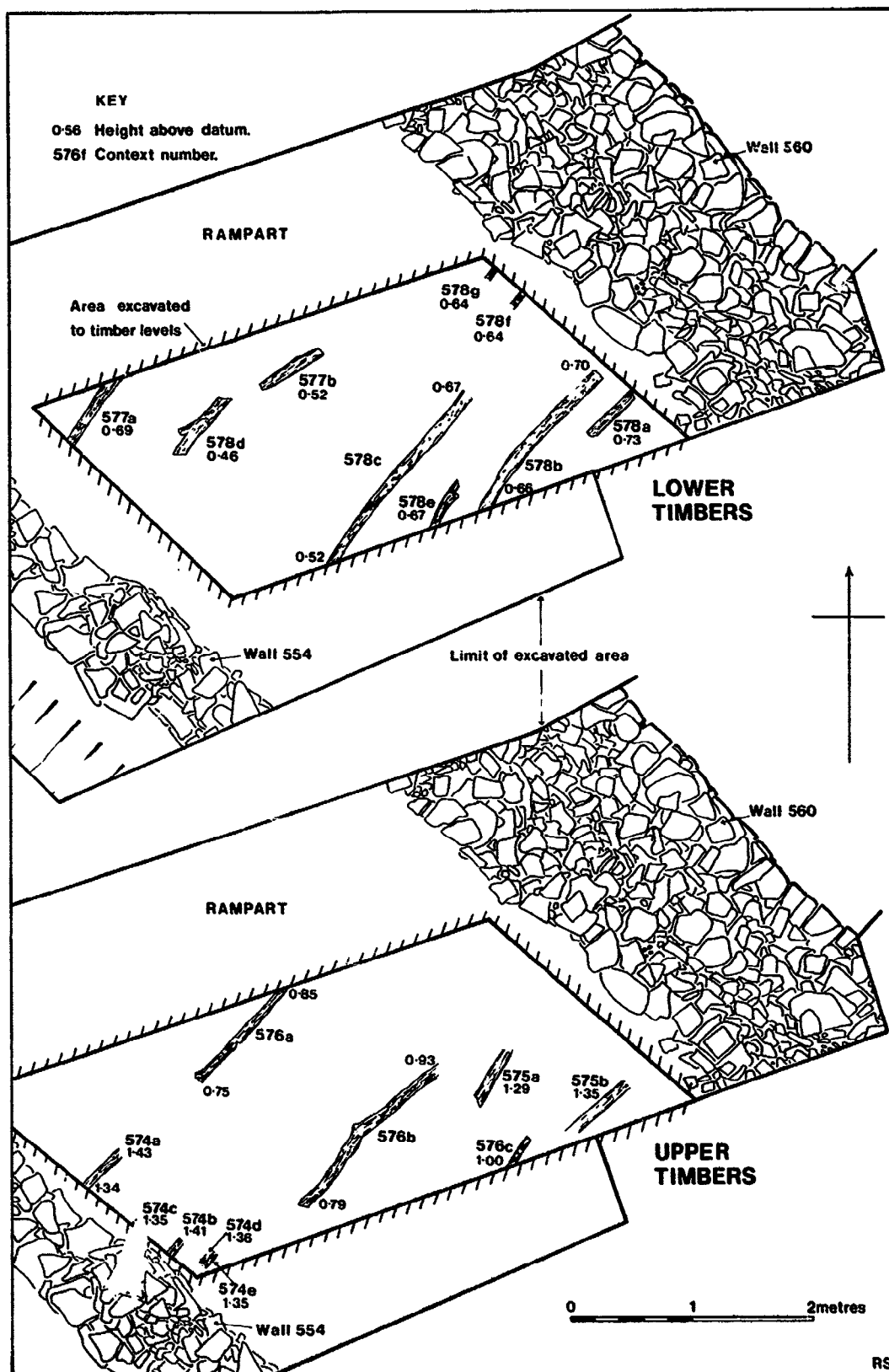


Fig 39 Cantilupe Street. Period 1. Positions of the timbers within the rampart. All the timbers sloped down from the front to the rear of the rampart. The remains were fragmentary but cut ends are shown where they were established.

When the berm in front of the period 2a wall 560 was examined during 1975 (Fig 47:M1.F11) there were no signs of occupation which could be associated with period 1 except for one small posthole, 630, cut some 0.2m into the original soil level.

Dating

There were no datable finds from this period and the fragments of timber which survived were unsuitable for radiocarbon dating.

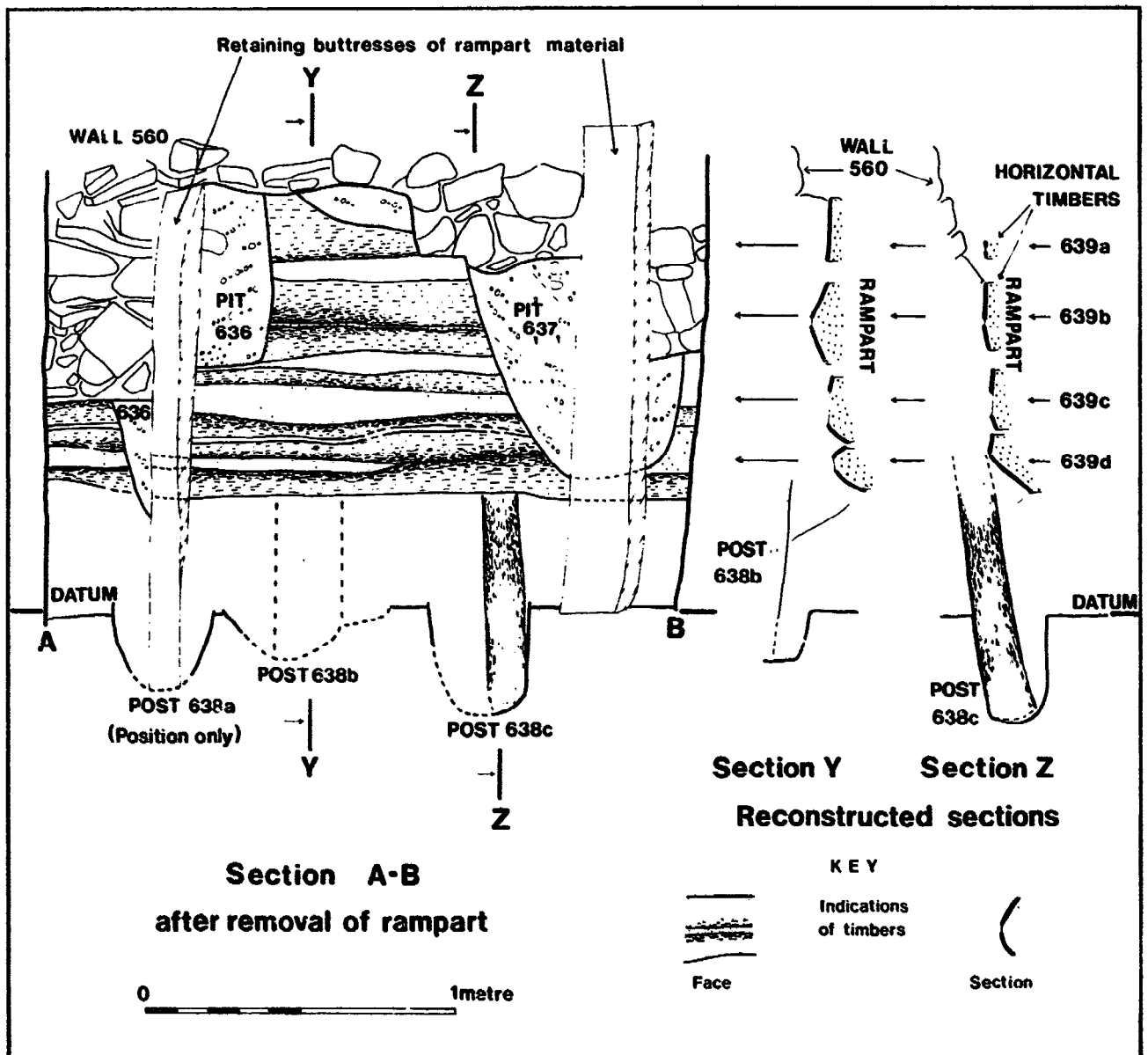


Fig 40 Cantilupe Street. Period 1. Section A-B showing timber face 590 as excavated and reconstructed sections Y & Z. For the position of the section see fig 36:M1.E14

Inventory (Vol 3)Small finds

Metal	Lead spindle whorl (may be from an unidentified later disturbance)	Rampart 543	Fig 8.1
Stone	Barbed and tanged flint arrowhead	Rampart 599	Fig 16.3

Discussion

The short stretch of clay bank together with the traces of the original face, which survive only in the gardens of some four houses in Cantilupe Street, are probably better preserved than any comparable stretch of Saxon defensive work in Hereford and possibly in the whole country.

The banded rampart material was cleaner than that seen in the main Victoria Street site and was more like the corresponding layers seen in the northern section of that site. The timber strengthening was of a similar nature although the timbers at Cantilupe Street did not apparently continue as far into the tail of the rampart as those at Victoria Street. The timbers were all approximately at right angles to the rampart and sloped down to the rear. This suggests that the rampart was constructed with larger sods at the front and smaller ones at the rear, thus giving a sloping platform on which the strengthening timbers were laid.

The design and construction of the timber face can be postulated from the results of this excavation, but the limited width of the trench along the line of the rampart means that no certainty can be attached to these postulations. However, the evidence would seem to favour the following hypothesis. Before piling up the turves of the rampart, posts, of which 638a and 638c are the two examples within the excavated area, were set in line along the proposed face, about 1m apart. Turves were then laid, and, as the platform thus created grew in height, logs which had been split in half were placed horizontally between the growing rampart and the vertical timbers, with the split side towards the rampart. Each split log was placed on top of the previous one as the

rampart grew and the eventual external aspect must have been very impressive, comprising a solid timber face without any use of nails or fastenings. It is presumed that the timber face was carried above the top of the rampart as a breastwork.

The rampart, as it settled, exerted a pressure on the timber face, and both the vertical timbers 638a and 638c began to slope outwards. This was apparently rectified, at least in this part of the defence, by inserting a secondary post 638b between the two original ones. This post was in a shallower hole and sloped inwards towards the top of the timber face.

A close examination was made of the tail of the rampart for any signs of what was suggested as a vertical timber fence at the Victoria Street site. Although many soft patches were found, no alignment could be established and the patches were eventually assumed to be animal holes.

The small amount of clayey soil shown in Fig 38:M1.F1 as a slight rise in layer 589 may represent a build-up of material on the berm in front of the timber face during its life. It could have been deliberately placed there to prevent the bases of the vertical timbers from moving outwards.

There was no evidence to indicate that a ditch was dug during this period of the defensive works. However, a ditch was certainly present in the succeeding period, 2a, and it is there discussed.

■ PERIOD 2a - Addition of stone walls and a metalled path (Defences - stage 3)

The timber face was eventually revetted with a stone wall and improvements were carried out to the rest of the defensive works. The stone walls were not removed during the course of the excavation.

Description

The front stone wall, 560, found in 1972 and cleared over the width of the garden in 1975, stands to a maximum height of 1.4m at the face and 2m at the rear (Fig 37:M1.F1). It is nearly 2m thick and was built in front of the period 1 timber face directly on top of the

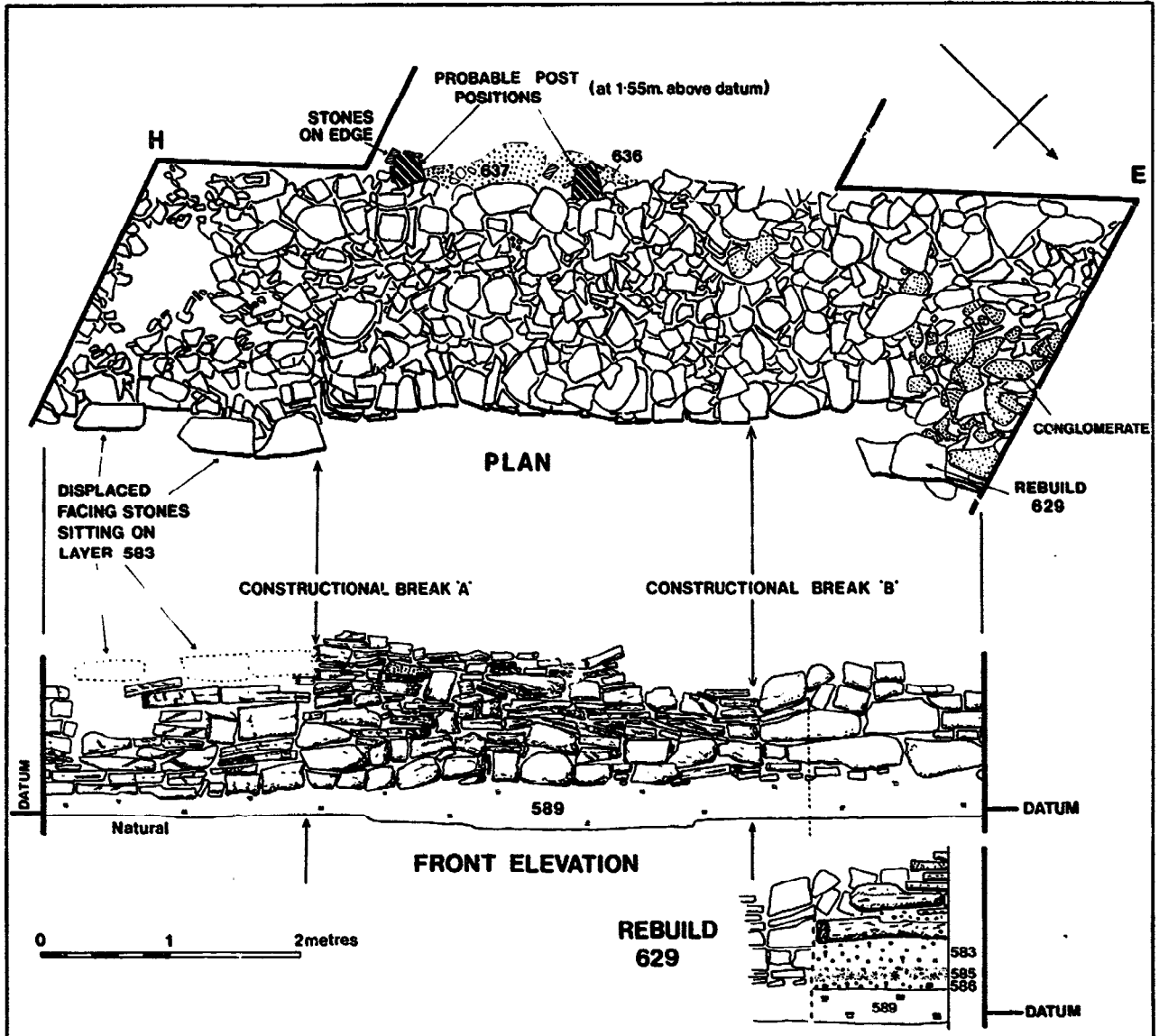


Fig 42 Cantilupe Street. Period 2a. Plan and elevation of wall 560 and associated features including rebuild 629 of period 2b.

existing ground surface without any foundation trench whatsoever.

There are indications that the wall was built in sections and two apparent constructional breaks can be seen (Figs 42, above & 43). The breaks could not be examined in detail because the wall was left in situ but they appear as approximately straight joints in the front elevation, although they are not as obvious in plan. To the left of constructional break A (Fig 42, above), the core of the wall contains much small rubble and clay, and small stones were used for the lower courses of the face with larger stones above. The central section between A and B is preserved to a higher level and includes the

whole of the area excavated in 1972. Several of the lower stones appear to have been reused, being roughly squared and worn. Above them the upper levels are of roughly cut stone, randomly piled with little attempt at coursing. The north-western part of the wall, to the right of break B, is of much larger stones, which may also have been reused. This part contains a larger proportion of conglomerate than the rest of the wall although this may be a result of the rebuild of period 2b. There is little evidence of regular coursing in the wall as a whole and the stones behind the face had apparently little order, although they have a general tilt downwards to the rear. Little mortar survived in the wall itself but more was present in front of the face, particularly in layer 624 immediately on top of the buried soil, 589, and there were traces in the overlying levels (Figs 37:M1.F1 and 38:M1.F1).

After removal of part of the rampart behind wall 560, traces of two pits, 636 and 637, were found (Figs 40:M1.F5 and 42:M1.F8). They were apparently associated with the wall and were each some 0.5m in width along the line of the wall, but only 0.2m at right angles into the rampart. The existing top of the pits was at 1.55m above datum. This was about 0.3m below the surviving top of wall 560, but the pits could have continued higher as the tops were confused by feature 556 of period 3. The surviving parts of the pits were about 1m deep and contained a mixture of clay, gravel, and small stones. Possible post positions were identified by packing stones of sandstone stood on edge, close to the tops of both pits. They were 1.5m apart and about 0.2m in diameter.

The rear wall, 554, is only one course high to the north-west, but increases in height to the south-east where there are some six courses surviving (Figs 44:M1.F10 and 45). The wall had been built on a step cut into the upper part of the tail of the period 1 defensive bank. The resultant trench, 569, was filled with a slightly darker material than that of the rampart (Fig 46:M1.F10). The wall, which is about 0.7m wide and a maximum of 0.8m high, has no apparent constructional breaks. The wall stones are mainly of similar size to those used in the lower levels of the central portion of the front wall, but there are also one or two large river pebbles. The higher parts of the wall consist of smaller stones with little attempt at coursing. There were traces of mortar in layer 558 which was behind the wall and above the tail of the rampart.

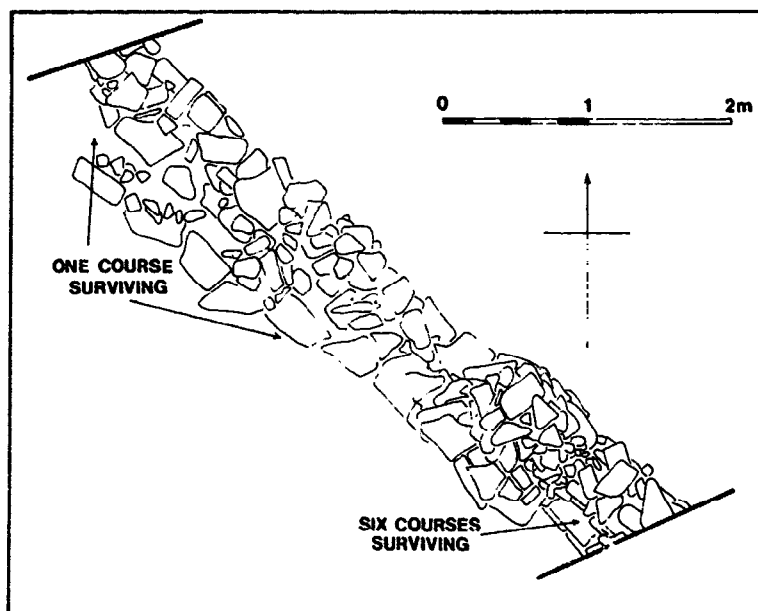


Fig 44 Cantilupe Street. Period 2a.
Plan of wall 554

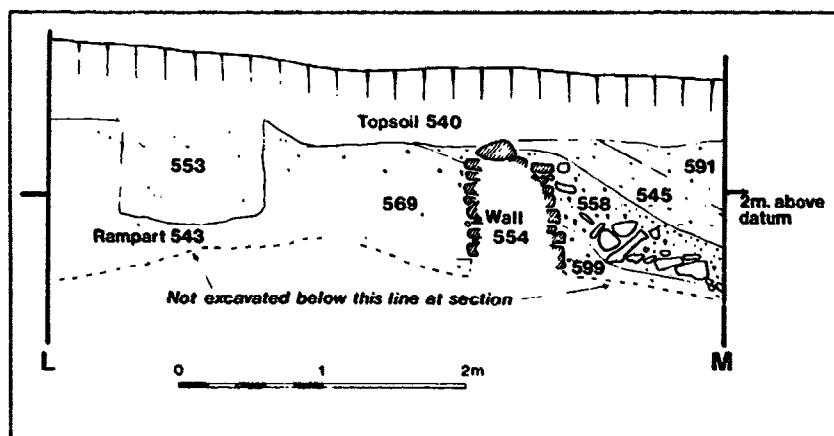


Fig 46 Cantilupe Street. Section L - M.
See fig 36:M1.E14 for position

Part of a metallised surface, 601, was found on the lower part of the tail of the rampart at the western extremity of the trench (Figs 35: M1.E13 & 37:M1.F1). It consisted of a thin layer of small river-washed pebbles which was laid on some 0.3m of rampart material. The full width of this laid surface could not be established.

On the berm in front of wall 560, and cut into the original soil surface 589, were three pits, 588, 627, and 628, apparently used for mixing mortar (Figs 47, below & 48). They varied between 0.8m and 0.9m in diameter and 0.3m and 0.4m in depth. The pits all had a thin layer of lime mortar over the sides and bottom and contained a mixture of gravel, clay, and small fragments of stone.

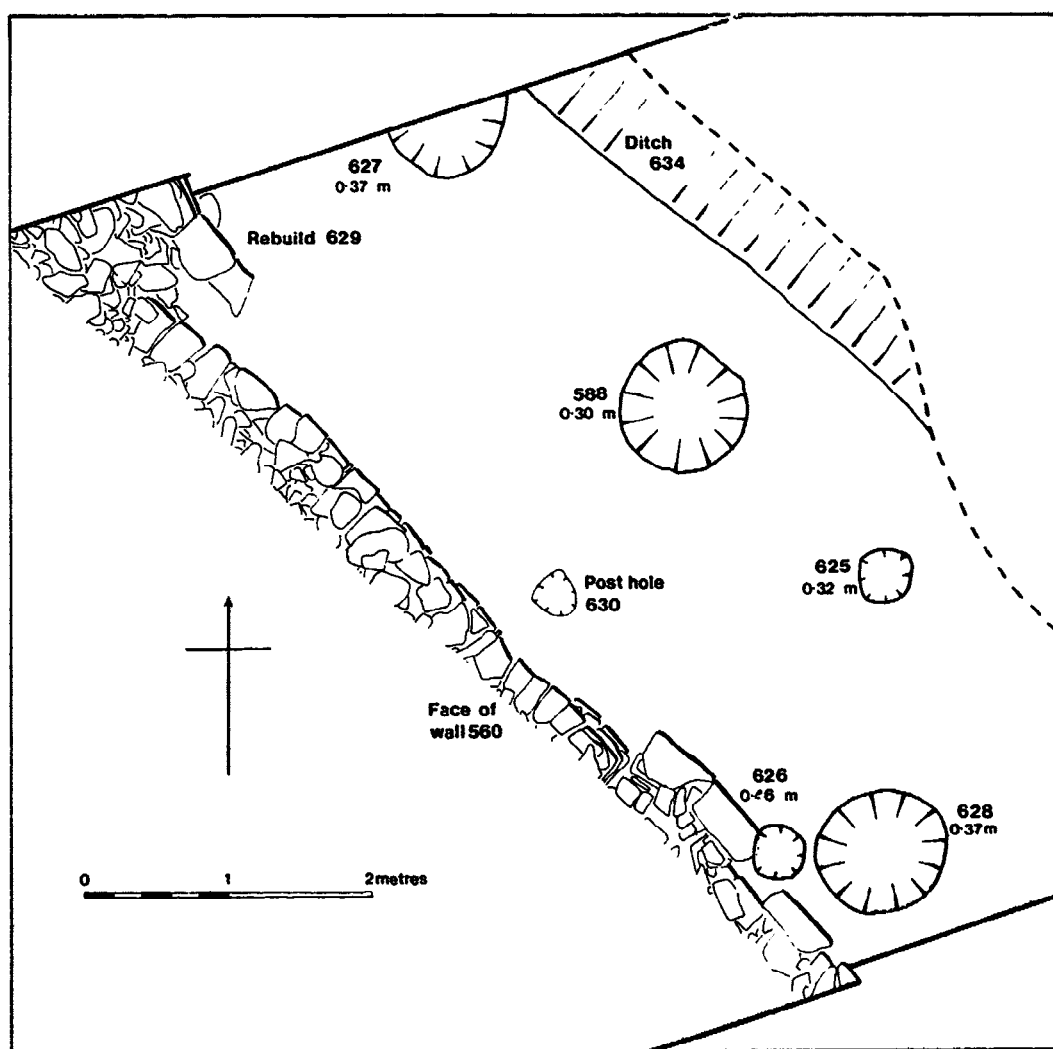


Fig 47 Cantilupe Street. Periods 2a & 2b. Mortar mixing pits on the berm in front of wall 560. Period 2a: 588, 627, & 628 (depths from the top of layer 589). Period 2b: 625 & 626 (depths from within layer 583). Posthole 630 is probably of period 1.

The edge of a possible ditch, 634, which cut through the buried soil 589, was also established on the berm. Only a small portion of this ditch remained, the rest having been cut away by the foundation trench for the period 4 wall, 617. The ditch cut was seen in plan for half the width of the trench (Figs 35:M1.E13 and 47:M1.F11) and is shown on section E-F (Fig 37:M1.F1). The small wedge-shaped area surviving contained some gravel and mixed red and green clay which apparently represented silting of the ditch.

During the construction and life of the defence there was a build-up of material on the berm (Fig 38:M1.F1). The lowest layer, 586, which was on top of the clean soil, 589, was a brown clayey silt containing pebbles and flecks of mortar. Above 586 was a gravel and clean clay mixture, 585, about 0.15m thick, and sealing this was layer 583 which may have continued as part of the fill of the ditch. It was 0.4m thick on the berm and consisted of a dark brown clay soil with pebbles, mortar, and charcoal. The layer contained a large number of mollusca, a quantity of animal bone, and one small sherd of West Midlands Early Medieval ware (Fabric G1).

The upper part of the surviving rampart material was cut by several pits of period 6, but otherwise a consistent layer, 544, was present. It consisted of a yellowish clay, similar to the rampart material 543, but with some pebbles, charcoal, and mortar flecks.

Dating

There were no datable finds from the constructional part of this period, but one sherd of West Midlands Early Medieval ware was found in layer 583, the uppermost layer on the berm. Animal bone from this layer was used for radiocarbon dating as it was thought that contamination from earlier periods was unlikely. The uncalibrated date was $ad\ 1000 \pm 70$, which, using the most recent value of the half-life, gives an approximation to the calendar date of AD 970 ± 70 (HAR 1620). This radiocarbon date, assuming that the bones are contemporary with their context, refers to the period between the date of the construction of the wall and the date of its disuse, and should be before the final collapse. It thus encompasses periods 2a and 2b (main text p 71).

DATE RANGE	PROBABILITY
pre <u>AD</u> 830	2.5%
pre <u>AD</u> 900	16 %
<u>AD</u> 900-1040	68 %
post <u>AD</u> 1040	16 %
post <u>AD</u> 1110	2.5%

If it is accepted that this radiocarbon date is later than the date of construction of wall 560, then there is an 84% probability that the wall was built before the mid 11th century.

There is a 97.5% probability that the animals, from which the bones came, died after AD 830 (and an 84% probability that it was after AD 900). This cannot be used directly to give a terminus post quem for the construction of wall 560 as it could have been built at any time before disposal of the bones. However, it is unlikely that a poorly constructed wall such as this, with the considerable pressure of the rampart behind it, would have survived for more than 100 years without many evident signs of repair work. The build-up on the berm, which included the animal bones, would have had to take place during this period and there is thus a reasonable probability that the wall was built after the beginning of the 9th century.

The sherd of West Midlands Early Medieval Ware is unlikely to have been deposited before the early 10th century but could have been much later and therefore does not help to date the construction of wall 560. Thus the available evidence is only sufficient to indicate that the most probable date range for the construction of the period 2a defensive wall is from the beginning of the 9th century to the middle of the 11th century.

Inventory (Vol 3)

Ceramic material

Pottery Fabric G1 - 1 sherd Layer 583 (unillustrated)

Environmental material

Mollusca Layer 583

(Layer 583 was partly deposited during period 2b)

Discussion

Even if an allowance is made for repair work, the timber face to the period 1 turf and clay rampart would have had a limited total life, and it was evidently still standing when it was buttressed by the stone wall of period 2a. This wall is a complex structure and complete demolition would be required to understand all the constructional problems involved. The two apparent breaks at A and B could be due to a variety of causes. The most straightforward reason is that the wall was built in sections by small gangs of workers who were not sufficiently experienced in stone wall construction to bond the individual parts fully together. Alternatively, as areas of the period 1 timber face decayed, the individual parts may have been buttressed in stone and these buttresses joined together to make a continuous face at a later date. A third possibility is that the space between A and B may have held a timber tower, which was replaced at a later date by a new section of the already constructed buttressing wall. The poor constructional quality of the wall and the lack of definite breaks in the surviving top perhaps makes the suggestion that the wall was built in short lengths the most likely.

It is very important in assessing the efficiency of the defensive work to attempt to estimate the original height of the timber face, the walls, and the rampart. The topmost layer of the rampart, 544, presumably represents a turf level on top of the eroded bank and the upper surface of this layer is about 2.2m above the original soil level. It is suggested that a reasonable allowance for erosion could be about 0.3m which, if accepted, would indicate that the original rampart height would have been about 2.5m above the ground level. During period 1 the timber face would have had to be about 1.5m higher than this to act as an efficient breastwork, and, as the posts for the timber face were sunk 0.4m into the ground, each front vertical timber would have been 4.4m long. Accepting these figures, the apparent height of the defence to an attacker would have been some 4.0m, sufficient both to look impressive and to prevent easy scaling.

The stone revetment wall was found standing to a maximum height of 2m next to the rampart. The poor technique used in construction would not have allowed this wall to have been of any great height, and if it is accepted that the two pits, 636 and 637, indicate a

new timber breastwork constructed during period 2a or 2b, then the wall need not have been any higher than the suggested 2.5m of the period 1 rampart. It is perhaps significant that there was only a small amount of tumbled stone in the area in front of wall 520.

The rear wall is quite narrow and appears to have had little structural strength. Its purpose could have been to act as a rear revetment for the flat platform on top of the rampart or to act as a foundation for a plank floor. There was a reasonable amount of tumbled stone behind the highest part of this wall (section L-M) so it would originally have been a little higher than the top of the rampart.

The position of the mortar mixing pits indicates that there had been little or no build up on the berm during period 1, which is rather surprising when one considers the build up in the same area during period 2a. This may be an indication that only a short time elapsed between the construction of the period 1 defensive work and the addition of the stone wall.

The cut for the ditch, which could have been dug either during period 1 or period 2, starts 3m in front of the stone revetment or 5m in front of the timber wall. The width and depth of the ditch are unknown and as the gravel from it was obviously not used in the construction of the rampart, the disposal of the considerable amount of material thus generated remains a problem.

The lowest of the layers on the berm, 586, which seals the mortar mixing pits, together with the concentration of mortar, 624, directly in front of wall 560, probably represent the debris left during or immediately after the construction of this wall. Layer 585 above is the only layer which could be associated either with digging the ditch or possibly cleaning it out. Above this, the thick humic layer, 583, which contained occupation debris, was presumably gradually deposited during periods 2a and 2b while the defences were in use.

■ PERIOD 2b - Partial rebuild or strengthening (Defences - stage 3)

Description

The north-western end of the excavated portion of wall 560, close to the section, had a second face, 629, set some 0.7m in front of the original face (Figs 37:M1.F1, 42:M1.F8, and 49). It was present for approximately 1m from the section. The lowest course, which was laid on a bed of soft mortar within layer 583, consisted of large stones. Smaller stones above took the total surviving height to about 0.7m. The area between this new face and the original wall was filled with stone fragments, soil, and some mortar. Conglomerate sandstone, which was found in a greater concentration on the upper part of the north-western end of wall 560, was also present in, and on top of, the rebuilt face 629.

In the area of the berm, at the same level as the lowest stones of this new face, 629, were two additional mortar mixing pits, smaller but proportionately deeper than those of period 2a (Fig 47:M1.F11). Pit 625, 0.35m in diameter and 0.3m deep, had a mortar layer over the bottom and was filled with a clean silt whilst pit 626, 0.3m in diameter and 0.45m deep, was entirely filled with mortar. The two pits were found within the material of layer 583 but there was no apparent surface associated with them. Over all other parts of the berm, layer 583 continued well above the level of the top of the pits and contained several large stones. Sealing 583 was layer 582, which consisted of clean gravel and clay. This layer abutted the face of the secondary wall 629 at the north section but tailed off over the remainder of the area excavated before it reached the face of wall 560 (section G-H, Fig 38:M1.F1).

Dating

There were no datable finds from this period.

Inventory

The only finds, which were from layer 583, are listed under period 2a.

Discussion

The use of conglomerate sandstone in the secondary face, 629, and in the top of the original wall, 560, at the northern end of the excavated area suggests that there was at least a partial collapse of the face at this point, or that collapse was imminent and the face was therefore buttressed using additional mortar for binding and strengthening. The clean clay and gravel layer 582 suggests that the ditch may have been recut at the same time, or soon after, the refacing work. The works of period 2b can thus be seen to represent a considerable renewal of the defences after they had fallen into some disrepair.

The two post positions 636 and 637, which have been described under period 2a, could equally have belonged to period 2b. They presumably indicate a replacement of the original timber breastwork at some time whilst wall 560 was an integral part of the defence.

■ PERIOD 3a - Disuse (Defences - stage 4)

Description

The only indication of what could be a deliberate destruction of the defences of period 2 occurs at the south-eastern end of wall 560. Three stones appeared to have been prized out of the face of the wall and were found on top of layer 583 immediately in front of the wall line (Fig 42:M1.F8). Layer 582, which sealed layer 583 over most of the berm, was not present in the area close to these stones. Towards the southern section the whole face of wall 560 had slumped forward at the top (section G-H; Fig 38:M1.F1) and several large stones were found in the adjoining parts of layers 582 and 583.

Above the clean gravel layer 582 was a thick layer, 566, of dark brown, dirty clay containing rubble, mortar, animal bone and shell. This layer sealed the top of the rebuilt face, 629. Above layer 566 and covering the remains of wall 560 was a more sandy, stone-free layer, 559, which also contained mortar flecks and some animal bone.

To the west of the area excavated, the main layer sealing wall 554 and the rampart tail consisted of a brown clayey soil, 558, which became thin where it covered metalling 601 (section C-D; Fig 37:M1.F1). This layer was of similar composition to layer 566, associated with the decay of the front wall. Although there was a substantial amount of material from wall 554 within layer 558 near the south face (section L-M; Fig 46:M1.F10), towards the north where wall 554 was least preserved, there was very little stone. There were, however, slight indications of a robber trench for wall 554 close to the north face (Fig 37:M1.F1). This trench, 557, which contained a grey clayey soil with small stones and mortar, was not present across the whole width of the area excavated.

Dating

One sherd of pottery, found in layer 559, was of 11th century date.

Inventory (Vol 3)

Small finds

Stone	Flint (unillustrated)	Layer 566	No 19
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Ceramic material

Pottery	Fabric D1 - 1 sherd	Layer 559	Unillustrated
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Discussion

There was insufficient stone in the debris layers associated with the decay of walls 560 and 554 to account fully for the apparent loss of stone from these walls. This, taken together with the indications of robbing of wall 554 and the attempted removal of stones from wall 560, suggests either a deliberate destruction or the sporadic removal of stone as the defences fell into decay.

The lack of maintenance, accelerated by stone robbing, caused the defences to become a relatively smooth bank, which apparently had a substantial turf surface represented by layers 558, 559, and 566. Only occasional stones, indicating the tops of the walls would have shown through this surface. At the rear of the rampart a reasonably stable slope scaled the remains of the metalled path and at the front, a smooth slope continued from above wall 560, over the berm, and into the, by then, partly silted-up ditch.

■ PERIOD 3b - Refortification (Defences - stage 4 or 5)

There was a slight indication, noticed only during the 1972 excavation, that the disused bank had been refortified with a timber structure on the front of the crest.

Description

The sole evidence consisted of a slot, 556, some 0.5m wide and 0.8m deep, which cut into layer 559 and into the rampart material (Figs 37:M1.F1 and 50,below). In parts the slot was slightly to the rear of the line of wall 560 and in other parts it cut into the top of the wall. The slot was filled with fine hard silty soils with occasional softer patches, but there was no sign of individual timber positions.

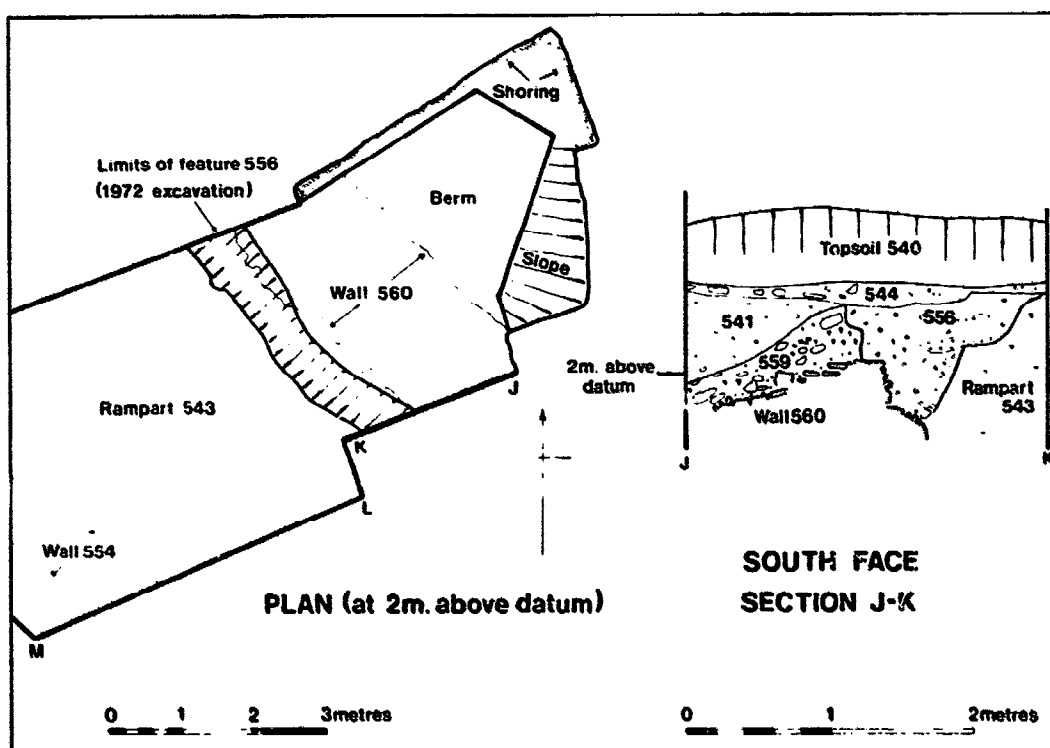


Fig 50 Cantilupe Street. Period 3b. Plan and section showing feature 556 which is considered to represent the setting for a timber or brushwood and thorn paling fence on top of the eroded periods 1 and 2 defences

Dating

There was no dating evidence for this refortification, which could therefore have occurred at any time between the decay of the earlier defences and the construction of the medieval wall.

Inventory

There were no finds from this period.

Discussion

The grassy bank left at the end of period 3a was probably disturbed regularly by being used as a quarry for the underlying stone. Thus, before full stability was achieved, a gradual erosion would have taken place. Under these circumstances it is only to be expected that the traces of any timber refortification would be slight. The evidence available suggests that a trench was dug along the front of the crest of the smooth bank and the depth and width of this trench suggests that it was used for a brushwood and thorn paling fence.

■ PERIOD 4 - The medieval wall (Defences - stage 6)

The medieval wall was built in a deep foundation trench cut into the silted ditch of periods 2 and 3.

Description

A deep step, 621, was cut into the western side of the period 2 ditch to produce a flat surface for the foundation of wall 517 (Figs 37:M1.F1 and 38:M1.F1). The bottom of the foundation trench was some 2m below the original ground surface.

The medieval wall was about 2.6m wide at its base. It survived to an average height of 2.7m from the bottom of the foundation trench, although the rear face had a maximum height of 4m at the south section (Fig 38 :M1.F1). The wall was roughly coursed, both internally and externally (Figs 51:M1.G7 and 52:M1.G8), but details of the construction were complex, the coursing and stepping on the inside face being variable along its length (Fig 54). The side of the foundation trench was almost in contact with the wall close to the

northern section but it widened at the centre of the excavated area to become almost 1.2m behind the wall at the southern section.

As the wall was built, the area between it and the smooth bank concealing the period 2 defence was gradually filled. The lower levels of this fill, 621, which were within the foundation trench, contained a mixture of clay and gravel. This was followed by layers of clean, small gravel in which were found bands of stone chippings, 622, which apparently indicate that the wall construction and the back-filling of the trench was a continuous process. The upper levels of the fill, 541, were mainly of a more pebbly nature, although there was some more small gravel at a higher level. This gravel partly sealed the line of the period 3b postulated defensive

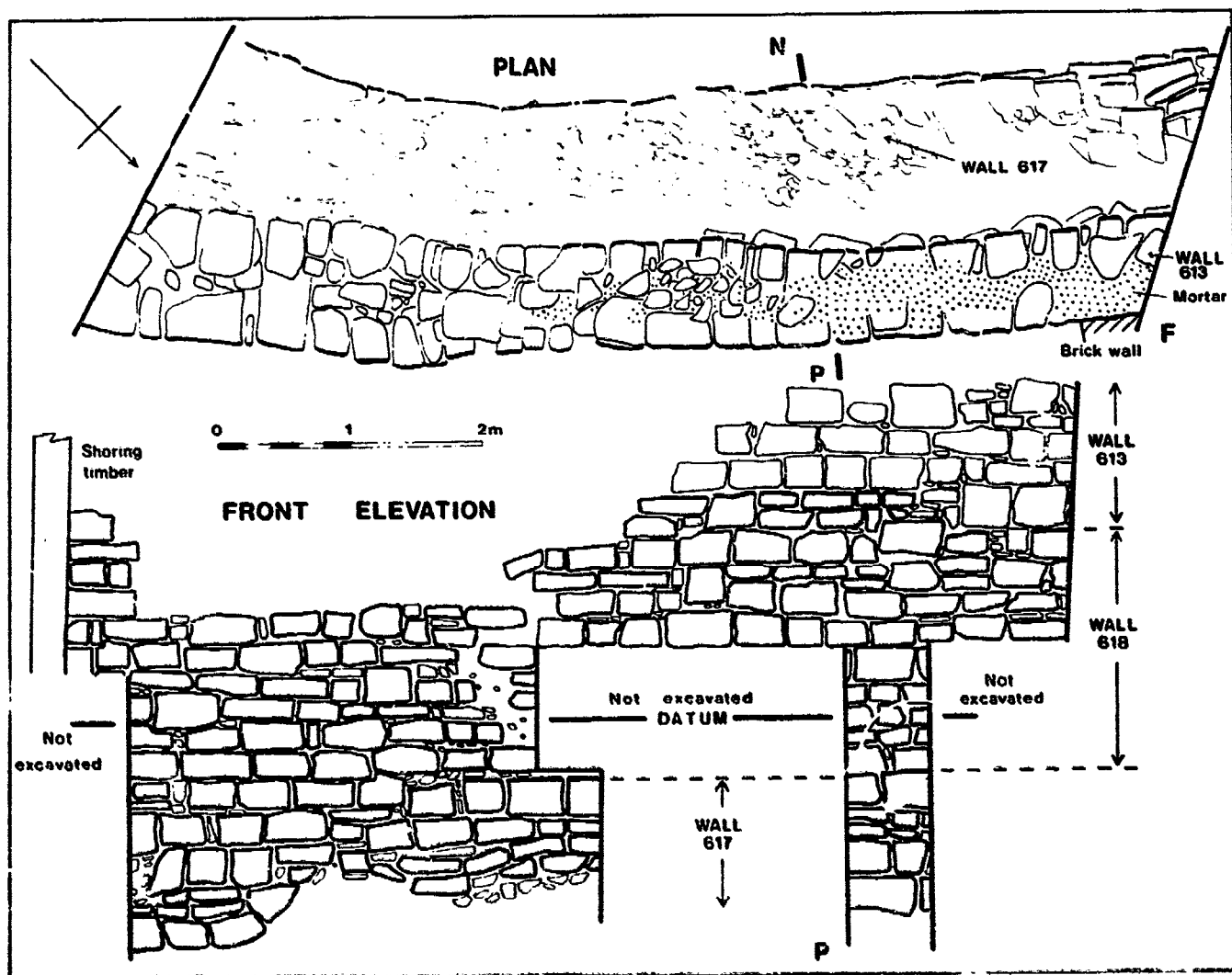


Fig 51 Cantilupe Street. Period 4: plan and front elevation of the medieval wall, 617. Period 5: rebuilds 613 and 618. Section N - P is shown on fig 53:M1.G0

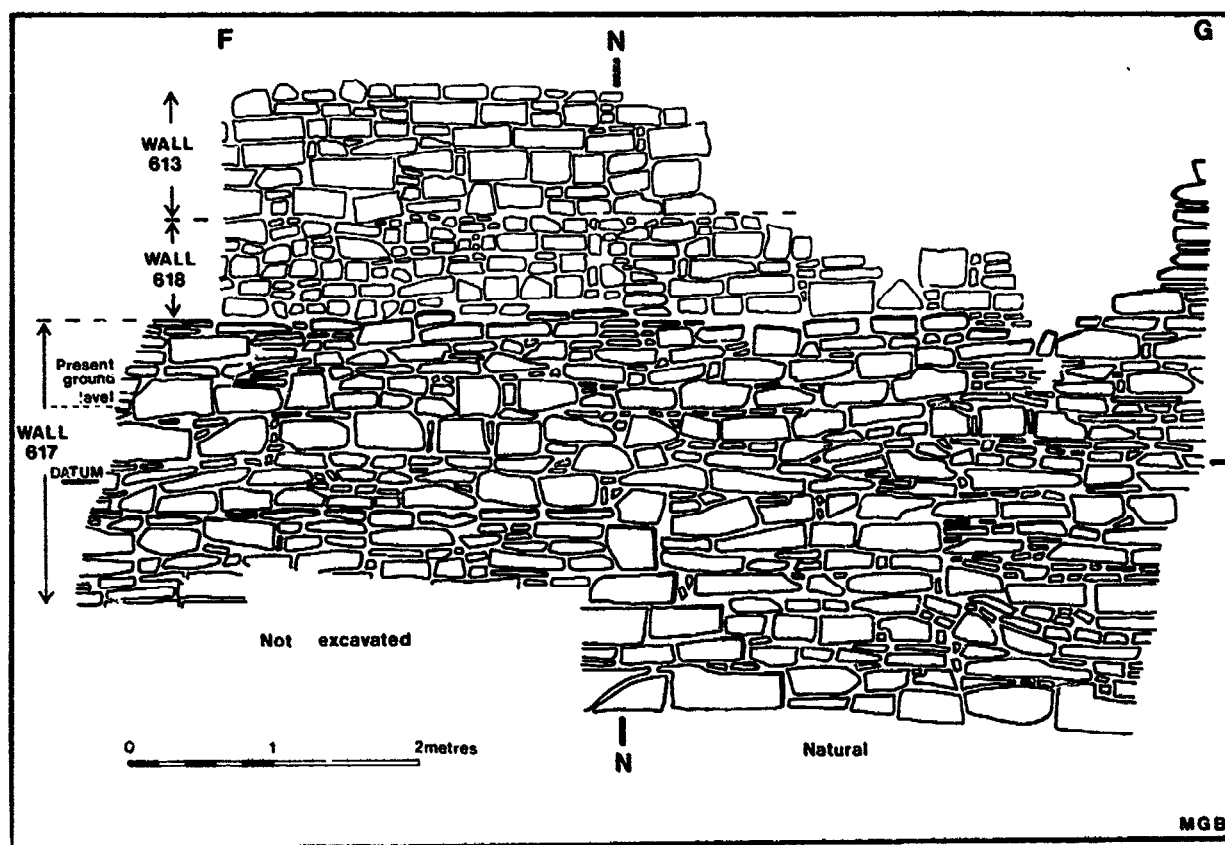


Fig 52 Cantilupe Street. Period 4: rear elevation of the medieval wall. Period 5: rebuilds 613 and 618. Section N is shown on fig 53:M1.G9

timberwork trench, 556 (Fig 37:M1.F1). Apparently, after the foundation trench and the area between the wall and the disused defence had been filled, further large amounts of gravel, 545, were tipped behind the earlier defence and extended throughout the area excavated.

Dating

There were no datable objects from the gravel layers of period 4 or from the material which comprised the wall. However, the gravel layers sealed layer 559, which contained a sherd of 11th century pottery, and this provides a terminus post quem for the construction of the stage 6 wall.

Inventory

There were no finds from this period.

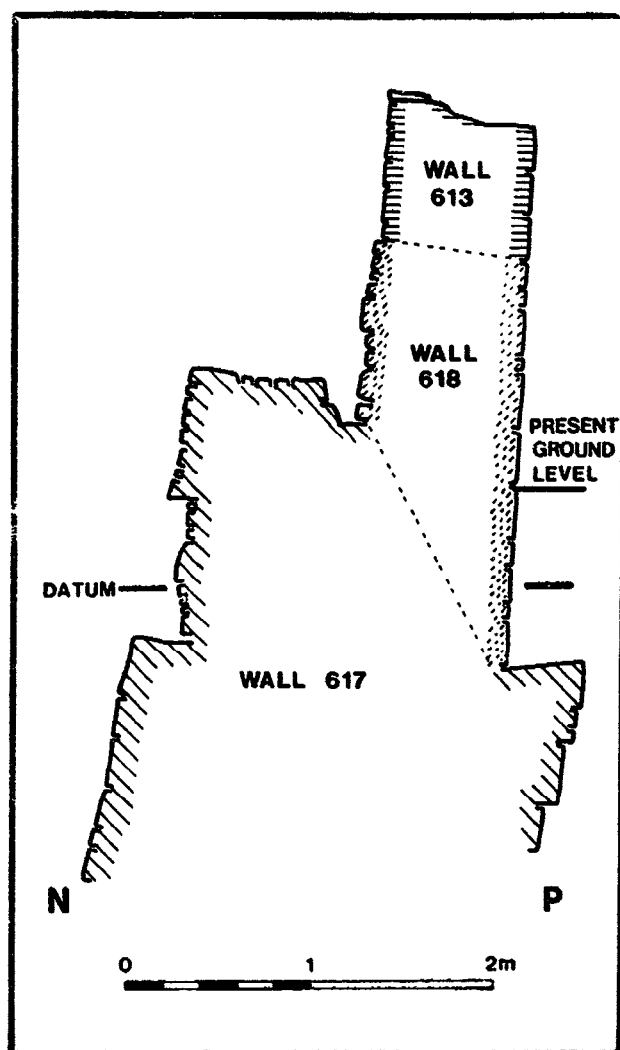


Fig 53 Cantilupe Street.
 Section N - P.
 Period 4: wall 617
 Period 5: rebuilds
 613 and 618.
 For position of section
 see figs 51:M1.G7 and
 52:M1.G8

Discussion

The variations in the width of the foundation trench and the irregularities of the coursing and stepping of the internal face of the wall probably indicate that two different building teams met at this point rather than that the wall was rebuilt. The latter case is considered unlikely because the gravel backfill in both the foundation trench and the area between the wall and the earlier defences showed no signs of the disturbances which would have been inevitable during any rebuilding.

At the same time as the wall was being built, a large external ditch must have been excavated, the resultant spoil being thrown over the wall. The lowest level of clayey gravel in the foundation trench, 621, would thus have come from close to the surface. The continuing inverse stratification of the material excavated from the ditch can be seen in the infilling between the medieval wall and the earlier defences, where fine gravel is sealed by larger pebbles which must have been dug from some considerable depth within the glacial deposits.

The intervening layers of chippings, 622, must have come from the shaping of individual blocks of stone so as to fit them into the wall.

Slot 556 of period 3b contained no gravel whatsoever so the timberwork which was originally included within it must have decayed or been removed, and the resultant holes filled in before the medieval wall was built.

■ PERIOD 5 - Medieval wall rebuilds and other later features
(Defences - stage 6)

The medieval wall, 617, was not strong enough to support the weight of gravel behind it and eventually collapsed at the northern end of the excavated area (Figs 37:M1.F1, 53:M1.G9, and 55). The collapsed wall was reused as a foundation platform for the construction of a thinner wall. Towards the south of the excavated area the medieval wall remained vertical, but was refaced on a slightly different line. This refacing ended in a straight break on the front of the wall at the boundary of the gardens of numbers 5 and 7 Cantilupe Street.

Description

After the collapse of the medieval wall, 617, an irregular trench, 614, was cut into the gravel layers behind the wall to enable rebuilding to take place (Fig 37:M1.F1). The new wall, 618, had a reasonably coursed face (Fig 51:M1.G7), but had only a rough face with poor coursing on the inside. It was 0.9m thick and continued across the trench from the north section, joining into the surviving part of the wall 617 near the south section. At this point rebuild 618 continued to the existing top of the original wall as a refacing only (Fig 38:M1.F1).

The northern part of this wall was eventually rebuilt a second time, as 613, when it was faced on both sides (Figs 51:M1.G7 and 52:M1.G8). Part of the masonry used in this second rebuild was taken from a large arch, but apart from slightly curved stones no other architectural fragments were found. A thin layer, 619, on top of the surviving part of wall 617, consisted of a soft dark earth fill with a quantity of small animal bones and fragments of 19th and 20th century cloth. It was eventually identified as a home for many generations of rats. *

The foundation trenches for the rebuilds were both filled with brown loamy soil containing pebbles and sandstone slabs which may have been roofing material, and there was some large rubble in the lower part of the upper fill, 612. Both foundation trenches were sealed by mixed soil levels 605 and 615.

Several small features were cut into the top of the period 1 rampart material and one large pit was cut into the gravel fill of period 4 (Figs 37:M1.F1 and 38:M1.F1). With the exception of pits 550 and 551, which were only seen in section, they were all shown to be of 18th century or later date. The two exceptions, which contained similar but darker material than the rampart, could have been of an earlier date.

Inventory (Vol 3)

Small finds

Coins	Halfpenny,	1775	Pit 561	No 12
	George III		(not on plan)	
	Token	1813-15	Unstratified	No 17

Ceramic material

Pottery (contexts 614, 618, and 619 only)

Fabric	B4	E6	G6	G8
Sherds	3	2	1	1

None illustrated

Discussion and dating

One result of the collapse of wall 617 at this point was presumably a pile of wall stones on the berm and down the inside face of the ditch which would have had to be removed before the wall could be rebuilt. The first rebuild, 618, may have been part of the repairs occasioned by the Civil War, but there was no conclusive dating material.

The curved stones which were used in 613 must have been taken from a large arch. It is possible that they were from St Owen's Gate nearby, after it was demolished in 1786. Alternatively they could have come from the arch which originally carried the city wall over the castle ditch at the eastern end of Cantilupe Street (main text p 86).

APPENDIX

THE EXTERNAL TRENCHES (Fig 34:M1.E10)

Several trenches were excavated east of the medieval wall to examine the berm and ditch. Two of the trenches, T1 and T4, both adjoining the medieval wall, were excavated by hand, but the others, because of the depth involved, were entirely dug by machine.

Description (Fig 56, below)

Trench M8 could not be fully excavated because of the likelihood of collapse, and only the north face was drawn. The face of the foundation of the medieval wall, 617, was found to be sloping precariously outwards, with the later rebuilds, 618 and 613, above. The lowest layer excavated, 640c, sloped downwards to the east, possibly reflecting one phase of the medieval ditch. Above this the relatively clean red and green clays, 640b, together with a layer of gravel, could have been redeposited spoil from a recutting of the ditch or could have been deliberately deposited to prevent further movement in wall 617. The upper layers, 640a, were probably associated with the two rebuilds, but were confused with modern debris.

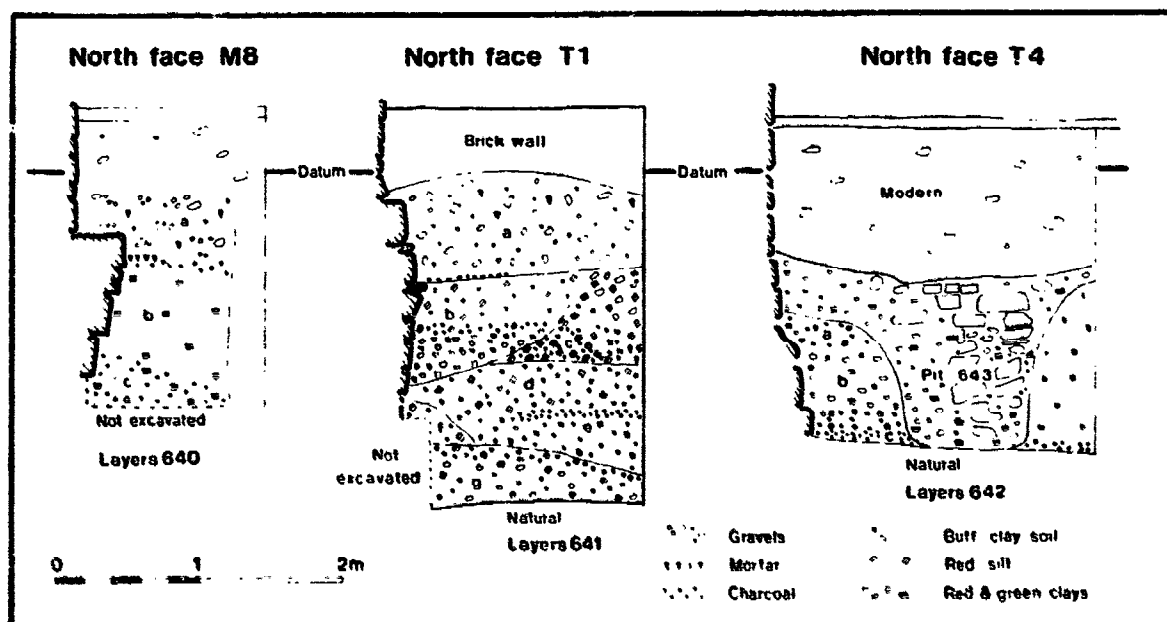


Fig 56 Cantilupe Street. Sections of the external trenches T1, T4 and M8. For position of trenches see Fig 34:M1.E10

Trench M2, in line with M8, had a modern brick fill and could not be excavated to a useful depth.

Trench M3 was excavated by machine to establish the position of the medieval ditch. The trench was unstable and sections collapsed before they could be drawn. In the centre of the trench the bottom of the medieval ditch was not reached at some 3m below datum but the sides of the ditch were rising at both ends of the trench. The lowest fill encountered was a heavy, black, waterlogged silt.

A large, late 18th or early 19th century well confused the junction of M3 and T1. The latter area was dug by hand to examine the face of the medieval wall and attempt to relate it to the levels on the berm. In this part of the trench undisturbed natural gravel was found at 2.3m below datum but the base of the medieval wall was apparently 0.8m above this level. The surviving part of the original wall, 617, sloped outwards to the top with the two rebuilds 618 and 613 above. The fill of the trench consisted of a confused series of layers which were not understood during the excavation. This took place before the inside of the medieval wall had been examined and the presence of the Saxon ditch and deep foundation trench was not appreciated. The depth of the trench was such that the bottom should be equivalent to the bottom of the Saxon ditch. However, this ditch was apparently completely cleaned out when the wall was built and as a result all the layers within T1 are of the same date as the medieval wall or later. The pottery finds indicate that layers 641a and b are not earlier than the 17th century.

The bottom of trench T4 was approximately 2m below datum with a slight slope downwards to the east. The medieval wall was of one build with no obvious repairs. There were no finds in the lowest level 642c, but 642a and b contained pottery of the 13th century. Fit 643 and the layers above were all post medieval.

Trenches M6 and M7 both contained modern disturbances to the full depth excavated.

Inventory

There were few well stratified finds from the external trenches and none are published.

Discussion

The three trenches, M8, T1, and T4 were presumably cut into the fill of the Saxon ditch but the pottery finds indicate that the ditch was cleaned out, more or less completely, when it was reused as a foundation trench for the medieval wall. The very slight slope at the bottom of T4 may indicate that the medieval wall at that point was built close to the inside edge of the Saxon ditch and if this is accepted then the presence of the ditch in T4 indicates that the Saxon defensive line must have curved to the south or possibly even to the south-west within the gardens of 7 and 9 Cantilupe Street. Had this defensive line continued on the alignment established in the excavation area of no 5, then the associated ditch would have been further to the east than T4.

There was no indication, in any of the trenches excavated, of the surface of the berm associated with the medieval wall. It may have been removed during one of the later rebuilds or completely lost as a result of modern constructional work.

Unprovenanced, described finds (Vol 3)Small finds

Coins	Token	c1813-15	No 18
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Ceramic material

Tile	Fig 61.6
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BERRINGTON STREET

INTRODUCTION

Berrington Street runs in a north-south direction, parallel to the western defences and some 45m east of their line. It joins St Nicholas Street/King Street at the south, to West Street, which runs just within the northern Saxon defensive line. Berrington Street is thus one of the regular grid patterns of streets which comprise central Hereford. It is shown as Plow Lane on Taylor's map of 1757 (Fig 5) and was first mentioned as Berrington Street in 1806 (Tonkin 1966). The area between Berrington Street and Victoria Street was the site of previous excavations including the western rampart (Shoesmith 1967) some 50m to the north, Victoria Street (M1.B6-E7) some 100m to the north and Friars' Gate (M3.F4-F8) immediately to the south.

Demolition of 6 St Nicholas Street, St Vincent's Convent, and St Francis Xavier's School took place in 1972. The latter two buildings fronted onto Berrington Street, and 6 St Nicholas Street was the corner house. Numbers 6, 8, and 10 St Nicholas Street all had gardens which curved at 90° to the front of the houses and thus had their western boundaries against the city wall. The grounds of the convent and school also continued to the west as far as the city wall. The total site was thus some 80m in length and about 45m in width. Down the western side ran the rampart defences and the city wall (Fig 13:M1.A11).

Previous excavations (Victoria Street, Friars' Gate, and the western rampart), both north and south of the cleared area, had exposed the defensive sequence, and the importance of the site was such that the Department of the Environment imposed an interim preservation order. Negotiations followed with the developers, and revised plans for the office block ensured that the rampart and city wall were preserved for the full length of the site, and that facilities for archaeological excavation of the remaining areas would be made available during the construction programme.

The whole of the area was not immediately accessible and the various parts had to be dealt with as they became available. As a result four separate excavations had to be mounted. The first three sites were along the western part of the area and the fourth was a street frontage excavation adjoining Berrington Street, at the north-eastern corner of the development area. In the following report the sites are numbered from 1 to 4 in the order of excavation. The south-eastern corner of the development area was not excavated as it was known to have contained large and deep cellars.

The excavations were directed by R Shoesmith; the first three on behalf of the Department of the Environment and the fourth for the City of Hereford Archaeology Committee. They were all funded by the Department of the Environment.

The finds from the excavations are deposited in Hereford City Museum (Accession numbers: site 1 - 1979/303; site 2 - 1979/304; site 3 - 1979/305; site 4 - 1979/306).

ACKNOWLEDGEMENTS

The developers of the site, Marlsford Properties (Hereford) Ltd, were co-operative throughout the excavations and thanks are due to them and to their architect W E Harries Baker who helped solve many problems. The building contractors, DBR Construction Ltd, suffered with great patience the problems caused by the archaeological work. The Hereford City Council loaned tools and fencing as required.

Site 1 was excavated by a team transferred from Chepstow, in appalling weather conditions during November and December 1972. Tony Johnson was assistant site supervisor. Without everyone's willing help the work would not have been completed within the 28 day deadline.

Much of the daily running of sites 2 and 3, excavated late in 1973, was organised by Robert Wilson who was also responsible for the planning. The labour force consisted mainly of schoolchildren from Redhill (now Haywood) School, Hereford, with a backing of experienced staff.

Site 4 was excavated between March and May 1976 during a break in the writing of this report. Martin Boulton undertook most of the planning and organisation of labour as his introduction to the work of the City of Hereford Archaeology Committee. The labour force included students from Hereford Cathedral School and from Haywood School.

METHOD

The southern part of the area was the first to become available for excavation (Fig 57:M2.A7). Half of it was sealed by a sunken concrete floor and this was removed by machine to establish the general depth of stratification. This area, site 1 north, was disturbed by rubble and cement-filled foundations and all occupation levels had been lost. The time available was limited so the adjoining area, site 1 south, was cleared by machine until a 12th century level was reached. This ensured that the earliest occupation levels could be examined over as large an area as possible. A trench was cut into the rampart in an attempt to relate the occupation levels to the defensive features. The site is now covered by an office block which extends to the east as far as Berrington Street.

The area of site 2 was planned as a car park for the office complex and it was hoped that the finished level would be such that the earlier occupation levels could be preserved. In the event this was not feasible and the area was excavated. Site 2 was the largest of the four sites and, although pitting from the 12th to 16th centuries was extensive, sufficient remained of the earlier levels to establish partial building plans.

The building overlying site 3 was demolished shortly after the excavation of site 2 was completed and a third excavation was mounted at short notice. The considerable overburden was removed by machine but a baulk was kept between the northern and southern parts of the site throughout the excavation, to provide an opportunity to relate the occupation levels to the defensive sequence. The partial plan of an early building was established in the northern site although disturbance from modern foundations was severe.

It was not until late in 1975 that proposals for a second phase of the office complex were presented to the planning authority. The new building was designed to cover both site 3 and the remaining unexcavated part of the area. An excavation along the frontage of Berrington Street was agreed and the site was cleared by machine down to 17th century levels. The site was disturbed by modern drains and foundations and cut by 12th to 16th century pits, but early occupation levels were eventually established. The second phase of the office complex has not been built and the area of site 4 is at present a surface car park.

RECORDING SYSTEMS

Inevitably, over the years, the systems used in archaeological recording in Hereford have changed. To obtain some degree of standardisation and continuity throughout this report of the four Berrington Street sites, adjustments have been made to the original numbering of site 1, thus avoiding duplication of context numbers.

SITE 1

Site Code	He72II
Areas	North, south and rampart extension trench
Contexts	Layers and features in a continuous sequence from 1-100
Finds	Indexed under context numbers

SITE 2

Site Code	He73II
Layers	101-113, 201-202
Features	101-132, 167, 201-370, 401-407
Finds	Indexed under layer or feature number
Site Datum	57.42m OD

SITE 3

Site Code	He73III
Areas	North, south, and rampart extension trench
Layers	107, 108, and 113 as in He73II otherwise 501-518
Features	501-574
Finds	Indexed under layer or feature number
Site Datum	58.23m OD

SITE 4

Site Code He76A
 Contexts 650-928
 Finds Indexed under context number
 Small Finds 122-183
 Site Datum 56.44m OD

SUMMARY OF CHRONOLOGY AND PERIODS

PERIOD	DESCRIPTION	PROBABLE DATE RANGE
0	Prehistoric and Roman finds	
1	Street plan and buildings A-G	Late 8th to 9th century
2a	Buildings H-K, site 4	10th century
2b	Buildings L and M, site 4	Early to mid 11th century
2c	Buildings N to R, site 4	Late 11th to early 12th century
3	Pits	Late 12th to early 13th century
4	Pits and building S	Late 13th century
5	Pits - some industrial use	14th to 15th century
6	Pits and building T	16th to 18th century
7	Modern disturbances	19th century and later

An attempt was made to relate the occupation periods to the various stages of the defences by cutting trenches from sites 1 and 3 into the material which comprised the ramparts. No firm stratigraphical relationship could be established and as a result the defensive features are considered in a separate section inserted in the text between periods 2 and 3.

THE EXCAVATION

■ PERIOD 0 - Prehistoric and Roman finds

A clean, light brown, clayey soil covered the natural gravel over most parts of the area. This layer, 61 in site 1, and 113 in sites 2 and 3, only existed in patches on site 4 (Fig 68:M2.B11). Several postholes were only seen in the underlying gravel, when layer 61/113 had been removed, but they are considered to be part of the structures associated with the period 1 buildings rather than

unidentified earlier features. Apart from a few small flecks of charcoal, layer 61/113 was without trace of occupation.

Throughout the four sites, only nine pieces of flint were found. Three came from site 2 and the remainder from site 4. Five were in the periods 1 and 2 occupation levels and the rest were distributed at random in later features. There was a slight scatter of Roman pot, tile, and other objects, particularly in the earlier levels. The various pre-Roman and Roman finds are noted in the inventory for the period in which they were found, and are discussed at greater length in the main text (p 88).

■ PERIOD 1 - Timber buildings

The earliest evidence of occupation on all four Berrington Street sites consisted of postholes and associated features cut into, or laid on top of, the original soil cover of the area (Fig 57:M2.A7). There were several problems involved in excavating these building remains. In most cases there were no traces of the original postpit, although the size of many of the posts was such that a pit would have been necessary. Postpits are shown on the detailed plans where they were established, and may be assumed for many of the other larger posts. There were no distinct occupation surfaces, and traces of hearths were established only on site 4. Patches of burnt daub, which sealed postholes and other features on sites 2 and 3, were assumed to represent the destruction levels of the buildings. A dark loamy soil with occasional pebbles, animal bone, and charcoal flecks eventually covered the whole area of sites 1-3 but further buildings were constructed on site 4.

Description

The northern part of site 1 had had all levels removed down to the natural gravel when the floor of the now demolished building was inserted. Of period 1 only gully 73, filled with a smooth grey soil, remained (Fig 57:M2.A7).

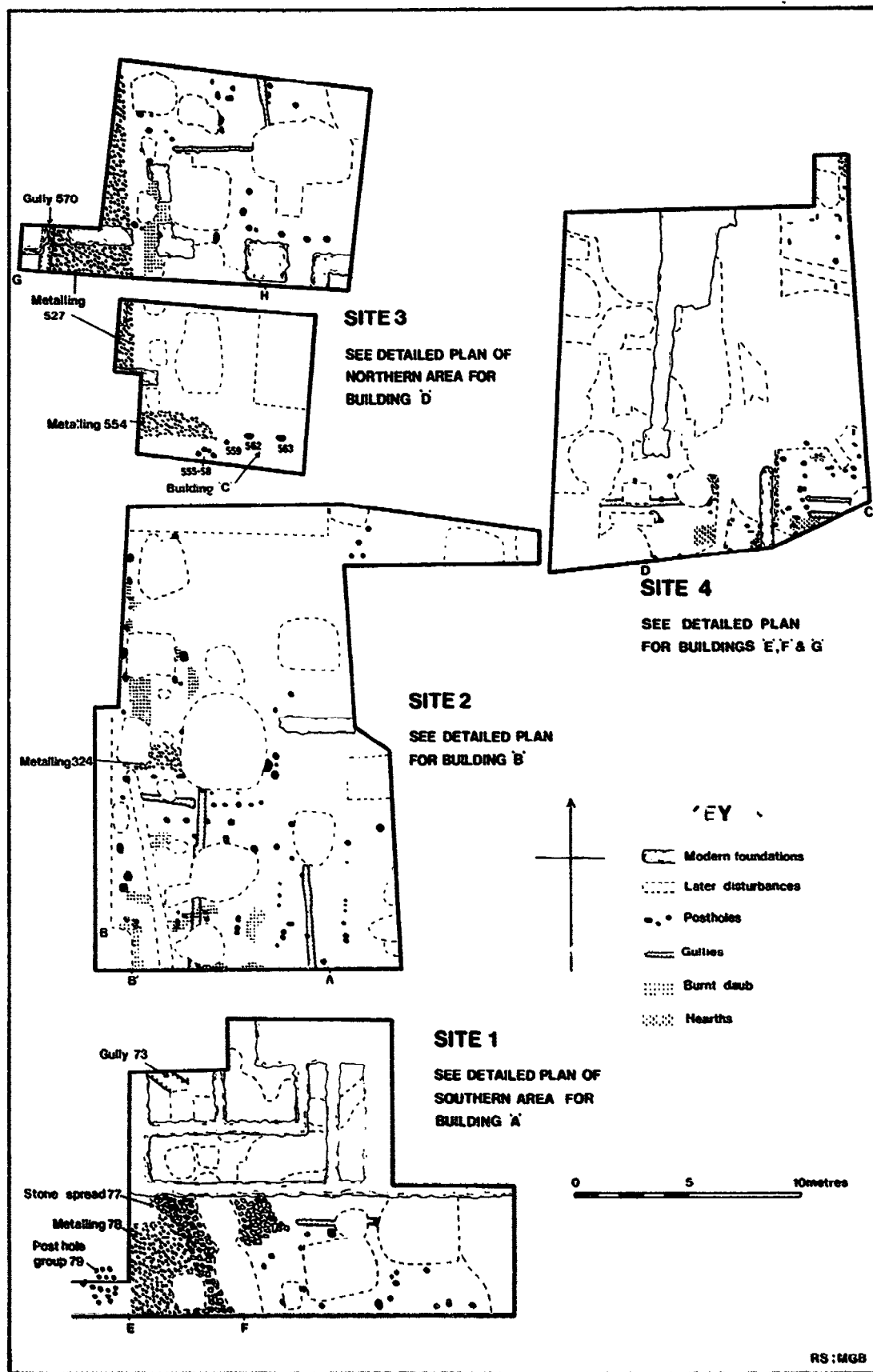


Fig 57 Berrington Street. Period 1. Plan of features on all sites

By comparison the southern part of site 1 was well preserved, although later pits had removed some of the earlier levels (Fig 58:M2.A9). This site was eventually extended to the west by means of a trench cut into the later defensive works. The period 0 layer, 61, a clean, light brown, slightly clayey soil with only occasional flecks of charcoal, was present over most of the site and it was on, or cut into this layer that the features of period 1 were found. In the western part of the site layer 61 was covered by a poor quality metalling, 78, consisting of a thin spread of small pebbles which were well pressed into the underlying layer (Fig 76:M2.D5). The metalling, which otherwise showed only slight signs of wear, ran roughly in a north-south direction and was about 4m wide. A spread of larger stones, 77, covered each side of this roadway and reduced its effective width to about 2.5m. The stones, which continued some distance to the east of the road on top of layer 61, showed no signs of having been used and consisted of a mixture of unshaped, quarried stone and split, large, river pebbles. They gave the impression of having been tipped rather than deliberately placed (Fig 60).

To the east of the metalled roadway were a series of postholes, some stakeholes and a gully, all cutting into layer 61. This group of features is now considered to represent the remains of building A (Fig 59:M2.A9). Insufficient survived to establish the plan and dimensions of this building, but it was evidently a structure with the long axis running east-west and the western face within 2 to 3m of the roadway. The postholes were of varying sizes and depths and were all filled with a darker, more clayey soil than the surrounding layer 61.

Sealing all the period 1 features was layer 60, a thick layer of dark loamy soil. This was interpreted as being the result of cultivation of the area and contained some animal bone and flecks of charcoal. Layer 60 material appeared identical to the fills of the period 1 features cut into layer 61. Because of this the features could have continued into this overlying layer but would not have been seen until layer 60 had been removed.

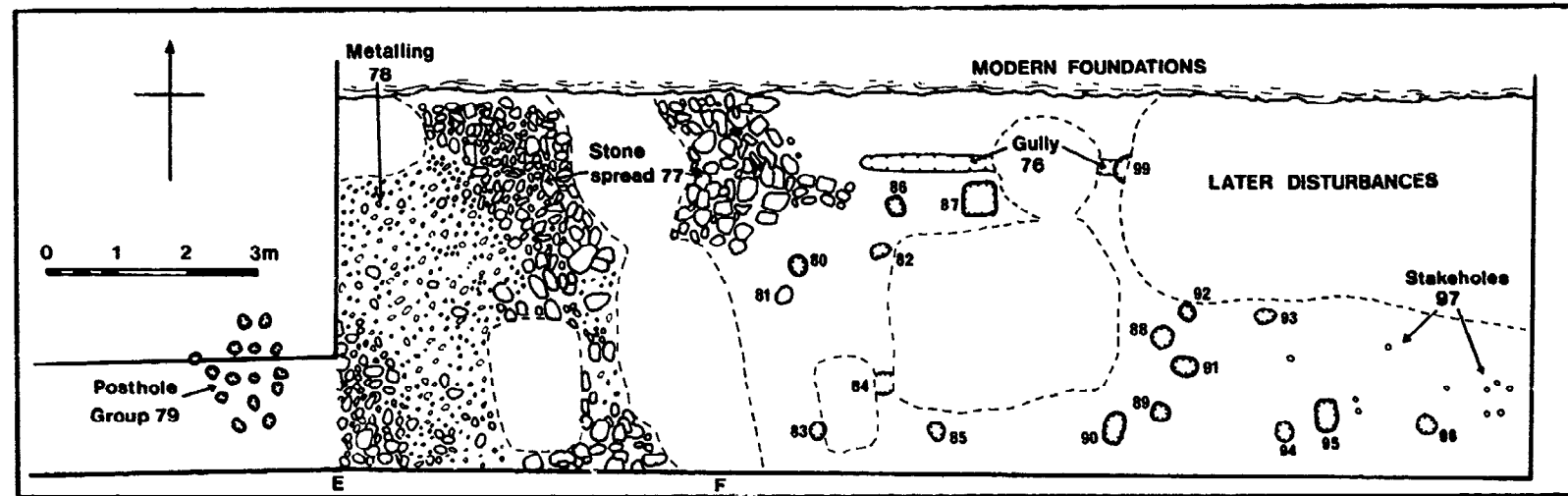


Fig 58 Berrington Street. Site 1 south. Plan of period 1 features

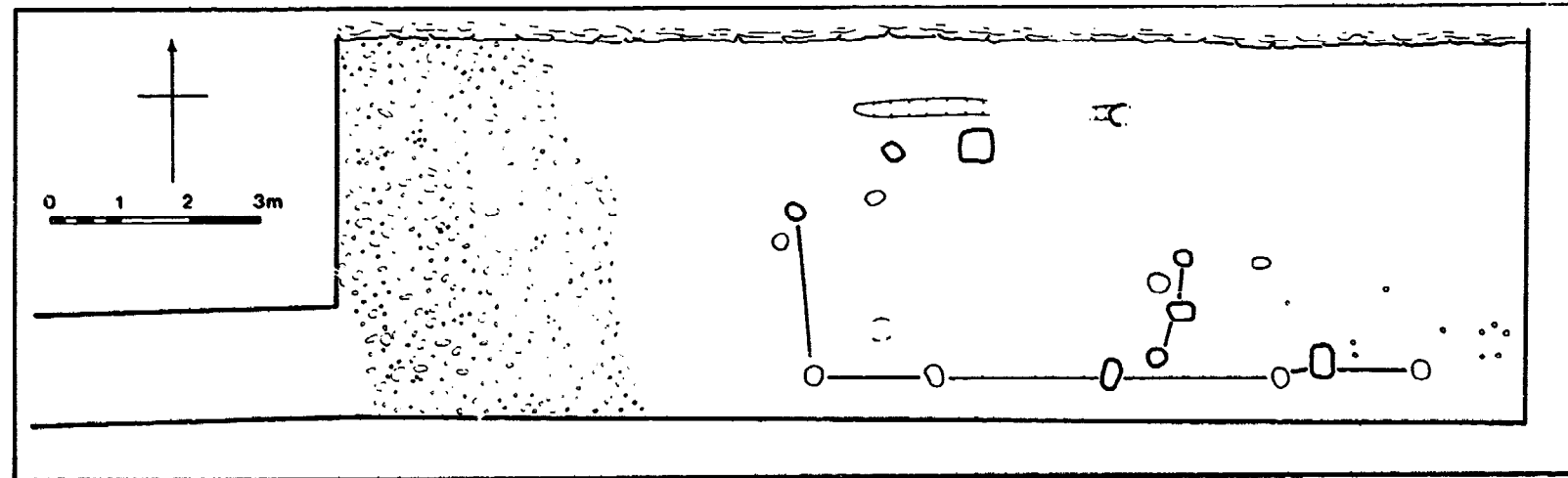


Fig 59 Berrington Street. Site 1 south. Interpretation of period 1 features - building A

BUILDING A: DETAILS OF POSTHOLES (Figs 58:M2.A9 and 59:M2.A9)

Details of the individual fills were not recorded;
all were described as containing dark, clayey soil.

POSTHOLE	DIMENSIONS (cm)		DEPTH (cm)
	E - W	N - S	(in layer 60)
79 (group)	all <u>≤</u> 14 in diameter		37 - 70
80	24	29	26
81	24	26	5
82	35	23	15
83	18	20	12
84	-	28	15
85	18	22	13
86	30	34	26
87	48	50	30
88	38	34	10
89	30	29	25
90	38	50	33
91	45	32	24
92	27	24	20
93	32	24	16
94	30	30	18
95	28	46	25
96	34	30	18
97 (stakeholes)	-	-	<u>≤</u> 30
99	40	36	20

The only other feature on site 1 which could belong to period 1 is the posthole group 79 west of the metalling (Fig 58:M2.A9). Unfortunately the circumstances of their discovery were such that their stratified position is uncertain. They were found in the western extension to the site, which had been dug in an attempt to establish the relationship between the various defensive features and the occupation levels of the main part of site 1. The trench was abandoned as being too dangerous for hand excavation after the surface of the stage 2 turf rampart had been exposed. The northern side of the extension trench collapsed after heavy rain, and at

the end of the excavation the spoil was cleared by machine so that the southern face could be drawn. As the machine removed this debris, it also removed the stage 3 metalling, 100, on the tail of the rampart and eventually exposed as voids, the group of postholes, 79. They were all between 0.4 and 0.7m deep and averaged about 0.1m in diameter. Several of them were slightly angled with the posts leaning outwards to the north and east.

Sites 2 and 3, which were excavated in succession, had a similar stratification to the southern part of site 1. Thus the period 1 features were cut into, or laid on top of layer 113, the equivalent to layer 61 on site 1 (Figs 61:M2.A13 and 62:M2.B2). The features were sealed by 108, a dark loamy soil identical to layer 60 of site 1. The period 1 features were damaged by medieval and later disturbances which caused a degree of uncertainty in the interpretation.

The northern continuation of the site 1 roadway, 78, was found in a good state of preservation on site 3, but was absent along the western side of site 2 where it was either cut away during the construction of the stage 3 defensive roadway, 272, or was completely to the west of the area excavated. On site 2, a short, east-west metalled path, 324, about 1m wide, of similar appearance to metalling 78, probably led eastward from the north-south roadway (Fig 61:M2.A13).

The southern part of site 2 contained numerous postholes and gullies cut into layer 113 (Fig 64), which are interpreted as the remains of building complex B (Figs 61:M2.A13 and 63:M2.B4). The eastern end of the building was not within the area excavated but the remains were sufficient to indicate that the building was about 4.7m wide and more than 12m long. The arrangement of the postholes suggested a central passage 2.8m wide and a possible lean-to or extension 2.2m wide along part of the northern side. Two gullies, 202 and 230, crossed the building from north to south, and a third, 322, was present in the northern extension. The southern wall of the building was constructed on a row of double postholes but the other walls included posts of various shapes and sizes. The presence of several otherwise unexplained postholes may possibly be accounted for by a partial reconstruction of the building.

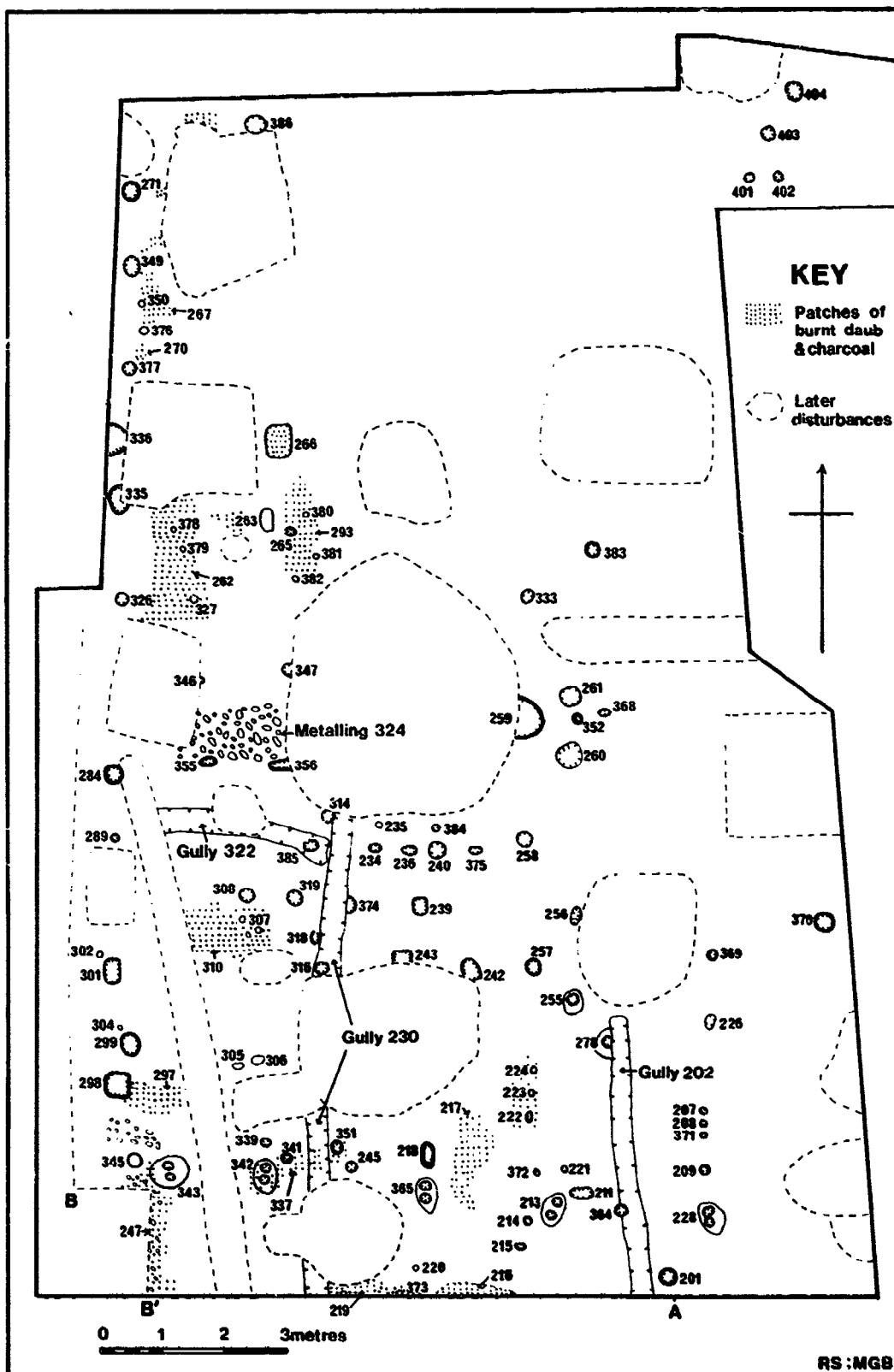


Fig 61 Berrington Street. Site 2. Plan of period 1 features

BUILDING B: DETAILS OF POSTHOLES (Figs 61:M2.A13 and 63:M2.B4)

POST-HOLE	DIMENSIONS(cm)		DEPTH(cm)	FILL (key M2.B1)	TYPE
	E - W	N - S (in layer 113)			
201	28	27	30	B	Post
207	8	8	18	B	Stakehole
208	8	8	18	B	Stakehole
209	18	14	18	B	Post
211	38	22	23	B, C, O	Post
213	35	55	-	B, C, O	Postpit
	(13, 15	15, 15	36, 44	B, C	Two posts in pit)
214	17	15	15	B, C	Post
215	24	10	19	B, C	Post
218	20	38	40	B, A	Post & postpit
220	13	13	8	B, C	Post
221	8	9	24	B	Stakehole
222	8	8	20	B, C, O	Stakehole
223	14	14	8	B, C	Stakehole
224	8	8	-	B, C	Stakehole
226	16	20	-	B, C	Post
228	-	-	-	B, C	Postpit
	(16, 14	16, 14	26	B, C	Two posts in pit)
234	24	13	25	B, C, O	Post
235	8	8	8	B, C, O	Stakehole
236	36	26	13	B, C, O	Post
239	26	32	26	B, C, O	Post
240	36	29	17	B, C, O	Post
242	36	-	17	B, C, O	Post
243	36	-	20	B, C, O	Post & packing stone
245	24	22	16	B, C, O	Post
255	30	32	18	B	Post & postpit
256	22	40	8	B, G	Post
257	27	26	31	B, C	Post
258	27	29	17	B, C, G	Post
259	70	90	34	L	Postpit with stones
260	41	43	8	B, G, R	Post
261	42	36	11	B, C, G, O	Post
263	24	36	7	?	Post
265	16	10	57	B, C	Post
266	50	76	25	B, C, O	Small pit?
271	20	22	55	Loose soil	Post
278	44	66	31	B, C, O	Post & postpit
284	30	35	60	B	Post & packing stone
289	14	13	-	B	Post
298	36	38	35	B, C	Post
299	34	36	30	B, C	Post & packing stones
301	26	38	-	B, C	Post & packing stones
302	13	13	-	B, C	Stakehole
304	6	6	6	B	Stakehole
305	22	10	-	B, C, O	Post
306	28	20	10	B, C, O	Post
307	≤10	≤10	≤20	B, C, O	3 stakeholes
308	26	30	33	B, C, O	Post
314	32	36	20	B, C	Post
316	18	≤30	38	B, C	Post & packing stones
318	18	30	22	B, C	Post
319	30	32	31	B, C	Post & packing stone
326	16	16	25	B, C, O	Stakehole
327	8	8	7	B, C, O	Stakehole
333	28	22	12	?	Post

POST-HOLE	DIMENSIONS(cm)		DEPTH(cm) (in layer 113)	FILL (key M2.B1)	TYPE
	E - W	N - S			
335	18	22	53 (post)	B, C, O	Post and postpit
336	20	20	53 (post)	A, B, C, O	Post and postpit
339	13	11	23	B, C, O	Small post
341	13	10	33	B, C	Small post
342	c40	c50	-	B, C	Postpit
	(14, 15	13, 16	33, 36	B, C	2 posts in pit)
343	60	44	-	B, C, O	Postpit
	(16, 12	16, 12	36, 30	B, C	2 posts in pit)
345	19	20	10	B, C	Post & packing stones
346	-	4	25	B, C, O	Stakehole
347	-	17	35	B, C, O	Post & packing stones
349	28	36	28	B, C, O	Post & packing stones
350	8	6	-	B, C, O	Stakehole
351	25	21	31	B, C	Post
352	17	13	48	B	Stakehole
355	27	17	30	B	Post & packing stones
356	>40	26	36	B, P	Post & packing stones
364	26	30	45	?	Post
365	30	62	-	?	Postpit
	(20, 26	20, 20	22, 33	?	2 posts in pit)
368	28	11	12	?	Post
369	13	14	34	B, C	Small post
370	26	29	25	B, C	Post
371	8	8	14	B	Stakehole
372	10	10	16	B	Stakehole
373	10	-	15	?	Stakehole
374	-	22	19	?	Post
375	27	8	8	B, C, O	Small post
376	14	16	18	?	Small post
377	18	18	33	?	Small post
378	5	5	7	?	Stakehole
379	5	5	6	?	Stakehole
380	6	6	11	?	Stakehole
381	6	6	6	?	Stakehole
382	8	8	14	?	Stakehole
383	19	17	43	?	Post
384	20	17	13	?	Post
385	25	13	32	B, C, O	Post
386	34	42	10	?	Post
401	24	25	-	B, G	Post
402	16	18	-	B, G	Post
403	34	33	-	B, C, O	Post
404	-	42	-	B	Post

Key to fill:

A - ash
 B - brown soil
 C - charcoal flecks
 G - gravel or small pebbles

L - clayey loam
 O - burnt orange clay flecks
 P - plaster
 R - red clay

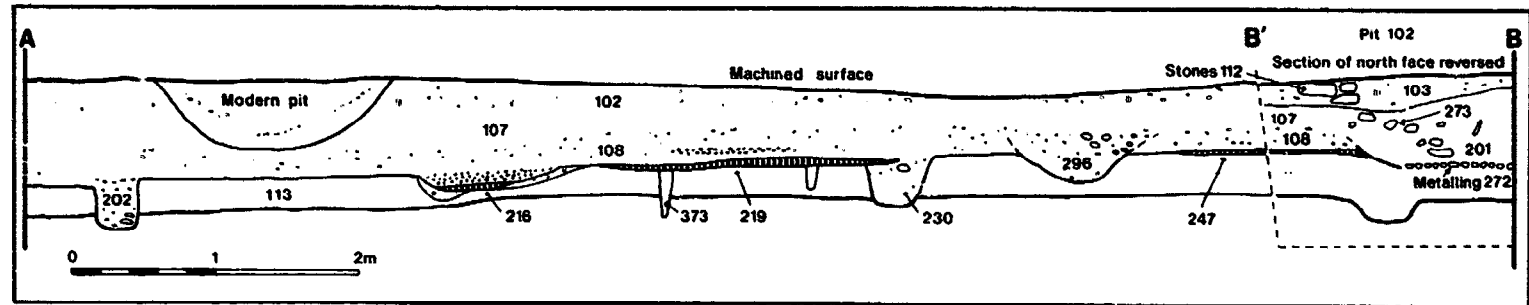


Fig 62 Berrington Street. Site 2. South section A - B

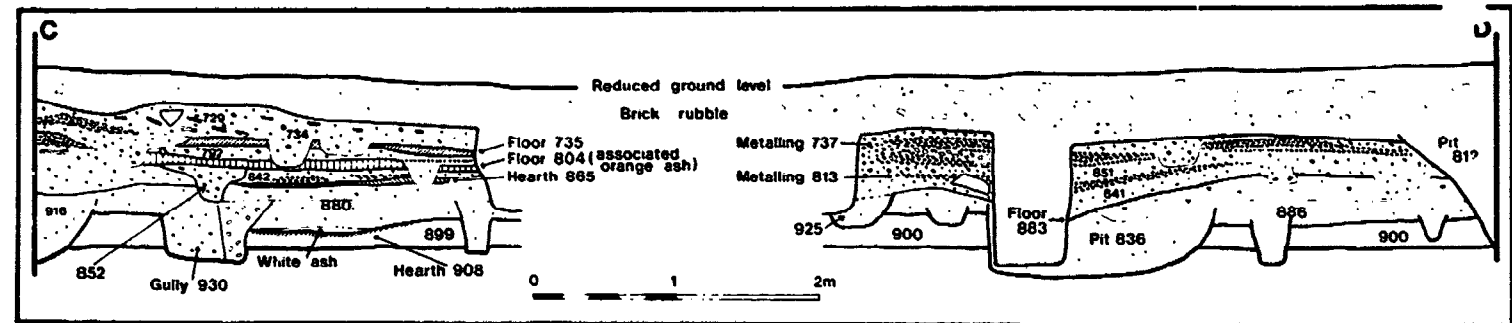


Fig 69 Berrington Street. Site 4. South section C - D. See fig 68:M2.B11 for the position of the section

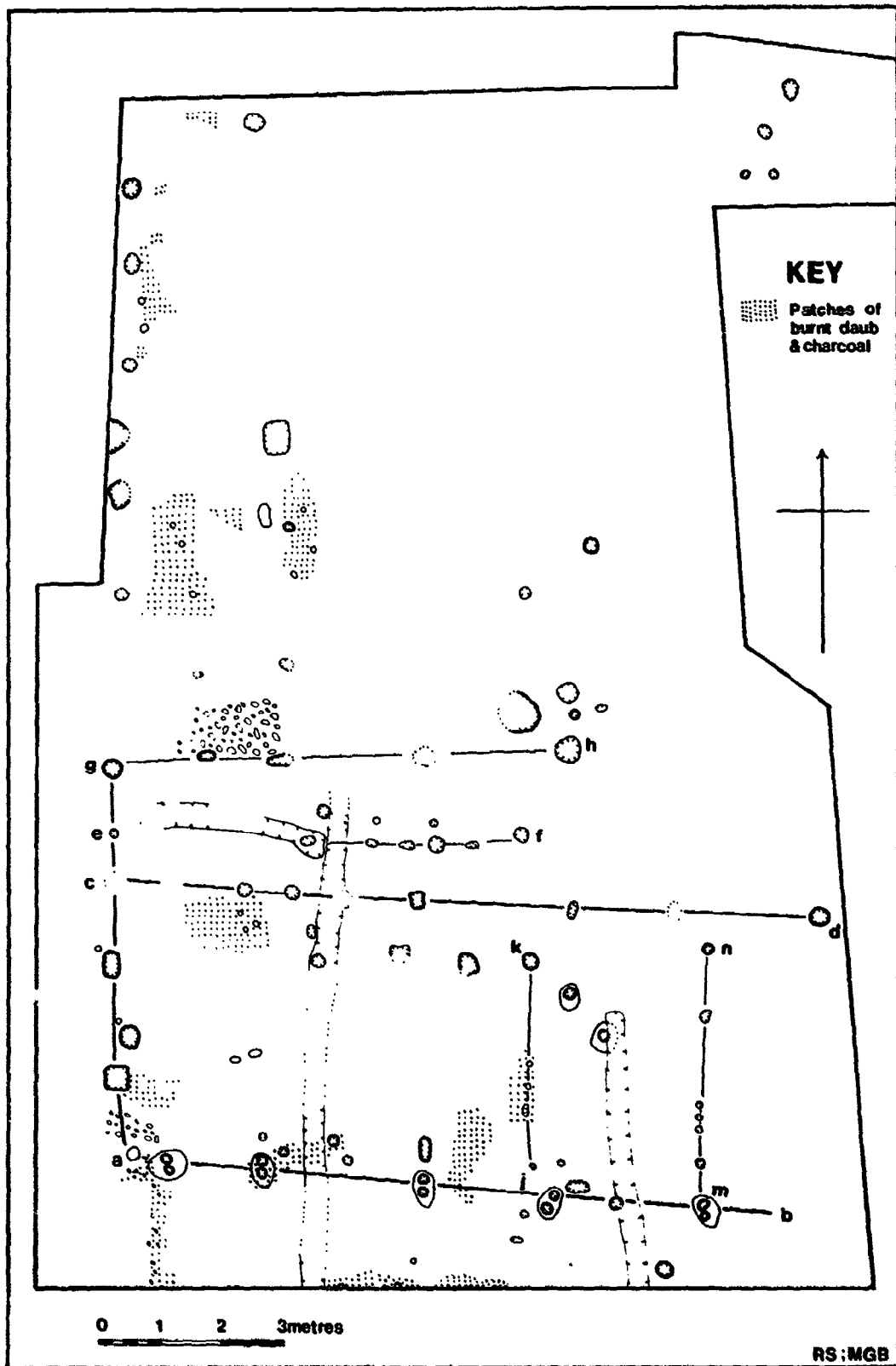


Fig 63 Berrington Street. Site 2. Interpretation of period 1 features - building B. See fig 61:M2.A13 for feature numbers

The part of site 2 north of the metalled path, 324 contained only a few postholes, with no apparent arrangement except for one alignment which continued the line of the western side of building B to the north.

On site 2 several of the postholes and part of a gully were sealed by irregular patches of burnt yellow clay and charcoal which were considered to be building destruction debris including daub. The same material occurred in the upper fill of a few of the postholes and also tended to fill what had apparently been slight depressions in the surface of layer 113. The patches, collectively feature 111, were generally quite thin and are separately numbered.

BUILDING B: INDIVIDUAL PARTS OF LAYER 111 (Fig 61:M2.A13)

PART	DESCRIPTION
<hr/>	
216	Shallow depression with baked orange clay and gravel lenses, possibly originally lined with clay
217	Shallow spread of baked brown clay, burnt sandstone, and some charcoal
219	Shallow depression sealing 2 stakeholes and part of gully 230 and containing charcoal, brown soil, baked orange clay, and white plaster
247	Spread of bright orange baked clay and charcoal, sealing part of post 343
262	Spread of charcoal and burnt orange clay
263	Small spread of burnt orange clay
267	Spread of charcoal and burnt orange clay
270	Oval feature containing burnt orange clay and charcoal
293	Shallow depression containing charcoal and burnt orange clay sealing 4 small stakeholes
297	Irregular feature containing brown soil, charcoal, and burnt orange clay
310	Irregular feature containing brown soil, charcoal, and burnt orange clay
337	Spread of baked orange clay and charcoal sealing several postholes and part of gully 230

The patches were usually separated from the underlying layer 113 by a thin, dark soil layer. In places the charcoal content of the patches followed straight lines which were interpreted as the charred edges of otherwise completely decomposed timbers. The yellow clay was considered to be burnt daub. Two of the double posts on line a-b of building B were sealed by patches 337 and 247, and gully 230 was also partly sealed by 219 and 337. Other smaller postholes were similarly sealed. Feature 111, the postholes and gullies were all covered by layer 108, a loamy dark brown soil.

Site 3 was excavated in two parts, the baulk being kept throughout the excavation (Fig 57:M2.A7). A metalled road, 527, which was slightly cut into layer 113, occupied the western side of the site (Fig 67). It was examined in detail in a trench which extended the northern area to the west. Within the extension the earliest feature was gully 570, 1.2m wide and 0.4m deep, which was sealed under the western side of metalling 527 (Fig 76:M2.D5). The gully was cut into layer 113 and ran north-south across the extension trench. It contained a fill of clean gravel and clay and was partly sealed at the west by layer 515, a clean reddish clay with some pebbles. Metalling 527, 3.8m wide, was also partly cut into layer 113 and was apparently cut into layer 515. The gully and layer 515 and part of the metalling were sealed by the tail of the stage 2 turf and clay rampart. A thin layer of clean, brown soil, 517, which contained a few bones, separated the eastern part of roadway 527 from the defensive stage 3 roadway, 528.

Traces of roadway 527 were also found in the extreme west of the southern part of site 3 (Fig 57:M2.A7). Apparently leading to it was a short east-west path, 554, which lay on top of layer 113. It was of identical construction to 527 and was of similar construction and dimensions to path 324 on site 2. Just south of this path, and apparently associated with it, was a slightly curved line of postholes which is considered to represent a small building, C, of which only the northern edge was excavated.

BUILDING C: DETAILS OF POSTHOLES (Fig 57:M2.A7)

POSTHOLE	DIMENSIONS (cm)		DEPTH (cm) (in layer 113)	FILL	TYPE
	E - W	N - S			
555	23	24	16	B	Post
556	24	22	14	B	Post
557	18	23	8	B	Post
558	23	21	25	B	Post
559	15	11	35	B	Small post
562	35	28	30	B, C, O	Post
563	40	25	33	B, C, O	Postpit with packing stones

Key to fill:

B - brown soil

C - charcoal flecks

O - burnt orange clay flecks

Building D, in the northern part of site 3, was represented by both postholes and gullies (Fig 65:M2.B8). The remains were fragmentary and only the western part of the building was within the area excavated (Fig 66:M2.B8). It was about 6m in width and in excess of 9m long and the position of the postholes suggested the presence of an internal partition. Two shallow gullies, 531 and 535, both containing a light brown, charcoal flecked soil and some stones, were found within the confines of the building. An area of burnt daub and charcoal, 523, which covered the south-western corner of the building was cut by the trench for the defensive stage 3 roadway, 528 (Fig 73:M2.C8). The area of daub together with the postholes and gullies were all covered by the dark brown loamy soil layer, 108, in an identical manner to the features on site 2.

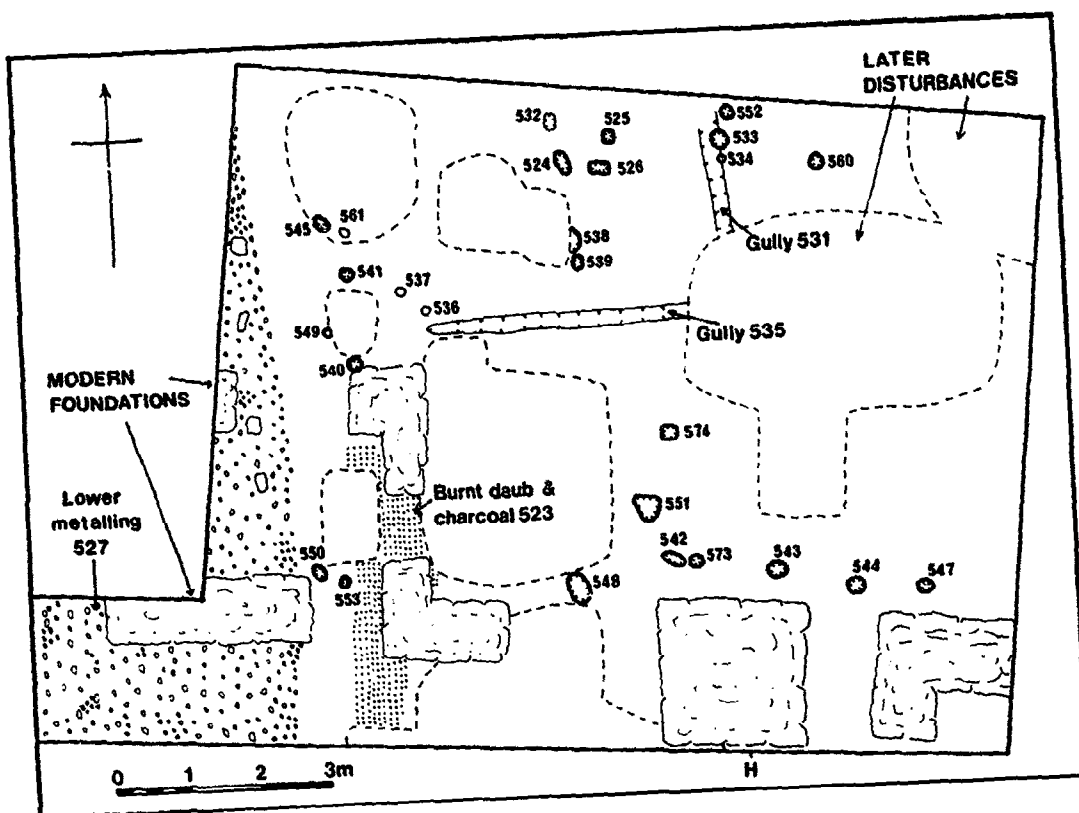


Fig 65 Berrington Street. Site 3 north. Plan of period 1 features

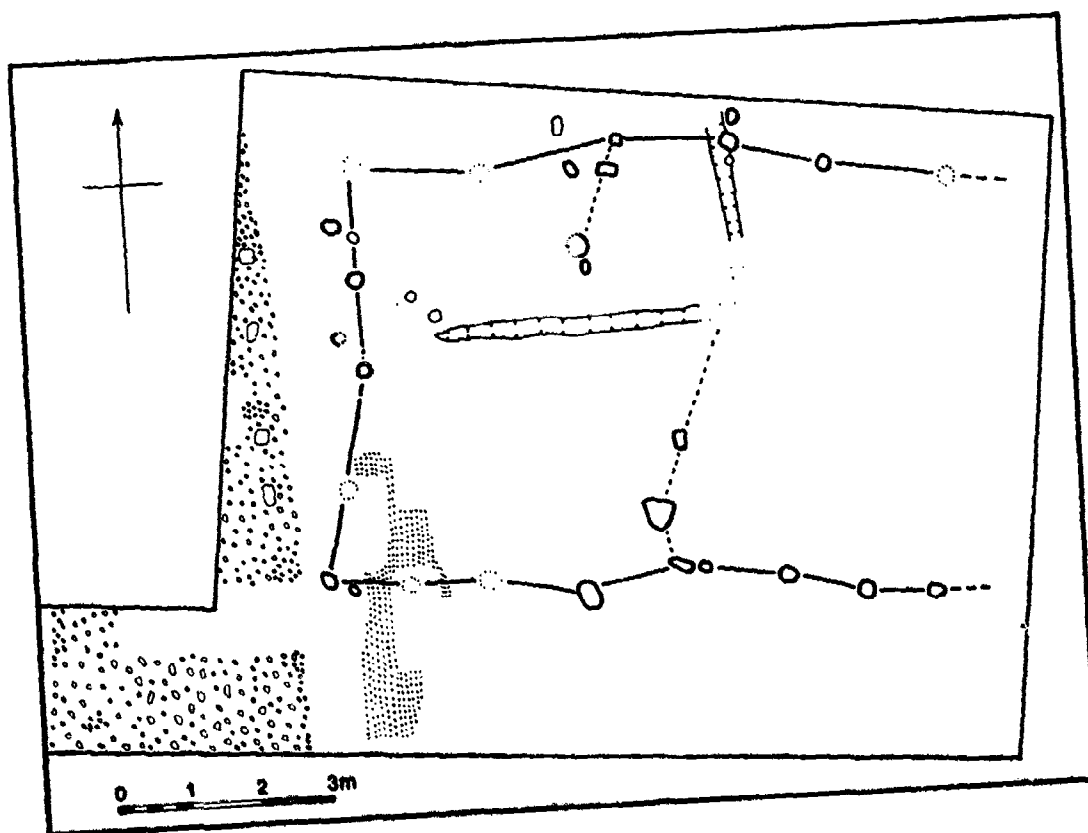


Fig 66 Berrington Street. Site 3 north. Interpretation of period 1 features - building D

BUILDING D: DETAILS OF POSTHOLES (Figs 65:M2.B8 and 66:M2.B8)

POSTHOLE	DIMENSIONS (cm)		DEPTH (cm) (in layer 113)	FILL	TYPE
	E - W	N - S			
524	28	56	27	B, P	Post
525	16	16	22	B, P	Post
526	18	16	30	B, P	Post
532	18	40	21	B, C, O	Post
533	30	25	26	B, C, O	Post
534	12	13	13	B	Stakehole
536	24	21	9	B	Post
537	12	10	7	B	Stakehole
538	-	45	35	B	Post
539	18	19	44	B	Posthole with packing stone
540	18	20	24	B, P	Post
541	15	14	25	B	Small post
542	32	20	36	B, O	Post
543	26	24	31	B, O	Post
544	22	24	26	B, O	Post
545	20	22	25	B	Post
547	26	23	22	B	Post
548	32	-	40	B, C, O	Post
549	9	10	-	?	Stakehole
550	22	18	43	B, C	Post
551	62	48	49	B, C, O	Irregular postpit
552	15	18	48	B	Small post
553	11	12	51	B	Stakehole
560	20	20	16	B	Posthole with packing stones
561	12	12	10	B	Stakehole
573	24	20	34	?	Post
574	21	15	9	?	Post

Key to fill

B - brown soil

C - charcoal flecks

O - burnt orange clay flecks

P - plaster

Only fragmentary remains of period 1 survived on site 4 (Fig 70) but the stratification was more definite and parts of buildings with traces of floors were present. There was no direct stratigraphical link between site 4 and sites 1 to 3 so it has been assumed that the earliest occupation on site 4 is of the same period as that on sites 1 to 3. Three separate areas were identified, each of which contained parts of buildings (Fig 68:M2.B11). Other small areas, to the north and west of the site, which were free of later disturbance, showed no signs of buildings but may have been cultivated.

The total undisturbed area in the north-eastern corner of the site, which contained traces of building E, was only 6m by 2.5m. The features were on or cut into a brown loamy soil, 892. In the extreme north-eastern corner of the area, traces of metalling 934 may have been the edge of a north-south road which fronted buildings E and F on the east. South of this, a line of postholes, running north-south, was joined by a second line running east-west. These two lines were sufficient to establish the alignment of the building but not the size or shape. The shape of the vertical timbers was established in several cases where they appeared either as voids or as holes very loosely filled with earth. In these cases the postpit contained slots for one, or sometimes two, vertical planks each about 0.2m long and 0.05m wide. Where there were two slots they were at right angles to each other. In three cases a small stakehole was found in juxtaposition with a slot.

The area at the south-east corner of the site, which also fronted on to Berrington Street, was only 4m by 4m and was too small to establish any plan for building F. However, two lines of postholes were identified which, together with two gullies and a metalled path, indicated that the building was probably aligned roughly north-south, although apparently at a slight angle to building E to the north and building G to the west.

The features of building F, which were cut into or laid on 899, a brown, loamy soil, probably incorporated several phases which could not be differentiated in the small area surviving (Fig 68:M2.B11). To the south of the area was hearth 908 seated in a slight depression

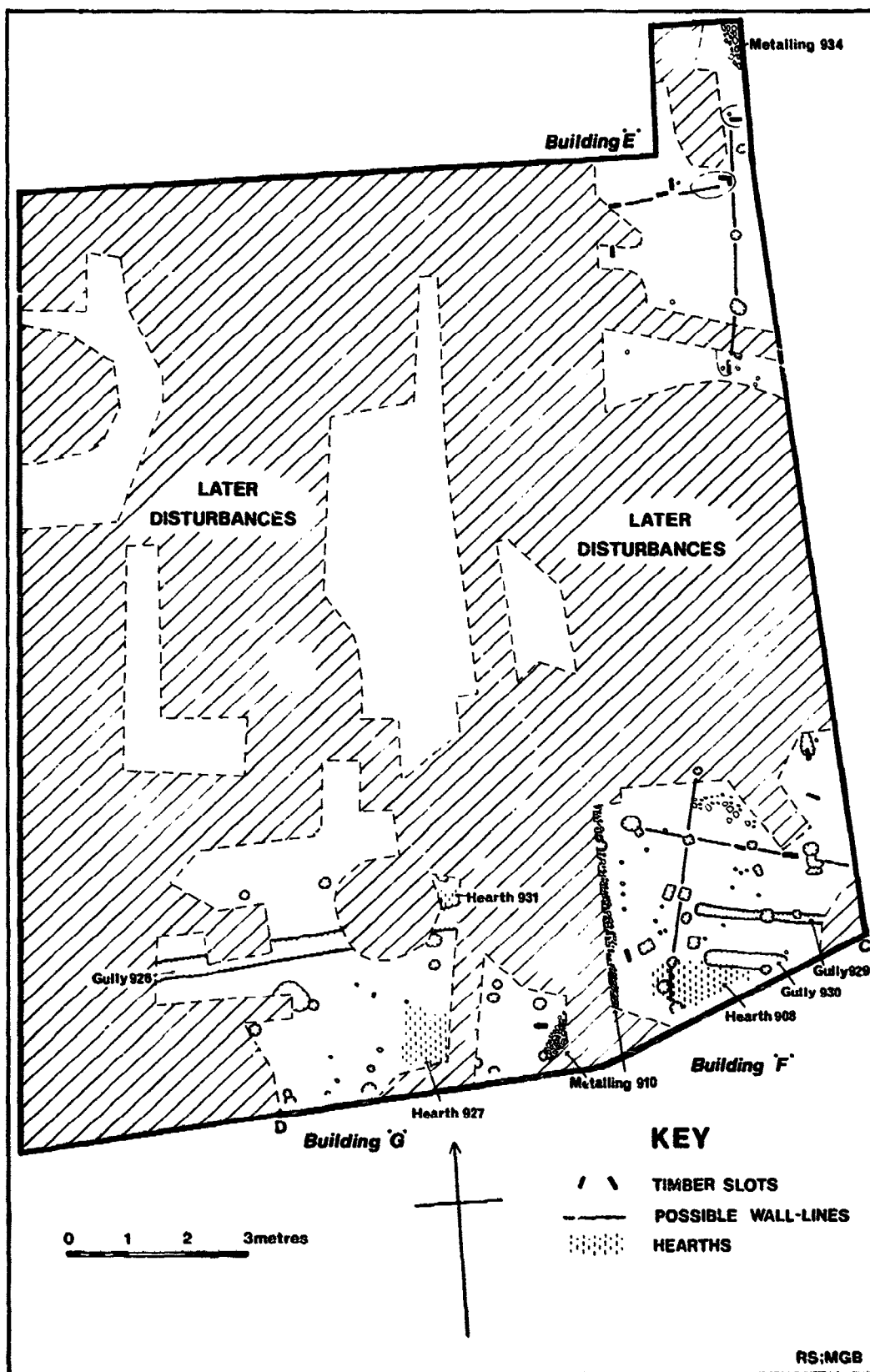


Fig 68 Berrington Street. Site 4. Plan of period 1 features - buildings E, F & G

(Fig 69:M2.B2). The surrounding soil was burnt to a bright orange, and the hearth was filled with white ash. Hearth 908 was cut by some members of a north-south posthole line and also by an east-west gully, 930. In the north of the area a posthole line running roughly east-west contained some timber slot holes similar to those associated with building E. Gully 929, which ran parallel to this posthole line, was very shallow and was cut by two postholes. Gully 930, also parallel to the posthole line, contained a very soft fill and may have been a sleeper-beam trench. There was some poor quality metalling in the northern part of the area and path 910 of small pebbles ran north-south down the western side. Small postholes and stakeholes, which were found over the whole area, tended to have north-south alignments. Building F was covered by a brown, loamy soil layer, 880.

To the west of building F. and separated from it by the metalled path 910, which was apparently about 1m wide, was building G comprising two hearths, 927 and 931, several postholes, and an east-west gully 926, all cut into or laid on the brown soil layer 900 (Fig 68:M2.B11). Evidence of more than one phase was present; hearth 931, comprising an area of well burnt subsoil, being cut by gully 926. The gully, which contained slight indications of post positions, was assumed to be a post or sleeper-beam trench. Hearth 927, which was in a shallow depression, contained some pink clay and was covered with burnt orange clay and ash. It may have been associated with gully 926 as part of an east-west orientated building. Several postholes, including one of the slot type, were found in the area. The features of building G were sealed by a mixed layer, 886, containing some burnt daub.

The other parts of site 4, where contemporary levels were present, contained a brown soil layer, 872, similar to the soil levels which were sealed and cut by the period 1 features.

In all the areas which survived on site 4 there was no cultivated soil layer overlying the period 1 features as there had been on sites 1-3.

Dating

A sample of charcoal from F523 (site 3), which was part of the areas of charcoal and daub spread, layer 111, was too small for radiocarbon dating and is now held at Harwell awaiting completion of the small samples counter (HAR 955).

A second sample was taken from a combination of F219 and F270 (site 2), both part of layer 111. The uncalibrated date obtained was $ad\ 960 \pm 70$ (HAR 1375) which, when corrected for the latest value of the half life becomes AD 930 ± 70 . The sample consisted of small twigs and branches and it is suggested that they were used as part of the initial construction of the buildings, possibly as part of a wattle framework on which the daub was placed. If this is accepted then there is a 68% probability of construction during the latter half of the 9th or the 10th centuries. However, there are reasons for considering this date range as being too young (main text p 71) and it should therefore only be used to provide a terminus post quem with at least an 84% probability of construction before the end of the 10th century.

A coin of Alfred was found in layer 60 (site 1). This layer may be associated either with the occupation of period 1 or with the cultivation of the ground which superseded the buildings and disturbed the occupation levels. Finds from this layer could possibly belong to a date earlier than period 1, although this is not considered likely. The coin cannot be used to provide a date either when building A was in use or when it was destroyed. The position in layer 60 is important, however, because this is the latest context on the site where pottery was absent. If it is accepted that the coin was lost in layer 60 by the end of the first quarter of the 10th century it can be suggested that pottery was not in common use in Hereford before that date. However, the coin could have been deposited at any date after its manufacture and thus it only gives a date on or after which layer 60 was deposited.

The dating evidence from period 1 is insufficient to give any firm indication of the dates of construction or demolition of the buildings. The dating of period 2 is more certain, as is the dating of the various stages of the defensive ramparts on the west of the site. If this evidence is used, and it is also assumed that the period 1 buildings have a similar date to the Victoria Street

period 2 building, then an occupation period during the late 8th and 9th centuries can be postulated.

Inventory (Vol 3)

Small finds

Metal	Iron strapping	Site 2:	F262	Fig 1.3
	Iron hooked strip	Site 2:	F259	Fig 1.12
	Iron key	Site 1:	L60	Fig 3.1
	Copper finger ring	Site 4:	900	Fig 4.2
	Copper bar	Site 4:	880	Fig 4.4
Stone	Spindle whorl	Site 3:	L108	Fig 11.1
	Flint (unillustrated)	Site 2:	L111	No 21
Worked bone	Knife handle	Site 2:	L108	Fig 24.1
	Pointed tool	Site 2:	L108	Fig 24.9
	End from comb	Site 3:	L108	Fig 24.5
	Part of comb or handle	Site 4:	930	Fig 24.7
Coin	Penny of Alfred	Site 1:	L60	No 4

Ceramic material

Pottery	One sherd of Samian pottery	Site 1:	L60	Fig 52.2
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The following sherds were originally assigned to period 1 contexts but are now thought to have belonged to unseen period 2 features.

	Fabric	D1	G1	
	Sherds	2	5	
	Illustrated pottery			Fig 56.1, 17, & 19
Loom weights	Unillustrated fragments	Site 2:	L108	No 3
			L111	No 4
			F289	No 5
			F349	No 6

Environmental material

Charcoal	Site 2:	F202, 230 & 266
Grain	Site 3:	L111
Inorganic samples	Site 2:	L111
	Site 3:	Posthole 540
	Site 4:	Hearth 908

Discussion

The traces of occupation on sites 1 to 3 during period 1 are of a consistent nature and comprise the earliest evidence for the settled use of this part of Hereford. The period 1 occupation of site 4 is of a more complex nature with at least two phases of building. There was no evidence to indicate which of these two phases should be associated with the predominantly single phase occupation on sites 1 to 3, so it may be either that the earliest buildings of site 4 predate those further to the west, or that the later phase on site 4 was after the western buildings had been demolished.

One feature on site 3 was earlier than the roadway and may thus have been earlier than the period 1 buildings. The small gully, 570, found partly sealed underneath the roadway, may represent the original marking-out of the property boundary which was replaced by the roadway at a later date. It may correspond with a similar gully (trench 'A') found in a similar position in the western rampart excavation of 1967 (Shoesmith 1967, 54).

Sites 1 to 3 contained the posthole remains of three or four buildings (Fig 71:M2.C2), each orientated with their longer axes running east-west. They fronted onto a north-south metalled roadway about 4m wide, which ran up the western edge of the site. Each building was the first construction on that part of the site and they were all sealed by an identical deposit. The two short east-west metalled paths, which ran close to the building lines, help to confirm that the buildings and the roadway were both of one period.

The metalled roadway was only seen on sites 1 and 3. On site 2 it may have been west of the area excavated or could have been cut away during the construction of the defensive stage 3 trackway on the rear of the rampart. Although the general course was north-south, the roadway began to turn slightly to the east in site 1 at a point where it was partly covered with stones.

Building A was built further to the east than buildings B and D, probably to accommodate the curve in the north-south road. Building B was about 13m from building A and approximately the same distance from

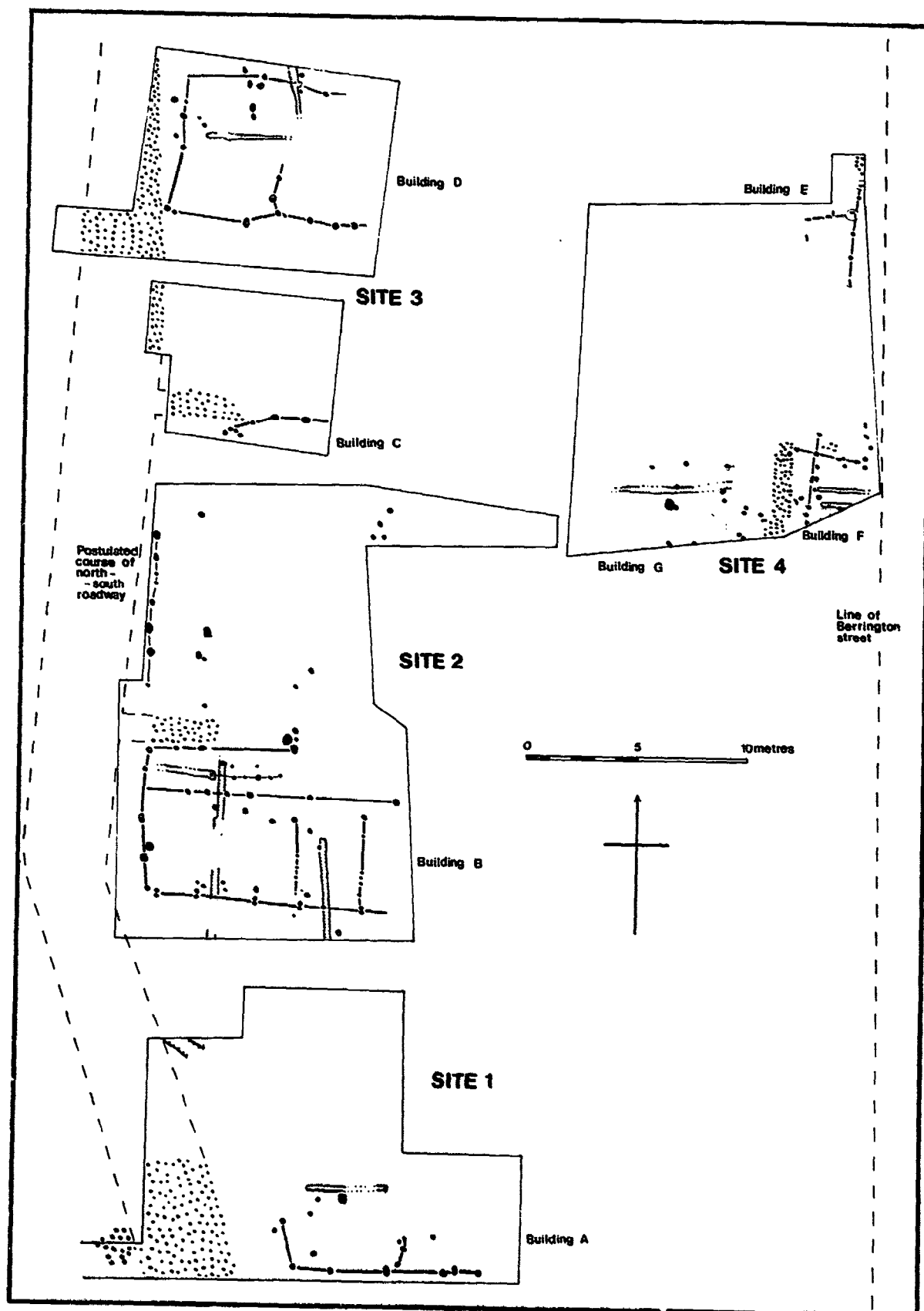


Fig 71 Berrington Street. Period 1. Interpretation of features on all four sites

building C. Buildings C and D were closer together, being only about 9.5m apart. There was no indication of boundaries between these plots, and only between buildings B and C was there any sign of a fence between the properties and the roadway. No complete building plan was obtained, but the width of the buildings varied from about 4.5m to 6m and building B was at least 12m long. Building B, and possibly buildings A and C, had indications of a north-south cross passage. It is possible that some of the posts of building B were replaced or strengthened, but there were no indications of any similar renewal work on buildings A, C, and D. There were no surviving floor levels or hearths in any of the buildings but traces of gullies, possibly associated with drainage, were recognized.

Site 4 contained the remains of at least three buildings which, as far as could be ascertained, were all aligned east-west, but no dimensions could be established. They were of posthole construction, although planks, as well as posts, were used for verticals. The remains, although fragmentary (Fig 71 :M2.C2), were better preserved than those on sites 1-3, due both to the lack of cultivation and to the replacement of the buildings during period 2. The buildings may be related to two separate plots of ground fronting onto the line of Berrington Street, the northern one containing building E and the southern one containing buildings F and G. Some of the plank post positions were found as voids, or very loosely filled with earth, especially those associated with buildings E and F. This suggests either that the buildings were deliberately demolished whilst the timbers were in sufficiently good condition to be retrieved for reuse and that the voids so created were immediately covered, or that the parts of the timbers within the ground were abandoned and gradually disintegrated after later floor levels were laid.

The building techniques used during period 1 are considered in detail in the published report (main text p 96).

The roadways and buildings have every appearance of being part of a deliberate lay-out of this area of the city, with the buildings arranged in plots of similar size on the east of the western roadway and on the west of the postulated roadway following the line of Berrington Street.

However, two points need further consideration. Why did the western roadway start to curve to the east, and was this in any way associated with posthole group 79? A glance at a modern plan of this area (Fig 13:M1.A14) shows that the houses in St Nicholas Street have properties which curve westwards towards the city wall. The house on the corner of St Nicholas Street and Berrington Street had a similar narrow east-west garden, with a northern boundary which bisected site 1. One can only suggest that these oddly shaped properties reflect late infilling and that King Street originally ran due westwards, rather than bending slightly to the south as it does at present. The change of direction of the period 1 north-south roadway, if continued as a curve, would have brought the roadway into line with this suggested realignment of King Street. If this theory is accepted then the posthole group could possibly have been associated with the stage 1 gravel rampart seen at both the Victoria Street site (M1. B6 - E7) and Friars' Gate site (M3. F4 - F8). The postholes could represent a watch tower on the northern side of the road leading through the original western gate of the town.

There was little sign of repair or renewal to the buildings on sites 1 to 3 and it is unlikely that post-buildings of this nature would have lasted for any great length of time. The burnt patches, which sealed some features of buildings B and D, comprised varying quantities of plaster together with charcoal of oak and ash, both from large trees and from twigs and branches (see Vol 3), and some burnt grain which included wheat and barley. These remains are consistent with the buildings having been burnt and the remains left on the surface. Buildings A and C may well have suffered the same fate.

On sites 1 to 3, as the remains of the burnt buildings gradually disintegrated or were removed for reuse the ground became cultivated. This may have removed most of the occupation levels, apart from the lower parts of the postholes and the patches of burnt daub and charcoal which survived in slight hollows in the ground. The metalled road may have continued in use for some time but eventually became sealed under the tail of the stage 2 rampart and the stage 3 trackway. On site 4, there was no damage to the period 1 remains by cultivation and as a result traces of both floors and hearths survived.

On sites 1 to 3, the dark, loamy, cultivated soil layer, 60/108, representing the close of period 1, was covered in period 2 by layer 58/107 which was similar in colour, texture, and composition. No definite junction could be established (Fig 62:M2.B2) between these two layers, but it became rapidly apparent during the excavation that pottery was present in the upper layer and absent in the lower. This lack of a distinct junction between the layers meant that separation of finds into the two contexts was difficult and the inclusion of some of the finds in period 1 must be considered suspect.

■ PERIOD 2: Timber buildings

Evidence of occupation during period 2 was mainly restricted to site 4 with only slight indications on sites 1 to 3 of the considerable activity a few metres to the east. The defensive features of sites 1-3 are discussed at the end of the section on period 2. This is the earliest period on the site where pottery could be used to relate the different parts of the whole excavation and to indicate a date range for the occupation. The period includes three phases of building activity on site 4, described as periods 2a, 2b, and 2c, and demonstrates that a gradually increasing area was covered with buildings.

■ PERIOD 2a (Figs 72:M2.C6 and 73:M2.C8)

Description

The cultivated level, layer 60/108, which brought to a close the period 1 occupation on sites 1 to 3, merged into layer 58/107 which was identical in appearance but contained fragments of pottery. The thin black soil level L201 which sealed the defensive stage 3 metall- ing, 272, and its associated stones, 273 and 274, also contained sherds of pottery (Fig 62:M2.B2). Parallel to the metalling and about 1.5m to the east was gully 296, 1m wide and 0.4m deep, cut into layer 108. It had an ill-defined upper limit within layer 107.

Other slight traces of occupation on sites 1 to 3 during period 2a consisted of a few isolated pits and postholes cut into layer 60/108, and an irregular burnt area, 75, on site 1. The late period 2 features are catalogued as period 2c.

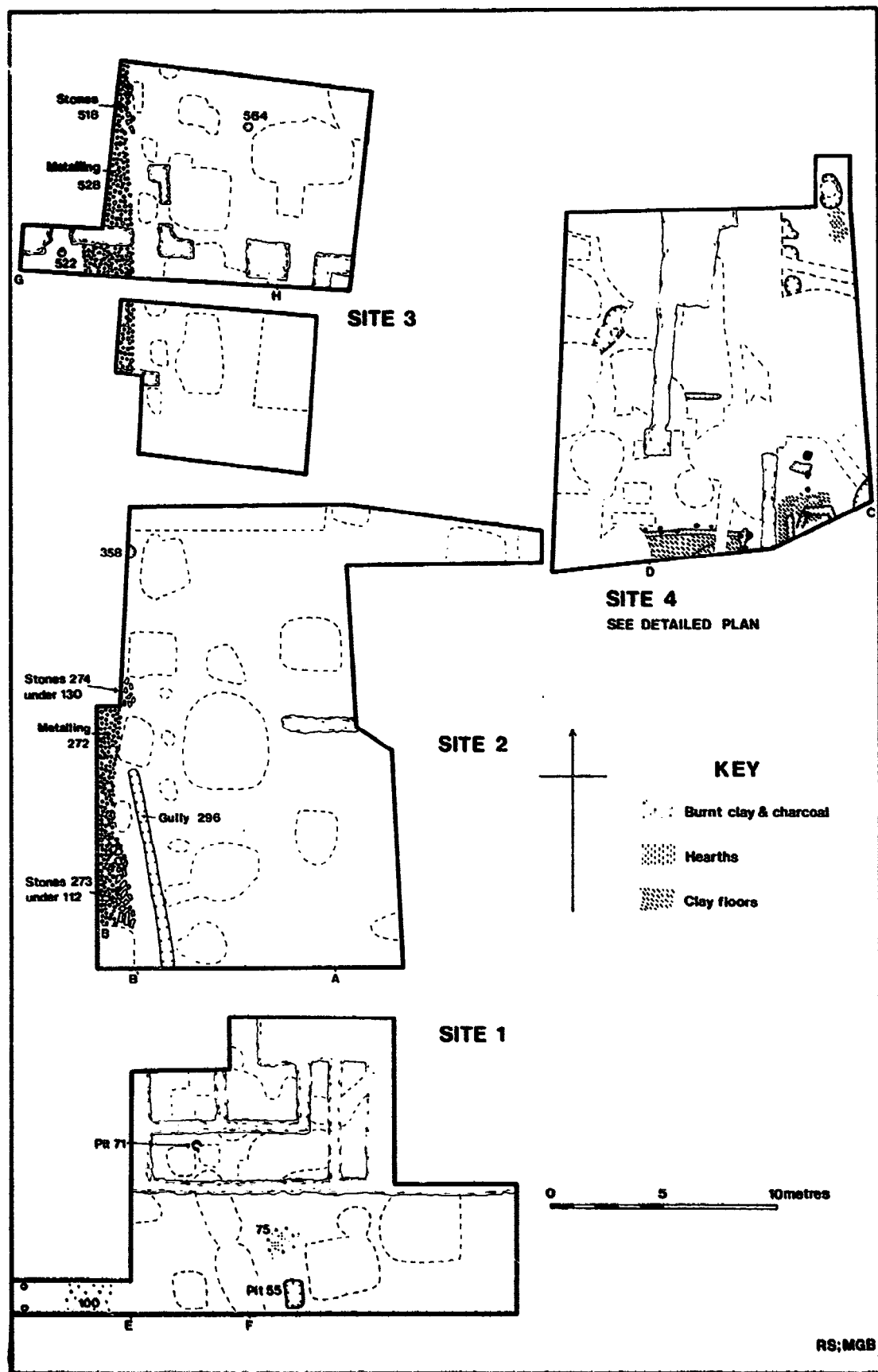


Fig 72 Berrington Street. Period 2. Features on all sites

The main evidence for occupation on site 4 during period 2a came from those areas which were also occupied during period 1 (Fig 73:M2.C8). The other small areas which were preserved to the north and west of the site were covered in a dark loamy soil, 844. This layer was interpreted as the result of cultivation over a long period and material from it is listed in the inventory for period 2b. Within layer 844, two features, pit 896 and gully 903, both with uncertain upper limits, were considered to belong to period 2a. They were both filled with a loamy soil slightly darker than the surrounding layer. The other surviving areas of site 4 contained the remains of buildings classified as H, J, and K.

Building H, in the north-eastern corner of the site, consisted of the fragmentary remains of an earth floor, 888, and a small hearth, 893, made of baked clay which was laid on a base of river pebbles and brown soil, 892. The floor and hearth were covered with an ash spread, 889, and to the west of the floor was a spread of small pebble metalling, 933. There were no postholes associated with the floor but at a later phase within period 2a four shallow pits, 757, 803, 832, and 837, all filled with homogeneous brown earth, were cut through the occupation levels.

Building J in the south-eastern corner of the site contained a small clay-lined hearth, 865, with the clay baked to a white colour in the centre (Fig 69 :M2.B2). It was surrounded by a clay floor, 861, which overlay the loamy soil layer 880 of period 1. Above part of the hearth were patches of clay mixed with ash which contained most of the period 2a pottery associated with this part of the site. At a later date several features were cut through these levels, including two shallow gullies, 852 and 863, pit 853, and some smaller postholes. The postholes did not appear to be associated with the floor and hearth and were apparently of a slightly later date. They were sealed by the period 2b make-up and floor. Pit 916, in the extreme south-eastern corner was stratigraphically earlier than hearth 865 (Fig 69:M2.B2) but was later than the period 1 occupation.

The southern area of site 4 contained the patchy clay floor 883 of building K which sealed the period 1 layer of earth and daub, 886, and a shallow pit, 836. The floor was surrounded by a rather indistinct gully, 925, which contained traces of several post positions. Other shallow postholes were found to the north of the gully.

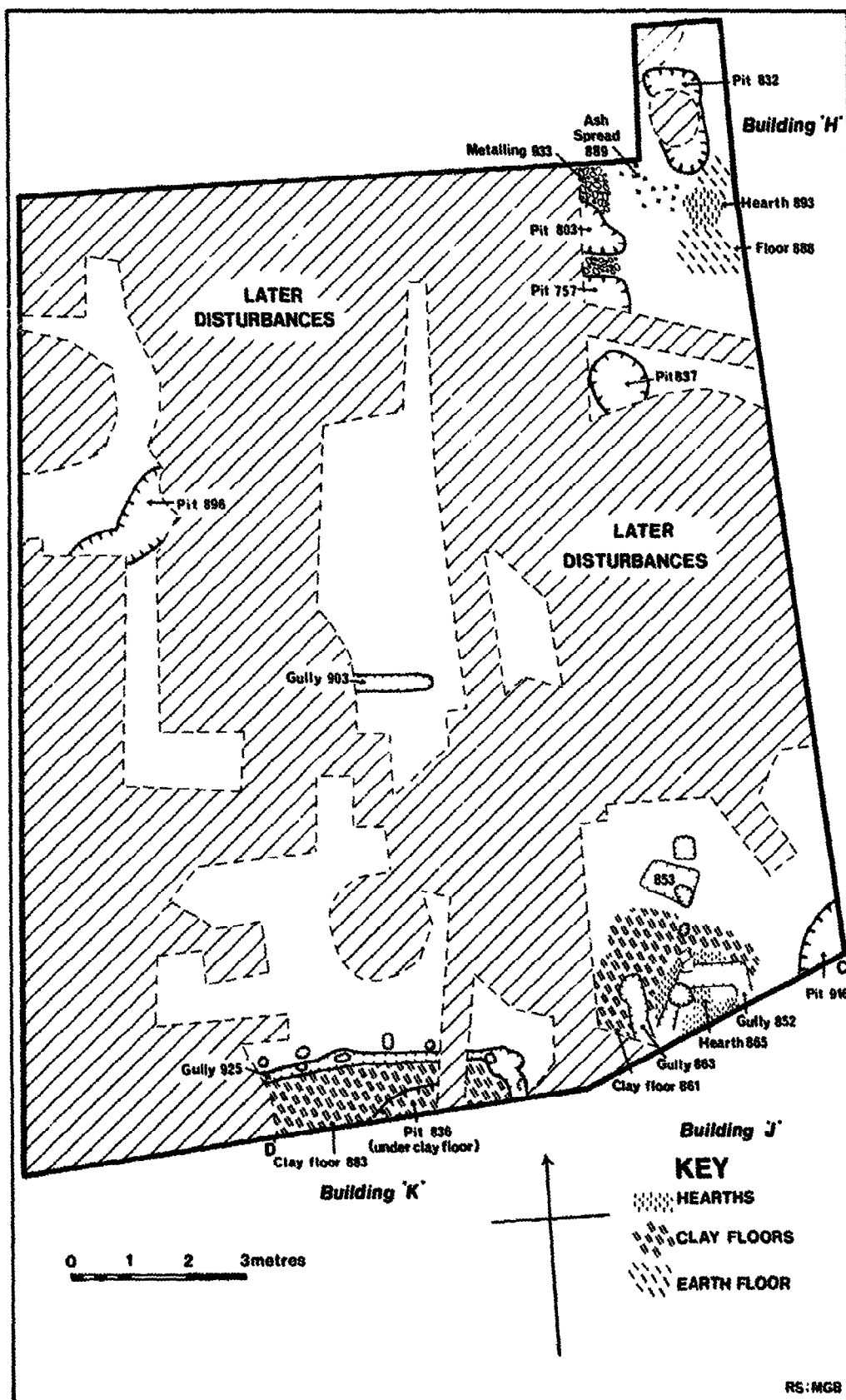


Fig 73. Berrington Street. Site 4. Period 2a. Buildings H, J, & K

Dating

The advent of West Midlands early medieval ware and other fabrics, within the period 2a levels, can be used to suggest a date in the first half of the 10th century for the construction of the buildings, with demolition towards the end of the century (see Vol 3).

Inventory (Vol 3)Small finds

Metal	Slotted piece of iron	Site 2:	L112	Fig 1.11
	Iron knife blade	Site 4:	837	Fig 1.5
	Lead spindle whorl	Site 4:	852	Fig 8.2
	Possible window leading	Site 4:	861	Fig 8.3 & 4
Stone	Possible games counter	Site 2:	L107	Fig 11.3
	Half spindle whorl	Site 2:	L107	Fig 11.4
	Small loom weight	Site 2:	L112	Fig 11.5
	Half spindle whorl	Site 2:	L112	Fig 11.15
	Flint flake (unillius)	Site 2:	L107	No 22
Jewellery	Glass bead	Site 4:	861	Fig 20.2
	Glass ring	Site 4:	861	Fig 20.3
	Shale ring	Site 2:	F296	Fig 20.4
Worked bone	Slice from comb	Site 2:	F296	Fig 24.6

Ceramic material

Pottery	Fabric	A7	B1	D1	D2	E1	G1
	Sherds	3	4	30	4	1	278
	Percent	1	1	10	1	-	87
	Illustrated pottery	Fig 31.24					
		Fig 45.1					
		Fig 49.1, 2 & 4					
		Fig 52.1 & 3-50					
		Fig 56.1-6, 16-19					
		(Fig 56.1, 17, & 19 were from period 1 contexts but are considered to be from unseen period 2 features).					

Fired clay	Loom weight	Site 2: L107	Fig 64.14 (Nos 7 & 8)
	Unillustrated	Site 1: L58	No 2
	fragments of loom	Site 2: F130	No 9
	weights	L107	No 11

Environmental material

Charcoal	Site 2: Pit 358
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■ PERIOD 2b (Fig 74:M2.C11)

Description

On sites 1-3 the early period 2 features are described under period 2a and the late ones under period 2c.

The dark loamy soil, 844, covered the central and western areas of site 4 with no discernible features except for pit 894, which was filled with a dark brown loam and many pebbles.

Pit 898, in the north-eastern corner of the site, was apparently a partial re-cut of the period 2a pit, 832. To the south of it, and on top of the period 2a floor, was a layer of earth and small stones, 874, interpreted as levelling material. This layer was sealed by the thin and patchy clay floor, 831, of building L. The floor was associated with a well-made hearth, 833, which consisted of a stone platform surrounded by curb stones, the whole being covered with a thick layer of well fired clay. Several small postholes were cut through the clay floor but were sealed by the period 2c levels.

Building M, in the south-eastern corner of the site, consisted of the fragmentary remains of a clay floor, 804, and a slightly bowl-shaped hearth, 805. The floor and hearth were both separated from features of the period 2a building by a soil layer, 842, considered to be levelling material (Fig 69:M2.B2). There were no indications of walls for this building but many small stakeholes were found, some of which cut into the clay floor. To the north of the building one side of an east-west gully or trench, 848, was found. It contained a mixed fill of soil and gravel. Several postholes cut into the period 2b floor but were sealed by the period 2c clay floor.

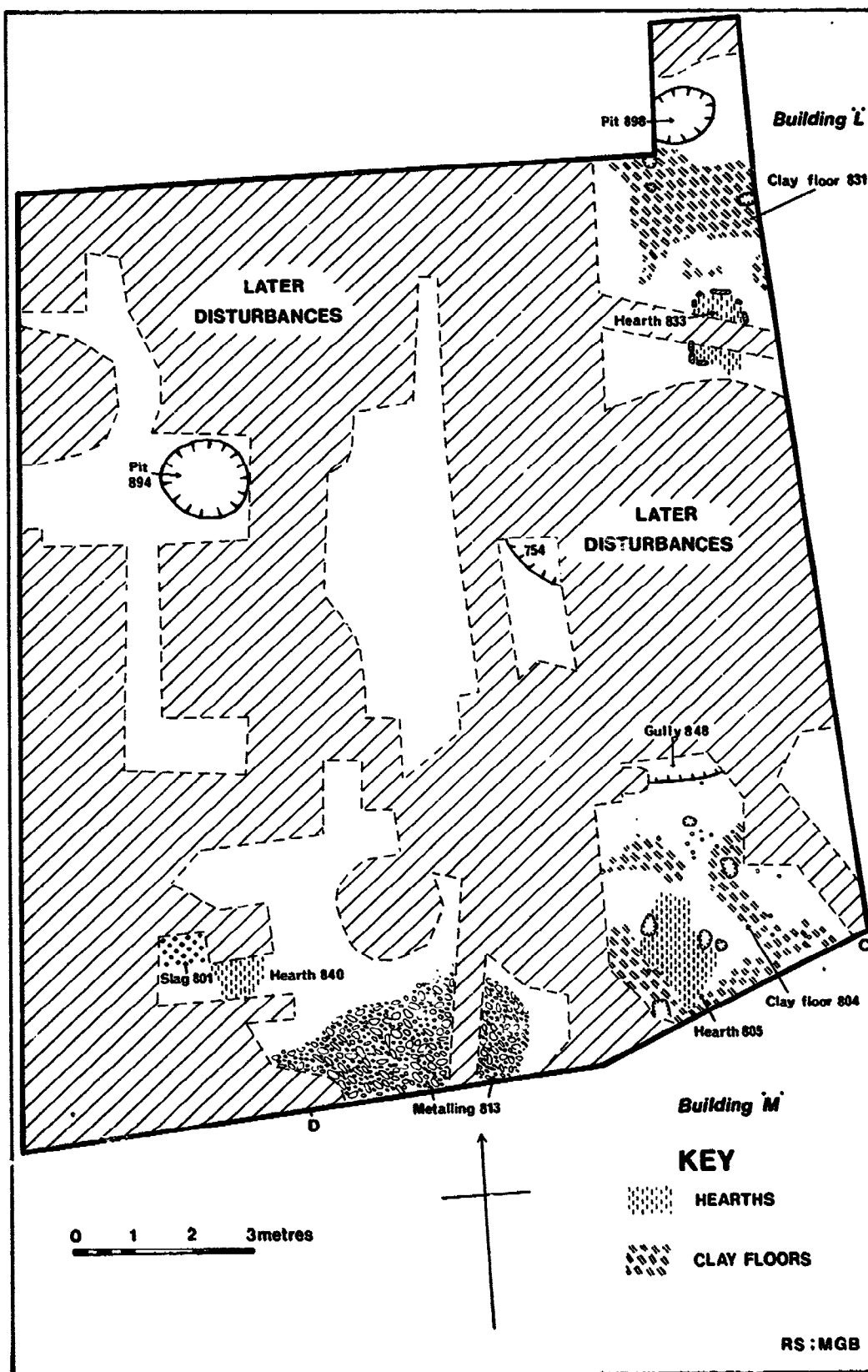


Fig 74 Berrington Street. Site 4. Period 2b. Buildings L & M

Further west, a large area of metalling, 813, consisting of medium sized river pebbles laid on a fine gravel base, sealed the remains of building K of period 2a (Fig 69:M2.B2). A layer of soil, 841, which separated building K from the metalling, continued to the north and west as a uniform layer and was apparently the ground level associated with the metalling. Cut into layer 841 was a small hearth, 840, associated with an ashy layer, 801, which contained many small, broken fragments of tap slag.

Dating

The pottery suggests that this phase of occupation took place during the first half of the 11th century (see Vol 3).

Inventory (Vol 3)

Small finds

Metal	Annular iron object	842	Fig 1.6
	Part of a horseshoe	842	Fig 1.8
	Two copper clips or garter hooks	844	Fig 4.5 & 7 & Fig 6
Stone	Flint flake	844	Fig 16.6
	Flint scraper	841	Fig 16.12
	Flint scraper (unillius)	844	No 25
Worked bone	Slice from comb	844	Fig 24.4
	Pointed and decorated object	841	Fig 24.8

Ceramic material

Pottery	Fabric	A2	B1	C1	C2	D1	D2	E1	G1
	Sherds	2	18	3	1	52	12	5	67
	Percent	1	11	2	-	32	8	3	42
	Illustrated pottery								Fig 45.2, 5, 6 Fig 56.7-10, 15, 20, 21, 24-26

Environmental material

Metallic residues

Tap slag	801
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■ PERIOD 2c (Fig 75:M2.C14)

Description

On sites 2 and 3 layer 103/513, consisting of brown clayey silt with charcoal flecking, covered parts of layer 107 towards the west. This layer is considered to represent slip from the defences of stages 2 and 3. Within it were found two rough lines of stones, 112 and 130, (Figs 62:M2.B2 and 72:M2.C6) which followed the edge of the stage 3 metalling and may represent an attempt to retain the rampart slip. Layer 103/513 was sealed by material similar in nature to the red gravel embankment of defensive stage 6.

On site 4 the buildings of period 2b were replaced and new buildings were constructed in the central part of the site.

A series of ashy layers, 819, sealed the period 2b floor in the north-eastern corner of the site and provided a base for a patchy clay floor, 778, which was all that remained of building N. It was only present in the northern part of the area and there were no traces of any associated walling.

Almost all of the south-eastern corner of the site was covered by building O which consisted of an ashy clay floor, 735, burnt orange in several places. It was laid on top of several irregular ashy layers, 792, which contained much smithing slag. The clay floor sloped downwards to the north of the area into the period 2b gully 848 but the surface had been levelled by the gravel metalling 749. Towards the centre of the area several stones, 795, formed what was considered to be the base for a wooden post. The stones, which were laid in a shallow hole cut into floor 735, continued for two courses above the floor level. Ash, slag, charcoal, and charred grain, collectively 734, covered the floor and above this were fragments of another clay floor, 729, associated with much black ash (Fig 69:M2.B2). This, the latest of the series of clay floors in the south-eastern corner, could have been laid late in period 2 or early in period 3.

In the south of the site the metalling, 813, of period 2b was covered with a thin layer of soil, 851, burnt and ashy to the east but cleaner to the west. This was covered by a more irregular metalling, 737, consisting of fine red gravel, river pebbles and smithing slag.

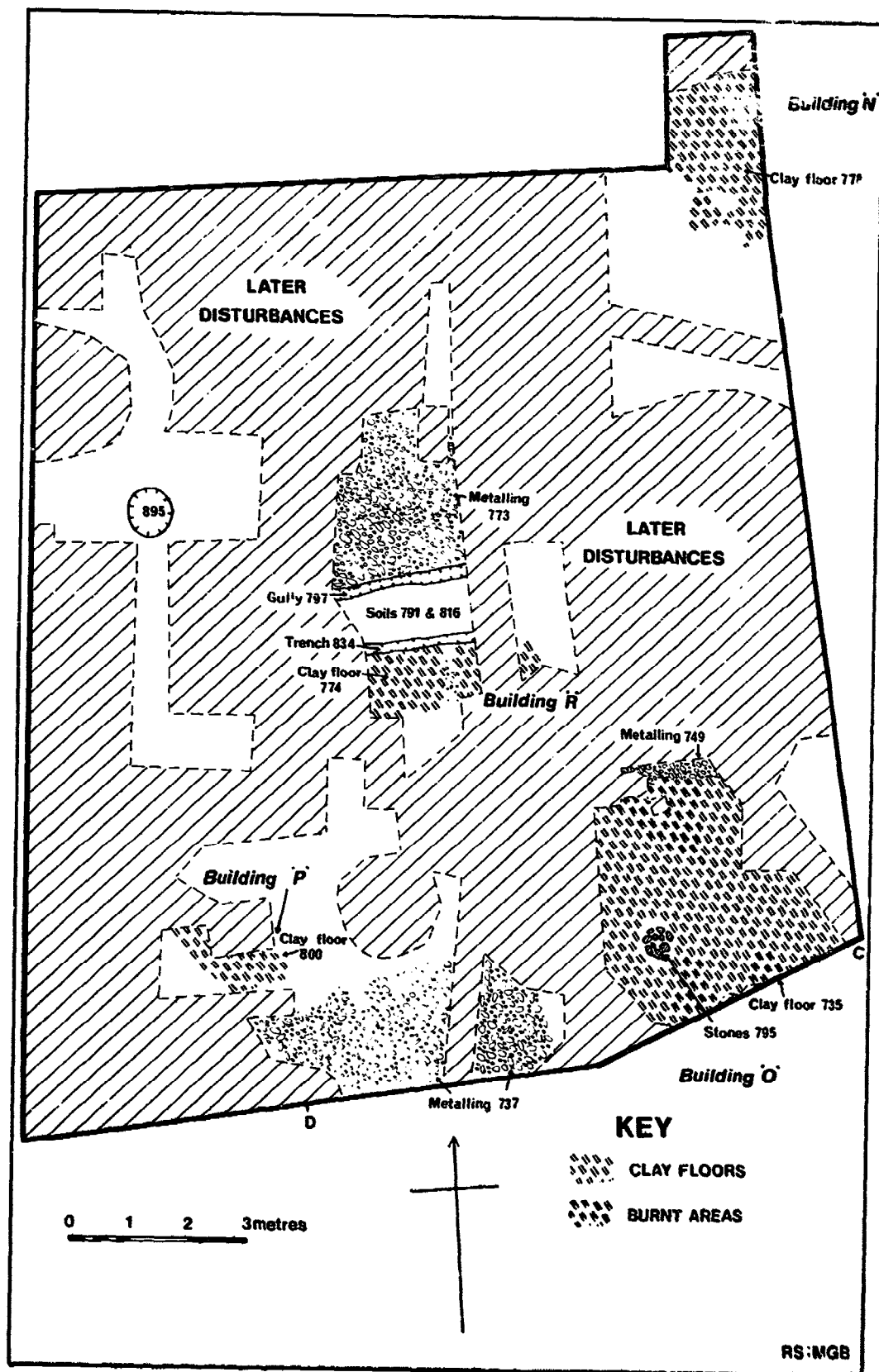


Fig 75 Berrington Street. Site 4. Period 2c. Buildings N, O, P, & R

To the north-west of this metalling were the slight traces of building P, which consisted of a clean yellow clay floor, 800, sealing hearth 840 of period 2b.

The centre of site 4, which had previously been cultivated, was partly occupied by building R and partly by a metalled surface, 773. The cultivation layer, 844, was sealed with a gravel, pebble and smithing slag make-up layer, 796, on which the yellow clay floor, 774, of building R had been laid. The clay floor was bounded to the north by a rather indistinct post trench, 834, which was separated from an area of rough pebble and smithing slag metalling, 773, by a confused band of soil, 791 and 816, and a shallow gully, 797.

Dating

The only dating evidence for period 2c is from the pottery. This suggests a date span from the late 11th century to the early 12th century for the various buildings (see Vol 3).

Inventory (Vol 3)

SITES 2 and 3

Small finds

Metal	Copper hook	Site 3: L513	Fig 4.3
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Ceramic material

Pottery	Fabric	A2	A7	B1	C1	D1	D2	G1
	Sherds	1	2	5	1	6	1	5
	Illustrated pottery							Fig 49.3

SITE 4

Small finds

Metal	Part of iron snaffle bit	792	Fig 1.7
Worked bone	Tool made from antler tine	816	Fig 24.10
Jewellery	Glass bead (probably Roman)	734	Fig 20.5

Ceramic material

Pottery	Fabric	A4	A7	B1	B2	C1
	Sherds	1	4	25	2	6
	Percent	1	2	14	1	3
	Fabric	C2	D1	D2	E1	G1
	Sherds	2	9	106	5	22
	Percent	1	5	58	3	12

Illustrated pottery

Fig 45.3

Fig 46.2

Fig 56.11-14,
22, 23, 27-36Environmental material

Grain	734
Metallic residues	
Smithing slag	737, 773 792, 796

Discussion

The complex occupation of period 2, observed in a fragmentary state on site 4, cannot be stratigraphically related to the defensive stages mainly because of the separation between them by cultivated ground in sites 1 to 3. However relationships can be suggested and they are discussed in a separate section (M2:D4-D8). It is sufficient at this point to note that the cultivated levels 60/108 of period 1 were covered by an almost identical layer, 58/107, during period 2. This build-up may have been partly caused by some denudation of the stage 2 rampart defences but was more likely to be a result of the continual building operations on the Berrington Street frontage. Towards the end of the period 2 occupation, further soil levels, 103/513, sealed the western parts of sites 2 and 3. This could have been caused by the final collapse of the stage 3 defences before they were reinstated during stage 4, using a considerable amount of clean gravel.

The pattern of occupation across the whole area is illustrated by the density of pottery finds from period 2a. An approximate calculation has shown that there was six times the quantity of pottery per unit volume of soil removed by hand in the layers of site 4 as compared with

pottery from those layers similarly removed on the three other sites. It should be appreciated that some of the cultivated levels on sites 1 to 3, which were of a considerable thickness, were removed by machine.

The buildings and other features exposed on site 4 in period 2a were fragmentary and only give a general impression of the occupation pattern (Fig 73:M2.C8). There was little apparent increase in the area which was covered in buildings, as compared with period 1, but the constructional methods used in period 2a were probably different from those of the earlier buildings which had posts set into the ground. Buildings H and J, which had surviving floor levels, were apparently not of posthole construction, and building K was built using a sleeper-beam trench with some additional vertical timbers in shallow holes. The associated occupation levels produced a few finds including a piece of bone comb a glass bead, a ring and some possible window leading. The latter may indicate that the buildings were of a higher quality than the surviving remains suggest. Spindle whorls and fragments of loom weights indicate that weaving was one of the occupations practised in the area. The few pits found were small and did not contain cess-type material. The disposal of human waste products throughout periods 1 and 2 left no apparent archaeological trace.

Gully 903, in the centre of site 4, may have been part of a property boundary, and a similar gully, of which 296 is the only remaining undestroyed part (Fig 72:M2.C6), may have separated the grounds of the Berrington Street properties from the defensive features.

The lack of constructional postholes continued throughout periods 2b and 2c, and the slight traces which survived of the buildings suggest that the walls were based on sleeper beams. There was little or no evidence of division into rooms but the pile of stones, 795, in building O (period 2c) (Fig 75:M2.C14), may indicate the presence of a central post, perhaps a necessary feature as the surviving clay floor indicated that the building was at least 4.5m square.

The ashy layers, which sealed the period 2b occupation in the north-east and south-east of site 4 and continued some way across metalling 813 at

the south, may indicate that the 2b buildings L and M were destroyed by fire about the middle of the 11th century.

During periods 2b and 2c the street frontage pattern of occupation, which was apparent in periods 1 and 2a, continued, but during period 2b the southern area of the site was redesigned with a small cobbled yard behind the main building and a possible metal working area further to the west (Fig 74:M2.C11). In period 2c, a further building was erected to the north of the re-cobbled yard, and the metal working area was re-floored (Fig 75:M2.C14). A large amount of smithing slag was used in the make-up levels for the 2c buildings and in the associated metallised areas, but there was no indication of the production area. The irregular break between the new building R, north of the cobbled courtyard, and the metallised area beyond, could have been a continuation of the property boundary, 903, of period 2a. It was approximately in the same position and on the same alignment.

Much charred grain was found in the burnt level, 734, overlying the period 2c building O. The grain, which was predominantly wheat with only a few contaminants, had been cleaned and showed signs of having germinated before destruction. It would still have been usable and is unlikely to have been deliberately destroyed. The clay floor of building O had many burnt areas although there was no definite hearth. These features taken together are consistent with building O being destroyed by fire during the early 12th century.

■ THE RELATIONSHIP OF PERIODS 1 AND 2 WITH THE DEFENSIVE FEATURES OF STAGES 1-4

A major problem on the Berrington Street sites is the relationship of the buildings of periods 1 and 2 to the various stages of the defences established at Victoria Street to the north (M1:B6-E7) and confirmed at Friars' Gate to the south (M3:F4-F8). The new developments on the Berrington Street site were designed to preserve the defensive features and because of this only two narrow trenches could be excavated into the protected areas. The trenches were limited in depth because of the danger of the sides collapsing, so that only the top of the tail of stage 2 of the defensive works could be observed. Layers, which may have been associated with the construction of the

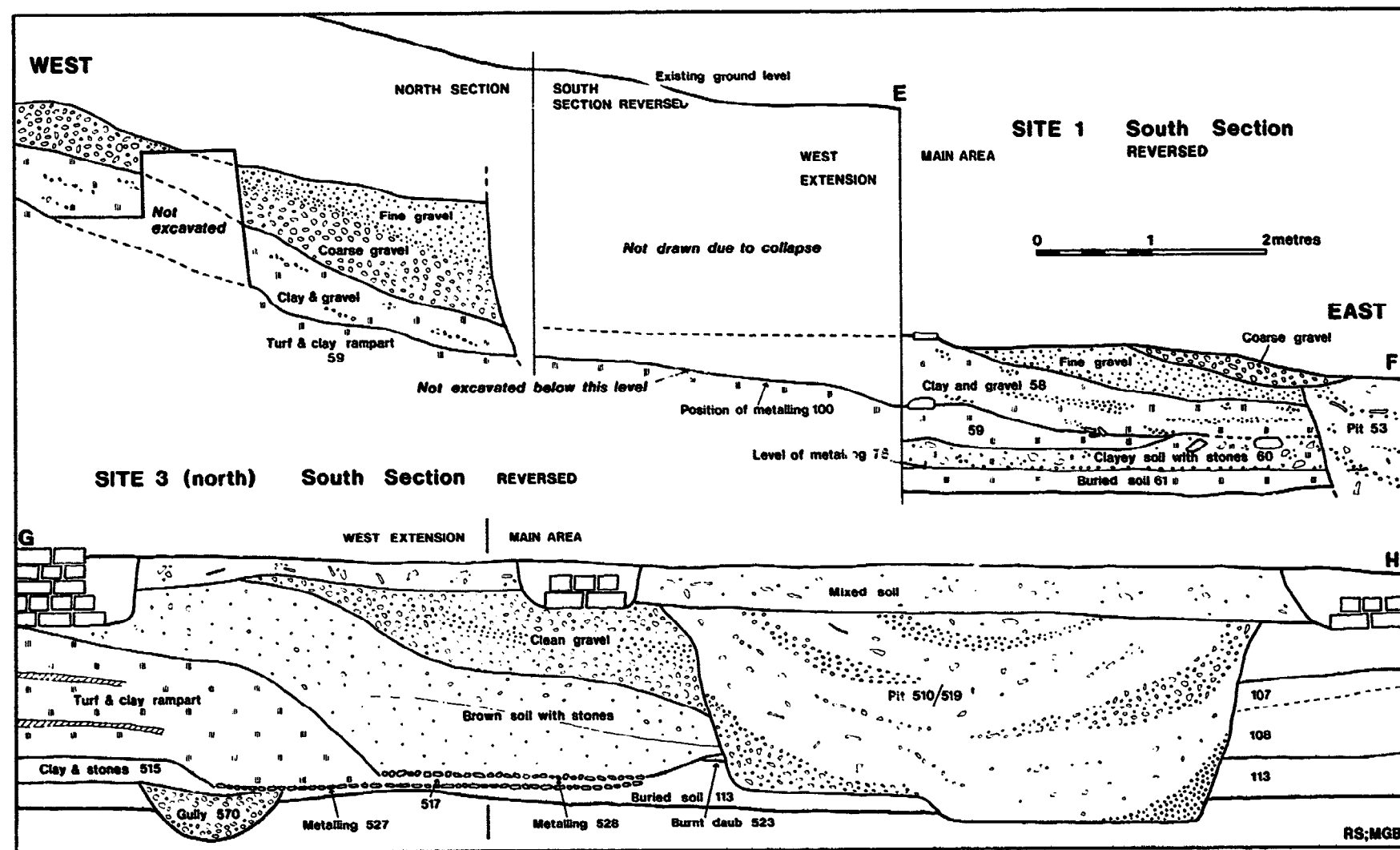


Fig 76 Berrington Street. Site 1: section E - F and site 3: section G - H. For the position of the sections see fig 57:M2.A7

rampart were cut by the stage 3 metalled roadway, and subsequent cultivation made it impossible to establish any direct stratigraphical relationship between the construction of the period 1 buildings and the defensive features.

However, the stage 3 metalled roadway on the tail of the stage 2 defensive rampart cut through some of the burnt patches, layer 111, which were considered to represent the destruction of the period 1 buildings and in places sealed the original north-south trackway which had been associated with these buildings. The stage 2 turf and clay rampart also sealed part of this earlier trackway (section G-H: Fig 76:M2.D5), and if it is assumed that the metalling of this period 1 trackway was laid at the same time as the buildings were constructed, then it is evident that the construction of the buildings on sites 1, 2, and 3 pre-dates the construction of the stage 2 defensive works.

The stage 1 gravel rampart was not encountered during the Berrington Street excavation and no relationship could be established between it and the period 1 buildings. However, if it is accepted that the easterly curve in the period 1 trackway and the posthole group 79, both on site 1, are indicative of a west gate to the town, then it can be suggested that some form of western defence was present, immediately to the west of Berrington Street site, when the period 1 houses were built. This could have been the stage 1 rampart but need not have been more than the small bank and ditch of Victoria Street, period 3.

The material from the collapse of the stage 3 defensive works during stage 4 merged into the cultivated layers 60/108 and 58/107 which sealed the period 1 occupation. The pottery finds indicate that this disuse phase should be associated with the upper layer 58/107 rather than with the non-ceramic layer 60/108. Further slip from the stage 3 rampart was represented by layer 103/513 on sites 2 and 3 and these layers were associated with rough lines of stones 112/130 (Figs 62:M2.B2 and 72:M2.C6), which may either have been an attempt to arrest the collapse or simply markers to indicate the extent of the property boundaries.

The upper gravel rampart, constructed during stage 4 and identified at Victoria Street as period 6, was also present in the Berrington Street trenches (Fig 76:M2.D5). It sealed the extreme western part of layer 58/107 but rapidly disappeared to the east. The lack of any associated surface across the Berrington Street sites is assumed to be due to repeated cultivation of this area, which, it is presumed, was extended into the tail of the rampart.

There was no stratigraphical relationship between the periods 1 and 2 buildings on site 4 and the defensive features. It can only be suggested that, following the demolition of the period 1 buildings on sites 1-3, the defensive features of stages 2, 3, and 4 gradually evolved and either the property boundaries were extended to the west towards the tail of the rampart or, initially, a buffer strip, with some cultivation, was kept between the properties and the defences.

The extension trench from site 1 exposed the top of the tail of the stage 2 turf and clay rampart 59 (Fig 76:M2.D5). Two postholes were found in the upper part of the rampart tail and a poor quality pebble metalling, 100, was found lower down to the east (Fig 72:M2.C6). The postholes were similar in size to those of Victoria Street, period 5, with equivalent distances between them (Fig 26:M1.D1). In the extension to site 3 a similar posthole, 522, was found in the tail of the rampart (Fig 72:M2.C6); and the metalled roadway 528, in better condition than that on site 1, was partly cut into the stage 2 rampart and partly into layer 111, the destruction level for the period 1 buildings. Part of the same roadway, 272, which was exposed in site 2, also cut through layer 111 material. On all three sites the tail of the rampart and its associated roadway were both covered with a thick brown soil layer which gradually merged into layers 60/108 and 58/107. Above this brown soil layer, the traces of the stage 4 gravel rampart were very similar to the equivalent layers on the Victoria Street site.

There was no independent dating evidence for the construction of any of the several stages of the defences exposed in the extensions to the Berrington Street sites.

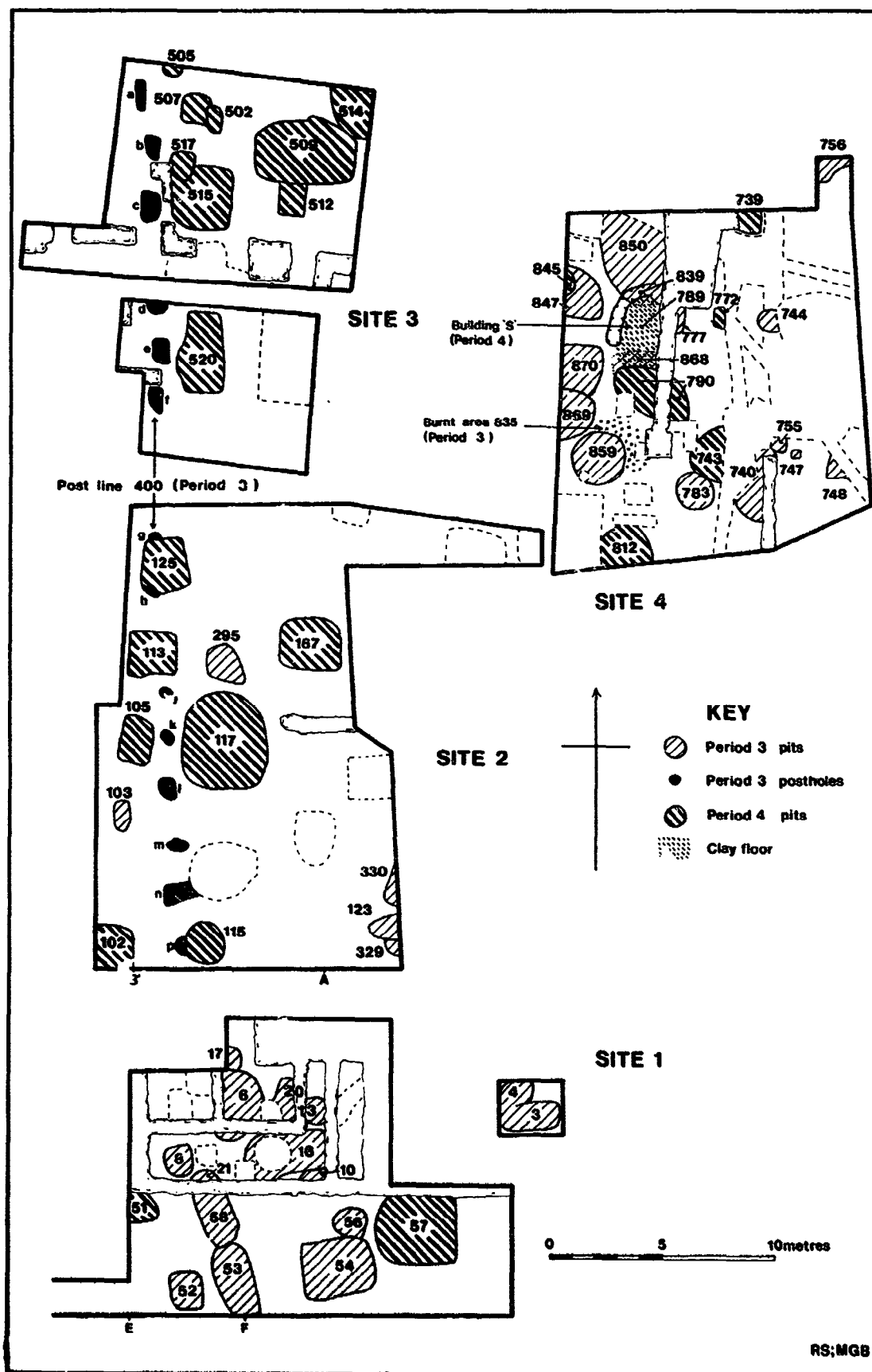


Fig. 77 Berrington Street. Periods 3 & 4. Features on all sites

■ PERIOD 3 (Fig 77:M2.D9) Pits

In all four sites the excavated remains of this period consisted of a series of truncated pits. Soil levels, which were largely removed by machine in sites 1 to 3, had the appearance of being regularly cultivated during this and later periods. There were no traces of buildings during period 3 - probably due to the ground surface at the east of site 4 being lowered when the buildings of period 6 were constructed, rather than a lack of domestic occupation in the area during this period.

Description

The pits dug during this period were concentrated in site 1 and the western part of site 4, and sites 2 and 3 were relatively undisturbed. The only exception was a row of large postpits, 400, which followed the bottom of the slope at the rear of the, by then, disused stage 4 rampart. The post positions were apparent in many of these postpits with flat stones at the base and vertical stones up the sides.

The average post size was apparently 0.4-0.5m diameter and most posts were circular or oval, indicating the use of small tree trunks for this substantial fence. The post line may have continued across site 1 and been removed by the period 4 pits 53 and 58. It was not appreciated until site 2 was excavated. Details of the posts which comprised this fence are given on M2.D11.

The pits in site 4 survived for most of their depth and several had gravel cappings. Some could not be fully excavated due to the limited time available. In most cases the fills of the larger pits comprised a dark gravelly soil with some clay but in a few the contents were separated into distinct bands. Details of the period 3 pits are given on M2:D12 and D13.

POSTHOLE LINE 400 (Fig 77:M2.D9)

The postholes are numbered a, b, c, from north to south across both sites 3 and 2.

POSTHOLE	SITE	DIMENSIONS (cm)		DEPTH (cm) (as found)	FILL
		E - W (posts in brackets)	N - S (posts in brackets)		
a	3 north	56	160	84	Small pebble gravel, stones & brown soil
b	3 north	64	120	106	Small pebble gravel & brown soil
c	3 north	80	136	101	Brown soil & pebbles
d	3 south	-	-	-	Red pebble gravel & brown soil
e	3 south	75(30)	99(46)	98	Red pebble gravel & packing stones
f	3 south	55	115	50	Red pebble gravel
g	2	120	-	c40	Dark brown soil & charcoal flecks; two stones at base
h	2	60	-	c54	Brown soil & small stones. Several stones at base
j	?	98(50)	71(44)	c50	Pit: red clay & brown soil; post: sandy gravel & packing stones
k	2	88	90	30	Sandy brown soil
l	2	112	82	64	Brown soil & pebbles
m	2	90(48)	68(50)	57	Pit: brown soil, pebbles & yellow clay; post: stones at base - signs of deliberate removal on east
n	2	>160(42)	84(41)	65	Pit: mixed orange & grey clay; post: stones at base - signs of deliberate removal on the east
p	2	>60	70	38	Brown silty soil, gravel & packing stones

PERIOD 3 PITS (Fig 77:M2.D9)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
3	1 north	-	1.00	*	Black soil and animal bone	Cesspit
4	1 north	1.15	-	*	Black soil and animal bone	Cesspit
6	1 north	-	2.80	*	Greenish-black soil and pebbles. Traces of wattle lining	Storage then cesspit
8	1 north	1.2	1.5	*	Dirty gravel	Cesspit
10	1 north	-	-	-	Black soil with some rubble	Cesspit
13	1 north	-	1.1	*	Mixed black soil and pebbles	Cesspit
17	1 north	-	1.4	*	Mixed black soil	Cesspit
20	1 north	-	-	*	Mixed black soil	Cesspit
21	1 north	-	-	-	Mixed black soil and gravel	Cesspit
52	1 south	1.27	1.79	*	Mixed black soil	Cesspit
53	1 south	-	-	*	Mixed black soil capped with gravel	Cesspit
54	1 south	3.3	2.6	*	Mixed black soil	Cesspit
56	1 south	1.64	1.33	*	Mixed black soil with some <u>in situ</u> burning	Cesspit with some rubbish
58	1 south	-	-	*	Mixed black soil	Cesspit
103	2	0.8	1.24	≤1.2	Layered fill - see page M2.D14	Cooking pit
123	2	-	1.32	>1.0	Dark brown soil and small stones	Cesspit
295	2	1.50	1.44	*	Mixed fill with bones and charcoal; capped with gravel	Rubbish pit

(Continued page M2.D13)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
329	2	-	-	0.98	Brown soil and charcoal flecks	Not known
330	2	-	1.63	-	Brown soil and orange clay; large stone at surface	Not known
740	4	1.6	1.6	>1.25	Black soil with some tip lines; capped with gravel	Cesspit
744	4	-	-	>1.1**	Includes two pits: 744 & 754. Both have a stony fill and a gravel cap. Both also contain much smithing slag	Not known
747	4	0.4	0.3	0.16	Ash, slag, charcoal, and clay	Possibly a post hole
748	4	1.0	1.0	0.38	Square pit filled with dirty gravel	Not known
754	4				See 744 above	
755	4	-	0.6	?	Mixed gravel and dirty soil	Possible postpit
756	4	Irregular		≤0.55	Loose black soil, charcoal and buff clay	Possible cesspit
777	4	-	-	≤0.9	Clay capping and moist, soft, dark soil with animal bone	Cesspit with some rubbish
783	4	1.5	1.5	>0.8**	Mixed soil and gravel	Cesspit
847	4	-	2.2	**	Mixed soil and gravel	Cesspit
850	4	-	-	>1.0**	Eventually established as 3 pits: 855, 856 & 857. All filled with mixed soil and gravel	Probably several cesspits
859	4	2.17	2.22	**	Mixed soil and gravel	Cesspit
869	4	-	2.1	**	Mixed soil and gravel	Cesspit
870	4	-	-	>1.0**	Mixed soil and gravel	Cesspit

* not recorded

** not bottomed

Pit 6 (site 1) was the only one which contained traces of a wattle lining, but many others may have been similarly lined.

Pit 103 (site 2) contained a large quantity of grass and straw held together by a calcium carbonate accretion. The fill included numerous charcoal fragments of oak and oak bark, and charred seeds of wheat, barley, and sloes. Small fragments of slaked and unslaked limestone were also present. In the lower levels was a coin (no 7), and in the upper levels a cooking pot, broken, but otherwise complete except for its base.

Pits 744 and 850 contained large amounts of smithing slag and several other pits contained smaller quantities.

There were slight indications of occupation in the south-western part of site 4, including traces of burning and some ash, 835, scattered over the contemporary ground surface and over clay floor, 800, of period 2c. In the south-eastern corner fragments of a clay floor, 729, and some associated black ash, both described under period 2c, may in fact belong to period 3, as may a similar ashy layer, 750, on top of floor 778 in the north-eastern corner.

A charcoal flecked, but otherwise clean, clayey soil layer, L56, which sealed the period 2a layer L58 on the western part of site 1, was of period 3 date. It may suggest a lack of cultivation in this area close to the rampart during part of period 3.

Dating

This period is defined as extending from the late 12th to the early 13th century on the basis of the pottery and other material found associated with the features.

Inventory (Vol 3)

Small finds

Metal	Probable iron key shank	Site 1: P56	Fig 3.2
Stone	Whetstone	Site 1: L56	Fig 11.6
Worked bone	Ring	Site 1: L56	Fig 24.11
	Antler tool	Site 4: 835	Fig 24.12
Coin	Penny of Henry II	Site 2: P103	No 7

Ceramic material

Pottery	Fabric	A2	A3	A4	A5	A6	A7	A8	B1	B2	B3
	Sherds	64	33	3	2	1	29	2	334	16	5
	Percent	10	5	-	-	-	4	-	51	2	1
	Fabric	C1	C2	D1	D2	D3	E2	G1	G2	G3	G7
	Sherds	54	15	5	50	1	1	24	1	2	2
	Percent	8	2	1	8	-	-	4	-	-	-
	Illustrated pottery							Fig 31.11			

Fig 38.1, 4, 8,
13, 14
Fig 45.4, 10
& 12
Fig 49.5, 6 &
14
Fig 53.1-37

Environmental material

Charcoal	Site 2: P103
Grain	Site 2: P103
Inorganic samples	Site 2: P103
Metalworking residues	Site 4: 744 & 850

Discussion

Although the period 3 occupation levels on the Berrington Street frontage were more or less completely lost, and the equivalent levels on sites 1 to 3 were later cultivated, the remaining features still present an informative picture. It is in period 3 that cesspits and the occasional cooking and storage pit become a feature of the Berrington Street sites. In other parts of the country Saxon and early medieval cesspits are common and this may suggest that such pits are determined by the population density rather than being a necessary adjunct to occupation in any given period.

The concentration of the pits in sites 1 and 4 may indicate that sites 2 and 3 were under cultivation and that it was only the area close to buildings which was used for cesspits. The pits in site 4 are just

behind the presumed western edge of the buildings fronting onto Berrington Street and the concentration in site 1 may also be behind buildings situated to the east, or just possibly to the south.

The small pit 103 (site 2), to the west of fence line 400, may have been used for cooking. Small fragments of lime, when heated or burnt, continue to burn exothermically and would constitute an ideal way of slow cooking without the presence of a fire (info J S R Hood). This pit could have been associated with repair work on the defences and may be dated, on the basis of the coin found in its fill, to c AD1170-1183.

The presence of smithing slag in several of the pits does not necessarily mean that it was produced on the site. It may have been imported and used from time to time as an alternative to gravel for sealing the contents of the pits.

The line of postholes, 400, indicates that during period 3 the boundary between the properties which fronted on to Berrington Street and the defences continued to reflect the line of the metalled roadways of periods 1 and 2. This post line may have continued across site 1 but this could not be confirmed. The fence was probably abandoned early in the 13th century, about the time that the city wall was built.

■ PERIOD 4

In period 4, pits were concentrated in sites 2 and 3, with few in site 4 and only two in site 1 (Fig 77:M2.D9). The pits of period 4 cut across the period 3 postline, 400, on site 2, and tended to be larger and deeper than those of period 3. They were not all fully excavated. The fills were more variable than in period 3, with bands of clean gravel separated by darker soils and clays, and several of the pits in site 4 had a brown clay capping.

Details of the period 4 pits are given on pages M2.E3 and E4.

PERIOD 4 PITS (Fig 77:M2.D9)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
51	1 south	-	-	*	Not recorded	Not known
57	1 south	3.3	-	**	Clay, gravel & dark soil	Cesspit?
102	2	-	-	<u>c</u> 1.0	Layered silts and orange clay at a steep angle	Not known
105	2	1.37	1.93	<u>c</u> 1.3	Rectangular, steep-sided, sandy, brown pebble gravel	Not known
113	2	2.04	1.77	0.5	Red clay lined: fill of brown soil and pebbles	Not known
117	2	3.8	4.7	1.5	Dark brown soil, orange clay, stones & pebbles	Not known
125	2	2.2	2.45	*	Brown clayey soil and pebble gravel	Not known
167	2	2.9	2.3	*	Fill removed by machine	Not known
502	3 north	0.72	0.97	0.38	See page M2.E4	Cooking pit
505	3 north	-	-	-	Brown earth and pebbles	Not known
507	3 north	1.8	1.3	*	Red pebble gravel and brown soil	Not known
509	3 north	4.4	2.8	**	Brown soil, stones and pebbles	Not known
512	3 north	1.22	-	*	Brown soil, pebbles and red gravel	Not known
514	3 north	-	-	**	Brown soil and pebbles	Not known
515	3 north	2.63	2.9	>0.5**	Red pebble gravel	Not known
517	3 north	0.83	0.8	0.27	Brown soil	Possible postpit
520	3 south	2.0	3.5	>0.4**	Brown soil and pebbles on top of red gravel	Not known

(continued on page M2.E4)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
739	4	0.94	-	>1.2	Black soil and gravel in layers. Capped in brown clay	Cesspit
743	4	-	2.4	>1.0	Black soil and gravel in layers. Capped in brown clay	Cesspit
772	4	0.6	0.8	≤0.2	Gravel and slag	Possible posthole
790	4	-	-	>0.5**	Comprises two pits: 824 & 825. Both contain mixed soils & gravels, but 825 also contained a small hearth	Not known
812	4	-	-	*	Dark soil and gravel	Cesspit
845	4	-	-	0.2	Brown soil	Not known

* not recorded

** not bottomed

Pit 102 (site 2) was probably rectangular with vertical sides and was filled with steeply-sloping layers of red-brown, fine soil with some pebbles and grey and orange clay bands. Pits 105 and 113 (site 2) were of similar shape to 102 and were sealed with a clean gravel capping.

In site 3, pits 507 and 515 were mainly filled with red pebble gravel but also contained some brown earth. The small pit 502 had many layers in its fill which included fragments of charcoal of hazel, beech, and oak, calcified straw, calcium carbonate, and a single wheat grain.

Pit 739 (site 4) was layered with organic material towards the bottom and had a brown clay capping. Pit 772 (site 4) contained a large amount of smithing slag.

In the centre of site 4 were the remains of a clay floor, 789, with a shallow gully, 839, running around its north and west sides (Building S). The floor sealed pit 868 of period 3 and slumped down the side of pit 790 of period 4 where it showed some signs of burning. On the same level as floor 789, and sealing some of the period 3 pits, was a mixed dark gravelly soil layer 817. Both soil layer 817 and pit 790 contained large amounts of smithing slag. A similar layer, 718, which sealed the period 2c features associated with building R also contained much slag.

Dating

Period 4 was also dated by the finds, and on this basis is considered to encompass the second half of the 13th century.

Inventory (Vol 3)

Small finds

Metal	Part of iron horseshoe	Site 4:	772	Fig 1.16
	Iron arrowhead	Site 4:	739	Fig 2.1
	Iron socketed object	Site 4:	812	Fig 2.5
	Copper ring	Site 4:	790	Fig 4.9
	Copper hook	Site 1:	P57	Fig 4.18
	Possible copper spoon	Site 1:	P57	Fig 4.19
Stone	Two spindle whorls	Site 4:	739	Fig 11.12 & 16
	Half of spindle whorl	Site 4:	817	Fig 11.17
	Broken flint blade	Site 4:	743	Fig 16.5
	Flint flake (unillust.)	Site 4:	817	No 23
Worked bone	Antler tool	Site 2:	P115	Fig 24.13
	Cut piece of bone	Site 4:	739	Fig 24.15
	Part of comb	Site 3:	P509	Fig 24.16

Ceramic material

Pottery	Fabric	A2	A3	A4	A5	A6	A7	B1	B2
	Sherds	28	14	13	14	13	108	308	4
	Percent	4	2	2	2	2	17	47	1
	Fabric	B3	B4	C1	C2	D1	D2	D3	E1
	Sherds	11	4	14	34	11	40	1	4
	Percent	2	1	2	5	2	6	-	1
	Fabric	G1	G3	G4	G7	G8			
	Sherds	18	2	1	3	1			
	Percent	3	-	-	-	-			

Illustrated pottery

Fig 33.1, 8, 9, & 13

Fig 38.5

Fig 45.7

Tile Roof tile

Site 4: 812

Fig 60.4

Site 3: P502

Fig 60.7

Environmental material

Charcoal

Site 3: P502

Grain

Site 3: P502

Inorganic sample

Site 3: P502

Metalworking residues

Site 4: 772, 790, & 817

Discussion

The distribution of the pits during period 4 was markedly different to the distribution during period 3. The larger pits of period 4 were concentrated in sites 2 and 3 with only a few in sites 1 and 4. In site 3, the western limit was apparently still the period 3 fence-line, but in site 2 some of the pits cut across this line and others were dug well to the west of it. The transfer of the pits to the western part of the area may illustrate either a gradual tendency during the 13th century to keep cesspits away from the immediate proximity of buildings, or it may be that the ground close to the buildings had become over-used. It was during the 13th century that the stage 6 city wall was built. The period 3 fence-line, 400, was abandoned about the same time and a rampart walk may have been constructed (Watkins 1919b). This would have allowed the Berrington Street properties to extend their western boundaries to include the sloping tail of the rampart, the area containing the pits 102, 105, 113, and 125 on site 2.

The fills of the period 4 pits were more variable than those of period 3. Those used as cesspits were larger, suggesting a longer period of use, and contained regular layers of gravel indicating that they were regularly sealed, presumably to decrease the smell. Pit 502 on site 3, which contained a similar fill to the period 3 pit, 103, may also have been used for slow cooking.

With the possible exception of pit 790 on site 4, all the pits were external to buildings. Pit 790 contained the slumped remains of part of the floor of building S and may thus have been internal. The slight signs of occupation on site 4 are insufficient to understand the general use of the site. Although the presence of smithing slag and ash may suggest that metalworking was practised in the vicinity, the few finds from the pits tend to indicate that domestic occupation was paramount.

■ PERIOD 5: Pits and industrial activities

Apart from the remains of two stone flues or furnace bases, 116 and 504, the only features which belonged to this period were pits. The distribution was very similar to that of period 3, but several of the pits had an industrial function.

Description (Fig 78:M2.E8)

Most of the pit fills consisted of a slightly cleaner but more clayey brown soil than those of period 4, and most included some pebbles and a little gravel. The pits were concentrated in sites 1 and 4; in site 1 they were apparently all cesspits, but in site 4, many of the pits had an industrial use.

Most of the pits in the western part of site 4 were only located after a thick layer of clayey soil, 720, had been removed. They comprised two groups; the first in the north-western corner, included two pits, 760 and 762, which were found in a sunken area, 759, and contained a large amount of clay mould fragments and some slag. Both pits were deeper towards the west and shallower to the east. The sunken area was filled with a soft brown soil with a quantity of relatively clean clay. It was apparent that these features were part of an industrial complex which stretched to the north and west of the excavated area.

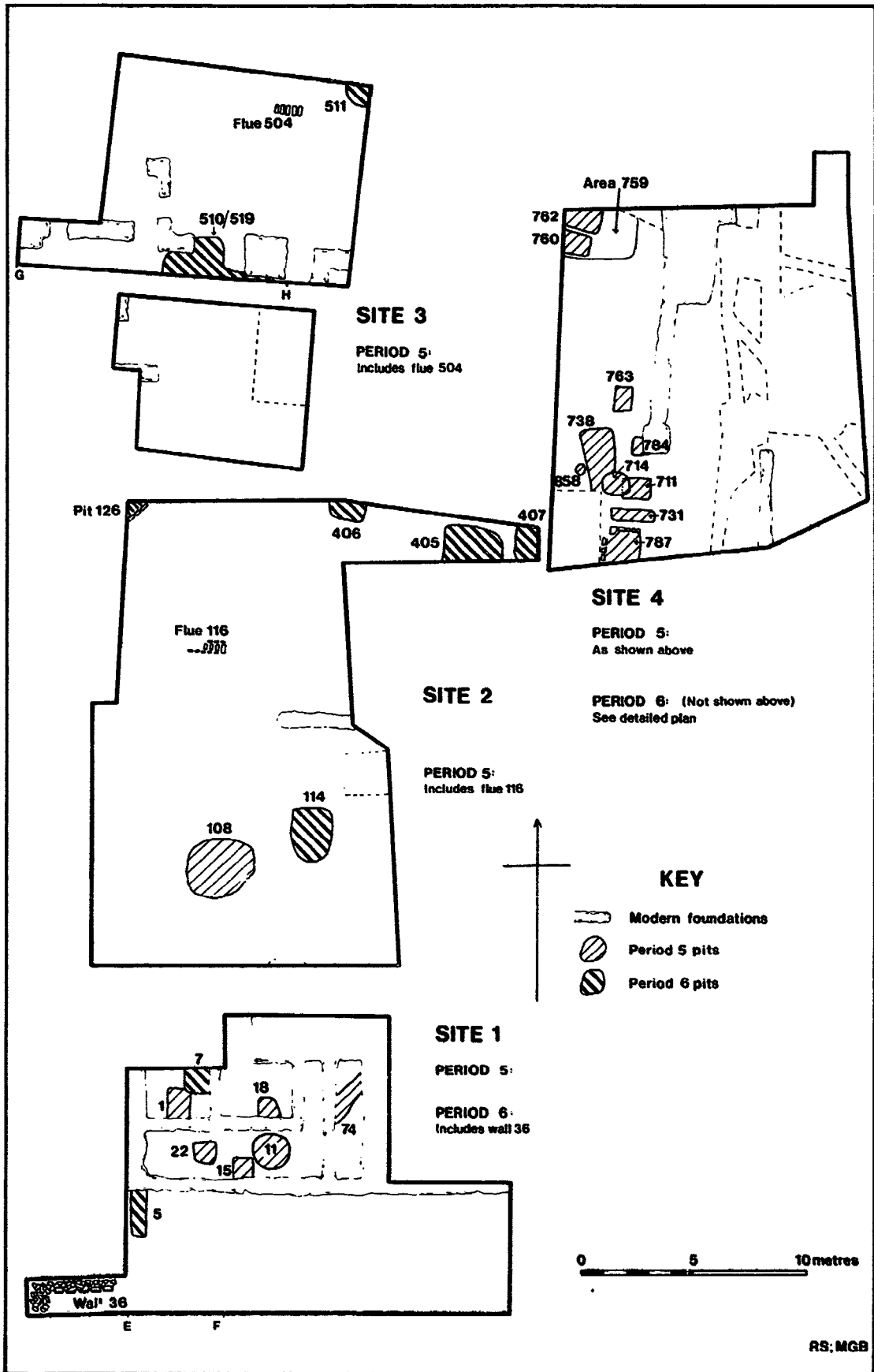


Fig 78 Berrington Street. Periods 5 & 6. Features on all sites. For site 6, period 6 see fig 80:M2.F1

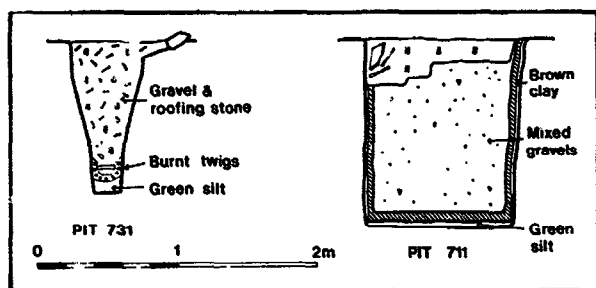


Fig 79 Berrington Street.
Site 4. Period 5.
Sections of pits
711 and 731

A second group of pits, in the south-western part of site 4, also apparently had an industrial use. Three rectangular pits, 711, 763, and 784, all had similar characteristics, being vertically-sided, flat-bottomed, and showing traces of a lining of clean brown clay overlying a layer of green silt (Fig 79 above). However, the remaining parts of the fills were more varied. Pit 711 contained a dirty gravel; 784 a clean brown clayey soil and 763 a brown clayey soil with mortar fragments, roofing stone, and pottery sherds which were reconstructed as the major portions of two jugs. To the south of pit 711 and aligned with it, was a narrow, deep, rectangular pit, 731 (Fig 79 above). It contained, at the bottom, a thick layer of lime and burnt twigs on top of a green silt. This was covered with a dirty gravel containing many fragments of roofing stone which filled the pit.

A later development of this industrial complex may be represented by pit 714, which cut pit 711 and an earlier, more irregular pit, 738. Pit 714 contained a mixture of grey-green silt and humic material at the bottom and was filled with red-brown clay which included some roofing stone. The two postulated phases are probably not significantly different in time, as fragments of ceramic material, which have been reconstructed as a louver, were found in pits 714, 738, and 784.

Two areas of laid, flat stones, 116 and 504, were found during the machine clearance of sites 2 and 3 (Fig 78:M2.E8). Both showed signs of being burnt in situ and a small area of burnt clay, 505, was associated with 504. They were interpreted as the flues or bases of small ovens, but there were no signs of any superstructure. They were sealed by a charcoal-flecked, brown soil, 508.

PERIOD 5 PITS (Fig 78:M2.E8)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
1	1 north	1.0	-	*	Brown sandy clay, pebbles & charcoal	Not known
11	1 north	1.6	1.5	Shallow	Mixed clay and rubble	Not known
15	1 north	0.8	-	*	Mixed brown clays	Not known
18	1 north	1.2	-	*	Mixed soils, rubble, and roofing stone	Rubbish pit?
22	1 north	1.1	1.0	*	Green clay and soil	Cesspit
74	1 north	-	-	*	Soil and rubble	Trench of uncertain use
108	2	3.0	2.2	>1.0	Lined with yellow clay. Fill of mixed soils. Machine cleared	Not known
711	4	1.20	0.93	1.33	Lined with green silt and brown clay. Brown clay and dirty gravel fill. Brown clay capping	Industrial?
714	4	1.43	<u>1.0</u>	*	Lined with brown clay. The bottom contained a green silt and this was followed by red-brown clay and roofing stone	Industrial?
731	4	2.00	0.50	1.00	The bottom contained lime and charcoal and the fill was of brown clay and roofing stone	Industrial?
738	4	1.40	2.8	0.44	Brown clay	Not known
760	4	-	1.0	0.5	The main fill was of brown soil and roofing stone but included slag and mould fragments. The uppermost layer was an orange silt	Cauldron manufacture

(Continued on page M2.E11)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
762	4	-	-	0.44	The main fill was of brown soil, burnt material and mould fragments. The uppermost layer was an orange silt	Cauldron manufacture
763	4	0.78	1.10	1.36	Lined with brown clay. Fill of brown clay, mortar, roofing stone, and pottery fragments	Industrial
784	4	-	0.86	-	Green silt on sides covered in a brown clay lining. Brown clay fill	Industrial?
787	4	1.8	-	≤0.5	Stone lined. Light brown clay fill	Not known
858	4	0.7	0.7	*	Large stones	Possible postpit

* not recorded

Dating

The period is defined by the dating of the pottery and the relationship of layers and features, particularly on site 4. The date range for the whole period encompasses the 14th and 15th centuries.

Inventory (Vol 3)

Small finds

Metal	Part of iron horseshoe	Site 4: 714	Fig 1.13
	Iron arrowhead	Site 4: 720	Fig 2.6
	Fragments of possible copper key	Site 4: 720	Fig 4.14
	Lead plate	Site 1: 711	Fig 8.11
Stone	Whetstone	Site 4: 720	Fig 11.13
	Spindle whorl	Site 4: 720	Fig 11.14
	Flint (unillustrated)	Site 4: 720	No 24
Jewellery	Silver brouch	Site 3: 505	Figs 17.2 & 18

Ceramic material

Pottery

The pottery is considered in two parts:

Layers (mainly from site 4), and pits (from all four sites).

There are some differences between the two assemblages which are considered to be principally due to residual pottery present in the layers.

Layers: Fabric	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4
Sherds	27	14	5	7	14	503	3	5	3	11
Percent	4	2	1	1	2	69	-	1	-	2

Fabric	C1	C2	D2	D3	E1	E3	E6	F1	G1	G7
Sherds	20	48	38	1	2	2	3	3	11	10
Percent	3	7	5	-	-	-	-	-	2	1

Pits: Fabric	A2	A3	A4	A5	A7	A8	B1	B2	B4
Sherds	6	4	2	4	177	1	79	1	34
Percent	2	1	1	1	49	-	22	-	9

Fabric	C1	C2	D2	D3	E1	E3	G1	G4	G7
Sherds	1	5	6	1	1	2	6	2	27
Percent	-	1	2	-	-	1	2	1	7

Illustrated pottery

Fig 33.11

Fig 38.6

Fig 40.1

Figs 46.10 & 47

Fig 49.13

Fig 54.1-23

Tile Ridge tiles
Louver

Site 1: P1 Fig 60.6
Site 4: 714, Fig 61.4
738, & 784

Fired clay Parts of moulds

Site 4: 759 Fig 64.2-7,
& 760 9, 12, & 13

Environmental material

Charcoal associated with flue 504

Site 4: 505

Metalworking residues

Site 4: 759 & 760

Discussion

The distribution of pits in period 5 is very similar to that in period 3. This may be coincidental, especially as, on site 4, the use of the pits changed, but it may well indicate a continuity of property boundaries which produced constraints on particular areas. Unfortunately there was no evidence for such property boundaries although they doubtless existed.

The area in the north-western corner of site 4 contained the waste products from cauldron manufacture. The remains of the bronze melting hearths are presumably to the north or in the unexcavated area between site 3 and site 4, although it is possible that flue 504 on site 3 may have been associated with this industry.

The pits in the southern part of site 4 are apparently related to each other, although they were not all open at the same time. The use of clay to line the sides of several of them may indicate that they contained liquids and may have been used for some purpose such as dyeing.

The final contents, which included broken pottery and roofing debris, suggest that they were deliberately filled at the end of their useful service with material resulting from local building operations.

■ PERIOD 6: Pits and stone building

Isolated pits were present on all four sites and the foundations of stone buildings were found on sites 1 and 4.

Description (Figs 78:M2.E8 and 80:M2.F1)

All the pits of period 6 were filled with mixtures of brown soil and pebbles with some gravel, apart from 407 and 651 which had been used for rubbish disposal. Isolated in the western extension to site 1 was wall 36, which had been cut into the rampart, and was associated with layers 50 to 53 consisting of dirty clay, ash, and charcoal.

PERIOD 6 PITS (Figs 78:M2.E8 and 80:M2.F1)

PIT	SITE	DIMENSIONS(m)		DEPTH(m)	FILL	PROBABLE PURPOSE
		E - W	N - S			
5	1 south	<u>0.6</u>	-	*	*	Not known
7	1 north	-	-	*	Mixed clay and soil	Not known
114	2	1.54	1.86	1.34	Brown soil, red clay, pebbles and roof tile	Rubbish pit?
405	2	2.64	-	**	Brown soil, pebbles, and pottery	Rubbish pit?
406	2	1.72	-	**	Gravel	Not known
407	2	-	-	**	Pottery, clay pipe, glass etc	Rubbish pit
510	3 north	-	-	various	Consists of unresolved pits 510, 519, and 530, containing brown soil and pebbles	Not known
511	3 north	-	-	**	Brown, charcoal-flecked soil	Not known
651	4	1.50 ±	1.26 ±	0.88	Stone-lined pit containing pottery, glass, and environmental material	Rubbish pit
716	4	1.31 ±	-	0.36	Stone-lined pit containing mainly brick but with green clay at the bottom	Cesspit & eventually rubbish pit
730	4	<u>4.0</u>	<u>3.0</u>	<u>2.0</u>	Roof tile, charcoal, and pottery in a fill of brown clay	Drainage pit

* not recorded ** pit not bottomed ± within stone lining

The earliest feature on site 4 was a large pit, 730, which contained a layered fill of mixed soils and gravels. The pit, which was not fully excavated, was deep enough for some of the lower levels to have remained waterlogged, and charcoal and wood ash were mixed with laminated plant material which may have been grass cuttings. Above pit 730 a slightly later fill, 704, represented infilling after the initial subsidence.

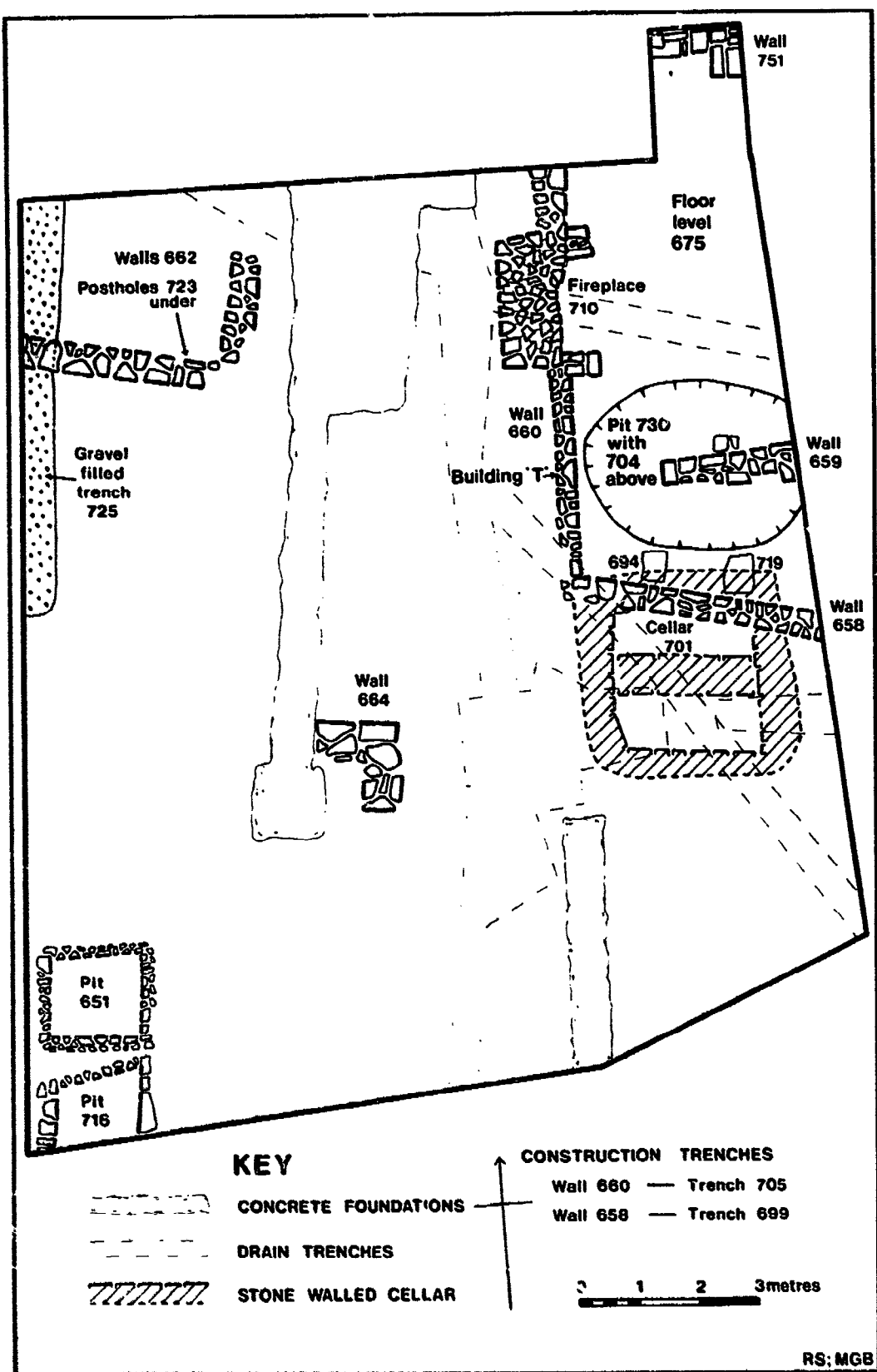


Fig 80 Berrington Street. Site 4. Periods 6 and 7.
Pits and the remains of building T

South of pit 730 was a small cellar, 701, which was some 2.5m square internally and was preserved to a depth of 2m. The walls were made of coursed stone backed with a rubble fill, but the cellar had no obvious means of entry. A platform, which ran east-west across the centre of the cellar, was about 0.8m high from the earth floor. The cellar, which had a mixed rubble and soil fill, was partly cut away by modern drains.

The upper parts of the north wall of the cellar were demolished before the stone building T was erected. In the first instance, foundation trenches 699 and 705 were cut and the resultant material, 695, was spread above pit 730. The west corner of the south wall of building T was supported on the north-west corner of the, by then, backfilled cellar, but the south wall did not follow the line of the northern cellar wall and was partly built above the cellar fill. This caused a void to appear underneath the new wall as the cellar fill consolidated. The western wall, 660, of building T, which survived in its foundation trench 705, included the base for a substantial stone fireplace, 710. This was built in a rectangular hole which had been cut through the whole build-up of the site into the natural gravel. Wall 751, at the extreme northern end of the site, and wall 659, above pit 730, were both internal partition walls with no foundation trenches and they only survived for one or two courses. Traces of a mortar floor, 675, were present in both rooms, and two flat stones, 694 and 719, had been carefully installed into the floor level just north of the main southern wall 658. There was no occupation debris within building T, which was eventually demolished down to the floor level.

In the north-western corner of site 4, a shallow, gravel filled trench, 725, ran down the western edge of the site. Partly above it was a double line of small postholes, 723, which were exposed as voids in the slight foundation trench for walls 662 which overlay the postholes. There were no floor levels associated with these postholes or with the later walls.

A fragment of wall, 664, which was found in the centre of the site, could not be related to any other feature. The walls throughout period 6 were either of drystone construction or were bonded with a red clay.

In the south-western corner of site 4 was a shallow stone-lined pit, 651. The contents showed that it was similar in date to the neighbouring site 2 pit, 407, and both had been used for rubbish disposal. They contained organic black fills which included quantities of fine glass, wine bottles with seals, and other expensive items. A soil sample from 651 contained environmental evidence including seeds and fish bones. South of 651 was a second, slightly larger stone-lined pit, 716, which contained a quantity of hand-made bricks.

Dating

The finds from this period can be dated with a greater degree of accuracy than those from the earlier periods. Pit 730 was filled by the mid 16th century and cellar 701 by cAD 1700. The main house building was constructed shortly after this date, together with walls 662 in the north-west corner, and both these buildings then continued in use throughout the period. Pits 407 and 651 are dated by the associated finds to AD 1700-20.

Inventory (Vol 3)

Small finds

Metal	Large copper pin	Site 4:	699	Fig 7.15
	Two pins	Site 4:	705	Fig 7.16 & 17
	Copper ring	Site 4:	730	Fig 7.19
	Pewter buckle	Site 4:	651	Fig 7.20
	Lead 'counter'	Site 4:	675	Fig 8.9
Glass	Fine glass	Site 2:	407	Fig 21.1-28
		Site 4:	651	Fig 22.1-18
		Site 4:	701	Fig 22.21
		Site 4:	705	Fig 22.22
	Wine bottles	Site 4:	651	Fig 23.1-11
		Site 1:	pit 5	Fig 22.28 & 29
Worked bone	Two bodkins	Site 4:	730	Fig 24.17 & 18
Coins	Penny Edward IV	Site 4:	695	No 9
	Half groat, Henry VII	Site 4:	730	No 10

Ceramic material

Pottery	Fabric	A2	A3	A4	A5	A6	A7	B1	B3	B4
	Sherds	4	3	2	3	4	369	36	2	282
	Percent	-	-	-	-	-	41	4	-	31

	Fabric	C1	C2	D1	D2	D3	E2	E4	E6
	Sherds	4	5	1	2	1	2	1	52
	Percent	-	1	-	-	-	-	-	6

	Fabric	F1	F2	G1	G4	G5	G6	G7	G8
	Sherds	6	9	8	1	7	5	9	79
	Percent	1	1	1	-	1	1	1	9

Illustrated pottery

Fig 40.4 & 5

Fig 42.1

Fig 45.9

Fig 48.1

Fig 49.7, 10, 16, & 18

Fig 55.1-20

Fig 57.1-35

Tile	Ridge tiles	Site 2: P114	Fig 60.9 & 10
		Site 4: 651	Fig 60.11

Environmental material

Fish bones	Site 4: 651
Insect fauna	Site 4: 651
Plant material	Site 4: 730
Seeds and grain	Site 4: 651
Charcoal	Site 4: 730

Discussion

The presence of the large pit 730, adjacent to Berrington Street, need not imply that there were no buildings on the site early in the 16th century. The pit could have been internal to a building and its possible use is indicated by a mid 19th century recollection of Hereford:

The condition of Hereford, from a sanitary point of view, was one entirely incomprehensible in these days. Sewers there were none. In some houses such drain as existed in the house discharged into a pit under the dining room or some other room on the ground floor, and either sank into the ground or evaporated (Humphrys 1925, 2).

The small cellar, 701, may have been in use as part of the same building which covered pit 730. There was no evidence for its date of construction but it was apparently backfilled some time after pit 730 was filled but before building T was constructed. There was no apparent means of entry to this room and it is possible that its use was as an ice-house rather than a cellar, with a trap-door entry from the room above.

The position of the cellar must have been forgotten and this meant that the south wall of building T was constructed on very poor foundations. This new building was presumably of a half timber construction with the low stone walls being used as bases for the timber frames. This type of construction can be seen in many small houses in the country areas of Herefordshire today. As was usual, the base of the fireplace was well constructed and may have been placed centrally in the west wall. The building must have fronted directly onto Berrington Street. The fragments of other walls on the site probably represent either outhouses or garden walls.

The contents of pits 407 and 651 do not seem to be in keeping with such a small building. The expensive ceramics and glassware together with whole wine bottles, represent material one would expect to find associated with a much grander establishment. The seeds and fish remains indicate a widely varied diet, which included some imported foods. In total, the finds from these refuse pits indicate a very high standard of living for the people in this small house in Berrington Street during the early years of the 18th century.

■ PERIOD 7: Later disturbances

The later features on the sites include drains, foundations, pits, and other features dating from the end of the 18th to the mid 20th century. On sites 1 to 3 all these levels, apart from the concrete foundations, were removed by machine, and on site 4, drain and water pipe trenches were excavated by hand after the removal of building debris by machine. Concrete foundations were left in place where they continued down to the level of the natural gravel (Fig 80: M2.F1).

Inventory (Vol 3)

Finds from this period are mixed in date and only a few are illustrated. They are all recorded as unstratified.

Small finds

Stone	Games disc (pottery)	Fig 11.18
	Flint	Fig 16.9
Jewellery	Stone pendant	Fig 20.7
Glass	Fine glassware	Fig 22.19, 20, 23, & 27
Coins	Elizabeth I sixpence	No 11

Ceramic material

Pottery	Illustrated pottery	Fig 29.23
		Fig 31.26
		Fig 40.9
		Fig 42.6
		Fig 49.15
Tile	Roof tile	Fig 60.5 & 8
	Floor tile	Fig 63.5-14
Fired clay	Loom weight fragments	No 10

B E W E L L H O U S E

INTRODUCTION

An area of approximately 500 square metres, in the north-western corner of the walled city, was chosen for the first large scale exploratory excavation by the City of Hereford Archaeology Committee (Fig 12.M1.A11). The site had previously been part of the Hereford Brewery but all the buildings with the exception of Bewell House itself were demolished in 1972. During the 18th and 19th centuries the gardens of Bewell House extended from Bewell Street to Wall Street and the excavation was contained within the northern part of this garden area.

The site was chosen to be representative of the proposed north-western development area, which includes much of the ground bounded by Bewell Street, Wall Street, and Widemarsh Street. The 1968 excavations at the Brewery site (M3:B5-E2) to the south-west of the chosen area had led to the suggestion that this part of the city had been part of a Saxon extra-mural settlement, and the excavation was partly designed to test this theory. The tail of the stage 5 extended gravel rampart was within the area chosen and it was hoped that the excavation would indicate the date of construction. Much of the area was excavated by hand to establish a dating sequence for pottery used in Hereford and to determine the depth and complexity of the archaeological deposits in the area.

The excavation lasted from November 1974 to June 1975 with occasional breaks during the winter months. It was funded by the Department of the Environment.

Finds from the excavation are deposited in the Hereford City Museum (Accession Number 1979/307).

ACKNOWLEDGEMENTS

Facilities for the excavation were granted by the then owners of the site, Pagebar Investments Ltd and the tenants, National Car Parks Ltd. The labour force consisted mainly of paid volunteers, but children

from both Haywood and Bishop's Schools assisted for short periods. Site supervisors were Chris Marley and Eric Smith.

METHOD

Machine clearance of the car park surface and the underlying hard core was followed by a hand examination of the post-medieval levels associated with the brewery and the Bewell House gardens. In all the previous excavations in the city the later occupation levels had been removed by machine, and this site provided an opportunity for an appreciation of these later deposits.

To obtain some indication of the depth and complexity of the deposits, two 2m wide trenches were excavated by hand down to the natural surface (Fig 81, below : trenches A & B). The trenches established the presence of a 13th century occupation surface above the rampart level and traces of an earlier occupation sealed underneath.

Areas C, D, and E were then stripped of the thick 18th century soil layers by machine and the earlier levels were examined by hand in areas C and E. A small trench F, at the north-eastern corner of the site, was excavated by hand to examine in more detail a gully previously seen in trench B. Area D was not fully excavated and the remaining areas of the site were not examined below the 18th century levels.

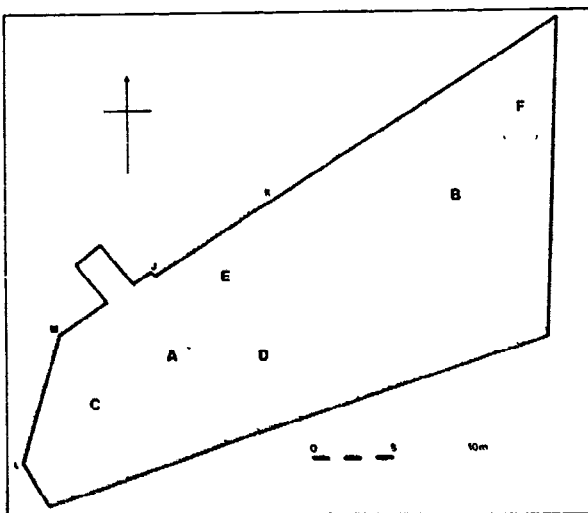


Fig 81 Bewell House.
Areas excavated

Site code: He74A
 Layers, features, etc: 1-442 (context numbers)
 Small finds: 1-121
 (Other finds are recorded under context numbers)
 Datum used on sections: 55.1m (approximately the level at which
 the undisturbed natural gravel was found)

A numerical card index system, which was established at the beginning of the excavation, was designed to record all layers and features in a single series of context numbers. This continuous numbering system has been used for all the excavations in the city since 1974.

Basic details of each context are recorded on cards, but site note books are used for additional notes, sketch plans, and small sections. Not all the context numbers used are mentioned in this report. Some have been amalgamated where it has become obvious that they represent identical features, and others have been classified under one general context number although several contexts were used for the feature during the excavation. No attempt has been made to give a full description of each context in this report, and the large number of plans and sections drawn during the excavation are not all published.

SUMMARY OF CHRONOLOGY AND PERIODS

PERIOD	DESCRIPTION	PROBABLE DATE RANGE
0	Prehistoric and Roman finds	
1	Pre-rampart ditches and gullies	11th to late 12th centuries
2	Rampart (Defences: stage 5)	Late 12th century
3	Timber building and cesspits	Early 13th century
4	Grain drying oven and timber building	Mid 13th century
5	Various pits	Late 13th to mid 14th century
6	Property boundaries and pits	Late 14th to late 17th century
7a	Bewell House gardens phase 1	Early 18th century
7b	Bewell House gardens phase 2	Late 18th to early 19th century
8	Hereford Brewery	Mid 19th century onwards

THE EXCAVATION

■ PERIOD 0

Several sherds of Roman pottery, part of a brooch, and one denarius, were found, mainly in the occupation levels of periods 4 and 5. Two worked flints were found in similar contexts. There were no indications of settled occupation in the area before period 1.

■ PERIOD 1 - Gullies (Figs 82: M2.F1 and 83:M2.F12)

Description

Four parallel gullies, cut into the natural gravel, crossed the site in an east-west direction. The southern one, 349, and the one furthest to the north, 132/380, were deeper than the others.

Gully 349 was cut some 0.7m into the natural gravel and was about 2m wide. It was rather irregular in section with a tendency to be slightly flat-bottomed. The lower part of the fill consisted of a stony brown soil with some gravel, similar to the undisturbed natural of the site. This layer filled the irregularities in the bottom of the gully and may have been the result of silting from upcast left on the southern side of the gully. Above this initial fill was a thick layer of brown silt which was similar in appearance to the overlying period 3 soil layer, 400. Several features in the immediate area of the gully were first seen at the same level as 349 and may thus be associated. Three small stakeholes, collectively 435, cut into the northern side of the gully, and were each about 0.2m deep and some 0.08m in diameter. They were filled with material similar to the lower fill of the gully. A posthole, 434, some 0.6m deep and with a similar fill to the stakeholes, was thought at the time of excavation to predate the ditch, but this could not be confirmed. Two small features, 262 and 282, both some 0.3m deep and filled with a dark soft, sandy silt, post-date the gully. Except for a few animal bones, there were no finds associated with ditch 349 and the surrounding features.

Four metres to the north, and parallel to 349, was a much shallower gully, 417. It was about 1m wide and was cut into the natural gravel for a depth of some 0.15m. The fill of brown silt was similar to the material which filled the upper part of 349. This gully had a slight extension to the south near the centre of the

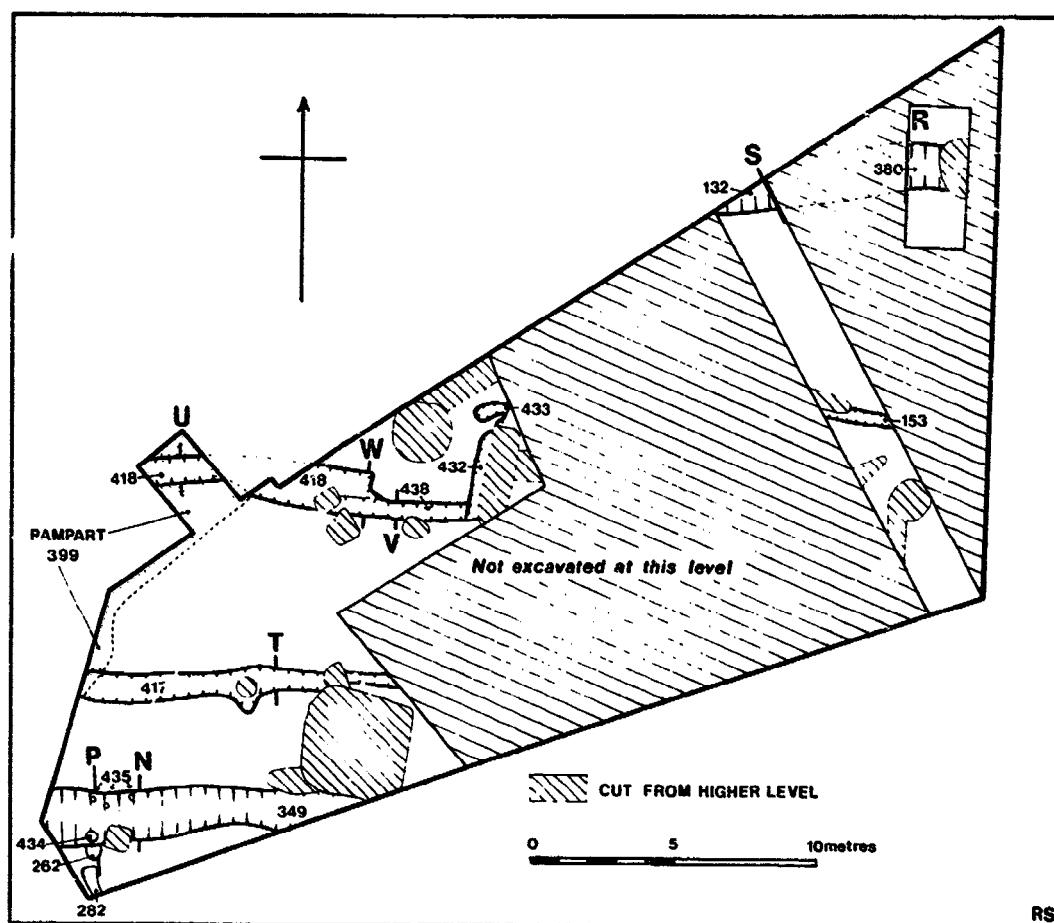


Fig 82 Bewell House. Periods 1 & 2. Plan of features.
For sections see Fig 83:M2.F12

area excavated, but this may have been due to the incomplete excavation of the overlying period 3 postpit 421.

Eight metres north of 417 and on the same alignment was gully 418/438. This was the only gully which was convincingly sealed by the stage 5 rampart of period 2. The western portion, 418, including the part sealed under the rampart, was about 1m wide and some 0.2m deep. The eastern part, 438, was about 0.75m wide and slightly deeper than 418. Both were filled with light brown, stone-free silt. The two gullies did not join end-to-end but rather side-to-side producing a short stretch of gully 1.6m wide. There was no evidence to show which part had been dug first. Underneath the rampart the cut of 418 was not apparent until the buried soil layer, 416, had been removed, and the gully was then seen as a cut into the natural gravel.

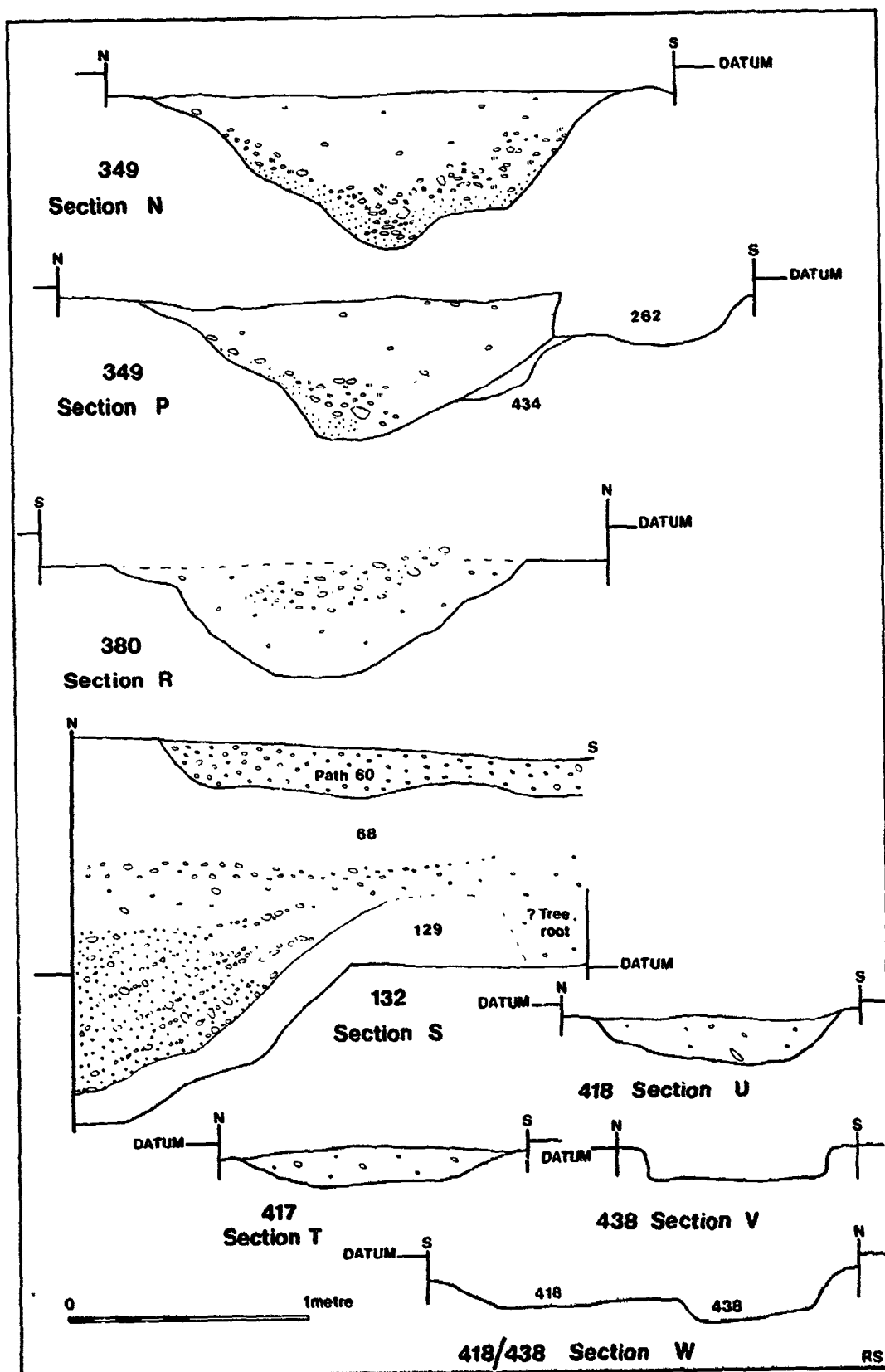


Fig 83 Bewell House. Period 1. Sections of gullies.
For the positions of the sections see [fig 82:M2.F11](#)

The northernmost gully within the area of the excavation was found in the north-eastern corner of the site and was parallel to the three previously described. It was seen in trial trench B, context 132, and again in the small cutting F, context 380, where it was about the same size as gully 349 and had a similar flat bottom. In trench B only half of the ditch was within the area excavated, the remainder being under the baulk. It was deeper than in trench F being cut some 0.9m into the natural gravel. A thick, brown silt, 129, which covered the side and bottom of the ditch, continued for a short distance to the south. The remainder of the fill was a clean, loose pink gravel similar to the stage 5 rampart material (Fig 83:M2.F12 - section S).

Other features which are considered to be of period 1 include gully 432, at right angles to 438, and gully 433 slightly to the north, both with identical fills to 438. In trench B, the continuation of gully 438 was not apparent, but a shallow gully, 153, on a slightly different alignment was of similar shape and fill.

Over most of the site the lowest soil level, 400, which should have been associated with these period 1 features, had been disturbed by cultivation during period 3. It was only in the small area towards the north-western corner of the site, under the stage 5 rampart material, that the undisturbed soil level, 416, was present. It consisted of a fine brown soil with occasional stones and showed only slight signs of occupation. This layer may also have been cultivated before the stage 5 rampart was built as there was no indication of any cuts extending through 416 and representing gully 418.

Dating

Animal bones from gullies 349 and 380 were used for radiocarbon dating. The sample from 349 was too small (HAR 1317), but that from gully 380 gave a date of ad 1080±80 (HAR 1260). This date is likely to be older than the date of the feature, but gives an indication of the period during which the gully was open.

An attempt was made to date the features of period 1 by examining the residual magnetic field in the ditch silts, but this was unsuccessful.

Inventory (Vol 3)Ceramic material

Pottery	Fabric	B1	B2	C1	D1	D2	E1
	Sherds	6	2	6	3	4	1

Illustrated pottery

Fig 38.9

Discussion

The gullies are considered to be property boundaries which became disused when the stage 5 gravel rampart was constructed. A similar gully (context 2) was found on the Brewery site, approximately in line with gully 349 (M3.B9). The positions suggest that they were the boundaries of long, narrow plots which fronted on to the line of the present day Edgar Street (Fig 12:M1.A11). Material identical to the rampart gravel was present in the fill of gully 132 but was absent in the similarly situated gully 418. This suggests that the gullies were of at least two periods and that the earlier ones had been open for a sufficient length of time to have completely silted up before the rampart was built.

The soil levels and upcast associated with the gullies, with the exception of the material sealed beneath the rampart tail, were destroyed by cultivation during period 3.

■ **PERIOD 2 - The gravel rampart (Defences - stage 5) (Fig 82:M2.F11)**

The gravel rampart, which was eventually faced by the defensive stage 6 city wall, follows the northern and western boundaries of the car park and the excavation site. Much of the rampart on the western side of the car park was removed when the ring road was constructed, and on the north the major part of the rampart is underneath Wall Street.

Description

A north-western extension to the main site was excavated into the tail of the rampart as far as the wall surrounding the car park. The rampart, 399, sealed the period 1 gully, 418, and some 0.4m of the clean soil layer, 416 (Fig 84:M2.G1). The rampart tail was partly cut away by furnace 304 of period 4 and by later features. The remaining material consisted of a very clean gravel with some small pebbles.

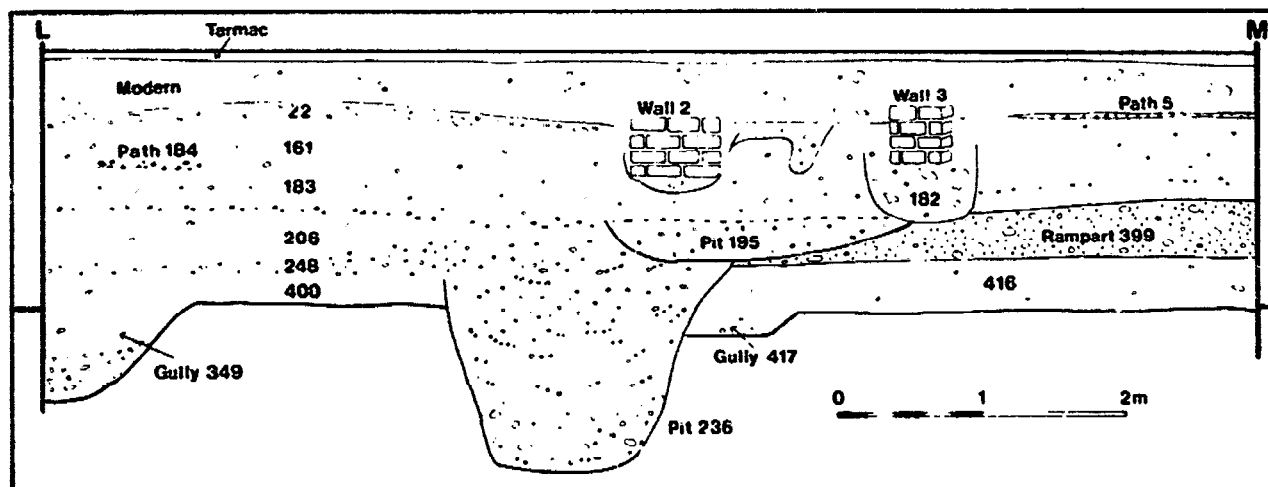


Fig 84 Bewell House. Section L - M. For the position of the section see fig 81:M2.F8

Dating

There were no dateable objects from the rampart itself, but a date range for its construction can be estimated by considering the pottery sealed underneath the rampart and the pottery from the period 4 features cut into the rampart tail. The material under the rampart is considered to be not later than the mid 12th century and that from the period 4 features is of early to mid 13th century date. A constructional date for the stage 5 rampart in the late 12th century would appear to be most likely.

Inventory

Nil

Discussion

The extended defensive line of the late 12th century cut across several property boundaries and must have involved a complete reorganisation of the ownership of the ground in this part of the city. However, this does not become apparent until periods 4 and 5 when the boundaries take a different alignment with the properties fronting on to Bewell Street.

The rampart material was very clean and must have been dug from some depth within the natural gravel, presumably from an external ditch.

■ PERIOD 3 - Timber building and cesspits (Fig 85:M2.G3)

The immediate post-rampart levels were confused by two factors: cultivation over the whole area during succeeding periods; and the tendency for the period 2 rampart material to slip over parts of the site and mix with the similar products of the excavations which were part of period 4. The combination of these factors meant that no period 3 occupation level survived and that the soil levels tended to be homogeneous. The features of period 3 which survived consisted of the lower parts of three groups of postholes and postpits and two probable cesspits.

Description

The rampart slip, where it could be separately defined from the gravels of the period 4 disturbances, is identified as context 401; the cultivated soil levels are accumulated as context 400 to the west of the site, and to the north, under the gravel and clay floor of period 4, context 415 is the higher and 419 the lower of the soil levels. The pottery fragments did not indicate any variation in date throughout these layers which were up to 0.6m thick.

The lower parts of many postpits survived where they cut into the natural gravel but most of these were not seen until the final stages of the excavation. However, pottery sherds found in several of them indicated that they belonged to the early 13th century. Others were sealed by the metalling and clay floor of period 4 and are therefore of period 3 or earlier. The postpits are described in three groups according to their size, depth, and position.

Group 3a: Many large and deep postpits were found in the central part of the excavated area. They varied from about 0.7m to over 1m in diameter and the cuts continued into the natural gravels with total depths varying from 0.3m to about 1m from the assumed level of the surface during the period. In all cases the tops of the pits were very diffuse; and a surface level approximately 0.3m above the natural gravel and 0.1m below the surface of the period 4 features was chosen as being a reasonable compromise to use in estimating the depths.

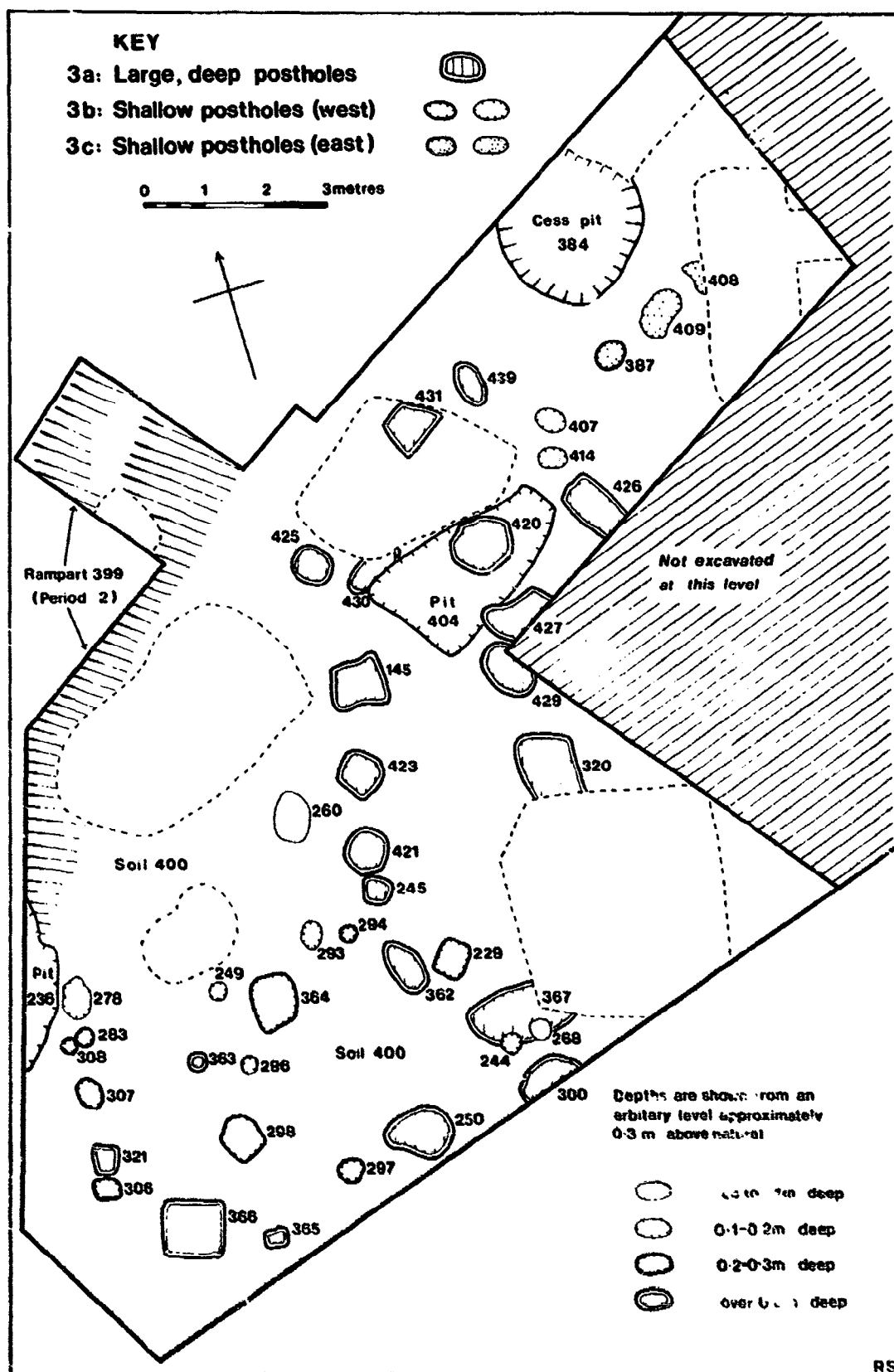


Fig 85 Bewell House. Period 2 - extent of rampart;
Period 3 - plan of features

The pits are assumed to have been the remains of a substantial timber building and are described as such. The main axis is apparently north-south following the postpit line from 250 at the south to 425 at the north with five intermediate posts (362, 245, 421, 423, and 145), giving a total length of at least 10m. A northern side can be postulated from a corner at postpit 425 through 430 and 420 to 426, with a minimum length of 5m. If this building plan is accepted then the large internal postpits such as 367, 320, 427, and 429, all of which were above average depth, could represent central supports, and the shallow pit 404, some 0.25m deep, filled with a mixture of soil and stones, may represent a refilling of the entry into the building in which case pit 420, which was exceptionally deep, could represent a doorpost.

Several of the postpits contained traces of a post position but the homogeneous fill and irregularity in shape of many of them suggests that the timbers were eventually dug out and removed. Most of the pits had a uniform fill of soft, brown, loamy clay with some charcoal flecking.

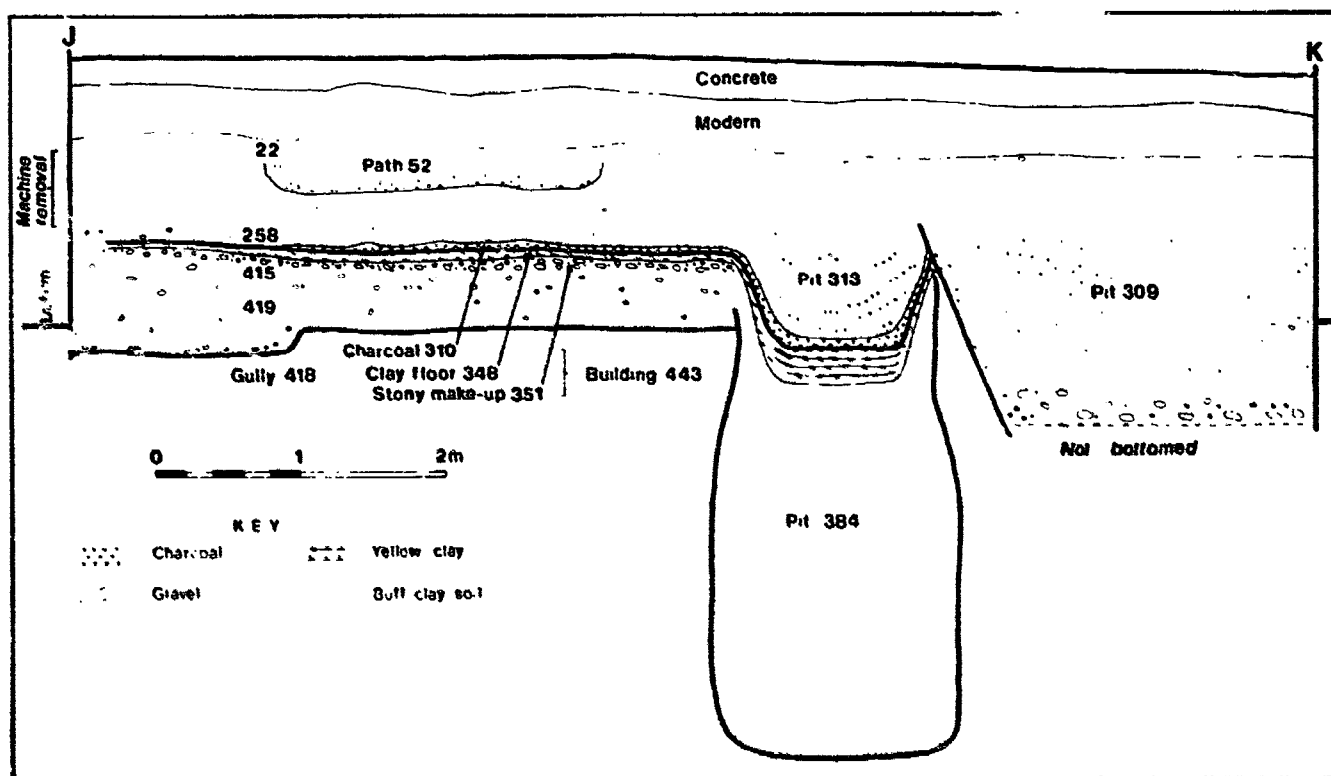


Fig 86 Bewell House. Section J - K. For the position of the section see fig 85, p. 48

PERIOD 3 - GROUP 3a POSTPITS (Fig 85:M2.G3)

PIT	DIMENSIONS (m)		DEPTH (m) (from assumed ground level)	FILL
	E - W	N - S		
145	1.0	1.0	0.40	Light brown, sandy soil, gravel, and pebbles. Possibly contained 2 timbers
245	0.51	0.7	0.48	Dirty gravel
250	1.1	0.85	0.37	Soil and gravel with posthole in one corner
300	1.0	-	0.69	Dark soft soil
320	1.1	-	0.80	Stony loam
362	0.4	1.0	0.74	Soft brown clay, pebbles, and charcoal flecks. Post position at S end
367	-	0.88	0.74	Brown soil, small stones, and charcoal flecks
420	1.1	0.9	>0.7	Soft sandy loam
421	1.0	0.8	1.16	Clayey loam
423	0.9	1.0	0.59	Soft sandy loam
425	0.8	-	0.65	Soft sandy loam and charcoal flecks
426	0.8	-	0.61	Brown loam, pebbles, and charcoal flecks
427	1.3	-	0.79	Sandy loam, pebbles, and charcoal. Post position at E end
429	1.05	0.8	1.13	Soft brown soil
430	1.1	0.46	0.63	Dark soil
431	1.2	1.2	0.69	Clay loam and charcoal flecks. Possibly contained 2 pos
439	0.45	0.7	0.86	Sandy clay loam

Group 3b: Several shallow postholes and postpits, found to the west and south of the site, were mainly of irregular shape and size. There was an apparent north-south alignment from 278 to 306 but the others appeared to be placed at random. With the exception of the large square pit 366, the group 3b pits were all much smaller and shallower than the postpits of group 3. Two small postholes 244 and 268 appeared to be later than the 3a postpit 367 but they may have been post positions associated with this pit. The fills of the 3b features were similar to those of 3a but tended to be slightly darker in colour.

PERIOD 3 - GROUP 3b POSTPITS (Fig 85:M2.G3)

PIT	DIMENSIONS (m)		DEPTH (m) (from assumed ground level)	FILL
	E - W	N - S		
229	0.75	0.85	0.34	Brown, stony loam
244	0.40	0.40	0.19	Dark brown soft loam
249	0.35	0.35	0.16	Dark loam and gravel
260	0.80	1.00	0.05	Clay loam and pebbles
268	0.45	0.45	0.17	Stony loam with some charcoal
278	0.65	0.85	0.15	Soft soil and gravel
283	0.40	0.40	0.28	Soft soil and gravel
293	0.45	0.60	0.16	Soft soil
294	0.35	0.35	0.21	Soft soil
296	0.35	0.35	0.20	Soft soil
297	0.55	0.40	0.24	Soft soil
298	0.90	0.95	0.25	Soft soil
306	0.65	0.50	0.29	Soft soil
307	0.50	0.65	0.30	Soft soil
308	0.25	0.25	0.25	Soft soil
321	0.55	0.65	0.36	Loose brown loam
363	0.35	0.35	0.78	Soft soil
364	0.95	1.15	0.50	Soft soil
365	0.50	0.40	0.49	Soft brown loam
366	1.25	1.25	0.59	Dark brown loam

Group 3c: A line of five shallow postpits, 414 to 408, aligned roughly east-west were found under the southern edge of the period 4 clay floor, 348. They had a fill of gravelly soil with no obvious post positions.

PERIOD 3 - GROUP 3c POSTPITS (Fig 85:M2.G3)

PIT	DIMENSIONS (m)		DEPTH (m) (from assumed ground level)	FILL
	E - W	N - S		
387	0.7	0.7	0.24	Stony soil with some clay
407	0.65	0.45	0.19	Soil, pebbles, and clay flecks
408	-	0.7	0.15	Soil and gravel
409	0.85	1.0	0.20	Stony loam and some clay
414	0.6	0.5	0.14	Soil, gravel, and clay flecks

Two large pits were considered to be of the same period as the postholes described above. To the west of the site, pit 236 was excavated to the section line (Fig 84:M2.G1; section L-M). It contained layers of dark soil and mixed gravel, indicative of a cesspit. The pit was cut through the tail of the stage 5 gravel rampart.

At the east of the site, and underneath the period 4 clay floor, 348, was a very large cesspit (Fig 86:M2.G4). The upper part of the fill, 313, was dated to period 4 and is discussed later. The remainder, 384, was some 2m in diameter and over 4m deep from the assumed ground level. The lower parts of the contents were removed by machine when hand excavation became too dangerous. The fill of dark greenish material was mixed with bands of cleaner gravel. There was some evidence in the upper part of the fill to suggest that the pit may have been timber lined (see period 4) (Fig 96:M3.A5).

Dating

A silver pennv of Henry I (probably lost before AD 1140) was found in trial trench A at an equivalent depth to the general soil level 400 and in the vicinity of pit 404. A penny of Henry II (probably lost between 1185 and 1205) was found in postpit 260. The first coin was within the cultivated soils and does not help with the dating of period 3. The second was in the large but shallow post-pit 260 and could refer either to the construction or to the demolition of the associated structure.

The pottery finds from the features of this period suggest that the building or buildings associated with the postholes were in use during the early 13th century.

Inventory (Vol 3)

Small finds

Stone	Whetstones	245, 384, & 364	
Worked bone	Carved bone plate	260	Fig 11.9-11
Coins	Silver penny of Henry I	400	Coin c
	Silver pennv of Henry II	260	Coin d

for more than the average household use and it would have been more appropriate for the general use which may have been anticipated by the manning of a defensive tower.

Once the stage 6 city wall and bastions were built, towards the end of period 3, there would have been no need for any other defensive towers and the ground within the line of the wall walk may then have become cultivated.

If the above interpretation is accepted, periods 2 and 3 should be considered together as the defensive phase in the occupation of this area of the city, replacing the extra-mural cultivation of period 1 and in turn being replaced by further cultivation and eventually the industrial activity of period 4.

■ PERIOD 4 - Grain drying oven and timber buildings (Fig 87:M2.G10)

Property boundaries were still not apparent in period 4 but the use of the area changed in the mid 13th century when it became a minor industrial site with two buildings, one containing a small oven or furnace, probably used for grain drying, and the other containing a working area (Fig 88). The buildings were in use only for a short time.

Description

Two related structures were found; pit 304 containing an oven or furnace within a small building, and the remains of a second building, 443. The two structures were surrounded by pebble and gravel metalling which was very similar to the stage 5 rampart material of period 2. Some of the metalling was doubtless slip off this rampart and the remainder may have been obtained when pit 304 was cut into the rampart and the underlying natural gravel. The gravel provided a rough hard-standing around the buildings and, together with the clay floor of building 443, sealed some of the postholes of period 3. The various parts of the metalling, 134, 202, 330, and 341 were of different thicknesses and quality and may have been laid at different times during the use of the buildings and oven. The metalling apparently continued in use during part of period 5.

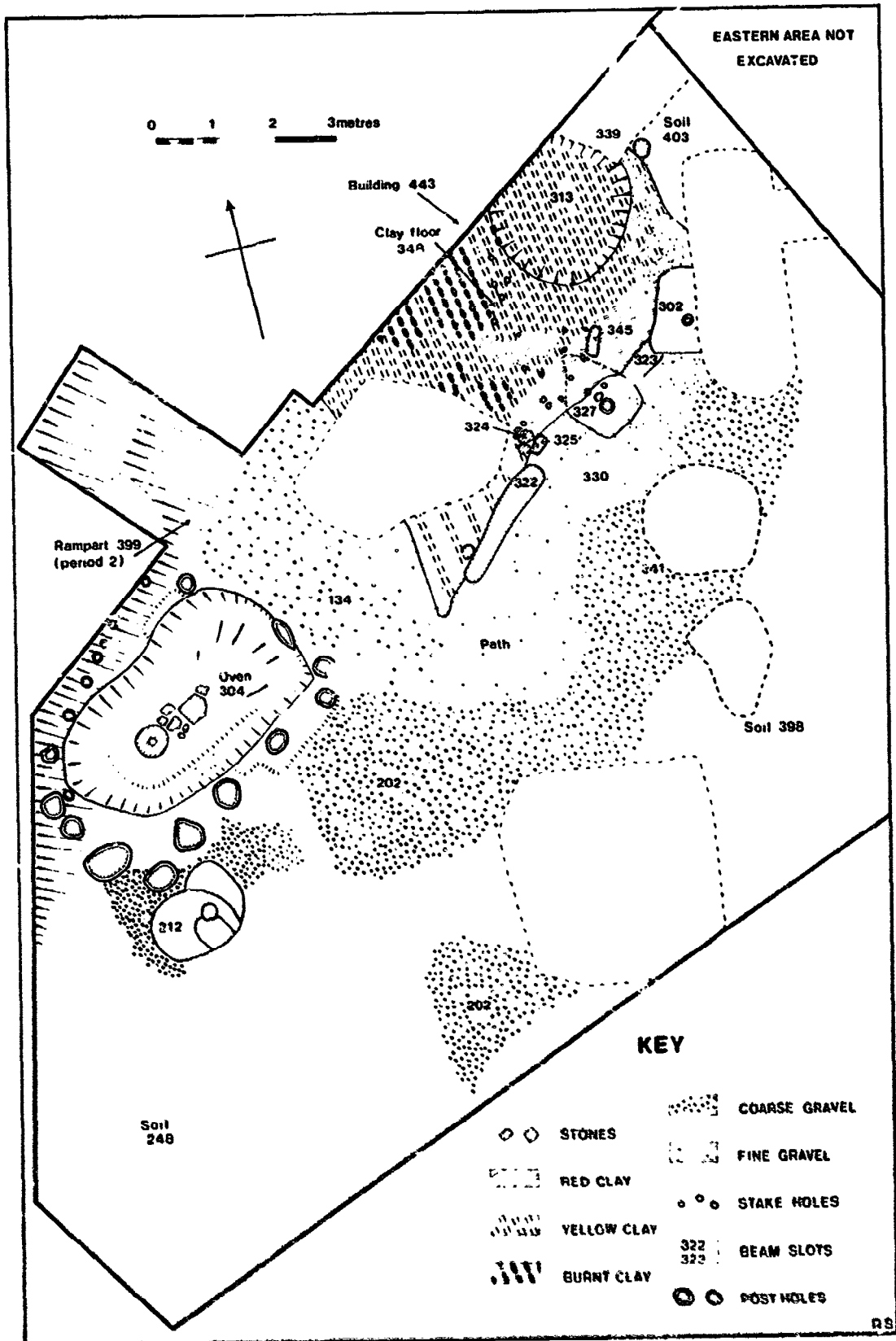


Fig 87 Bevell House. Period 4. Plan of features

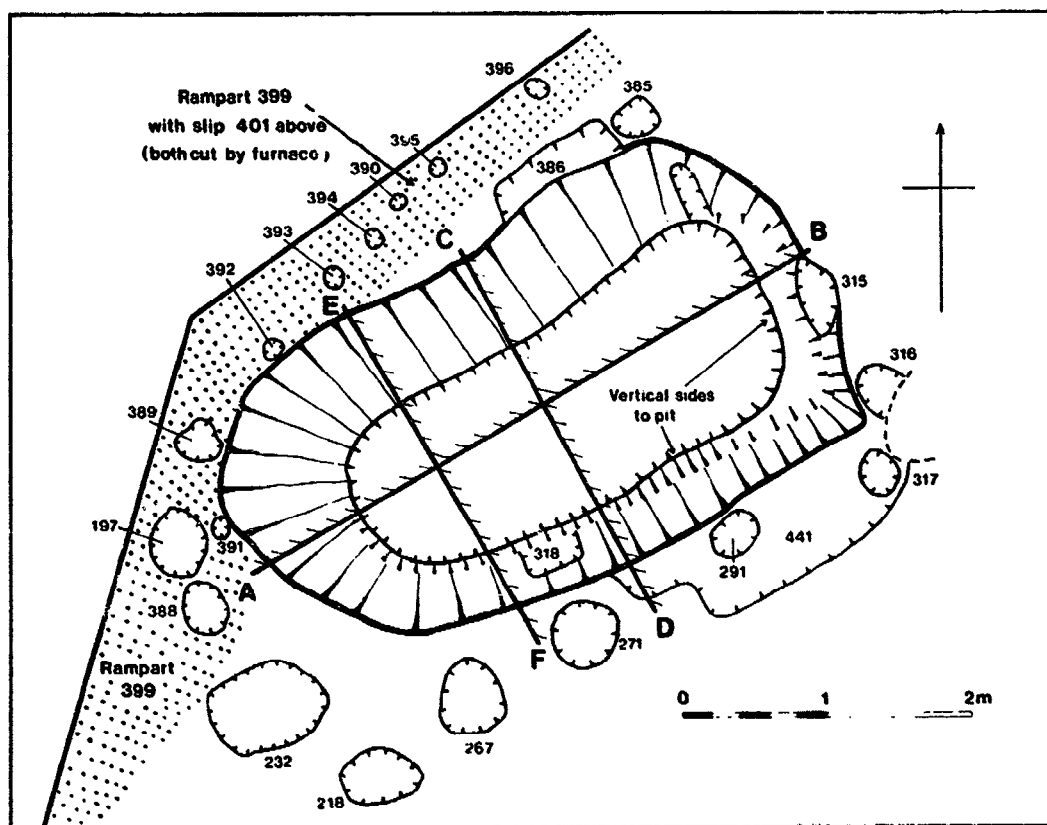


Fig 89 Bewell House. Period 4. Plan of oven 304 and the associated building

The westernmost building (Fig 89, above) was about 5m long and 3m wide and was cut slightly into the tail of the rampart. It had been constructed on a series of posts of which the postpits survived, some being up to 0.6m in diameter. The average depth of the posts, from the assumed ground level on the south and west sides of the building, was about 0.3m. On the east, posthole 315 was 0.6m deep but on the north there were only small stakeholes which were some 0.1m in diameter. The stakeholes were found as shallow gravel-filled depressions in the buried soil, 416, which lay underneath the stage 5 rampart, but a careful examination established that the stakes had originally passed through the rampart material. The slight nature of the stakeholes suggests that the building was constructed as a lean-to against the rampart.

PERIOD 4 - POSTHOLES ASSOCIATED WITH FURNACE BUILDING (Fig 89:M2.G11)

POST	DIMENSIONS(m)		DEPTH (m) (from assumed ground level)	FILL
	E - W	N - S		
197	0.42	0.48	0.35	Grey-brown soil with few stones
218	0.55	0.40	0.31	Gravelly fill; post position
232	0.80	0.70	0.28	Red gravel
267	0.48	0.52	0.32	Stony loam with clay flecks
271	0.46	0.47	0.24	Stony loam with clay flecks
291	0.30	0.35	0.31	Loam and gravel
315	c0.3	c0.5	0.57	Soft loam with charcoal and clay flecks
316	-	0.34	0.29	Soft loam with few stones
317	0.28	0.30	0.31	Soft loam with few stones
318	0.42	-	0.48	Loose sandy loam and charcoal flecks
385	0.34	0.30	0.20	Gravel
388	0.34	0.36	0.35	Gravel
389	0.34	0.28	0.21	Gravel
390	0.10	0.10	-	Gravel (stakehole)
391	0.12	0.15	-	Gravel (stakehole)
392	0.13	0.13	shallow	Gravel (stakehole)
393	0.12	0.13	-	Gravel (stakehole)
394	0.13	0.13	-	Gravel (stakehole)
395	0.12	0.12	-	Gravel (stakehole)
396	0.15	0.13	-	Gravel (stakehole)

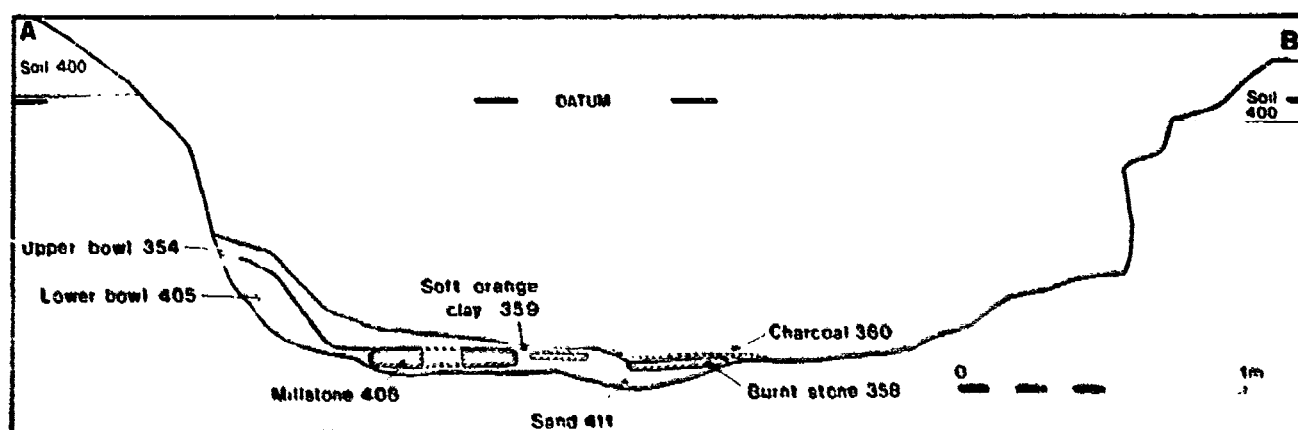


Fig 90 Bewell House. Period 4. Section A - B through oven 304.
See fig 89:M2.G11 for the position of the section

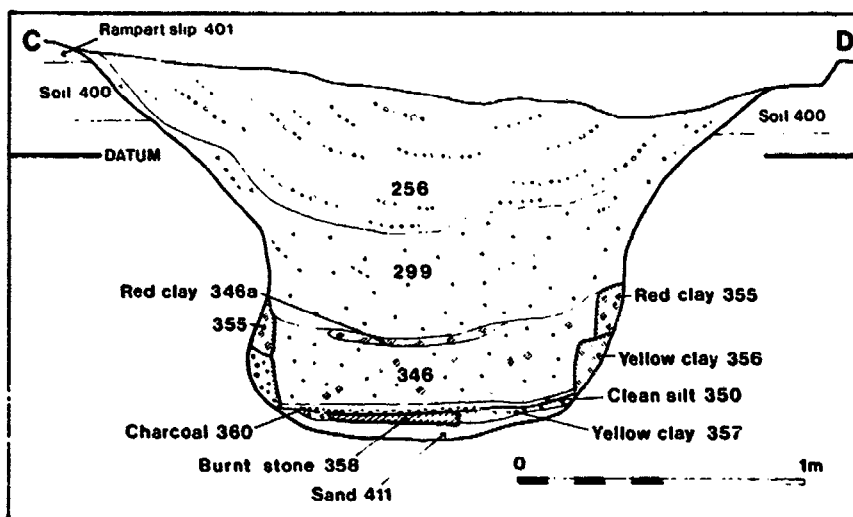


Fig 91 Bewell House. Period 4. Section C - D through oven 304. See fig 89:M2.G11 for the position of the section

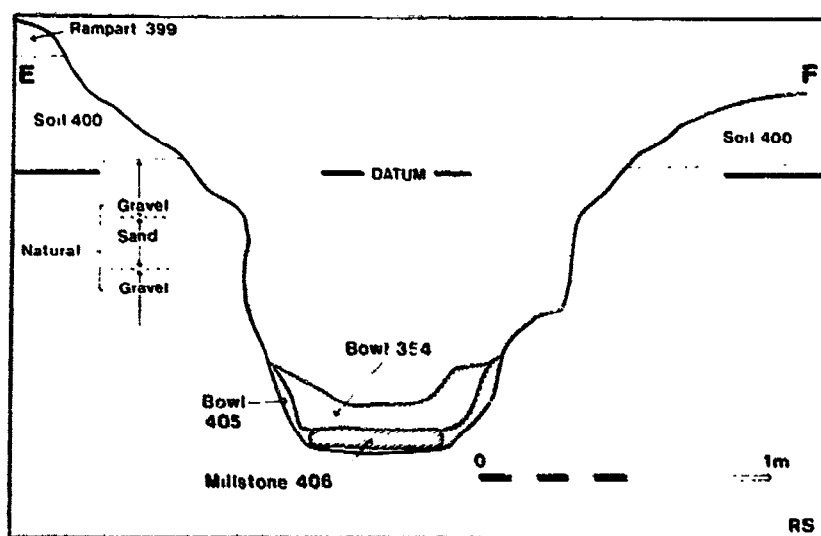


Fig 92 Bewell House. Period 4. Section E - F through oven 304. For position of the section see fig 89:M2.G11

The building contained pit 304 which had been used as an oven or furnace. The two postholes at the south-east corner of the building were in a depression, 441, about 0.2m deep. This could represent the doorway, with a step leading down into the stoking pit. A second smaller step, 386, about 0.1m deep may have been associated with an alternative entry on the north side. The pit, which was totally within the building, was 4.5m long and 2.5m wide and was about 1.4m deep when originally dug. It was roughly oval in plan and the bottom was flat over most of the length. The sides had a gentle slope towards the top of the pit but lower down they were steep, with parts undercut into the soft natural gravel and sand (Figs 90:M2.G12, 91:M2.G13, and 92:M2.G13). One apparent post position, 318, was found within the building. It was seen only in the shelving on the southern side of the pit (Fig 89:M2.G11), but had it continued to the assumed ground surface, the posthole would have been about 0.5m deep.

In both of the phases of use of the pit, the stokehole was in the eastern part, the fire was central and a clay-lined vertical flue filled the western part (Figs 93:M3.A1 and 94). In the lower, first phase the base of the western flue consisted of a re-used millstone, 406, 0.5m in diameter and 0.08m thick, which was laid on a clean layer of sand, 411. The sand continued under a flat, burnt stone, 358, in the centre of the pit, and it was on this stone that the fire had been laid. Lipping the millstone and continuing up the sides of the pit was a layer of fired clay, 405. The clay had been moulded onto the base and sides of the pit, smoothed on the inside, and eventually fired to a grey colour. From the flat base, the clay sides went up for some 0.3m at about 30° to the vertical and then flattened out at the top. Several stones, 410, which separated the bottom of the flue from the hearthstone, were laid on a layer of soft orange clay, 359, which merged into a yellow clay, 357, which covered the central part of the base of the pit above layer 411.

In the second phase, although the central part of the pit was unchanged, a new bowl, 354, was laid over the top of 405. This was more heavily burnt towards the top and was apparently designed to ensure a more gradual slope to the flue.

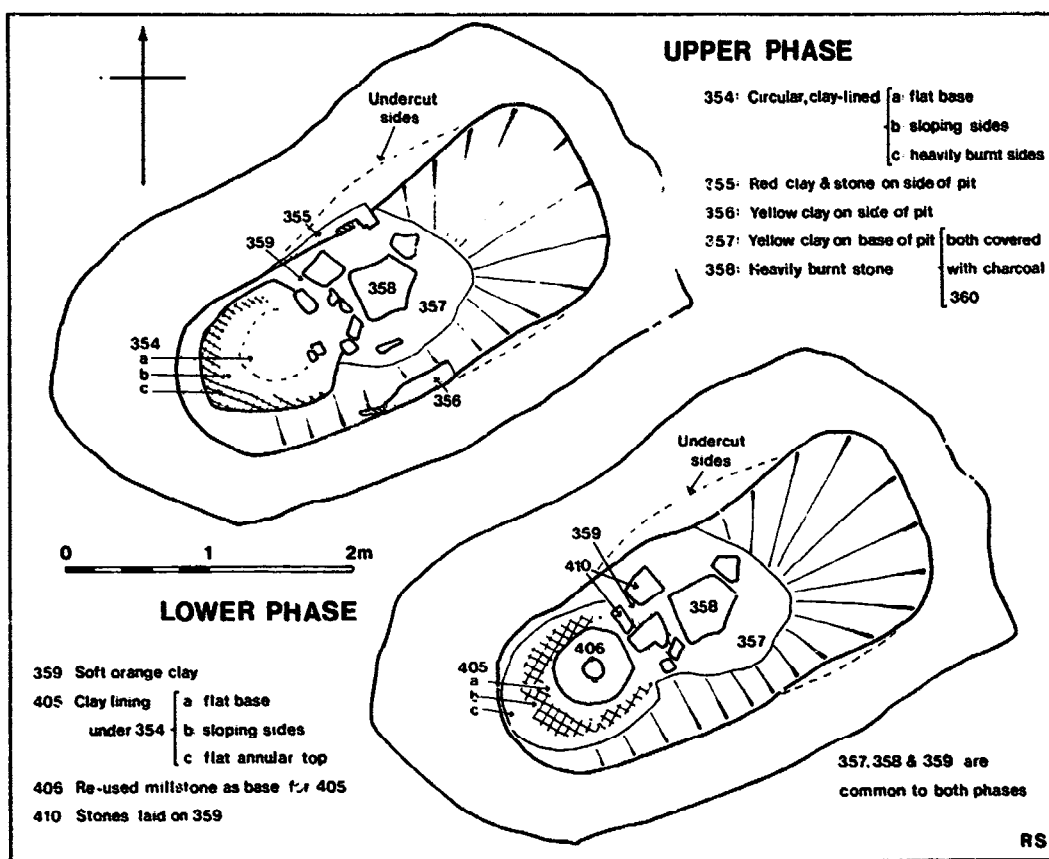


Fig 93 Bewell House. Period 4. The two phases of use of oven 304

On the sides of the pit, opposite the central burnt stone, 358, an arrangement of clay and stone, 355/356, was probably part of the second phase of construction (Figs 91:M2.G13 and 93, above). It continued up the sides of the pit for about 0.4m with the eastern ends opposite each other and shaped vertically. It could represent the remains of a partial blocking which restricted the size of the aperture through which the fire was stoked, or alternatively it could have been part of a support for a superstructure above the fire.

Above stone 358 and clay 357 was a layer of compressed charcoal, 360, some 20 to 30mm thick, which presumably represented the last firing of the oven. It contained charred grain of oats, wheat, and barley.

The remaining parts of the pit fill were deposited after it fell into disuse (Fig 91:M2.G13). Directly above the charcoal was layer 350, 30 to 40mm thick, comprising a very fine and clean silt. This was covered by 346, a clayey loa containing charcoal and occasional pieces of red clay, and 346a which contained a larger concentration of red clay. This probably represents the collapse of the super-structure of the furnace, and it may be that the lean-to building had disappeared by this time. The lower of the two remaining fills, 299, contained much charcoal, suggesting that some of the waste products of the oven, left in the surrounding area, may have been used to fill the hole. The upper layer, 256, was a much cleaner mixture of gravel and soil but there was still a concentration of charcoal in the overlying levels of both periods 5 and 6 in the vicinity of the oven, which indicated the presence of the underlying structure.

East of the furnace, and separated from it by some 3m of pebble metalling, 134, were the fragmentary remains of a second building, 443 (Fig 87:M2.G10). This structure was unfortunately cut at the west and the east by later features and extended outside the excavated area to the north-west. The building was at least 7m long and more than 3m wide. A posthole and sleeper beam complex were found along the south-eastern side comprising features 322, 327, 323, and 302. This complex was on almost the same alignment as the 3c group of postholes in period 3, but the earlier postholes were sealed by the edge of the period 4 clay floor. Underneath the floor of the building was a make-up level, 351, comprising a mixture of clay and gravel, which was laid on the period 3 soil level 415 (Fig 86:M2.G4, section J-K). On top of this make-up layer was a thin clay floor 348. It was bounded on the south-east by two shallow trenches, 322 and 323, which were about 0.15m deep and 0.3m wide and had a fill of hard, sandy loam. The clay floor came exactly to the edges of the slots which were considered to be sleeper beam trenches. Between 322 and 323, near the middle of the south-eastern side of the building, were two post positions. The more easterly one, 327, consisted of a large post pit, partly sealed under the clay floor, but with a central post position outside the edge of the floor and in line with the sleeper beam trenches. The post position was found as a void and was some 0.2m in diameter and 0.65m deep below the level of the clay floor. A smaller posthole, which adjoined the main post position to the north, was found in the same postpit and was 0.25m in diameter and 0.25m

deep. It was also outside the edge of the clay floor and may have been a later insertion. A second posthole, 325, which was found 1.5m to the west of 327, was in proximity to a group of stones 324. This posthole, which was only 0.15m deep and 0.2m in diameter had much charcoal in its fill, and was earlier than the stones, 324, which apparently replaced it. The stones, which consisted of a roughly circular pile about 0.4m in diameter and 0.1m thick, included part of a quern.

The gap between the sleeper beams 322 and 323 presumably represented a doorway, probably of two phases, the original one with the door hung on a deeply sunk post at the east, and the replacement with the door pivoting on the stone pile to the west. The beam slot, 323, was cut at the north-east by a large postpit, 302, which may also have been part of the second phase in the life of the building. It was 0.5m deep and 0.7m wide with a central post position. The north-east and south-west sides of the building were difficult to establish as the clay floor tended to become fragmentary away from the central area. Posthole, 339, 0.3m in diameter and 0.3m deep, may have represented part of the north-eastern side.

Within the building were many stakeholes and one small irregular posthole, 345, which was 0.25m deep. The stakeholes were mostly concentrated within and to the north of the entry, and probably represented flimsy partitioning of the building into two rooms together with some screening of the door. The floor of the building showed variations on each side of this central partition line. To the south-west there were signs of burning and the floor was baked to a bright orange colour in many places. To the north-east of the partition line the floor was in two parts. The south-eastern part was of red clay, with little sign of disturbance, and apparently in a similar condition to when it was laid. The northern part was unburnt but had oxidised to a yellow colour.

Much of the north-eastern room was above the period 3 cesspit, 384. The upper part of the pit was apparently reused during period 4 as a shallow clay-lined hole, 313, in the centre of the room (Fig 95:M3.A4). The earlier pit had apparently been timber lined and traces of the timbers, 442, some of which appeared as voids, were found near the sides and towards the top of the later pit (Figs 96:M3.A5 and 97).

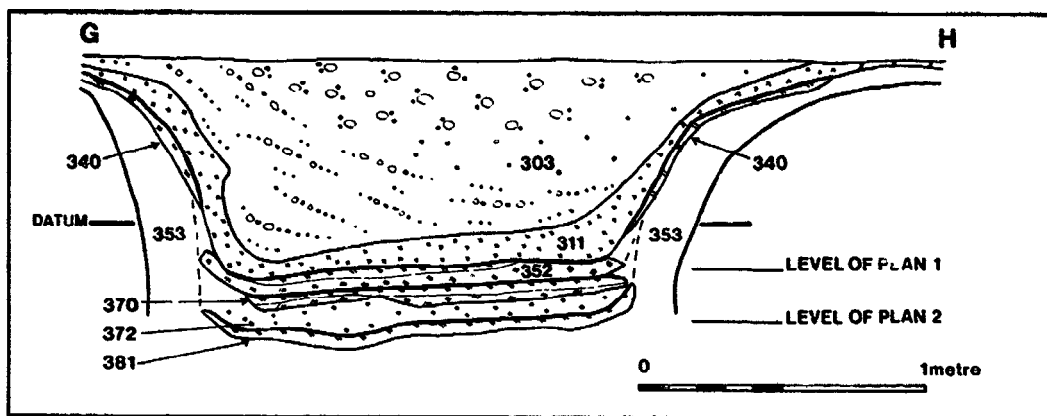


Fig 95 Bewell House. Period 4. Section G - H through pit 213. For the position of the section see fig 96:M3.A5

The original fill of pit 384 was sealed by a yellow clay layer, 381, approximately 1m below the building floor level, 348. Successive clay levels, 370 and 352, within the pit raised the bottom to some 0.7m below the floor level, still apparently much greater than would have occurred by any subsidence of the original pit fill. A layer of clay, 340, covering the sides of the pit, inside the timber lining, confirmed that the upper part of the pit was in use during period 4. The clay on the sides was continuous with the clay floor, 348, at the top of the pit and was also probably continuous with the upper clay layer, 352, within the pit.

The clay floor level, the sides and bases of the pit, and the surrounding beam and post positions were all covered with a layer of charcoal, 311 and 310, some 50mm thick on the floor and up to 100mm thick in the bottom of pit 313. The charcoal was of uniform consistency with no large fragments.

The remaining 0.6m of the fill of pit 313 comprised a rather wet gravelly soil, 303, mixed with some clay and sand. This fill merged into 258, a mixture of sandy soil and pebbles, which covered the whole of the north-eastern part of the site (Fig 86:M2.G4).

Surrounding both the building containing the oven and building 443 was a large metallated area which consisted of varying amounts of fine and coarse gravels (Fig 87:M2.G10). It was similar in composition to the material used in the construction of the stage 5 rampart.

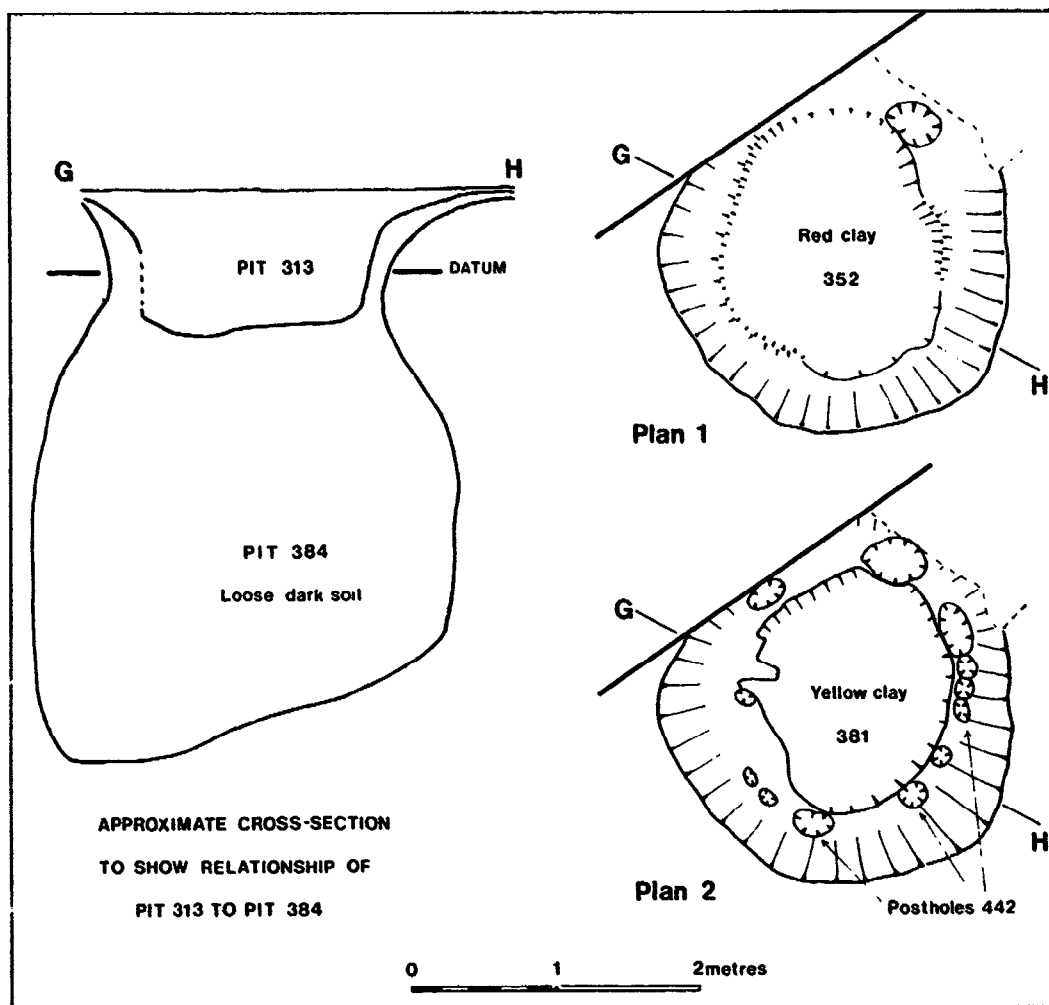


Fig 96 Bewell House. Periods 3 and 4. The relationship between pit 384 of period 3 and pit 313 of period 4. For the upper part of section G - H see fig 95:M3.A4

The soil levels 248, 398, and 403, surrounding the metalling during period 4, were confused and poorly differentiated from later layers probably due to cultivation during period 5.

Late in period 4 a complex pit, 212, was dug some 0.5m deep through the southern part of the metalled area close to furnace 304. It contained a mixed fill of gravel and soil and did not have any apparent link with the buildings of period 4.

Dating

The dating for period 4 is dependent on the pottery found in the various pits and postholes, the span of time being limited by finds from the layers above and below the oven, clay floor, and metalling. On this basis the occupation period was of relatively short duration during the middle of the 13th century.

Inventory (Vol 3)Small finds

Metal	Copper bodkin	248	Fig 4.12
	Copper strip	346	Fig 4.13
Stone	Quern 406 in base of 304		Fig 10.4
	Quern reused as door post base in building 443		Fig 10.5
	Flint blade	134	Fig 16.4
Jewellery	Copper brooch (Roman)	299	Fig 17.1

Ceramic material

Pottery	Fabric	A2a	A2b	A3b	A4	A5	A7b	B1	B2	B3
	Sherds	69	23	25	6	5	27	540	8	5
	Percent	8	3	3	1	1	3	66	1	1
	Fabric	B4	C1	C2	D1	D3	E1	E2a	E3	G1
	Sherds	7	58	14	9	3	1	1	1	4
	Percent	1	7	2	1	-	-	-	-	1
Illustrated pottery		Fig 29.2, 3, 5, 18, & 20 Fig 31.9 Fig 38.11 & 12 Fig 45.13 & 16								
Tile	Fabric A2			346						Fig 60.1

Environmental material

Grain	Barley, oats, & wheat	Layer 360 in oven 304
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Discussion

A complex of small buildings erected as leantos against the remains of the gravel rampart replaced the postulated defensive tower of period 3, probably soon after the city wall was built in the mid 13th century. The two buildings excavated did not have long lives although there were some signs of timber renewal associated with one doorway.

The purpose of these buildings can be suggested by a consideration of the oven found in the complex. It was built in a deep pit and enclosed inside a shed only a little larger than the pit itself. There was no indication that any great heat had been used and the clay found in the destruction levels of the pit, considered to represent the superstructure, had not been fired. Apart from charcoal and a little charred grain there were no waste products. The oven was probably used as a low-temperature grain drying kiln with the fire some 1.2m below the ground to allow the grain to be spread on a platform at surface level. Presumably, the half of the pit containing the flue would have been covered at ground level with a wattle framework covered in clay which would have served as the platform on which the grain could be spread. Holes in or around this platform would have allowed the flue to function and create the necessary through draught. The primitive lean-to shed which contained the oven would have enabled it to be used in wet or windy weather.

A similar kiln at Wharram Percy had almost identical dimensions but the flue was lined with a penannular chalk wall and the kiln was apparently in the open (Hurst 1978). The use of millstones as bases in corn drying ovens is recorded as early as the Roman period (Rahtz and Greenfield 1978, 56-7).

An oven such as the one found in Hereford could only have been used for relatively small quantities of grain unless it was functioning more or less continually. It probably indicates that some grain was being collected which had a high moisture content and needed drying before use. Barley, oats, and wheat were all present so it is perhaps unlikely that the oven was used solely to parch the grain and thus impart an improved flavour (M1:B14-C2). Within the limits of the city, the oven should perhaps be seen as an annexe to a corn merchants shop fronting onto Bewell Street, where grain with a high moisture content could be rapidly dried before being sold or milled. The nearest mill to the site, which was just outside Eign Gate and operated by water from the Eign Brook, could have been used for this purpose.

Building 443 could have been residential, but this is unlikely because of its position close to the defences and its construction as a lean-to against the gravel bank meant that it was little more

than a shed. There was no fixed hearth but the western part of the floor showed patches of burning possible indicating that small fires had been lit at various times. Even allowing for some subsidence into the earlier cesspit, the evidence indicates that pit 313 was present as a substantial depression throughout the use of the building. The pit was carefully lined and could probably have held water or some other liquid. The thick charcoal layer on the floor and within the pit suggests that the building was eventually burnt and although this event could have produced the burning observed on the western part of the floor, one would expect that the eastern part would have suffered the same treatment. The homogeneous charcoal material could have been produced by a thatched roof being burnt rather than structural timbers.

The building may have been used for the storage of grain after it had been dried in the adjoining oven but before it was sold.

The whole area around oven 304 and building 445 was presumably a metalled yard. Some of the material undoubtedly came from the stage 5 rampart and the remainder could have been the result of digging the pit for the oven. There was no sign of any break in the metalling between the oven building and building 443, so it would seem probable that they were in use together as a small industrial complex.

There was, unfortunately, no indication of the approach path to the complex which would have indicated the orientation of the properties in the 13th century. The newly built defences to the north and west would only allow access to the site either from Widemarsh Street, 230m to the east, or from Bewell Street 55m to the south. The latter would seem most likely, but it is not until perhaps the 16th century that north-south property boundaries become apparent on the site (period 6).

■ PERIOD 5 - Pits (Fig 98:M3.A9)

For convenience, periods 5 and 6 are shown together on the same plan. Period 5 is represented by several irregular pits, but otherwise the whole area excavated was apparently under cultivation.

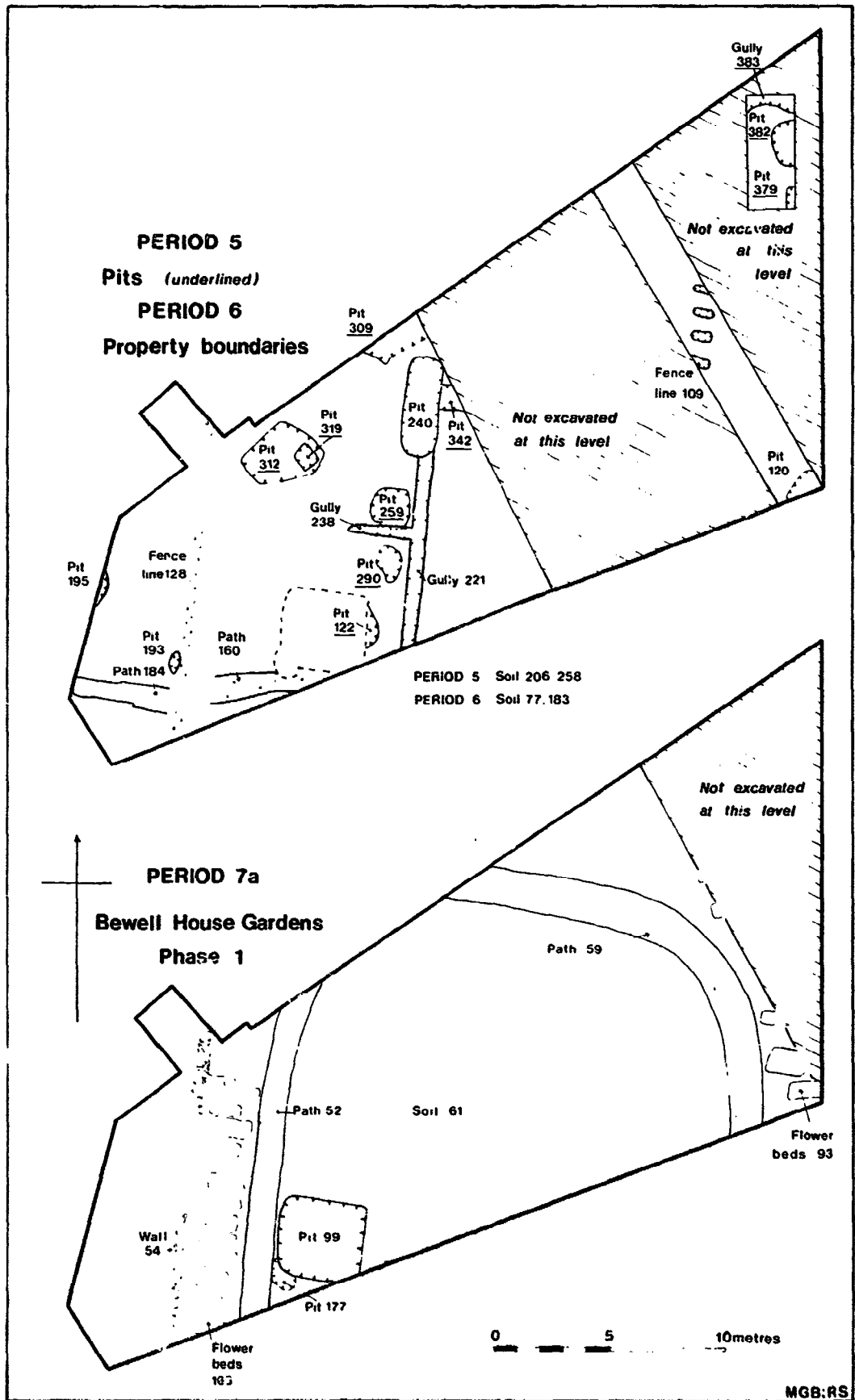


Fig 98 Bewell House. Periods 5, 6, and 7a. Plans of the various features.

Description

Layers 206 and 258 covered the western and eastern parts of the area excavated respectively (Figs 84:M2.G1 and 86:M2.G4). They both consisted of mixed soils and were apparently the result of regular cultivation.

The metallised surfaces of period 4 were either still in use or near enough to the surface for them to have become contaminated with a few sherds of pottery dating to period 5. Building 443 of period 4 must have completely disappeared and pits 312 and 309 were partly cut through the floor level.

Pit 312, which contained posthole 319, was a very confused feature which was not completely understood. The pit itself was some 0.4m deep, but the posthole continued for another 0.4m below this. Both had a brown loamy fill with some clay and pebbles. Pit 309, in the north-eastern corner of the excavated area, was probably used as a cesspit but had a clean gravel upper layer. It was not fully excavated because of the danger of section collapse, but was more than 1.4m deep (Fig 86:M2.G4 - section J - K). Other pits in the area excavated had fills which were slightly more clayey than the overlying soil levels but all were shallow and could have been associated with the general cultivation of the ground. In area F, to the east of the site, parts of three pits or gullies were found but they were not examined in detail.

Dating

Most finds attributable to period 5 came from 206 and 258 which were the lower parts of the cultivated soil levels. The continued cultivation of the area excavated during periods 5 and 6 does not allow for any rigorous dating but these lower soil levels did not appear to have been seriously disturbed after the middle of the 14th century.

Inventory (Vol 3)

Small finds

Metal	Iron cheek piece of snaffle bit	259	Fig 1.14
	Iron socketed arrowhead	258	Fig 2.4
	Fragment of copper decorated sheet	258	Fig 4.15

	Four copper pins	258	Fig 4.16 & 17
	Broken tweezers	258	Fig 4.8
Stone	Two quernstone fragments	258*	Fig 10.6
	Slightly worked flint (Unillustrated)	206	No 26
	(*from trench B at equivalent level to 258)		
Jewellery	Copper brooch	258	Fig 17.3 & Fig 19
Worked bone	Possible handle	258	Fig 24.19
Coin	Denarius of Carausius	259	No 2

Ceramic material

Pottery	Fabric	A2a	A2b	A3b	A4	A5	A7b	A7d	A7e
	Sherds	80	29	47	13	15	132	16	1
	Percent	7	2	4	1	1	11	1	-
	Fabric	B1	B2	B3	B4	C1	C2	D1	D2
	Sherds	697	7	19	31	14	16	3	18
	Percent	58	1	2	3	3	1	-	2
	Fabric	D3	E1	E3	E6	F2	G1	G5	J8
	Sherds	6	3	5	4	3	3	1	8
	Percent	1	-	-	-	-	-	-	1
Illustrated pottery					Fig 29.15, 17, 21, & 28				
					Fig 31.2, 7, 10, 20, & 21				
					Fig 38.15 & 20				
					Fig 42.8				
					Fig 45.14				

Discussion

The occupation of period 4 was only of a short duration and afterwards parts of the area excavated became cultivated ground. Throughout the period some of the area probably remained semi-derelect with only occasional refuse pits being dug and little organised activity. This allowed the occupation levels of period 4 to become sealed, possibly by further slip from the rampart.

■ PERIOD 6 - Property boundaries (Fig 98:M3.A9)

The area excavated was partitioned into individual narrow properties aligned with, and probably fronting on to, Bewell Street. Cultivation continued within each of the properties.

Description

Three separate property divisions were found, all of which crossed the site from north to south. The easternmost one, which was examined in trench B, consisted of a line of double posts, 109, each pair being in a single postpit. The pits were about 1m apart. The tops of the postpits were indistinct and the total depths could not be estimated. Some 12m to the west, a second property boundary was exposed as gully 221, which was lost to the north where it was cut away by the later pit 240. The gully was about 0.3m deep and 0.8m wide. A shallow gully 238, at right angles to 221, was apparently of the same period. Pit 240 was 0.75m deep and aligned with gully 221. It served no obvious purpose although it was notable because it contained a quantity of small copper objects, such as pins and lace tags, which could be associated with sewing.

A further 10m to the west was a boundary consisting of a double line of small postholes, 128, which were found as voids in the bottom of the foundation trench for the period 7a property wall, 54. The postholes were about 0.35m deep and 0.1m in diameter.

A roughly metalled pathway, 160/184, which crossed the southern part of the site, was probably earlier than fence 128. Four shallow pits, 122, 193, and 195 in the main area and 120 in trench B, were the only other disturbances of this period. They were filled with a similar material to the overlying soil layers. These layers, being regularly cultivated, were not easily differentiated from the similar ones above and below. In some areas of the site arbitrary levels had to be accepted as being the upper or lower limits of period 6. The soil layer 77 was to the east of fence 128, and layer 183 was to the west (Fig 84:M2.G1).

Dating

Period 6 covers the 300 or more years from the late 14th century until the construction of Bewell House in the early 18th century. The dating for these confused cultivation levels is not precise,

and therefore no firm date was established for the construction of the property boundaries.

Inventory (Vol 3)

Small finds

Metal	Copper pins	240	Fig 7.2-10
	Copper lace tags	240	Fig 7.13 & 14
	Engraved copper plate	240	Fig 7.18
	Copper needle	183	Fig 7.12
	Copper boss	109	Fig 7.11
	Lead disc	183	Fig 8.8
Coin	15th century jetton	Probably 77	No 16

Ceramic material

Pottery	Fabric	A2a	A2b	A3b	A4	A5	A7b	A7c
	Sherds	9	5	4	3	2	128	1
	Percent	3	1	1	1	1	37	-
	Fabric	A7d	B1	B3	B4	C1	C2	D1
	Sherds	9	93	5	66	5	4	1
	Percent	3	27	1	19	1	1	-
	Fabric	D3	E6	F2	G5	G6	G8	
	Sherds	1	4	4	1	1	8	
	Percent	-	1	1	-	-	2	
	Illustrated pottery				Fig 29.11			
					Fig 31.19			
					Fig 46.9			

Discussion

Fence line 128 cut directly across the oven of period 4, so the regular plots shown on the period 6 plan could not have evolved before the late 13th century. The same fence line cut across path 160/184, also of period 6. This reorganisation of land boundaries is thus unlikely to be earlier than the beginning of period 6, especially as there are no signs of replacement of any of the fences. It is suggested that it was not until some time after the middle of the 16th century that this area of the medieval town was split into these narrow but long properties which fronted on to Bewell Street.

■ PERIOD 7 - Bewell House gardens

In the early 18th century several of the narrow properties were amalgamated to form the grounds for Bewell House. The original lay-out for the gardens, described as period 7a, lasted until the mid 18th century when the grounds were redesigned. Period 7b extends from the time of this new lay-out until period 8 when the house and garden both became part of the Hereford Brewery.

Description

Period 7a (Fig 98:M3.A9) A stone wall, 54, was built on the same line as the period 6 boundary fence 128 but the other properties within the excavated area were amalgamated to become the garden of Bewell House. The wall was separated from a well constructed path, 52, by a row of flower beds, 163, each about 1.5m by 0.7m and up to 0.25m deep. The central area contained a fine soil, 61, which was interpreted as a lawn. It was bounded on the west by the curved path, 52, and on the north and east by path 59, which was apparently a continuation of 52. The paths were carefully constructed in trenches filled with graded gravels (Fig 86:M2.G4). The flower beds 93, close to the eastern boundary of the garden, balanced those on the west. Pits 99 and 177 were probably dug during the construction of Bewell House. They contained stone fragments, charcoal, and some coal in a grey-brown clayey loam.

Period 7b (Fig 99:M3.B1) It was probably when Bewell House was being altered and extended that the garden was redesigned to include an additional area to the north-west. A new brick boundary wall, 3, was built to include this new area and path 5 was laid to follow it (Fig 84:M2.G1). The main area of lawn remained, but it was apparently relaid or returfed as context 15. Paths 50 and 60 were constructed at the east end of the garden and smaller curved paths, 51, probably surrounded flower beds.

Dating

The many finds of clay pipes were used to date pits 99 and 177 to cAD 1710-30, and finds from the flower beds 93 and 163 indicated that they were in use between about 1720 and 1760. About the middle of the 18th century the grounds were relandscaped and the gardens continued in use into the early 19th century.

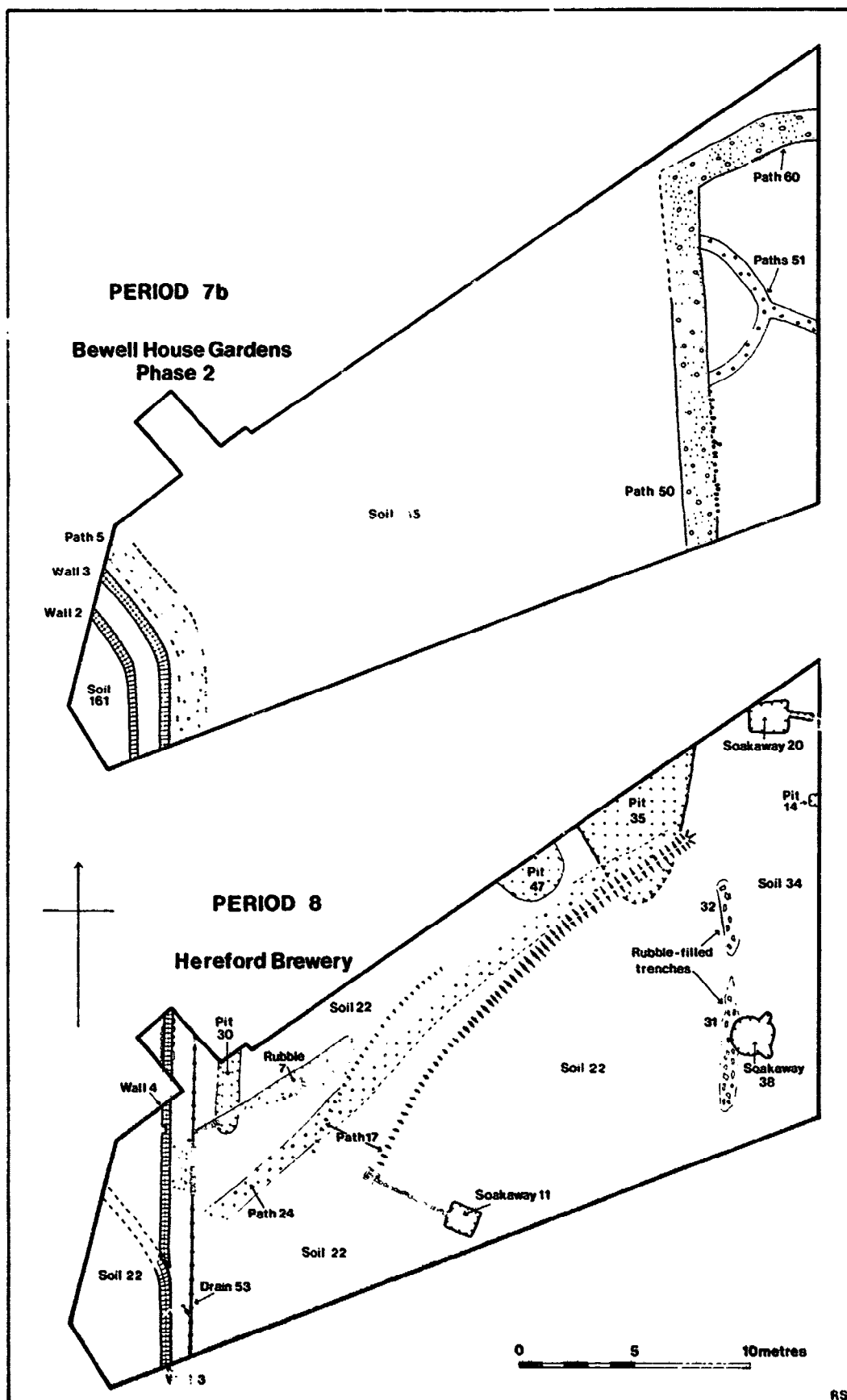


Fig 99 Bewell House. Periods 7b and 8. Plans showing the various features

Inventory (Vol 3)

The 18th and 19th century finds are not considered in detail in this report. Some pottery finds are illustrated in the type series, but these are mainly residual.

Period 7a

Small finds

Glass	Fine glassware	99	Fig 22.26
	Wine bottles	177	Fig 22.30-33

Ceramic material

Pottery	Fabric	A2b	A3b	A7b	A7d	A7e	B1
	Sherds	2	1	34	91	53	43
	Percent	-	-	5	11	7	6
	Fabric	B4	C1	E2a	E4	E6	F2
	Sherds	50	1	1	1	335	12
	Percent	7	-	-	-	44	2
	Fabric	G5	G6	G8	'Flowerpot'		
	Sherds	59	6	31	33		
	Percent	8	1	4	4		
	Fabric	Unidentified 'English stoneware'					
	Sherds	5					
	Percent	1					
	Illustrated pottery						Fig 29.26
							Fig 40.2
							Fig 48.2
Fired clay	Part of clay mould	99					Fig 64.1

Period 7b

Small finds

Coins	Penny of George III,		
	1806	15	No 14
	Halfpenny of George III,		
	1807	15	No 15

Ceramic material

Pottery	Fabric	A2a	A2b	A3b	A7b	A7d	B1	B2
	Sherds	8	1	7	83	25	87	1
	Percent	2	-	2	26	8	27	-
	Fabric	B3	B4	C1	C2	E2a	E3	E6
	Sherds	2	43	1	4	1	2	44
	Percent	1	13	-	1	-	1	14
	Fabric	F2	F4	G5	G6	G8		
	Sherds	3	1	4	3	2		
	Percent	1	-	1	1	1		
	Fabric	Unidentified 'English stoneware'						
	Sherd	1 bottle						
	Percent	-						

Illustrated pottery

Fig 29.4 & 8

Discussion

The excavation by hand of the levels associated with periods 7 and 8 enabled a recording system to be evolved and also established a post-medieval pottery sequence for the site. The various details of the garden landscaping are confirmed from Taylor's map of 1757 (Fig 5), Curley's map of 1858, and the earliest editions of the Ordnance Survey plans of the city.

■ **PERIOD 8 - The Hereford Brewery (Fig 99:M3.B1)**

Bewell House became part of the Hereford Brewery early in the 19th century but the gardens were little used. In the excavated area the main feature was a curved gravel path, 17, which was eventually replaced by path 24 made of ash. Soakaways, drains, and shallow pits were cut into the gardened areas but eventually the whole site was covered with concrete and used as an open yard with sheds built against the northern wall.

Dating

The finds indicate that the Brewery took over the garden area during the early 19th century.

Inventory (Vol 3)

The many examples of 19th and 20th century glass bottles from the Brewery which were found on the site are not recorded in this report but examples are preserved in the deposited finds in the museum.

Small finds

Glass	Fine glassware	22	Fig 22.24 & 25
Coin	Imitation spade guinea	22	No 19

Ceramic material

Pottery	Fabric	A7b	A7d	A7e	B3	B4	E3	E4	E6
	Sherds	12	63	12	1	21	1	7	1018
	Percent	1	4	1	-	1	-	1	72
	Fabric	F2	F4	G5	G6	G8	'Flowerpot'		
	Sherds	22	19	54	7	10	46		
	Percent	2	1	4	1	1	3		
	Fabric	English stoneware		Stoneware bottles		Ink bottles, etc			
	Sherds	8		84		14			
	Percent	1		6		1			
	Illustrated pottery			Fig 49.12					

Discussion

The use of the site as part of the Brewery continued until the ring road was built in 1970, but for many years the archaeological levels had been sealed by concrete, and various sheds and lean-tos covered the area. Older workmen at the Brewery could remember the area as being very overgrown and disused with only traces of paths winding through the undergrowth.

Unprovenanced, described finds (Vol 3)Small finds

Coin	Halfpenny, George III	No 13
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B R E W E R Y S I T E

INTRODUCTION

Early in 1968, in advance of the ring road construction, Frank Noble organised a small excavation north of Eign Gate close to the site of bastion 6 (Fig 12:M1.A11). At that time Wall Street, running immediately inside the defensive stage 6 medieval wall, still continued as far as the site of Eign Gate (Fig 9). A trench was cut by machine from Wall Street eastwards as far as the line of the proposed new wall to the west of the Bewell House grounds. Early medieval occupation levels were established in the machine cut trench and as a result, the then Hereford City Excavations Committee arranged for the site to be examined. The whole area, which was due to become part of the ring road, was to the east of the medieval wall line and included, over most of its length, the tail of the stage 5 gravel rampart. The excavation was directed by Margaret Gray and financed by a grant from the then Ministry of Public Building and Works.

Taylor's Map (Fig 5) indicated that the area was under cultivation in 1757, and, although buildings had occupied the site in more recent years, they had had only slight foundations and little modern disturbance was anticipated. Wall Street, immediately to the west of the triangular area, rose steeply from the site of Eign Gate to follow the top of the stage 5 gravel rampart where it presumably reflected the intra-mural road. The area to be excavated sloped down to the east on the tail of this rampart. The primary aim of the excavation was to examine the sealed levels underneath the rampart and thus establish the predefensive occupation pattern in the area.

This 'rescue' excavation followed immediately after the one in Victoria Street and lasted for six weeks. Shoring was needed throughout the excavation because of the heavy traffic which was then using Wall Street.

Finds from the excavation are deposited in the Hereford City Museum (Accession Number 1979/308).

ACKNOWLEDGEMENTS

The labour force for the excavation comprised students of the School of History, Birmingham University, and local volunteers. Site assistants R Thomson and P Berrett were later joined by G Lewis. The Hereford City Council made premises available adjacent to the site for finds storage and processing, and tools and equipment were provided by the Excavation Committee and the University. Help and advice was obtained from the Hereford City Museum and its assistant curator, Peter Leach.

METHOD

A machine had to be used to remove the large amounts of relatively clean rampart gravel from over the whole area because of the limited time available. Unfortunately, a tracked machine was used and this damaged the layers below the gravel, making it difficult to establish which features had been cut through the rampart and which had been sealed underneath. What apparently happened was that the tracked vehicle tended to sink into the softer fill of any disturbances and as it moved the rest of the gravel from the site, it filled the top of these depressions with a new layer of clean gravel. Subsequent hand excavation suggested that these features had been sealed beneath the gravel rampart.

After the machine clearance, two parallel trenches were laid out northwards from the original east-west trial trench. The two trenches were excavated by hand and eventually most of the central baulk was removed. The excavation was finally extended a little way to the south of the trial trench, and the area surrounding furnace 169, partly underneath Wall Street, was completely examined. The upper levels, comprising layers 7, 15, and 190, were disturbed by the machine clearance and therefore cannot be used for dating purposes.

RECORDING SYSTEM

Site code:	HER68B
Layers, features, etc:	1-235, 250-261
Finds, etc:	Finds were indexed using the same method as at the Victoria Street site but are referred to in the text under their context numbers. Animal bone was kept from pits but not from layers.

Datum level on sections: 57.47m OD

SUMMARY OF CHRONOLOGY AND PERIODS

PERIOD	DEFENSIVE		PROBABLE
	STAGE	DESCRIPTION	DATE RANGE
0	-	Irregular features cut into the subsoil	?
1	-	Gullies, pits and metalling	Pre-mid 11th century
2a	-	Layer 21 and the posthole and burnt remains of buildings	Late 11th to early 12th century
2b	-	Furnaces, pits, and stakeholes	12th century
2c	-	Layers, 7, 15, & 190 and associated features	Late 12th to early 13th century
3	5	The gravel rampart	Late 12th to early 13th century
4a	-	Pits cut through rampart tail	Early to mid 13th century
4b	-	Bell-mould manufacturing area	14th century
4c	-	Pits	15th and 16th centuries

THE EXCAVATION

■ PERIOD 0 (Fig 100 :M3.B8)

The earliest features on the site were not seen until the final clearance of the subsoil. They were all sealed underneath the soil layers of periods 2a and 2c.

Description

Cut into the subsoil of the site were six irregular features, 14, 25, 39, 86, 182, and 183. They were filled with a dark brown sandy soil and were sealed below the period 2 layers 7 and 21. They varied in depth from 0.15m to 0.35m.

Dating

There was no evidence to date these features.

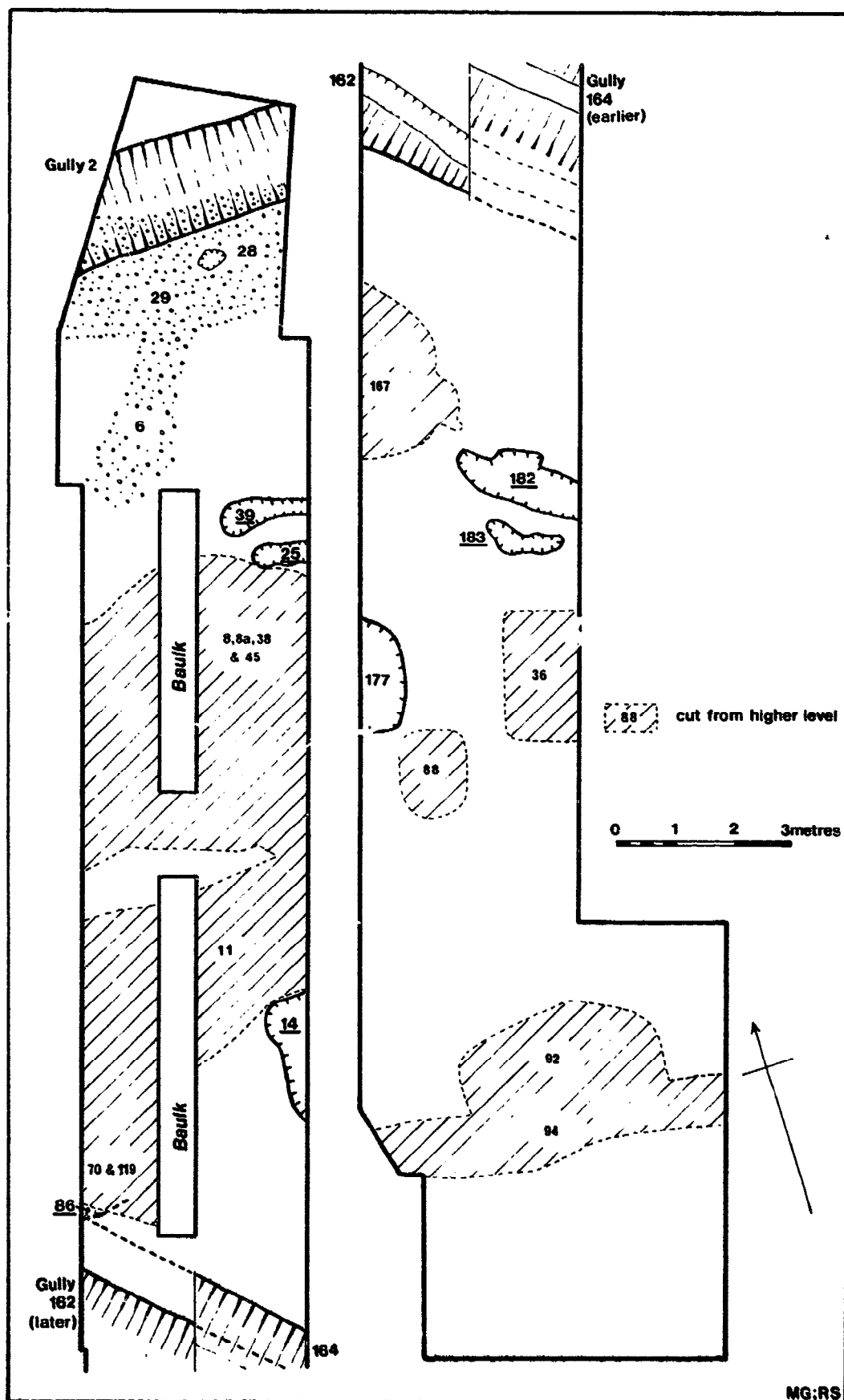


Fig 100 Brewery site. Periods 0 & 1. Plan of features.
The features of period 0 are underlined

Inventory

Nil

Discussion

The irregular features of this period were completely without finds and were probably disturbances caused by tree roots which could have occurred before any human occupation of the site. It is surprising that this type of feature has not been met with more often in Hereford, but on most sites disturbance of the natural levels by vegetation seems to have been minimal.

■ PERIOD 1 - Gullies and other features (Fig 100:M3.B8)

The features of period 1 were found at the same level as those of period 0. They comprised several large gullies, a pit, and a metalled surface.

Description

Gully 2 crossed the northern end of the site running in an east-west direction. The shape in cross-section (Fig 101:M3.B10) was a shallow 'V', 2m wide and approximately 0.7m deep from the top of the subsoil. The lower fill, 2b, consisted of a clean, yellow-brown sandy silt and above it was 2a, a more mixed soil with charcoal flecks and some animal bone.

Half-way along the excavated trench, running north-west to south-east, was the large gully 164, which had been recut as gully 162 following the same line as 164 but slightly further to the south. Both gullies were considered to be of period 1.

Gully 164 was flat-bottomed and was at least 2.5m wide and about 0.9m deep from the subsoil level (Fig 102:M3.B12). The original silting, 164f, consisting of a red, sandy soil mixed with some gravel and pebbles, was similar to the natural gravel of the site. Layer 164e was more dirty with less gravel and some traces of organic material. The upper levels, 164 a-d, were of mixed silts and gravels which had steep angles of slope.

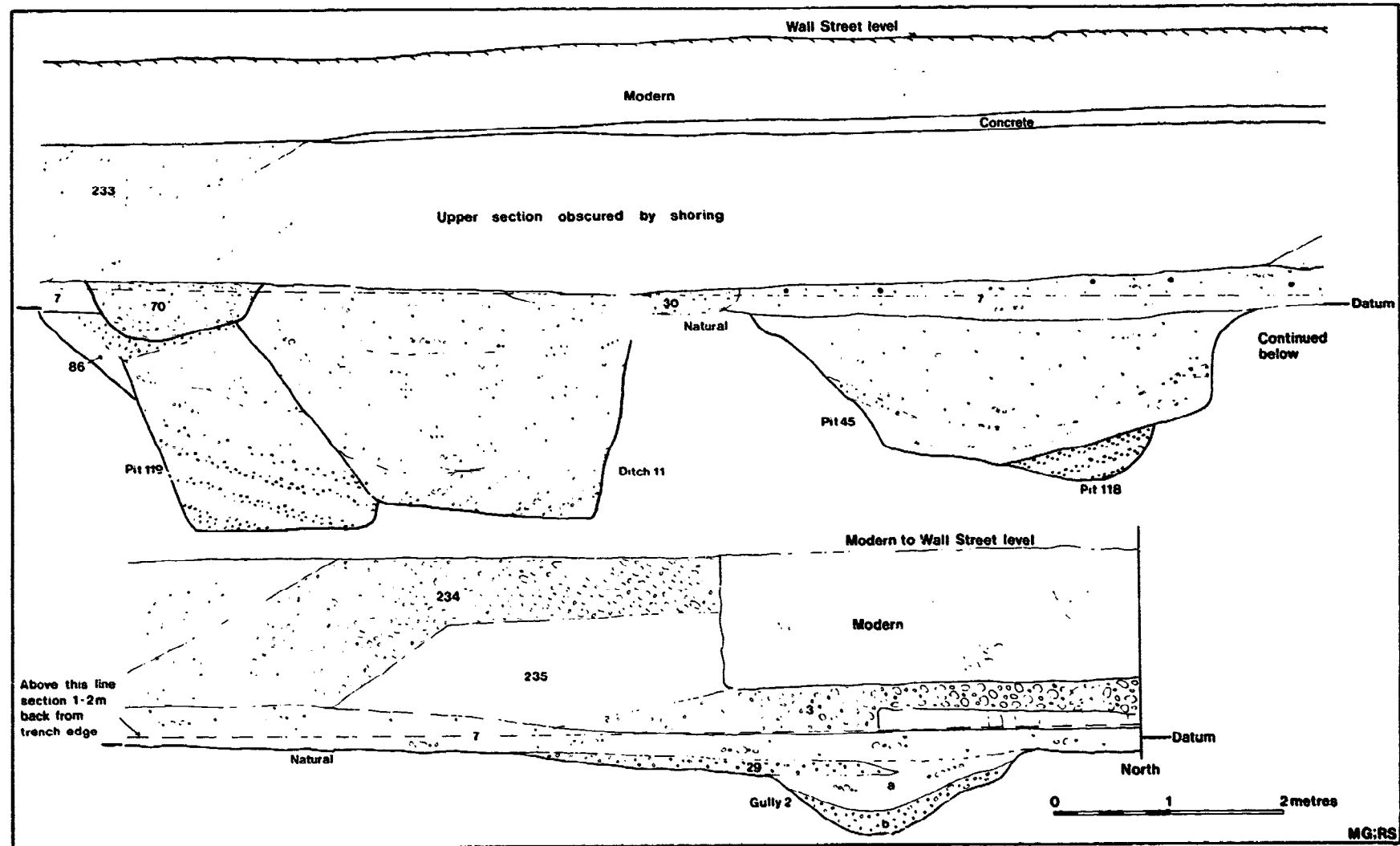


Fig 101 Brewery site. Section of north part of west face. See fig 100:M3.B8 for the position of the sections

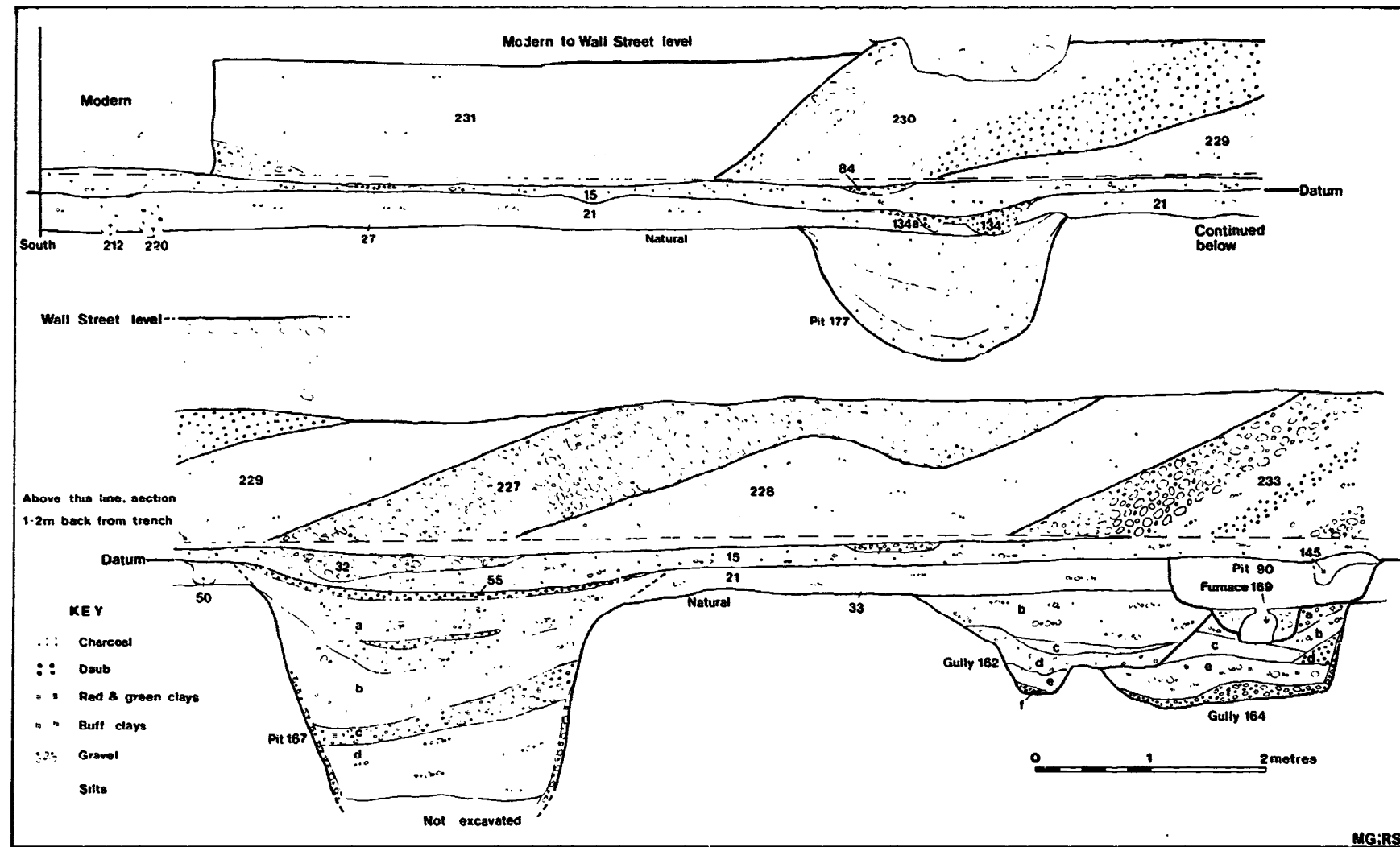


Fig 102 Brewery site. Section of south part of west face. See fig 100:M3.B8 for the position of the sections

The replacement gully, 162, had not been cut until gully 164 had been completely filled. It was slightly shallower than 164 but had a deeper channel along its southern side. It was nearly 3m wide and about 0.7m deep from the top of the subsoil. The lower, clean silts, 162 c-f, were covered with a mixed soil, 162b, which was similar to the period 2a sealing layer, 21, but contained a little more gravel.

The upper part of gully 2 was partly cut away on its southern side by a slight depression, about 0.1m deep, which was filled with layer 29. a buff, clayey soil mixed with gravel. This layer continued partly over the top of gully 2, and, together with layer 6, comprised a roughly metalled area towards the northern end of the excavated area. A small isolated posthole, 28, was apparently associated with this metalling.

Pit 177, in the southern part of the trench, was not seen until the final clearance at subsoil level. The pit extended outside the excavated area and was apparently very large. The section (Fig 102:M3.B12) does not indicate its full depth. The sides and bottom of the pit were covered with a red, gravelly silt, the main fill being a dirty, clayey soil with some animal bone and fragments of charcoal.

Dating

Pottery from the period 1 features was restricted to two sherds from pit 177 and two sherds from the top of gully 162. However, the latter may have belonged to layer 21 above and they are so classified. There is no indication of the period of time included within period 1 but the pottery is not later than the middle of the 11th century.

All the features described as period 1 were recorded as being sealed by the period 2 layers and therefore are cut into, or laid on top of, the subsoil of the site. However, as will be seen later (M3.C2) the date of deposition of the period 2 sealing layers apparently varies along the length of the area excavated. In the northern part of the site the sealing layer may be as late as the early 13th century, whilst over the remainder the period 1 features were sealed by layer 21,

which is of very late 11th or early 12th century date. Gullies 162 and 164 and pit 177 were sealed by layer 21 and are therefore of 11th century or earlier date, but gully 2 and the overlying metalled surface 6/29 could be of a later date.

Inventory (Vol 3)

Ceramic material

Pottery	2 sherds	Fabric G1	P177
	None illustrated		

Discussion

The gullies probably represent property boundaries, although they are rather large for this purpose. The steep tip levels in gully 164 suggest that it was deliberately filled and then replaced by the shallower ditch 162. However the other fills indicate a gradual silting of the gullies and it can be assumed that they were open for some time. There was no indication of the spoil which would have occurred when the gullies were dug and it must be assumed that this material was totally removed or possibly spread across the site.

Gully 2 may have continued for some distance to the east for it was on the same alignment and had a similar fill to the Bewell House site period 1 gully, 349. The metalled surface, 29, at the northern end of the site was not laid until gully 2 had completely silted up. It may have replaced the gully as a property boundary but was not apparent as such on the Bewell House site. A discussion of the orientation of property boundaries in this extra-mural area of the city can be found in the main published text.

The fill of pit 177 suggests that it was a cesspit, one of the few examples of a pit used for this purpose in late Saxon contexts in Hereford.

■ PERIOD 2 - Timber buildings and furnaces

The occupation of period 2 was very complex and was not fully understood at the time of excavation. The vertical stratification was slight and could not be used to arrange the many features into successive phases. The pottery finds indicate that period 2 includes the 12th century and possibly the early years of the 13th century.

The features are considered in three sub-periods: 2a which includes the original soil build-up and the traces of several timber buildings; 2b, which is an industrial phase with several furnaces; and 2c, which contains the soil levels which were immediately underneath the stage 5 rampart material.

■ PERIOD 2a

Description

Covering the subsoil of the site and sealing the features of period 1 were two layers, 21 to the south and 7 to the north (Figs 101:M3.B10 and 102:M3.B12). Layer 7 contained much later material than layer 21 and is considered to be part of period 2c. Period 2a refers only to features cut into or laid on layer 21 and thus refers only to the southern part of the site.

Layer 21 consisted of a light brown soil which contained a small amount of gravel. The finds which were recorded within it were mainly in the upper levels. The layer continued smoothly across the top of pit 177 and gullies 162 and 164 (Fig 102:M3.B12) and was, on average, some 0.3m thick.

Many postholes, stakeholes, and pits were visible in the surface of layer 21 (Fig 103:M3.C3), and laid on this layer, at the south of the excavated area, were the remains of what is interpreted as a burnt building (Fig 104:M3.C4).

The area excavated was too narrow for any building plans to be established and the density of postholes was such that no definite alignments could be seen. It was apparent that more than one phase of building was present, there being examples of later postholes cutting through earlier ones. In a few such cases the later posthole contained traces of a post which had seemingly been burnt in situ. This was particularly noticable in postholes 120b and 129, which apparently replaced 120a and 180 respectively. In the southern extension to the excavation, posthole 222h also contained a burnt post. The posthole depths varied from less than 0.1m to more than 0.4m below the surface of layer 21, but most were in the range from 0.2 to 0.3m. The holes were often elongated and only occasionally contained traces of the post position. Most of the fills were of dark sandy soil with charcoal flecks.

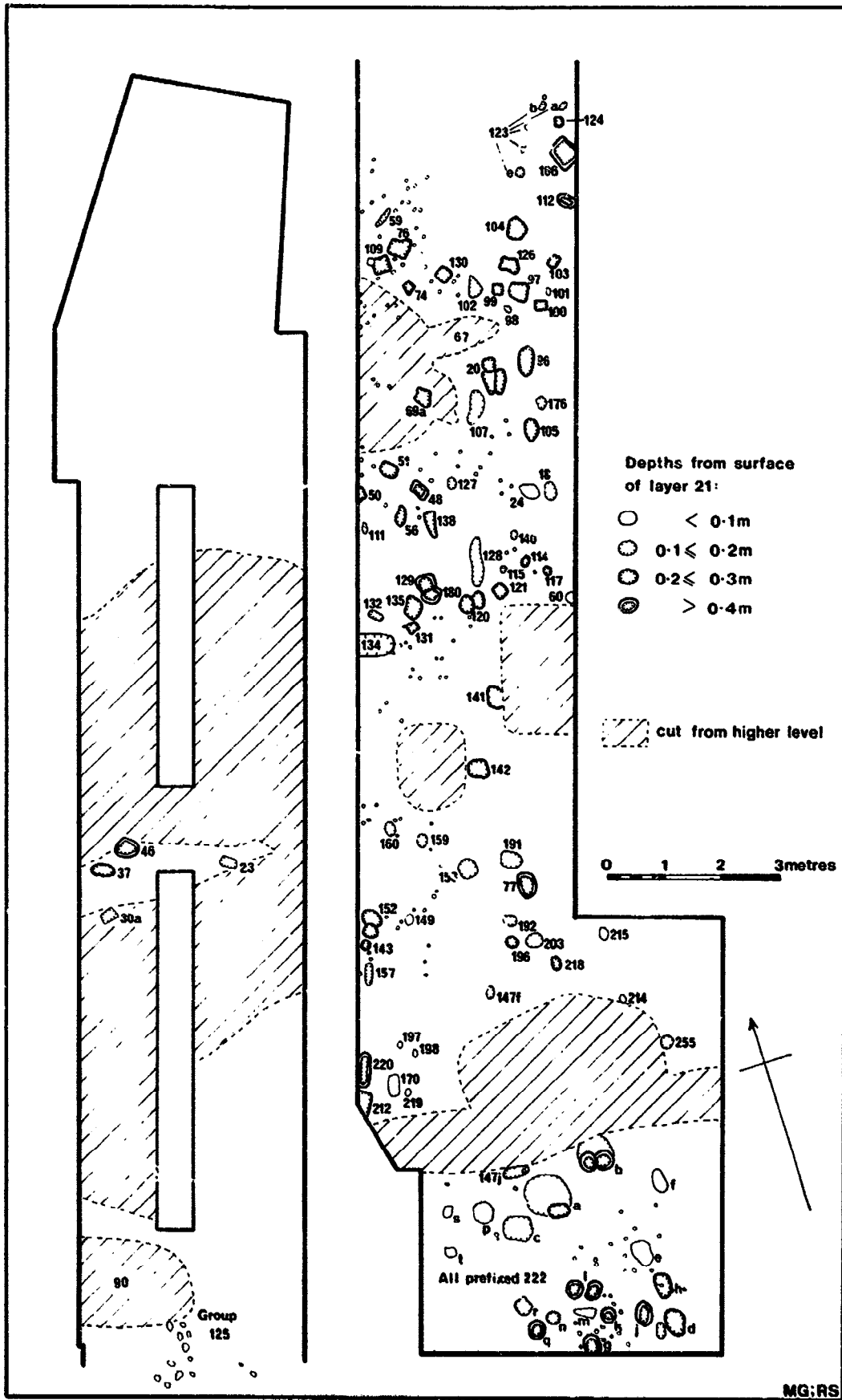


Fig 103 Brewery site. Period 2a. Plan of features

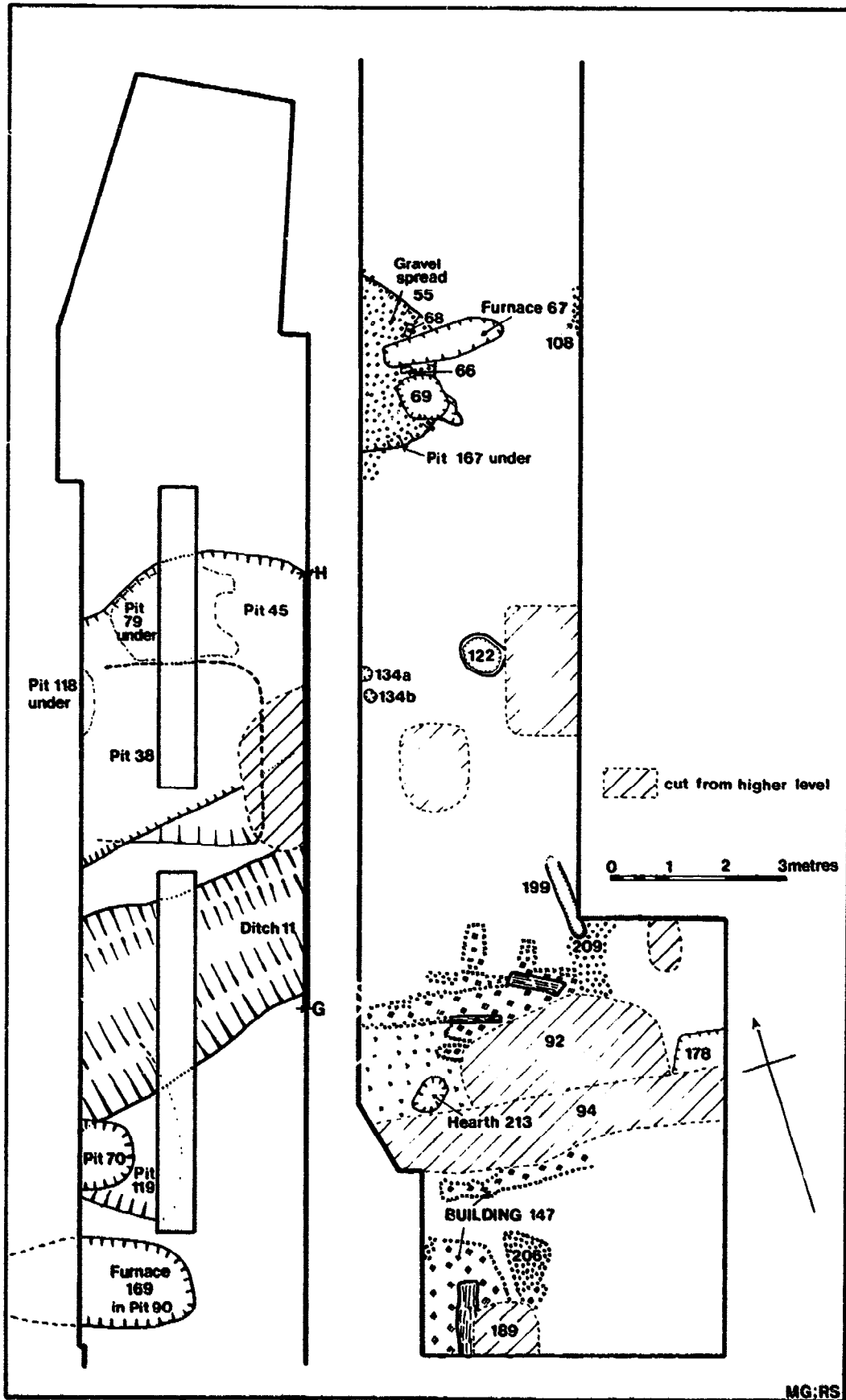


Fig 104 Brewery site. Periods 2a, 2b, & 2c. Plan of features. Building 147 is considered to be part of period 2a

POSTHOLE	SURFACE WHERE SEEN	FILL	DIMENSIONS (cm)	DEPTH (cm)
18	In 182	Dark, sandy soil & gravel similar to layer 15 material	35 x 22	38 below datum
20 (3 holes)	21	Layer 15 material	40 x 20	38 below datum
23	At natural	Dark brown, sandy soil similar to layer 7 material	17 x 30	16 below natural
24	In 182	Layer 15 material	20 x 35	-
30a	In edge of ditch 11	Small gravel	-	-
37	At natural	Layer 7 material & animal bone	22 x 35	25 below natural
46	At natural, in S edge of pit 38	Dark brown soil with fine gravel lower down	30 x 38	69 below natural
48	21	Layer 15 material with much charcoal	10 x 10	40 below datum
50	21	Similar to 48 above	25 x -	20 below L21
51	21	Similar to 48 above	25 x 30	15 below L21
56	21	Similar to 48 above	25 x 35	28 below datum
59 (slot)	21	Dark brown soil	10 x 40	5 below L21
60	21	Dark, gravelly material	13 x 13	35 below datum
69a	Under 69	Dirty soil	-	16 below bottom of 69
74	21	Similar to 48 above	15 x 15	22 below L21
76	21	Similar to 21 material	30 x 40	25 below L21
77	I, W edge of 62	-	50 x 25	29 below datum
96	21	Gravelly at top, more sandy towards bottom	50 x 25	22 below L21
97	21	Dark gravelly soil & charcoal	20 x 25	20 below L21
98	21	Similar to 97 above	10 x 15	12 below L21
99	21	Similar to 97 above	12 x 20	12 below L21
100	21	Similar to 97 above	20 x 30	26 below L21
101	21	Similar to 97 above	10 x 10	6 below L21

(continued on page M3.C6)

POSTHOLE	SURFACE WHERE SEEN	FILL	DIMENSIONS (cm)	DEPTH * (cm)
102	21	Similar to 97	50 x 25	12 below L21
103	21	Similar to 97	15 x 15	30 below L21
104	21	Dirty gravel	35 x 30	30 below L21
105	-	-	35 x 20	24 below datum
106	21	Similar to 97	Over excavated	31 below L21; into fill of ditch 162
107 (scoop)	21	Dark brown soil with charcoal	65 x 20	10 below L21
109	21	Similar to L21 material but slightly darker	25 x 30	29 below L21
111	21	-	10 x 8	19 below L21
112	21	Similar to 97	10 x 20	28 below L21; into fill of ditch 162
114	21	Fine gravel & charcoal	20 x 15	20 below L21
115	21	Similar to 114 above	12 x 12	16 below L21
117	21	Similar to 114 above	15 x 15	26 below L21
120 (double)	21	Later hole with burnt post <u>in situ</u>	30 x 20 & 35 x 25	26 below L21
121	21	Dark brown with much charcoal	25 x 25	27 below L21;
123a } 123b } 123c } 123d } 123e }	21	Dark, brown sandy with charcoal & a little gravel (All cut into ditch 162)	{ 14 x 14 16 x 16 12 x 12 12 x 12 20 x 20	10 below L21 11 below L21 12 below L21 13 below L21 19 below L21
124	21	Similar to 123 above	50 x 40	22 below L21
125 (group)	21	-	Diameters from 7-11	From 7-16 below datum
126	21	Similar to 97	35 x 35	26 below datum
127	21	Dark fill with some gravel & animal bone	35 x 20	18 below L21
128 (scoop)	21	Fine pink gravel	85 x 20	18 below L21
129	21	Post burnt <u>in situ</u> ; much charcoal & burnt animal bone	Posthole 50 x 60 Post 25 x 25	42 below L21; replaced by post 180
130	21	Similar to 97	25 x 30	15 below L21

(continued on page M3.C7)

POSTHOLE	SURFACE		DIMENSIONS (cm)	DEPTH*
	WHERE SEEN	FILL		
131	21	Layer 15 material	20 x 20	20 below L21
132	21	-	15 x 30 possibly over excavated	33 below datum
134	21	Burnt charcoal - ashy (may be small hearth)	-	-
135	21	Similar to L15 material	40 x 30	20 below L21
138 (slot)	21	Soft yellow unburnt clay & charcoal	50 x 15	22 below L21
140	In 183	-	10 x 7	19 below datum
141	21	Dark fill with much charcoal	40 x 40?	22 below L21; cut by pit 36
142	21	Similar to L15 material	35 x 35	-
143	21	Black/brown clayey soil	10 x 10	20 below L21
147f	147	-	20 x 20	15 below L147 surface
147j	-	Possibly patch of burnt clay	50 x 35	12 below datum
149	21	Black/brown clayey soil	15 x 15	-
152 (2 holes)	21	Black/brown clayey soil	S hole 25 x 25 N hole 35 x 35	20 below L21 25 below L21
153	21	Dirty red gravel	35 x 35	15 below L21
157	21	Black/brown clay	35 x 10	10 below L21
159	21	-	15 x 15	-
160	21	-	15 x 10	-
170 (slot)	21	-	50 x 20	7 below L21
176	In natural	-	20 x 15	17 below L21
180	See 129	No other details	-	-
191	-	-	30 x 35	10 below L21
192	21	Dark brown soil	20 x 25	15 below L21
196	In natural	Loose grey/brown soil with charcoal	20 x 20	Into natural
197	21	Grey/brown soil with some charcoal	8 x 8	7 below L21

(continued on page M3.C8)

POSTHOLE	SURFACE WHERE SEEN	FILL	DIMENSIONS (cm)	DEPTH * (cm)
198	21	Dark soil & charred wood	5 x 5	7 below L21
203	21	Similar to L21 material but darker	-	17 into natural
212	21	L15 material	40 x 25	28 below L21
214	On edge of pit 92	Fine red gravel	15 x 10	10 below L21
215	Under 209	-	-	20 under 209
218	21	-	20 x 15	20 below L21
219	In natural	L21 material & charcoal	5 x 5	10 below natural
220	21	L21 material & charcoal	55 x ?	38 below L21
222a	21	L21 material & charcoal with post position	80 x 80 (pit) 25 x 40 (post)	15 below natural
222b	21	L21 material & charcoal; 3 post positions	30 x 30 25 x 25 20 x 20	33 below L21
222c	21	L21 material & charcoal	50 x 50	10 below L21
222d	21	L21 material & charcoal	45 x 30	33 below L21
222e (scoop)	21	L21 material & charcoal	45 x 30	7 below L21
222f	21	L21 material & charcoal & 3 packing stones	40 x 25	7 below L21
222g	21	L21 material & charcoal	30 x 30	33 below L21
222h	21	L21 material & charcoal & post position with burnt post <u>in situ</u>	30 x 20	33 below L21
222j	21	L21 material & charcoal	30 x 20	33 below L21
222k	21	L21 material & charcoal	20 x 20	33 below L21
222l (2 holes)	21	L21 material & charcoal	E 25 x 25 W 20 x 20	E 38 below L21 W 33 below L21
222m (slot)	21	L21 material & charcoal	15 x 40	7 below L21
222n	21	Burnt material & 2 post positions	E 25 x 25 W 20 x 20	15 below L21
222p	21	L21 material & charcoal	35 x 35	7 below L21
222q	21	L21 material & charcoal	25 x 25	33 below L21

(continued on page M3.C9)

POSTHOLE	SURFACE WHERE SEEN	FILL	DIMENSIONS (cm)	DEPTH * (cm)
222r (scoop)	21	L21 material & charcoal	30 x 30	7 below L21
222s	-	-	-	-
222t	-	-	-	-
255	21	Black soil	6 x 6	18 below L21

* Depths are below surface of L21

Many stakeholes were found at the same level as the postholes but they are considered to be later in date and are described as part of period 2b.

Parts of the burnt building 147 had been cut away by the period 4 feature, 92, and by the original machine trench, 94 (Fig 104:M3.C4). In the area of the building the surface of layer 21 had been burnt in places to a yellow or orange colour and the remains of several charred timbers were found on the surface. The fibrous nature of much of the burnt layer, 147a, which was associated with the debris of the building, was suggestive of straw which could have been used for thatching. It would seem likely that the burnt remains of building 147 should be associated with the underlying postholes and that both represent the same building. Two spreads of small pebble metalling, 206 and 209, which were apparently associated with building 147, may indicate the position of doorways (Fig 104:M3.C4), but there was insufficient evidence to attempt any reconstruction of the building.

Dating

The dating evidence for period 2a is entirely dependent on the pottery finds. These indicate a date range from late in the 11th century until the first half of the 12th century for the various features of this period.

Inventory (Vol 3)

Ceramic material

L21:	Fabric	A1	B1	C1	D1	D2	E1	G1
	Sherds	2	4	8	2	5	1	39
	Percent	3	7	13	3	8	1	65

Illustrated pottery

Fig 58.1-13

Building remains:	Fabric	B1	C1	D2	E1b	G1
	Sherds	3	4	8	1	22
(postholes & building 147)	Percent	8	10	21	3	58

Illustrated pottery

Fig 58.14

Discussion

A discussion of the interrelationships between periods 2a, 2b, and 2c follows the description of the various features (M3.D5). It is sufficient at this point to observe that the postholes and other remains represent at least two phases of building, but the dimensions and orientations of these structures could not be established.

■ PERIOD 2b

Description (Fig 104:M3.C4)

A complex series of intercutting pits was examined in the northern half of the excavated area. They are all grouped together as part of period 2b but the fragmentary remains of 79 and 118 may be of earlier date. Pottery finds from within the fills of the later pits indicate that the pits post-dated the buildings of period 2a.

The two earliest pits, 79 and 118, were found after the excavation of the overlying pits, 38 and 45, and only the lower parts remained. They both contained similar fills of banded dirty gravel and both extended some 0.4m below the bottom of pit 45. A Roman coin was found in pit 79 but apart from this there was no dating material whatsoever.

Pit 38 was rectangular with steep sides and had been partly cut away by pit 45. Only the lower levels survived and these consisted of red clay and gravel banded with greenish-black silts which contained animal bone and charcoal.

Feature 45, which continued across the whole width of the excavated area, was considered at the time of excavation to be a large circular pit rather than a ditch or gully. It cut away parts of pits 38, 79,

and 118, described above, and was itself cut by pits 8 and 8a of period 4a. The pit contained large quantities of animal bone and some burnt or fired clay. The lower layers (Fig 105, below) were of reddish gravel which became coarser with depth. Above them layer 45b, a buff, clayey soil, showed some signs of burning. It contained three burnt stones, which may have been part of a hearth, and quantities of clay and charcoal. The pit was sealed by layer 45a which was similar to 45b except that it did not contain as much charcoal.

Pit 119, to the south of the main complex, was probably of a similar date to pit 45. It cut the period 0 feature, 86, and was itself partly cut by the period 2c ditch 11. Pit 119 contained alternate bands of greenish-black silt and clean red gravel with occasional sherds of pottery and a quantity of animal bone.

The features of period 2b which have been described above were all sealed by layer 7. This layer is apparently the equivalent of layer 15 in the southern part of the excavated area. Layer 15 lies above layer 21 and thus seals the features of periods 2a and 2b. Layers 7 and 15 are considered to be part of period 2c.

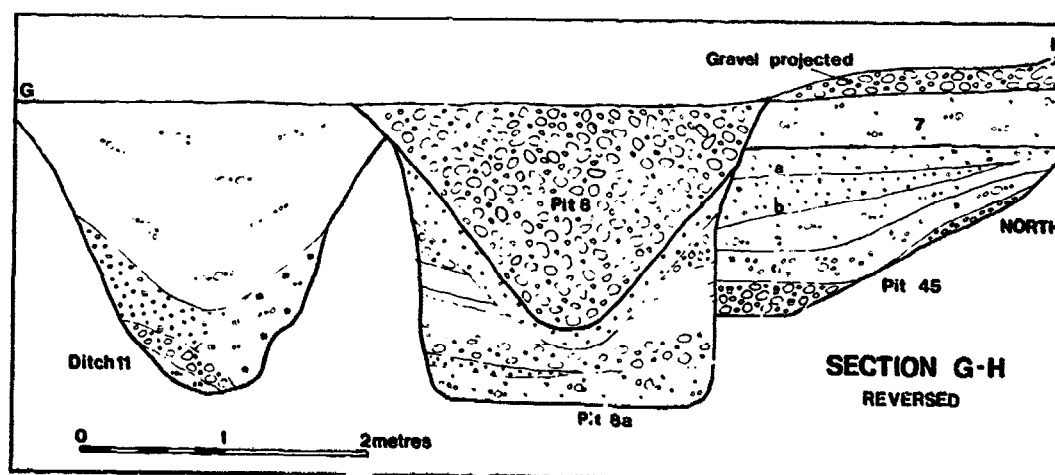


Fig 105 Brewery site. Section G - H. For the position of the section see fig 104:M3.C4

The following features were all sealed by layer 15 and were apparently later than the period 2a features described above.

In the southern half of the area excavated, and surrounded by period 2a postholes, pit 167 extended into the western section. The pit was more than 2m deep and was not fully excavated (Fig 102: M3.B12). The main part of the fill, 167b and 167d, was of dark brown, clayey soil with some animal bone, but the upper level, 167a, which was more sandy with charcoal, daub, and some gravel, may have been a make-up level associated with the overlying furnace, 67.

Furnace 67 was partly built into the top of pit 167 and partly cut into layer 21. The western half was surrounded by layer 55, a spread of fine red gravel which had presumably been used to level the ground over the area of pit 167 and to provide a working surface for the operation of the furnace. Two postholes, 66 and 68, a large pit 69, and various stakeholes all cut through layer 55 and were considered to be associated with the furnace.

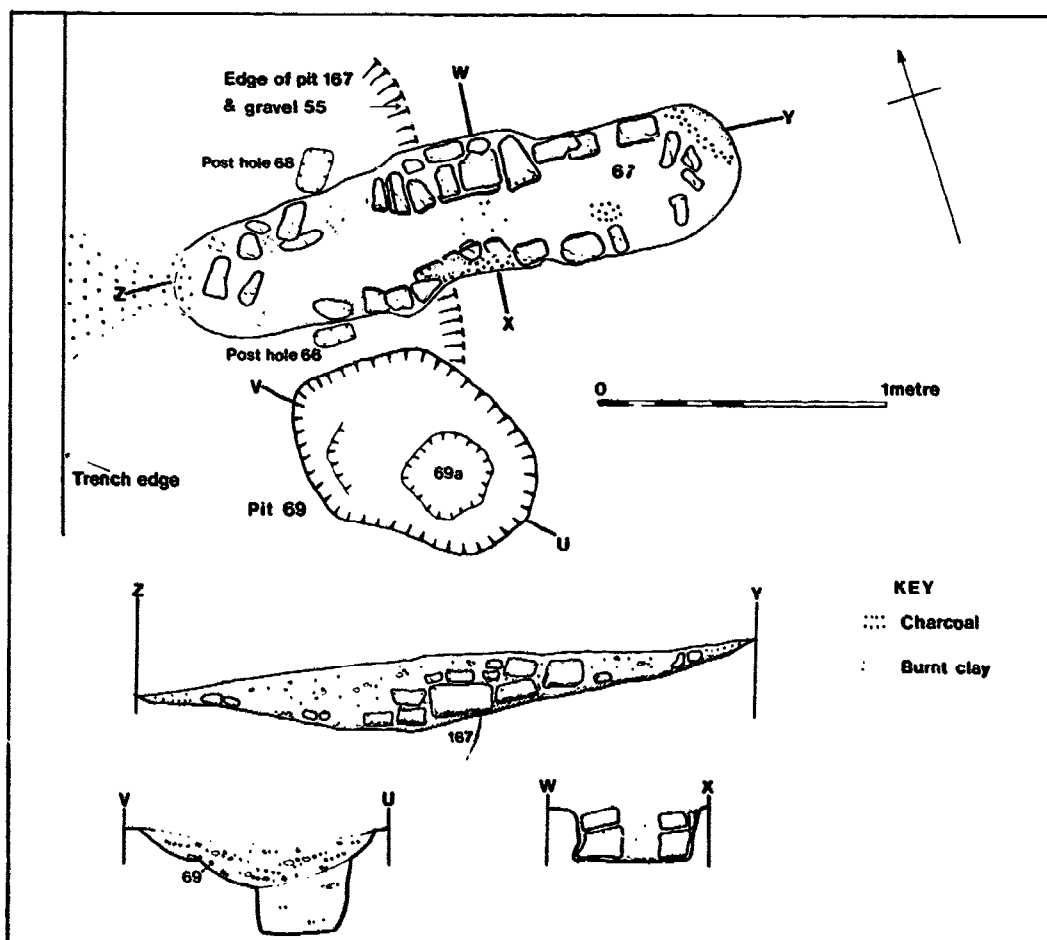


Fig 106 Brewery site. Period 2b. Plan and sections of furnace 67

The first indication of the presence of furnace 67 was as layer 15 was removed. A dark brown ashy stain containing burnt sandstone, charcoal and burnt and un-burnt animal bones appeared. The removal of this overlying debris exposed the furnace as a shallow oval pit containing a simple arrangement of two parallel rows of sandstone which lined a channel some 0.4m wide (Fig 106:M3.C12). The channel sloped down from east to west and joined two shallow depressions within the oval pit. The western depression, which contained much clay, charcoal, and animal bone, showed traces of fire. Tumbled stones, on top of a layer of charcoal, filled the eastern depression. The stones outlining the central channel were packed with clay which had been burnt and the firing had been strong enough to shatter some of the sandstone.

Postholes 66 and 68 were almost identical in shape and size and both contained the remains of a burnt timber. South of furnace 67, pit 69 contained dark brown soil with charcoal and burnt and un-burnt clay. The pit sealed posthole 69a of period 2a.

To the north of furnace 67, furnace 169 was of similar design but was slightly larger and much better preserved (Figs 107:M3.C14 and 108). It had been built into the bottom of pit 90 which was cut into the top of the silted up period 1 gullies 162 and 164 (Fig 102:M3.B12). The furnace was not completely within the excavated area but an extension was eventually cut to the west to include the whole of the structure. The furnace was thus excavated in stages from the east and sections were drawn at convenient points (Fig 107:M3.C14).

A channel, which was partly lined with sandstone blocks, ran down the middle of the oval pit. The channel was deeper than the similar feature in furnace 67, but it was otherwise identical in design and joined two shallow depressions, the lower of which was at the western end. The stones lining the upper parts of the channel were held in place by clay which continued downwards as a lining for the lower parts of the channel. The clay had a reduced surface and had been burnt in situ. Above the stone-lined channel were two small stones which may have been used for levelling the top of the structure. Traces of charred wattles running across the channel from north to south indicated how the superstructure had been built. Their purpose was to hold unbaked clay in place until it had been fired and would then

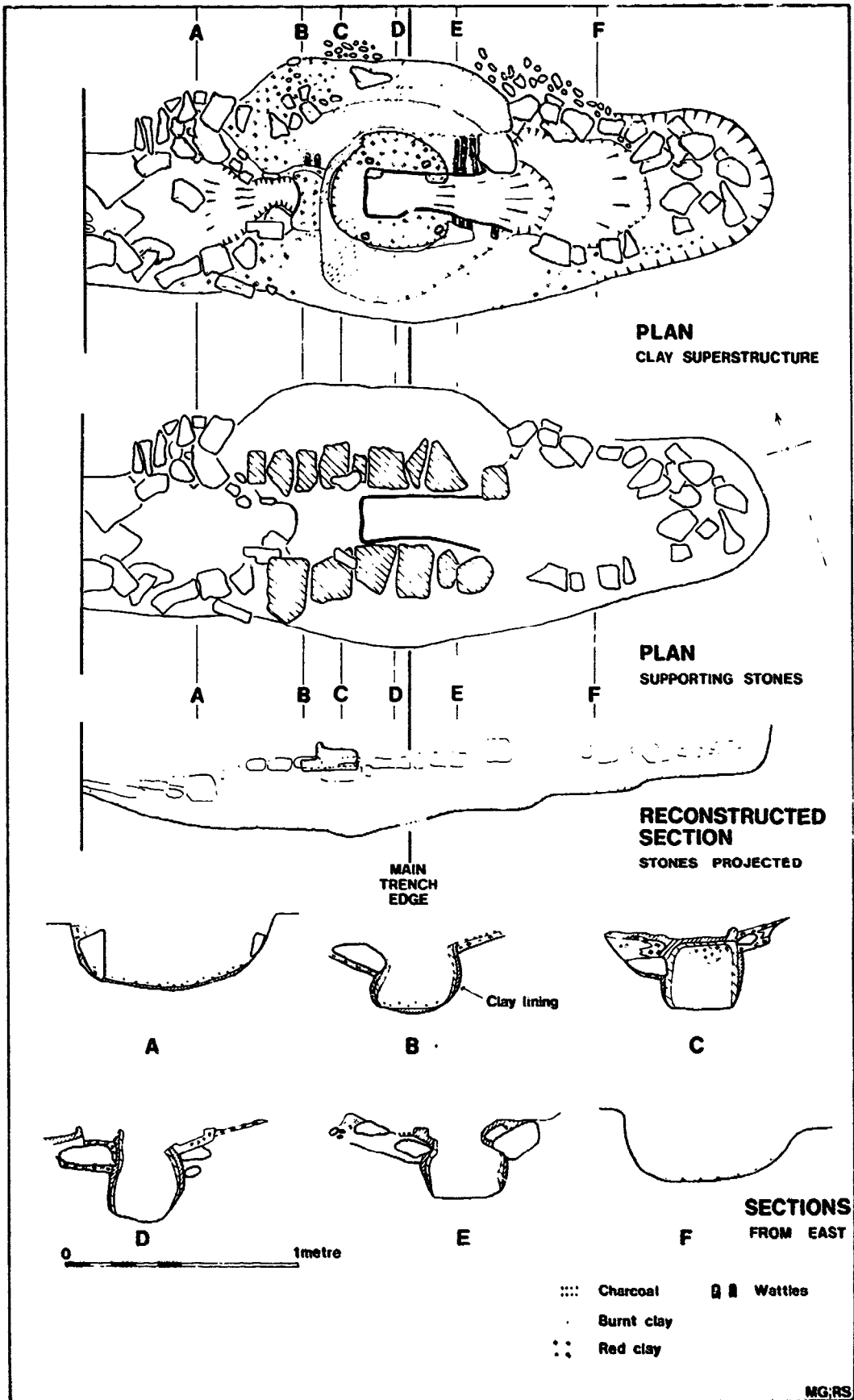


Fig 107 Brewery site. Period 2b. Plans and sections of furnace 169

be supported by its own strength. Part of the clay superstructure survived as a flat platform about 0.5m in diameter with a slight lip around it. Small square holes in the top of this platform suggest that it was meant to support a further structure. The superstructure showed more signs of burning towards the west where the fire was apparently placed. There was also a thick layer of charcoal at this end and the stones around the entry to the channel were heavily burnt. The eastern end of the furnace probably acted as a flue and may also have been used for raking out ashes. The remaining fill of pit 90, above the furnace, consisted of dark brown soil which contained a great deal of charcoal, animal bones, and some copper slag. Many pieces of fired clay and daub were also present.

On top of pit 90 were the fragmentary remains of a small bowl furnace 145 (Fig 102:M3.B12), which contained burnt clay and slag.

Many stakeholes, averaging 50mm in diameter, were found in the surface of layer 21 in the southern half of the site (Fig 103: M3.C3). Several were in the top of layer 55 and could have been associated with furnace 67 but none were sealed by the material from the burnt building 147. Although there is some sign of grouping of these stakeholes, there is no arrangement which gives any indication of their use.

Hearth 213 was cut into the charcoal spread associated with building 147, and was sealed by layer 15 (Fig 109, below). The hearth consisted of a shallow bowl about 0.5m across and 0.12m deep. It had been lined with clay and had been fired to a sufficiently high temperature to burn the surrounding clay and gravel. The fired clay lining varied in colour from a greenish-yellow to a bright orange and the remainder of the bowl was filled with a silty clay which contained much charcoal.

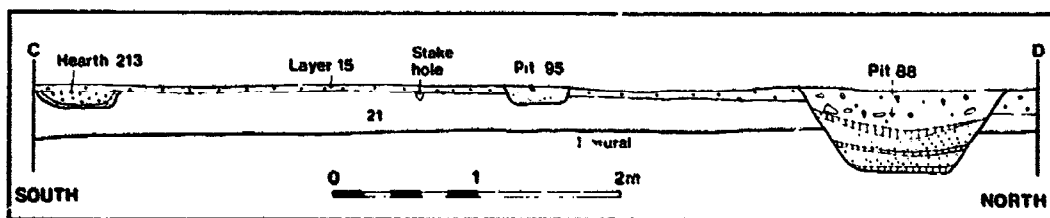


Fig 109 Brewery site. Section C - D. For the position of the section see fig 110:M3.D11

Dating

The features described as period 2b are those which are considered, on pottery and stratigraphic evidence, to be later than those of period 2a. All 2b features are sealed by layers 7 and 15 of period 2c. The pottery finds are not sufficient to give a precise date range for any single feature but they indicate a broad range within the 12th century for the whole of the period.

Inventory (Vol 3)Small finds

Metal	Iron knife blade	P45	Fig 1.9
Stone	Whetstone	P38	Fig 11.2
Coin	Roman dupondius	P79	No 1

Ceramic material

Pottery - Pits 38, 45, 119, & 167

Fabric	A7	B1	C1	D1	D2	E1b	G1
Sherds	2	17	10	11	57	2	14
Percent	2	15	9	10	50	2	12

Illustrated pottery Fig 31.25

Fig 58.25-28, 30-38

Furnaces 67 & 169 & associated layers

Fabric	B1	B2	C1	D2	E1b	G1
Sherds	3	2	8	8	1	6

Illustrated pottery Fig 58.29

Discussion

The fill of most of the earlier pits in the north of the site indicates that they were used as cesspits, with the exception of pits 45 and 167, which were apparently used for rubbish disposal. Most of the pottery in the inventory was from pit 45 and is sufficient to suggest a date in the first half of the 12th century for the fill.

Furnaces 67 and 169 were both alike in shape and design but only 169 showed any evidence of the superstructure. The furnaces and the mould fragments found associated with them were typical of the material and practice described around AD 1100 by Theophilus (Hawthorne and Smith 1963) and found in this country consistently associated with bell casting.

The method involved two separate and different heating processes - a moderate 'baking' fire ($\leq 500^{\circ}\text{C}$) for the mould, and a high temperature crucible hearth ($\geq 1,000^{\circ}\text{C}$) for melting the bell metal. Furnace 169 apparently shows the remains of a 'mould ring' over the drying channel, and the presence of mould debris but general absence of slag would appear to confirm that it was used for bell manufacture. Some slag would be expected from the crucible hearth which would have been very close and possibly above the furnace stokehole (information L Biek) (see Vol 3). There is no documentary evidence for a medieval bell foundry in the city of Hereford, the earliest reference being in AD 1559 (Sharpe 1966-75, 672). The relationship of the features of period 2b to those of periods 2a and 2c is discussed later (M3.D5).

■ PERIOD 2c

Description

The features described as periods 2a and 2b were sealed by layer 7 to the north of the site, layer 15 over the southern part, and layer 190 south of the machine cut trench 94. Layer 7 was a fine, dark brown, sandy soil which sat directly on top of the subsoil of the site. Layers 15 and 190 were almost black in colour and consisted of a mixture of soft sandy soil with a little gravel and much charcoal and animal bone. All three layers contained pottery fragments.

Several features, which are shown in section as cutting through layers 7, 15, or 190, and which were considered at the time of excavation to be sealed by the stage 5 rampart material, are described as part of period 2c and are the latest of the pre-rampart features.

The major intrusion in the northern part of the site was ditch 11 (Fig 104:M3.C4). It crossed the excavated area in an east-west direction and was on average about 3m across. It widened to the west where it became flat bottomed and narrowed to the east where it was 'V' shaped (Figs 101:M3.B10, 104:M3.C4, and 105:M3.C11). The ditch was about 2m deep and contained greenish-black silts alternating with layers of gravel. Throughout the fill were quantities of animal bone, including many horn cores and ten sheep skulls, most of which showed cut marks.

They were apparently all the waste bones from butchering. The ditch was cut by pit 70 and both were sealed with a thin layer of dark brown soil which was apparently directly underneath the gravel of the stage 5 rampart.

Pit 70, which cut away parts of pit 119 and gully 11, was filled with gravel, dark soil and charcoal. It also contained some animal bone, copper slag and daub. The pit continued into the west section and was not fully excavated (Fig 101:M3.B10).

Pit 122, in the southern part of the site, may have been a large postpit but there were no signs of any associated structure. It had a dark soil fill with some charcoal, and contained later pottery than the postholes of period 2a. Similar pottery was found in the slight, gravel-filled pit, 178 (Fig 104:M3.C4).

Features 134a and 134b were shallow, gravel-filled pits near the western side of the excavation. They may have been postholes.

Feature 199, a shallow gully which cut into the gravel spread 209 associated with building 147 of period 2a, was irregular in outline and contained a grey-brown silt with some charcoal.

Dating

The dating evidence for period 2c is entirely dependent on the pottery. It is evident from the inventory below that intrusive material was present, especially in layers 15 and 190. However, the percentages of the major fabrics are similar for both layers and features and, if these alone are used, a date of deposition in the late 12th or early 13th century would be acceptable. It must be assumed that the pre-excavation machine clearance caused substantial damage to layers 15 and 190.

Inventory (Vol 3)

Small finds

Metal	Iron hook	L15	Fig 1.10
	Copper ring	P70	Fig 4.10

Stone	Whetstone	Ditch 11	Fig 11.7
	Whetstone	L15	Fig 11.8
Coin	Silver penny of Cnut	L7	No 5

Ceramic material

Pottery - Layer 7

Fabric	A2	A7	B1	B2	C1	D1	D2	E1	G1
Sherds	10	1	40	2	23	8	13	2	11
Percent	9	1	36	2	21	7	12	2	10

Illustrated pottery

Fig 59.1-18

Layers 15/190

Fabric	A2	A3	A7	B1	B2	C1
Sherds	23	1	1	164	10	96
Percent	5	-	-	38	2	23

Fabric	D1	D2	E1	G1	G2	G6
Sherds	10	75	5	45	5	1
Percent	2	17	1	10	1	-

Illustrated pottery

Fig 59.19-42

Pits 70, 122, & 178 & ditch 11

Fabric	B1	C1	D1	D2	G1
Sherds	13	5	3	15	4
Percent	32	13	8	37	10

Illustrated pottery

Fig 58.15-24

Roof tile Two small fragments of
roof tile, fabrics A7 & B4,
were found in layers 15/190

Mould fragments

Environmental material

Slags

Discussion

The features and layers, which together make up period 2, have been grouped in sub-periods 2a, 2b, and 2c on rather flimsy stratigraphic evidence and on the dating for the pottery. The three sub-periods

should not be regarded as mutually exclusive - the evidence is insufficient for such a rigorous definition. It is possible, for example, to consider that the furnaces of period 2b were within one of the buildings classified as period 2a and that ditch 11 was open, and perhaps regularly cleaned, during most of period 2 rather than that it was simply a period 2c feature.

The critical evidence for the dates of the commencement of period 2 and the eventual sealing by the stage 5 rampart material, should have been obtained from the occupation layers rather than from the sporadic and often apparently unrelated features. Pottery and tile from within layers 15/190 show the extent of the disturbance caused by the pre-excavation machine clearance. They include Tudor Green ware (fabric G6) which should not be much earlier than the 15th century, and roofing tile which should be, at the earliest, late 14th century. There was some uncertainty during the excavation in establishing whether the pits of period 2c, and indeed the pits of period 4, were dug through the rampart tail or sealed by it. Because of these reasons it has to be accepted that the Brewery site cannot be used to provide a constructional date for the stage 5 rampart defences.

There are many problems concerning the occupation of period 2 which were not resolved during the excavation. The orientation of the period 2a buildings would have given valuable information about the development and plan of the town as it extended beyond the Saxon defences. The common alignments of gully 2 of period 1 and ditch 11 of period 2c, both considered to be property boundaries, may indicate that the properties were aligned in an east-west direction throughout both of these periods, but this is apparently contradicted by the alignment of the period 1 gully 164 and its replacement 162. However, the east-west alignment agrees with the evidence from period 1 on the Bewell House site (M2.F10) and, if this relationship is accepted, then it can be suggested that the postholes may represent buildings which were within properties which fronted on to a north-south street on the approximate line of the present Edgar Street (Fig 12:M1.A11). The main concentration of postholes was in the southern and central parts of the area excavated and they presumably reflect two separate, probably multi-phase building

complexes. These buildings need not be the limit of development to the north at this time, because the excavated area cut across the postulated properties at an angle, and thus the northern part of the area may represent undeveloped or cultivated ground to the rear of a building situated west of the excavated area.

The lack of evidence for floor levels, particularly in the case of the burnt building 147, is noteworthy. The carbonised remains, which were considered to represent thatch and structural timbers, sealed layer 21, and in places the fire had been sufficient to bake this layer to a yellow or orange colour. The lack of any indication of wear in the surface of layer 21 in the areas where buildings are postulated infers that these layers were protected by some covering material which was used for the floors. It may be that the buildings contained timber floors laid on joists, or that the earth floors were continually covered with rushes or some other vegetable matter.

It is possible that some of the postholes described as part of period 2a were associated with period 2b structures. The features of both these periods were cut into the same layer and were only differentiated by the pottery finds. At least one posthole, 69a, can be seen to be stratigraphically earlier than pit 69 which is associated with furnace 67 (Fig 106:M3.C12), and it has already been noted that the postholes represent at least two phases of building. It is thus possible that furnaces 67 and 169 may have been enclosed within posthole buildings.

The presence of cesspits during the 12th century, which is a common feature on residential sites of this date in Hereford, is perhaps an indication that at least some of the buildings were of a domestic nature. However, the site had industrial uses: the large quantities of bone retrieved from some of the pits and from ditch 11 are considered to represent waste from butchering; whilst the furnaces indicate that bell mould, and probably bell manufacture, was practised.

It is evident that the excavated area, which probably cut across several properties, was too restricted in width to establish the boundaries and precise function of each individual unit, but it was

sufficient to indicate the diversity of trades in this undefended area of the city during the 12th century.

■ PERIOD 3 - The gravel rampart (Defences - stage 5) (Figs 101:M3.B10 and 102:M3.B12)

The rampart material was cleared and removed from the site by machine before the excavation commenced. A section through this material was left close to Wall Street and some 2m to the west of the western edge of the excavation. Parts of this section had to be shored, but the remainder was cleaned and drawn. The possible relationship of this upper section to the section alongside the excavation area is indicated by publishing the two together.

Description

The section through the rampart material consisted of a series of layers, containing several grades of gravel and soil, each of which sloped at an oblique angle apparently representing tip lines. There was no opportunity to cut back the face to establish the angles at which these layers cut the section.

The lowest level of rampart material, at the extreme north of the area, was layer 3 which consisted of clean, large pebble-gravel, and probably sealed ditch 2 and part of layer 7. Above this was layer 235, a turfy material about 1m thick. This was the only layer which had a flattened profile. A thick layer of clean red gravel, 234, covered this apparent bank and presumably sealed yet more of layer 7. From this point, for a distance of some 10m, the upper section was obscured by shoring and could not be examined or drawn.

To the south of the shoring two bands of clean gravel, 227 and 233, each about 1m thick, were separated by a thick soil level, 228, which contained the only pottery found in the upper section. Above 227 was a further soil level, 229. To the south of the site, a layer of more mixed gravel, 230, was sealed by another soil level, 231, both still exhibiting the same angle of slope as the layers at the north of the trench.

Dating

It has already been indicated that the date of construction of the stage 5 defensive works cannot be established by the examination and dating of the material from the underlying levels and from the features cut into the rampart, because of the problems caused by the machine clearance. The few sherds of pottery found in the rampart layer 228 are probably of 12th century date but they could be residual.

Inventory (Vol 3)

Ceramic material

Pottery	Fabric	B4	C1	D2
	Sherds	1	2	2

Illustrated pottery

Fig 59.43 & 44

Discussion

The oblique angles of the rampart layers are considered to represent tip lines, which were formed as varying types of material were cast up from the surrounding soil layers and the new ditch. It is possible that all the tip lines represent one phase of rampart construction, although the line of the section is almost parallel to the line of the defences. If the rampart was built from north to south, using different materials from the overlying soils and the gravels of the ditch as they became available, then the final product could be similar to the section as drawn. However, the same result may also have been achieved if the ditch was regularly re-cut and the resulting spoil thrown onto the back of the original rampart. Both hypotheses and various combinations are possible, but it should be appreciated that, if the tip lines are also at an oblique angle to the section, then, because the upper part of the section is between 1 and 2m west of the lower section and the excavated area, the parts of the rampart which apparently seal the period 2 deposits would not be those shown directly above the deposits on the section. If this is accepted, then layers 3, 235, and 234 at the northern end of the site could be earlier than any of the period 2 features excavated and, at the south, layers 230 and 231 could be later than the period 4 features.

The lack of any direct relationship between the upper and lower parts of the sections, and the uncertainty of the dates of deposition of the various layers which formed the rampart, compound the problems already appreciated for the absolute dating of the stage 5 defensive works.

■ PERIOD 4 - Post-rampart features

The features of period 4 are those which were considered during the excavation to be cut through the rampart material. They comprise a series of pits dated from the 13th to the 16th centuries which are separated into two groups, sub-periods 4a and 4c. A bell mould manufacturing area, feature 92, of 14th century date, is described as period 4b.

Description

■ PERIOD 4a - Pits 8, 17, 19, 36, 85, 175 (Fig 110:M3.D11)

This group of pits of late 12th and 13th century date, were all in the southern half of the excavated area with the exception of 8 and 8a.

Pit 8a was rectangular with vertical sides and contained alternate fills of greenish-black soil and clean gravel (Fig 105:M3.C11). Pit 8 cut through some of the layers of pit 8a and may represent a partial clearance of the earlier pit. The later pit was pointed at the bottom and was completely filled with red gravel. It is possible that this secondary fill may indicate a phase of rampart construction or repair. The two pits were both stratigraphically later than those of period 2b, being cut from above layer 7.

Pits 17, 19, and 85 were all shallow features adjoining the eastern side of the area excavated (Fig 111:M3.D12). Contexts 17 and 85 were considered to be shallow postholes and 19 was an irregular depression. They were all filled with gravel and were sealed by layer 16 which consisted of a thin spread of clean gravel.

Pit 36, which was rectangular and vertically-sided, was cut by the east section (Fig 111:M3.D12). Only two-thirds of the fill was excavated. The pit contained layers of greenish-black silt and clean gravel and was similar to other cesspits on the site. Within the fill were some pieces

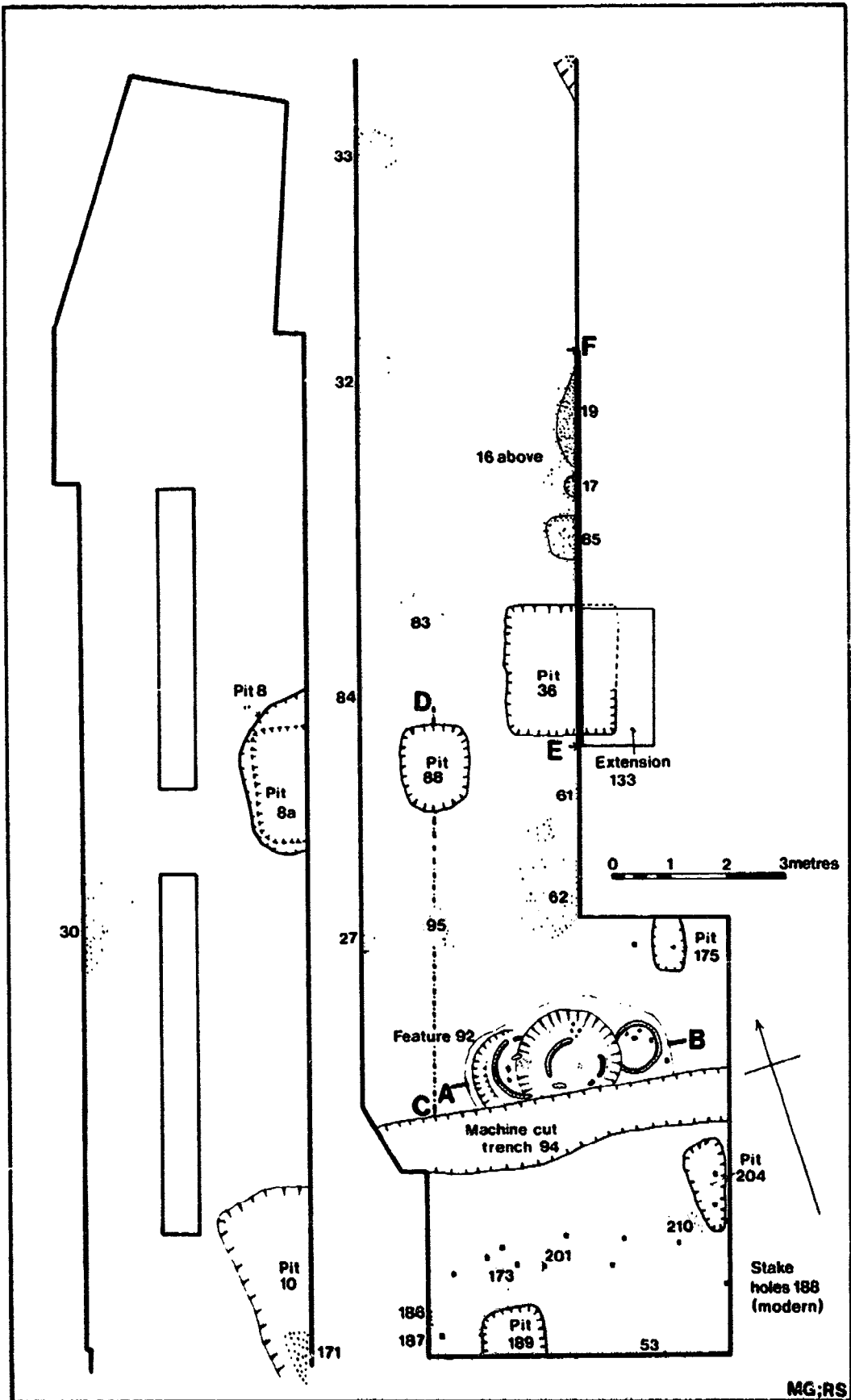


Fig 110 Brewery site. Period 4. Plan of features

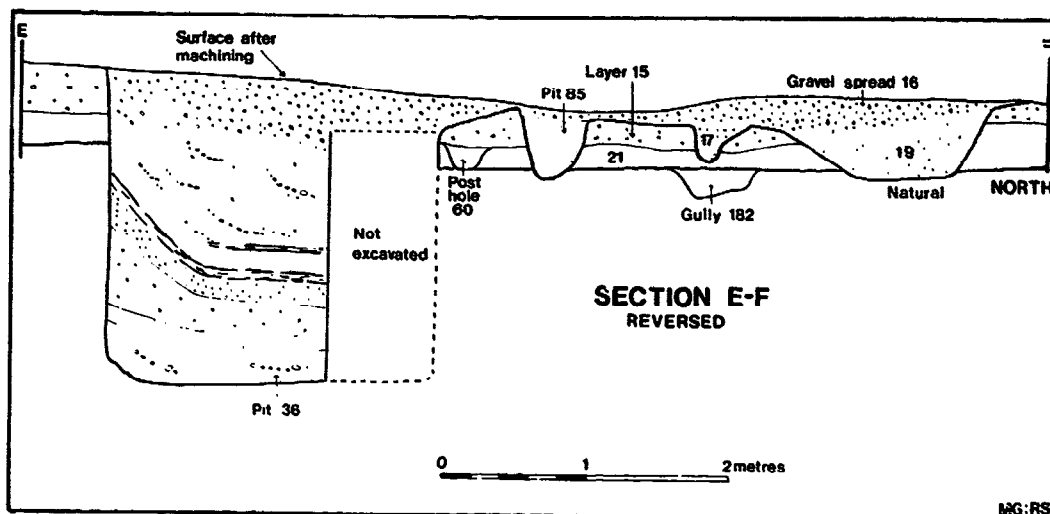


Fig 111 Brewery site. Section E - F. For the position of the section see fig 110:M3.D11

of decayed wood which suggests that the pit originally had either a wooden lining or a wooden cover. Above the wood was a layer of brown sandy soil with some gravel and stones. The pit contained some animal bone, daub, and charcoal.

The shallow pit, 175, in the southern part of the area, was considered to be the bottom of a larger feature. It contained a large stone and several sherds of pottery of 13th century date.

■ PERIOD 4b - Feature 92 (Figs 112:M3.D13 and 113)

A complex pit, 92, cut through layer 190 and part of the period 2a burnt building, 147. The feature had been partly removed by the original machine trench, 94. Within the pit, at varying levels, were the remains of three unfired clay rings, 200, 251, and 253. There were many pieces of unburnt red clay, and several fragments of grass-tempered moulds, in the fill of the pit.

The earliest of the clay rings, 200, lay above a small pit, 258, and was 0.9m in external diameter. The clay was carefully shaped with a flange, and the ring had a small indentation on the south side. It was cut at its western side by pit 256 which contained the more fragmentary ring 251, 1.1m in diameter. The latest of the three rings, 253, was also within pit 256. The diameter could not be measured accurately but was approximately the same as 251. Small patches of burnt clay were found centrally within rings 251 and 253.

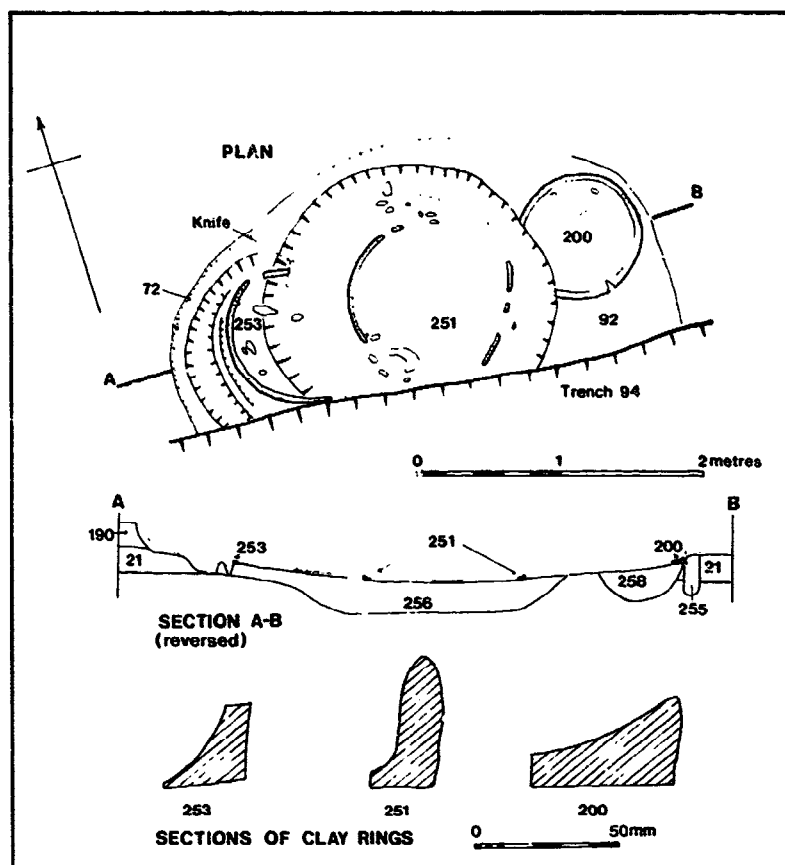


Fig 112 Brewery site. Period 4. Feature 92

■ PERIOD 4c - Pits 10, 88, 189, and 204 (Fig 110:M3.D11)

All the pits of this period were of post-medieval date and had been cut sufficiently deep to go completely through the stage 5 rampart material and disturb the earlier layers.

Pit 88 (Fig 109:M3.D1) was a typical cesspit with layered green clays separated by cleaner bands of gravel. Above these layers was a brown soil layer with charcoal, animal bone, and oyster shell.

Pit 204 was apparently the bottom of a larger feature which had been mainly removed by the machine clearance. It was probably a cesspit and had a similar fill to 88 but also included several mould fragments.

Two slight pits, 10 and 189, were both shallow modern intrusions containing bricks and concrete. Stakeholes, 188, at the extreme south of the area were later than pit 204, and traces of wood found in their fills suggests that they were also modern.

Dating

All features of period 4 were dated by the pottery found in their fills. The first group of pits, those of period 4a, were all of late 12th or early 13th century date. Feature 92 contained only a few sherds and was probably in use during the 14th century. In period 4c, pit 88 was of late 15th century date and pit 204 contained 16th century material.

Inventory (Vol 3)

Period 4a

Ceramic material

Pottery	Fabric	A2	A3	A4	A5	A6	A7	B1	B2
	Sherds	34	2	2	2	4	1	140	10
	Percent	14	1	1	1	2	-	56	4
	Fabric	B3	B4	C1	C2	D2	D3	G1	G2
	Sherds	2	1	18	6	13	5	8	1
	Percent	1	-	7	2	5	2	3	-

Illustrated pottery

Fig 59.45-74

Period 4b

Small finds

Metal	Copper fitting	F200	Fig 7.1
	Iron knife	F253	Fig 1.15

Ceramic material

Pottery	Fabric	A5	A7	B1	G1
	Sherds	1	6	2	3

None illustrated

Period 4c

Small finds

Stone	Two moulds	P88	Figs 12-15
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Worked bone Castellated carving P88 Fig 24.20 & Fig 27

Ceramic material

Pottery	Fabric,	A2	A5	A5	A7	B1
	Sherds	1	2	2	7	13
	Percent	2	4	4	13	24
	Fabric	B4	D3	G1	G6	G8
	Sherds	21	1	3	1	3
	Percent	37	2	6	2	6

None illustrated

Fired clay Parts of moulds P204 Fig 64.8, 10 & 11

Environmental material

Metalworking residues

Discussion

The late 12th and early 13th century pits were all in the eastern part of the site and were presumably cut through the tail of the stage 5 rampart material. The main bulk of the rampart was underneath Wall Street from where it would have sloped down across the site.

The construction of the northern extension to the defences cut across the properties which had originally faced on to Edgar Street. There is no evidence to show that the truncated eastern remains of these properties were reused with new buildings fronting on to the intra-mural Wall Street (Fig 12:M1.A11), and it seems that the whole area was rearranged with new properties facing Bewell Street to the south. The area excavated would thus have been part of a triangular piece of land which may well have contained a house close to the corner of Wall Street and Bewell Street.

Feature 92 is typical of the small industrial use of a site backing on to the city defences. It was probably cut into the tail of the rampart after this feature became disused with the construction of the city wall and the intra-mural roadway in the 13th century. The clay rings were apparently the waste remaining after the construction

of bell moulds, but the furnaces for firing the moulds and melting the metal, which one would expect to be associated, were not found. The continuity of site usage for the manufacture of bell moulds, from period 2b to period 4, may be coincidental, especially as there was a change of property alignments. There are no documentary records of bell founding in Hereford before the Reformation (Sharpe 1966-75, 672).

In the late 18th or early 19th century the whole of the area excavated became part of Bewell House grounds and was eventually absorbed into the Hereford Brewery (M3.B3).

Unprovenanced, illustrated finds (Vol 3)

Small finds

Metal	Clip or garter hook	Fig 4.6 & Fig 6
Coins	Radiate, 3rd century	No 3

M I N O R S I T E S

INTRODUCTION

Between 1965 and 1976, several small areas in the city were excavated and watching briefs were maintained on various development sites. Short reports on some of this work have been published in the Transactions of the Woolhope Naturalists' Field Club and are summarised in the main text (p 6). In this section unpublished material, mainly relating to excavation work on the defences of the city, has been gathered together from several sources. The excavations and watching briefs were supervised by various people and inevitably the standard of work varied from site to site. However, the results are of importance because they add extra information to that obtained from the major excavated areas and also because they confirm that various features observed on the major sites are consistent constructional features and not minor irregularities within the defensive sequence.

The first part of this section is concerned with the archaeological work undertaken on the city wall in the mid 1960's during the construction of the ring road. It is important to appreciate that these were the first excavations in Hereford directly concerned with the city defences. Previous writers (main text p 8) had considered the possible defensive circuits from topographical and theoretical aspects and had examined sections through the defences during building works. However, the existence of pre-12th century fortifications was not confirmed archaeologically until late in 1967 (Shoesmith 1967).

The second part of this section includes several sites where trenches, dug during the construction of new buildings, were recorded on an emergency basis, and one small excavation which examined part of the tail of the stage 5 gravel rampart.

THE CITY WALL EXCAVATIONS (Defences - stage 6)

In 1965, when this series of excavations commenced, the defences of Hereford appeared to have been written off by all the responsible authorities. Only a few sections of the medieval wall and ditch were scheduled as ancient monuments, whilst the associated ramparts and earlier defensive circuits, although described in several articles, had no statutory protection whatsoever.

The excavations on the line of the city wall (Fig 11:M1.A11) drew attention to the historic importance of the defences and resulted in a programme of restoration and conservation.

The first excavation, that of bastion 10, was undertaken in 1965 with the aid of a small grant from the then Ministry of Public Building and Works. It was directed by F Noble and Miss M Crompton with W T Jones supervising the planning and photography.

The Hereford Excavations Committee was formed early in 1966 and their first excavation was in Blueschool Street on the buried remains of bastions 9 and 10a and a neighbouring stretch of the city wall. The work, which was financed by a grant from the Ministry of Public Building and Works, was directed by Miss H Sutermeister. Both sites were threatened by the impending construction of the ring road and this road now overlies the line of the city wall in the bastion 10a area. The work was rendered difficult due to persistent heavy rain and snow.

Attention was transferred to the Victoria Street area in 1967 and the opportunity was taken to explore the berm and ditch in front of bastion 4 by means of a machine-dug trench (Fig 13:M1.A14). The work was directed by F Noble and R Shoesmith.

In the north-western corner of the city, the ring road was again planned to cut across the line of the medieval wall and the excavation of bastion 6 was undertaken for the Hereford Excavations Committee during 1968 by a voluntary group under the direction of Miss R E Hickling (now Mrs Skelton) and Mrs J O'Donnell (Fig 12:M1.A11).

The following reports are condensed from the original descriptions and I would like to express my appreciation to the various people concerned who allowed me to make use of their material. The original reports and the finds are deposited in the Hereford City Museum (Accession No 1979/309).

■ BASTION 10 (Figs 114, below, and 115:M3.E6)

The heavily robbed remains of this bastion, excavated during Easter 1965, were not identified until over 1m of more recent building debris had been removed. The area originally occupied by the bastion contained later walls, concrete floors, and cesspits which made satisfactory excavation impossible over much of the site.

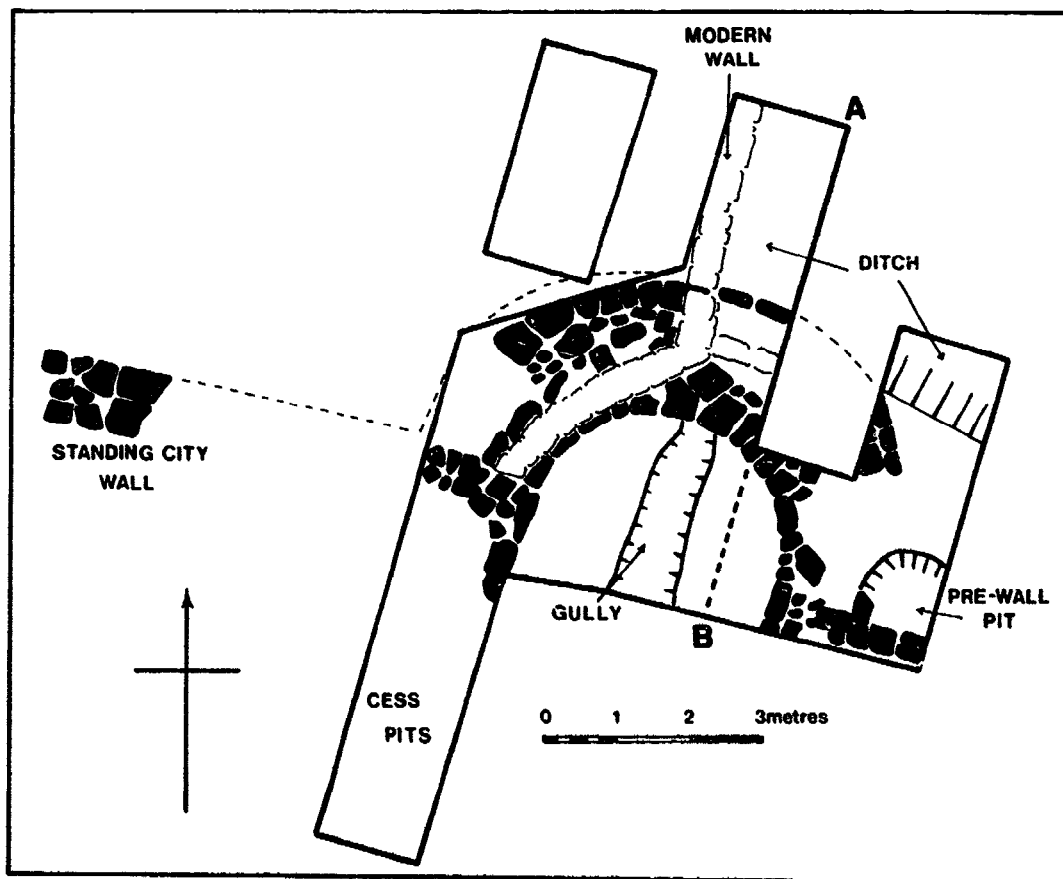


Fig 114 Bastion 10. Plan of features

Description

The bastion and wall were found to be secondary to earlier features, some of which are assumed to be defensive. The bastion was built into the slope of a pre-existing ditch, apparently on a step especially cut for the purpose. Other features considered to predate the wall included a grey soil level within the bastion, a gully and a pit cut into the soil layer, and a layer of dirty red gravel which sealed these features and continued down the slope of the ditch (Fig 115, below). A few sherds of pottery, found in the pit, were of 12th or very early 13th century date.

The surviving fragments of the bastion were sufficient to establish that it was of semi-circular design, 7.4m in external diameter with walls 1.8m thick. The remains of the city wall were more fragmentary than those of the bastion and its thickness could not be established. It was difficult to ascertain whether the wall and bastion were bonded together but the available evidence pointed to this conclusion. The berm was only 1m wide in front of the wall and the bastion was built into the face of the ditch. Substantial timbers, found in front of the bastion at a high level, may have carried a footwalk around it late in its life.

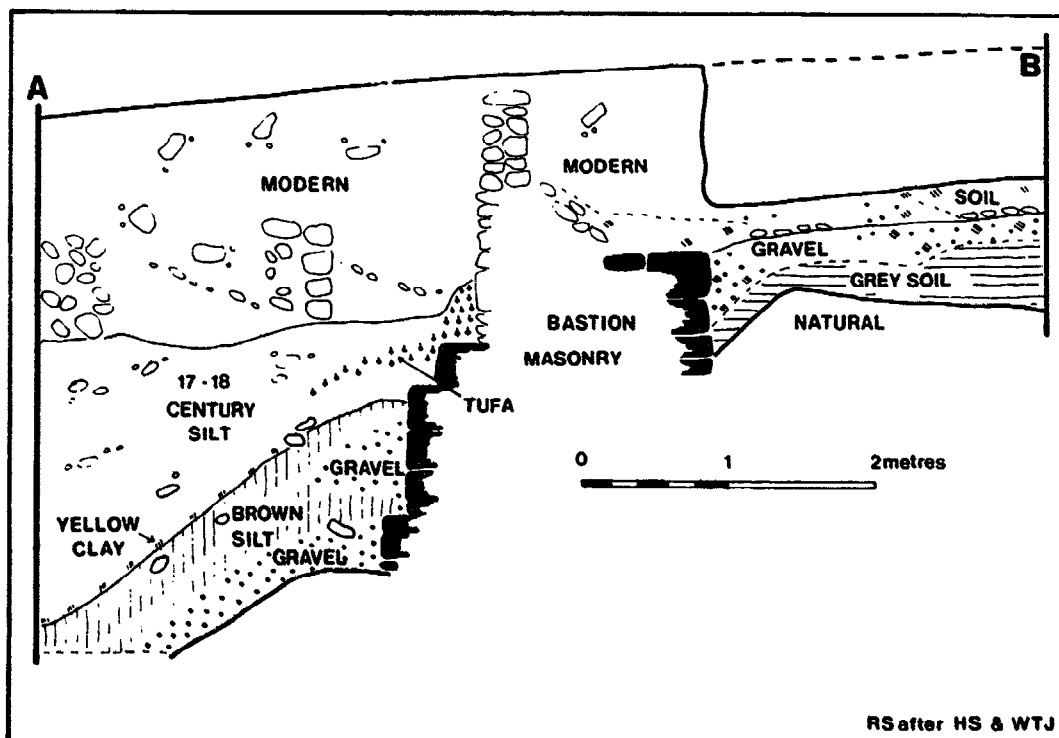


Fig 115 Bastion 10. Section A - B. For the position of the section see fig 114:M3.E5

The lowest fill of the ditch was the dirty red gravel which was considered to predate the bastion and this layer was covered with a brown silt deposited during the life of the bastion. These layers were sealed by a band of clean yellow clay some 0.1m thick. The remainder of the ditch fill consisted of a mixed clay silt which contained a tufa-like deposit. The latter material was probably caused by lime being washed out of the plaster and mortar used in the construction of the bastion. Finds from the clay silts were of 17th and 18th century date.

Within the bastion there were traces of a cobbled floor laid on top of the dirty red gravel layer. The floor was covered by a gravel and soil mixture of 17th century date.

The area to the rear of the city wall was examined in a trench 1m wide, and slight signs were seen of a grey soil layer similar to that within the bastion. Most of the area within this trench was disturbed by some very late cesspits.

Discussion

A pre-wall defensive phase is apparent although few details survived. It is assumed that this is part of the stage 5 gravel rampart and ditch. The gully and pit, which may have been cut into the berm between the stage 5 bank and ditch, had no apparent defensive purpose, although the excavators suggested that the pit may have held a substantial post. The wall had only a narrow berm between it and the ditch and it is suggested that the wall was probably built in front of the gravel rampart rather than being set into it. The lack of a reasonable width of berm meant that the bastion foundations had to be built into the face of the ditch, which could suggest that the bastion was a secondary feature to the wall. However, the full archaeological evidence tends to indicate that the wall and bastions were all of one build (main text p 85). It is possible that the ditch was widened and deepened when the wall was built and that the resultant spoil was piled on top of the stage 5 gravel rampart to build a bank for an intra-mural walk.

The excavators suggested that the band of yellow clay may have been associated with a rebuilding of the face of the bastion, possibly at the time of the Civil War. The gravel and soil layer which was found within the bastion, was apparently of the same date and sealed what may have been the original cobbled floor.

■ BASTION 9 (Fig 116:M3.E9)

The remains of this bastion were buried under the remains of a 19th century stone-built forge which had been demolished to make way for the ring road. The bastion was examined in April 1966 by means of two machine-cut trenches about 6m apart.

Description

West section A-B:

A narrow trench, which was cut by machine to a total depth of 3.2m below the existing ground surface, was too shallow to examine the ditch to its full depth. The earliest excavated material consisted of a relatively clean gravel which was found in a thick band against the original side of the ditch. The resultant profile of the ditch had been cut into steps, which continued across the width of the trench. Stone footings were found on each of the steps, but the upstanding masonry of the bastion which was two courses high, was only present on the topmost step. The angle at which these upstanding stones were laid indicated that the western edge of the bastion had been found. A layer of silt which sealed the clean gravel in the ditch fill was of 17th century date and above this was a mixed rubble fill. A combination of rubble and brown clay, found above the footings, was interpreted as the fill of the robber trench for the bastion. This merged into the mixed rubble fill of the ditch suggesting that it was finally filled at the time the bastion was dismantled.

East section C-D:

The earliest feature was a flat-bottomed trench which had been cut some 1.5m deep into the natural gravel. The steep slope on the south of this trench continued through a grey soil layer which survived on top of the original ground surface. This pre-wall trench had a fill of mixed gravel which was used as the base for both the wall and the bastion. The fill had been stepped to the north to take the footings of the bastion.

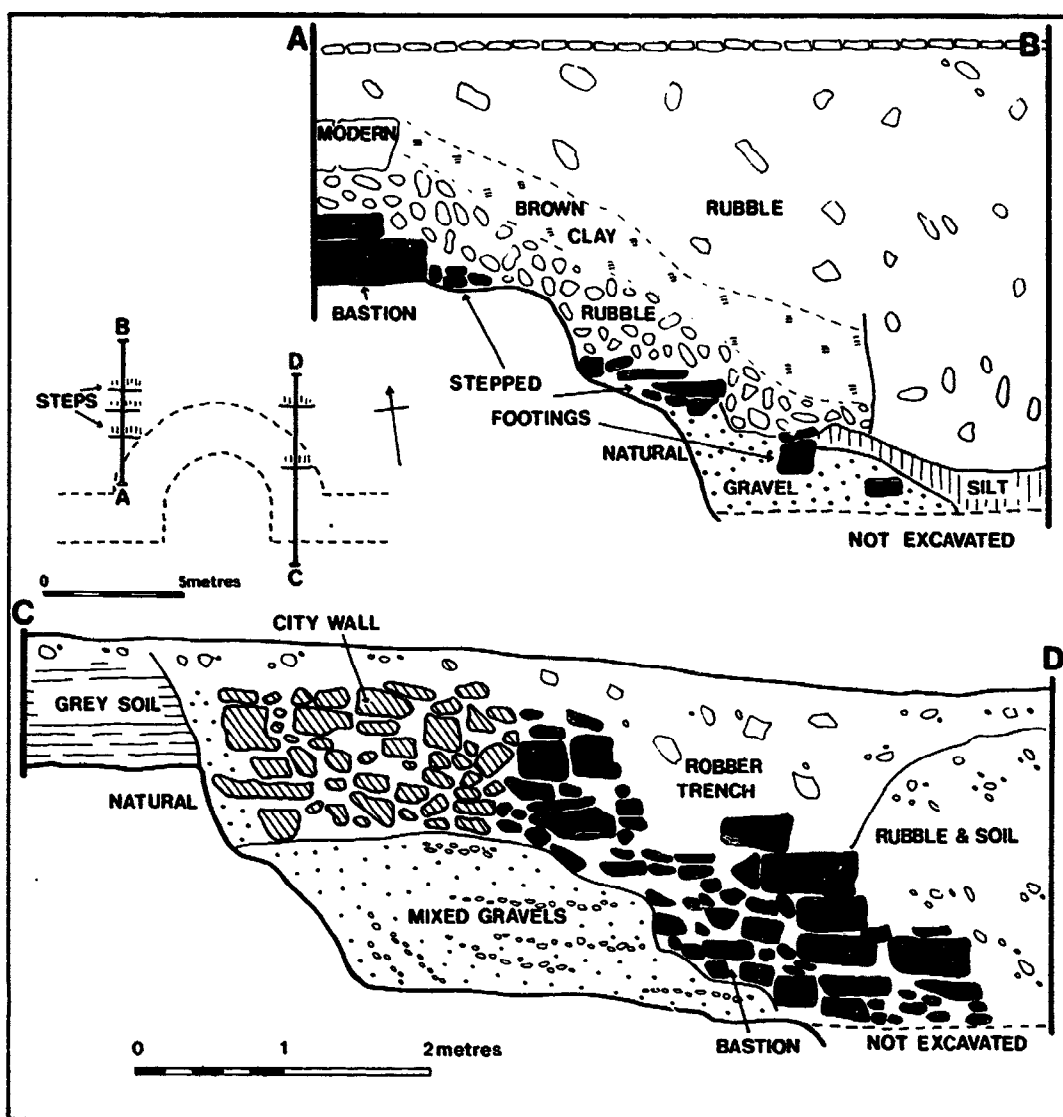


Fig 116 Bastion 9. Sections A - B and C - D

The wall and bastion survived about 1m high and the stones which comprised them were loosely bonded together, but the differences in alignment of individual stones distinguished the two structures. The small portion of the ditch which had been associated with the wall and bastion was filled with a mixture of soil and stones and a robber trench dug to remove the wall and bastion masonry had been cut through this material.

There were no finds which could be used to date any of the constructional phases seen in these machine cut trenches.

Discussion

Bastion 9 was still upstanding in 1870, when it was examined by members of the British Archaeological Association during their visit to Hereford (Watkins 1919b, 162). It was probably demolished very shortly afterwards. The sections indicate that both wall and bastion were secondary features to an earlier defensive ditch. In section A-B, the gravel which sealed this original ditch was presumably the result of erosion, either of the pre-wall rampart or of the edges of the ditch itself, before the bastion was built. However, the thick layer of gravel underneath the wall and bastion in section C-D could indicate that the early ditch was refilled, but as this ditch apparently continued deeper underneath the bastion footings, the original profile could not have been of the normal U or V-shape.

Both trenches suggest that the city wall was built in front of the stage 5 gravel rampart and on the edge, or perhaps just within the fill, of the associated ditch. There was thus no berm between the wall and the ditch and as a result the bastion had to be constructed into the sloping side of the ditch. To provide a reasonably secure footing for this bastion, the side of the ditch was cut into several steps and a foundation platform was built on each of them. The semi-circular bastion was then built on this series of platforms and eventually tied into the city wall at the ground level.

■ BASTION 10a (Figs 117:M3.E11 and 118:M3.E12)

This bastion, which was shown as rectangular on Hill's map of 1716 (Hill 1716), but was not indicated on Taylor's map of 1754 (Fig 5), was presumably demolished between these two dates. A stone building occupied the site until it in turn was demolished to make way for the ring road.

Description

The bastion was of at least two constructional phases with the first phase built into the slope of an earlier ditch. The slope of the ditch continued within the bastion and cut through a grey soil which was the only surviving pre-wall layer found during the excavation.

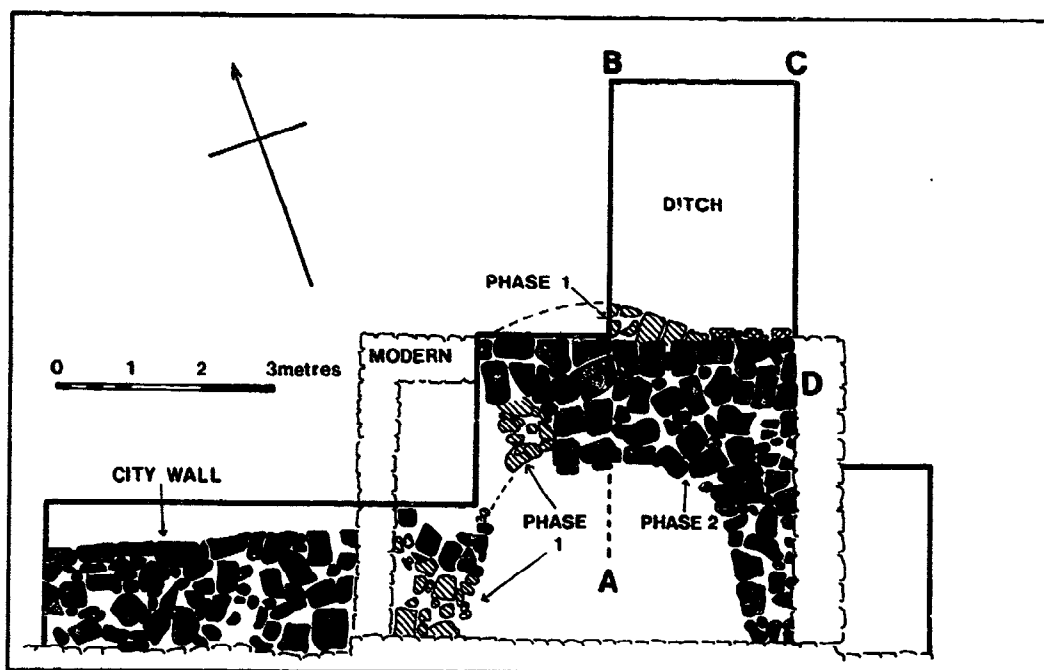


Fig 117 Bastion 10a. Plan. For the positions of the sections see fig 118:M3.E12

The original bastion was semi-circular and was apparently built in a foundation trench cut into the face of the earlier ditch. The footings of the bastion could not be excavated to their full depth because of the conditions on the site, but the foundation trench was seen to continue into the natural gravel. The bastion was some 8m across with walls about 2m thick and was thus slightly larger and more massive than bastion 10. There were slight indications of a chamfer (Fig 118:M3.E12 - section C-D) around the outside of the base. Within the ditch a heavy brown silt had apparently accumulated during the life of this bastion and a gravel filled trench, which was cut through this silt, contained the remains of seven vertical wooden stakes which leant against the face of the bastion.

The semi-circular bastion was demolished to its foundations which were then reused as the footings for a rectangular tower. The new outer face was built some 0.3m within the line of the original front, the thickness of the wall being retained by taking the new courses partly over the fill inside the original bastion. The corners of the new tower were outside the curve of the semi-circular bastion and were set, without any proper foundation, into the silt of the ditch.

The red mud and stones which were found in the fill of the ditch in front of the new tower sealed a layer of soil and gravel. Both layers were probably associated with the construction of the tower but it is possible that the red mud was a result of demolition during the first half of the 18th century.

The junctions of the city wall and the bastion could not be properly investigated but a length of some 4m of the wall was examined to the west of the bastion. The foundations stood some 0.7m high and were at least 2m thick. The face was built of large red sandstone blocks, roughly coursed with the use of small filling stones. The lowest course was stepped out 0.05m as a footing for the remainder of the wall. There was no indication that mortar was used in the construction and the smaller stones used in the core of the wall were packed with gravel and red clay.

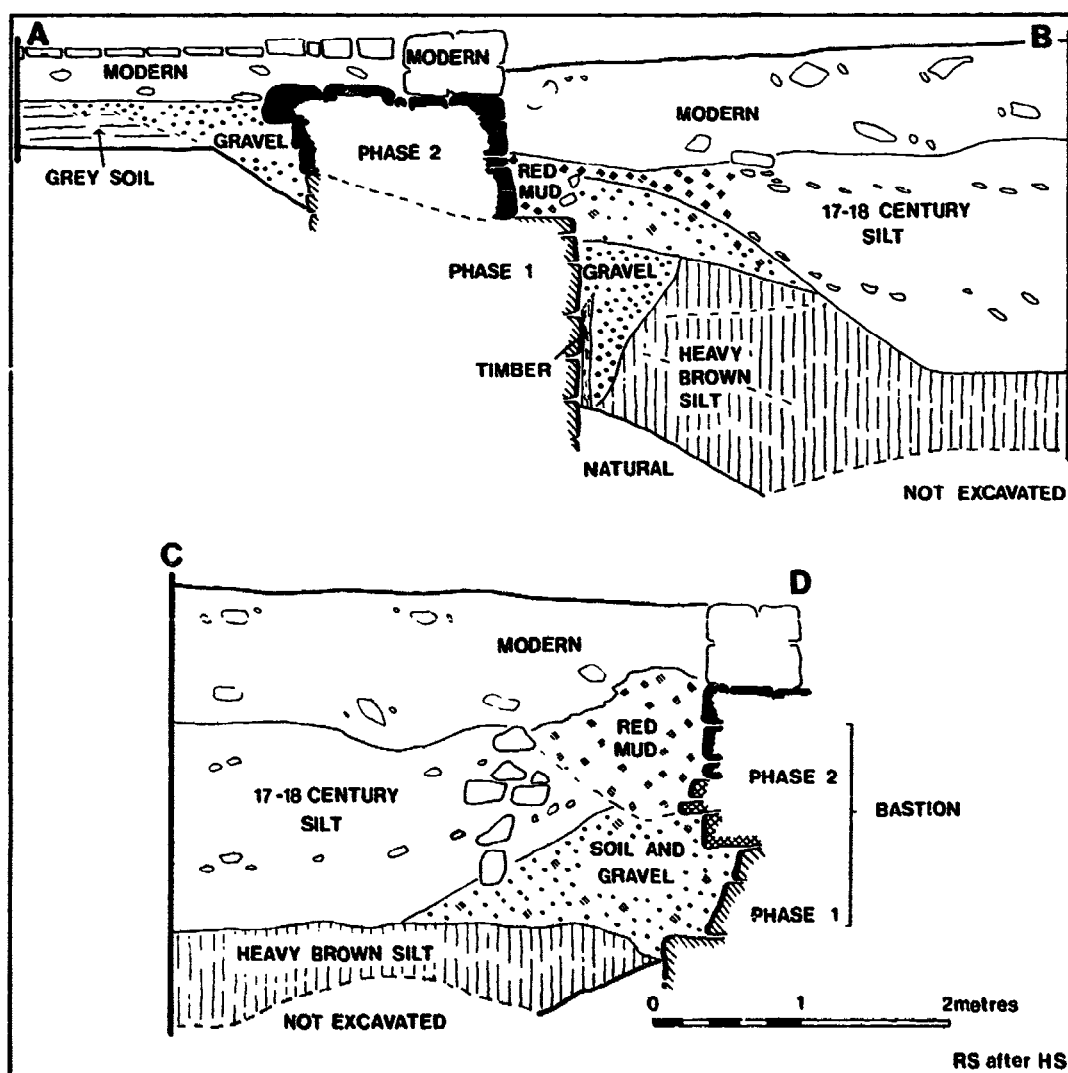


Fig 118 Bastion 10a. Sections A-B & C-D. For the position of the sections see fig 117:M3.E11

Discussion

As far as is known, this is the only bastion which was more or less completely rebuilt and the only one where the shape was changed from semi-circular to rectangular. Rectangular towers of this type are generally considered to be of late 14th or 15th century date but may be later (Turner 1970, 60). The dating evidence for the rebuild is only sufficient to suggest that it could have been at any time up to the Civil War.

The timbers, which were found in the gravel filled trench in front of the semi-circular bastion, could have been either part of the constructional scaffolding for one of the building phases or the remains of a timber walkway around the bastion.

■ WALL SECTION BETWEEN BASTIONS 10 AND 10a (Fig 119, below)

A trench was cut by machine through the line of the city wall and the upper fill of the ditch about 22m to the west of bastion 10a. The section was similar in many respects to those exposed at the two nearby bastions, 10 and 10a. A thick layer of mixed gravel and silt lined the side of the original ditch, and the foundation trench for the city wall was cut partly into this layer and partly into the

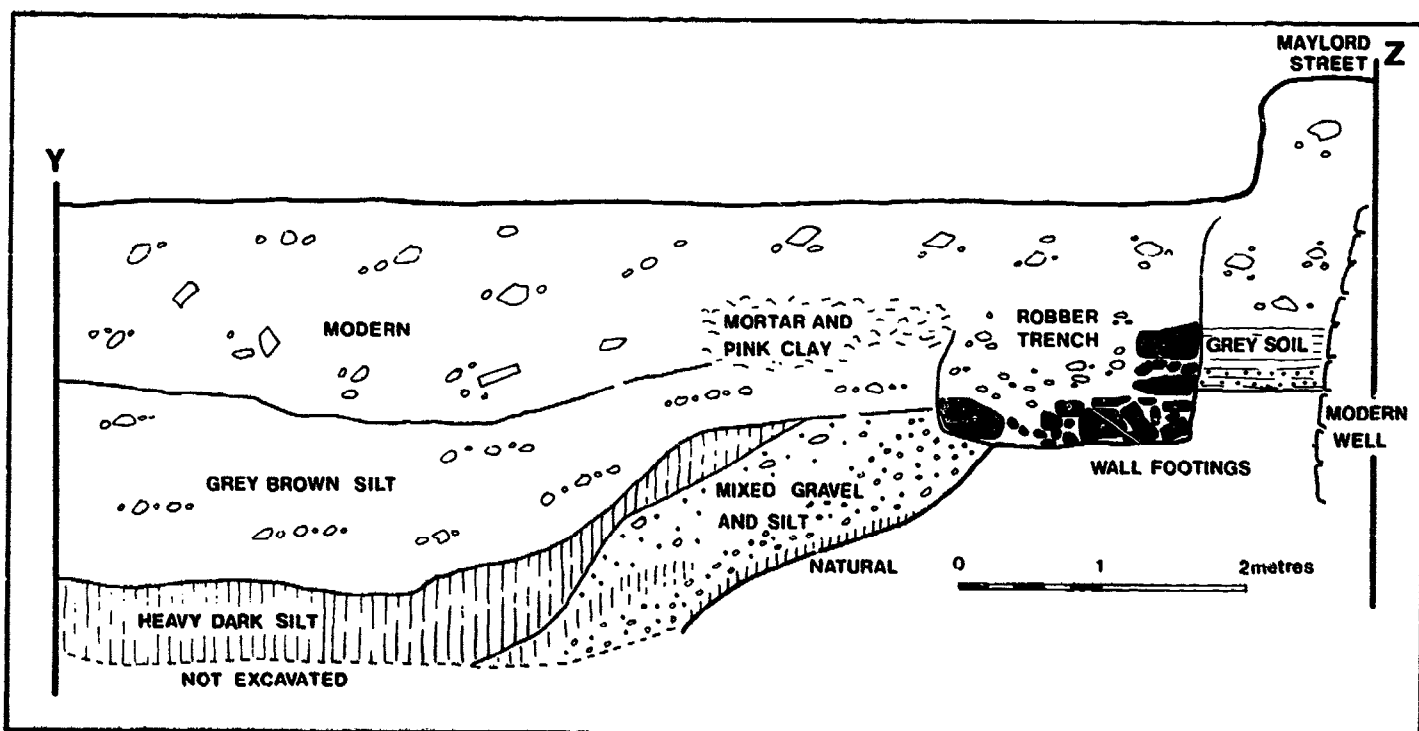


Fig 119 Wall section Y-Z between bastions 10 & 10a. For the position of the trench see Fig 11:M1.A11

natural gravel of the site. The wall was 1.8m wide and when constructed the foundations were probably laid less than 1m deep in the existing ground surface. Only a few stones, which comprised these footings, remain.

The lowest level excavated within the fill of the ditch was a heavy dark silt similar to that seen in the other nearby excavations. The overlying levels represented the final filling of the ditch in the 19th century. A modern well cut away most of the layers within the wall line but sufficient remained to show that the foundation trench for the wall cut through an existing soil level.

■ BASTION 4 (Fig 120:M3.F1)

The remains of this bastion can be seen by visitors to the city as they follow the Victoria Street section of the ring road. Before the road was constructed this bastion and the adjoining stretch of city wall were hidden from public view by several small industrial premises built on top of the line of the ditch. When the buildings were demolished there was an opportunity for archaeological work which included a machine excavated trench in front of bastion 4.

Description

The cut for a ditch was apparent in the natural gravel in front of the bastion. This was covered with a layer of brown silt and above it a thick layer of gravel containing some mortar flecks. It is possible that these two layers were associated with one phase of the pre-wall rampart defences. The remainder of the ditch fill consisted of mixed soils and modern debris to the total depth excavated.

The foundation trench for the bastion was apparently cut through the brown silt level and may have involved the removal of the front of the pre-existing rampart. This meant that the bastion was built on the original berm, rather than in the face of the ditch as had been the case on the northern part of the defences. The bastion is 7.9m in external diameter and is fully bonded with the city wall on its southern side.

To the north the wall has been demolished. A slight step in the masonry of the face of the bastion may well indicate the original ground level when this phase of the defences was in use.

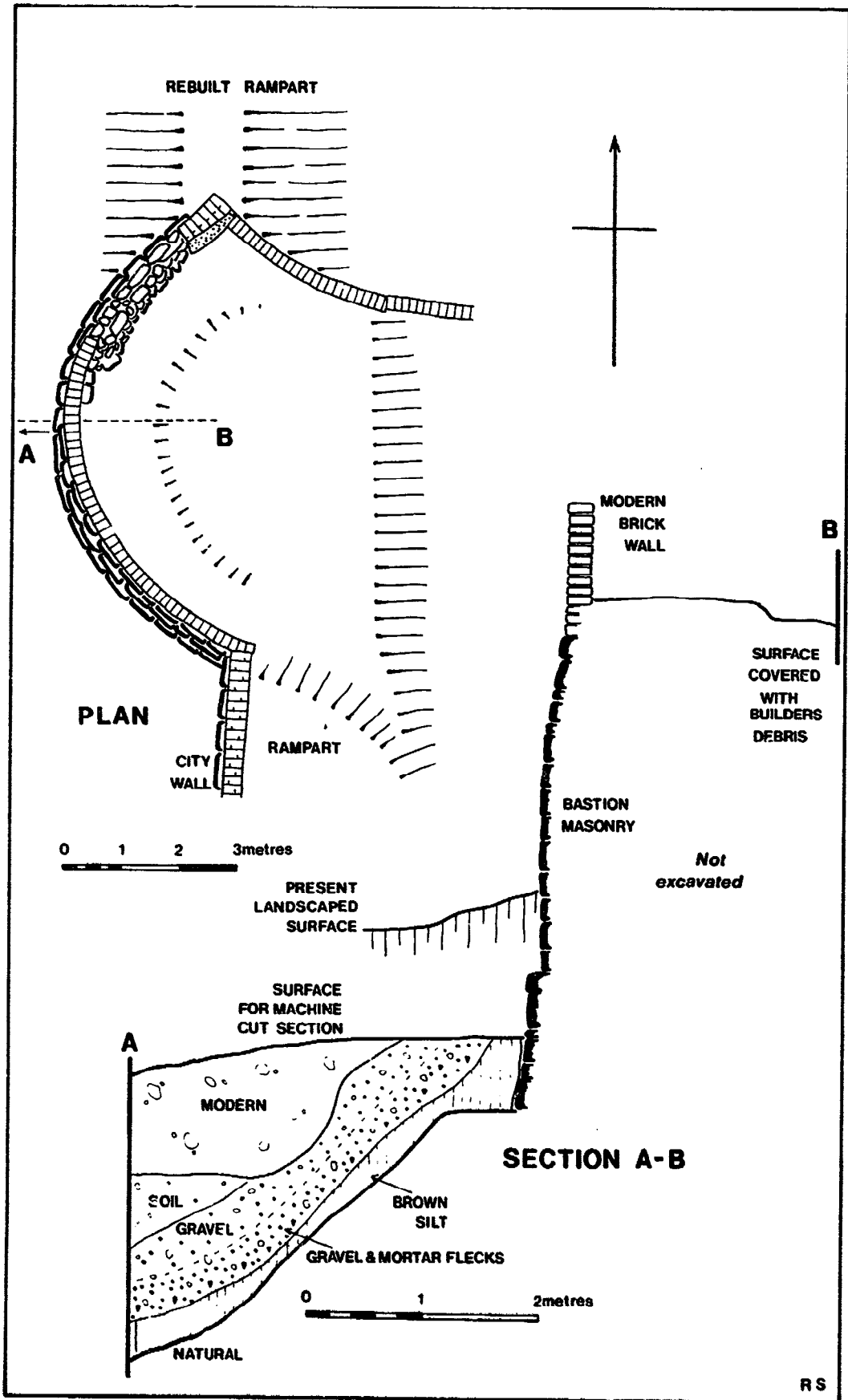


Fig 120 Bastion 4. Plan and section A.- B

Discussion

Bastion 4 has a slightly more flattened profile than those excavated along the northern sector, but otherwise is of similar dimensions to the earlier phase of bastion 10a.

Other excavations in the immediate area of bastion 4 have demonstrated the relationship of the city wall to the earlier defensive features (Shoësmith 1967). It is apparent that the city wall in Victoria Street was built on a platform, deliberately prepared by removing the face of the stages 1-3 defences, and therefore it acts as a revetment to these earlier defences rather than being a separate wall, as was the case along the northern sector and in Cantilupe Street (M1.G6). As a result of this method of construction there would have been a berm, perhaps 4m wide, in front of the wall along this part of the circuit, contrasting with the total lack of berm along the northern sector.

This may mean that there was a deliberate change in policy or that one part of the wall was constructed at a much later date than the other. Another possible reason for this method of construction is that the western defensive ditch, leading directly to the river from the junction of Yazor Brook with the defences close to Eign Gate, was already deep and wide before the wall was built. Around the northern perimeter the ditch may have been more shallow and would thus have required deepening when the wall was built. The large amount of spoil produced by this work would then have been available to make a new rampart walk behind the wall. Along the western line, the smaller amount of spoil produced by cutting back into the rampart may have been sufficient to raise the ground inside the wall to the appropriate height for the intra-mural walk.

One important effect of the different constructional methods was that the western bastions apparently contained a solid fill (Fig 120:M3.F1), as compared with the excavated bastions on the northern circuit which have been shown to be hollow.

Landscaping associated with the construction of the ring road has raised the ground surface outside the bastion by about 1m from its 1966 level. Some 2m of the bastion masonry is now buried under the ground and only 2m remains visible. The bastion and the stretch of city wall to the south of it were renovated in 1970 (Fig 140).

■ BASTION 6 (Fig 121, below)

The site of bastion 6 was between Wall Street and Edgar Street some 30m north of Eign Gate (Fig 12:M1.A11). The ring road was planned to go directly through the site and a small excavation was organised during April 1968. The site was limited in size by the position of the two roads and only the area of the bastion could be examined.

Description

The surviving layers within the bastion consisted of mixed silts and gravels which covered a sloping cut in the natural gravel. This was assumed to be the side of the ditch belonging to the stage 5 defences. There were no indications of any other pre-wall features. The bastion had been extensively robbed and the city wall had been replaced by a cellar wall in the 18th century, but there were slight indications which suggested that the wall and bastion were both of one build. The bastion was about 6.7m in external diameter with walls a little more than 1.2m thick and was thus less massive than bastions 10 and 10a. The foundation courses of the bastion may have been laid on a step or in a trench cut into the face of the earlier ditch. There were slight indications that the bastion may have had substantial repairs: at the south-western side of the bastion there were three stones of a chamfer which may have continued round the whole of the bastion; at the south-western corner a cobbled surface, consisting of pebbles and stones laid vertically, was found external to the bastion. The surface sealed a layer which contained 15th century pottery.

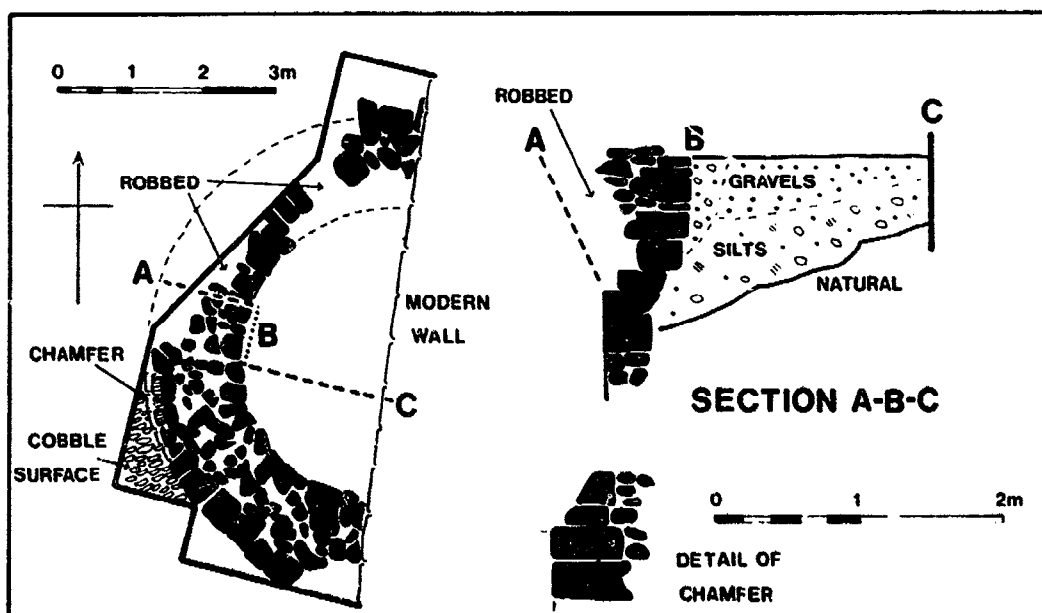


Fig 121 Bastion 6. Plan and section A-B-C

Discussion

The construction of the bastion in the face of the ditch was similar to the constructional method used around the northern sector, rather than that used for bastion 4 to the south.

There are two other examples of a chamfer on the city wall. One is under the small, early 17th century postern gate in the wall of the Farmers' Club to the east of Widemarsh Gate (main text p87), and the other is in the yard of the Lamb Inn, to the north of St Owen's Gate. In addition, buttresses, which have been inserted into the city wall to the south of Friars' Gate, also have chamfered bases. The evidence indicates that the use of a chamfer is a late feature in the Hereford defensive works, and this may suggest that bastion 6 was either totally rebuilt or that it was a late addition to the defences, built close to Eign Gate to give additional protection to the curved part of the wall between the gate and bastion 7.

■ FRIARS' GATE (Defences - stages 1-4 & 6) (Figs 122:M3.F5 and 123)

Demolition of property close to the corner of Victoria Street and St Nicholas Street exposed the inner face of the city wall (Fig 13:M1.A14). The northern part of the site was then cleared using a mechanical excavator and this revealed a section through the pre-wall defences. After some negotiation, the contractor allowed archaeologists to examine the site for three days during Easter 1971, and a small grant was provided by the Department of the Environment. The section was cleaned and drawn and a small area was examined in plan.

The finds are deposited in the Hereford City Museum (Accession Number 1979/310).

Description

The section was very similar to that seen in the Victoria Street excavation some 120m to the north (M1.B6-C7). However, there was little indication of occupation in the area before the stage 1 gravel rampart was constructed, except for slight traces of charcoal (layer 1) to the east of the site, and part of a quern stone which was found in the same level. The stage 1 gravel rampart was similar in appearance to the parts previously observed and also contained

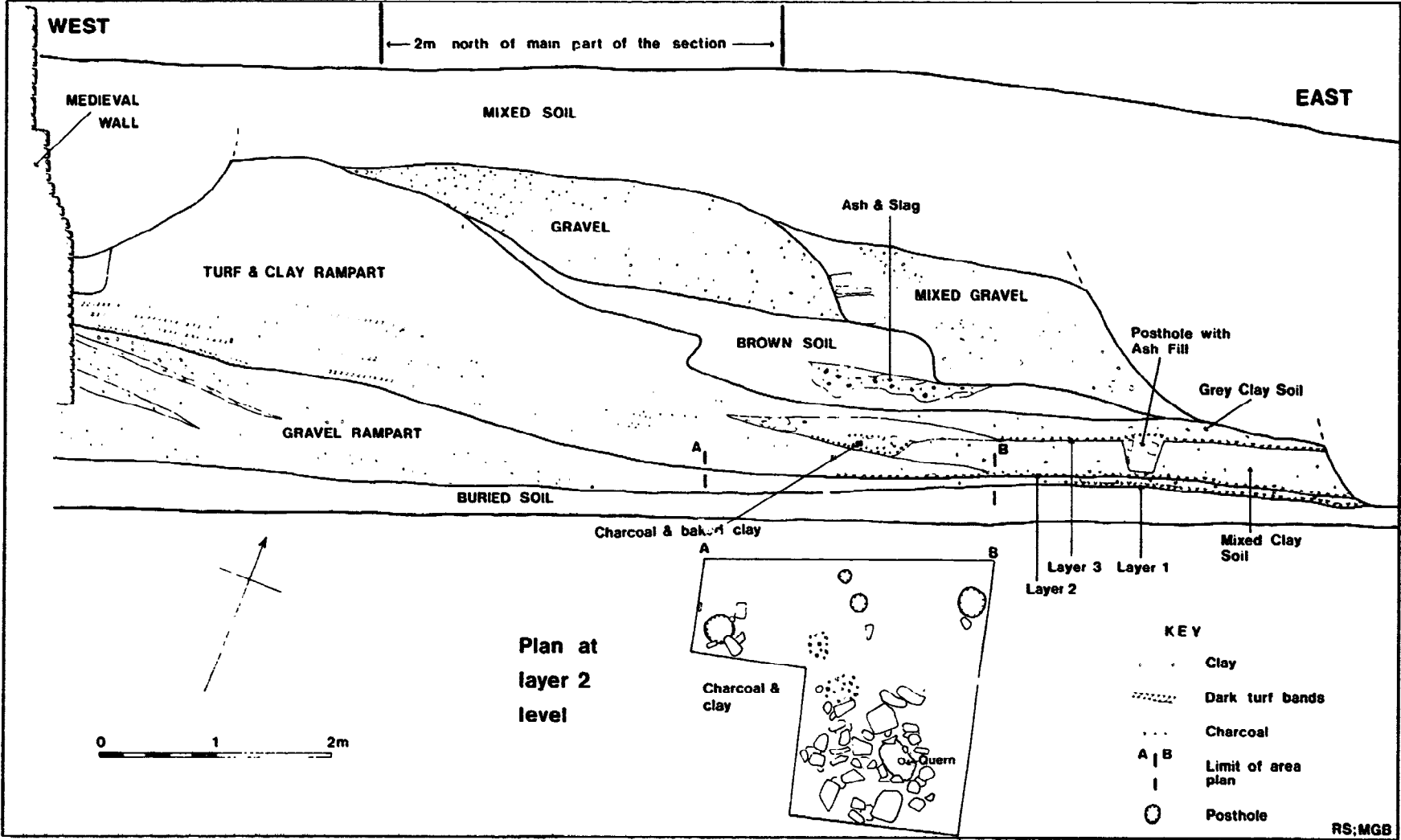


Fig 122 Friars' Gate. Western part of the section. For the positions of the excavation see fig 13:M1.A14

bands of clay. Layer 2, consisting of mixed clay and charcoal, continued from the tail of this rampart to the east, and a small part of this layer was examined in plan. Several postholes, which were apparent by their darker fill, were associated with patches of charcoal and burnt clay.

Layer 2 was covered by a scatter of unworked stone which in turn was sealed by the tail of the stage 2 clay and turf rampart. The construction of this rampart was apparently very similar to that seen in the exposures further to the north, with bands of darker material throughout. Towards the tail an abrupt break in the slope of the rampart may be equated with feature 60 on the Victoria Street site.

This is considered to be due to the presence of a timber revetment built into the rear slope of the defence. Traces of occupation were found on and within the eastern part of the tail of the stage 2 rampart. A mixed clay soil level sealed the stone on top of the layer 2 occupation on the tail of the stage 1 gravel rampart, and above this a charcoal spread, layer 3, associated with, or possibly sealing, an ash filled posthole, indicated an occupation level which was within the material comprising the tail of the stage 2 rampart. This layer widened towards the main part of the rampart where it included some baked clay, ash, and charcoal. There was a gradual change between the grey clayey soil which sealed this occupation level and the turf and clay rampart material to the west. The thick brown soil of layer 4, which contained a pocket of ash and slag, covered the tail of the stage 2 rampart and was equivalent to the disuse phase of stage 4. It was within this layer that a small body sherd of fabric G1 was found. There was no indication of the stage 3 stone revetments and metalled road.

A clean gravel layer, which sealed the remains of the turf rampart, was bounded to the east by a slight stone revetment. This layer is identical to Victoria Street period 6 and represents the stage 4 reconstruction of the defences. A layer of mixed gravel and soil was found to the east of the stone revetment. All the defensive remains were sealed by a layer of garden soil which was between 1 and 2m thick.

The lower courses of the city wall were built against a vertical face which had been cut into the several ramparts. They were poorly mortared with rough edges and stood about 1.4m high. Above this were

two rebuilding phases, both constructed by digging a trench to a suitable depth through the stage 2 rampart material. The rebuilds were both roughly faced on the inside and corresponded with a decrease in the thickness of the wall from that of the original foundations. There was no evidence to indicate the dates of construction of the wall and its rebuilds.

Dating

The only dating evidence for any of the features on this site was a small sherd of fabric G1 found in the disuse layer associated with stage 4 of the defensive sequence.

Inventory (Vol 3)

Small finds

Stone	Quern	Layer 1	Fig 10.3
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Ceramic material

Pottery

1 sherd	Fabric G1	Layer 4
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Discussion

The Friars' Gate section demonstrates the continuity of the various defensive features on the western side of the city. It can therefore be assumed that the defences to the west of the important Berrington Street excavations would be consistent with those found at Victoria Street and Friars' Gate.

The occupation levels on the Friars' Gate site could not be examined in any detail. The layers associated with the various defensive stages suggest that this area of the city was quite densely occupied after the defences were built, but the lack of any substantial traces of occupation underneath the gravel rampart is perhaps noteworthy. The section indicates that there was an occupation layer to the east of the site (layer 1) underneath the one definitely associated with the stage 1 gravel rampart (layer 2). This layer could have been associated either with the rampart construction or with an early phase of its use. However, the area examined was so small that no firm conclusions should be made from this apparent lack of evidence.

■ **LIBERAL CLUB (Defences - stage 5) (Fig 124, below)**

A small grant was made by the Hereford Excavations Committee to examine a section of the tail of the stage 5 gravel rampart in advance of landscaping works (Fig 12:M1.A11). The excavation, which took place during August 1971, consisted of a hand-dug trench, 2m wide and 6m long, at right angles to the defences. Permission for the excavation was granted by the committee of the Liberal Club to whom thanks are due.

The context numbers used on the published section (Fig 124, below) have been altered, in one or two cases, from those used during the excavation for ease of reference.

The finds are deposited in the Hereford City Museum (Accession Number 1979/311).

Description

The undisturbed soil levels were found to be over 2m deep and because of this the excavation was limited to a width of 1m in the lower parts of the trench. There was thus little opportunity to examine the features cut into the natural subsoil of the site.

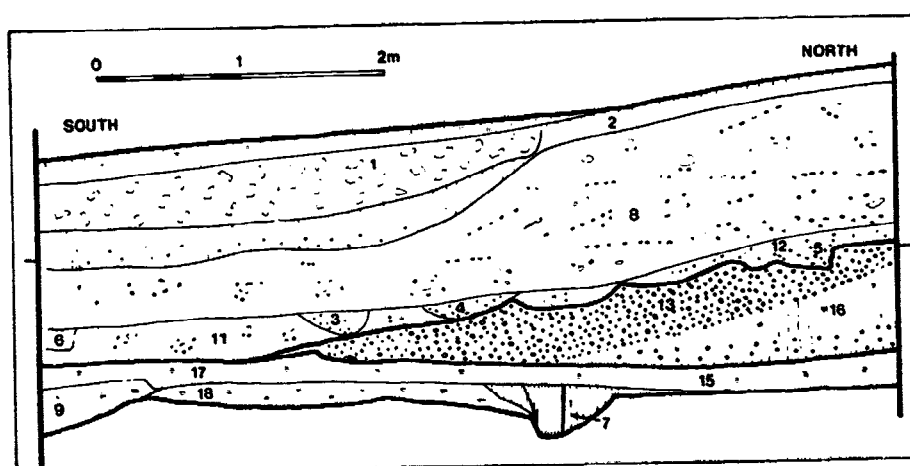


Fig 124 Liberal Club. West face of trench.
For position see fig 12:M1.A11

Three distinct periods were established; a pre-rampart occupation phase, the stage 5 gravel rampart, and the post-defensive build-up of the ground surface. The lowest soil level, layer 18, which was above the natural gravel of the site, consisted of a clean, greenish-brown clayey soil. Cut into it were several features, two of which, 7 and 9, can be seen on the section (Fig 124:M3.F9). Feature 7 consisted of a postpit containing a grey sandy silt with a post position evident because of the darker silt of its fill. The post, which had been some 0.3m in diameter and 0.35m deep, may have been deliberately dug out. To the south-east of the trench was a similar post position, 10, which was also cut into layer 18. It was approximately 2.5m from posthole 7. Feature 10 was apparently associated with a slight east-west gully, 9. Sealing the gully and postholes was layer 17 which consisted of a mixed grey-brown silt with a few pebbles. This layer was cleaner to the north, where it was sealed by the rampart, and was there recorded as layer 15.

Stage 5 rampart material covered almost two thirds of the trench with a maximum thickness of 0.8m at the northern edge. The lowest level, layer 16, consisted of a consolidated grey silt with some pebbles in the lower part and sealing it was layer 13 which was made up of clean red gravel and pebbles. The rampart apparently became stabilized with the formation of layers 11 and 12 and the upper parts of these layers were cut by many shallow pits and depressions such as 3, 4, and 6, during the 13th century. The post-rampart levels, layers 1, 2, and 8, were some 1.2m thick and were made up of various mixtures of soils, gravels, and stone.

Dating

The only dating evidence was from the pottery and this suggests that the pre-rampart levels are of late 12th century date or earlier although there were a few, probably intrusive, later sherds in layer 17. The lower part of the rampart material, layer 16, contained only material of late 10th or 11th century date. This is considered to have been redeposited. Disturbances in the top of the rampart were of 13th century or later date and the thick post-rampart levels were 17th century or later.

Inventory (Vol 3)Small finds

Token mid 17th century L8 Coin 17

Ceramic material

Pottery Illustrated pottery Fig 29.6 & 10

Discussion

The orientation and size of the two posts found in the pre-rampart levels suggest that they were part of a building or a substantial fence. However, there was no indication of any floor level so a fence, which because of the size of the posts was presumably a property division, would seem most likely. This may perhaps be compared with the property divisions found in similar levels at Bewell House (M2.F10) and the Brewery site (M3.B9) to the west, and with the gully found in the trial excavations to the east (Sawle 1977). It would seem likely that the city had extended northwards to such an extent that property boundaries were a significant feature in these areas towards the end of the 12th century.

The stage 5 gravel rampart sealed late 12th century material and 13th century material was found in the overlying layers, suggesting that the rampart was constructed about the turn of the century. The layers of the rampart have a similar appearance to those in the Bath Street excavation (Stanford 1966), where it was suggested that the spoil from an external ditch was deposited in the same sequence as it was excavated. Thus the subsoil levels are represented by layer 16 and the deeper gravels were laid on top to become layer 13. The few sherds of late 10th or 11th century pottery from layer 16 may indicate some occupation in this area well outside the earlier defensive line similar to that examined on the Brewery site (M3.C1).

The angle of slope of the rear part of the rampart was probably too great for it to be cultivated and there was no indication of any industrial use similar to that found at the Bewell House site (M2.G9). The thick deposits of 17th century and later date presumably represent the levelling of the ground to the south when the bowling green was constructed.

■ ST OWEN'S GATE AREA (Defences - stages 5 & 6) (Fig 14:M1.B1)

Late in 1973 three trenches were dug on the outside of the city wall in the yard of the Lamb Hotel, to the north of the site of St Owen's Gate, in order to insert reinforced, brick-faced buttresses. The upper parts of the wall sloped precariously outwards and had previously been supported by a 19th century stable block.

All the trenches contained similar fills, the natural gravel being encountered at about 0.7m below the yard surface. Sealing this was some 0.2m of clean light brown silt which showed few signs of disturbance and was apparently the subsoil of the site. Above this and tailing away from the wall was a thin band of clean red gravel. Above this again was a layer of dark soil containing some modern debris. The foundations of the city wall were only a few centimetres deep below the present yard level and the wall had traces of a chamfer above this level. The berm in front of the wall was at least 2m wide in all three trenches.

In 1976, alterations to the building on the inside of the city wall at the same point, now the City Walls Steak Bar, provided further information. The lower 1.5m of the inside face of the wall was exposed over a 4m length as part of the reconstruction work. The wall was poorly coursed and unfaced with a quantity of pebble gravel adhering to the surface.

It was apparent that, at this point, the wall had originally been built as a facing to the stage 5 gravel bank, and only became free-standing at a later date. The thin layer of gravel on the berm in front of the wall may have been part of the remains of this bank, being left behind when the rampart was cut back to insert the city wall. Alternatively it may have been slip from the stage 5 rampart. The areas examined were too small for the apparent lack of pre-rampart occupation to be significant.

■ CITY ARMS (Defences - stages 1-4)

The City Arms Hotel, on the eastern side of the northern end of Broad Street, was built by the Duke of Norfolk at the end of the 18th century as a replacement for an earlier inn, the Swan and Falcon. The narrow part of Broad Street, shown on Taylors Map (Fig 5) as Norgate and assumed to be the site of the northern gate leading into the Saxon city, was widened by taking the frontage back to the line

of the rest of the street, and when originally built, the new hotel stretched from High Street to East Street. The building continued as an important city hotel until 1973, when planning permission was given for it to be converted to a branch of Barclays Bank, conditional on the retention of both the Georgian facade and the 15th century timber-framed house which had been incorporated into the building of 1790. A full archaeological investigation of the site was impractical but a grant was provided by the Department of the Environment for a watching brief.

Method and recording

The site overlay the remains of the stages 1-3 defences, but they had been heavily disturbed both during the construction of the Georgian building and afterwards by the several attempts made to prevent subsidence of parts of the building into the softer fill of the defensive ditch. The cellar and boiler room of the hotel followed the Broad Street frontage but larger cellars at the south-eastern corner of the site were required for the new building. The watching brief was concentrated on an examination of the trenches excavated for new foundation walls and those dug along the northern edge of the site to underpin the neighbouring buildings (Fig 125:M3.F14). The new cellar area at the south-eastern corner of the site was excavated by machine under conditions which made full archaeological examination impossible and the underpinning was done in stages by workmen. As a result, the evidence obtained was fragmentary but it is sufficient to give some indication of the use of the site after the defences became disused, and included valuable environmental material from the fill of the ditch.

Site code: He741

Trenches: 1-14

Layers: L1-L20 (Trenches 6, 7, & 14)

Features: F1-F12 (Other trenches)

Timbers: A, C, E, F, H, and L

Finds are indexed under layer or feature number, and are deposited in the Hereford City Museum (Accession Number 1979/312).

Description

Traces of a brown, turfy soil layer, considered to be part of the stage 2 defensive rampart, were seen on the southern edges of trenches 1, 2, and 5. The material was only preserved in the sections

close to East Street (Fig 125, below). Underneath the rampart material were traces of an occupation surface, but this could not be examined. The level of the natural gravel of the site sloped downwards from these trenches towards the north, but the first indication of ditch fill material was in trench 4 where a black organic silt was encountered at about 3.9m below the present ground level. Trenches 8 and 12 both had a flat bottom at about 5.4m, and this level continued into the underpinning trenches, 6, 7, 9, 13, and 14. It was not possible to define the precise limits of the rampart, ditch, and berm within the areas observed because of later disturbances.

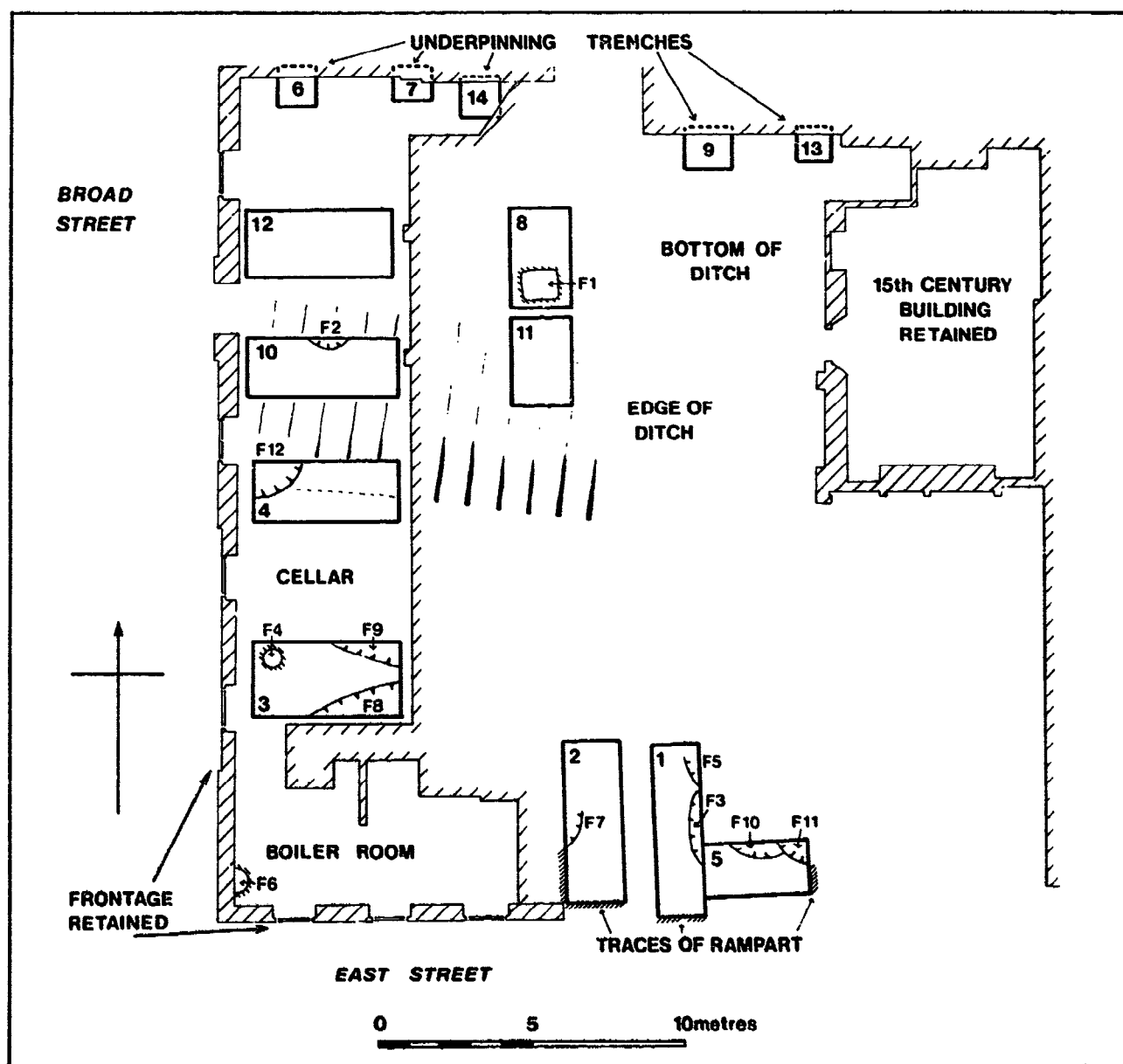


Fig 125 City Arms. Site plan

The ditch fill was examined in all five of the underpinning trenches. The stratification was very similar in all cases and only trenches 6 and 7 are described in detail (Figs 126 below, 127:M3.G2, and 128:M3.G3). An accumulation of about 0.4m of black, heavy silt, L15, in the bottom of the ditch contained no datable finds. It was sealed with several bands of gravel which may represent a deliberate attempt to fill the ditch. These layers, L8, L9, L14, and L19, were separated by bands of black silt with some pebbles, L10 and L18. The material of one gravel layer, L8, was concreted by iron oxides and, as it appeared to be continuous in all the trenches examined, could have formed part of an iron pan (information Dr H Keelcy).

Above the gravel fill, but still within the confines of the ditch, were traces of a structure built of timbers, stakes, and wattling. The remains were examined in section, using very limited electric light, after the trenches had been dug by the workmen. Fence 'C', which ran east-west, was seen in trenches 6 and 7, but was not apparent in trench 14. Remains of vertical stakes were found and the wattling was evident as voids in each section face (Figs 127:M3.G2 and 128:M3.G3). In the west face of trench 7 the fence was broken with the upper part bent to the north. A vertical timber, 'H', (Trench 7) was apparently associated with the fence as was an east-west horizontal timber, 'A' (Trench 6). Both of these timbers were to the south of the fence line - 'H' having an associated post-

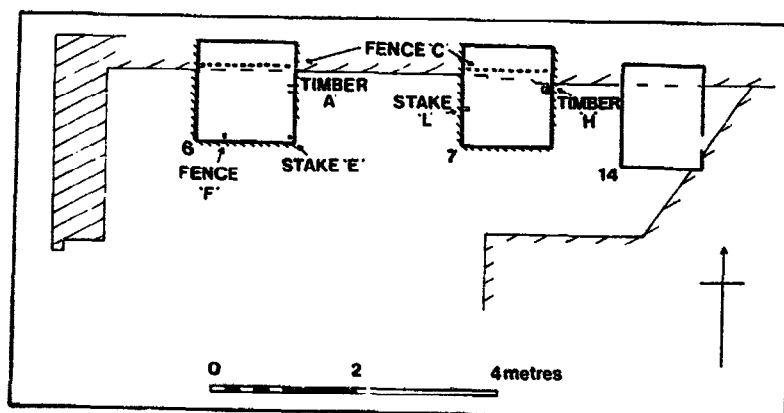


Fig 126 City Arms. Plan of trenches 6, 7, & 14

pit, 17. The fence and its associated timbers were apparently within a trench cut some 0.4m deep into the silts and gravels of the ditch fill. The trench contained a different fill on each side of the fence; to the south, where it was 0.3 to 0.4m wide, it contained layer L6, a mixture of soil and stones, and to the north the fill, which continued beyond the northern limits of the trenches contained a heavy black organic soil, L7. Traces of a second fence, 'F', running north-south at the same level as fence 'C', were seen in the south face of trench 6. Two isolated stakes, 'E' in trench 6 and 'L' in trench 7, could have been associated with the fences but no direct relationship could be established.

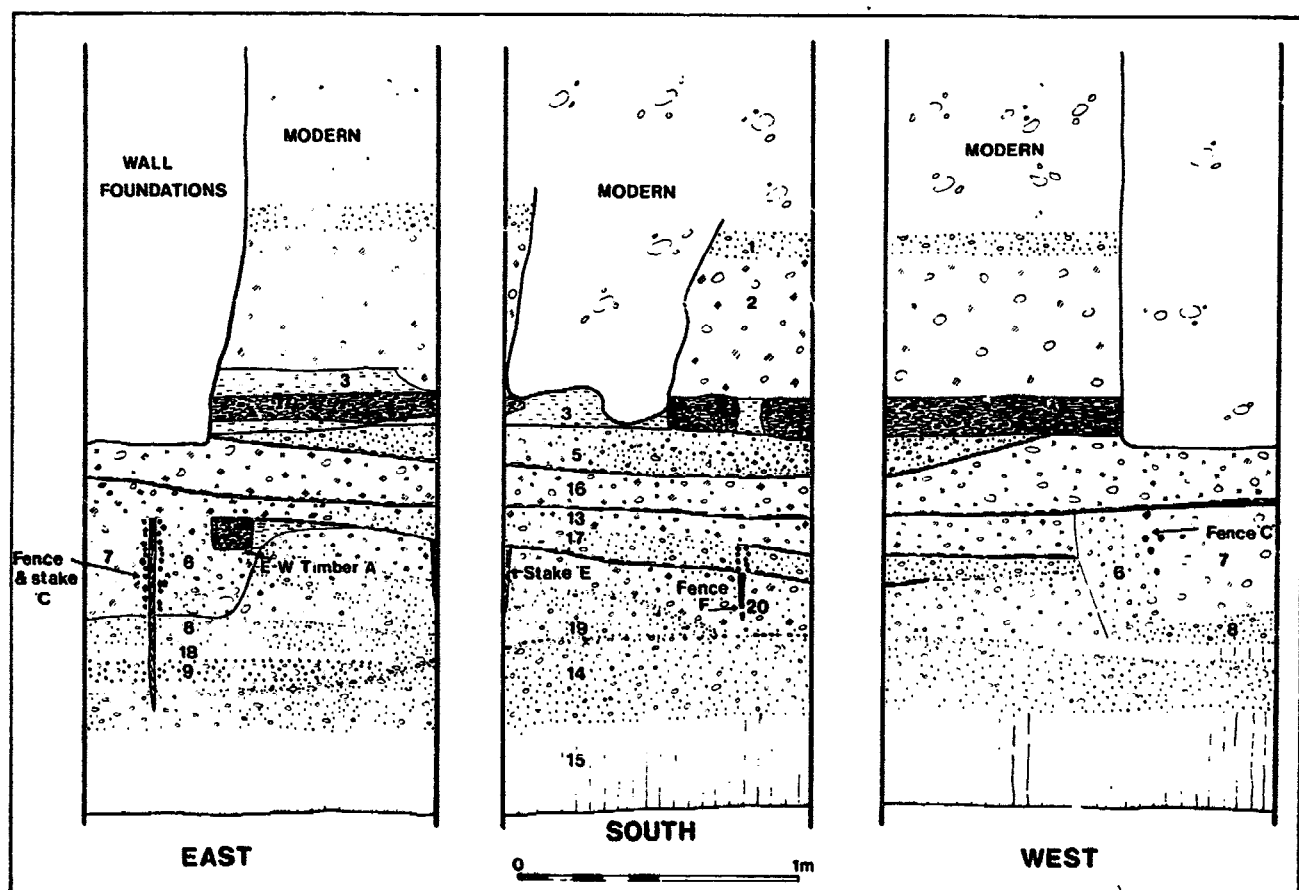


Fig 127 City Arms. Sections of trench 6. For the positions of the sections see fig 126:M3.G1

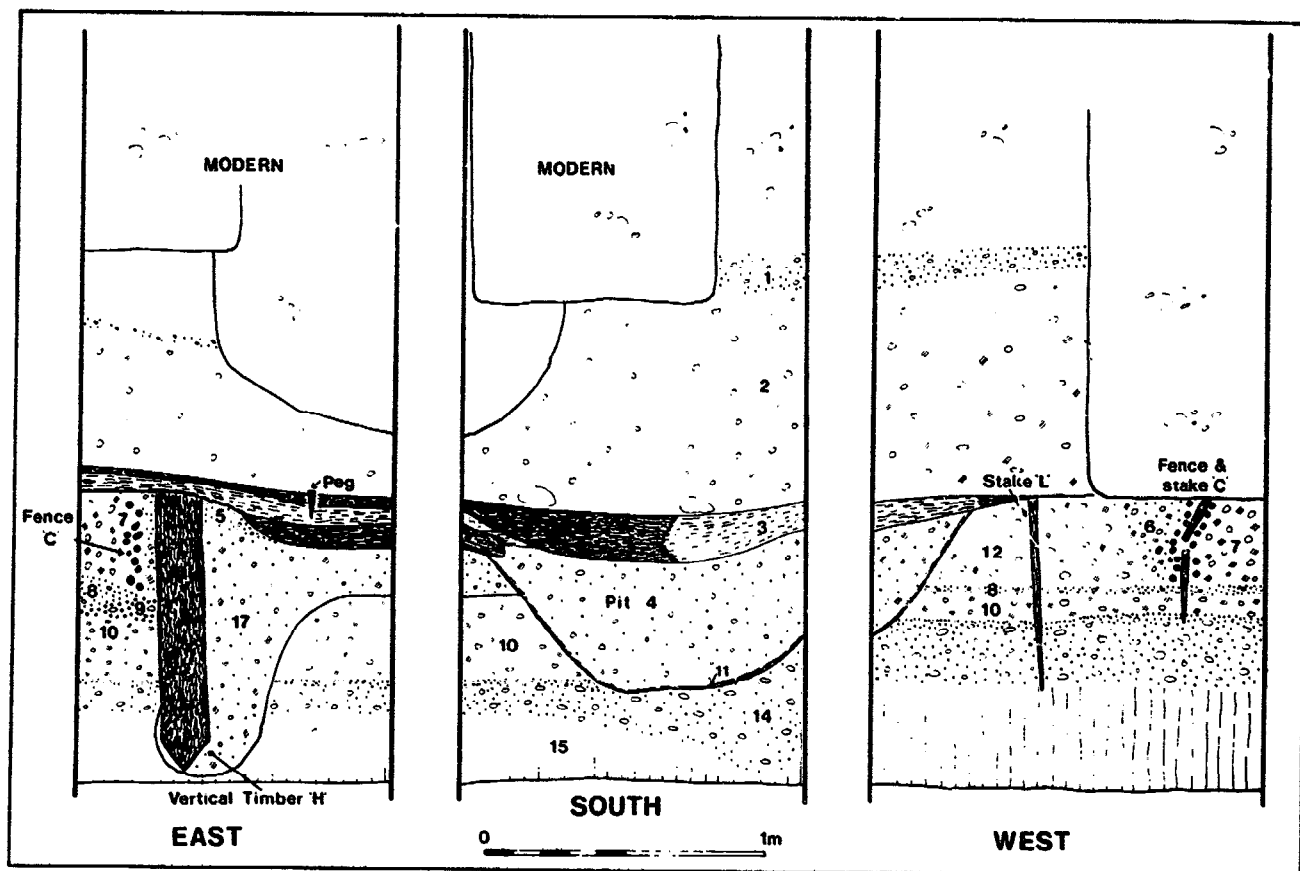


Fig 128 City Arms. Sections of trench 7. For the positions of the sections see fig 126

In trench 6, a grey, clayey soil, L16, sealed the layers containing the fence, and was covered by a band of clean gravel, L5. These layers were not present in trench 7 but both trenches contained layer L3, which was identified as compressed organic material resembling straw or grass. It contained seeds and insect remains and a few fragments of wood in the form of twigs. The final fill of the ditch consisted of a black soil, L2, which contained fragments of leather and some 12th century pottery, and this was sealed with L1, a layer of clean, pink gravel.

Several pits and other features were seen in the bottoms and sides of other trenches on the site (Fig 125:M3.F14). They were mainly cut from surfaces which have since disappeared and could not be examined in detail. Most were cesspits of 12th or 13th century date and only F12 produced any quantity of pottery.

There were three wells on the site. F1 in trench 8, of uncertain date, was square, stone-lined, and in excess of 7.5m deep, whilst F4 and F6 were circular and stone-lined with 18th century fills. F6, partly under the west wall of the City Arms, had a fill which was seen to consist entirely of broken pottery, but for safety reasons the contents had to be left in situ and the well was sealed with a concrete raft.

Dating

A radiocarbon date was obtained from a sample of wood from the tip of post 'H'. The date, which because of the size of the timber, is likely to be older than the date of the timber structure, was ad 1200±70 (HAR 1735). Other features were dated by the pottery finds.

Inventory (Vol 3)

Ceramic material

Pottery	Illustrated	Fig 29.7 & 25 Fig 31.3, 6, 8, & 23 Fig 33.14 & 15 Fig 38.2 & 3 Fig 42.13 Fig 45.11 Fig 49.17
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Environmental material

Wood	Timber 'H'
Seeds	L3
Insects	L3

Discussion

There was no trace of the defensive stage 1 gravel bank on this site and no evidence to date the stage 2 defensive ditch and bank. The site is important, however, because it has provided information about the influence of the ditch on the development of the city as it expanded to the north of the Saxon defensive line. A previous development provided the opportunity to examine briefly the same ditch at a point further to the west (Shoesmith 1971) and it has

also been noted during the construction of several large stores along the line of East Street and West Street. A sample of the ditch silt from the western site contained plant remains, which indicated that the ditch had been filled with water for some time but that it had not been notably polluted. On the same site, traces of a fence were found on the southern lip of the ditch.

On the City Arms site the ditch was in excess of 15m wide and after its defensive use had ceased it probably acted as a boundary between properties which fronted High Street to the north and those which fronted East Street to the south. The thick black silt which filled the lower 0.5m of the ditch was probably deposited during, or at the end of, the defensive phase and the bands of gravel above the silt may be the result of using part of the rampart material to fill the ditch.

A trench was cut into this redeposited material and was partly lined with timbers and a wattle fence. The fill of this trench suggests that it acted as an open drain following the line of the ditch. However, the slight traces of wattling at right angles to the main fence may indicate that the whole structure was more complex than was appreciated during the excavation. It is possible that there were also lateral trenches which fed the main drain from individual properties. The fence and drains apparently became disused during the 13th century, after which soil and gravel were deposited in the ditch.

The thick layer of vegetable matter close to the top of the ditch is seen as refuse from a farmyard or stable and this material became compressed by the final fill of soil and gravel.

Fragments of leather from these upper levels indicate that the fill continued to be waterlogged throughout its history. The 15th century building at the east of the site was built on top of the ditch. This indicates that at least this portion of the ditch, if not the whole, had been completely filled and was considered to be sufficiently compacted to take the weight of a building by this date.

Subsidence occurred in the City Arms building and can still be seen on the preserved western facade where the sills of the two ground floor windows on either side of the central door both slope slightly into the line of the ditch.