1 Introduction

1.1 The hillfort and its previous history (Pls 1 and 2)

In the first report of this series an account was given of the earthworks which constitute the hillfort of Danebury (Vol 1, l–4). In summary, three major circuits of earthworks survive: *the inner earthwork,* originally with two gates and later with only one, which formed the main defensive enceinte throughout the fort's life from *c* 550–100 BC; the *middle earthwork* of slighter proportion, which existed only on the south-east side of the fort between the earthworks of the two entrances; and an even slighter outer *earthwork* encircling the entire site and linked to a linear ditch system. While the inner earthwork was clearly defensive, the middle and outer earthworks were thought to have been designed to provide protected corral space for animals.

There is little to add to the description of the earthworks given in Vol 1 except for a few details which have become evident as the project has proceeded: these are incorporated in Fig 1.2.

Perhaps the most surprising point to emerge from the recent work is that the 'tumulus', lying to the east of the main entrance, upon which the Ordnance Survey trig point stands, is almost entirely a natural feature. Excavation has now shown that it consists of an uneroded capping of clay-with-flints without significant modification by man (p. 21).

One small addition to the plan is a short length of what appears to be a bank and ditch, on the north side of the fort, lying between the counterscarp of the inner earthwork and the outer earthwork. It is evidently an artificial feature and would appear to pre-date the outer earthwork which changes direction in relation to it. It was noted by Keiller (Crawford & Keiller 1928, 88) but was omitted from our previous plan. Without further work the feature remains unexplained.

Keiller had also used his air photograph to plan the various trackways which impinged upon the outer and middle earthworks. One of these tracks, having passed through a gap in the outer earthwork (p. 19) appeared to fork, one branch passing between the middle and outer earthworks, the other cutting through the middle earthwork. Surface examination suggests that in this relationship the track is secondary to the middle earthwork. It is therefore distinctly possible that the northward continuation of this track between the inner and middle earthworks may have become the hollow way, observed in 1969 in trench 6/7, running beneath the outer

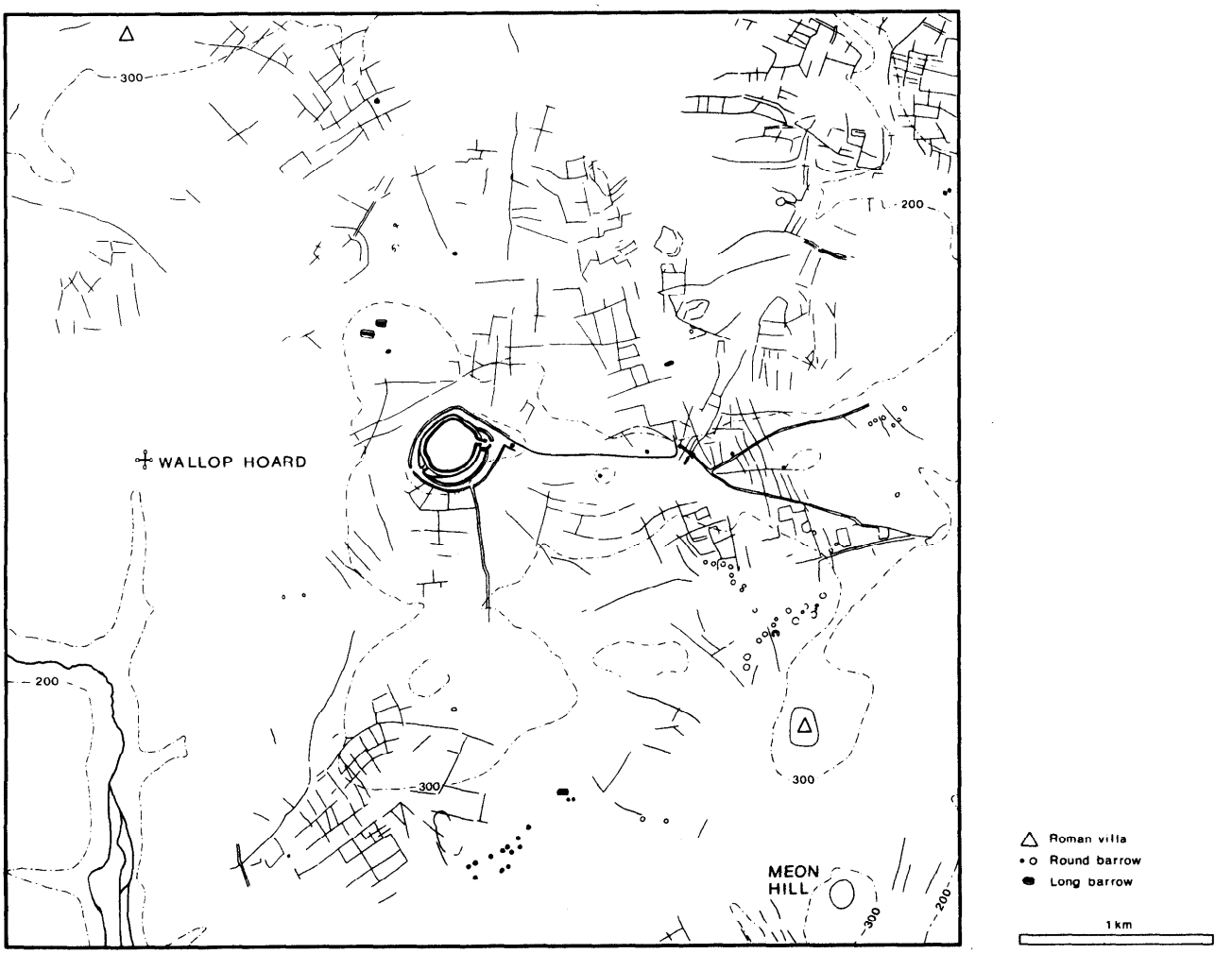


Fig 1.1 Danebury and its immediate environment

hornworks of the inner entrance (Vol 1, fig 3.8). The course of the track and the gap in the middle earthwork have been indicated on the plan (Fig 1.2).

The more recent history of the fort has already been outlined (Vol 1, 4–6). The only points of significance to add are that in 1985 a management plan for the site was prepared by Hampshire County Council with the agreement of the Historic Buildings and Monuments Commission and the Nature Conservancy (p. 3). In September 1986 a new museum displaying the Danebury finds – The Museum of the Iron Age – was opened at Andover by the Hampshire County Museum Service. At the same time an additional 18 acres of land immediately to the east of the fort was bought by the County Council to ensure that the linear earthwork (running from the outer earthwork around the fort), together with its associated features, was preserved from further agricultural erosion. It is a matter of considerable relief that the entire site and much of its hinterland is now managed with care and concern by the County Recreation Committee.

1.2 The excavation campaign

Excavation began in 1969 and an account of the first ten-year programme has already been given in the report detailing the results of that work (Vol 1, 6). In 1979 a new programme began, influenced by the fact that dead trees were being rapidly cleared and pressure for replanting was accordingly increasing. Having consulted widely among colleagues, it was decided that a strict sampling procedure should be instigated to allow larger areas to be examined so that replanting could keep pace with clearance. All shallow features, such as post-holes, stake-holes and gullies were to be totally excavated but of the pits, only 10% were to be examined, the sample being chosen on a strictly random principle. The rationale behind the change in policy was

a) pits were far less susceptible to the destructive activities of tree roots and burrowing animals than were the shallow features;

b) the number of pits already excavated (over 1000) was

DANEBURY EXCAVATED AREA

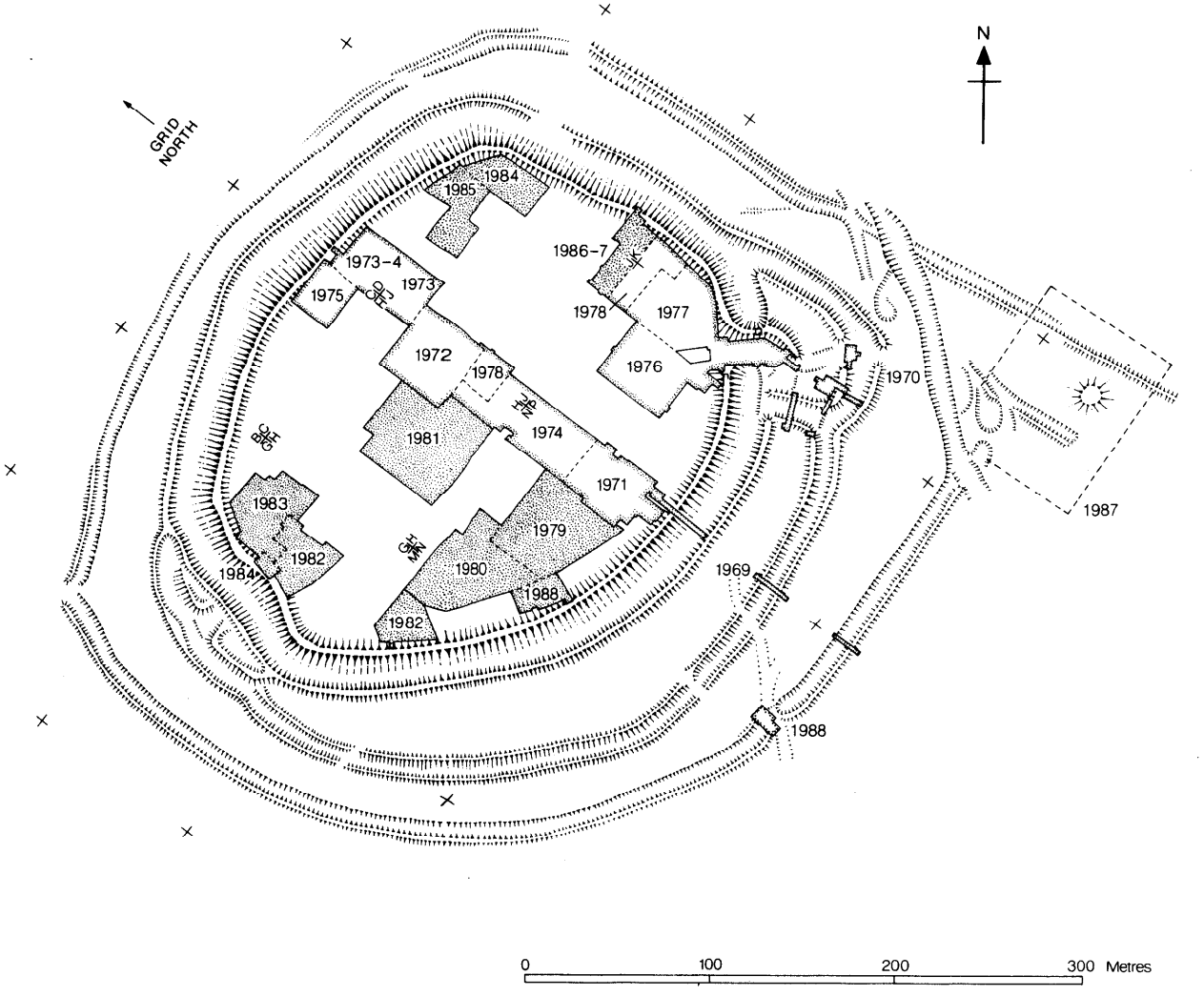


Fig 1.2

large enough to provide a reasonable sample of type, filling and artefact assemblage;

c) the 90% of pits unexcavated but located on plan could be further sampled at any subsequent date.

The 10% sampling procedure was adhered to for four seasons (1979–82) but doubts soon developed about whether so small a percentage could give an accurate picture of chronological variation across the excavated area. In 1981, therefore, the percentage was increased to a notional 20%. Comparison between the number of pits discovered and the total in the random sample shows that the actual percentages were not exactly at the 10% or 20% level. This is because all features were assigned to type and numbered immediately after the topsoil had been removed and the surface cleared. The sample pits were designated at this stage. As work proceeded some features were reclassified thus distorting the percentages. Nevertheless the sample pits can be regarded as a true random sample and may therefore be treated statistically.

In addition to the random sample, an additional number of pits were excavated because they were in significant stratigraphical relationship to layers or other features, including pits belonging to the random sample. These constitute a judgment sample and may be separated from the random sample for purposes of statistical analysis. The actual numbers involved were:

	Total pits	Total in random sample	Total in judgment sample	Overall total excavated	% excavated
1979	257	27	14	41	16.0
1980	154	18	24	42	27.3
1981	319	58	32	90	28.2
1982 (area M)	30	5	3	8	26.7

After reflection, the sampling policy was felt to be unsatisfactory, the principal reason being that, since it was impossible to phase the unexcavated pits, phase plans were, of necessity, incomplete. The information loss was judged to be too great and therefore, after the 1981 season, the previous policy of total excavation was reintroduced, except for the small area excavation carried out in 1982 to complete the 1979–80 area.

From 1982–1988 the excavation concentrated upon well-stratified levels behind the rampart where previous experience had shown a fine definition of phasing to be recoverable. An added advantage of excavation around the periphery of the site was that it allowed tree planting to proceed so that the appearance of the original beech clump could be recreated. The 1982, 1983 and part of the 1984 seasons were concerned to examine the area adjacent to the blocked south-west gate. In 1984 and 5 an area in the northern corner of the site was examined while in 1986–7 an area was added to the excavation of 1977–8. The work of 1984–7 was specifically designed to provide a large sample of the quarry hollow stratigraphy on the north-east side of the site in order to examine recurring patterning in the layout of the different settlement elements. In 1987 a trial trench was also cut into the rear of the rampart to test the constructional sequence. In the final season, 1988, an area was examined behind the rampart on the south side of the fort, between the excavations carried out in 1969 and 1982, to acquire a large sample of well-stratified deposits belonging to the early phases of occupation which were known, from the previous work, to have survived in this area. In addition to the work in the fort, during the last two seasons, 1987 and 8, a series of trial excavations were undertaken on the outer earthwork and its associated linear extension.

Throughout the ten years of the second programme of excavations, a sampling procedure was adopted to obtain carbonized seeds. Of the pits, a 10% random sample of the total exposed in excavation, was selected and a two-bucket sample of each layer was taken for flotation. In addition a selection of judgment samples were taken from other pits, usually those producing considerable amounts of burnt material. The same policy was applied to stratified layers not contained within features. Of the post-holes, a 10% random sample was taken of those exposed in the excavations of 1981 and 1982 and a series of judgment samples was also taken at this time and in other years but no further systematic sampling was undertaken. No gullies were sampled for flotation but a number of judgment samples were taken from other features, mostly burnt layers in ovens and associated with hearths. The floats were retained and dried and form a part of the curated archive.

Within the fort topsoil was removed by machine under constant archaeological supervision. Thereafter excavation procedure normally involved the removal of layers using hand tools, the speed of removal depending upon the nature of the layer. To provide some control on artefact loss rate a number of pits were selected at random for sieving. The layers were removed in the normal way and artefacts, bones, etc, seen during excavation, were removed. The spoil was then carried off and sieved in total, any additional material recovered being retained separately. The detailed results of the experiment are given in Fiche 18:A3–4. In summary it may be said that normal excavation techniques occasioned no significant loss whatsoever. As a sub-experiment of the sieving regime 2 kg bags of sieved soil were kept from each layer for snail analysis.

With the completion of the second ten-year programme excavations at Danebury are at an end: the Danebury project, however, continues. At the time of writing a new five-year programme of site sampling has begun.

Meanwhile the site of Danebury is being carefully managed to safeguard its archaeological potential. The management policy lays down that the inner defensive earthwork together with the earthworks of the entrance will not be replanted with trees as the existing tree cover is gradually reduced by disease or age. In addition, the earthworks will be kept clear of scrub to allow stable grass cover to develop and to discourage burrowing animals. The interior has been divided into three zones (Fig 1.3). The first, the area which has already been excavated (57.3% of the interior), is being replanted with trees native to chalkland to recreate the appearance of the clump. The second zone is designated as an archaeological reserve. This comprises a series of unexcavated areas chosen either because they are likely to be typical of areas already excavated or because they contain deeply stratified archaeological levels. The archaeological reserve is 1.37 ha, that is, 25.7% of the interior area. The intention is that it will be allowed to revert to grass and will be kept clear of scrub and burrowing animals. No excavation will be contemplated for at least 50 years. The remaining 0.9 ha (17% of the interior) is set aside for further consideration. It consists of two separate areas both still supporting mature trees. Whilst some part of it may be made available for excavation in the future it is more likely that the area will be left to develop its own natural vegetation with the minimum of management. The concept of the ‘archaeological reserve’, positively managed to maintain its archaeological potential, will ensure that future generations of archaeologists wishing

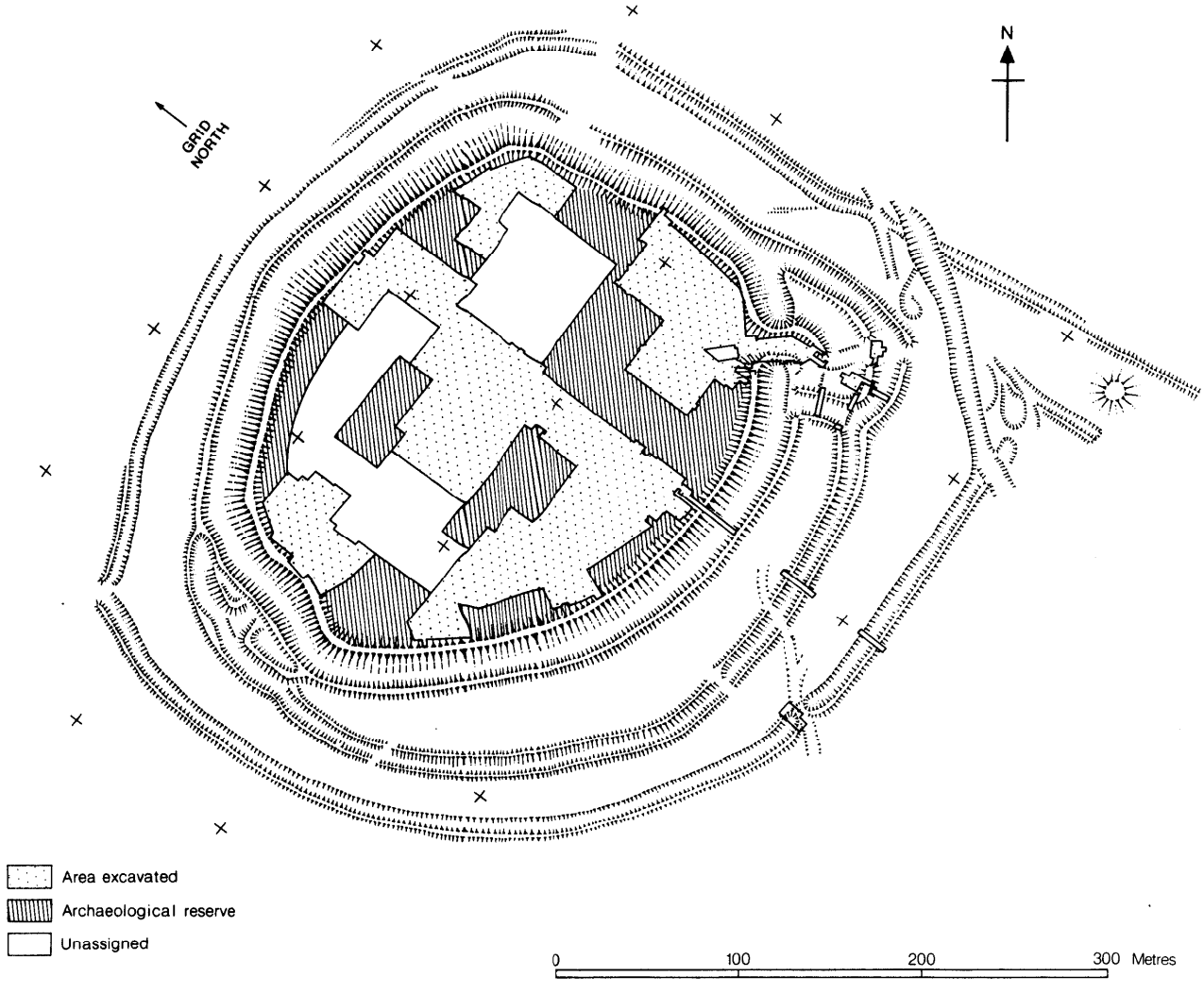


Fig 1.3

to test aspects of our current interpretations will have optimum conditions to do so.

1.3 The recording system and the presentation of the report

1.3.1 Site recording

The system adopted has been set out in the first report (Vol 1, 7). The same principles and methods were used throughout the second ten-year campaign, the only addition being that for the work on the linear earthwork a separate 100 m grid was imposed, each 100 m square being designated with a double letter prefix to distinguish it from those within the fort.

1.3.2 The publication research design

The publication research design was set out in full in the first report (Vol 1,7–8) and for the sake of simplicity has been adopted here, the publication format being directly comparable. The obvious benefit for the reader is that the material presented in Volumes 1 and 2 and Volumes 4 and 5 can be easily compared by reference to the section headings and numbers which are the same in both sets. The same standards of analysis and similar forms of presentation have been used throughout.

On a number of occasions authors have expressed the wish to explore some aspect of the total data base that was not examined in the original reports. The decision we have all accepted is that these matters are best left to a separate volume (Volume 6) in which the broader aspects of the site are to be considered. Only in one case – Section 4.5 *Spatial patterning and social significance* – is a new issue addressed. The sixth volume will contain a series of general reviews of aspects of the Danebury data together with a range of comparative studies.

1.3.3 Publication

The first, two volumes published in 1984 contained a detailed account of the excavations of 1969–1978. A third volume published at the same time and prepared by the RCHM(E) presented an analysis of the prehistoric and

Roman landscape within which the fort lay. This present pair of volumes presents the results of the excavations of 1979-1988 while a sixth volume is planned to cover a range of ancillary studies. Volumes 4 and 5 are more slender than their predecessors because it has been possible to omit a wide range of introductory material and general discussion covered in Volumes 1 and 2.

The first two volumes were being prepared at the same time as a CBA/DoE working party, which one of us (BC) chaired, was drawing up its proposals on the principles of archaeological publication. Inevitably much of the philosophy of that working party's deliberations was taken note of when the Danebury reports were designed, although it cannot be claimed that the reports were planned to conform to the working party's recommendations which had not at that stage been finalized. In the event we believe that Volumes 1 and 2 adhere to standards closely comparable to the principles set out in the working party's document, except that too much structural detail was given in the printed text rather than the microfiche supplement. In Volumes 4 and 5 we have tried to follow the working party's principles more rigorously.

The printed volumes contain what we consider to be the data necessary to understand the site and its context. This is necessarily highly selective and for this reason a considerable body of back-up data has been provided in the fiche section. Even so much has been omitted from the reports. It has not, for example, been considered worthwhile to include sections, plans and descriptions of all post-holes (some 10,000) or of all 2500 pits. The details exist but anyone wishing to consult them will have to use original site records, from which the information can be extracted, either at the Institute of Archaeology, Oxford or the Hampshire County Museum Service to which the archive and material is steadily being transferred.

The archive consists of:

a) The original site notebooks, containing descriptions of each context, and indices.
b) The original site section drawings (at 1:10) of all pits, post-holes, features and linear sections through stratified deposits.
c) Site plans of each 10 m sq (1:20) together with plans of layers (1:20) and plans of special deposits (1:10). The site plans exist as field drawings in pencil and an additional set of inked plans on drawing film.
d) A complete set of black and white photographs with index.
e) A small finds index.

In addition to this the following extract records have been made:

f) A descriptive account of every small find arranged according to material (published in full in the fiche reports).
g) A descriptive account of each circular structure together with plans and sections (published in the main report).
h) A metrical summary of each post structure together with plans and sections (published in full in the fiche reports).
i) A descriptive account of all ovens together with plans and sections (published in full in the fiche report).
j) A descriptive account of all hearths and gullies (published in full in the fiche report).
k) A folio for each pit including copies of all original records together with a proforma sheet summarizing selected data.

Certain aspects of the dataset have also been computerized: these will be considered in the following section.

1.3.4 The computerization of the Danebury archive

by Gary Lock

Since the publication of Volume 1 certain changes have taken place in the computing of Danebury. All work is now based at the Institute of Archaeology, Oxford, using the mainframe facilities of the Oxford University Computing Services (OUCS). This comprises of a VAX cluster (two dual-processor 8800s and two 8700s) running VMS.

The three main computerized data files are still the pottery, animal bone and pit information. All three record structures remain as described in Volume 1. Data capture is still a two stage process with the appropriate specialists recording by hand on pro-forma sheets. The data were then transcribed onto the mainframe by professional data-preparation staff at OUCS, and earlier at Staffordshire Polytechnic. This duplication of effort is, in fact, only apparent as the procedure has evolved to fit in with the Danebury site recording system. It also copes with the wide geographical spread of the workers involved and, overall, has been satisfactory.

After editing, the raw data files were archived onto magnetic tape at OUCS to form part of the site archive. The pottery, animal bone and pit data files were loaded into separate tables within the relational database management system INGRES. The statistical package SPSSx has also been used on the three raw data files. Sub-sets of the pottery and pit files have been transferred to a micro-computer (IBM compatible) via the communications program KERMIT for analysis using SPSS/PC+ .

The combination of INGRES and SPSS has allowed most of the required analyses for this volume although certain retrievals have required specialist programs to be written. Some of these are currently in FORTRAN and trials are taking place using 'C'.

The computing for this volume has only required single file (table) analysis. Work involving more than one set of data thus using the full relational potential of INGRES is underway and will form a part of Volume 6. The Danebury data-set is large and varied enough (around 15Mb in total) to offer considerable prospects for quantitative analyses. Several lines of enquiry are currently being pursued including: retrospective random sampling, different approaches to pottery quantification, multivariate analysis of pit contents and spatial analyses of pit contents. Reports on all of these will appear in Volume 6.

1.3.5 The microfiche supplement

In preparing the first volumes of this series we found the considerably increased flexibility of having a microfiche section both a stimulus and a relief. It continues to be so and extensive use has been made of it here. A full listing of fiche contents is given in the preliminary pages and detailed cross referencing will be found throughout the printed text. Each fiche also begins with an index.

1.4 Acknowledgements

A twenty-year programme of excavation, analysis and publication has necessarily involved a large number of people most of whom have given their services volun-

tarily. In these acknowledgements we will be concerned with only the last decade.

A notable feature of the last ten years of digging has been the consistency of the volunteer team, many individuals coming back year after year. Actual numbers are difficult to compute but in all some 3–400 people have taken part. Most were British but each year has seen a number of foreign helpers from Canada, Australia, America, west Europe and more rarely from Hungary, Yugoslavia, the Congo and Ghana. The volunteer diggers were the backbone of the project.

Throughout the campaign Barry Cunliffe has served as on-site director with Cynthia Poole as assistant director from 1981, her services as a supervisor going back to 1977 and as a volunteer to 1975. Site supervision has been in the capable hands of

Graham Barton	(1981–88)
Ian Brooks	(1980–88)
Andy Brown	(1984–86)
Lisa Brown	(1980–88)
Kathy Laws	(1984–88)
John Maalam	(1979)
Alex Miller	(1979)
Roy Platt	(1979)
Sue Rouillard	(1979)
Lyn Sellwood	(1980–85)
Linda Smith	(1982)

Many others have been responsible for other aspects of site recording:

Laura Baseden, Chantal Cagle, Daniel Cunliffe, Mark Dennison, Anne Foster, Jeremy Hill, Andy Moore, Mary Newnham, Sarah Reeves, Paula Richardson, Thomas Richardson, Mike Rouillard, Fiona Rowe, Jane Russell, Paolo Scremin, John Taylor, Alison Trim, Ian Wall, Karen Waugh, Valerie Wheater.

On-site treatment of finds was organized by Melanie Becket, Rosemary Goodyer, Mary Newnham and Penny Platt. Flotation of seed samples was carried out by Anne Foster, Kathy Laws, Cynthia Poole and Robyn Stocks. Another crucial member of the team was Jim Kennedy who each year guided his mechanical excavator with unbelievable delicacy to remove topsoil in preparation for the excavation. Throughout we have enjoyed the support of the Army Air Corps at Nether Wallop who have provided helicopters each year to enable us to take aerial photographs.

Accommodation was in the much-loved Fullerton Bridge Station until 1982 when the County wisely decided to sell it before disrepair escalated to dilapidation. Thereafter the digging team was housed in the more luxurious Mansion House Farm at Abotts Ann. Catering was in the competent hands of Joan Amey, Viv Mead and Angela Carruthers.

Throughout the campaign the project has been managed by the Danebury Trust under the chairmanship of Councillor Maurice Jones. The good advice and continued support of the Trustees have been crucial to the success of the project and their regular annual meeting on the site is something we have all looked forward to. Behind the scenes the help of Colin Bonsey, Hampshire's County Director of Recreation, has been crucial. It was his initiative which began the work and his enthusiasm for Danebury has been a mainstay of the project. His assistants, successively Chris Thomas and Chris Gledhill have given much practical help in matters of day to day running, ably supported by a succession of site wardens.

The continued backing of the Department of Environment, now the Historic Buildings and Monuments Commission, has been of vital importance to us not least in providing a considerable proportion of the cost of the post-excavation work. The regular visits and good advice of the Inspectors have been most welcome. Funding for the field work and excavation has been provided by the Hampshire County Council, the British Academy, the John Lewis Partnership and the Society of Antiquaries with much help in kind made available by the University of Oxford.

Finally, the preparation of this report has been the responsibility of a group of specialists working closely together, inspired and cajoled by meeting together to discuss problems and progress. The names of the various contributors appear at the heads of their sections. Others who have made a significant contribution are the staff of the Institute of Archaeology at Oxford, in particular Bob Wilkins, Paolo Scremin and Harry Edwards for their photographic work, Alison Wilkins and Simon Pressey for producing the line drawings, and Lynda Smithson for preparing the typescript of the text and fiche.

The twenty-year programme of excavations at Danebury has been long and at times arduous but it has never been boring. Each year has brought new insights and has required us not only to expand but also to modify our interpretations. The fascination of directing a project of this size is a privilege that is not easily relinquished but we feel that, having substantially excavated 57% of the interior of the site, we at last have a data base of sufficient size to enable some of the questions we have been considering over the years to be answered. Many of us have grown up with Danebury, some because of Danebury.

2 Pre- and post-hillfort occupation

The hill upon which the hillfort was built bears signs of pre-Iron Age occupation. After the fort was abandoned sporadic activity in the Roman, Saxon and Medieval periods has left traces in the archaeological record. The pre- and post-hillfort occupation is briefly summarized in this section.

2.1–2.4 Neolithic and Bronze Age occupation (Fig 2.1)

During the excavation of 1969–78 flints of late Neolithic to Early Bronze Age date were discovered together with a small quantity of Beaker period pottery (Vol 1, 11–12 and fiche 1:A2-B4). With the exception of a single crouched Beaker burial all the finds were strays recovered from Iron Age contexts.

The excavation of 1979–88 has added to our knowledge of this early period. Most significant has been the discovery of a flintworking site *in situ* on the patch of clay-with-flints which caps the small knoll, now occupied by the trig point at the approach to the hillfort. Further discoveries reflecting early prehistoric occupation on the hill came from the two rampart cuttings made in 1987 and 1988. In the 1987 cutting the tail of the first rampart was found to have been composed largely of turves containing a small collection of flint artefacts and potsherds. The turves had a high clay content and must have been derived from an area of clay-with-flints somewhere nearby. The more extensive rampart excavation of 1988 produced worked flints both from the original turf line sealed by the rampart and from the turves incorporated in the rampart itself. Apart from these three closed contexts the rest of the early prehistoric material, consisting of flints and more rarely stone

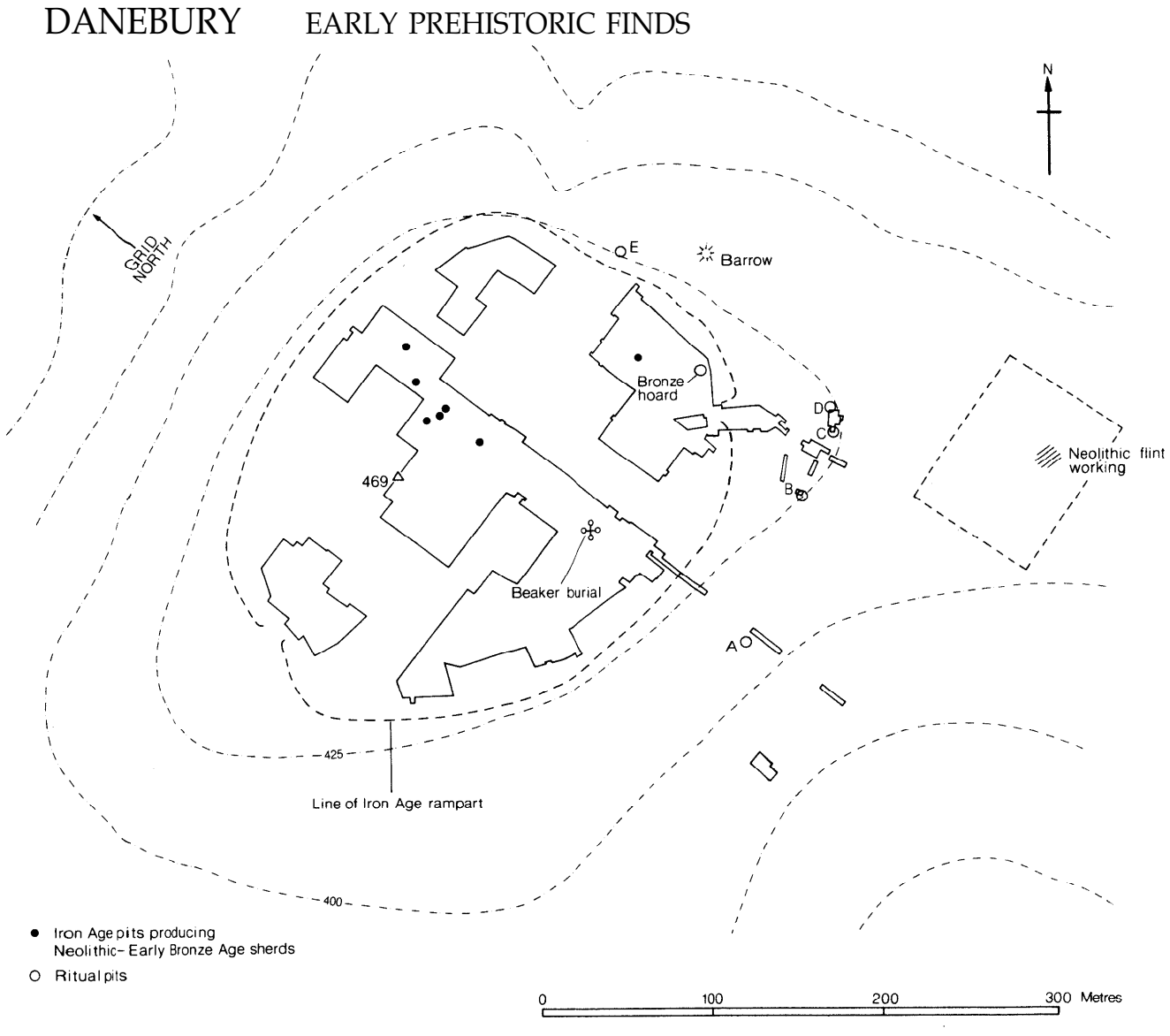


Fig 2.1

axes together with a few potsherds, came from Iron Age contexts.

Summary reports on the flints, the stone axes and the pottery are presented here. The detailed analysis of collections will be found in the fiche report (flints, 18:A9–C13; stone axes, 18:D1–2; pottery, 18:D4).

The prehistoric flint collection

by Ian Brooks

The flint assemblage from the excavations at Danebury between 1979 and 1988, comprising some 2896 items, can be divided conveniently into three sub-assemblages:

a) from Iron Age contexts inside the fort;
b) from turves forming the core of the primary rampart sectioned in 1987–1988;
c) from the vicinity of the trig point outside the fort.

The assemblage from the internal area of the hillfort is clearly from several periods and is largely, if not wholly, from derived contexts. The recognizable tool types tend to confirm the previous pattern of both early Neolithic and late Neolithic to Early Bronze Age flint artefacts being present on the site (Care 1984, 1:A9).

The problem of Iron Age use of flint is difficult to assess, however it seems unlikely that this potential tool medium was totally ignored. Whilst accepting the difficulty in determining an assumed low level, informal use of flint there are a few pieces of the Danebury assemblage which may be assigned to a possible Iron Age date. These include a single piece of 'starch fractured' flint which has retouch along one edge and the rough core (Fiche 18:B1). How much of the rest of the assemblageis of Iron Age date is impossible to determine. It is tempting to use the degree of patination as a guide to separating the assemblages, however the formation of patination is determined by the local environment of deposition (Schmalz 1960; Rottländer 1975) as well as time and is therefore difficult to use with any certainty.

The assemblages from the 1987 rampart section (layer 1756) and from the 1988 rampart excavation (layers 2089, 2090 and 2094) were collected from the primary turf stack of the first rampart. It would appear that these assemblages were within the turfs cut for the base of the first rampart and are therefore in a derived context. By comparison with the frequency histograms from Micheldever Wood (Fasham & Ross 1978) the assemblage appears to be of Middle Bronze Age date although this is difficult to confirm due to the lack of diagnostic artefacts. It was also noted that these assemblages tended to concentrate within layers 1756 and 2094 which were characterized by the high clay content of their matrices and possibly reflect a general trend for the flint assemblages to concentrate around the clay-with-flint deposits of the hilltop.

The flint assemblage from the vicinity of the trig point was concentrated at the eastern end of trench 102, particularly within the layers 1723, 1724 and 1725. These layers showed a marked concentration of both worked and unworked flint. The matrix for this layer was an orange/brown clay which is characteristic of the clay-with-flints which caps part of the hill. It is possible that the assemblage was at least partly the result of axe production as is suggested by the broken axe rough-out from layer 1725. It will be necessary, however, to excavate a larger sample of the layer if the assumption is to be confirmed.

A full report on the flints summarized above will be found on Fiche 18:A9–C13. Thirty-one flint implements are illustrated including 16 scrapers, four points or fabricators, two polished flint axes, one leaf-shaped arrow head, one flaked axe and seven miscellaneous tools.

Implements of stone other than flint

by Fiona Roe

Five implements made of stone other than flint were recovered: one pebble-hammer and four stone axes. The pebble-hammer (sf 1624) is made of quartzite, a material commonly employed for such implements (Roe 1979, 36) and likely to have been collected locally. The example from Danebury has seen particularly heavy use as a hammer-stone. It is not possible to be precise about the date of this implement but it is very probable that it pre-dates the Iron Age occupation.

Petrological examination of the axes has shown that two are made of greenstone, and two of sandstone. One of the greenstone axes (sf 790) is made from an ungrouped rock which probably comes from south-west England, though without a specific source. The other (sf 246) can be assigned to group I, which is likely to have come from the region of Mount's Bay, near Penzance, Cornwall. The complete sandstone axe (sf 1658) has a composition consisting largely of feldspar grains, and it may be classified as an arkose. The other fragmentary example (sf 2776) is a more typical variety of sandstone with a high content of quartz clasts. Both these sandstones are of unknown provenance.

With the exception of the arkosic sandstone, these identifications are consistent with evidence already obtained for stone axe materials recorded in Hampshire, and also with information for pebble-hammers (Woodcock et al 1988). Group I greenstone and other ungrouped greenstones are the two most frequently imported stone axe materials that have been recorded for Hampshire, while sandstone axes are also not uncommon *(ibid,* Tables 10, 11). Pebble-hammers are similarly relatively abundant in the south east *(ibid,* Table 15), and they are frequently made from quartzite pebbles which could be collected locally. The arkosic sandstone axe though strikes a discordant note, since this can be compared with one find only from the south east (Kent 55). This stone axe would have been less hard than one made from a sandstone containing quartz, but may nevertheless have fulfilled its function reasonably well.

The items are illustrated and further described in Fiche 18:Dl-2.

Early prehistoric pottery

by Lisa Brown

The 1979-88 excavations produced two Beaker sherds. Both though decorated were heavily abraded. The sherds came from contexts relating to the rampart. One (B14) came from the core of the primary rampart sectioned in 1987 the other (B15) from a layer of puddled chalk representing rampart period 2 sectioned in 1988. The sherds are described in detail in Fiche 18:D4.

A group of sherds of Late Bronze Age/Early Iron Age date found within the body of the primary rampart in the 1987 section are considered below in volume 5.

2.5 Post-Iron Age occupation: Roman and Saxon

There is very little to add to the summary of Roman and Saxon material given in the first report (Vol 1, 12).

A small group of Roman sherds were recovered which are

summarized below and listed in full in the fiche (l8:D6–8). No further Saxon pottery was recovered.

The Roman pottery

by Lisa Brown

A total of 69 sherds of Roman date were identified in the 1979–88 assemblage. The majority (approximately 71%) are probably Alice Holt/Farnham wares. Most of the remainder are products of the New Forest, Oxfordshire and Black Burnished I industries.

Alice Holt production began in the mid first century AD with copies of Gallo-Belgic forms. These vessel categories strictly belong to ceramic phase 9 at Danebury and are discussed in the section describing pottery of that period. Sherds attributable to the late first century AD onwards at Alice Holt are described below along with identifiable products of Roman factories. Non-diagnostic body sherds in Alice Holt reduced fabrics cannot be specifically dated, nor can they be distinguished from the similar New Forest wares but where, on the basis of fabric type and treatment, dates of the late first century or later seemed likely, these sherds were included in the catalogue below.

The majority of the Roman sherds were recovered from the top layer of Iron Age pits which generally represents accumulation of soil in the hollow resulting from subsidence of the pit fill proper. A few sherds were redeposited in association with post-medieval pottery relating to the warrener's hut, The greatest concentration of Roman pottery is near the centre of the hillfort interior. No features or structures could be specifically identified as being of Roman date on the basis of ceramic evidence. Most sherds were very small and heavily abraded, suggesting the possibility that they were brought to the site from elsewhere, perhaps in a consignment of fertiliser.

Further details are given in Fiche 18:D6–8.

DANEBURY RABBIT WARRENS

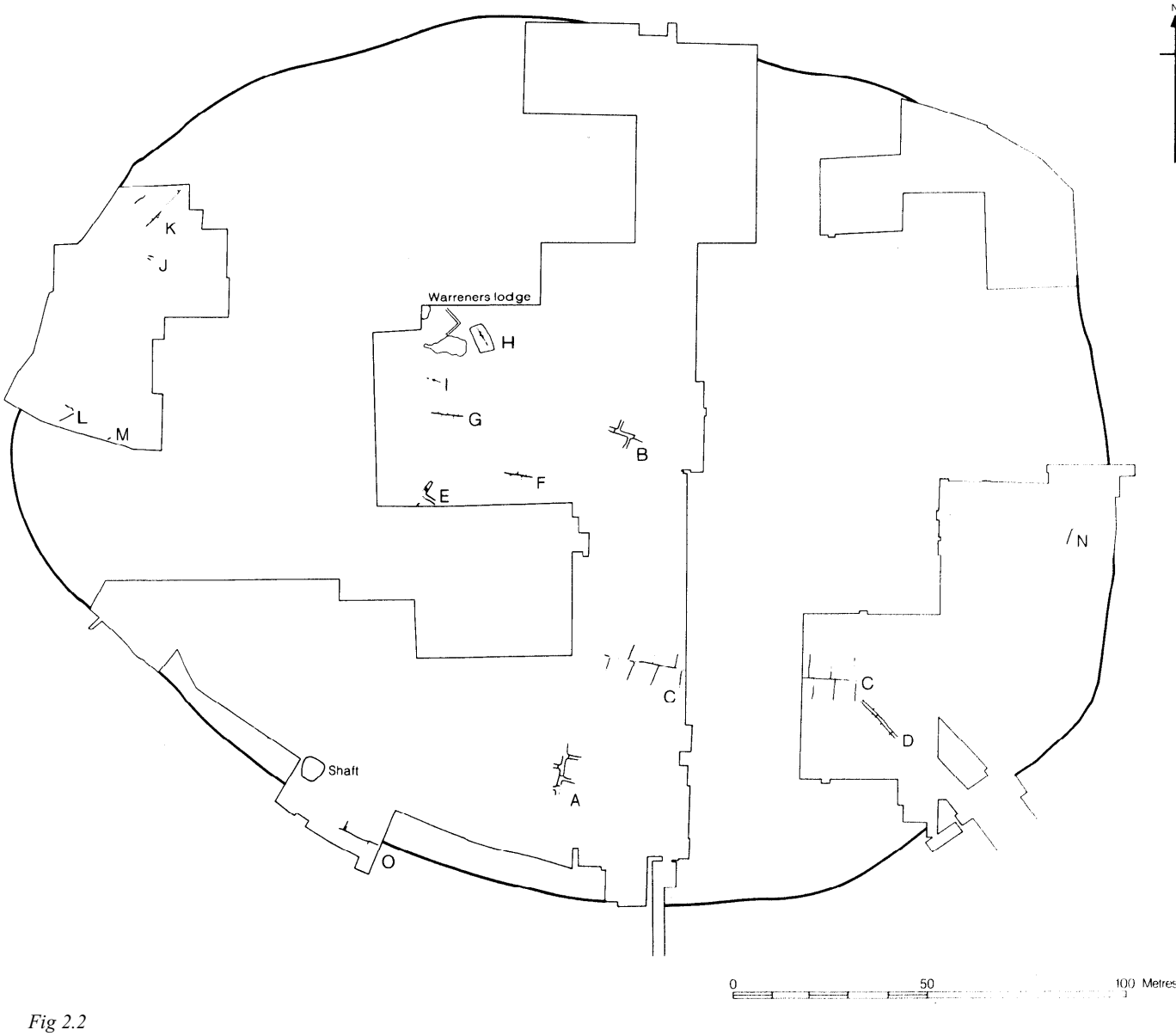


Fig 2.2

2.6 Post-Iron Age occupation: medieval and later

There is ample documentary evidence to suggest that in the seventeenth century Danebury hill was being actively developed as a rabbit warren guarded by a resident warrener whose lodge lay within the defences. By the 1670's the warren had become defunct and the hill was reverting to sheep pasture (Vol 1,5). The excavation has yielded evidence of activity at this time. During the 1969–78 campaign four deliberately constructed warrens were recorded (Vol 1, 13–14). The second campaign of 1979–88 has added a further 11 together with some details of the warrener's accommodation.

The overall plan (Fig 2.2) shows what is known of the distribution of the seventeenth century features. Three groups of structures are represented:

a) the warrener's lodge and associated features;
b) the warrens;
c) two large pits or wells.

The warreners's lodge and associated features (Fig 2.3)

The warrener's house occupied the summit of the hill and was examined in the excavation of 1981. All that survived of the structure were two short lengths of wall (F87 and F88) built of cob strengthened with blocks of chalk and flints. A post-hole containing a single wooden post may have been part of the framing of the structure but no further post-holes were found along the wall line. A doorway was located in the east wall close to the limit of the excavation.

Some contemporary levels survived. Outside the south wall was a patch of consolidated chalk rubble (694) while inside a spread of flint cobbles was found (708) upon which was an occupation layer (702) sealed by a compacted spread of chalk (701). To the south west broadly contemporary levels were encountered (704 and 703) equivalent to the occupation layer (702) and the chalk above it (701).

Three substantial features excavated into the chalk were found nearby. In the north-west corner of the excavation was an irregular hole (F97) of which one corner lay within the 1981 excavation. It was evidently a deep shaft, probably a well or cistern, of which only the upper 2 m was examined. Clay packing around the upper edge was sealed by the cobble layer (708). Much of the area of the lodge and of F97 was covered with a layer of chalky clay, mixed with flint and roof tile (714) derived from the collapse and decay of the superstructure of the lodge.

To the south of the lodge was an elongated irregular excavation (F86) measuring about 10 m in length and varying from l–4 m in width. One section was completely excavated across the centre where the maximum depth was little over one metre. The feature was probably a quarry to provide chalk for the construction and flooring of the lodge. A number of stake-holes around the upper edge suggest that it was once fenced. The filling consisted of tips of different material including a quantity of occupation debris.

To the south east of the lodge was a regularly dug rectangular feature (FSS) 7.5 m in length, 3.6 m wide and of maximum depth 0.75 m. The sides were vertical and the bottom was flat. Into the floor was cut a warren (G212/213) described below. The filling of the feature contained flint nodules, quantities of broken roof tiles, iron nails and occupation debris all presumably derived from the destruction of the lodge.

To the north of F85 were two small rectangular features (ph 7907 and P1632) both of seventeenth century date.

Detailed descriptions of the stratigraphy associated with these seventeenth century features, together with sections, are provided in Fiche 18:E4–8.

THE WARRENERS LODGE

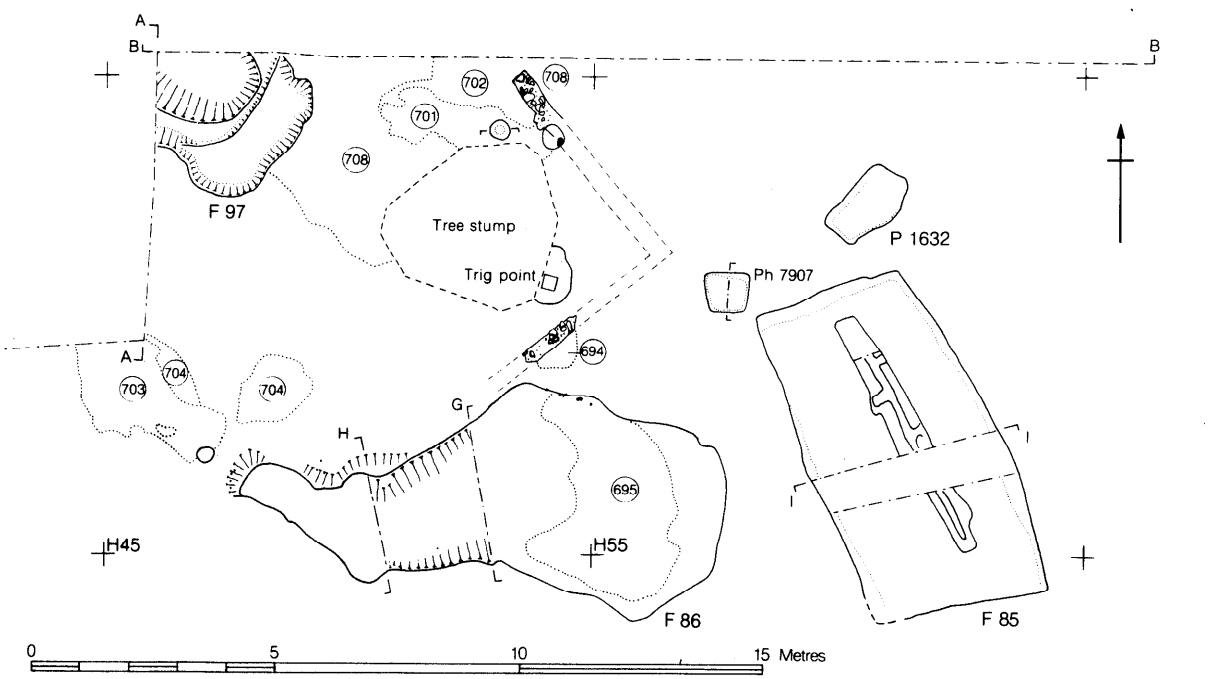


Fig 2.3

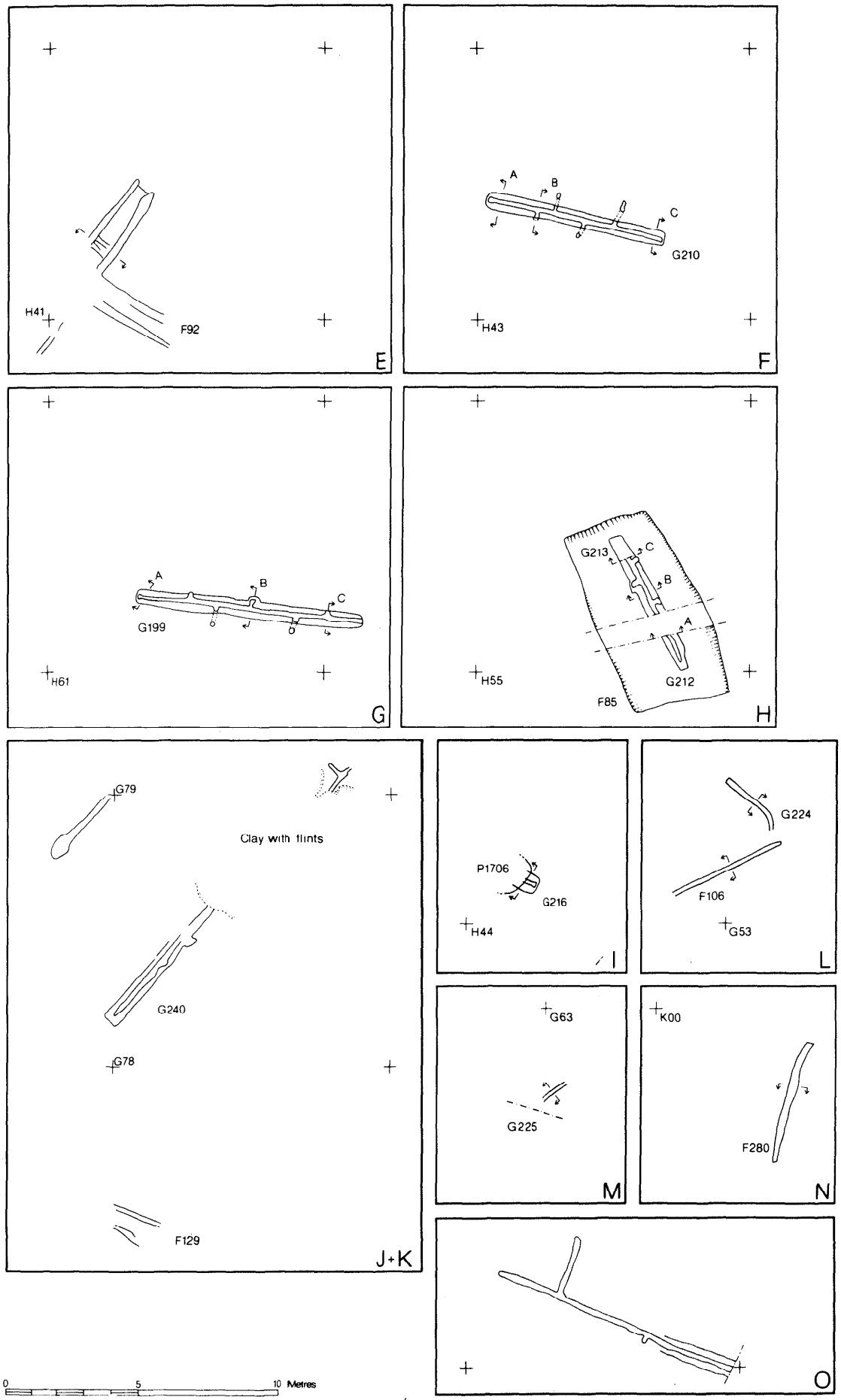


Fig 2.4 Details of rabbit warrens

The rabbit warrens (Figs 2.2 and 2.4 and Pls 3 and 4)

The excavation of 1979–88 exposed 11 separate rabbit warrens to be added to the four found in the previous ten years. For the sake of convenience the entire group may be considered together. Broadly speaking they can be divided into two types:

a) those involving excavation to two different levels;
b) those composed of runs excavated to a single level.

Type a includes warrens F, G, H, I and O. The upper level comprised a trench 8-9 m in length, 0.5 m wide and of about the same depth. Into the floor of this was dug a single narrow run up to 0.2 m wide and 0.3 m deep. From the central run, exit burrows were constructed, by boring diagonally through the solid chalk, in such a way that the ground level opening was clear of the edge of the upper trench. These exit burrows were arranged from alternate sides of the central burrow at intervals of about one metre. The filling of the central run and the exit burrows was of fine soil while the filling of the trench above consisted of chalk rubble and flints. It seems likely therefore that once dug the burrow had been roofed with organic material before the trench was filled with rubble. Such an arrangement would have encouraged the rabbits to restrict themselves to the man-made burrows and to use the exits cut for them through the solid chalk. In this way, by closing or opening exits at will, the warrener could determine which exit the occupants used and thus would be able to set traps or nets accordingly.

Warren H differed from others of this type in that it was constructed in the base of a deep vertical-sided pit (F85) close to the warrener's lodge. The arrangement clearly imposes even greater control on the movements of the creatures since they may well have been unable to scale the pit walls. Such a system could have been used to collect young after breeding without damaging them before introducing them into a new warren.

Type b consists of different arrangements of deliberately-cut burrows *c* 0.2 m wide and 0.3 m deep. Two patterns can be recognized:

i) parallel burrows joined at intervals by cross runs, *eg* nos A, B. D and E;
ii) a medial burrow with alternating lateral extension, *eg* no C.

The remainder are fragmentary but mostly comprise single burrows.

Type b warrens probably functioned in the same way as type a the only difference being that the rabbits would have found it somewhat easier to dig their own exit burrows and the type would therefore have been less efficient. No evidence of mounds was recovered. For a further consideration of this type see Vol 1, 13-14. Sections of the warrens are given in Fiche 18:E3.

The different types of warrens may represent improvements over time but they could equally reflect differences in practice and gathering technique. Together the collection provides an interesting insight into a specialized seventeenth century economic strategy.

The large pit (Feature 78)

Close to the southern rampart a large pit of seventeenth century date was discovered. It measured 3.5 m square and was dug to a depth of 3.6 m. Its filling consisted largely of eroded chalk and soil. Finds were restricted to a few fragments of post-medieval pottery. The function of the pit is uncertain though it may have been a well. A full description of its filling is given in Fiche 18:E1–2.

3 The hillfort defences and earthworks

3.1 The inner earthwork

3.1.1 Introduction

In the first ten-year programme of excavations one section was cut through the inner rampart, the ditch and the counterscarp in 1969 (Vol 1, 16 -19) and a second partial section was cut through the back of the rampart in 1975 (Vol 1, 19-20). Part of the tail of the rampart was also removed in 1978.

The second ten-year programme saw three more rampart investigations, made in 1982, 1987 and 1988, as well as the removal of part of the rampart blocking the south-west entrance in 1982-4. These partial sections were cut to test the structure of the rampart and to link the rampart sequence to the internal stratigraphy. The positions of the various sections are shown on Fig 3.1.

3.1.2 The 1969 section

A single trench 3 m wide was cut through the defences in 1969 sectioning the rampart to the underlying natural turf line. On the basis of this section four periods of construction were recognized:

Period 1 Primary rampart, box structured
Short interlude: slight weathering of rampart surface

Period 2 Heightened: sloping front face?
Long interlude: considerable weathering of rampart surface, thick turf line forms over tail of rampart

Period 3 Heightened by addition of chalk rubble skin *c* 0.3 m thick. Recut V-shaped ditch in front
Short interlude: some weathering on the rampart surface

DANEBURY POSITION OF RAMPART SECTIONS

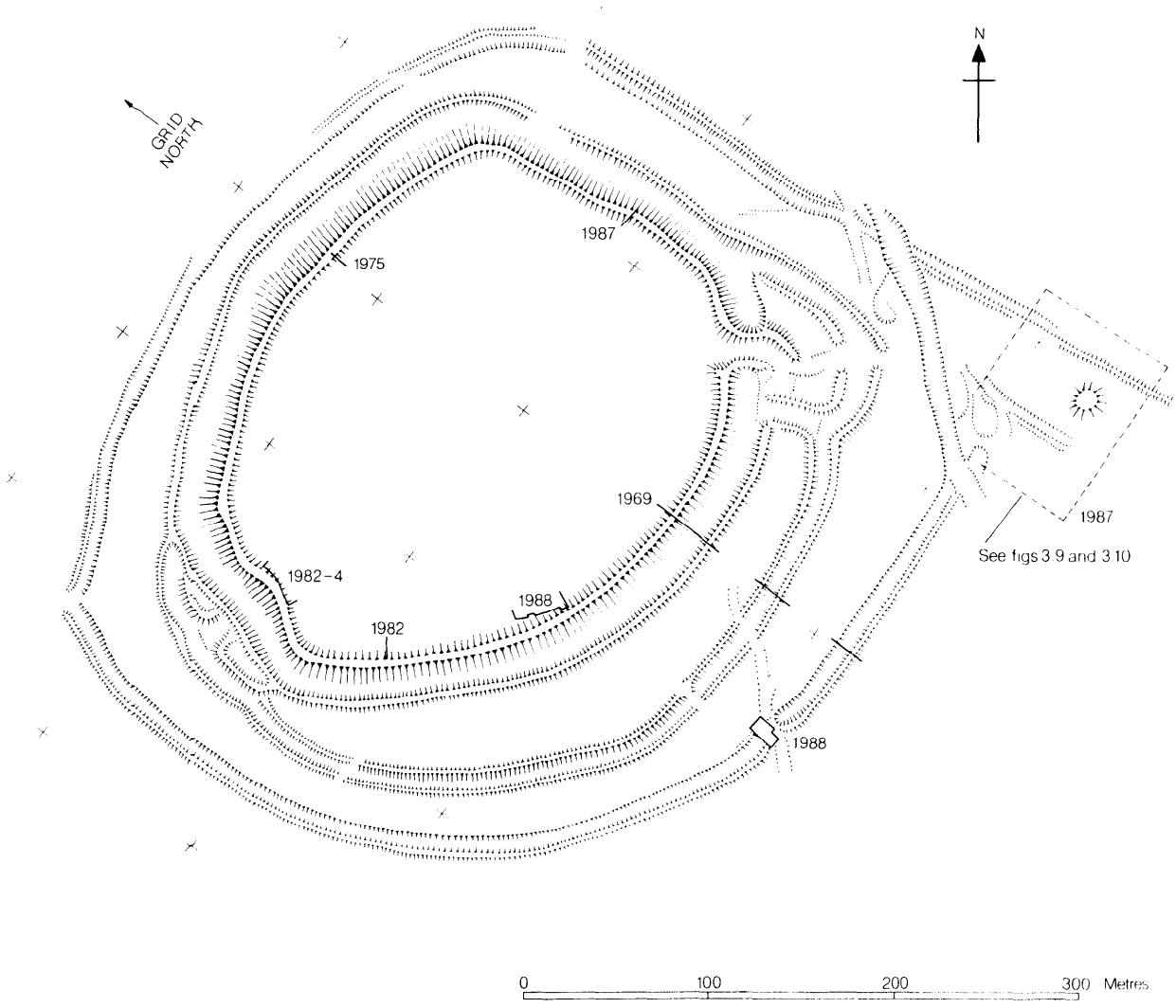


Fig 3.1

Period 4 Heightened

The rampart sequence was tentatively related to the recutting and silting of the ditch.

Very little good dating evidence was obtained. Apart from a La Tene III fibula which appeared to be from rampart period 4 layer, the only pottery from the rampart, even the most recent levels, was of cp 3-4, dating to before *c* 400 BC.

Although the sequence as outlined was entirely consistent with the recorded stratigraphy several doubts remained. The original on-site assessment, recorded in the first interim report, was that what was later to be called Rampart 2 was, in reality, only a late phase in the construction of the earliest rampart, the erosion surface separating them being little more than a pause in construction. By the time that the final report was written for Volume 1 it was felt that the distinction into two separate periods should be made on the grounds that the gully beneath Rampart 2 was most likely originally dug to mark the tail of Rampart 1. In anticipation of the discussion of the 1988 sequence to follow (pp. 15-17) it can now be shown that the original interpretation was correct and that only one period of construction was represented.

A second point of debate is the date of what was designated Rampart 4 but in the new interpretation is Rampart 3. It was composed of dumps of soil, chalk rubble and flints which had suffered considerable disturbance by burrowing animals. The only pottery from the dumps consisted of sherds from cp 3-5 but a single La Tene III fibula was found in layer 6a. This was taken to imply a first century BC or early first century AD date. The evidence from the 1988 excavation shows conclusively that Rampart 3 was built before the advent of cp 7 and must therefore date to *c* 350-300 BC. We can only suppose that the fibula found its way into layer 6 as the result of root or animal disturbance.

The reinterpretation is a salutary reminder of the dangers inherent in interpreting narrow sections through defensive works.

SECTION 43 INNER EARTHWORK RAMPART

TRENCH EXTENSION OF 1982 AREA

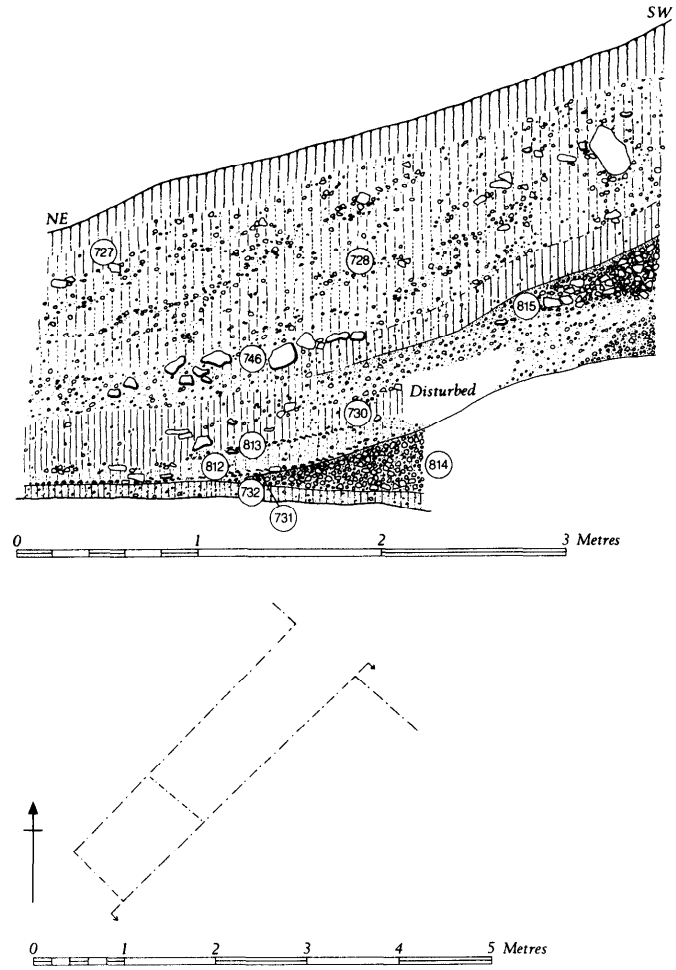


Fig 3.2

3.1.3 The 1975 section

There is nothing to add to the discussion offered in Volume 1.

3.1.4 The 1978 excavation

The tail of the period 3 rampart cut back in the excavation of 1978 was examined in more detail in the excavation of 1987 and is discussed below (pp. 165-6).

3.1.5 The 1982 section (Fig 3.2)

In 1982 a small trial section, just less than 1 m wide, was cut into the back face of the rampart to relate the complicated stratigraphy exposed in the area excavation to the sequence of rampart rebuildings. The upper part of the trench was cut mechanically but the lowest 0.7 m was excavated by hand. The section had been heavily disturbed by burrowing animals and tree roots but the main sequence was quite clear.

The natural chalk, which sloped away to the south, was covered by a layer of clayey, yellowish brown silt 0.10-0.15 m thick mixed throughout with small rounded pieces of chalk (layer 732). Since there was no evidence of stone-free to soil we must suppose that either the turf had been deliberately stripped before the rampart was constructed or that the soil had been ploughed regularly in the pre-rampart period. The former is more likely. Three post-holes and a chalk spread represent a phase of activity before the first rampart was constructed.

The primary rampart (R1) was composed of a dump of angular chalk lumps (each no larger than 0.15 m) (814). In the upper part of the dump the chalk lumps were packed tightly together but in the lower part they were mixed with crumbly brown soil derived, presumably, from redeposited topsoil. There was no hard division between these two faces. The upper surface of the rampart showed some weathering on the steeper slope but there was little evidence of soil formation.

In the intermediate period which followed a discontinuous occupation layer containing much charcoal (731), a thin lens of chalk rubble (812) and another lens of occupation material rich in charcoal (813), were deposited in succession over the tail of Rampart 1.

Rampart 2 which followed consisted of two distinct layers, a lower layer (730) which represents a mixed mass of redeposited occupation material and an upper layer (815) composed of interleaved tips of chalk and chalky silt of varying sizes. The uppermost 50 mm of the top level was compacted and powdery resulting from prolonged exposure to weather.

While the slope of the rampart had a distinct interface with the superimposed layers, the lower tail was less

distinct and was difficult to distinguish clearly from the layers above except in one place (not appearing on the drawn section) where a discontinuous lens of charcoal and burnt flints (729) had been dumped. A more widespread layer, sealing layer 729 and the rampart (815), followed. It consists of a mass of flint nodules, up to 0.2 m long, mixed in a chalky silt (746). It is possible that the flints had eroded from a structure, perhaps a breastwork, built on top of the rampart. The flint nodules concentrated on the lower slope of the rampart tail but the clayey silt matrix continued up the slope sealing the period 2 rampart.

The rampart was deliberately heightened for a second time (Rampart 3) with a deliberate dump of chalky silt 0.7 m thick (728). The layer is very mixed, with occupation material, charcoal, lumps of chalk of various sizes and occasional lenses of compacted chalk (eg 748). It had evidently been derived from a nearby occupation area and deliberately piled up to increase the height of the rampart.

The new rampart tail created by the addition soon became overlain with lenses of chalk (734 and 735) which were eventually sealed by a natural accumulation of grey silt (727) and occasional discontinuous layers of flint nodules eroded from the rampart crest (733).

The sequence exposed in the rampart section may be summarized as follows:

Silt
Rampart 3 (second addition)
Silt and occupation
Rampart 2 (first addition)
Occupation and silt
Rampart 1 (primary)
Occupation
Pre-rampart soil.

The main area excavation immediately adjacent to the rampart section showed that Rampart 1 had been constructed with chalk dug from a series of discrete quarry hollows (F122, F124, F121 and F118) while Rampart 2 was composed of material from a single elongated quarry scoop (F119/F109). The material for Rampart 3 was gathered from the superficial build-up of occupation debris. These features and the occupation levels stratified within and between them are considered below (pp. 201-11) where the dating evidence is assessed.

3.1.6 The 1988 section (Figs 3.3 and 3.4 and Pls 11—14)

The very limited excavation of the rampart undertaken in 1982 together with the original section cut in 1969 suggested that the defensive sequence on the southern side of the fort differed from that on the northern side in that the massive quarry hollows dug to provide material for rampart period 3 were missing on the south. This meant that occupation levels belonging to the early period *(c* 550–400 BC) were likely to be well preserved in the lee of the southern rampart whereas around the northern periphery they had been largely removed by the latest quarry. With this in mind an area excavation, some 30 m in length, was laid out along the back of the southern rampart. An added reason for attention to this area was that some details of the interpretation of the rampart sequence, based on the 1969 section, had become difficult to sustain as work developed over subsequent years. In the event, the large-scale investigation of 1988 fully repaid the effort in that it clarified problems, showed how complex and varied rampart construction was and provided a considerable body of ceramic dating evidence.

The strategy adopted was to strip away each rampart phase and its associated occupation layers in turn until the first rampart was reached and then, having excavated the earliest occupation levels, to remove the rear 2–3 m of the primary rampart to bedrock.

The earliest features to be identified were seven post-holes cut deeply into the natural chalk and sealed by the pre-rampart turf line. They are undated but must, from their stratigraphical position, belong to a pre-Iron Age period (below p. 212). Similar pre-rampart features were seen in the 1982 cutting and the 1982–4 excavation just south of the blocked entrance.

The original soil (layers 2042, 2095, 2096, 2071 and 2109) was well-preserved beneath the primary rampart. At the east end of the site the full profile survived with a distinct stone-free A horizon some 100 mm thick above a B horizon containing small rounded particles of chalk. In the central and western part of the site much of the A horizon had been stripped possibly to provide turf for a setting out bank which may have delineated the front of the rampart. Below the B horizon the surface of the natural chalk was uneven and disturbed with ancient root holes. The evidence therefore suggests that after clearance grassland became established, and remained undisturbed for a considerable period of time, apart from the construction of some four-post structures, until the hillfort defences were set out. A collection of early prehistoric flints was found in the turf layer (above p. 8).

The first rampart was constructed in several stages representing a continuous process. To begin with an irregular but continuous quarry trench was dug roughly where the tail of the rampart was to be (G332, F368, F370). The variation in depth and width can best be appreciated from the plans and sections (Figs 3.3 and 3.4). The material derived from this quarry was probably used to construct the front of the rampart, filling in and around the timber boxwork structure which was identified in the 1969 rampart excavation. In the second stage it is likely that chalk rubble quarried from the ditch line was brought in to create the core of the rampart behind the fronting timbers. No part of this process was identified in the partial excavation of 1988 but the structure was clearly evident in the complete section cut in 1969 (Vol 1, fig 3.4 layer 27). The third stage consisted of a substantial addition to the back slope of the rampart using topsoil stripped from inside the fort. The composite layer created (2041, 2046, 2072, 2090, 2091 and 2094) showed clearly the interleaving lenses of turf (A horizon) and subsoil (B horizon) and contained a quantity of struck flakes and other flintwork derived from an earlier phase of occupation on the hilltop (above p. 8). This deposit sloped down steeply towards the north and filled, either partially or wholly, the quarry trench, covering the south side and much of the bottom of the quarry. It was noticeable that where the exposed chalk was sealed in this way it showed no sign of weathering. This demonstrates that little time had elapsed between the digging of the quarry and the deposition of the turf and topsoil dump. The final stage of construction was really a continuation of the last using rather more chalky rubble which was presumably derived from shallow diggings within the fort in areas from which the soil had already largely been removed. The resulting layer (2028, 2044, 2069, 2089, 2092, 2093 and 2098) created the final back slope of the first rampart. It was deliberately built of well defined tips of material but some of the larger blocks of chalk had rolled

down the slope to accumulate at the tail, captured in the quarry trench.

Then began a period of erosion and occupation. At the east end of the site (Fig 3.4, section 44) during the initial period of instability, a chalky silt (2043) formed over the rampart tail. This was soon followed by the deposition of a deliberately laid chalk spread (2003 and 2004) which represents an attempt at consolidating the ground. Thereafter a thick layer of soil containing much occupation debris (1997) accumulated over the rampart tail grading, up the rampart slope, to a more chalky soil (2027) formed by the erosion and weathering of the rampart surface combined with the growth of vegetation. The sequence at the western end of the site was even simpler (Fig 3.4, section 46). Here the sloping face of the rampart weathered and was covered with a thick accumulation of silty soil containing a high proportion of occupation material (2053 and 2054).

In the middle part of the site a somewhat more complex sequence was evident and is best appreciated in sections 45 and 47 (Fig 3.4). Here, following the construction of the first rampart a thick deposit of chalky silt rapidly accumulated over the tail (2089). The layer was partly the result of erosion from the rampart and partly derived from the exposed northern face of the quarry. The thickness of the deposit (200-400 mm) was probably due to the fact that a considerable hollow existed here in the quarry trench and would have formed a natural zone of capture for the products of erosion washing in from all parts of the site. One notable fact was the very large number of sling pebbles found in this layer: the area excavated produced in the order of 1400. This provides clear evidence of the significance of sling warfare at the initial stage of the fort's history.

Following the erosion, which may have caused slumping in the rampart, a layer of fine chalky rubble was tipped and compacted on the rampart slope (2092) and, possibly as part of the same process, a dump of freshly quarried chalk blocks was thrown into the deepest part of the remaining quarry hollow (2087). Then followed a further accumulation of chalky silt (2088) which washed in from inside the fort. After this the upper part of the quarry was filled with tips of chalk rubble (2056 and 2086) which were well compacted on the surface.

It was after this that intensive occupation began scarping into the back face of the rampart and giving rise to a complex of layers including, in sequence, a mixture of silt and occupation debris (2047), thick charcoal-rich occupation lenses (2080 and 2082), localized tips of chalk rubble (2075) and finally a layer of fairly clean silt mixed with a little occupation debris (2076 and 2077). The sequence is best interpreted as a period of intensive use followed by a period of inactivity.

After the period of silt formation a further layer of chalk rubble (2050) was added to the back slope of the rampart as a localized patch evening out irregularities caused by the depth of the quarry trench at this point and by the subsequent occupation activity. Thereafter a thick layer of silt containing occupation debris formed (1999). This was directly equivalent to layers 1997 and 2053/2054.

The contrast between the complex stratigraphy in the central section and the very simple sequences represented at both the east and west ends of the site is a vivid reminder that lateral variation can be considerable and, without extensive area excavation, could lead to misleading conclusions.

The formation of the silt layer (1997, 1999 and 2053/2054) and the erosion and soil formation on the rampart slope must represent a considerable period of time, perhaps as much as a century. It was after this interval that rampart period 2 was added. Throughout the entire length of the excavation Rampart 2 consisted of a single layer of medium to fine compacted chalk rubble averaging 300–500 mm in thickness, thinning to nothing at the tail (2005, 2052 and 2100). The surface of the layer had been weathered creating a fine-grained compacted crust but there was no evidence of soil formation. One notable feature about the surface was a series of rows of stake-holes (F362), the stakes having been driven vertically into the chalk to a depth varying from *c* 100–300 mm. The arrangement of the holes will be apparent from the plan (Fig 3.3) and photograph (Pl 12). The function of the stakes is uncertain. While it is quite possible that they represent a light structure built on the rampart slope, it is more likely that they were simply short pegs driven into the surface to give stability to the lower soil layers dumped on the chalk slope as the first stage in the construction of rampart period 3.

Material for rampart period 2 was probably derived from shallow quarry hollows within the fort close to the rampart. One quarry (F361a) was identified in the eastern part of the site: others may well have been removed when a more extensive quarry was dug for rampart period 3 destroying earlier features over much of the central and eastern part of the site.

The erosion on the surface of rampart period 2 shows that some time had elapsed before the final rampart phase was constructed, but the lack of soil development on the slope and the absence of silt deposits over the tail imply that the time lapse cannot have been more than a year or two at the most.

Rampart period 3 consisted of the addition of a metre or so of material deposited in two separate operations. In the first the earlier rampart was buried by a tip of grey chalky soil (1952 and 2052) which extended for the entire length of the rampart exposed in the excavation. Since the soil had a high organic content and contained some occupation debris, it probably represents turves cut from a partially disturbed area within the fort. The lensing of the more chalky component and the steep, stepped face created in some places (see especially Fig 3.4, section 46), strongly suggest that individual turves were being stacked up. It is this material that may have been pegged in place giving rise to the stake-holes seen in the underlying surface of rampart period 2.

Once the turf layer was in position a final protective capping was added. At the western end of the site this consisted of a layer of freshly quarried chalk rubble reaching a maximum thickness of 1.1 m (2018) where it was exposed in section 46. Further east, in section 45 (1992) it had thinned to 0.5 m and had disappeared altogether another metre to the east. In the eastern part of the site the place of the chalk capping was taken by various tips, of soil and chalky silt (1951, 1975 and 1995) interleaved with each other and of no great extent.

The chalk capping was clearly derived from a large quarry (F84/F365/F369b) cut to the depth of about a metre behind the tail of the rampart and extending from the tail for a width from 7 to 11 m. The eastern limit of the main quarry was coincident with the extreme limit of the chalk capping. The dumps of soil and chalky silt which made up the upper part of the period 3 rampart across the eastern part of the site were presumably derived from superficial deposits scraped up over a wide area within the fort and from a shallow quarry (F361b).

The creation of rampart period 3 marked the end of recognizable defence activity in the area. Thereafter occupation continued the details of which are described separately below (pp. 215–19).

THE RAMPART SEQUENCE 1988

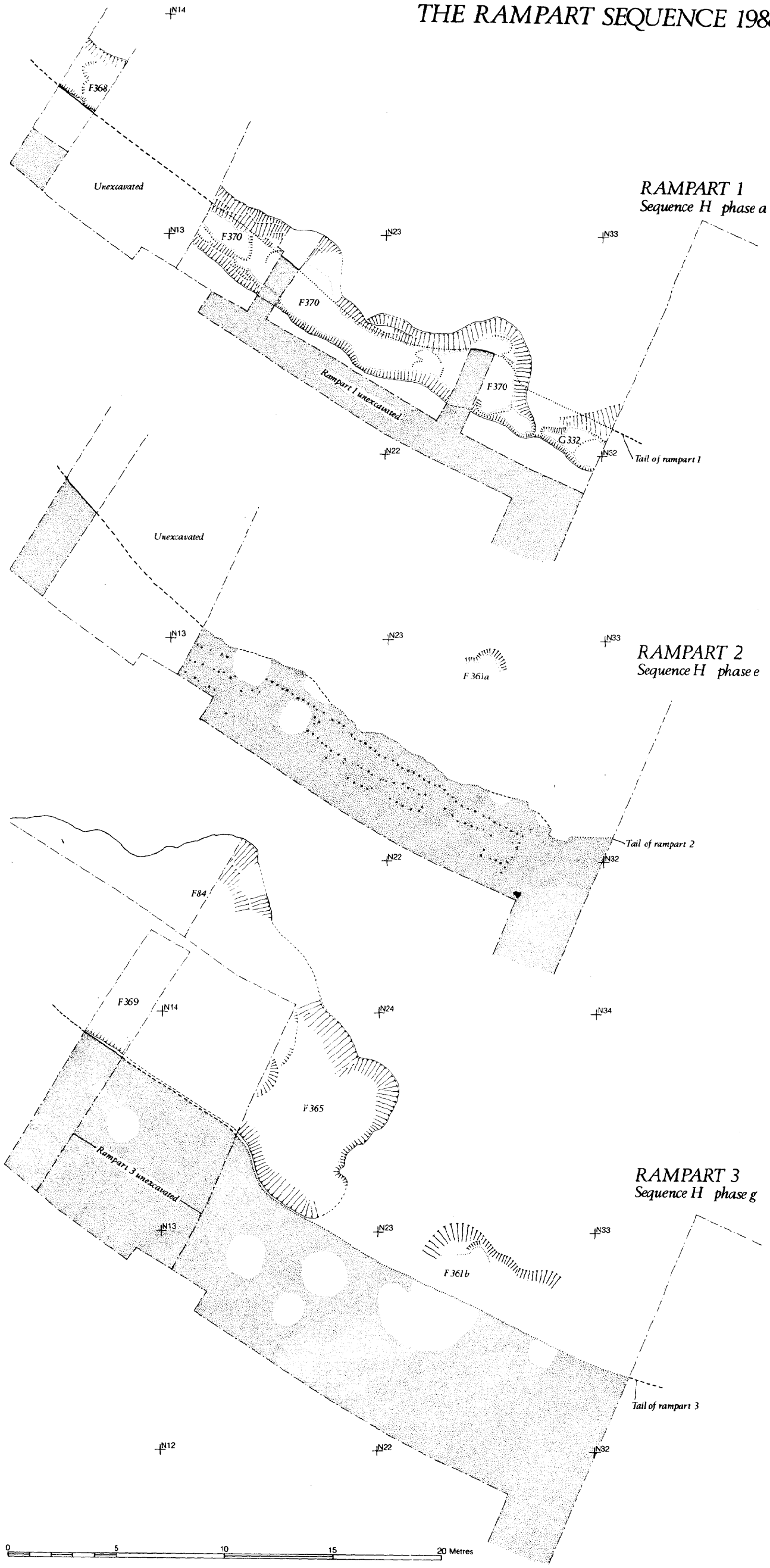
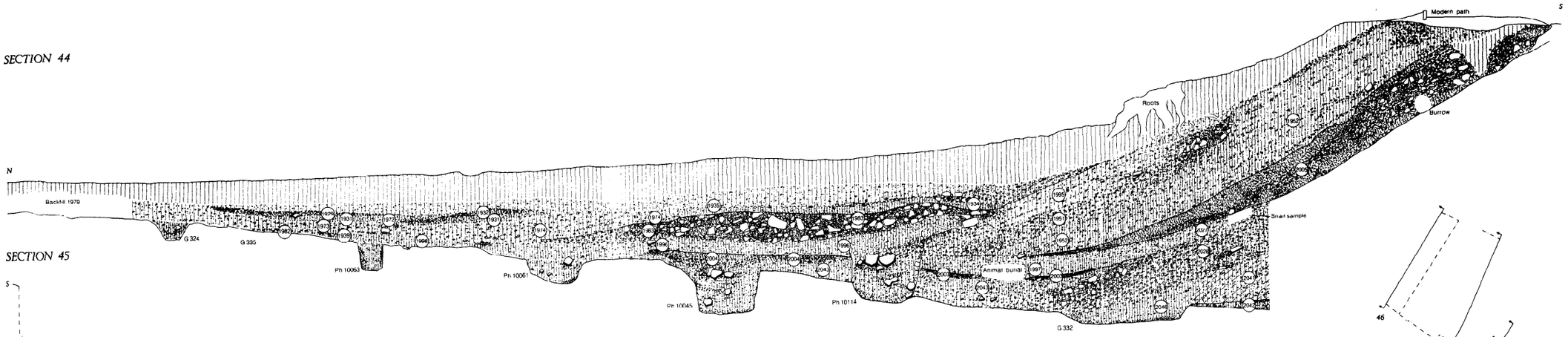
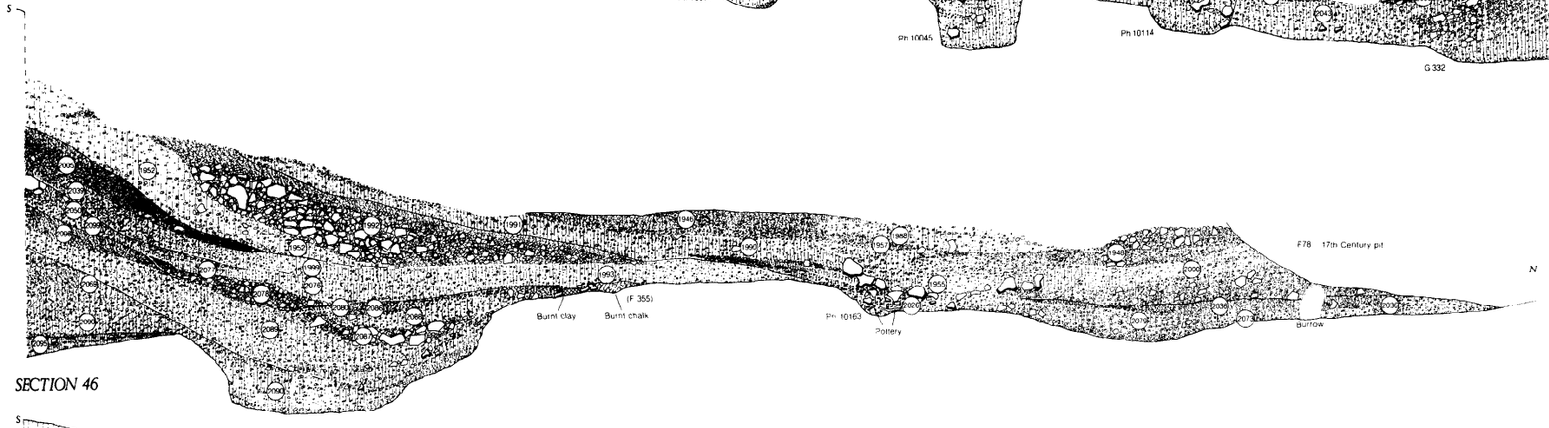


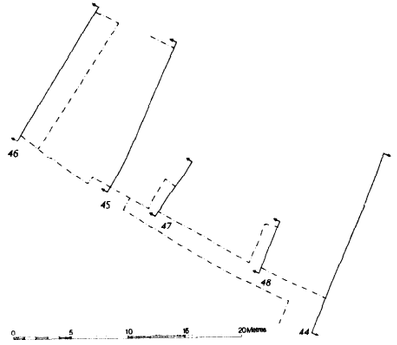
Fig 3.3

SECTION 44

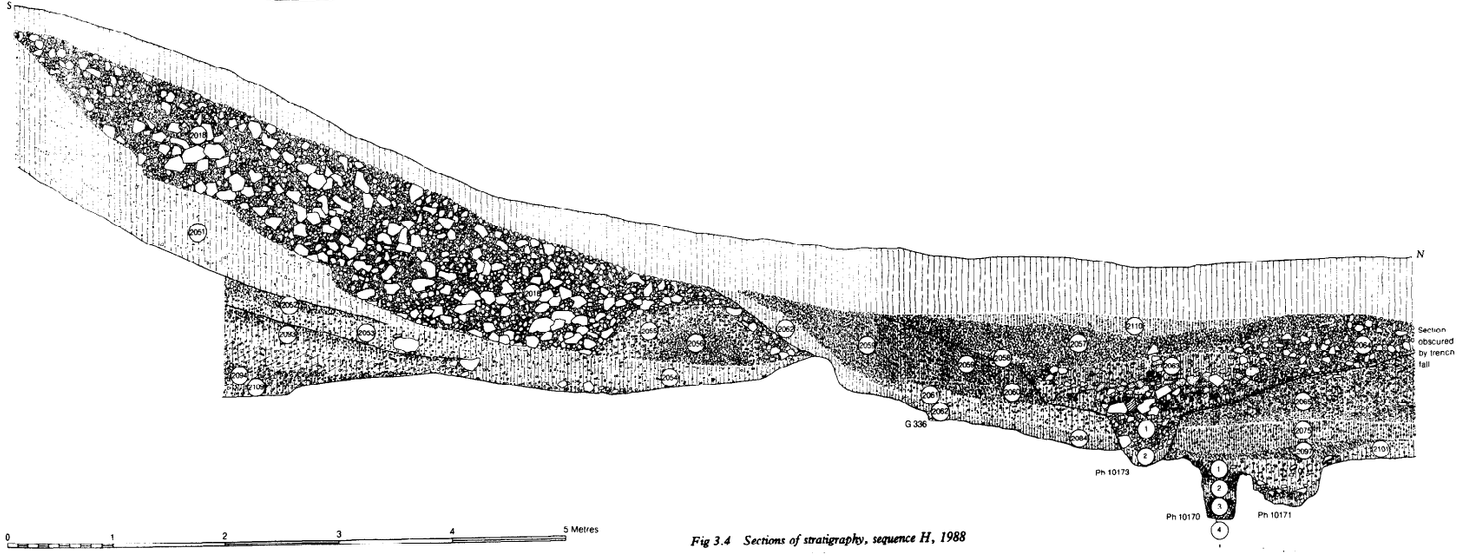


SECTION 45

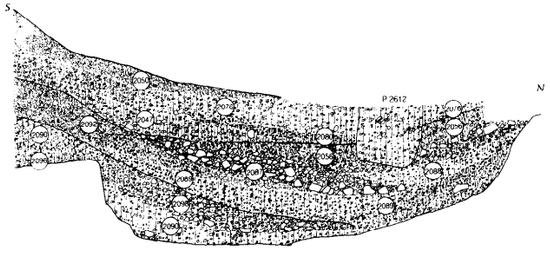




SECTION 46



SECTION 47



SECTION 48

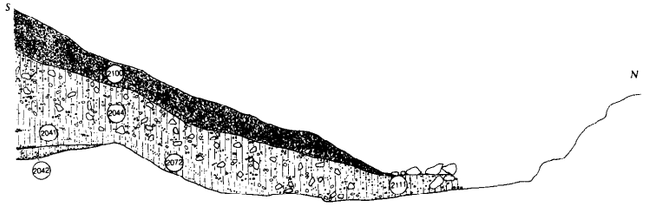


Fig 3.4 Sections of stratigraphy, sequence H, 1988

In summary the sequence exposed is:

Occupation	(phases h-m)
Rampart 3	(phase g)
Occupation	(phase f)
Rampart 2	(phase e)
Occupation	(phase d)
Rampart lb	(phase c)
Occupation	(phase b)
Rampart la (with quarry trench)	(phase a)
Turf Pre-turf occupation	(phase 0)

In addition to the original quarry trench of phase a, a small shallow quarry (F361a), from which the material of Rampart 2 was derived, was located within the excavation, together with a larger quarry (F84, F361b, F365 and F369) which provided soil and chalk for Rampart 3. Details of these and of the stratigraphy contained within them are given below (pp. 215-19).

The sequence exposed in the 1988 excavation is directly comparable to, though in some details more complex than, that recorded in the 1982 section. It can also be correlated with the results of the 1969 trench but this requires some modification to the phasing and dating given in the first report (see section 3.1.2 above).

3.1.7 The 1982-4 section (Fig 3.5)

The area excavation in the vicinity of the blocked (south-west) entrance was carried out over a period of three seasons from 1982-4. During this time the blocked entrance was partially excavated (see below p. 23) and several cuttings were made into the tail of the rampart though the presence of trees and old tree roots south of the blocked entrance greatly hindered the work preventing a more extensive examination. The extent of the excavation is shown on Fig 3.16.

South of the blocked entrance the rampart was examined in one trench, dug along the southern boundary of the site (Fig 3.5, section 49) and a lateral section designed to cut back the rampart tail (so far as tree roots permitted) to expose the edge of the original entrance passage (Fig 3.23, section 65).

Upon the surface of natural chalk the original ground surface was well preserved particularly where it had been protected by the tail of the rampart. Here a well-formed soil could be seen, consisting of a lower, C, horizon composed largely of weathered chalk (829) with the AB horizon, a brown clayey silt soil, largely stone free, above (828). The effect of worm sorting had caused a number of small flints to be deposited at the interface. Elsewhere the old ground surface was preserved (740, 824 and 798) but in a more disturbed form: it did not have the same distinctive profile and it is possible that turf and topsoil had been deliberately removed in some areas. A single post-hole (ph 8582) cut the soil and the surface of the soil was sealed by intermittent trampled chalk spreads (826 and 830) and patches of occupation (821). In the light of the clear evidence obtained in the 1982 and 1988 rampart sections for a pre-rampart phase of occupation these features may be assigned to phase 0 and the rampart material sealing them to the first phase of rampart construction. An alternative view, that the first rampart lay beyond the limit of excavation, this being an addition to the original mass, though possible is unlikely.

The original soil and early features were sealed by a dump of rampart material (rampart 1) consisting of layers of turfy material at the base (819 and 820) overlain by a thick deposit of freshly quarried chalk blocks up to 0.3 m in size (810). Above this were tips of chalky silt (818, 809, 825, 788) which in places were interleaved with trampled lenses (817 and 808) before more silt (8 16 and 807) was dumped. This was followed by a capping of fresh chalk blocks (800, 801 and 804).

Following the construction of the first rampart, there was a period of occupation evidenced by the digging of pits (P2159 and P2171) as well as other features such as a gully (G232) which may represent the wall slot of a house (CS32). It was during this period that the main road through the south-west entrance was in use and a low chalky bank was built out along the south flank of the road (788 and 787).

Then followed a period when silt was allowed to form over the bank and the road surface (786, etc) intermittently consolidated by spreads of cobbles and chalk. At the end of this sequence pit 2162 was dug. Thereafter the blocking of the entrance gap began.

SECTION 49 *INNER EARTHWORK RAMPART*

TRENCH EXTENSION OF 1982 AREA

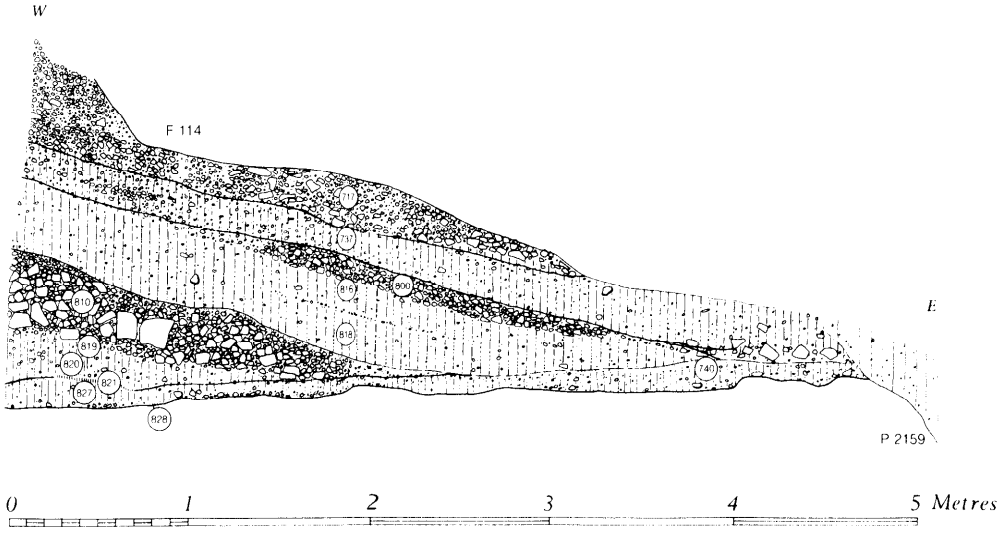


Fig 3.5

Contemporary with this blocking came the heightening of the rampart. To the south this is represented by a thick layer of hard-packed fresh chalk rubble (717) which, closer to the entrance, becomes a more mixed silty material (781).

Soon after the blocking and heightening was complete a new phase of intensive occu pation b egan i nvolving the construction of two houses (CS33 and CS34), a four-post structure PS201 and the digging of a number of pits. Details of this sequence are given below (pp. 196-207).

To the north of the blocked entrance one small cut was made in the rampart tail. It revealed a thick soil deposit mixed with occupation material (965) scaling a post-hole (ph 8812) and a thin layer of chalky soil (1040) lying in a hollow in the surface of the natural chalk. The soil was sealed by the tail of the latest phase of the rampart, composed of chalk rubble and chalky silt (962 and 963). The material from the rampart heightening in this area was obtained from a massive quarry hollow (F132/135).

From the above description it will be appreciated that although the rampart flanking the 1982-4 excavation was not extensively examined its general development is clear. The principal structural periods can be defined as follows:

Extensive occupation

Rampart 3	Gate blocked and rampart heightened. Quarries F132/135
	Much reduced activity: roadway through gate silting
Rampart 2	Lateral extension along the south side of the gate
	Occupation: gate in continuous use
Rampart 1	Pre-rampart occupation. Post-holes and chalk spread.

3.1.8 The 1987 section (Fig 3.6)

In 1987 a section 2.5 m wide and 6 m long was cut by hand through the inner sloping face of the rampart to provide a section continuous with the north face of the adjacent area excavation. The purpose of the rampart section was to examine the phasing of the rampart construction at this point on the defensive circuit and to allow it to be related to the sequence of quarry digging exposed in the area excavation. The description to follow will concentrate largely upon the rampart sequence, leaving the question of the interleaving occupation layers and the quarries for a more extended discussion below (pp. 164-80).

The original soil level (1757) was well preserved just above the surface of the natural chalk. It consisted of a layer, 50-100 mm thick, of yellow-brown clayey silt mixed throughout with small rounded fragments of chalk. No stone-free topsoil was seen. Thus either the ground had been disturbed, perhaps by the plough, immediately prior to the construction of the first rampart, or the turf had been deliberately removed.

The first stage of the first rampart (Rampart 1A) consisted of a mass of brown, very clayey soil mixed with occasional small pieces of chalk and flint (1756) dumped on to the original soil. The high clay content suggests that it came from an area of clay-with-flints and perhaps represents the topsoil stripped from such an area. The deposit produced flints (p. 8) and a number of EIA potsherds (Volume 5). The surface of the clay dump had had time to consolidate, but not to form an erosion surface, before new tips of material were added. This suggests a brief break in the construction sequence but the interval need have been little more than a few weeks at the most. Then followed a series of tips adding 1.0- 1.5 m to the height. This material

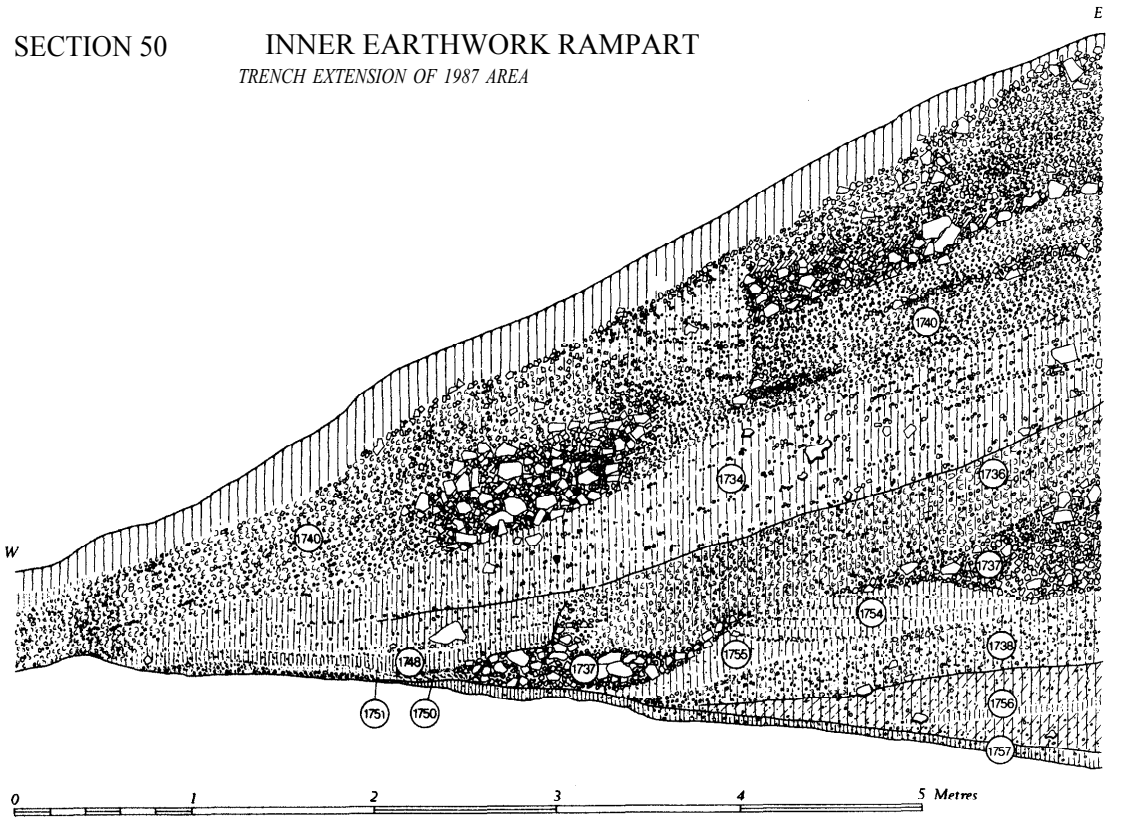


Fig 3.6

(Rampart 1B), included tips of turf-like material, silty chalk and freshly quarried chalk rubble (1736, 1737, 1738, 1741, 1754, 1755). For the most part the material was simply dumped indiscriminately but layer 1754 was more carefully laid. It consisted of successive layers of fine silty soil separated by thin lenses of trampled chalk. The most likely explanation for this is that the layer was a stack of turves, laid as a temporary internal consolidation to the growing rampart, the chalk lenses representing trample from the feet of the work force.

The surface of the uppermost of the rampart tips (1736) had been subjected to considerable weathering and erosion fragmenting the surface chalk into a powdery mass. The tail of the rampart was also cut, or worn, away by activity caused by intensive occupation in the lee of the rampart. The actual line of this 'cut' was to some extent obscured by the fact that material from the face had fallen into the occupied area and had been trampled and incorporated into the actual occupation levels but the evidence was sufficiently clear to allow the interface to be traced. The occupation layer consisted of successive lenses of charcoally soil and trampled chalk spreads (1752, 1758, 1751, 1750) followed by a thicker layer of grey silty soil containing sparse occupation debris (1748) which may suggest a temporary lull in occupational activity at this point. It was partially sealed by another thin chalk trample (1749 not extending to the drawn section) before activity stopped altogether and material eroding from the sloping back face of the rampart filled the remaining hollow.

In the final stage, Rampart period 3 (allowing that period 2 found elsewhere was not represented in this section), the rampart was heightened yet again in two distinct, but continuous, phases. In the first a mass of mixed silty soil containing chalk, flint and occupation material (1734) was dumped forming a layer, 0.6 m thick, over the back of the earlier rampart and this was sealed by discontinuous, interleaving and overlapping dumps of chalk rubble, much of it freshly quarried (1740, 1733, 1739, 1732, 1735 and 1731). In some places near-vertical discontinuities in the tipping show where work gangs had dumped material or piled turves in heaps to be engulfed almost immediately by tips of different material. The general sequence of deposits in the period 3 rampart would be consistent with, first, the bringing in of soil accumulations quarried from behind the rampart and then, when the quarries had been deepened, the removal of fresh chalk to heighten the rampart even further. The diagrammatic section (Fig 3.24) gives a clear idea of the relative volumes of the ramparts.

The sequence exposed in the section may be summarized as follows:

Silt and extensive occupation
Rampart 3
Intensive occupation and later silting.
(No evidence of Rampart 2 seen elsewhere)
Rampart IB
(Brief pause)
Rampart 1A
Pre-rampart soil.

It is evident that the main continuous quarry hollow behind the rampart provided the material for Rampart period 3. A series of smaller discrete quarry hollows preceding the main quarry are most likely to have been the source for the period 1B rampart. These quarries will be considered in more detail below (pp. 165–8).

3.2 The middle earthwork

No further work was undertaken on the middle earthwork but the revision of the plan showed that the course of a trackway, continuous with that passing through the outer earthwork, cut through the middle earthwork. The surface configuration strongly suggests that the gap was not original but that the ditch had been partly filled and the bank levelled. There is nothing inherently unlikely in this sequence since it will be argued that the entrance through the outer earthwork, through which the track passes, post-dates the middle earthwork. The course of the trackway, running towards the east entrance can be traced for some distance (Fig 3.1). It is possible that it continued right up to the entrance and that it was the same as the 'pre-hornwork track' noted in Vol 1 (fig 3.28) which was cut through and obscured when the hornworks were constructed.

3.3 The outer earthwork

The general plan of the outer earthwork is apparent from Fig 3.1. In addition to the trench cut through it in 1969 (Vol 1, fig 3.9) two further elements of the system were explored: the south-eastern entrance; and the approach flanked by the linear earthworks.

3.3.1 The south-eastern entrance, 1988 (Figs 3.7 and 3.8 and Pl 10)

A limited excavation was undertaken at the point where a trackway, visible from the air, impinged upon the outer earthwork which here appeared to turn inwards on either side of the track. The crucial junction was partially covered by yew trees but half of the entrance area was available for excavation.

On excavation three distinct phases were apparent:

a. The ditch of the first phase of the outer earthwork ran continuously across the excavation.
b. The ditch was allowed to silt naturally.
c. The ditch was partially recut leaving a causeway across which the track passed, represented by a hollow-way worn deeply into the natural chalk.

The details will best be appreciated from Figs 3.7 and 3.8. The first ditch of phase a (F357) measured 1.8 m wide by 0.8–1.2 m deep: it had been partly truncated by the later hollow-way worn along the line of the track. The filling was entirely natural consisting of lenses of finely fractured chalk interleaved with chalky silt which had eroded from the ditch side. No angle of rest had occurred sufficient to allow the beginning of soil formation. This suggests that the filling had been continuous and fairly rapid.

The recut ditch of phase c (F351) incurved and shallowed at its western terminal. Presumably the eastern terminal, rendered inaccessible by tree growth, was similar. At the western extremity of the excavation the recut ditch was 5 m wide and nearly 2 m deep. The filling was of chalky silt with a soil content increasing as the ditch filled. Both inside and outside of the ditch a low bank of chalky rubble had been thrown up sealing an original ground surface now mutilated by burrowing animals.

The trackway, which passed through the earthwork was unmetalled and had worn away the chalk to a maximum depth of *c.* 1.0 m.

The excavation raises the question of the date of the outer earthwork. In the 1969 section a plain saucepan pot of cp 6/7 was found on the ditch bottom. This suggested a late (ie Middle Iron Age) date for the earthwork (Vol 1, 22). However a potential difficulty arose when, in 1982–4, it was shown that the south-west entrance of the fort had

been blocked at the beginning of the Middle Iron Age (cp 6) while the outer earthwork presented an entrance opposite the south-west gate. This observation suggested (but did not prove) that the outer earthwork was in existence before the main south-west gate was blocked. An explanation of this apparent anomaly was provided by the evidence of recutting found in the 1988 excavation and b the recovery of sherds of the Early Iron Age (cp 3-5) from the primary ditch fill. The most satisfactory explanation, to contain all the evidence, is that the outer earthwork, with its south-west entrance, existed in the Early Iron Age and enclosed the defensive circuit with its two functioning gates. At a later date, in the Middle Iron Age (cp 6-7), after a period of silting the outer earthwork ditch was largely recut (hence the cp 6/7 sherd on the ditch bottom in the 1969 section) leaving a new entrance gap on the south side through which a track, coming from fields to the south, passed. The reinterpretation would require that the outer earthwork originated much earlier than had previously been supposed. The modification of our views, necessitated by the results of the limited 1988 excavation, is a reminder that the extensive recutting of features can sometimes obscure evidence of their antiquity. The question of the actual date of the first phase of the outer earthwork will be considered below (p. 36).

3.3.2 The linear earthworks and related features (1986-7) (Figs 3.9-11 and Pls 5-9)

At the eastern approach to the hillfort is a slight rise dominated by an Ordnance Survey trig point set on what has the appearance of being an artificial mound. The mound occupies a central position between two linear earthworks, a short *south* earthwork and a much longer *north* earthwork which is continuous with the outer earthwork around the fort and runs for several kilometres across the countryside to the east of Danebury. The air

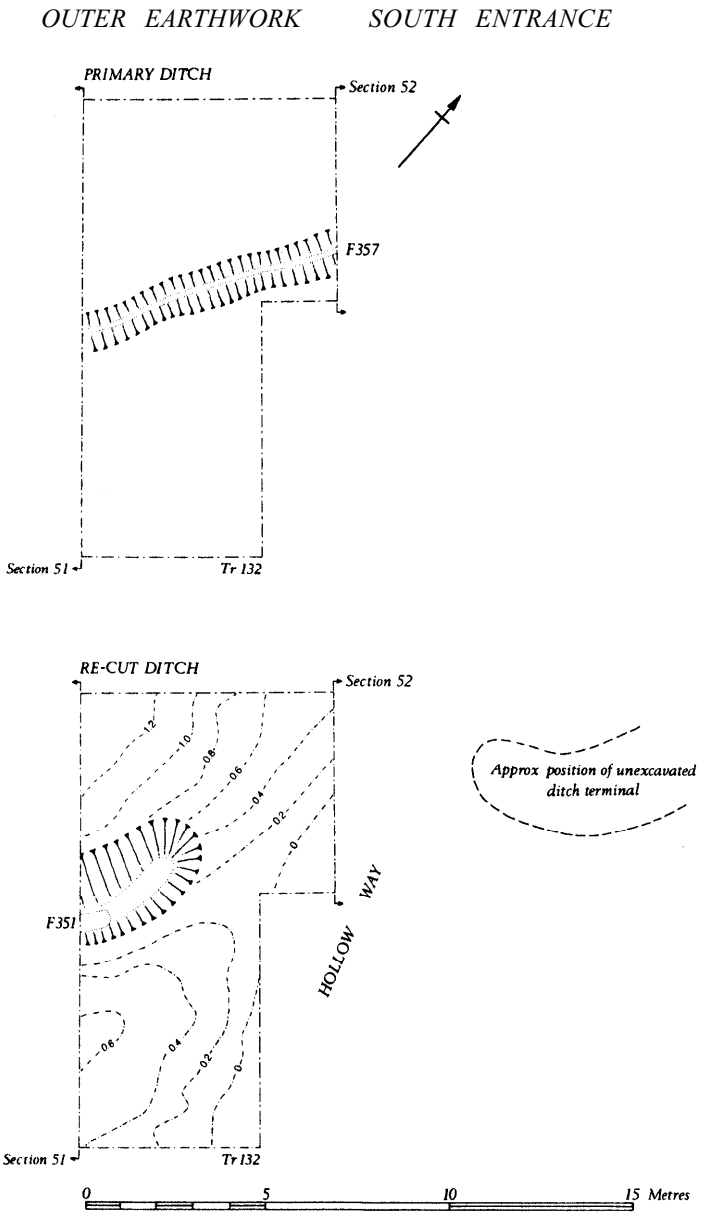
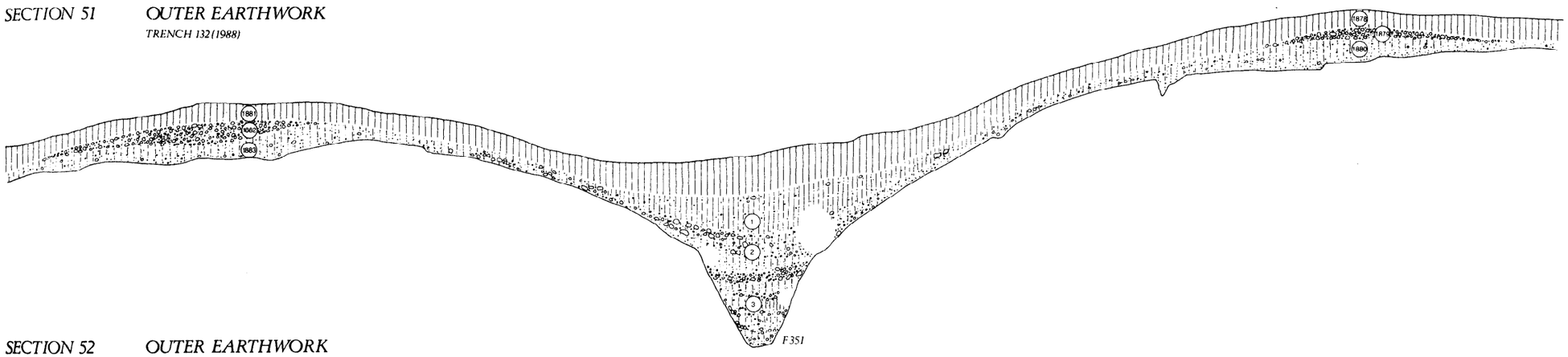


Fig 3.7 Plan of outer earthwork excavation. For location see Fig 1.2

SECTION 51 OUTER EARTHWORK

TRENCH 132(1988)



SECTION 52 OUTER EARTHWORK

TRENCH 132(1988)

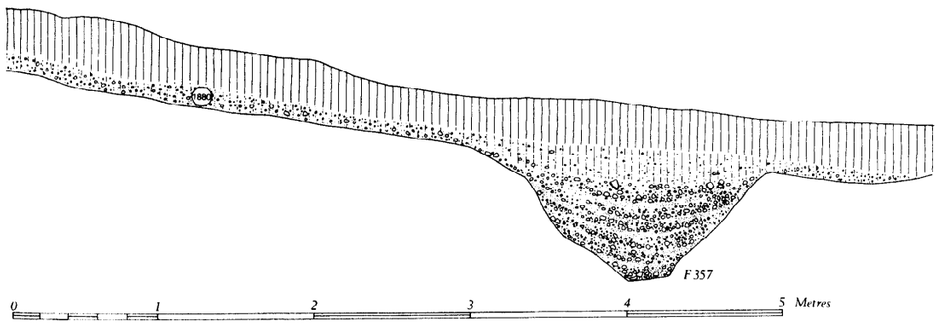


Fig 3.8 Sections of outer earthwork. For locations see Fig 3.7

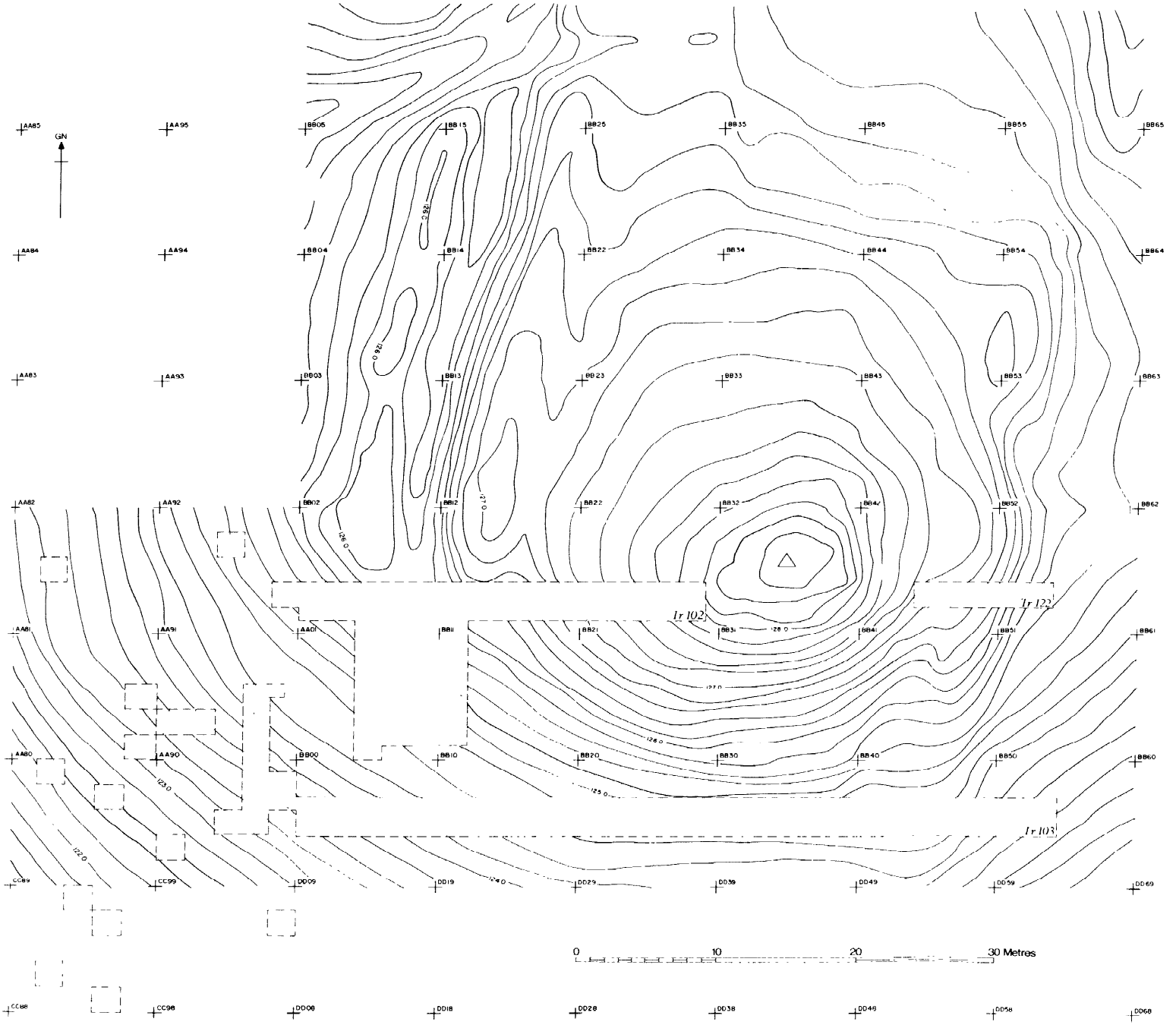
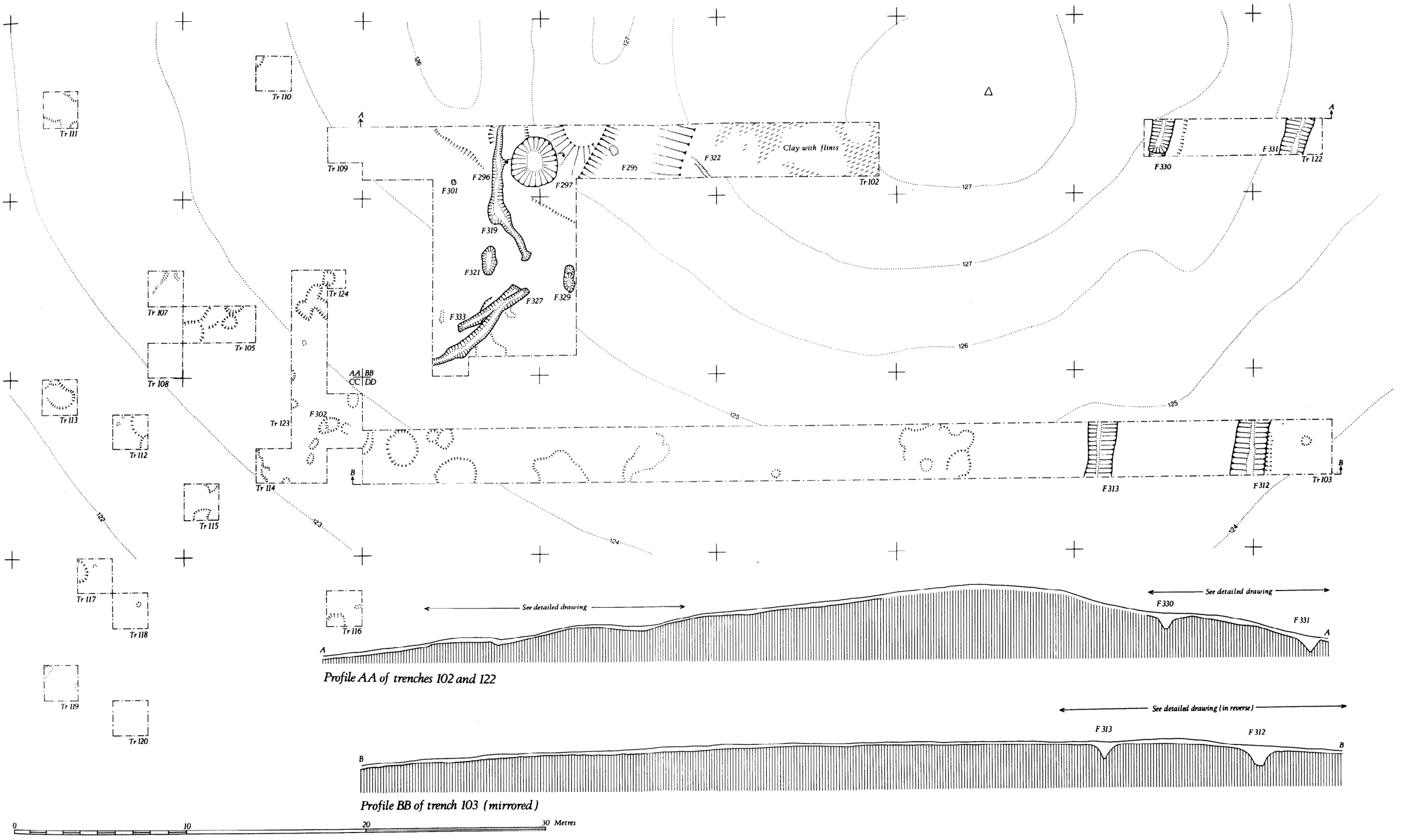


Fig 3.9 Plan of area around the trig point. For location see Fig 1.2. Contours at 0.25 m



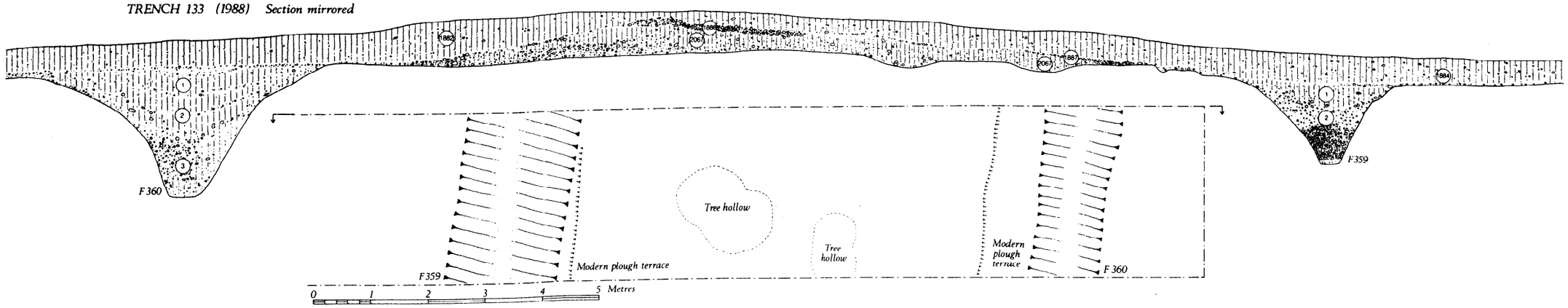
Profile AA of trenches 102 and 122

Profile BB of trench 103 (mirrored)

Fig 3.10 Excavations adjacent to the trig point

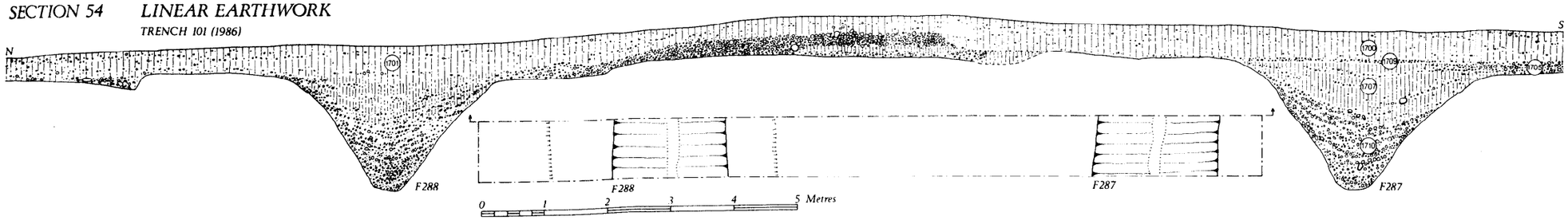
SECTION 53 *LINEAR EARTHWORK*

TRENCH 133 (1988) Section mirrored



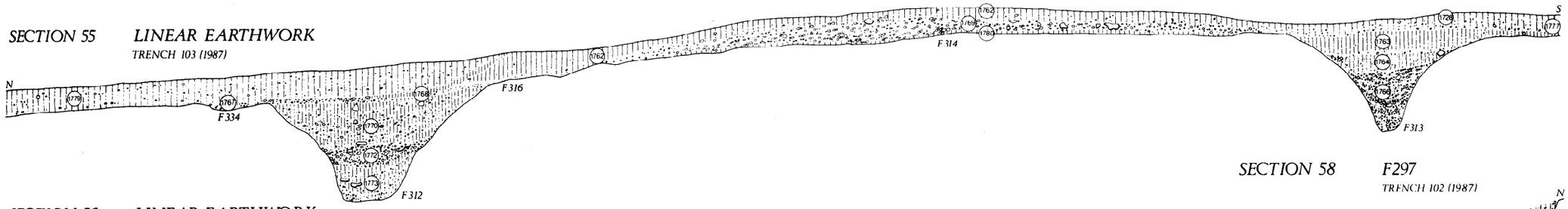
SECTION 54 *LINEAR EARTHWORK*

TRENCH 101 (1986)



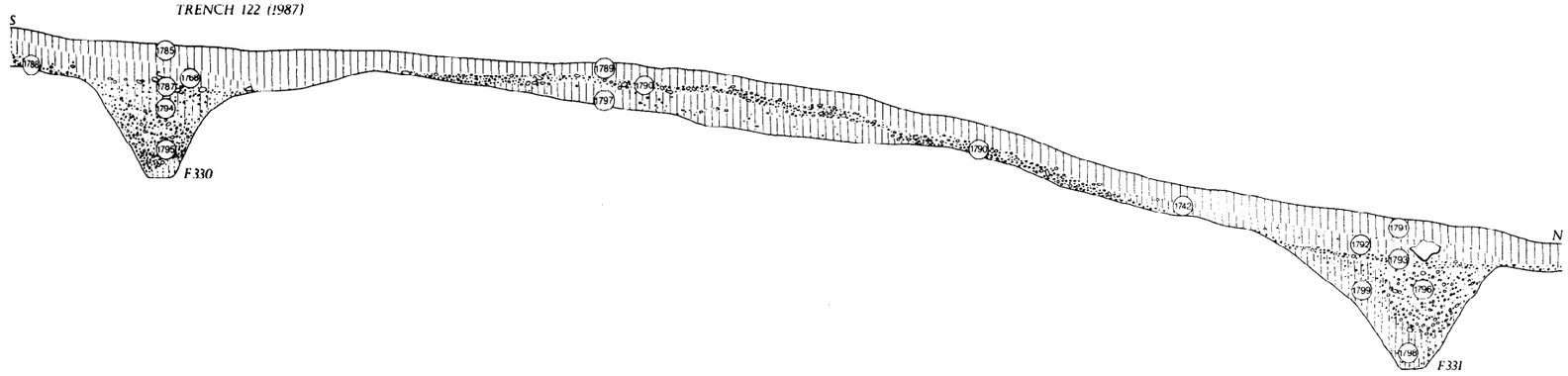
SECTION 55 *LINEAR EARTHWORK*

TRENCH 103 (1987)



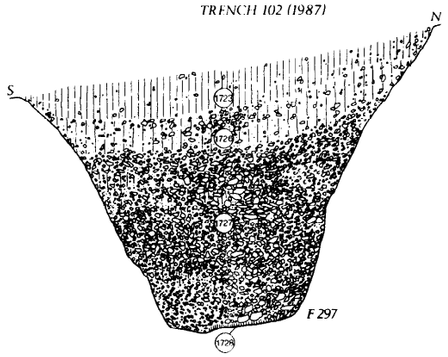
SECTION 56 *LINEAR EARTHWORK*

TRENCH 122 (1987)



SECTION 58 *F297*

TRENCH 102 (1987)



SECTION 57 *LINEAR EARTHWORK*

TRENCH 102 (1987)

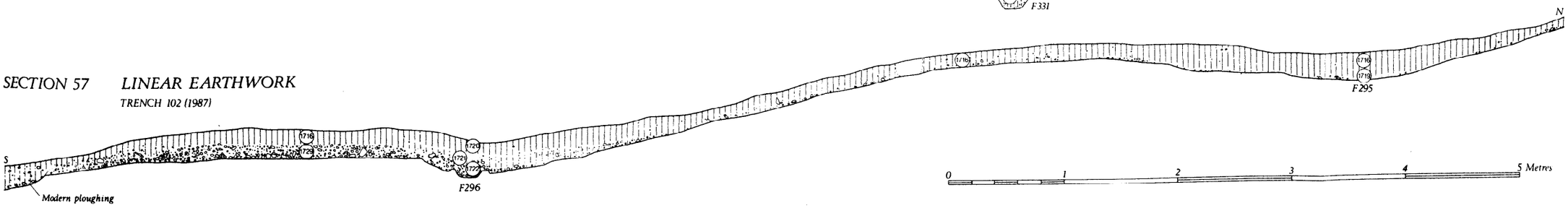


Fig 3.11 Sections of the linear earthwork. For locations see Figs 3.10 and 3.12

photograph published by Crawford and Keiller (1928, pl X), taken before the downland around Danebury was ploughed, showed the short earthwork to stop on line with the mound. A more recent series of air photographs, following a period of intensive modern ploughing, failed to show any soil or crop marks which might indicate that the earthwork had once continued. Since the main approach to the east entrance must have funnelled between these earthworks it was clearly an area of potential interest.

In 1986 much of the field immediately east of the 'mound' was purchased by Hampshire County Council, providing an opportunity to carry out a trial excavation designed partly to examine the Iron Age features at this crucial point and partly to assess the extent of plough damage (Pl 6). A further factor to be considered was that a metal detector user had reported the discovery of Celtic coins somewhere in the vicinity (Volume 5) and HBMC wished to know if the scatter extended to within the land acquired by the County. To examine this question a random sample of 2 m squares was carefully excavated along the southern limit of the County's new land purchase (Pl 9).

Most of the work outlined above was undertaken in 1987 but in the previous autumn a trench had been cut across the linear earthwork 150 m east of the 'mound' in advance of the laying of a water pipe.

It is convenient to describe this programme of related work in two parts: a) the excavation of the linear earthworks and b) the area excavation to the south of the mound.

The excavation of the linear earthworks (Figs 3.9 and 3.10)

Close to the mound two long transects were laid out, one running from the north linear, across the 'mound' to include the eastern end of the south linear and the second covering the same span 14 m to the east. Along the first transect two trenches were set (Trs 102 and 122) leaving the 'mound' unexcavated. The second transect was examined in a single continuous trench (Tr 103).

The greatest surprise was the discovery that the mound was essentially a natural feature consisting of a remnant of clay- with-flints capping a natural chalk hillock. It is possible that the crest had been enhanced in height but this would not have accounted for more than 0.6 m at the most. The short, south, linear ended where surface appearances suggested but a shallow gully (F296, described below p. 22) extended its line. It is possible that the substantial chalk-filled pit, F297, (Fig 3.11) may have been broadly contemporary but, apart from a few scraps of Roman coarse ware in the uppermost silt, it is undated. The bank to the south of the ditch was represented by about 0.15 m of chalk rubble (Fig 3.11, section 57, 1729). The relief of the earthwork had been enhanced by a hollow trackway (F295) which had been worn to a depth of *c* 0.3 m behind the ditch on the north. This again is undated but could, indeed, be one of the original tracks leading to the entrance of the fort.

The northern linear excavated in this section (Tr 122: Fig 3.11, section 56) consisted of two small V-shaped ditches F330 and F33l) 7 m apart with a slight bank composed of finely broken chalk rubble (1790) in between. The 'bank' sealed an original turf line of brown clayey soil (1797). The southern ditch (F330) shallowed considerably within the excavation. Both ditches had silted naturally but the northern ditch fill was sealed by a thin lens of chalk rubble (1793) which could have resulted from ancient ploughing, though it might simply have been caused by erosion of the ditch edge or wash down from the bank.

The continuous trench (Tr 103) sectioned the easterly continuation of the north linear earthwork (Fig. 3.11, section 55) which was very similar in structure to that exposed in trench 122. The ditches (F312 and F313) were 7 m apart but the northern ditch was more substantial than its counterparts. A shallow bank (1769) could be distinguished with a thin soil level (1780) beneath. The ditches had silted naturally but the northern ditch (F312) contained more chalk throughout. This could have resulted from continuous disturbance nearby, perhaps ploughing, whilst it was filling. The southern ditch (F313) had filled with rapidly eroded chalk in its lower levels and much cleaner silt towards the top. Modern ploughing had extended across the ditches but had left the bank undamaged.

A third section (Tr 133: Fig 3.11, section 53) was cut across the northern linear 150 m east of the trig point mound in 1988 at the lowest point in the col between Danebury and the Turret in anticipation that the stratigraphy here would be reasonably well preserved. The trench was 3 m wide and 25 m in length, extending well to the north of the earthwork into an area where scraps of Roman material had been found during field walking.

The earthwork consisted of two ditches 8 m apart. The southern ditch (F359) was 1.2 m wide and 0.6 m deep and was filled with loose chalky rubble which had eroded rapidly from the sides. Modern ploughing had probably lowered the surface of the natural chalk by as much as 0.3 m at this point. The northern ditch (F360) was more substantial, measuring 2.5 m wide at the top and 1.0 m deep. The filling was entirely of chalk eroded from the ditch sides mixed, in the upper layers, with an increasing soil component. Modern ploughing may have removed 0.1–0.2 m of the natural chalk surface.

Between the ditches the original soil level (2067) survived in the central area preserved beneath a layer of fine chalk rubble (1886) measuring 0.15-0.25 m thick, representing upcast from the ditches. The surface of the natural chalk between the ditches was pitted with ancient tree root disturbance some of which could be seen to have penetrated the chalk upcast.

There were no stratified artefacts apart from a few sherds of Roman pottery found in the modem ploughsoil.

A fourth section (Tr 101) had been cut across the northern linear 50 m east of Trench 133 in the autumn of 1986 in advance of the laying of a water-pipe (Fig 3.11, section 54). The features and stratigraphy were similar to that recorded for Trench 133.

The four sections cut through the northern linear in 1986-8 and the trench cut further to the east in 1974 (Fig 3.12) show that the earthwork was of similar structure throughout. Careful examination of the layers and surfaces between the ditches showed traces of a shallow bank, presumably composed of the upcast from the ditches. There is no evidence of compaction or wear of the kind that would have occurred had the strip been used as a track. Indeed had it been a track considerable hollowing would almost certainly have occurred. The simplest explanation of the feature therefore is that it was a boundary zone, defined at its extremities by ditches, quite probably with a hedge of massed vegetation between. Unless causeways or gaps had been left it could well have formed an impenetrable barrier dominating and controlling the approach to the fort both for men and livestock.

The evidence from the analysis of molluscs from samples

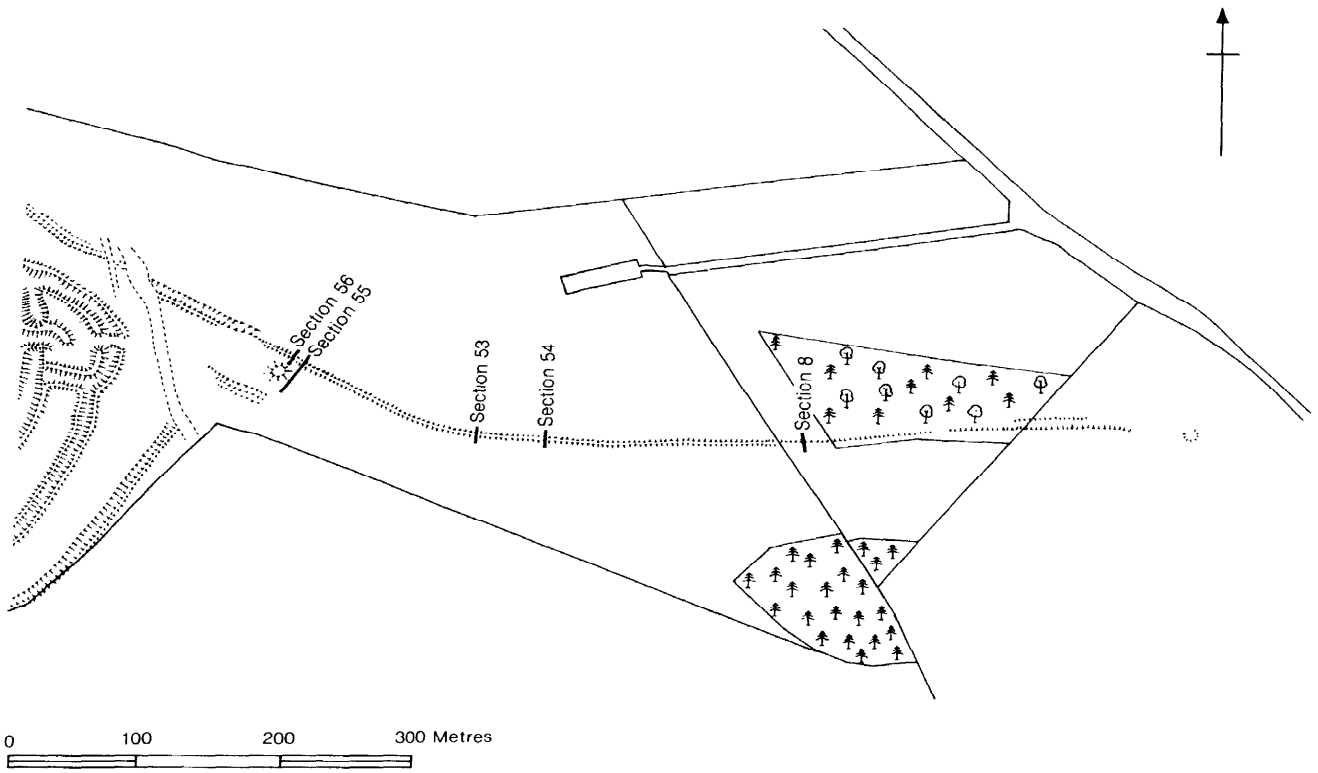


Fig 3.12

from the ground surface beneath the central bank showed a progression from woodland, through scrub to open country. In the latest phase, before the earthwork was constructed the ground was almost bare probably as the result of over-grazing (see Volume 5).

Ground survey shows that the linear earthwork changes character just to the north of the 'mound' where it becomes a significant ditch with slight flanking banks – a form which it maintains, as the outer earthwork, around the fort (Fig 3.13). At the point of change there appears to be an entrance gap. If original, as seems probable, this northern entrance would have provided the only access to the main entrance of the fort from the north. The approach from the south would have been between the southern earthwork and mound where the hollow-way was found. The implications of these points will be apparent from the diagram (Fig 3.13). The natural 'mound' clearly occupied a strategic position of great importance. Not only did it command the two forward entrance gaps but from it the entire approach to the fort could be surveyed for miles around. Moreover the mound was clearly visible both to the 'command post' at the east entrance and to the gate tower beyond. The overall arrangement of features strongly suggests careful planning with strategic considerations in mind. It is not unreasonable, therefore, to refer to the 'mound' as the *outer command post.*

Area excavation south of the mound

The area excavation south of the mound (Fig 3.10) developed from the two linear transects (Trs 102 and 103) and the random sample of 2 m squares dug to examine the possible extent of the supposed coin scatter.

The 2 m squares represent a 10% random sample of the eight 10 m squares along the southern fringe of the land owned by Hampshire County Council. Each was dug carefully by hand with a trowel and the soil scanned by metal detector. Twenty percent of all the soil was sieved through sieves down to 1/4 inch mesh. That no coins were found strongly suggests that the scatter did not extend into County-owned land. The random sample was also of considerable value in showing that man-made features are unlikely to have existed in the area. A number of shallow disturbances were found here, and in trench 103, in the surface of the natural chalk immediately below the plough soil. All have the appearance of ancient root-disturbance, possibly accentuated by burrowing animal activity, but are entirely undated.

The only man-made features to be found were noted in the area extension to trench 102. Beside the large chalk-filled pit (F297) mentioned above (and Fig. 3.11, section 58), which may in some way have served as an obstacle enhancing the termination of the south earthwork, several shallow gullies were found (Fig 3.10). It is difficult to interpret them with any assurance but the simplest explanation is that they were designed to direct the approach to the south entrance gap. The gullies had silted naturally and there was no evidence of vertical timbering which would probably have been recognizable had they once served as foundation trenches for fences. No dating evidence was recovered.

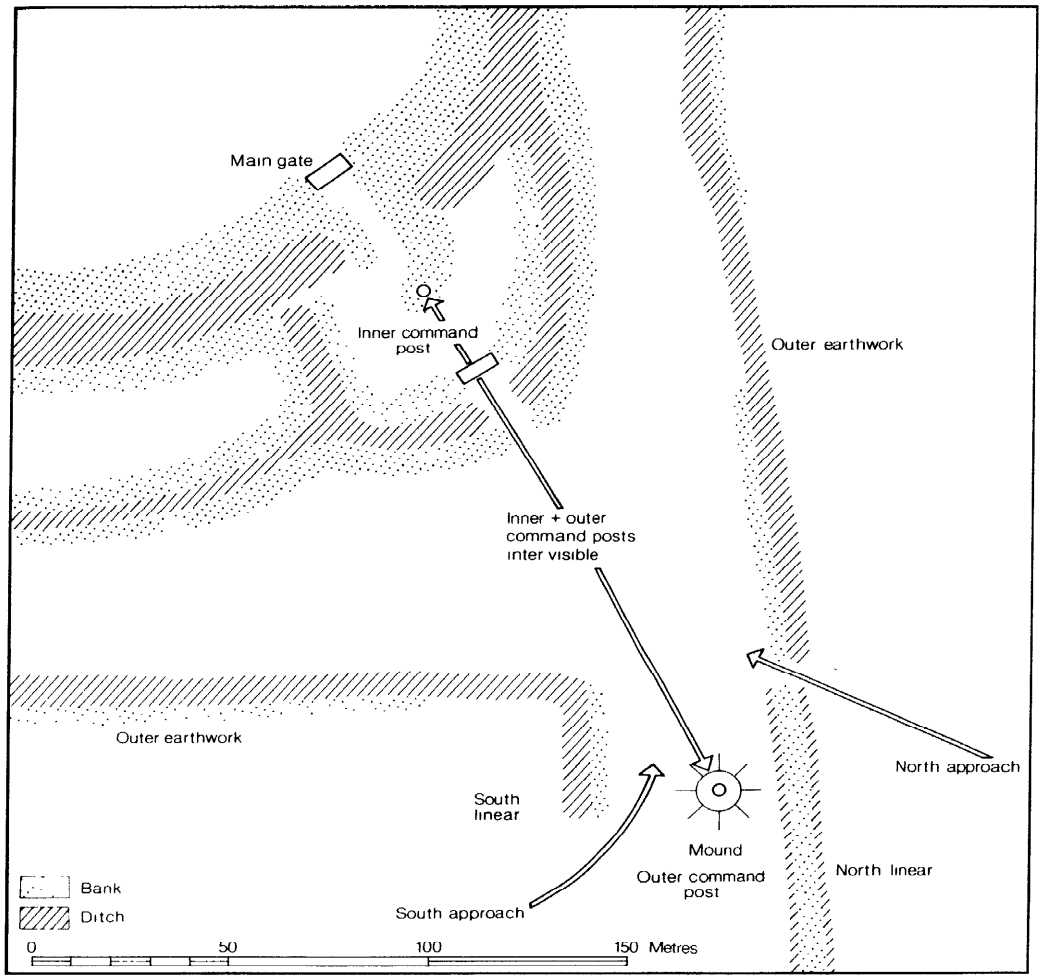


Fig 3.13 Diagram to show the function of the entrance features

3.4 The south-west entrance (Figs 3.14-23 and Pls 15-18)

It is apparent, from the surface configuration of the main earthworks of the fort, that an entrance had once existed roughly opposite the east entrance, on the south-western side of the main enclosure. A slight unconformity in the rampart line marks the position of the original gate while in front of it lie the hornworks which once flanked the approach road. Sometime during the life of the fort the entrance gap had been blocked and the causeways across the ditches dug away leaving the hornworks isolated and redundant. An account of the principal features of the entrance earthworks, and some suggestion as to their possible phasings, was given in the first report (Vol 1, 22–5).

The blocking of the gate must have been a major event in the history of the fort and may have signalled some reorganization of the internal arrangements. It was clearly desirable to discover the date of the blocking and in doing so to arrive at a *terminus ante quem* for the construction of the hornworks.

The excavation was spread over three seasons. In 1982 and 1983 an area was stripped inside the fort. This provided clear evidence of the occupation sequence while allowing the exact position of the blocked gate to be located. This done, in 1984 part of the blocking and the layers on either side of the entrance passage were removed, up to the line of the rampart crest, exposing features belonging to the innermost part of the gate complex. The unique nature of the blocked entrance influenced the decision to leave the front part totally unexcavated.

3.4.1/2 The developed entrance and the blocking

The surface configuration of the entrance hornworks and the associated middle earthwork allow various alternative models of entrance development to be proposed. The principal options were discussed in Volume 1 (22–5) and are summed up in Fig 3.15 (republished from Vol 1, fig 3.12). Since no further work has been undertaken on the hornworks the suggestions then offered remain valid.

3.4.3 The gate and its blocking

The sequence of events exposed in the excavation can be divided into five distinct stages:

1. The multiphase use of the entrance.
2. The erosion of the gate sides and the final road metalling.
3. The blocking of the entrance gap.
4. Occupation following the blocking.
5. Erosion of the rampart and associated silting.

The details of stages 4 and 5 will be incorporated in the general discussion of the occupation levels exposed in 1982-4 (below pp. 196–207). Stages 1–3 will be considered

Stage 1. The multiphase use of the entrance (Fig 3.16).

The excavation exposed an entrance passage some 5 m in width in its final stage flanked on either side by mounds rising to a maximum of 1.5 m above the level of the natural chalk. These flanking earthworks were made up of layers and dumps of chalk and chalky silt interleaved with soil accumulations and erosion levels representing a range of activity beside the road and behind the earliest phase of the rampart. They are thus equivalent to rampart period 2. The accumulations on either side of the road, while showing general similarities to each other, differ in detail and or this reason they are best described separately. The sections (Fig 3.23, sections 59–65) provide the best guide.

The accumulation on the south side of the road reached a maximum height of 1.48 m above the natural surface of

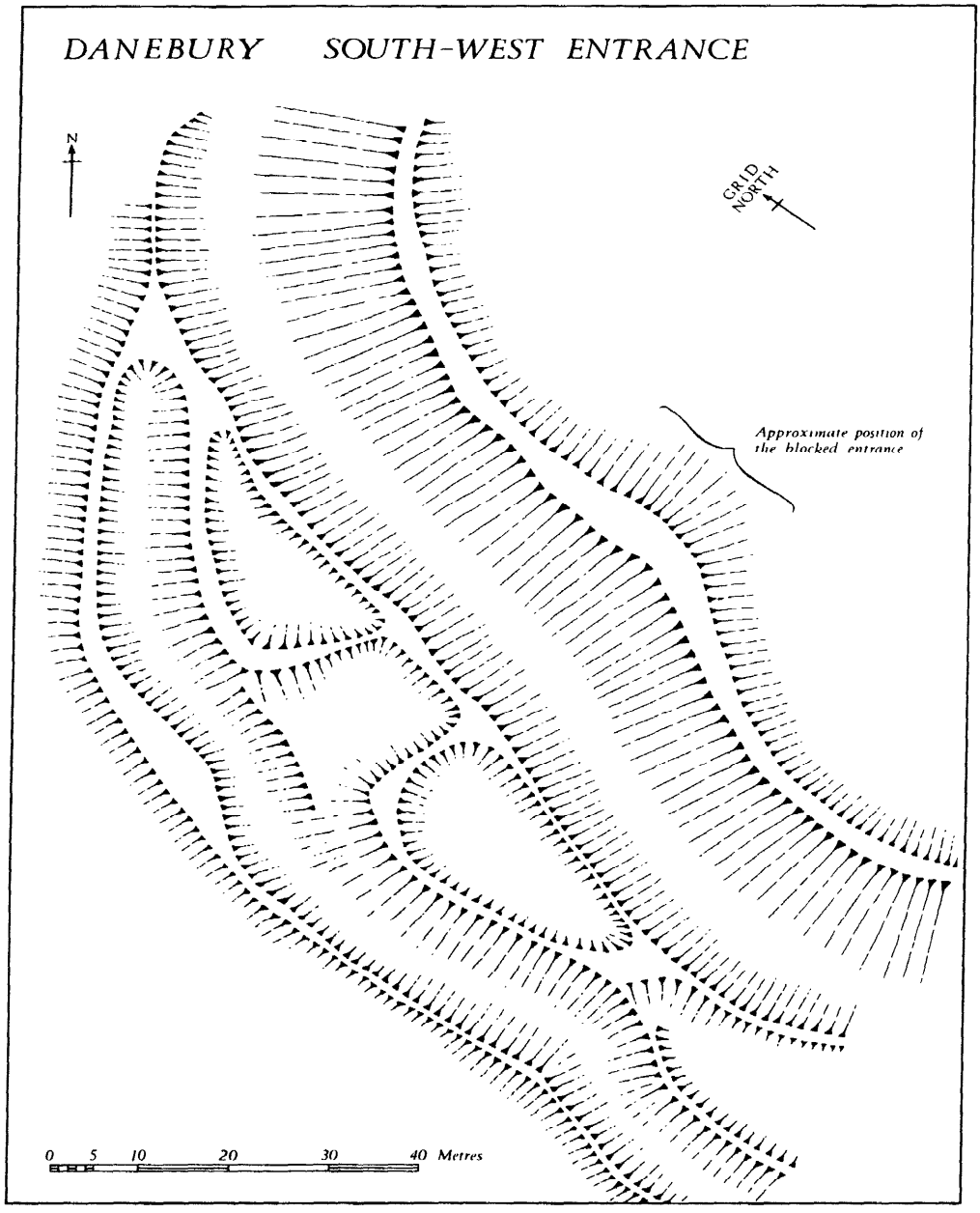


Fig 3.14

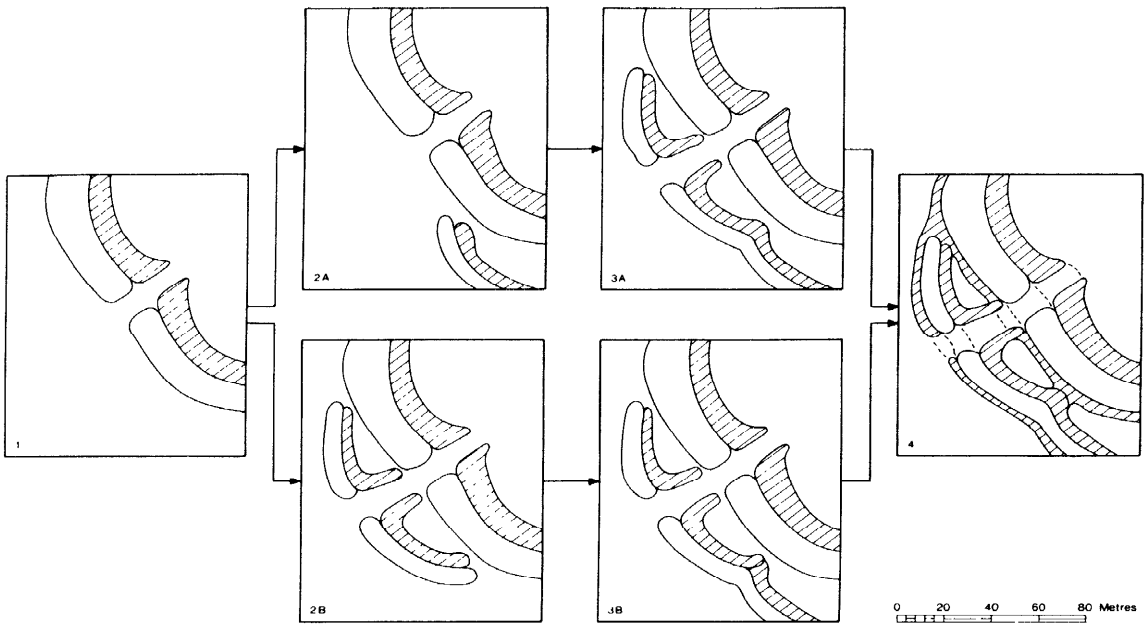


Fig 3.15 Diagram to show possible stages in the evolution of the south-west entrance

the chalk. Little of the original soil cover (798) survived, except in patches and in hollows, either because it had been deliberately removed or because it had been worn away by feet and vehicles. The first deliberately deposited layer was a thickness of heavily compacted and trampled chalk rubble (1095) upon which had accumulated a layer of soil or silty soil (1103) representing a phase of inaction during which time natural processes of soil formation were at work. Then followed the deliberate dumping of 0.1–0.2 m of mixed chalk and soil (1102) the upper surface of which had been compacted by trampling. More substantial wear to the north, presumably associated with the road, seems to have worn away the layer (and parts of the underlying layers).

In the next phase a bank was created by the dumping of nearly one metre of redeposited material in two distinct tips, a lower mass of turf and topsoil (1100) and an upper layer of freshly quarried chalk rubble (1099). The surface of the chalk was densely compacted, and in places puddled, implying exposure for some time and wear.

After this the bank was again heightened with tips of chalk and soil (1090, 1097 and 1101) capped with freshly quarried chalk rubble (1096 and 1098) which had undergone some compaction. This was followed by a period of erosion (stage 2) before the blocking process (stage 3) began.

In summary, the stage 1 stratigraphy on the south side of the road can be divided into nine separate phases (prefixed S for South):

S9 Heightening (layers 1096, 1097, 1090, 1101)
S8 Erosion
S7 Bank constructed (layers 1099, 1100). Some charcoal on surface
S6 Erosion
S5 Chalk spread (layer 1102)
S4 Soil formation (layer 1103)
S3 Wear
S2 Chalk spread (layers 1093, 1095)
S1 Original soil (layer 798)

This sequence represents four 'constructional' phases (2, 5, 7, 9) separated by periods of use and/or disuse.

The sequence on the north side of the road is somewhat more complex. The original soil level (1104) was well preserved and dipped down into an irregular hollow (F244) which was probably a quarry pit for the original rampart. Upon the original soil had been laid a thin lens of chalk (1108) trampled hard: its use appears to be contemporary with a vertical post (in ph 8932). After this, soil had formed (1107). Then followed a levelling of tips of soil and chalk rubble (1106) dumped at the same time as cleaner and more massive chalk rubble (1105) levelled up the hollow of F244. As part of the same process of dumping a layer of chalky silt (1087) was spread over the chalk. The surface of this layer was worn.

Then followed a period when discontinuous chalk spreads separated by thin lenses of silt, all rapidly deposited, raised the surface by a further 100-150 mm (1083, 1084, 1085, 1086, 1089). The uppermost layer of chalk (1089) was compacted by wear and had been subjected to considerable erosion: it seems to have been dumped around PS500. Thereafter a layer of soil mixed with flecks of charcoal and other occupation material, was allowed to accumulate (1081). The main density of the occupation activity lay at the base of the slope (ie to the east). Layer 1081, almost 100 mm thick, must represent a considerable period of time.

A further tip of densely compacted chalk rubble (1080) was then laid. It is probable that the layer had been exposed and worn for a while. At its lower (ie east) edge the chalk tip gives way to an occupation layer (992) composed of trampled chalk mixed with charcoal and burnt flints and chalk, which overlapped the worn surface and must represent a period of use. Then followed a layer of redeposited soil, mixed with occupation material and occasional chalk blocks (994) dumped to raise the surface by up to 0.4 m. There is evidence of erosion and incipient soil formation at the surface of this deposit. This may well be contemporary with the

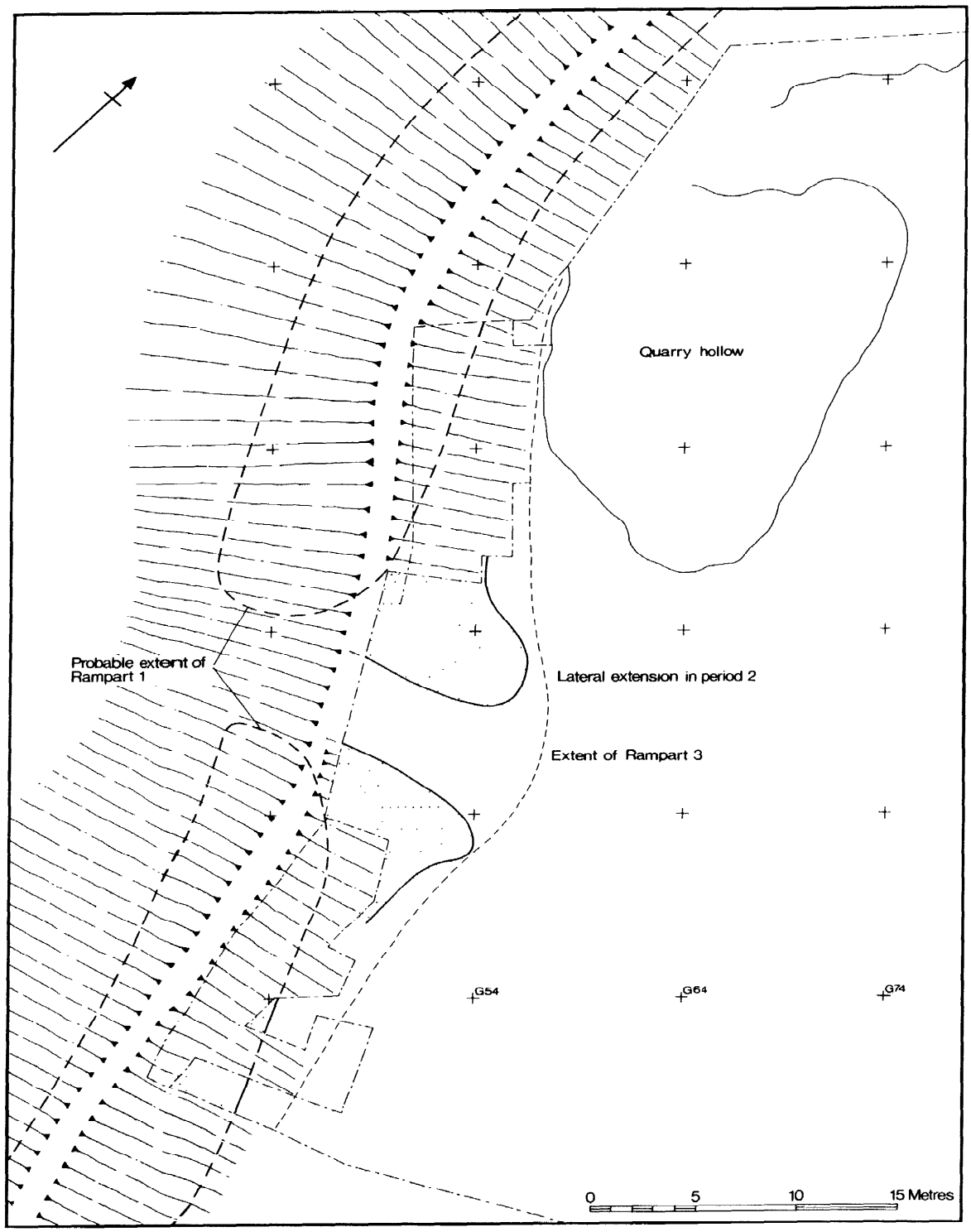


Fig 3.16 The principal features of the south-west entrance

formation of a layer of silty soil (1091) which clothes the south face of the sloping north bank.

The sequence of events leading to the formation of the stratigraphy on the north side of the road can be divided into 13 separate phases (prefixed N for North):

N13 Erosion and weathering (layer 1091)
N12 Dump (layer 994)
N11 Erosion and occupation (layer 992)
N10 Dump (layer 1080). Scatter of charcoal on surface burning
N9 Soil accumulation (layer 1081). PS500 in use
N8 Wear
N7 Succession of layers (layers 1083, 1084, 1085, 1086, 1088, 1089). PS500 constructed
N6 Wear
N5 Dump (layers 1087, 1105, 1106)
N4 Soil formation (layer 1107)
N3 Wear
N2 Chalk spread (layer 1108)
N1 Original turf (layers 1104, 998)

It seems likely that phases N1–4 can be correlated directly with phases S1–4 but thereafter cross correlation is difficult and implies that the two sides of the entrance underwent different processes of modification.

The relationship of this complex of activity, constituting stage 1, with the main rampart sequence is tolerably clear. The construction and use of Rampart period 1 can probably be related to the chalk spreads S2 and N2. Then follows a period of use culminating in the creation of shallow lateral banks (S7 and N10) which, after a period of erosion were heightened (S9 and N12). Thereafter the entrance was sporadically used (stage 2) up to the time that the entrance gap was blocked (stage 3). This blocking is equivalent to Rampart period 3. The lateral banks constructed during stage 1 must therefore be equivalent to Rampart period 2.

It is not clear what form these two flanking soil accumulations originally took before the stage 2 erosion reduced them to their present eroded form. It is possible that they were built up in such a way as to form steep faces along the flanks of the road, but the nature of the accumulations, and in particular the way in which the deliberate deposits of the south side were laid argues in favour of shallow slopes not much in excess of the final eroded profile.

The relationship of the flanking accumulations to the post-holes shown on Fig 3.17 is of some relevance since some at least of the holes held major gate timbers and others were related to the layers constituting the flanking accumulations. The post-holes may be divided into two groups: the small post-holes, up to 0.3 m, in diameter and the larger post-holes in excess of 0.3 m in diameter.

Small post-holes (Fig 3.17)

Altogether 11 small post-holes lie within the area of the entrance (leaving out of consideration phs 8778, 8792 and 8804 which clearly relate to the interior occupation). Of these the majority cluster along the north side of the entrance passage. Four can be related directly to the stage 1 stratigraphy: ph 8911 phase N8; ph 8931 phase N1-11; ph 8932 phase N4; and ph 8933 phase N1. A further six, found in the road hollow are either of stage 1 date (and have been shorn of their contemporary stratigraphy by wear on the road) or belong to stage 2. Their stratigraphical relationships are as follows:

sealed by layer 1109: phs 8921, 8922, 8923, 8930
sealed by layer 1082: ph 8935
sealed by layer 1088: ph 8925

All were related to discontinuous chalk spreads of limited extent deposited at various times during stage 2 probably to consolidate areas of instability created by the unconsolidated fillings of the post-holes below. The simplest interpretation of the observed facts is that all belonged to stage 1 but their contemporary stratigraphy had been removed as the road deepened in stage 1 and early in stage 2. The one other post on the northside, ph 8926, was sealed only by the silt of stage 2 (970). It seems probable, on the basis of the plan that phs 8911, 8931, 8924 and 8926 constitute a single four-post structure here designated PS500. The stratigraphical evidence would allow all four posts to be contemporary.

On the south side of the road there were only two posts: ph 8934 was partially cut away by the large post-hole ph 8929 while ph 8919 (part of PS428) which cuts P2162, was sealed by a silty erosion layer belonging to stage 2 (layer 1091): both probably belong to stage 1 but ph 8919 could date to early in stage 2.

The dating evidence for the small post-holes and their general spacing is such that there is little that can be said of their relationship to successive gates. The most likely interpretation is that they reflect a range of activities spread throughout stages 1 and 2 and may have nothing to do with the building or maintenance of the gates themselves. Sections of all the small post-holes are illustrated in Fiche 18:E10.

Large post-holes (Figs 3.18 and 3.23)

Seven post-holes fall into this category and all were probably associated with rebuildings of the gate. They may be briefly described:

Ph 8898 (Fig 3.18). Sealed by the stage 2 chalk spread (1078). Large oval post pit 1.40 m deep. The post, some 0.55 m in diameter, was placed against the west edge of the pit and packed in position with flint nodules and rammed chalk. Part of the wooden (uncarbonized) stump of the post survived in position: it consisted of a core of oak heart wood up to 0.15 m across and 0.4 m in length. The void, left by the rotting of the remainder of the post, was filled with loose chalk lumps eroded from the packing, and silty soil.

Ph 8912 (Fig 3.18). Sealed by the stage 2 chalk spread (1078). Large oval post pit 1.0 m deep. Two timbers placed adjacent to each other occupied the pit. One, a timber of circular section 0.3 m across had been placed against the south edge of the pit, the other, a rectangular timber roughly 0.1 by 0.2 m, had been set against it. The space between the timbers and the pit edge was filled with heavily compacted chalk.

Ph 8927 (Fig 3.23). Cut into the fill of ph 8928. Sealed by the stage 2 erosion layer (1091). Post-hole 0.7 m deep. No trace of the original post or packing. Filled with a uniform brown silty soil with flecks of charcoal and chalk.

Ph 8928 (Fig 3.23). Cut by ph 8927. Sealed by the erosion layer 1091. Large post pit 1.0 m deep and 1.2 m in length. The width has not been ascertained. The fill showed little trace of the original post position (unless the clean chalk rubble towards the bottom against the north side was part of the packing). It consisted of layers of chalky silt interspersed with tips of large flint nodules. Although the evidence is not conclusive, the filling would suggest that the post had been removed and rubble thrown back in.

Ph 8917 (Fig 3.23). Sealed by the lowest blocking fill of stage 3. Large post pit 0.6 m in diameter and 0.48 m

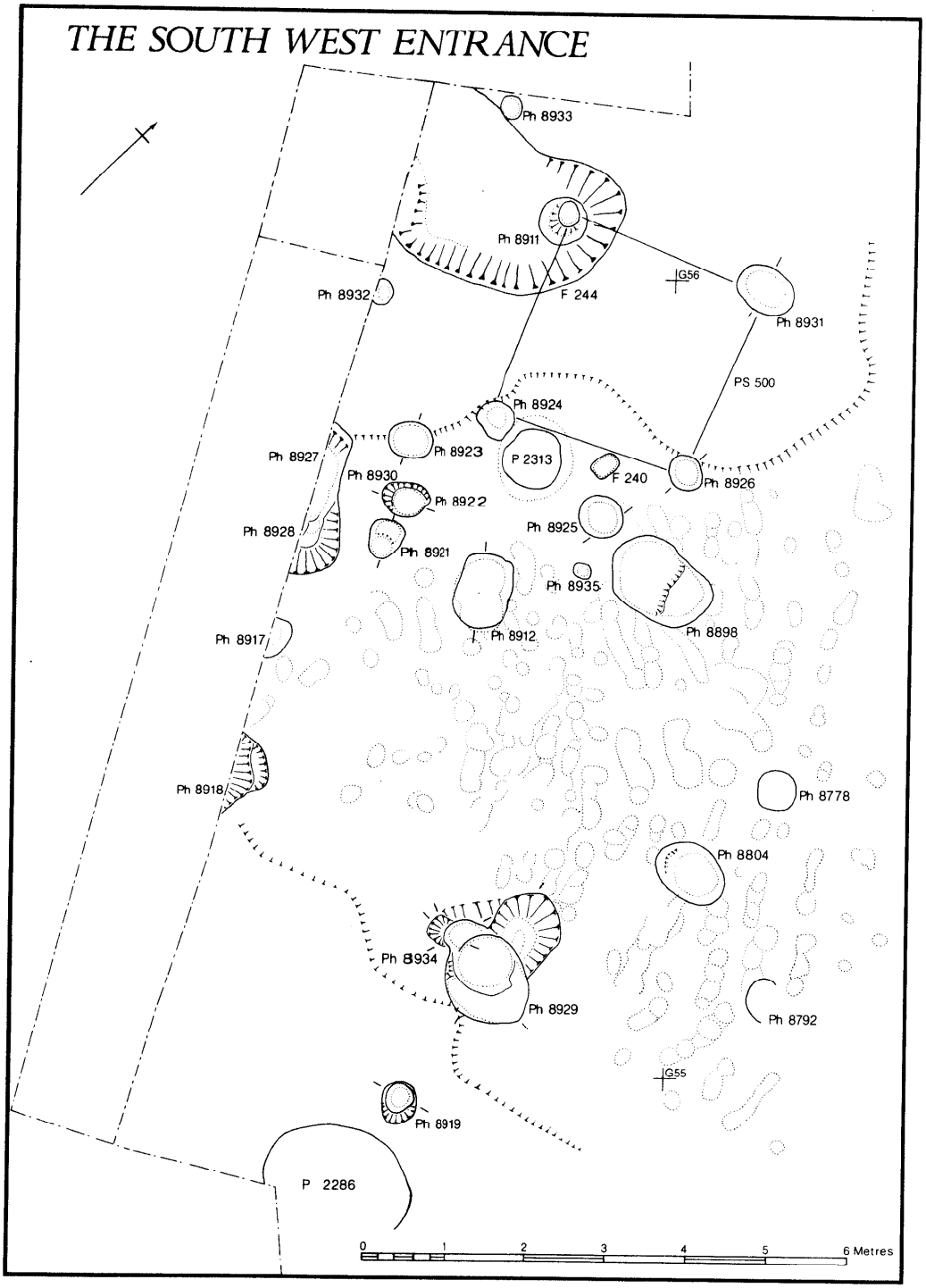


Fig 3.17

deep. No trace of original post position. Two layers of filling could be distinguished, a 'lower filling of grey silt and small chalk and an upper fill of loosely packed flint nodules.

Ph 8918 (Fig 3.23). Sealed by the lowest blocking fill of stage 3. Upper edge of what appears to be a large post-hole most of which lies beyond the limit of the excavation.

Ph 8929 (Fig 3.18). Cut through layers 1093 and 1095 (of stage 1) and filling partially sealed by cobbles of the stage 2 road. Large post pit 1.3 m deep with a sloping ramp leading down from the north. The post, 0.48 m in diameter was set tightly in a hole cut 0.2 m deep in the bottom of the main pit and was packed with flints and rammed chalk. On removal, or rotting in position, much of the packing collapsed into the void. The subsequent filling was of silty soil with some chalk erosion.

All seven of the large post-holes pre-date the stage 3 blocking and most (probably all) pre-date the main phase of use of the stage 2 road. Only ph 8929 can be directly related to stage 1 layers and then only in a way as to show

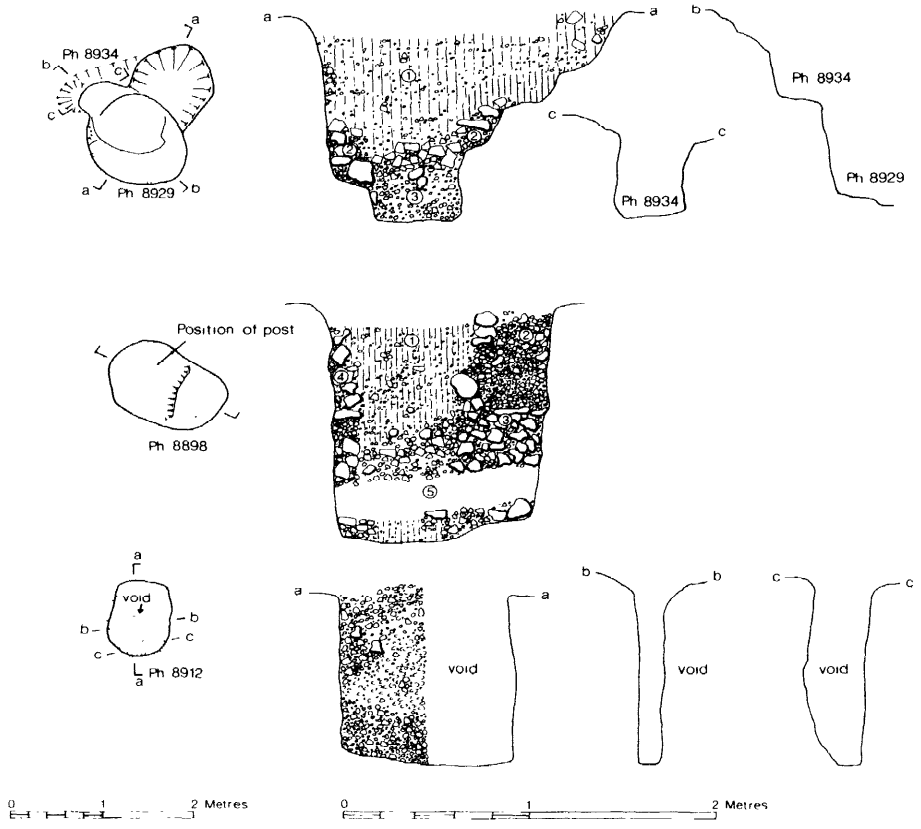


Fig 3.18 Sections of gate posts of the south-west entrance

that it was later than one of the earliest chalk spreads. The only relationship to suggest that more than one structural phase is involved is the intercutting of phs 8927 and 8928. In other words the stratigraphy suggests that all seven post-holes belong to gate structures of stage 1 but gives little indication of how they may be sorted into their separate phases. The problem is rendered more difficult by our having exposed only part of the gate passage. The only approach to phasing is by considering the likely pairing of posts and their spatial arrangements (Fig 3.19).

The most obvious pairing is ph 8929 and ph 8898. Both pits are of comparable size and depth and both of the posts are of roughly the same diameter. Another grouping might suggest that phs 8918, 8917, 8928 and 8927 belonged to two superimposed sets. One scenario would be to see ph 8918 and 8928 as comprising an early set, with ph 8927, 8917 and a third post lying in the unexcavated area to the west of ph 8918, representing a later replacement. This is perhaps the simplest explanation given the incomplete evidence from this part of the site. The remaining post ph 8912 cannot be paired and its structure is anomalous. Though deep, its timbers are much less substantial than post 8929/8898. On balance it is unlikely to be a gate timber but may well have been a constructional element in one of the entrance arrangements. These potential groupings are illustrated in Fig 3.19 but even if correct they cannot be put into sequence.

Comparison with the gates of the east entrance suggests certain similarities. It is tempting to see phs 8918/8928 as equivalent to the period 1 gate while phs 8927/8917/ missing post, and phs 8929/8898 present a configuration not unlike that of the period 4 gate. But such comparisons of only partial plans can be misleading and the final resolution of the south-western gate plans must be left open.

The roadway (Fig 3.17 and Pl 18)

Throughout the period comprising stage 1 the roadway presumably remained in continuous or near continuous use. Little evidence of metalling survives except for a small patch of cobbles (1094) preserved at the south edge of the road near the western limit of excavation and a compacted chalk spread close to the north edge of the road west of ph 8912. Apart from this the lowest erosion silts of stage 2 lie on the heavily compacted surface of the natural chalk. One curious and unexplained feature, however, must have some bearing on the nature of the road surface - the entire area was pocked with shallow hollows, collectively called F245, cut into the chalk. An impression of the overall pattern is given in Fig 3.17. Most of the hollows were linear averaging 0.2 m across, 0.6 m long and varied in depth from 20-120 mm. Many of the features had a deeper section, well-rounded in form, at either end. The filling was invariably a fine brown silt, with very little chalk. The relationship of these features to the large post-holes of the stage 1 gates is unclear since the soft slumped fills of the post-holes would not have been robust enough to have retained traces had the features been created after the post-holes had filled. It is however clear from the plan that they

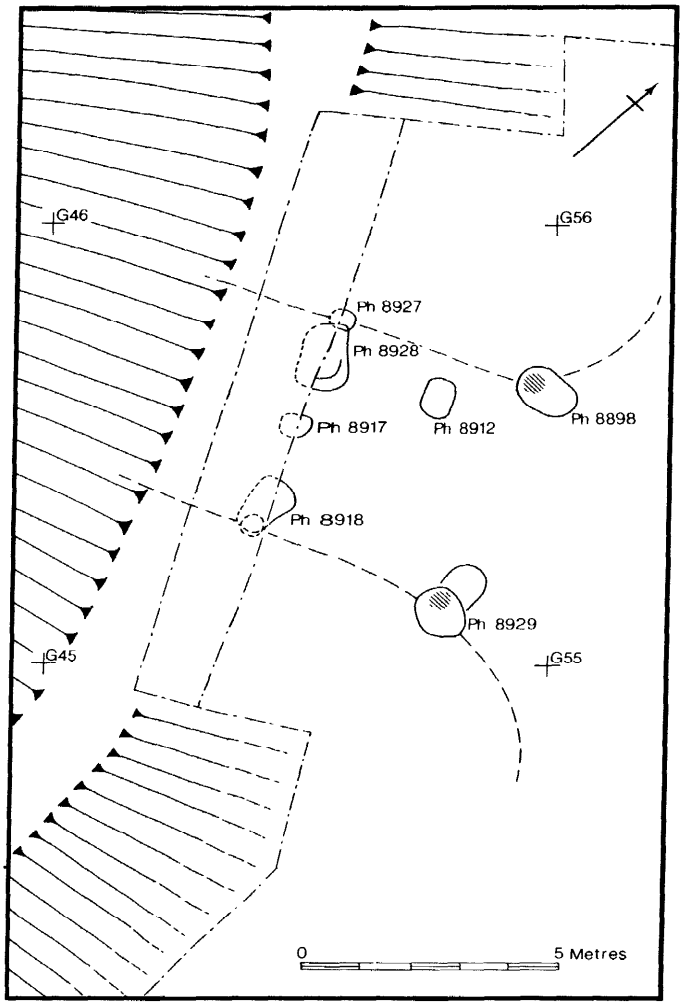


Fig 3.19 Diagram of the gate posts of the south-west entrance

must pre-date or post-date the period (or periods) when phs 8929, 8898 and 8912 were supporting uprights.

How these enigmatic features were created and for what purpose it is impossible to say but that they relate to the use of the road is clear. One possibility is that they represent the basal impressions of short piles driven in to consolidate the ground along the line of the road where intense wear was anticipated, perhaps in the initial phase of use of the entrance. If so it would require that in subsequent phases continued wear removed both the piles and the supeficial layers leaving only the basal impressions to weather and erode. Such an hypothesis, while possible, seems rather over-elaborate. Another possibility is that the hollows were made with shovels perhaps with the deliberate intention of creating a corrugated surface to the road to improve grip for wheeled vehicles. A further elaboration of such a theory would be to suppose that short lengths of timber were laid horizontally in the hollows to provide a corduroy. Again there are difficulties — for example, why are the bases of the hollows not level? Of the explanations which present themselves none are satisfactory.

Stage 2. The erosion of the gate sides and the final road metalling (Fig 3.20)

For a considerable period of time, following the last additions to the low earthworks created on either side of the road, the passageway continued in use, the constant traffic keeping the route free from soil accumulations. During this time the posts of the last gate structure were removed, or allowed to rot through at ground level leaving the stumps (at least of phs 8898 and 8929) still in position. While this was happening the slopes of the two flanking earthworks were eroding giving rise to layers of slightly chalky, silty soil (786, 1090a and 1091). Eventually a silty soil (970 and 1069) was allowed to form across the floor of the entrance hollow filling the 'corrugations' in the surface of the natural chalk and merging with the silts developing on the flanks. The layer was only a few centimetres thick over the floor of the passageway but its very existence suggests that traffic had now been reduced to virtually nothing. This does not necessarily mean that the fort was now abandoned: it could be that some form of temporary blocking had been put up between the main rampart ends beyond the limit of the excavation. Without a far more extensive excavation the problem will remain.

At any event the period of disuse was short for on top of the silt in the roadway an expanse of metalling, composed of tightly-packed flint cobbles, was laid (1023 and 1079) (Fig 3.20). It was evident from its extent and stratigraphical position that the post-holes of the old gate were now filled,though the fillings had not properly consolidated. The cobbles were subjected to considerable wear and at the western limit of the passageway, examined in the excavation, where the road had narrowed between the flanking earthworks, wear had removed most of the superficial layers down to the chalk bedrock.

Then followed another period during which silt was allowed to continue to accumulate (the upper part of layer 970). In the eastern part of the entrance passage an isolated patch of cobbles (902) and some broadly contemporary spills of trampled chalk (901, 969, 974 and 1014) stratified above the silt suggest continued use though on what scale it is impossible to say. Thereafter another layer of silty soil developed (1013). It was during this last stage that pit 2313 was dug on the north side of the passage.

The evidence briefly outlined here suggests that stage 2 was a time when the entrance was used on a much reduced scale, probably only intermittently. The continuous process of erosion and silting was broken on one occasion when an attempt was made to produce a tough cobbled surface. Later patching with cobbles and chalk need represent little more than the filling of puddles. Apart from this no significant structural renovations have been recognized.

Stage 3. The blocking of the entrance gap

The blocking of the entrance gap was undertaken in a single continuous operation at the same time as the rampart around the fort was heightened. In the entrance gap this meant the dumping of 4 m of chalk and soil. Some of this would have been derived from clearing out the ditch and digging away the causeway in front of the entrance while much of the material would have come from within the fort from superficial deposits and from the large quarry hollows that were dug behind the rampart. The nature of the filling is best appreciated from the drawn section (Fig 3.23, section 59) which gives a longitudinal view through the blocking at its highest. It

Fig 3.20 Road surface at the south-west entrance

will be appreciated by referring to the plan (Fig. 3.22) that the upper part of the section, above the 'ledge', is approximately 1.40 m to the west of the lower part.

The blocking took place in six major stages (Fig. 3.21). In the first stage (stage A) about one metre of chalky silt with occasional tips of flint was dumped in the southern part of the entrance gap (1051). (It is possible that this material was derived from clearing out the ditch.) During this time the northern part of the gap was open presumably to allow easy access through the rampart. In stage B part of this gap was filled with tips of silty soil. At this point in the sequence a vertical barrier was created east-west along the middle of the entrance passage. It was probably little more than a series of vertical timbers supported in some way to prevent them tipping to the north while a mass of chalk and rubble was piled behind them to the south (stage C). Against the south face of the timber revetment large blocks of chalk were deliberately piled (1047) in an attempt to relieve pressure on the revetment. The intention of this temporary measure seems to have been to keep a passageway clear so that spoil could be brought from the ditch into the fort to dump against the rear of the rampart.

In the next stage (stage D) this northern gap was partially filled with discontinuous tips of soil, turf and chalk (layer 1050). This was followed (stage E) by the removal of the timber revetment and a general levelling off with a single mass of finely broken chalk rubble (1073). Thereafter the

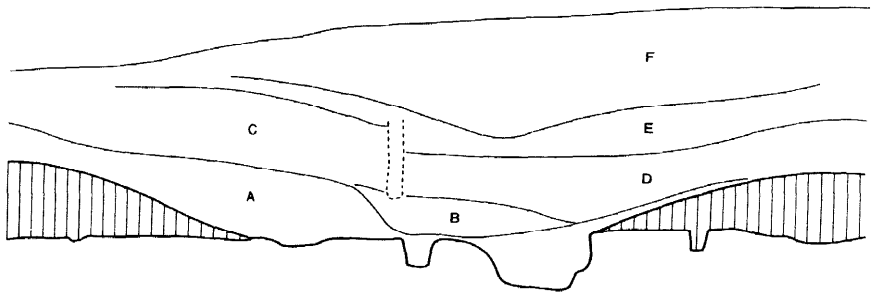


Fig 3.21 Diagram to show stages in blocking of the south-west entrance (for detail see Fig 3.23 section 59)

rampart continued to be raised with a series of tips of chalk (layer 1047b) (stage F).

How long the process of blocking and rampart heightening took it is impossible to say but there is no evidence to suggest periods of inactivity. The work was, most likely, continuous. Given a reasonable sized workforce the entire process need have taken no more than a few weeks.

Once the work had been completed occupation levels began to form behind the newly refurbished rampart (stage 3). These will be considered below (pp. 196–207).

3.4.4 Dating evidence

The stratified pottery from the blocked entrance is fully listed on Fiche 25D 10-12. Although the total quantity was small sufficient was recovered to provide a reliable dating framework. In stage 1 whilst the gate was fully in operation the only pottery recovered belonged to cp 1-3. In stage 2, during the period of erosion and final limited use a few sherds of cp 5 and 6 were lost. The pottery from the blocking itself was entirely residual producing nothing later than cp 5. Subsequently, in stages 4 and 5 the assemblge contains pots of cp 7 date.

3.5 The east entrance

No further work was undertaken at the east entrance.

3.6 Summary of the defences and the dating evidence

3.6.1 The structural sequence

The structural sequence set out in the first volume (Vol 1, 42-4) was based upon the evidence of two rampart sections (1969 and 1975) and the excavation of the main east entrance. The rampart sections suggested four separate periods of construction while the more complex gate sequence allowed eight major phases, several with sub-phases, to be defined. It was possible to offer some broad correlations between the rampart and gate phases.

The second programme of excavations provided much new data. Three partial rampart sections were cut (1982, 1982–4 and 1987), a substantial length of the rampart on the southern side of the fort was dissected (1988) and the blocked entrance was extensively examined (1982–4). In addition to this the outer earthwork and the attached linear earthwork were sectioned in several places (1986–8). The recent work, while in broad agreement with the sequence presented in the first volume, has imposed several significant modifications.

Taking first the sequence of fortification preserved in the rampart sections, three major phases can be defined:

Rampart 1. The primary rampart was a complex structure. It was timber-faced (1969) and erected in stages on the original ground surface. The first stage involved the digging of an irregular quarry trench where the rear of the rampart was to be: spoil from this was probably used to make a fronting, or marking out, bank. In the second stage the core of the rampart was built with material both quarried from the fronting ditch and cut, as turves, from inside the fort. The final stage saw the addition of chalky and clayey subsoil (presumably dug from inside the fort after the turf had been stripped) to create an evenly sloping back face which was allowed to cover, partially or wholly, the inner quarry trench. The entire process could have taken some time to complete and there is some evidence to suggest a brief time lapse between the second and third stages.

Nothing is known of the ditch at this time but it was probably U-sectioned and separated from the fronting timbers of the rampart by a berm.

A considerable period of occupation followed during which a thick layer of soil accumulated over the rampart tail, in places containing quantities of sling stones, and a thinner soil, continuous with it, formed on the back slope of the rampart. In one localized area examined in 1988, intensive occupation impinged on the rampart causing some terracing and erosion. This was soon obliterated with a new spread of chalky rubble added as a local patch to the back slope of the rampart (Period lb).

Rampart 2. On the south side of the fort Rampart 2 consisted of a thin skim of fine chalk rubble 0.3-0.4 m thick added to the back face of the rampart. The evidence from the north side (1975) would suggest that the first addition was similar. On the east side (1987) and in the limited section dug near the blocked entrance in 1982 no trace of an addition of this phase could be detected.

The period 2 addition can hardly have been designed to increase the defensive capabilities of the fort and may, therefore, have been a symbolic act of refurbishment incomplete in its extent. The sections of 1969, 1975 and 1988 all show that the period 2 addition, though having time for its chalky surface to weather through frost action, was not exposed for long before the material of the third phase rampart was added. Not only did soil fail to form on the surface but little silt or occupation material accumulated at the rear. This would suggest that Rampart 2 dated not long before *c* 350–300 BC, the preferred date for the construction of Rampart 3. Such a date would be consistent with the degree of weathering and soil formation which occurred after Rampart 1 was built *c* 550, before the chalk of Rampart 2 was added.

Throughout this period the ditch was probably kept clear of silt which was thrown downhill to form a constantly growing counterscarp bank.

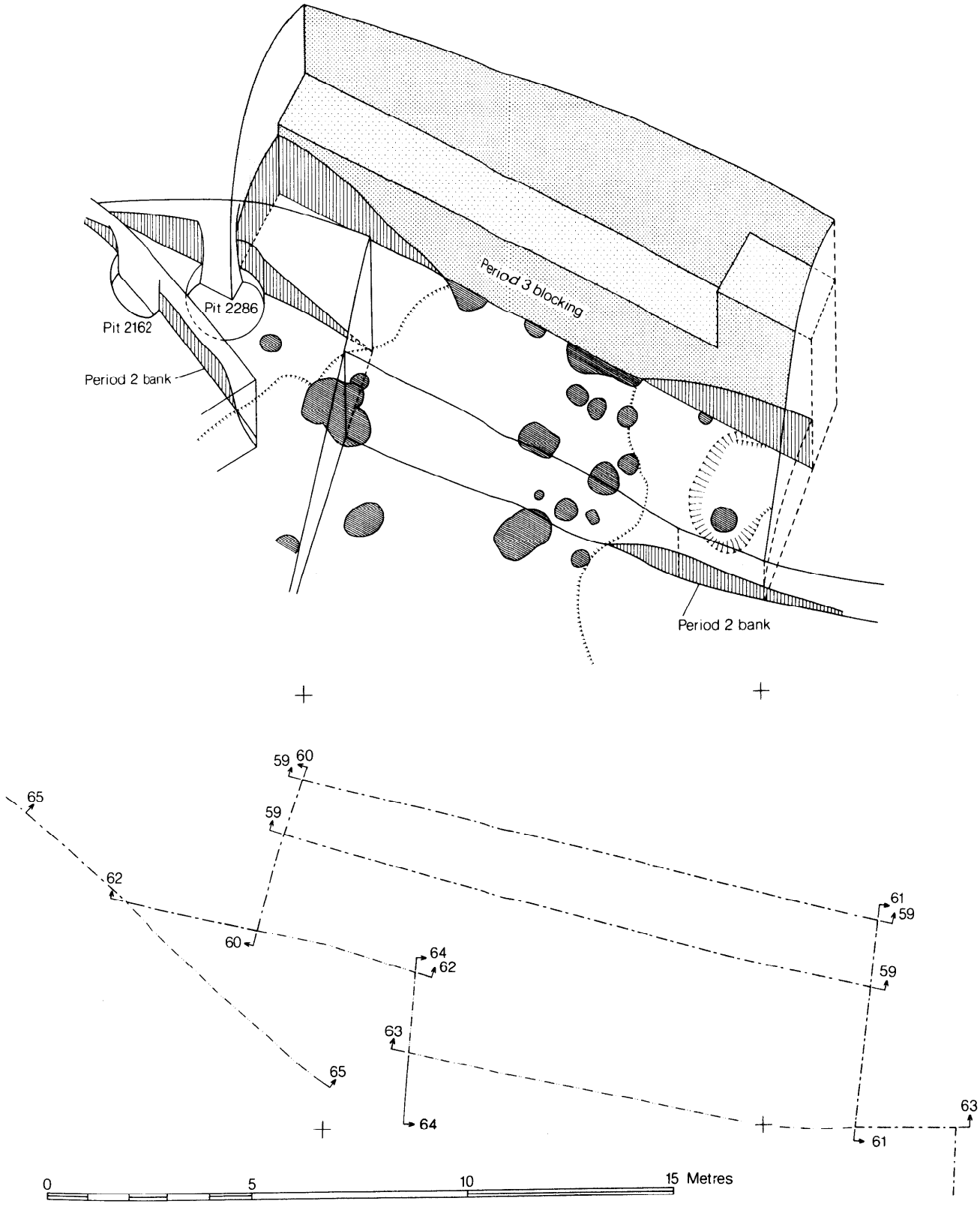
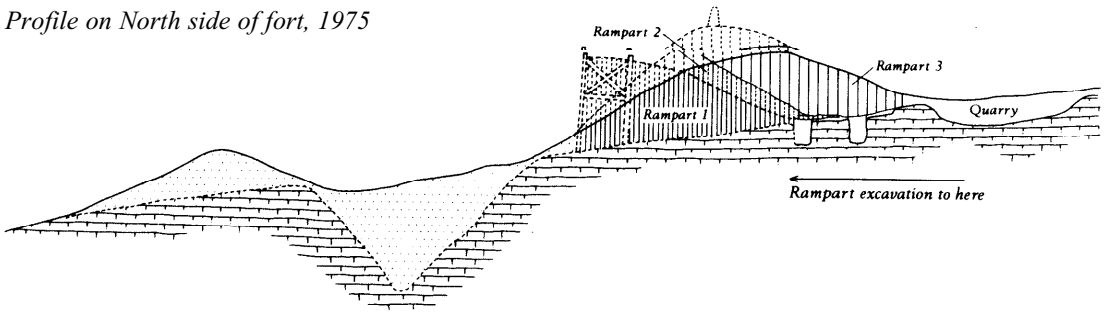
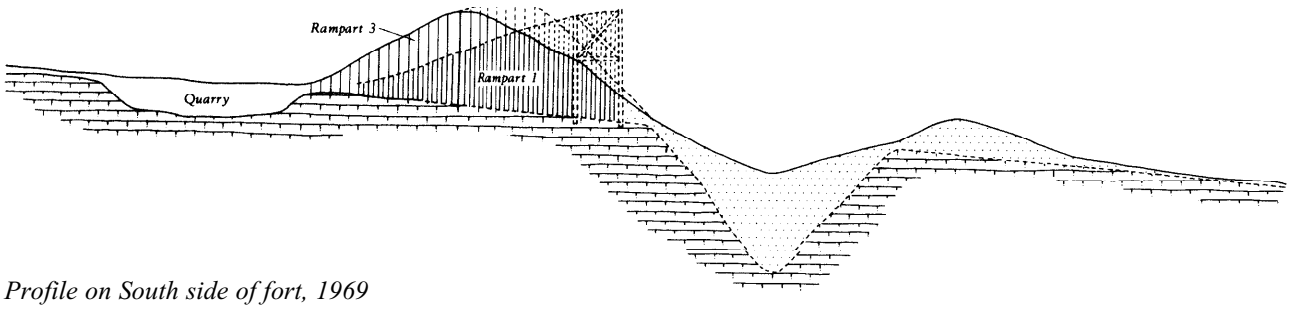


Fig 3.22 Diagram of the excavation stages and sections of the south-west entrance

Profile on North side of fort, 1975



Profile on East side of fort, 1987



Profile on South side of fort, 1969

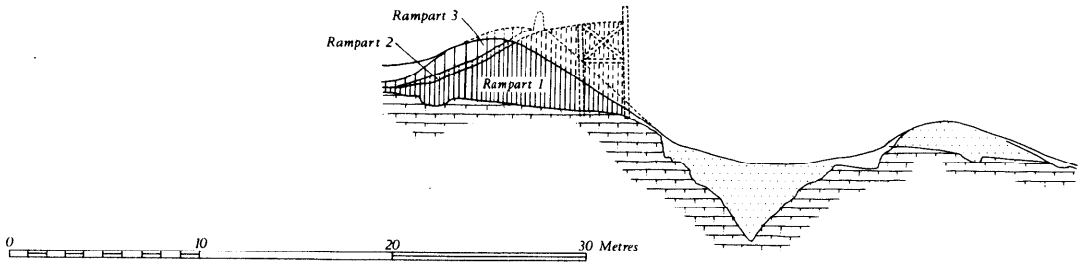


Fig 3.24 Diagrammatic rampart sections

Rampart 3. The heightening of the rampart in this phase marked a major expenditure of communal effort. Around the northern side of the fort the volume and height of the rampart was greatly increased with tips of chalk rubble quarried from a 10 m-wide zone immediately behind the rampart. It was at this time that the south-western gate was blocked. The southern rampart was also heightened, but the skim of new material added was seldom more than a metre thick. It was derived partly from internal quarries (as in part of the 1988 area) but largely from superficial skimming, producing a variegated mixture of soil and chalky rubble from inside the fort. The reason for the disparity of effort between the north and south sides of the fort may be due to the fact that the southern rampart was already substantial before it was heightened, but it could have some symbolic significance which escapes recognition.

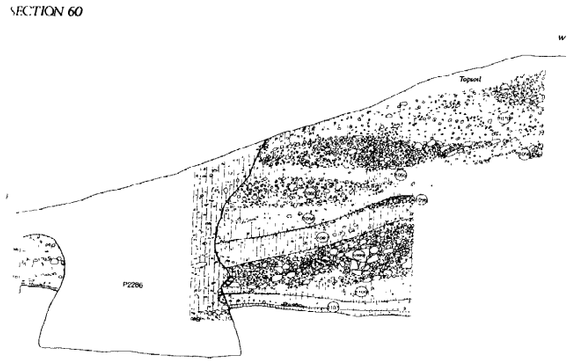
It was probably in period 3 that the ditch was recut to its deep V-shaped profile and was kept clear of silting by periodic clearing out, the upthrow gradually increasing the height of the counterscarp bank.

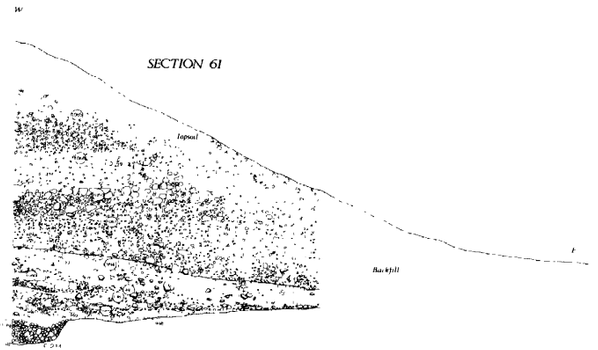
Rampart 3 continued in use from the time of its construction *c* 350/300 BC until the fort was finally abandoned about 100 BC or a little later. By the end of the period, the rampart was capped with a breastwork of some kind built of large flint nodules. Some of these can still be seen on the rampart crest but most had eroded down into the ditch (eg Vol 1 fig 3.5) and into the area immediately behind the rampart.

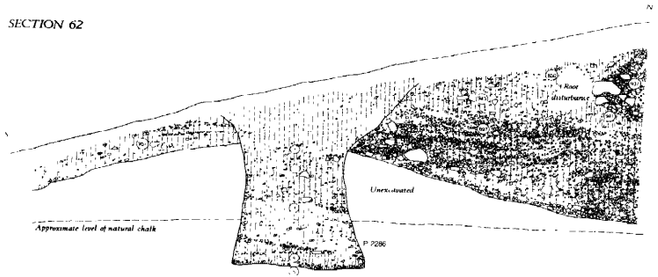
We have argued above that the 'period 4' defined in 1969 belongs to our redefined period 3 and that the fibula which caused it to be given a late date was an intrusion. The fact that there is no evidence from elsewhere in the fort for late refortification would support this view. The late recutting of the ditch, noted in 1969, is a reality but the date of this activity is totally unknown and could well be of a comparatively recent date.

The entrance sequences can be related to the rampart sequence. At the south-west gate three stages of activity were recognized: stage 1 when the gate was in active use; stage 2 when there was a diminution of use; and stage 3 when the entrance was abandoned and blocked. Since the blocking of stage 3 can be directly correlated to rampart phase 3, stages 1 and 2 must run parallel with the duration of Ramparts 1 and 2 and cover the period *c* 550–350/300.

The eastern entrance sequence is more difficult to place. In the first report we suggested that gate 4 might be correlated to a rampart heightening seen in trench 16 which would be equivalent to rampart period 3: the suggestion was tentative (Vol 1, 35) since all linking stratigraphy had been removed in a later period. The plan of gate 4 at the eastern entrance is, however, very similar to that of the last gate of the south-west entrance. If the similarity can be taken to imply broad contemporaneity, then gate 4 at the eastern entrance should pre-date rampart period 3. This would allow the completely new gate plan introduced at the east entrance







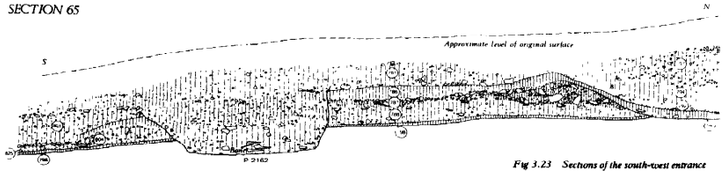


Fig 3.23 Sections of the south-west entrance

in period 5, together with the outward projecting (inner) hornwork, to be part of the fundamental remodelling which accompanied the construction of Rampart 3 and the blocking of the south-western gate. On balance this correlation has considerable attractions.

The implications which follow are that gates 1–4 at the east entrance run parallel to the stage 1 and stage 2 developments at the south-west gate. A close parallel development need not be expected but it is possible that the phase of destruction by fire at the east entrance (2c) may have its counterpart in the evidence of burning at the south-west gate between phases S7/N10 and S8/N11. The phase of diminished use at the south-west gate (stage 2) was not noted at the east gate. It need not have occurred there but there was no direct evidence that it did not. Thus we have allowed for it in the generalized scheme.

The correlation of gate 5 at the east entrance to rampart period 3 leaves only two gate phases (5 and 6) to fill two centuries or so but gate period 6 is of at least two phases. Expecting a single gate to last 60 years is not unreasonable when it is remembered that the vertical timbers were 0.5–0.7 m in diameter.

A further point needs to be emphasized. The south-west gate was, during its life, provided with a system of fronting hornworks. Even if, as seems likely, they belong to a late phase in the gate's life, they must have existed at a time when the east gate was without hornworks. The blocking of the south-west gate contemporary with rampart period 3 was followed by the creation of hornworks at the east entrance. This implies a complete change in emphasis some time about 350/300 BC when the east entrance took over from the south-west entrance as the aggrandized way into the fort. What social pressures or symbolism lie behind this we can only guess.

The hornworks of the south-west entrance are of a type known at various sites in central southern Britain, for example at Blackbury Castle (Devon), Maiden Castle (Dorset), the east entrance of phase II, and Beacon Hill (Hants). The dating evidence from Danebury implies that the system was in use by *c* 350/300 BC. This would conform well with the reassessed date of the Maiden Castle entrance. It is of some interest to see complex outworks dated so early.

The various sequences defined within the defensive circuit at Danebury may be correlated as follows:

3.6.2 Dating evidence

The pottery found stratified in relation to the rampart sequence is fully listed in the microfiche section (Fiche 25:B1–D12). In summary:

The pre-rampart occupation:	pottery of cp 1–3
Rampart 1	
occupation	cp3
stages 1–2 of blocked entrance	cp 4–6
Rampart 2	?cp 6
Rampart 3	cp 7

The only matter for debate is the occurrence of cp 6 sherds in contexts pre-dating Rampart 2. The evidence is limited but consistent occurring most clearly in Sequence H (1988). Supporting evidence came from the blocked entrance where a few cp 6 sherds were found to pre-date the blocking of Rampart period 3. Elsewhere, around the northern perimeter of the fort there was no ceramic evidence to suggest that the rampart reconstruction (Rampart 3) need date so late: no cp 6 pottery was found to precede its construction and the earliest phases of occupation occurring in the quarry hollows contained only cp 6 pottery. Two explanations for this apparent discrepancy are possible. It could be argued that the northern and southern sequences are not correctly correlated and that around much of the northern perimeter Rampart 3 was constructed at the end of cp 5 while around the south, Rampart 3 dates to the end of cp 6. The alternative view is that the reconstruction of the rampart (Rampart 3) took place at the same time on both sides of the fort during cp 6. That no cp 6 pottery was found below it on the north side is entirely understandable when it is realized how little of the pre-Rampart 3 levels was excavated. The absence of cp 7 pottery in the earliest layers in the quarry hollows may be partly due to the generally small sample size and partly to the effects of residuality but it could also mean that Rampart 3 was constructed *during* cp 6 and that pottery of the type continued in use for some while after.

If the revised correlation given above is accepted, then it has implications for the absolute dating of the construction of Rampart period 3 since it is no longer necessary to hold it back to *c* 400 BC – the date suggested by radiocarbon assessment to be the best fit date for the beginning of cp 6. It is safer therefore to adopt a date around 350/300 BC for this event.

Table 1. The Defensive Sequence

Ramparts	*South-west gate*		*East gate*	*Period*
Rampart 1	Phase S2-6 and N3-9		Gates 1a-c	1a-c
	Phase S7 and N10		Gates 2a-b	2a-b
	– (Possible fire	) stage 1	Destruction by fire	2c
Rampart 2	Phase S8 and N11		Gateless	2d
	Phase S9 and N12 (final gate)		(Gates 3a-b	3a-b
			(Gate 4	4 a
	Diminished use	stage 2		4 b
Rampart 3	Blocking	stage 3	Gate 5	5
			Gates 6a-b hornworks	6a-b
			Destruction by fire	6c
			Gateless	7
				8

3.6.3 The sequence of defences dated

The dating evidence for the different ceramic phases has been discussed in detail in the first volume (1, 190-98). Applying these dates to the stratified pottery found in relation to the defences we may conclude:

a) Rampart 1 was constructed in the mid sixth century.
b) Rampart 2 probably dates to the period 450-400 BC.
c) Rampart 3, the blocking of the south-west gate and the development of hornworks at the east gate took place *c* 350/300 BC.
d) The subsequent developments at the east gate spanned the period c 350/300- *c* 100 BC. The gate was then destroyed by fire.
e) The recutting of the ditch could date to any subsequent period but was probably quite recent.

3.6.4 The sequence of enclosures (Fig 3.25)

As we have seen, the hillfort complex of Danebury is composed of three circuits of defences which we have called the inner, middle and outer earthworks. In the first volume it was argued that the inner was the earliest, to which the middle earthwork was added, the entire complex being later surrounded by the outer earthwork. The more recent work has, however, suggested that the sequence is likely to be more complex than that. The principal reason for this is the work on the outer earthwork which has demonstrated two distinct phases: an original phase, associated with sherds of early type (cp 3–5) reasonably high in the filling, and a later, recut, phase. It was probably the recut ditch which was sectioned in 1969 on the bottom of which the almost complete vessel of cp 6 was found. On this basis the first phase of the outer earthwork must be roughly contemporary with the first phase of the main defence but there is no reason why its construction should not pre-date that of Rampart 1. At this point the four-post structure(s) which could be shown to pre-date Rampart 1 (1988) become relevant. In the original discussion of early four-post structures we allowed the possibility that some may have pre-dated the early rampart and may have been enclosed within a palisaded enclosure totally destroyed by the fort ditch (Vol 1, 30-1). This suggestion is enhanced by the 1988 evidence, but an alternative view now presents itself. Perhaps the outer earthwork in its original phase was the enclosing feature. One way to test such a view would be to carry out an area excavation between the outer earthwork and the main defensive ditch. The area is, however, a Site of Special Scientific Interest (SSSI) and ought not to be disturbed on the scale which such an excavation would require.

Without new large-scale excavations we are left with various possibilities (Fig 3.25) of which the more likely are:

a) outer earthwork enclosing, at some distance, a palisaded enclosure within which the early four-post structures lie. The palisade is replaced *c* 550 BC by Rampart 1 and its ditch;
b) outer earthwork enclosing early four-post structures. Rampart 1 and its ditch added later enclosing a more restricted area;
c) early palisade enclosing early four-post structures followed by the building of the outer earthwork and Rampart 1 in that order or the reverse. It is also necessary, in this sequence, to accommodate the 'ritual pits' which lie between the outer and inner earthworks.

All three options are equally possible but on balance the first seems the most likely. The date of this earliest (pre *c* 550 BC) phase is totally undefined but the sherds of Late Bronze Age-Early Iron Age pottery found in the 1987 rampart section (Volume 5) may be relevant.

In summary then, the supposed earliest period of enclosure is followed *c* 550 by the construction of Rampart 1 of the inner earthwork at which or by which time the outer earthwork was probably in existence.

Where in the sequence the middle earthwork belongs is more difficult to assess but it clearly precedes the hornworks of the east entrance and is probably best placed in the period following the construction of the inner and outer earthworks in their first phases.

The next stage in the development depends upon the relationship of the trackway leading to the fort from the south. The track passed over the silted up outer ditch (first phase) and appears to pass through a gap made in the middle earthwork before turning eastwards towards the main east entrance of the fort where it was traced as a hollow-way beneath the hornworks. If these tenuous links have any validity they provide a useful horizon in the complex development of the earthworks. At, or after, this time the outer earthwork ditch was redug leaving a gap for the southern road. Some time later, when Rampart 3 was constructed blocking the south-west gate, and when the hornworks were added to the east entrance, the track was obstructed. It may have been at this time that it was realigned between the middle and outer earthworks. Thus the sequence summed up in Fig 3.25 would be:

A Pre-inner earthwork phase (various possible sequences combining the outer earthwork and the putative palisade).
B Inner earthwork (Rampart 1) either built with existing outer earthwork or with outer earthwork added later.
C Inner earthwork rebuilt (Rampart 2) and south-western hornworks constructed. Middle earthwork constructed at about this time.
D Southern track crosses silted up outer earthwork ditch and slights middle earthwork ditch.
E Inner earthwork rebuilt (Rampart 3) blocking south-west gate; hornworks built at east gate. Outer earthwork ditch redug leaving gap for south road (now realigned). Middle earthwork remains slighted.

Stage A would pre-date c 550 BC; stages B-D would date to *c* 550-*c* 350 while stage E would begin *c* 350/300. Even if the arguments based on the trackway are regarded as insubstantial the sequence could not be changed significantly.

The function of the middle and outer earthworks remains obscure. The middle earthwork had defensive qualities and could well have functioned as an added defence on the weak southern side perhaps providing corral space as well. The outer earthwork in both its phases was simply a narrow ditch which man and many beasts could easily have jumped across, though the possible existence of flanking hedges would have made this more difficult. Perhaps it was little more than a *cordon sanitaire* marking forall to see the edge of the private space within which the hillfort, and its preceding settlement, lay.

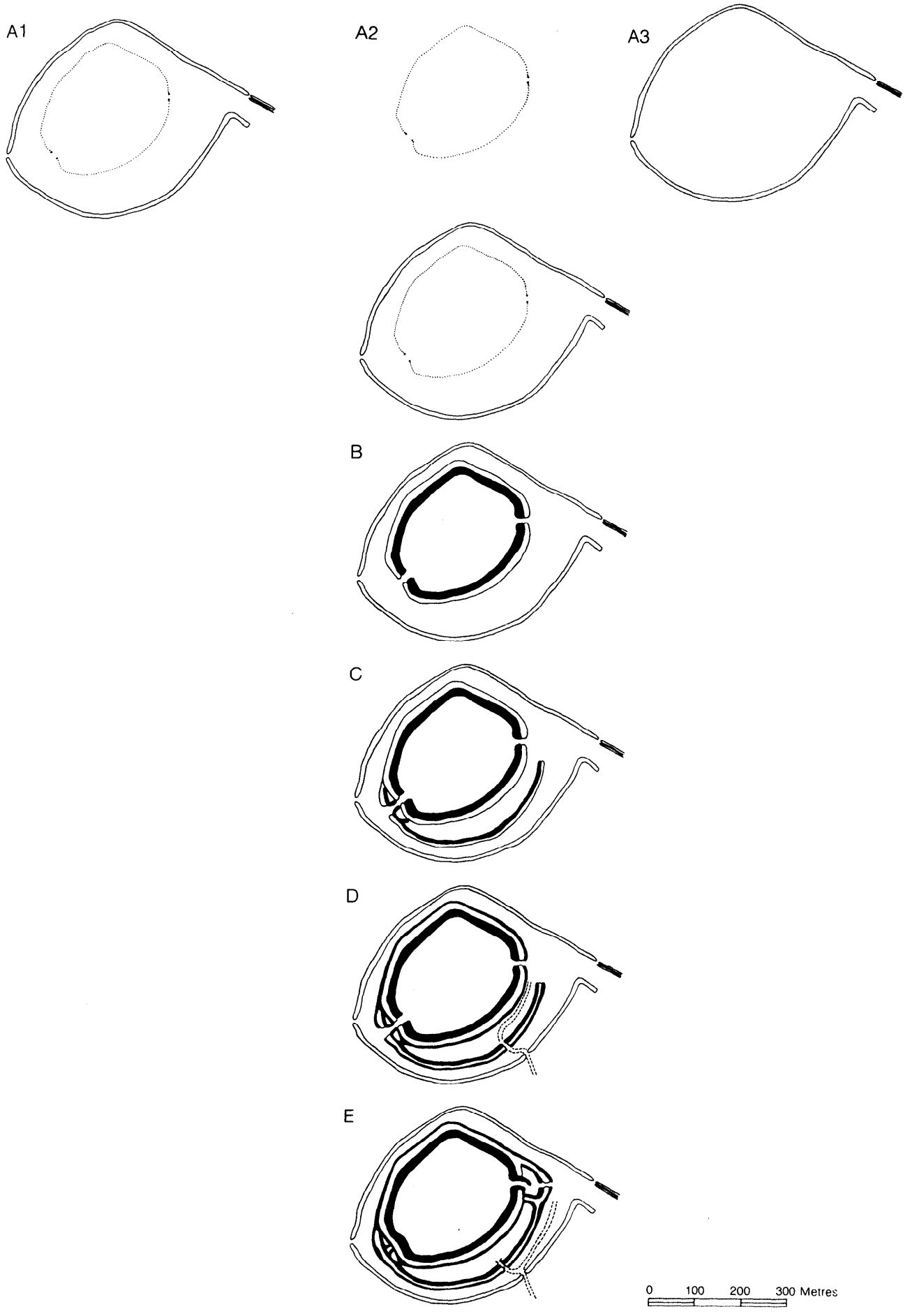


Fig 3.25 The evolution of the Danebury enclosures

4 The interior occupation

4.1 The nature of the evidence

4.1.1 Introduction

The inner rampart of the hillfort encloses an area of 5.3 ha. Of this 1.211 ha was excavated between 1969 and 1978 and a further 1.8 ha between 1979 and 1988, bringing the excavated sample to 57% of the total. Within this a large number of Iron Age features have been recorded including some 10,000 post-holes and 2,500 pits together with quarries, stake-holes, gullies and constructed features such as hearths, ovens, house floors and road surfaces. Some indication of the overall pattern is given on Fig 4.1 which represents human activity over a period of 450 years or so from *c* 550 to *c* 100 BC.

The creation of the first rampart in the sixth century BC provided a constraint within which occupation was to develop. Each phase of activity added to the complexity of the archaeological record while at the same time destroying some part of the earlier record. These processes and their implications have been considered in some detail in Vol 1 (47–9) and the discussion need not be repeated here. To provide just two figures: pit digging alone has removed about 20% of the original surface, while the quarry, dug to provide material for the rampart at various times, has destroyed some 4,300 sq m. Clearly, it has been the earlier phases which have suffered and consequently the record of these phases must be regarded as less complete than that of the later phases.

As a preface to this section it is worth reiterating the point made in the first volume that the site divides into two zones, a peripheral zone around the ramparts where stratified deposits have survived well in the quarry hollows and have been preserved by silting washed down from the interior and from the rampart, and a central area where a variety of erosion processes have combined to remove both the superficial stratigraphy and some part of the original chalk surface. These matters have been considered fully in Volume 1 with some attempt at quantification.

This reality constrains interpretation. In the peripheral zone it is possible to work out details of phasing and to reconstruct the features and activities occupying contemporary ground surfaces. In the central area (with the exception of a small patch of stratigraphy examined in 1979–80) phasing is possible only by reference to intercutting features and to relative dating based on an assessment of the associated pottery. These points are of particular relevance to the consideration of the development of the fort and will be examined further below.

4.1.2 The range of the surviving data

In section 4.2 below we will consider in some detail the different structural complexes created within the fort. Here it is necessary only to make some broad generalizations about the individual elements of which they are composed. These notes are designed simply to augment and update the discussion in Volume 1 (49–51).

Post-holes (Figs 4.2 and 4.3)

Post-holes are defined as vertical-sided holes, usually of circular plan, measuring between 100 mm and 1 m in diameter and with a similar range of depths. The assumption is that they were dug to support timbers. Though, with very rare exceptions, no actual timber survives in position, the emplacements of the vertical timbers can often be made out as a distinctive earth fill contrasting markedly with the chalk or flint packing rammed in around them. Sometimes the earth filling was very loose, and in the case of doorpost timbers preserved in the stratigraphy of the peripheral zone, the position of the wood often appeared as a void suggesting that a timber stump may have rotted in position. Since there is little significant distinction between a true void and a void loosely filled with a trickle of soil the word 'void' is used in subsequent discussion to refer to both situations. 'Voids' are very seldom visible in post-holes in the central area even though the post position, as a post-pipe, may be distinguished from the packing.

In total some 10,000 post-holes have been found in the excavated area suggesting a total of 17,500 surviving within the fort. The actual number originally dug will have been greater bearing in mind the destructive effect of the quarry and of pit digging.

Post-holes will have been dug for a wide variety of reasons. The most readily recognizable contexts are as structural timbers, especially doorposts, in circular buildings, as the uprights for rectangular structures and as pairs providing frames for drying racks, looms, etc. Of the total recorded less than a half can be assigned to recognizable structures.

Stake-holes

Stake-holes measuring 20–100 mm in diameter and up to 350 mm deep are not infrequently preserved especially in well-stratified areas. They were probably made with an iron-tipped pole to create an earth-fast socket for verticiliy-set split timbers or poles. In some cases close-set stakes formed the vertical element of wattle fences or walls (as in the case of the circular structures). Elsewhere they may have supported temporary shelters or performed a host of other functions.

Survival is difficult to assess. In the deeply stratified peripheral zone survival is good especially where the holes have been driven into chalk rubble or solid chalk. When, however, the 'bedrock' was a clayey silt, of a more fluid nature, the holes of uprooted stakes could very easily disappear. Elsewhere in the fort survival will vary according to the thickness of the overburden into which the stakes were driven and the extent to which the surface of the natural chalk has suffered erosion. At best the pattern in the central area is partial.

Pits (Fig 4.4)

A total of 2,500 has been recorded in the excavated area suggesting an overall total of 4,700 within the fort. Survival is high except in the area occupied by the quarry hollows where all trace of most early pits is likely to have been removed.

In terms of gross statistics the estimated 4,700 pits represent an average of 10 pits per year throughout the occupation span of the fort though some may have been in use for several years at a time.

Gullies (Fig 4.5)

A number of gullies have been found. They fall into three categories: penannular or curved arcs of gullies usually

Fig 4.1 Plan of all Iron Age features

DANEBURY
GENERAL PLAN SHOWING
ALL FEATURES EXCEPT PITS

Fig 4.2

DANEBURY
ALL POST HOLES
EXCLUDING RS & CS POSTS

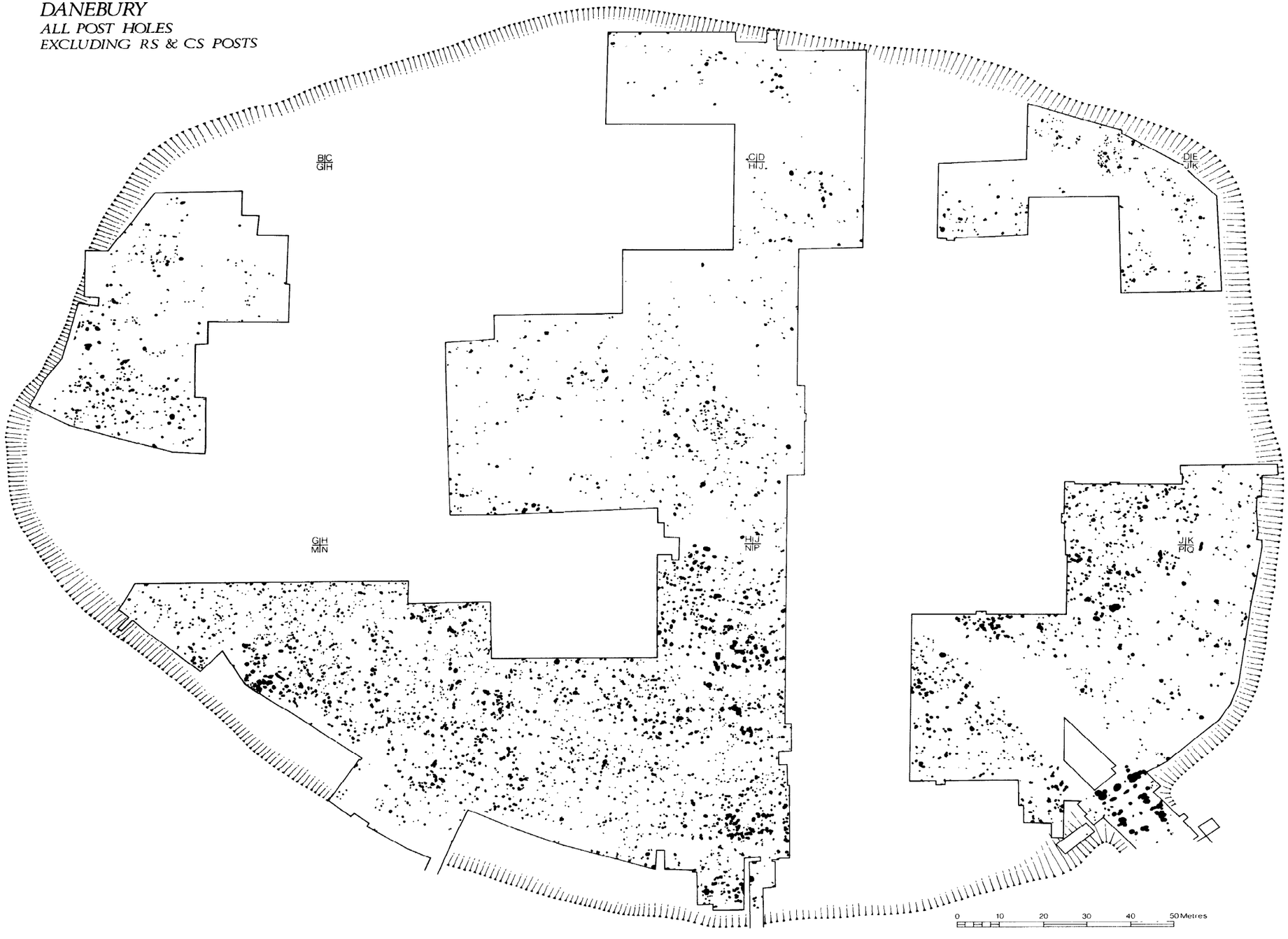


Fig 4.3

DANEBURY

GENERAL PLAN SHOWING PITS ONLY. ALL PHASES

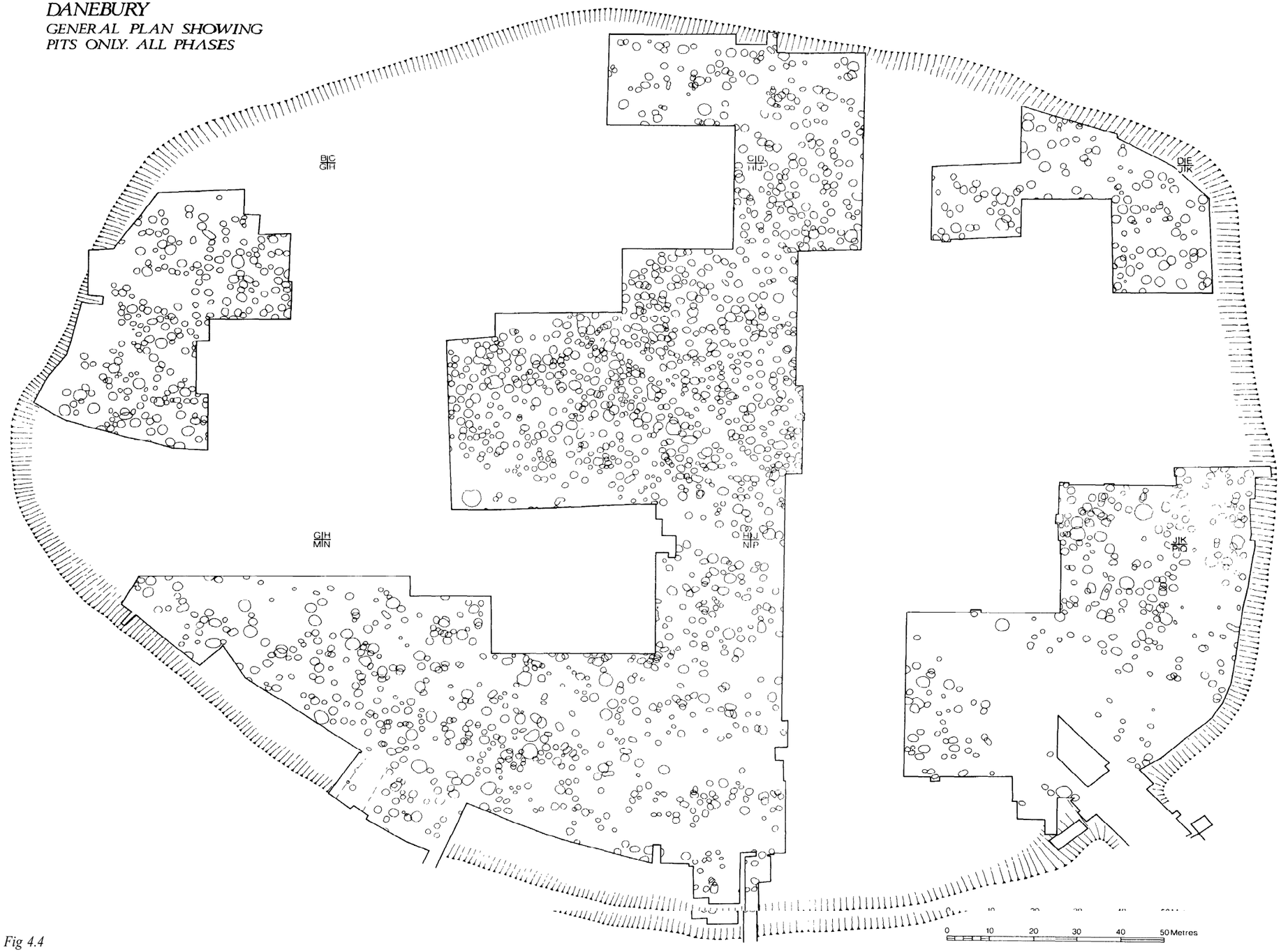


Fig 4.4

DANEBURY
CIRCULAR STRUCTURES
AND GULLY COMPLEXES

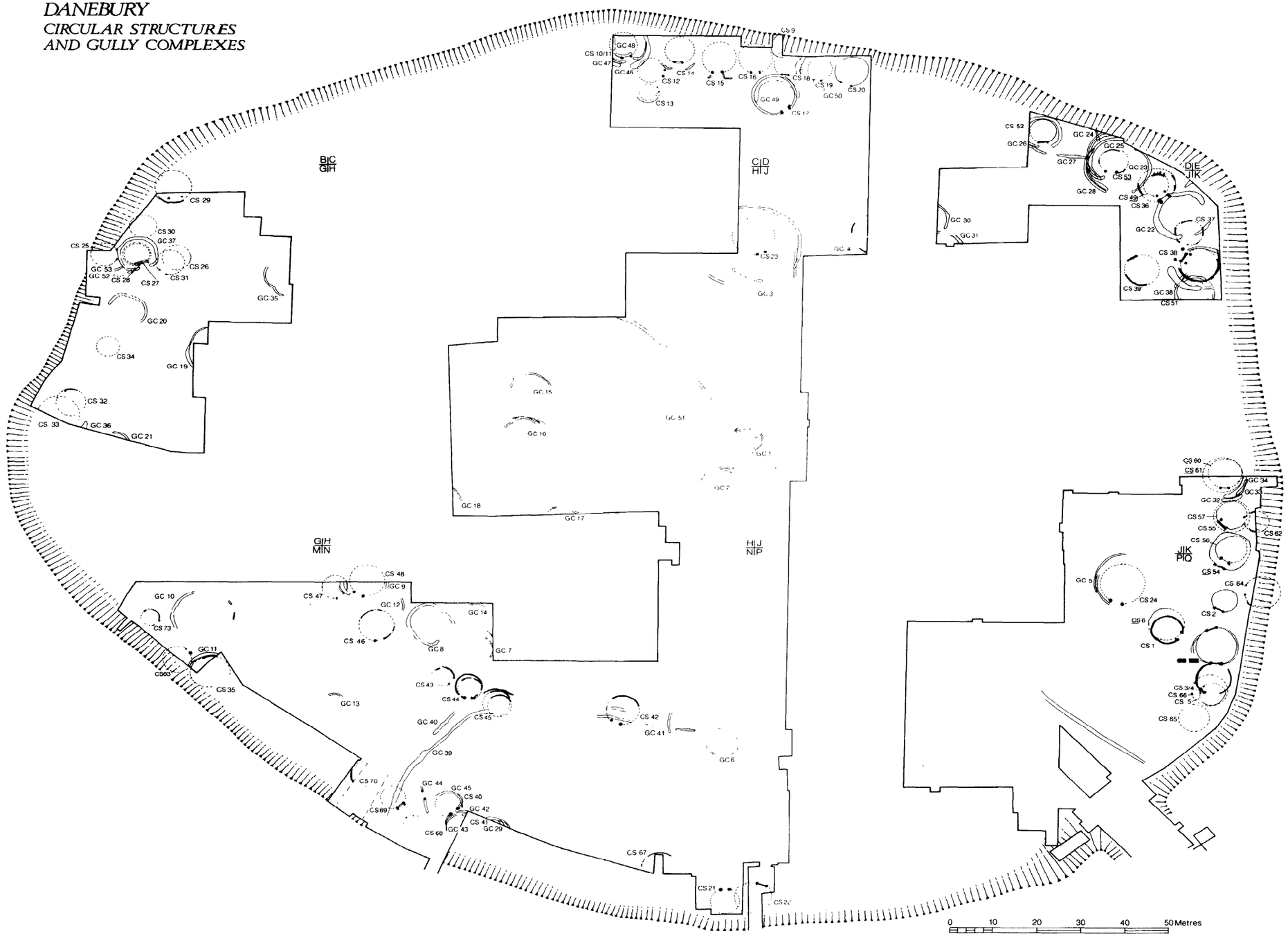


Fig 4.5

associated with houses or post structures; enclosure gullies defining open areas in proximity to houses; and linear gullies. All are likely to have served a drainage function, taking off surface water, but some may, in addition, have marked boundaries. Survival is likely to have been good.

Open areas

Apart from the lines of the roads (visible on Fig 4.1) no obvious open areas are recognizable. This, however, is more a feature of the continuous use of the site than of reality and when the different phases of occupation are considered (below pp. 231–9) a number of lightly utilized areas become apparent. It also seems likely that the area of clay-with-flints in the north-west corner of the site was generally avoided. Little of this area has been excavated but the patches exposed in 1972, 1981 and 1983 were largely without features.

Stratified layers

For the most part stratified layers were restricted to the peripheral zone in the quarry hollows and preserved beneath rampart period 3 but a patch of chalk, silt and cobble spreads, in the vicinity of road 2 (excavated in 1979-80), provided a vivid reminder of what has been lost through erosion and later human activity in the central region. In all probability layers of this kind once survived throughout the fort where worn hollows attracted silt and debris and were later consolidated with successive tips of chalk.

4.1.3 Chronological and locational variation

Even a cursory glance at Figs 4.2-4.5 will suggest some degree of functional differentiation throughout the life of the fort. Road lines seem to have been maintained over long periods of time and superficially at least the occupation seems to be divided into three zones: a peripheral zone occupied by houses and associated structures; a northern central zone where pits predominate; and a southern central zone where post-holes, many of them constituting rectangular post structures, cluster in rows. At one level of generalization this simple threefold division is valid but when chronological constraints are considered or individual areas are looked at in more detail the picture, not surprisingly, becomes more complicated.

4.1.4 The arrangement of the report

The procedure adopted here, to present the complex array of data, is similar to that used in the first volume. In the first section (4.2) a detailed consideration is given to each of the main types of structural element: circular structures; rectangular post-built structures; gullies and ditches; roads; pits; and internal quarries, together with a discussion of the structural use of daub, clay and timber. Individual structures are fully described either in the printed text or in the fiche, In the following section (4.3) the stratigraphical sequences, within which some of the structural elements are embedded, are discussed in some detail. For the most part these sequences lay within the peripheral zone, largely in the quarry hollows, but the patches of stratigraphy found near road 2 in 1979-80 are also described. The individual sequences, taken together with those published in the first volume, are used to establish a *general stratigraphical development sequence* which, combined with the rampart sequences and the *gate sequences,* allows the compilation of a *Danebury general sequence* (p. 35). In section 4.4 the different areas of the site will be considered chronologically insofar as the dating evidence for the individual features allows. Finally, in section 4.5 an initial presentation will be made of a range of analyses designed to examine functional and social aspects of the data. This is essentially a preliminary treatment which will be further developed in Volume 6.

4.2 The structural elements

The sequence of descriptions adopted here is closely similar to that used in the first volume. To begin with each of the main structural categories is considered in detail in the following order:

a. Circular structures, including buildings and working areas;
b. rectangular structures built of timbers set in continuous foundation trenches;
c. rectangular structures composed of upright timbers usually set in individual post-holes;
d. gullies, either linear or penannular dug for boundary or drainage purposes (where not discussed elsewhere in relation to structures);
e. roads;
f. pits;
g. internal quarries.

4.2.1 Circular structures (Figs 4.6–4.63; Pls 35-46)

The excavations of 1969–78 exposed a complex of features and layers from which 24 circular structures were isolated. These were described in detail in Volume 1 (60–81). During the excavations of 1979–88 a further 43 broadly similar structures were recognized (CS25–63, 68–70 and 73) several of which were rebuilt on more than one occasion on the same site. To this total can be added a further six (CS64-7, 71–2) tentatively identified following a thorough reconsideration of the 1969-78 data. Thus in all 73 circular structures have now been defined.

Some thought has been given as to the most appropriate means of presenting this complex of data. In the end it was decided to adopt the method used in the first volume, that is to publish a full catalogue of the circular structures in the main text giving a plan, sections and a concise description of each. There are two reasons for putting such an extended treatment here, rather than in the fiche section: first, high quality structural data of this kind is rare from British prehistoric sites outside wetland environments, and secondly, even though preservation is good uncertainties of interpretation remain: these are best made explicit in full published descriptions. What is offered is, even then, only a selection of the available data. The spatial relationships of the structures are considered more fully in Section 4.3 while detailed descriptions of the individual layers will be found in the site archive.

It will be apparent from the general plan (Fig 4.5) that the majority of the circular structures were found in the stratified layers beneath or behind the ramparts where stake-holes of the walls and floor surfaces frequently survive albeit incompletely. Comparatively few have been recognized within the central area and then only where exceptional circumstances prevail, such as the build up and survival of stratigraphy along the line of road 6, or the occurrence of penannular drainage gullies which focus attention on pairs of posts which might

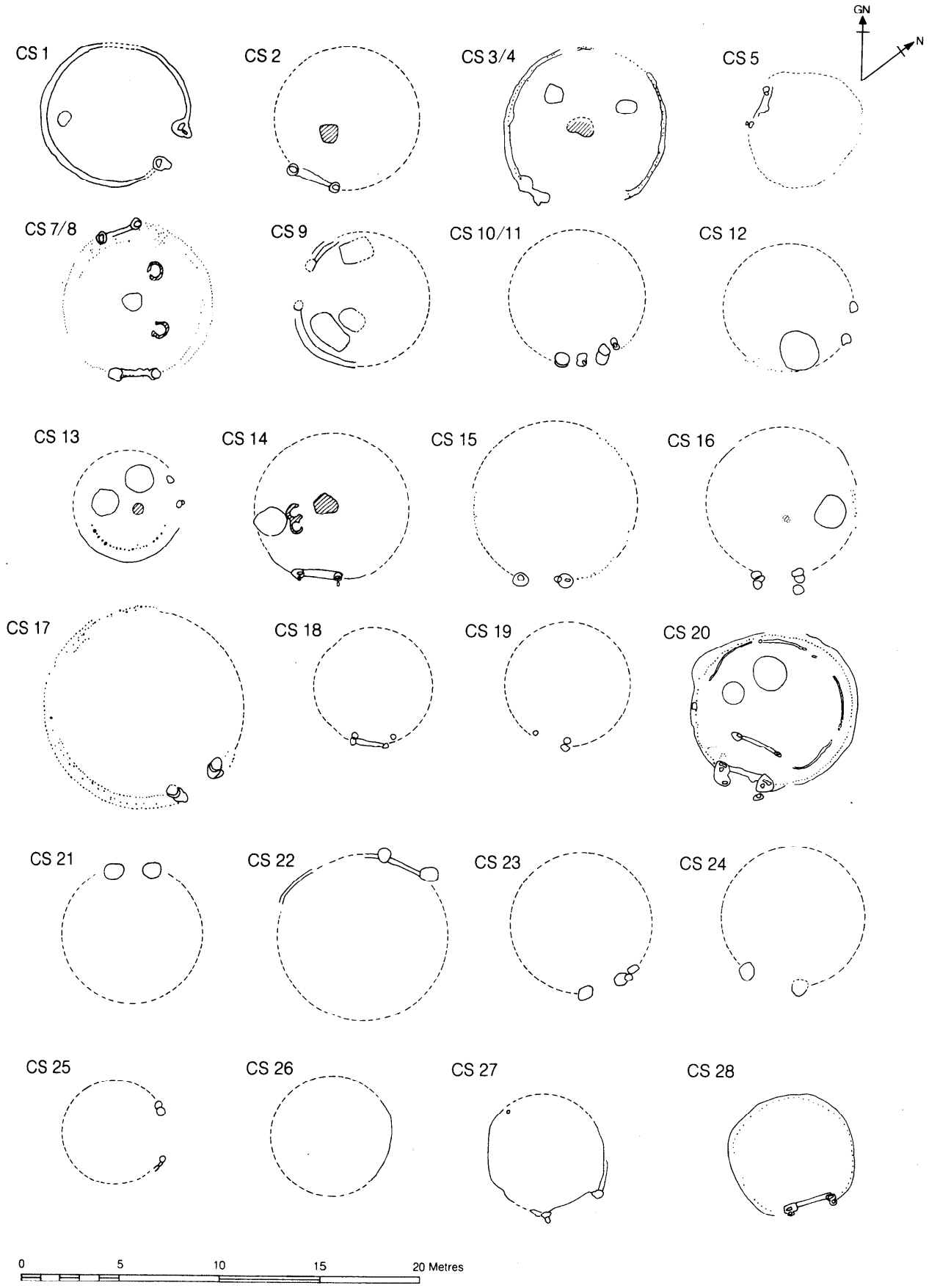


Fig 4.6 Plans of circular structures

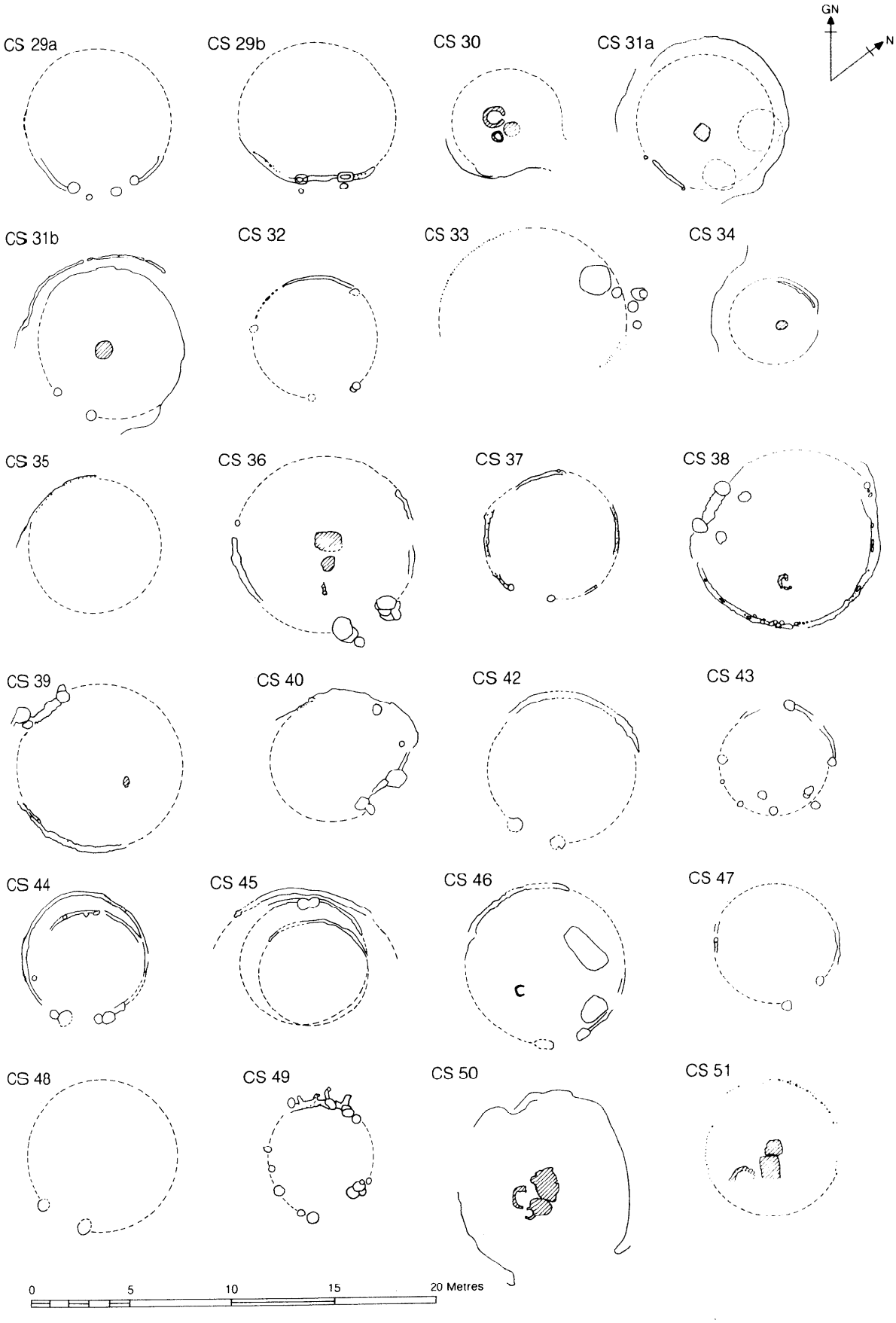


Fig 4.7 Plans of circular structures

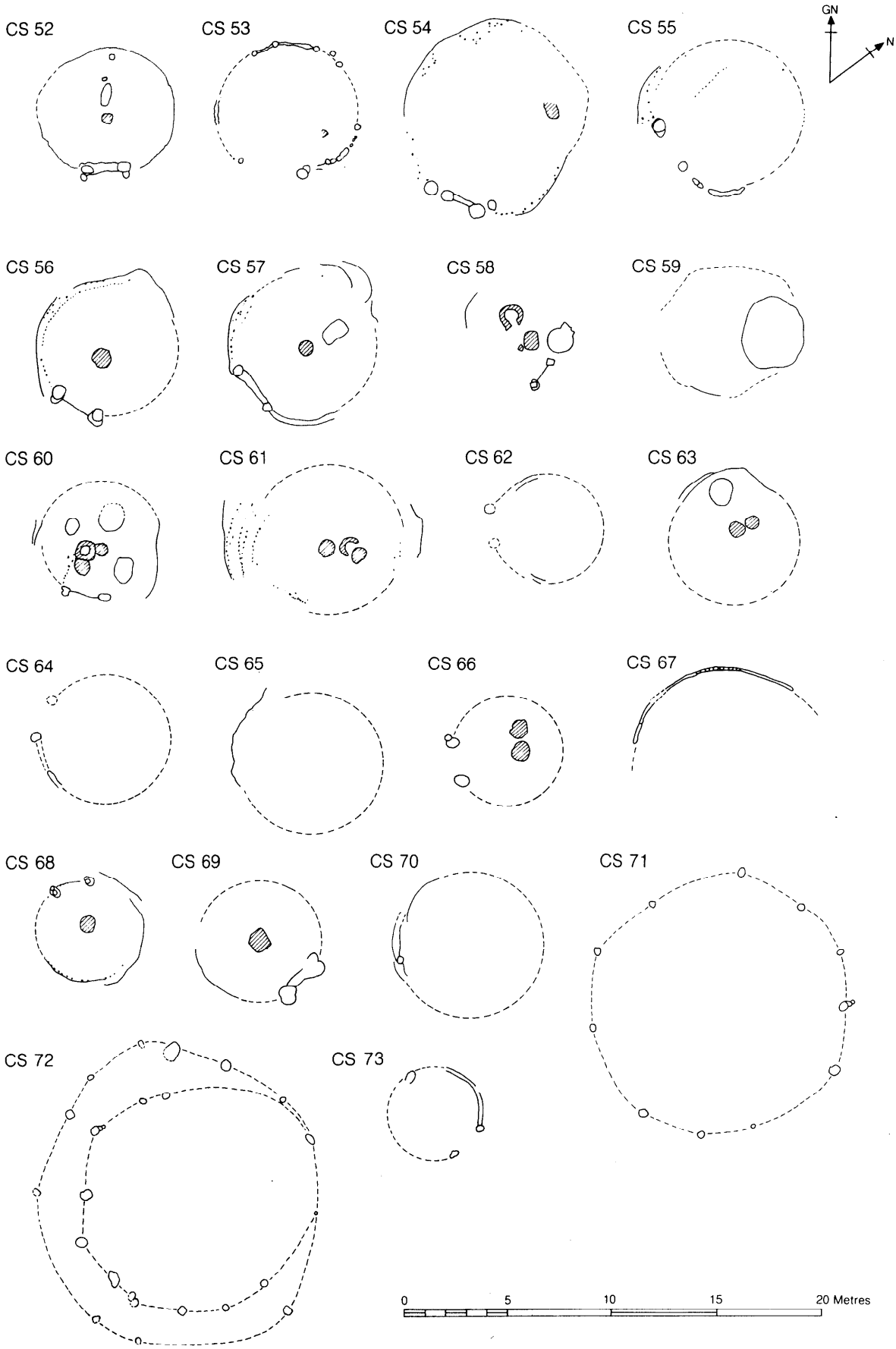


Fig 4.8 Plans of circular structures

represent door structures (eg CS23 and 24). That there were more circular structures within the central area is likely. A scan of all the post-holes within the 1979-88 area has suggested at least 50 settings of paired posts out of a total of 159 two-post structures, the spacing and proportions of which are appropriate to door frames (pp. 113): there may well have been more no longer recognizable because of the destruction of one or both of the posts by later pits. How many of these pairs were actually doors to houses and how many were simply two-post structures reflecting a variety of other functions we will never know, but that even a few of them may represent houses is a warning against using the apparent absence of evidence for houses in rash generalizations about the interior organization of the fort.

In the discussion in the first volume some comments were offered about the different forms of circular structures encountered. The much larger sample now available calls for reconsideration of some of the issues raised. In the section to follow all 73 circular structures will be taken into consideration.

Early ring-groove houses

A small group of buildings survives which, by virtue of their stratigraphical relationships and associated material, can be shown to belong to the early period of occupation (550-350/300 BC). These are CS9, CS25, CS32, CS37, CS42, CS43, CS44(a and b), CS45(a and b), CS46, CS47, CS62 and CS64. All are remarkably similar. The majority are between 6–7 m in diameter (the smallest is 5.5 m and the largest 8.0 m), all have a shallow ring-groove defining the wall and a simple two-post door. Evidence for the actual wall structure is not extensive but the slots are shallow and in three examples (CS37, CS44 and CS45) stake-holes were found in the bottoms. In the case of CS25 the wall seems to have been built of paired stakes or billets of rectangular section. Taken together this would indicate that walls of wattle were probably the norm. Few features have been found inside but for a variety of reasons (partial exposure, subsequent erosion, etc) the absence of evidence need not be significant. In two cases (CS9 and CS46) internal rectangular pits seem to be contemporary with the use of the building and CS46 also has an oven.

Since all the early structures conform to this general type it is clear that the ring-groove house was a significant part of the Danebury vernacular in the early period. The fact that houses of this type occurred both immediately behind the rampart and also in the central area suggests that it was not a specific type restricted to a single location. It should be remembered, however, that early houses without ring-groove walls could have passed unnoticed in the central area.

Ring-groove houses are comparatively common in the north of Britain (see Cunliffe 1978, 225–6 for general discussion) where they tend to be well-preserved but the type is becoming increasingly well-represented in the archaeological record of the Midlands and south.

Plank-built structures

In the first volume three structures were classified as being of plank-built type. Of these CS9 is best reclassified as an early ring-groove house while CS3 is, on reflection, likely to be a ring-groove house of the later period. This leaves CS1 as the sole example with plank-built walls. The fact that, during the second ten-year programme, no further examples of the type were discovered serves to emphasize its most unusual character. There is nothing further to add to the discussion already published (Vol 1, 54-9) except to offer a tentative reconstruction based upon all the available evidence (Fig 4.9).

Late ring-groove structures

Of the 49 typical house structures belonging to the later period (post 350/300 BC), 14 have their walls in part or in total defined by shallow ring-grooves. In seven of these (CS3, CS22, CS29a, CS31b, CS34, CS36 and CS68) no trace of the actual timbers survives and in theory they could have been of any form but in seven (CS29b, CS35, CS38b, CS38c, CS39, CS40 and CS53) some basal impressions of small timbers or stakes can be made out. There appears to be some variety. In CS53, for example, small posts up to 150 mm in diameter were found widely spaced around the circumference of the house with the wall-groove in between (though the posts could not be shown to be absolutely contemporary with the house). In the case of CS38c timbers up to 100 mm in size seem to have been more closely spaced. On the other hand, CS35 showed clear stake impressions, 40 mm in diameter, spaced at intervals of *c* 100 mm. In some examples, eg CS29b, deep but sporadic stake-holes along the wall line could represent the local rebuilding of a partly rotted wall. The one case of total rebuilding seems to be CS3/4 where the stake-holes of CS4 were driven through the filling of the ring-groove of CS3 (Vol 1, 62–4). Thus, although the evidence is not particularly clear, and is distorted by rebuilding, the basic wall structure seems to have been of small timbers, serving as the verticals presumably for wattle walls, their bases packed in position in a wall trench.

The average diameter of these late ring-groove houses is 6.9 m with the smallest being 4 m and the largest 8.7 m. This compares with an average diameter of 6.2 m for the early ring-groove houses.

Stake-built structures

By far the commonest type of house at Danebury was built of stakes, set in holes driven into the underlying soil or chalk using a crowbar-like implement. Twenty definite examples of this type have been identified (CS4, CS7, CS8, CS10, CS11, CS13, CS15, CS16, CS17, CS20, CS28, CS33, CS51, CS54, CS55, CS56, CS57a, CS60, CS61 and CS70) and, it will be argued below, a further 17 examples probably belong to the same type. The well-preserved examples show that the stakes were usually 30–60 mm in diameter and were spaced at intervals of 150–200 mm. Assuming that the hole was made first with a bar and the stake was then rammed into it, the shape of the hole is most likely to reflect the shape of the timber. The stakes were frequently circular or oval in section but many examples have been found which showed a distinctive rectangular cross section. These were presumably split or trimmed timbers quite possibly long poles shaved down to be of even size throughout their length.

The stakes must have formed the vertical framework for a wattle wall woven in position forming a rigid earth-fast drum joined to the doorposts. Above wall-top level there were two possible treatments: either the verticals were trimmed off and the separate rafters of the conical roof were bound to a suitably strengthened wall top or, more simply, selected vertical poles, projecting above the woven wattle wall, were bent inwards and joined at the

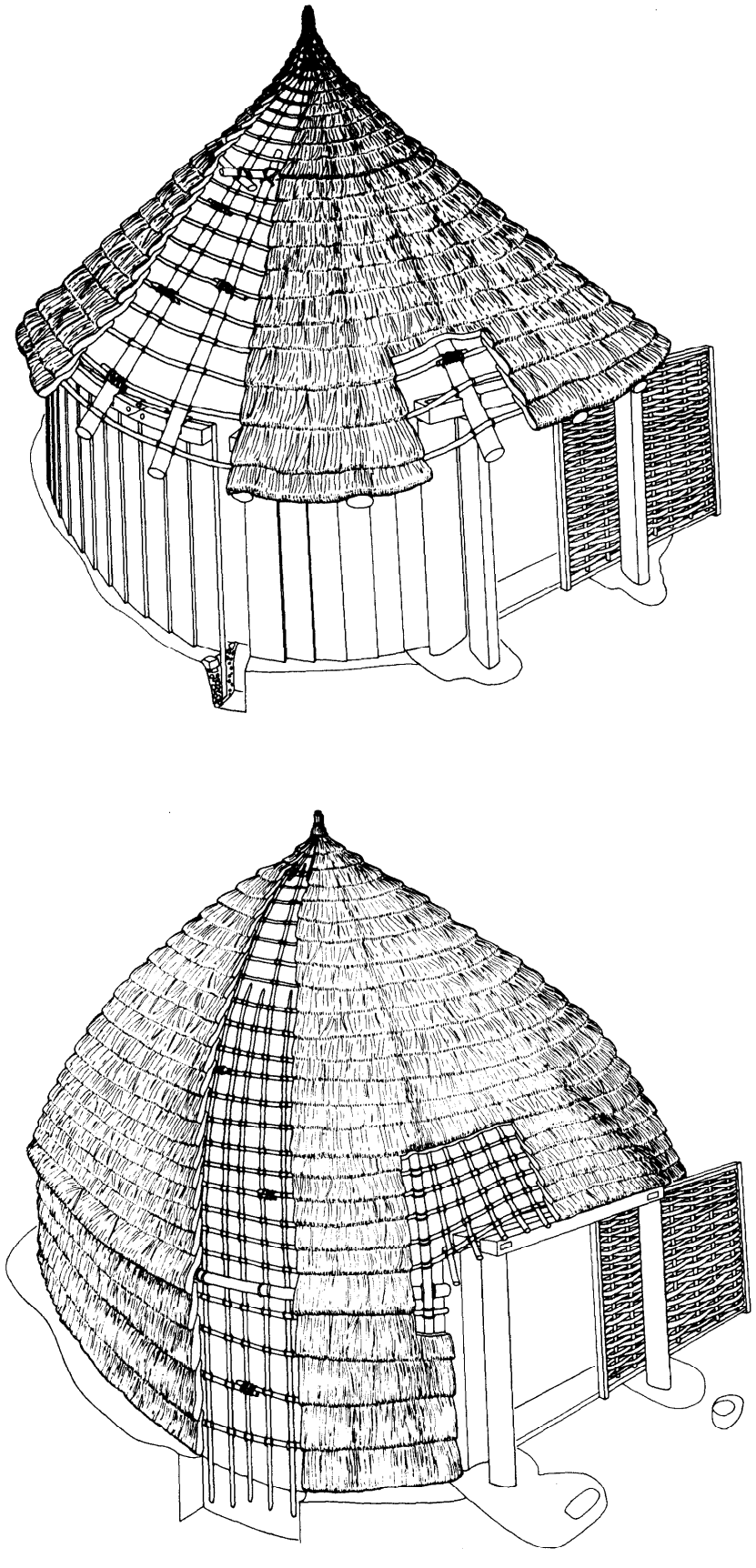


Fig 4.9 Reconstructions of plank-built and stake-built houses (by Chris Unwin)

apex to form a framework for the wattlework to continue upwards. The resulting structure, illustrated in the reconstruction in Fig 4.9, would have had a considerable strength and rigidity. Moreover it would have been light enough to enable the entire house to be moved by a comparatively small group of people (see below p. 48). The remarkably-preserved houses found at Deer Park Farm, Co Antrim, dating to the seventh century AD (Lynn 1989), show something of the elegant simplicity of large wattle-built houses. The lack of distinction between vertical wall and roof was noted by the excavator.

The walls and roofs (however structured) would have had to be covered to keep out draughts and rain. The simplest way to seal the roof would have been with thatch, ideally reed thatch. In the absence of any evidence for the daubing of the wattle it is quite possible that the walls were treated in a similar manner. At Deer Park Farm double walls infilled with organic insulation were the norm. Only one possible example of this type was found at Danebury (CS17) but it is quite possible that the technique of double walling was widely used since the internal face need not have been earth-fast.

It will be evident from the individual house plans that seldom have all the individual stake-holes been traced. This is particularly clear in the case of CS61: several arcs of stake-holes were found on the western side where they had penetrated the natural chalk but in spite of repeated careful search of the eastern side, where the terrace had been scarped into a layer of fine crumbly silt, not a single hole was located. The simplest explanation for this is that they had existed but as the timbers rotted (or were removed) the loose and slightly plastic soil into which they had been driven simply closed up leaving no trace, Thus one of the most important factors influencing the survival of the stake-holes is the texture of the soil into which they were set. Crumbly silts with a high clay content were potentially fluid but the rather more chalky silt, on which CS20 was built, remained stable and allowed the individual holes to be clearly seen. In other examples it is possible that the stakes had been deliberately pulled out allowing dark black soil from the surrounding occupation layers to fall into the voids before distortion could occur. There were evidently many factors influencing survival and the only lesson that can be learnt is that the absence of evidence for stakes does not necessarily constitute evidence for their absence. With this in mind we must now look at the 17 examples where no trace of a wall is evident in spite of the posts of the door frame surviving.

Three of these (CS23, CS24 and CS48) can be simply explained by pointing out that subsequent erosion had removed all floor and occupation layers and was therefore probably sufficient to have removed all trace of stake-holes. The remaining 14 houses (CS2, CS5, CS12, CS14, CS18, CS19, CS21, CS26, CS27, CS31a, CS57, CS65, CS66 and CS69) require more detailed consideration. Two examples serve to demonstrate the problem: CS5 and CS52. Both had well-defined doorposts and door sill slots while inside the distinctive chalk floors exactly marked the inner edge of the wall and yet not the slightest trace of the wall structure could be seen except for a few smudges of charcoal along part of the wall line of CS5. There are only two reasonable explanations: either the walls sat on the surface of the soil and did not penetrate it; or stake-holes had once existed but all trace of them had disappeared in the manner discussed above. It is impossible to decide between these two options but the further implications of the former will be considered again below p. 48.

The stake-built and probable stake-built houses averaged in diameter 7.0 m, ranging from 5.1 to 9.5 m. Thus they were not significantly larger than the late ring-groove houses.

Post-ring structures

No definite examples of houses built of circular settings of posts have been recognized at Danebury in spite of careful search but in view of the large number of post-holes in the central area (nearly 10,000) and the destructive activity of pits it is impossible to be sure that none existed. A number of possibilities have been considered but, with two *possible* exceptions (CS71 and CS72), they lack the regularity necessary to be convincing. In the deeply stratified areas, where recognition would be much easier only two dubious examples can be offered, CS49 and CS53. The first is unlikely to be a circular structure at all while the second is most probably a ring-groove house with a few posts fortuitously impinging upon its wall line. It seems unlikely that any others could have escaped unnoticed in the stratified periphery. This does not, however, mean that post-ring round houses were entirely absent from the central area at Danebury and the two possible examples (CS71 and CS72) may give some indication of their general form and size.

Working areas

Several roughly circular areas were recognized, sometimes terraced or worn into the backslopes of the rampart, where evidence of activity associated with floors, pits, hearths and ovens was readily apparent but where no trace of door or wall structure survived. Locations of this sort were probably open-air working areas. Examples include CS6?, CS30, CS34?, CS38a, CS50, CS58 and CS59. CS50 was the largest and most elaborate: it measured *c* 10 m in diameter and was surrounded by a penannular drainage ditch with a low bank inside and was approached by a well-constructed chalk path. Others, eg CS34, were much smaller, only 3–4 m in diameter and were little more than consolidated areas around hearths, or, in the case of CS59, pits.

The range of structural features constituting these working areas in no way differed from the interior features of many of the houses. This could suggest either that the cooking and baking activities, which the majority of them represent, were carried out in the open or within a building irrespectively or that some houses were later reused as cooking places after their original use had come to an end.

Doorways (Fig 4.10)

The door frames were frequently the best preserved element of the Danebury houses. At their simplest they consisted of two doorposts bedded in pits 0.5–0.7 m deep set with centres *c* 2 m apart and while this basic structure was adopted in all those examples where the doors were excavated several variations can be recognized. The most frequent was the addition of a horizontal door sill represented now as a slot against which the chalk house floors and thresholds had abutted. The sill was presumably a structural part of the door frame serving as a counterpart to the lintel in keeping the structure rigid. We must suppose therefore that the sills were in some way jointed or pegged to the main verticals.

Another variation was the setting of two additional timbers in front of the main doorposts leaving a gap of

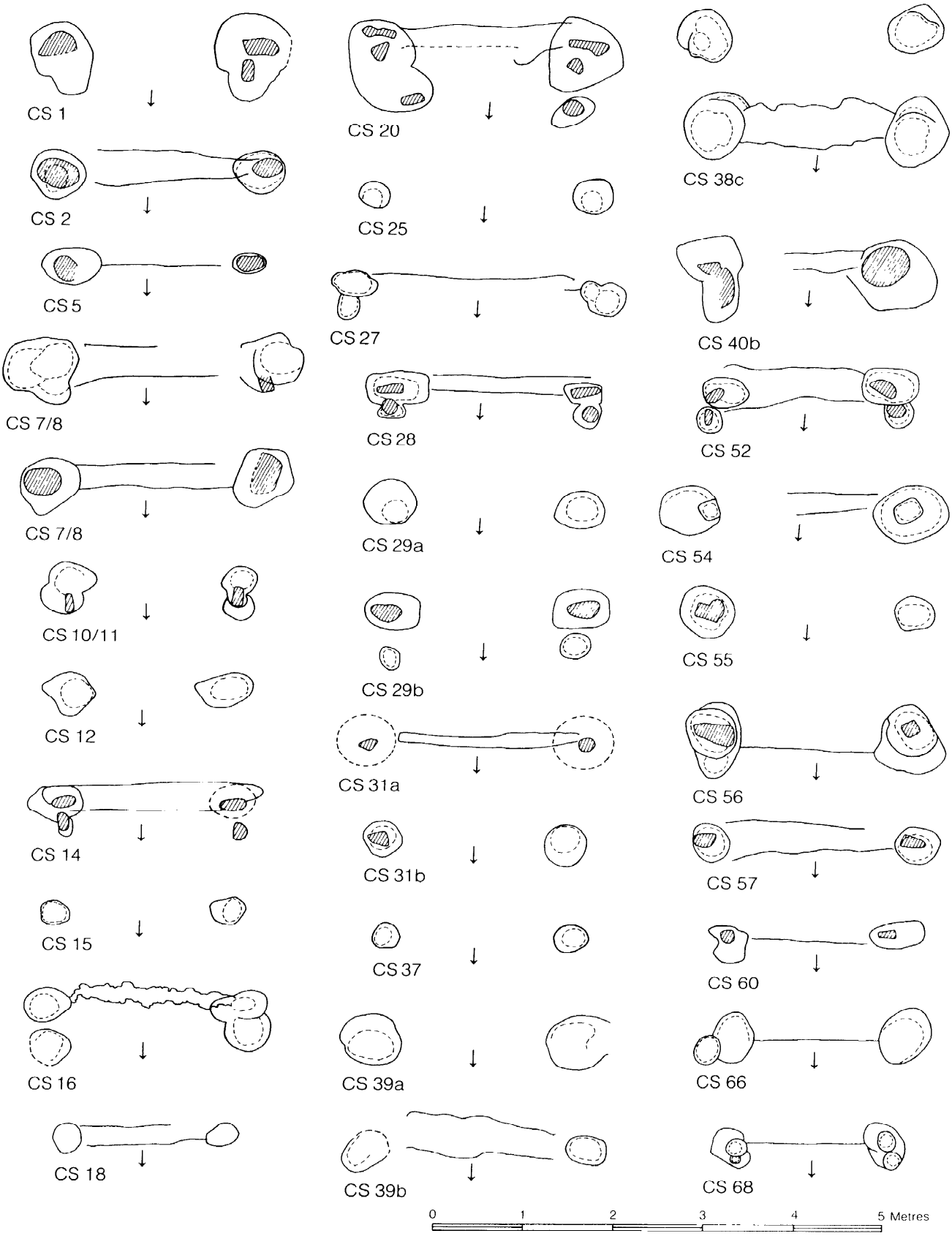


Fig 4.10 Plans of door structures (The arrows point to outside)

100-200 mm. This kind of arrangement was clearly planned from the outset because in several cases the double post-holes can be shown to have been dug and packed as part of one operation. The best examples of these double post doors are CS1, CS10/11, CS14, CS20, CS28 and CS52. Less well preserved examples are CS16, CS29b and CS36 and there are others where the recutting of the doorpost holes has obscured detail. Double post doors recurred a sufficient number of times to suggest that the feature was desirable either for its decorative (or symbolic) effect or for some functional reason. One possible explanation is that the gap between the door-posts and the outer frame was designed to secure a movable door, perhaps of wicker, which could be slotted into position or completely removed at will.

In a number of cases the shapes of the original timbers have been precisely preserved by the rammed chalk packing around them. A selection of the best is shown here (Fig 4.10). Invariably the inner timbers were elongated along the line of the wall and the individual voids suggest that they had been formed from halved or radially split trunks. The outer frame, where it occurred, was usually built of smaller verticals of uniform dimension: some were squared, some were of circular cross section, while several look as though they were formed from quartered trunks. These shapes, of course, reflect only the cross section of the timbers at and below ground level and it is quite possible that above ground they were more carefully finished and even carved.

Another feature which occurs less frequently, apparently associated with doors, is an inner setting of two posts mirroring the door timbers. This arrangement can be seen in CS20 and CS38b and c and may represent some attempt to create an internal vestibule perhaps intended to exclude direct draughts.

Interiors

Most of the houses were floored, frequently on more than one occasion, with layers of chalk rubble which had become compacted and puddled by wear. For the most part the interiors seem to have been kept clear but in a few cases internal structures built of stakes have been recognized. One consistent feature is the construction of a small alcove against the wall, just inside the door. Examples may be seen in CS5, CS7, CS14, CS20 and CS57. Less frequently there is evidence of wattle screens dividing off part of the interior (eg CS52, CS55 and CS60) and many houses had scattered stake-holes or isolated posts suggesting a variety of internal structures probably of a temporary nature.

The only major structural fittings to occur frequently were hearths and ovens, which were invariably constructed in a consistent manner. Hearths were made either by digging a shallow pit in the floor *c* 100 mm deep and filling it with a layer of small flint nodules packed in crushed chalk or by setting the flint foundation within the floor during construction. This was then surfaced by a thickness of puddled chalk or daub brought to a fine smooth finish. In one example (CS31a) the surface of the hearth was decorated with incised circles. An exactly comparable hearth was found at Glastonbury (Bulleid & Gray 1911, pl VI(2)). The ovens were made by digging a shallow pit and flooring it with puddled chalk. The walls of the oven were then built up in chalky daub leaving a flue arch in one side for stoking. Little is known of the superstructures (but see Section 4.2.4 for a more detailed discussion).

Of the 34 houses which are sufficiently well preserved to retain the relevant characteristics (all from the late phase in the quarry hollow) ten have no hearths or oven at all (CS1, CS5, CS10/11, CS12, CS18, CS19, CS20, CS27, CS55 and CS57b); 18 have only hearths (CS2, CS3/4, CS13, CS15, CS16, CS28, CS31a, CS31b, CS34, CS39, CS52, CS53, CS54, CS56, CS57a, CS66, CS68 and CS69) while eight have both hearths and ovens (CS7/8, CS14, CS36, CS38a, CS51, CS60 and CS61). In addition to this there were three external working areas, with no evidence of doors or walls, which possessed both hearths and ovens (CS30, CS50 and CS58). Of the less well preserved, two provide evidence of hearths (CS63 and CS64) and one of an oven (CS46). The variation provides a very clear indication that circular structures must have served a range of functions.

Another variation, again reflecting on function, is the presence or absence of contemporary pits. It is sometimes impossible to be sure that pits were actually being used while the house was functioning (rather than having been dug immediately after its abandonment) but in some examples a fair degree of certainty is possible. Two early houses (CS9 and possibly CS46) had rectangular pits fitted carefully inside. Of the 38 later houses where the preservation is adequate 22 do not contain contemporary pits (CS1, CS2, CS3/4, CS7/8, CS18, CS19, CS21, CS22, CS27, CS28, CS31b, CS36, CS38a, CS38b, CS38c, CS39, CS52, CS53, CS55, CS57a, CS68 and CS69), ten probably had one contemporary pit in use at any one time (CS5, CS20, CS31a, CS33, CS40b, CS54, CS56, CS57b, CS60 and CS61) and a further seven possibly had contemporary pits (CS10/11, CS12, CS13, CS14, CS15, CS16 and CS40a). In each case the pit is located to one side of the house close to the wall. Given that they were all beehive-shaped, the mouths would have been little more than 0.5 to 0.75 m across when originally dug and could, therefore, easily have been covered.

Exteriors

The majority of the houses had an approach path leading to their doors surfaced on more than one occasion with tips of chalk. Whether or not it was normal practice to do this only when the path became muddy it is difficult to say but there is some evidence in the 1986–7 area that hollows had formed in front of the doors before the first chalk surfacing had been laid. Generally these approaches were without emphasis but in two cases (CS14 and CS15) an attempt was made with fences and shallow gullies to create a focus on the entrance.

It is somewhat surprising, bearing in mind the low-lying location of most of the houses, that drainage ditches were so infrequently dug. Only six examples have been recorded. Of these one, certainly, (CS28) and one, probably, (CS10/11) were surrounded by penannular ditches and in the case of CS28 a low bank had been created on the inner lip of the ditch against the house wall. The other examples (CS38b, CS51, CS60 and CS61) possessed only short arcs of ditch concentric with the house walls. In every case the distance between the wall and the lip of the ditch was such that water running off the roof would have dripped into the ditch but the ditches would also have served to drain off surface water to prevent flash floods from swamping the houses. Why such a simple and effective technique was not more widely used is difficult to understand unless the ditch was in some way a reflection of the status of the occupier, but this seems unlikely in view of the fact that a penannular ditch with slight internal bank was used to define an otherwise unprotected working area (CS50).

In the central area of the fort it is possible that some of the lengths of curved gully which survived were originally associated with circular structures but only two (CS23 and CS24) have produced sufficient structural evidence to suggest the presence of houses.

General considerations

Sufficient will have been said to suggest that there was a distinct vernacular architecture at Danebury, each circular structure comprising a combination of characteristics chosen from a limited repertoire. What stands out is that the house structures involved the use of very little large timber. Apart from the door frames the entire structure of most of the buildings could have been made from coppiced poles. This does not necessarily imply that large timber was in short supply: indeed a great deal must have been available for the large number of four- and six-post structures. A more likely explanation is that constructional techniques had evolved to such an extent that form now fitted function allowing a maximum economy of effort — why use heavy timber in walls and roofs if slighter poles would serve as efficiently?

Another advantage of light construction was the ease with which it allowed a building to be moved intact. There is nothing inherently unlikely in supposing that structures were moved around at this time. As the ethnographic record shows the practice occurred quite widely in the more recent past. Wattle-built houses, with roofs and walls woven in one would have maintained their rigidity of structure especially if the doorpost timbers were braced at top and bottom with a lintel and sill. A house of this kind would have been constructed in the first instance with earth-fast poles but after a comparatively few years the wattle would have rotted through at ground level thus freeing the wall. Once the doorposts had been loosened the entire structure could have been moved with ease and reset on any other terrace, anchored in a new pair of doorpost holes. Some such explanation could account for the absence of evidence for stake-holes or wall slots noted at a number of the house sites where doorposts and floors are well preserved.

Stake-built houses have featured rarely in the archaeological literature . Examples are known in Scotland at Green Knowe (Feachem 1963) and in Wales at Moel y Gaer (Guibert 1976). In southern Britain evidence has been found in the hillfort of South Cadbury (Alcock 1972), in the Thames Valley at Hardwick (Robinson & Allen 1978) and at Hengistbury Head (Cunliffe 1987). In all probability the type was widespread and this may account for the paucity of houses recorded on many Iron Age settlements where the destructive effect of agriculture were sufficient to have destroyed evidence of stake-holes (Guilbert 1975, fig 4) or where excavation technique has not been adequate for their recovery.

There is comparatively little to be said of the chronology of house development. It may be significant that while ring- groove houses were built both before and after Rampart 3, constructed *c* 350/300 BC, stake-built houses were restricted to the later period the earliest being the somewhat anomalous double ring structure, CS17, found in the 1973–5 area. By the end of the late period, *c* 100 BC they were common and widespread within the fort.

The Danebury assemblage of circular structures provides a rare insight into Iron Age housing. The fragility of the evidence and the difficulties encountered in interpretation will be evident from the descriptions to follow. At the very least it warns against over-simple interpretation of the fragmentary data that, too often on Iron Age sites, is all that remains. At best, it opens up new avenues of social interpretation, but these matters must be reserved for later consideration.

Descriptions of the individual circular structures

In the section to follow all circular structures are illustrated and briefly described. Their general location in the fort is shown on Fig 4.5. No attempt is made here to discuss the phasing of the structures or their spatial relationships to contemporary features: these matters are dealt with separately and in detail below (Section 4.3). Layer numbers are, however, given in brackets, where appropriate, so that the relationship of the structure to the stratigraphy can be checked against the matrix diagrams. The somewhat extended treatment given to the circular structures is justified on the grounds that the corpus of house plans retaining, as most of them do, their contemporary stratigraphy, is unique and deserves to be presented in full.

CS2. Circular house: 1978/1986 (Fig 4.11)

The building CS2 was partially uncovered in 1978 the rest of it being exposed in 1986. The new evidence has called for a reassessment of the 1978 records and a modification to their interpretation. The building was constructed on an artificial platform (F67) created by cutting into a thick chalk spread on the west side (552/1613) and the edge of the quarry hollow on the east. It was immediately preceded by a dark brown silt (547A) which, over much of the area, served as the floor surface when the building was first constructed. (In the first volume (p. 62) layer 547 was regarded as being later than CS2. This cannot be so and to correlate with the complex and well preserved stratigraphy to the north it has now been subdivided, 547A being earlier than CS2 and the same layer as 1583 exposed in 1986. It is likely that some of 547A was removed during the terracing process exposing 552 and 549 which served as a floor level early in the life of the building.)

The only surviving structural elements were the two doorposts and the doorsill. The post-holes (ph 3663 and ph 3667) were presumably cut from the level of 547A (though were not observed until 551 had been removed). The holes measured 0.6 and 0.5 m in diameter and up to 0.9 m deep. The 'voids' were 0.5 by 0.34 m (ph 3631) and 0.36 by 0.25 m (ph 3658) and both were filled with loose brown silt. The packing, of chalk rubble, had been sealed by the chalk spreads around the door.

Between the doorposts was a slot (G108), 1.8 m long, 70 mm deep and up to 0.3 m wide, which would have held a wooden doorsill. The lack of evidence for a wall has been discussed in Volume 1 (p. 58), but its position is closely delineated by the edge of 532 and 1518 especially the gap between 552 and 532 and between 1518 and 1574.

Deliberately laid chalk floor surfaces survive only close to the door. During the first phase of use the surface of 547A and any underlying chalk spread exposed by the terracing, served as the floor and patches of daub and occupation debris were trampled on the surface (548). On the surface of the silt the hearth (550) had been constructed. It was trapezoidal in shape, 0.9 by 0.8 m, and was constructed on a base of burnt flints over which had been packed puddled chalk 80 mm thick, burnt grey during use.

Just inside the door were two overlapping chalk spreads (555 and 553) made up of rounded chalk lumps puddled tightly together. The surface was smooth and trampled.

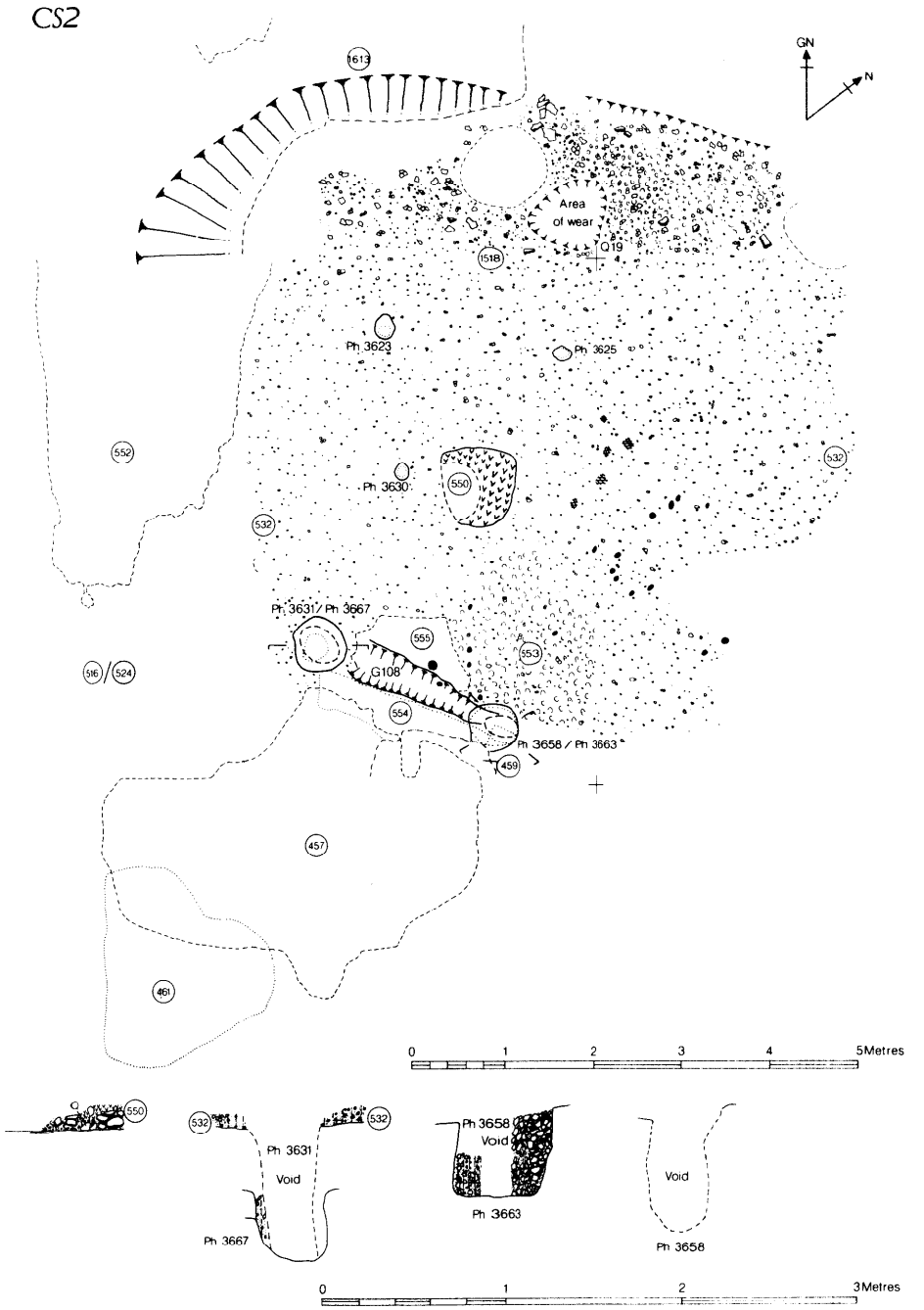


Fig 4.11

Outside the door a narrow spread of chalk (554) had been laid against the sill. About 2 m to the south was a contemporary tip (461) thrown down and packed tight to fill a hollow in the worn path leading to road 6. Overlapping both, another chalk spread (459), composed of blocks (30–80 mm in size) packed hard in a puddled matrix, had been laid. Over this a thin occupation deposit (548) occurred as intermittent patches merging to 458, a light brown chalky silt, south of the house. (This silt is equivalent to 547B and was not distinguished from 547A where both overlay each other with no intervening chalk spreads or occupation layers.) This silting separated two phases of occupation in CS2.

The second phase was represented by a chalk spread (532/1518) 0.2 m thick extending over the whole of the floor surface and extending across the doorsill to form part of the threshold outside. The layer consisted of subangular blocks (80–120 mm) in a matrix of grey silt. The voids of the doorposts were visible through this implying that the door was still functioning. The fact that the hearth was not replaced in this later phase indicates a change of use. Outside the door another patch of chalk (457) was dumped over the worn hollow at the junction of the threshold with road 6.

CS25 (F167). Circular house: 1983 (Fig 4.12)

Little of this structure was exposed since it had been sealed beneath rampart period 3 (965) and only part of the rampart tail was removed.

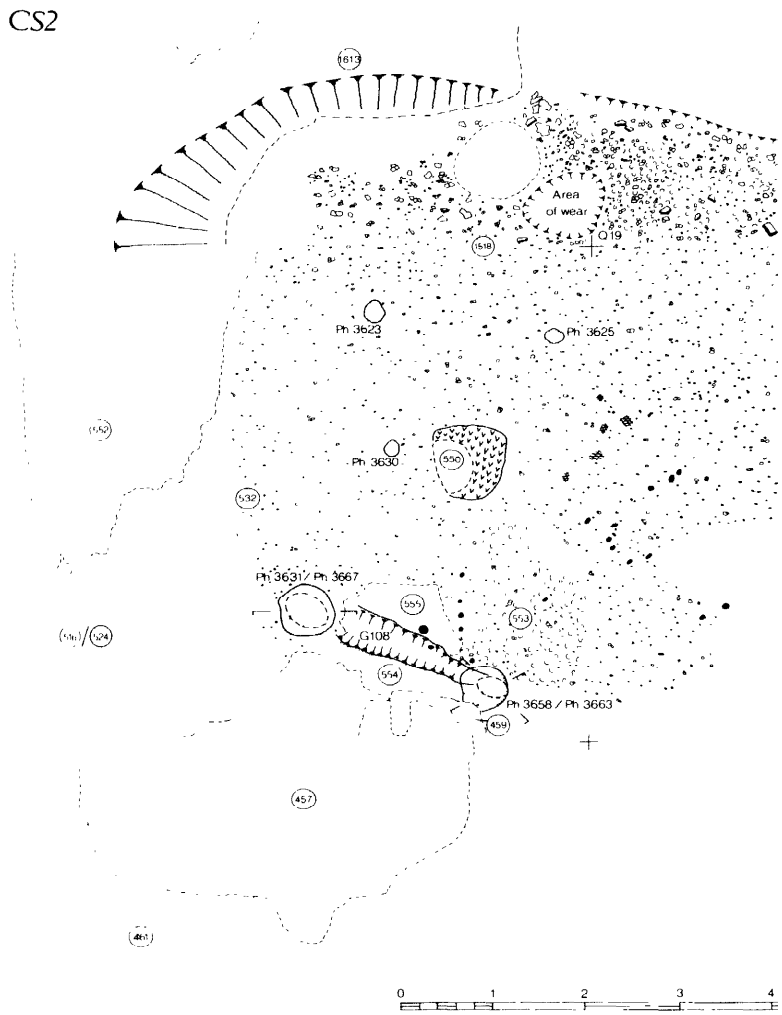


Fig 4.12

The principal surviving elements were two doorposts phs 8801 and 8802 and part of the wall slot, G264. The filling of ph 8801 preserved a wedge-shaped void 220 mm long and 8–110 mm wide suggesting that the timber of this post had been split radially from a tree trunk. The void in ph 8802 was circular 240 mm in diameter. Both voids were filled with crumbly brown soil with some charcoal and burnt flints. The post packing in both cases was of small angular chalk lumps packed tightly in a matrix of puddled chalk. Ph 8877 which was cut by ph 8802, is not certainly related to the house. The doorway faced east and the house therefore backs on to the phase 2 rampart.

A short length of the wall slot (G264) was exposed. The excavated section consisted of two conjoined oval slots with near-vertical sides, filled with dark brown silt mixed with quantities of daub and burnt flints. While it is possible that each sector took the base of a vertical plank the double indentation in the base of one suggests a wattle wall with each of the slots taking a pair of stakes.

Little of the interior was exposed but the contemporary floor level (1040) was found lying on the natural ground surface and sealed beneath the rampart material. It was composed of discontinuous chalk lenses intermixed with patches of charcoally occupation debris not exceeding

CS26 (F166). Circular structure: 1983 (Fig 4.13)

A possible circular structure most of which has been destroyed by the digging of the quarry hollow F135 and the creation of the terrace F127.

All that survived was a terrace scarped into the natural chalk to a depth of 0.1–0.4 m and estimated to be approximately 6 m in diameter. The chalk surface was worn and trampled presumably representing the floor. It was sealed by a layer of occupation material (1045) consisting of dark brown clayey soil mixed with small lumps of chalk, angular flints (some burnt) and numerous flecks of charcoal. The layer was rich in pottery and daub of unidentified type but likely to be oven debris. At a later date the area had been levelled with a deliberate infilling of angular chalk blocks (150–200 mm) puddled together (1044).

CS27 (F165). Circular structure Stake-built house?: 1983 (Fig 4.14 and Pl 45)

Circular structure partially terraced into the western edge of the quarry hollow F135: 5.7 m in diameter. It lies immediately beneath CS28.

The door was originally represented by a pair of double posts, ph 8849/8848 and ph 8883 (the fourth being partially cut away by ph 8845). Phs 8848 and 8883 took the main doorposts while ph 8849 and its equivalent were shallow to take fronting timbers. No voids survived. Ph 8845 may have been a replacement for ph 8883. Between the doorposts was a shallow gully, G257a, 270 mm wide

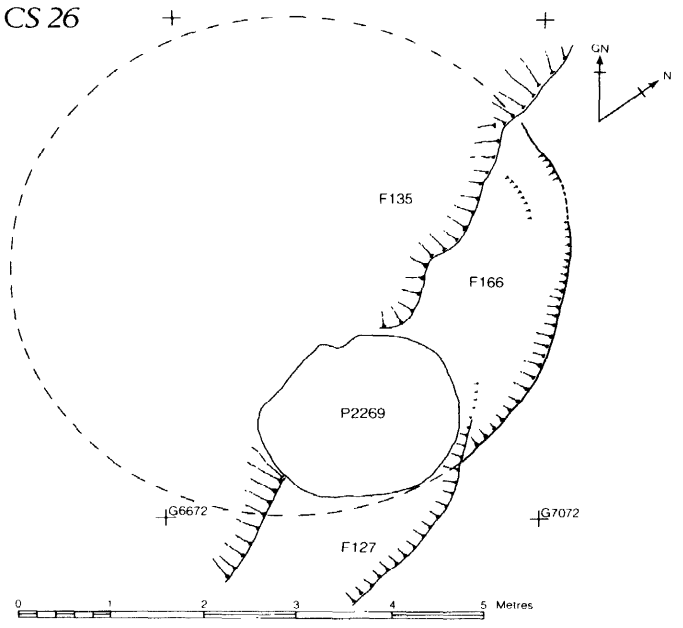


Fig 4.13

and 20–30 mm deep presumably for a horizontal timber groundsill.

The wall of the house was marked partly by the line of its scarped terrace on the west side and partly by irregular lengths of slot (G259 and G257b) extending from the doorposts. The slots varied in profile from U- to V-shaped and in width from 120-250 mm: the maximum depth was 120 mm. There was no evidence to suggest the form of the wall but in all probability it was stake-built. The filling of the slots was the same as the overlying silt (911). Several small post-holes, roughly on the wall line, may have been associated with the structure (phs 8800, 8886, 8882) but these could be earlier and unrelated. Ph 8885 is significantly larger and probably pre-dates the building. A few similar post-holes inside the house may be contemporary.

The floor of the house was the irregular, but worn, natural chalk. Inside and probably contemporary with its use, was a shallow hole (ph 8857) largely filled with a hoard of iron objects consisting mainly of harness trappings (hoard 3, Volume 5) possibly representing a votive foundation offering. Where the floor had been protected by the bank belonging to CS28, the original occupation deposit (1025) survived. It consisted of a chalk-free, dark greyish-brown silt with broken flints (some burnt), charcoal and other occupation debris. It probably resulted from natural erosion processes working on the occupation accumulation after the superstructure had disappeared.

CS28 (F136) and GC37. Circular stake-built house: 1983 (Fig 4.15 and Fig 4.136 sections 74 and 75)

This structure immediately overlay CS27 and was closely similar in plan suggesting that it represented a rebuild of the earlier house. The new building, measuring 5.8 m in diameter, consisted of a door structure and a wall of stakes.

The doorposts were represented by two deep inner posts (phs 8768 and 8770) both oblong in shape measuring 0.38 and 0.48 m in depth respectively. The voids for the vertical timbers were well preserved showing that the original timbers had been wedge-shaped and therefore presumably split radially from a tree trunk. They measured 350 mm long by 50 mm increasing to 120 mm in width. They were packed with rammed chalk rubble in a matrix of grey silt. The packing was continuous with that of the smaller post-holes in front (phs 8769 and 8771) each of which retained the voids of small circular upright timbers 180 mm in diameter: these post-holes were 0.35–0.4 m in depth. A horizontal timber doorsill had been laid between the posts in a slot (F157) 230 mm wide and 120–200 mm deep.

The wall of the house was constructed on a ring of stakes set at intervals of 0.25-0.3 m. Most of them were 60-70 mm in diameter and were placed in holes rammed into the underlying silt sometimes deep enough to penetrate the underlying natural chalk. A selection of the stake-holes were sectioned: 12 were cut parallel to the wall and four at right angles to it. The right-angled sections show that the stakes sloped markedly inwards. This suggests that the wattles may have gone upwards and inwards to join together in the centre forming a beehive-shaped structure. Whatever the exact form of the structure it is most likely that the vertical stakes formed the framework for a wattle wall.

Around the outside of the wall was a bank beyond which was a penannular gully. The bank was composed, on the north and west sides, of packed chalk (1028) which had been laid immediately outside the line of stakes and deliberately rammed. A similar packing (1020) was noted on the south-east side. Overlying this was the main body of the bank (1027) comprising a mixed dump of brown silt and chalk lumps. On this, mainly on the west side, large angular chalk lumps and flints (up to 180 mm) had been packed in a chalky brown silt (1026). The bank was quite loose and sloped down from the wall of the house to the inner edge of the gully (G248).

The penannular gully surrounded the house and its terminals were inturned towards the doorposts. It varied in width from 0.7 to 1.15 m and in depth from 0.6 to 0.25 m. The profile was generally U-shaped though the sides had a much gentler slope close to the front of the house. Its purpose was most likely to act as a sump for rain-water.

Inside the house several floor levels were distinguished. The earliest floor was essentially the underlying silt (911) with rounded chalk lumps (up to 80 mm) and occasional broken flints trampled into the top of it (950). The chalk was not very densely packed and was especially sparse towards the walls. In the centre was a hearth (F163), roughly oval, formed of a base of flint nodules upon which had been placed a layer of puddled chalk 30–70 mm thick. The surface was smooth, flat and discoloured grey from burning to a depth of 5 mm. Below this, and around the edges of the hearth, it was burnt pink to a depth of 30 mm.

Over this floor was a thin occupation deposit (949) of dark brown ashy silt with occasional flecks of burnt clay and charcoal but with very little pottery or bone. Isolated patches of chalk were spread as patching before the second floor was laid. This was composed of tightly packed lumps of chalk (10–30 mm) in a brown silt matrix (948) 20–50 mm thick except in the centre over P2308 where it was up to 130 mm thick. The surface was smooth and well worn. It was best preserved in the centre of the house and may never have extended as far as the wall. Some traces of burning were noted but there was no properly constructed hearth to replace F163. Lying on the second floor was an accumulation of occupation debris (892) consisting of a compact greyish-brown silt

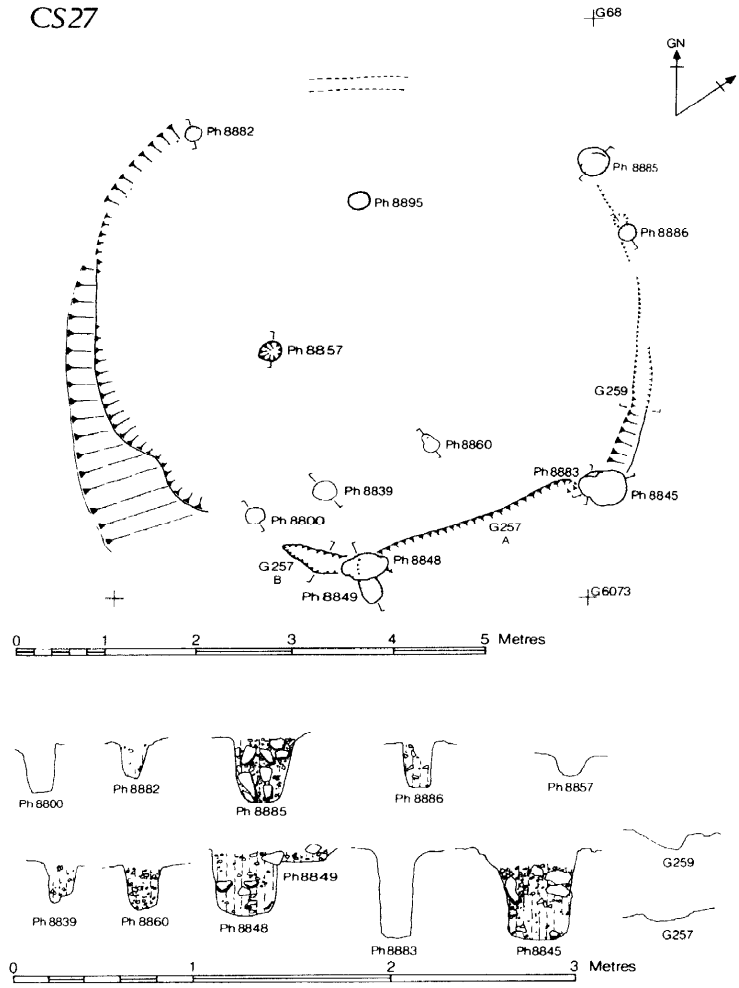


Fig 4.14

with dark smears from fine fragments of charcoal, occasional rounded lumps of chalk, burnt flints and other occupation debris such as burnt clay, pottery and bone.

Outside the house a series of chalk spreads were laid to consolidate the approach to the door. The earliest (1015) was a spread of small rounded lumps of chalk with a very worn surface. This was followed by a more substantial spread (891) composed of subangular lumps of chalk, packed in a fine chalky matrix, with a hard, smooth, well-trampled surface.

Further from the door, in the 'courtyard area' in front of the house, further chalk spreads were laid to consolidate the surface. The earliest (1017) was probably equivalent to 891 being most like it in texture and appearance. Overlying this was a second compacted chalk spread (1016) of large angular chalk lumps in powdered chalk. The surface was worn smooth and had been puddled.

After the abandonment of the house the hollow was filled gradually with deliberate tips of chalk and rubbish (889, 899, 900, 905, 919) and natural silting (851, 862, 864, 880, 893). A similar sequence filled the penannular gully (G248).

CS29a and b (F131 and F161). Successive circular houses: 1983 (Fig 4.16 and Pl 40)

The two superimposed houses occupied the quarry hollow F128 but only about a third of their area projected into the excavated area. They were constructed on the surface of the clayey silt (1024) which had accumulated in the bottom of the quarry hollow.

The fist house (CS29a)

The door lay on the south side of the house. Four post-holes were identified of which two, phs 8781 and 8854, are most likely to have represented the main door. They were 0.7 m deep and 0.6 m in diameter. Traces of a circular post void was recognizable in ph 8781. The two other posts (phs 8715 and 8806) were of very unequal sizes. Although ph 8715 is deep, together they hardly make a door pair. The simplest explanation is that ph 8806 post-dates CS29 but pre-dates CS30 and is not part of a house structure while ph 8715 is part of an earlier (post?) structure.

The line of the wall was indicated on the east side by a shallow slot (G251) the filling of which contained much

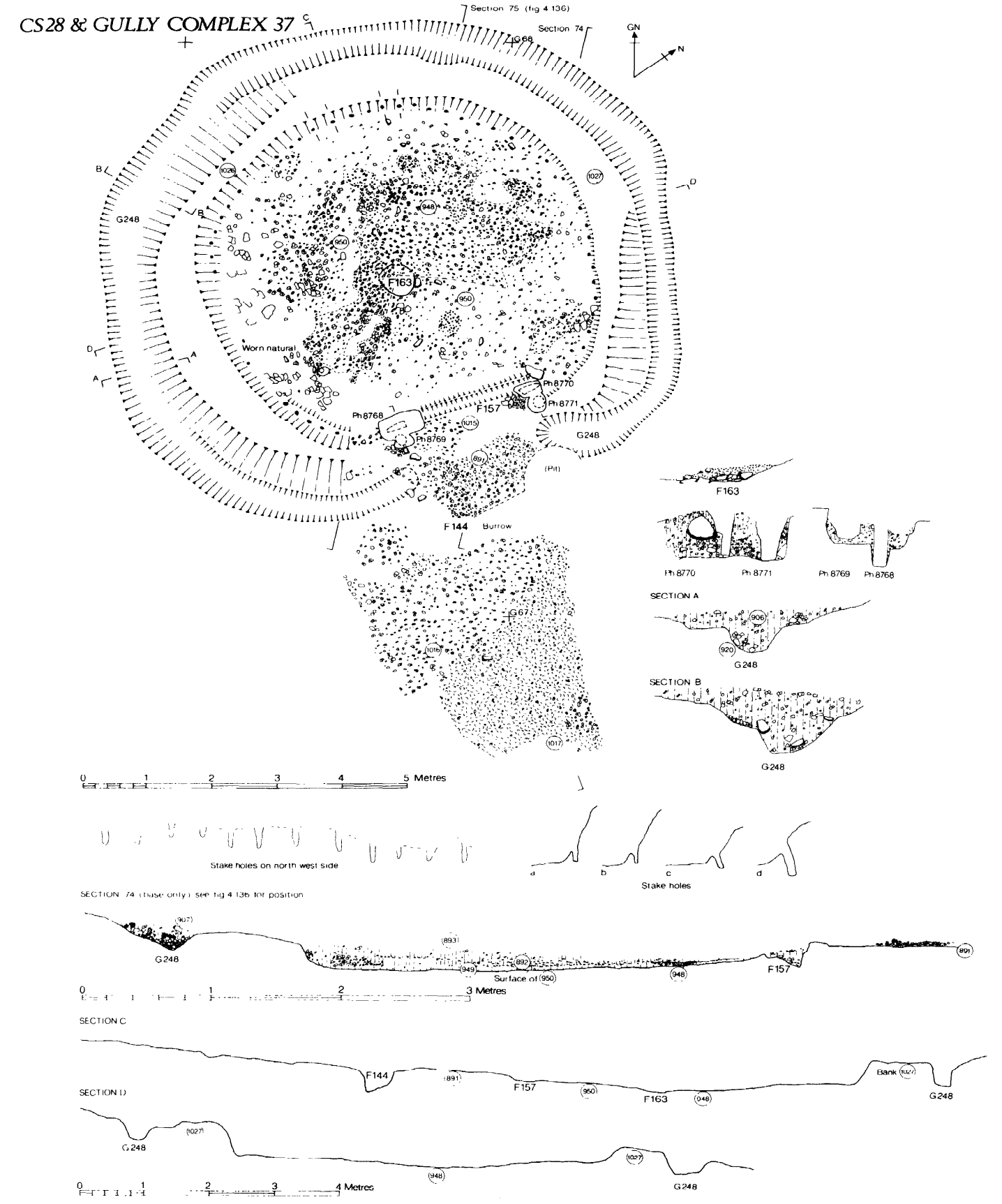
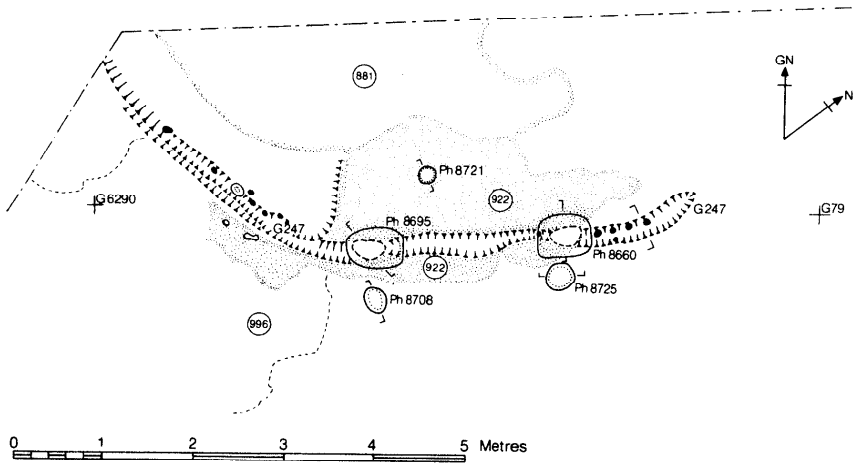
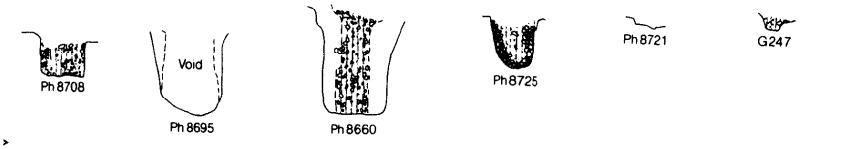

CS28 & GULLY COMPLEX 37
Section 75 (fig 4.136)
Section 74
GN
N
G66
G248
F163
Worn natural
Ph 8770
Ph 8771
F157
Ph 8768
Ph 8769
(Pit)
F144
Burrow
G67
F163
Ph 8770
Ph 8771
Ph 8769
Ph 8768
SECTION A
G248
SECTION B
G248
0 1 2 3 4 5 Metres
Stake holes on north west side
a
b
c
d
Stake holes
SECTION 74 (base only) see fig 4.136 for position
G248
Surface of (950)
F157
0 1 2 3 Metres
SECTION C
F144
F157
F163
Bank
G248
SECTION D
G248
G248
0 1 2 3 4 Metres

Fig 4.15

CS29a

CS29b





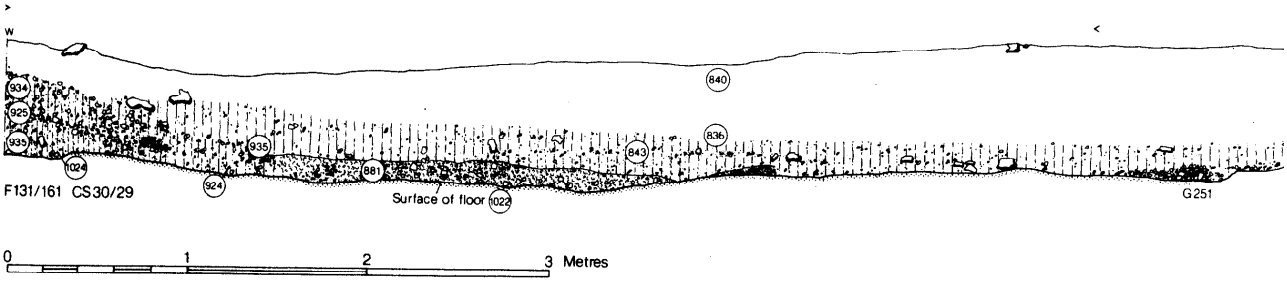


Fig 4.16

finely comminuted charcoal which may have resulted from the burning of the wall. A similar slot survived to the west (1024).

The floor was composed of a discontinuous layer of rounded chalk lumps (1022) trampled into the underlying clay and continuous with the packing of ph 8781. In one place a hole in the chalk had been patched with angular flints (1046).

Overlying the chalk floor inside the house was a thin layer of fine brown silt devoid of occupation debris (985). After the building had fallen into disuse a layer of chalky silt (924) accumulated over it.

Outside the door to the south was a substantial spread of angular chalk lumps in a puddled chalk and silty clay matrix (1018). It was very compacted having a well-trampled surface. It seems to have been deliberately laid to create a path leading diagonally to the door of the house. In one place a large number of stake-holes had been cut through it.

The second house (CS29b)

This building lay above CS29a in quarry hollow F128. Only part of it had been exposed in the excavation. Before the construction began a dump of chalk and silt (1019) was laid to level the ground.

The door lay on the south side: it comprised two pairs of post-holes. The inner (main) doorposts (phs 8695 and 8660) were oval in plan 0.6 by 0.45 m and 0.65 m deep. The positions of the original timbers were clearly visible as soil-filled 'voids' D-shaped in plan. It is possible therefore that the doorposts were trunks split in two. In ph 8695 was a quantity of charcoal, probably the remains of the actual doorpost, identified as oak. The two fronting (porch) posts (ph 8708 and 8725) were smaller, only 0.29 and 0.18 m in diameter and 0.28 m deep.

The line of the wall was marked by a narrow slot (G247) which was clearest where it cut through the natural chalk. In the base were several stake-holes. The fills of the stakes contain charcoal and daub possibly derived from the walls.

Inside the house the earliest level (882) was a firmly compacted dark brown clayey silt with small lumps of chalk trampled into the surface. This probably represents the first floor. Over this was laid a second floor (881) composed of heavily compacted chalk rubble (up to 80 mm) puddled together in a layer 30–100 mm in thickness: it was discontinuous.

When the house was abandoned the floor was sealed with a naturally accumulating brown silt 843 and 935.

The area immediately in front of the doorsill had been consolidated on several occasions. The first layer was a trampled mass of chalk (1003) 20–100 mm thick. Over this had accumulated a thin layer of silt (1004) before a second chalk spread was laid (922) on both sides of the doorsill and sealing the packing but not the voids of the doorposts. This was composed of small chalk fragments firmly compacted in a matrix of puddled silty chalk. It varied in thickness from 30–150 mm.

Outside the house to the south the ground had been consolidated with a dark brown clayey silt mixed with angular chalk (1012) 0.15–0.2 m thick. This served as the base for a thin layer of puddled chalk (996) which had been heavily worn.

CS30 (F143). Open circular working area: 1983 (Fig 4.17)

CS30 comprised an apparently unenclosed working area of roughly circular shape terraced into the rear slope of the rampart.

The earliest feature on the site was P2204, followed by P2296 which had been cut through a deposit of fresh chalk rubble (984), well compacted with a trampled surface. Above the chalk had accumulated a discontinuous occupation layer of dark grey silt containing flecks of daub, charcoal and burnt flints (982). Cutting this was P2297 and a post-hole 8782. Contemporary with this layer was a pale brown silt (988) containing a quantity of animal bone.

Over this area had been laid a chalk floor (956), discontinuous and uneven, made up of compacted dirty chalk in a matrix of silt. Several post-holes were cut from this level (phs 8762, 8763, 8764, 8766 and 8773 as well as two pits, P2191 and P2206. P2285 may also be contemporary with this activity. On the chalk surface was built a small oven (F142) oval in plan, measuring 0.5 by 0.4 m across and formed of a daub wall built around a smoothed chalk base. Within the oven was a thin dark grey ashy layer with no charcoal.

Overlying this was another chalk spread (915) composed of chalk lumps and flints packed tightly together and trampled on the surface. The layer extended to the south and east where it was found to be continuous with a mass of chalk rubble (981) dumped to level the area. One small post-hole, ph 8718, was cut into the floor (915).

Contemporary with this floor was a hearth and an oven. The hearth (F139) had been damaged but the major elements could be discerned. It was roughly oval in plan and built of a basal layer of flints over which had been packed a layer of daub: both flints and daub had been subjected to heat.

The nearby oven (F140) was circular, 1.0 m in diameter with a flue on the east side. The walls were composed of flints set in a pale yellowish-brown chalky daub baked red in places. The walls had been built on a puddled chalk floor 80 mm thick, its surface burnt to a dark grey. Within the oven, sealing the floor was a dark grey-brown crumbly silt containing burnt flints and quantities of charcoal. Outside the oven to the south and west were large quantities of weathered daub, presumably the collapsed superstructure of the oven. Dumps of occupation material and daub (907, 919, 905, 967) thrown into features immediately to the south may have derived from this phase of occupation.

Since no doorposts were found, nor was there any evidence of walls enclosing the area, it seems probable that the floors represent an open-air working area.

The layers and features described above, within F143, were sealed by a layer of occupation debris consisting of dark greyish-brown silt containing a good deal of charcoal as well as daub, pottery and bone. A similar deposit (979) was found to the south and east over the chalk spread (981).

CS3la and b (F127). Circular house, rebuilt: 1983 (Figs 4.18 and 4.19 and Pl 43)

CS3la and b were the latest house structures built in the quarry, F135, on a roughly level terrace cut partly into the natural chalk and partly into the quarry hollow fill (916 and 917). Some of the dumps of chalk in F136 may have been deliberate levelling and consolidation prior to the erection of the new structure.

The first house (CS31a)

The house measures 7.4 m in diameter and shows evidence of two distinct phases of building. Much detail has, however, been destroyed by a large tree root and by the burrowing activities of rabbits working out of the

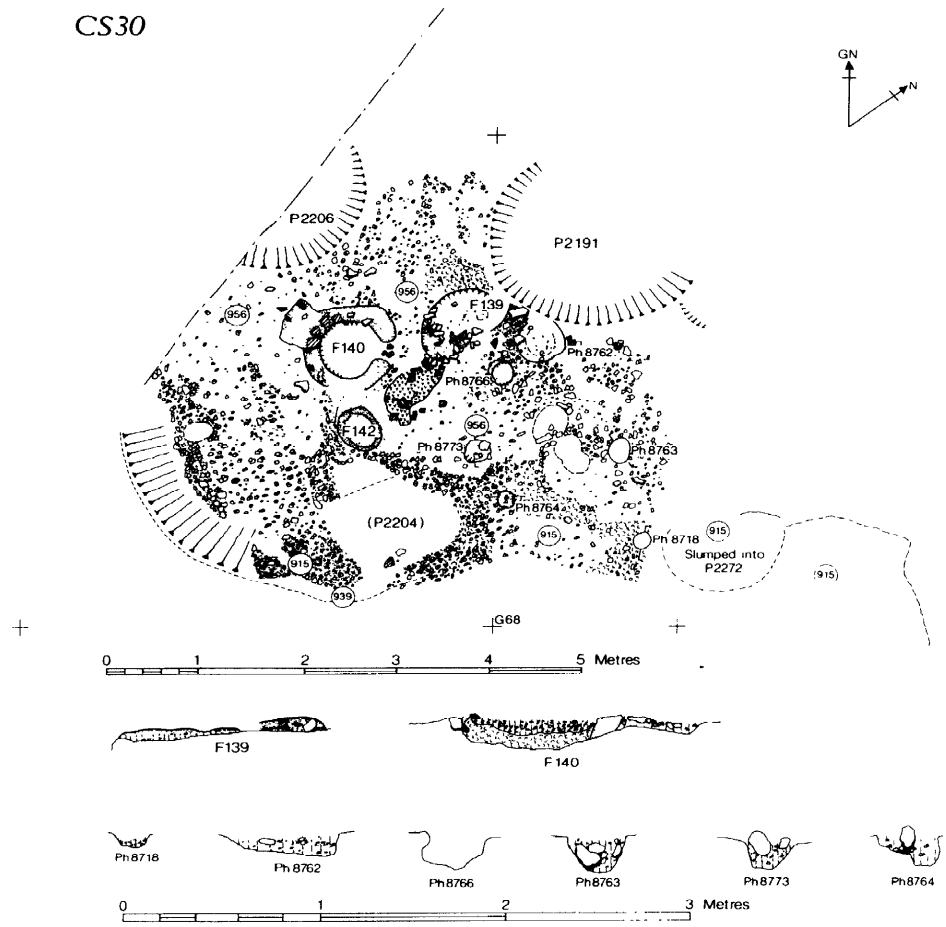


Fig 4.17

warren (warren J) which had been constructed across the filling of the house.

The main structural elements were the doorposts which, in the early phase appear to number only three. The door faced south and on the west side there was only one post-hole (ph 8767). As first exposed it appeared to be only a void 100 mm in diameter with the chalk make-up in front of the door (978) packed around it. However, upon the removal of this layer the more substantial post-hole (separately numbered ph 8835) was found measuring 0.6 m in diameter. The packing, of subangular chalk lumps rammed in tightly was continuous with the chalk threshold (978). On the east side of the door were two posts recognizable as voids: ph 8774 was 90 mm in diameter and was lapped by the chalk spread (978) while ph 8720 behind was represented by a void 120 mm in diameter with the chalk sill (980) packed against it. The shape of the post-holes in which these two verticals had been placed was not defined because the quarry silts through which they were cut were not fully examined at this point.

The position of the timber doorsill was represented by a shallow slot, F141, 2.0 m in length. From the outline preserved by the chalk spreads around it it seems to have held two planks of differing widths placed end to end. Packed against the outside was a chalk sill (980) formed of large angular blocks of chalk in a silt matrix. Beyond this was a more extensive deposit of deliberately laid chalk (978) composed of subangular blocks *(c* 80 mm) in a grey silt and chalk matrix. The surface had been hardened by puddling and wear. The form of the wall is not clear. In all probability it was based on vertical timbers set around the inner (lower) edge of the scarp but no trace of timber emplacements survives.

Inside the house the first floor level (955) was essentially the worn top of layers 981 and 977. It occurred mainly in the centre of the house (the natural surviving as the floor along the east side) and was composed of small chalk lumps trampled in a matrix of puddled chalk and mottled clay. The surface was smooth and well worn. One small post-hole (ph 8646) cut the floor and it is possible that the pit 2269/2276 was cut from this level. P2271 probably dates to this early phase since a thin layer of chalk in the top fill is probably best correlated to the later floor surface sealing it. P2270 pre-dates P2271 and also probably belongs to the early phase or earlier.

Towards the centre of the floor was a large hearth, F138, square in shape with rounded corners, measuring 0.78 m across. It was left unexcavated but had probably been constructed on a flint foundation over which yellow chalky daub had been laid. The daub was reddened in the middle from the heat and in part has a blackened surface. Its smooth surface had been decorated with impressed circles 100 mm in diameter overlapping each other.

The floor level was sealed by an occupation deposit (954)

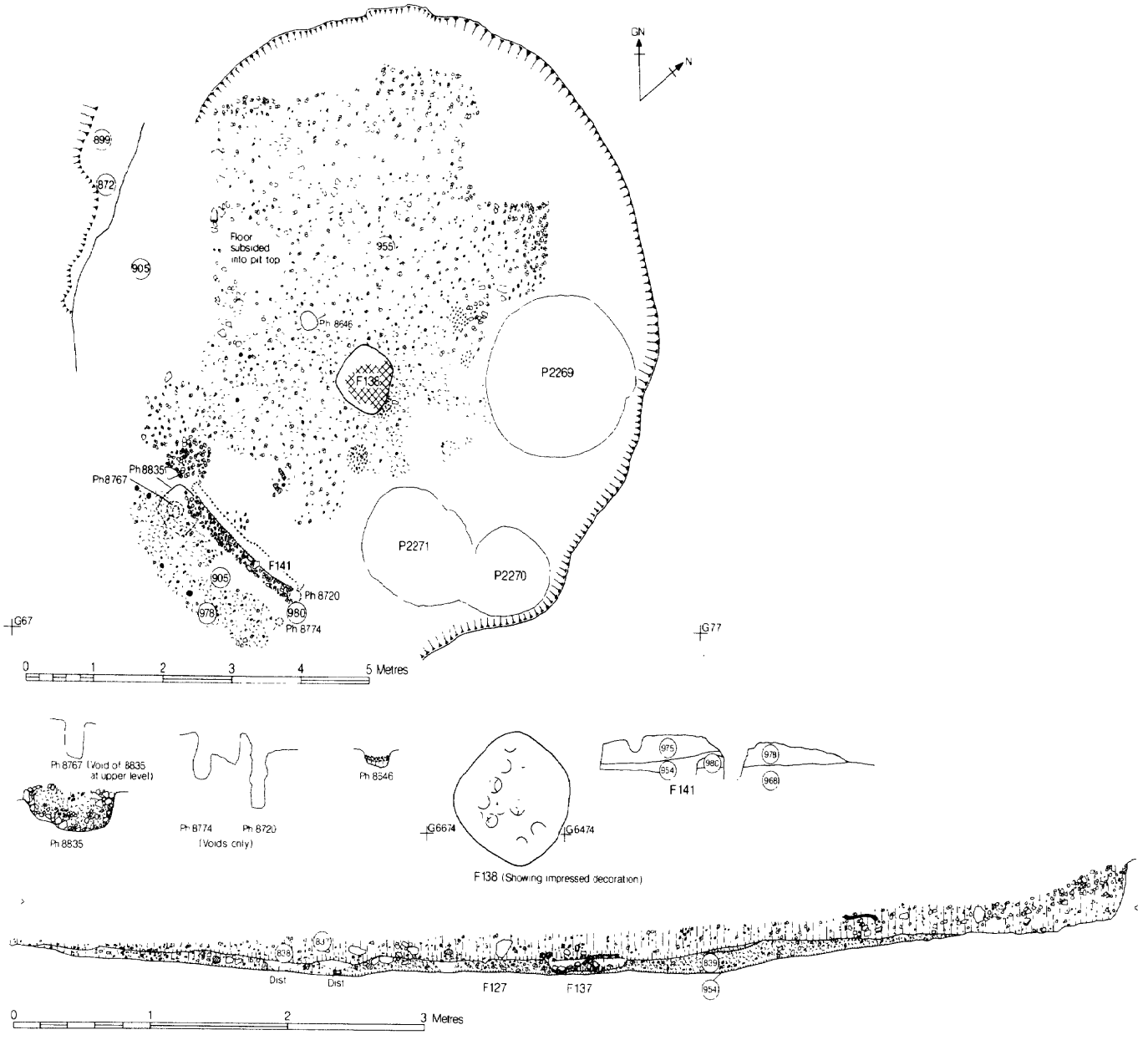

GN
N
899
872
905
Floor subsided into pit top
955
Ph 8646
F136
P2269
Ph8835
Ph8767
F141
905
978
980
Ph 8720
Ph 8774
P2271
P2270
G67
G77
0 1 2 3 4 5 Metres
Ph 8767 (Void of 8835 at upper level)
Ph 8835
Ph 8774
Ph 8720
(Voids only)
Ph 8546
G6674
G6474
F138 (Showing impressed decoration)
975
954
980
978
968
F141
838
841
839
954
Dist
Dist
F127
F137
0 1 2 3 Metres

Fig 4.18

Fig 4.19

c 20 mm thick consisting of a brown silt with intermittent patches of black, charcoal-rich soil and occasional burnt and shattered flints. This was sealed directly with the floor of the second house.

The second house (CS31b)

Immediately after the first house had been pulled down a new structure of comparable size and plan was constructed.

The doorposts belonging to this later house stood inside those of its predecessor. Two large doorposts survived (phs 8753 and 8780). Post-hole 8753 was 0.4 m deep and had supported a timber of triangular section the void of which could be clearly seen. The shape of the post suggests that it may have been made from a quartered trunk. Its pair, ph 8780, 0.58 m deep produced the void of a circular timber 0.25–0.3 m in diameter. Both posts were packed in position with rammed chalk rubble. Another triangular void, ph 8754, was noted next to ph 8780 but the timber had simply been placed on the surface and the chalk rubble of the threshold packed around it. This arrangement of three posts echoes that of the first phase house and presumably reflects a variant of the type of door normally encountered. The door threshold between and in front of the posts was composed of a narrow deposit of clayey puddled chalk (975) outside of which the ground had further been consolidated with a layer of chalk rubble (952) with a very well worn surface. It was thickest (0.4 m) closest to the doorposts, thinning to 0.15 m to the south.

No trace of the wall survived but the area inside the scarp had been severely disturbed by rabbits and closer to the door there was considerable tree root disturbance.

The floor surface (839) of the second house was laid over the occupation deposit (954) on the first floor. It was composed of chalk lumps *(c* 50 mm) but in places there were much larger lumps *(c* 100–200 mm). All were packed in a matrix of fine powdery chalk and yellow clay trampled to form a puddled surface. There had been some subsequent patching (951).

In the centre of the floor was a circular hearth 0.68 m in diameter (F137). It had been built in a circular pit cut 60 mm into the floor. In the pit had been laid a foundation of angular broken flints (50–100 mm) and some chalk, and on this had been packed a layer of pale brown daub 30–40 mm thick, burnt to a pinkish brown at the surface. Lying on this was a thin lens of black ash and charcoal over which a resurfacing of the hearth took the form of a thin skim of yellowish-red sandy daub was spread. In addition to the hearth there were some other patches of clay or daub (847) lying on the floor which had probably eroded from some other structure. Cutting the latest floor was a small post-hole (8729). The area of the house was finally sealed by a dark brown silt (838) containing chalk, flint, charcoal and occupation rubbish.

Beyond the scarp created by the house platform was a layer of chalk (953) cut by an irregular slot (G245). The chalk, which covers the area between the scarp and the slot, is composed of coarse angular rubbly chalk (80–200 mm) tightly packed with smaller lumps. The surface is extremely smooth and worn. It is continuous with layer 904, another chalk spread, which close to the house is heavily trampled but further away is more irregular and rough. It seems to represent a yard area around the house. G245 is a curved slot, narrow and irregular averaging 100–180 mm wide and 140 mm deep.

Interpretation of these features is uncertain. While the slot could in theory have taken the wall of either the first or second house (the stratigraphical sequence would allow either phase) the sharp change in level at the scarp would be unusual for the inside of the house. The possibility of G245 being an eavesdrip gully is superficially attractive but if so one would hardly expect the chalk between the gully and the wall line to be so worn. Moreover the gully looks as though it held stakes from the irregularities in its base. The question is best left open.

CS32. Circular house: 1982 (Fig 4.20)

CS32 was represented by a length of gully (G232) the curve of which, if continued would have had a diameter of *c* 6 m. The southern part of the house was not exposed largely because of the presence of a mass of tree roots. Much of its wall line was destroyed by later pits (P2116 and 2159).

The gully was in form a narrow slot 70–160 mm wide

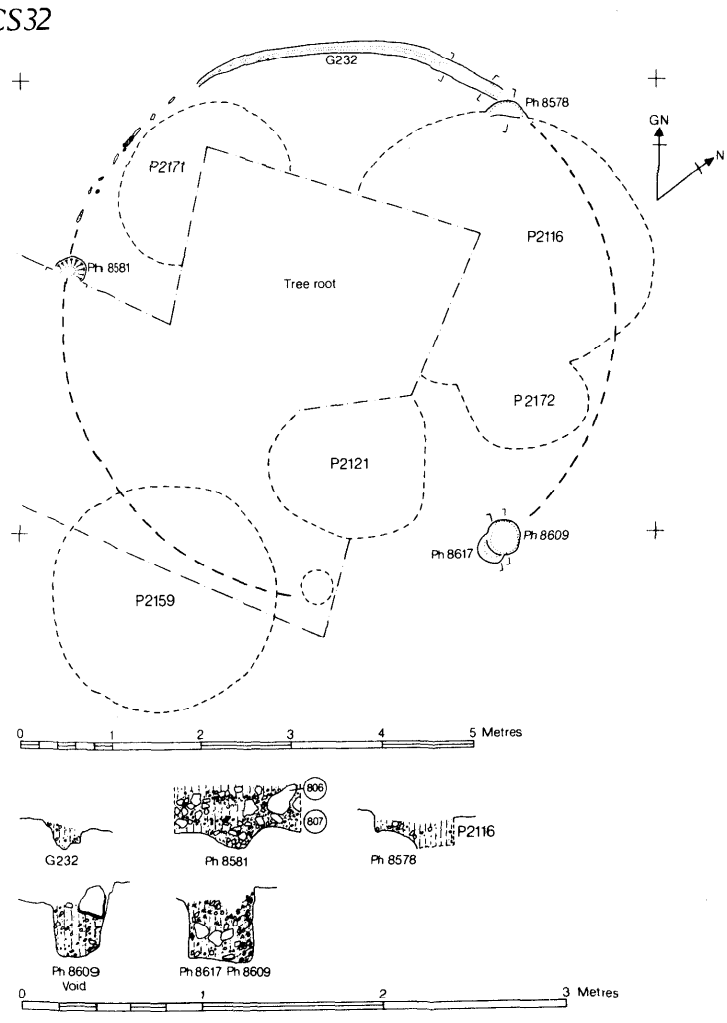


Fig 4.20

and 40–110 mm deep. The base was irregular and sub-divided into small circular hollows which, together with a few distinctive stake-holes on the west side, suggest that the slot held a stake-built wall. The fill was of dark grey clayey silt with a scatter of small pieces of chalk. There were two shallow post-holes on the wall line (phs 8581 and 8578) which are most likely to have held wall timbers.

The door is likely to have been on the south side with ph 8617/8609 being the eastern of the pair of doorposts (the western post lying in the unexcavated area). The post-hole was recut: both posts were 0.4 m in diameter and 0.34 m deep with clearly discernible 'voids'.

CS33 (F114) and GC36. Circular house: 1982 (Fig 4.21 and Pls 38 and 39)

Approximately two-thirds of this circular structure lay within the excavated area. The house platform had been created by partly scarping away the chalk rubble of the rampart (period 3) (layer 717) but over much of the central area the floor had slumped into the soft filling of P2159. The overall diameter of the structure is estimated to be about 9 m.

The wall was stake-built and was best preserved on the western side where the stake-holes could be clearly seen cutting layer 717. Most were 40 by 60 mm and were spaced regularly at an interval of 0.15 m. Over much of the rest of the area disturbances have destroyed the wall line but a few stake-holes on the south-eastern side may represent part of the wall.

The position and form of the door are uncertain though it probably lay on the north-east side where a number of broadly contemporary post-holes have been located. They are shown on the plan and their sections are given. The complex, ph 8608/8616, is the most likely to have been a doorpost. If so its counterpart would be somewhere beneath the unexcavated tree stump.

The floor (738) was composed of large blocks of chalk (up to 120 mm) in a matrix of puddled chalk. A smaller patch (802) crossed the wall line and may be of later date (there

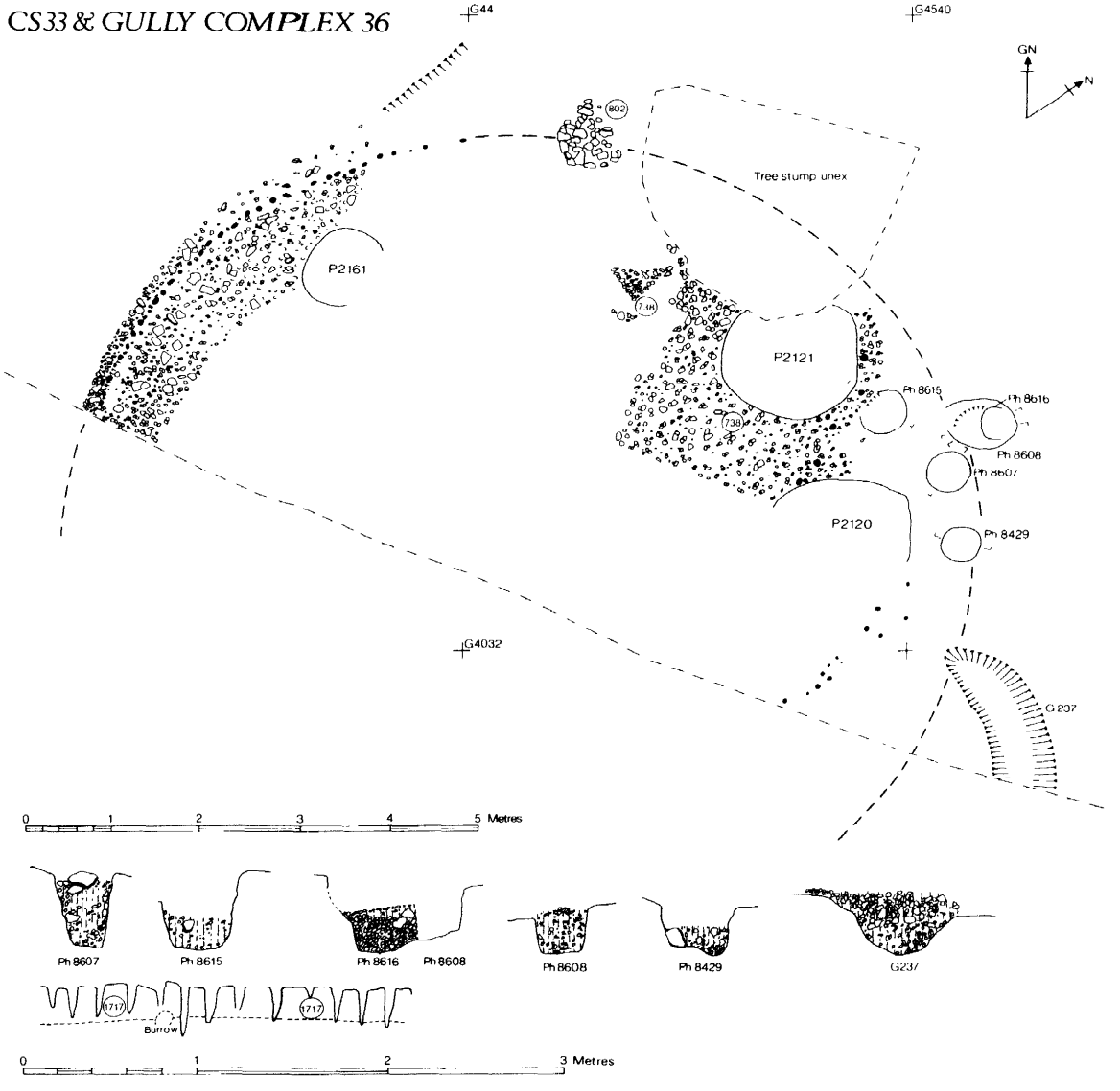


Fig 4.21

is much disturbance by tree roots in this area). Immediately overlying the floor was a clayey silt (799) containing some charcoal and burnt flints representing an occupation layer. This was sealed by a chalk spread (736) 50–60 mm thick consisting of small rounded chalk lumps (up to 50 mm) tightly packed in puddled chalk. It has a well compacted, trampled surface and was presumably a later floor surface which survived where it had slumped into the top of P2159. The floor may already have been subsiding during the use of the house. Over this was a spread of occupation debris (725) 10–20 mm thick incorporating much burnt material, pottery and fragments of metal and stone objects. Away from the hollow and the pit top a similar layer (721) occurred though not containing so much rubbish. The area of the house was sealed by accumulations of natural silt (719 and 724) together with flints which had tumbled off the ramparts (720 and 718). The gully (G237 = GC36) to the south-east of the structure may have been the end of a drainage gully flanking the southern side of the house. The gully was 0.7 m wide and 0.4 m deep and was filled with brown clayey silt with a moderate quantity of chalk. Exact contemporaneity with the house, though likely, cannot be proved.

CS34 (F133). Circular structure: 1983 (Fig 4.22)

CS34 was a circular area scarped into the material dumped to block the entrance in rampart period 3. It measured *c* 4 m in diameter.

The floor of the structure was composed of densely compacted chalk in a matrix of yellowish-brown silt (876). Where it was not disturbed by tree roots the surface was well worn and compacted. Around the perimeter of the floor the chalk became sparse and on the west it gradually merged with the underlying silt (885). In the centre of the floor was a small oval hearth (F134), measuring 0.45 by 0.54 m. It was constructed on the surface of the floor and consisted of a layer of small flints (up to 70 mm) covered with a chalky daub burnt reddish brown.

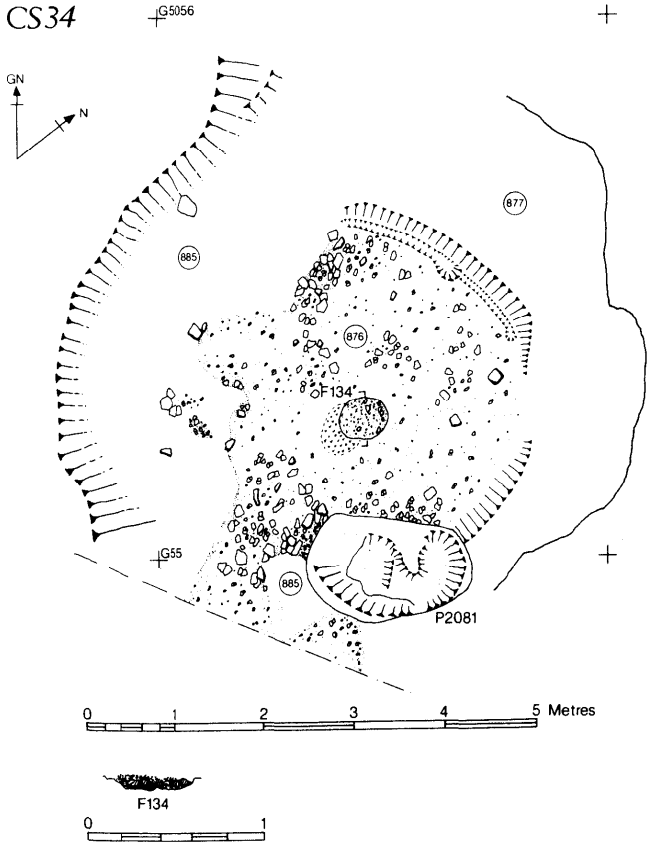


Fig 4.22

At the base of the scarp on the north-east was a shallow slot, 100 mm wide and 30 mm deep which represents the only structural element to survive and may have held the base of a stake wall or screen. There was no evidence of doorposts unless, as seems unlikely, the irregularities in the base of P2081 were the lower parts of post-holes. In all probability there were no doorposts in which case the structure cannot have been a conventional house and may only have served as a sheltered cooking or working area. Around the outside of the structure an earlier chalk spread (877) formed a hard surface.

The area of the structure was sealed by a thick layer of silt (870) which had accumulated naturally. A layer of chalk (859) above this may have been a later floor but this is unlikely in the absence of any associated structural features and was probably just a levelling of the hollow left by the terrace.

CS35 (F111). Circular structure: 1982 (Fig 4.23)

Only a small sector of this structure lay within the excavated area: it was represented by a shallow circular area terraced into the natural chalk and silt (77 1) utilizing the platform previously enclosed by GC11. Along the edge of the terrace was a shallow slot (G233) which had stake-holes along its edge at intervals of 150–200 mm. They measured 60–80 mm in diameter. Along the inner edge of the gully was a second row spaced at intervals of *c* 0.3 m the stakes being somewhat smaller, 40–60 mm in diameter. The gully itself was 0.18–0.4 m wide and up to 0.14 m deep: the outer edge was steep, the inner edge gently sloping. The fill was of a pale brown chalky silt. The small post-hole (ph 8420), which cuts the inner edge of the gully, may have held a wall timber.

To the east of G233, and running concentrically with it was another short length of slot (G234/G238), 0.3 m wide and 0.13 m deep. The fill was of chalky silt and there were a number of stake-holes associated with it. This second slot suggests that there may have been two phases to the house, though it could have represented an internal partition. The small post-hole (ph 8417) was apparently contemporary with the use of the structure.

For the most part the natural chalk served as the floor surface of the house but at the southernmost extent the preceding silt (771) with a scatter of chalk trampled into its surface was the floor. The house floor was sealed by (745).

CS36 (F201). Circular house: 1984 (Fig 4.24)

A circular terrace (F201) approximately 10–11 m in diameter had been scarped partly into the tail of the rampart and partly into earlier chalk spreads (1341, 1348). Before the house was built the platform had been levelled up with a layer of puddled chalk and rubble (1381) which had been thrown down to fill the top of a hollow created by the subsidence of the filling of an earlier pit (P2420). A similar layer of make-up (1197) extended to the edge of the scarp on the south side.

The main structural features were the doorposts, the complexity of which suggest that the posts had been replaced on several occasions. At the rear of each complex were two massive post-holes (phs 9181 and 9108) both of which, in plan, appear to be of two phases, A soil-filled 'void' visible in ph 9181A measured 0.2–

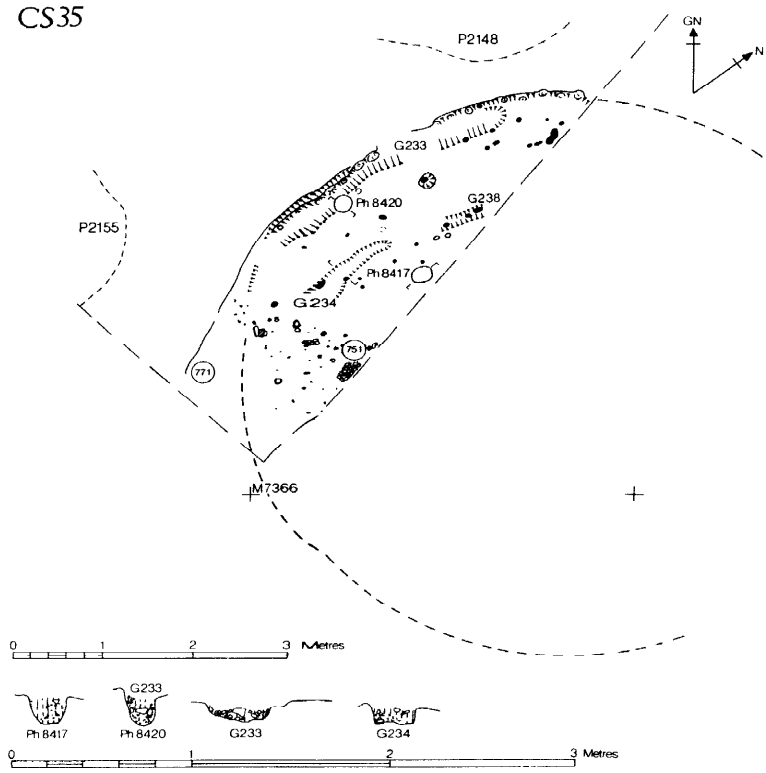


Fig 4.23

0.25 m in diameter: no equivalent could be traced in ph 9108. In front of these two holes were settings for shallower posts recut three or four times. Presumably these would have taken vertical planks of the type noted in many of the other houses: no timber positions were, however, seen.

Much of the position which would have been occupied by the wall was disturbed by root action; however, along the west side a length of wall slot (G273) survived. Its shallow depth and the degree of disturbance made it impossible to trace plank or wattle impressions. Part of the same gully, traced on the east side suggested that the house was 8.2 m in diameter.

Two separate phases of occupation could be traced. In the earliest the make-up layer (1381) served as the floor surface and was overlain by a thin layer of occupation debris (1380). Nearby were the remnants of two hearths. The southern hearth survived as a layer of flint nodules surfaced with daub. The northern hearth (1249), measuring *c* 1.3 m in diameter, had been of similar construction but had suffered from erosion and slumping into the top of an earlier pit.

These features were sealed by the second floor (1184) composed of sub-rounded chalk lumps (up to 80 mm) tightly packed in clay and chalk. Though in section layer 1184 appeared to be a heterogeneous mixture of tips of chalk and clayey silt, the surface was entirely of puddled chalk very worn and smooth. The edge of the layer, though very disturbed, reflects the approximate extent of the wall line. In the centre of this second floor was another hearth (F202) measuring 0.75 by 0.70 m. It was constructed on a foundation of broken flint nodules, tightly packed in a brown chalky silt upon which was a thin layer of puddled chalk packed smooth and burnt grey. Patches of burning on the surface of 1184 to the south may represent hot ashes raked from the hearth or from an oven (F211) a small fragment of which, made of yellowish-brown daub, survives nearby. Several small post-holes and stake-holes in the house may represent partitions or fittings.

Overlying the chalk floor (1184) and its associated features was a dark brown clayey silt (1183) containing moderate quantities of small chalk and flint as well as quantities of occupation debris. The layer probably represents natural silting mixed with occupation debris left after the house had been abandoned.

CS37. Circular stake-walled house: 1984 (Fig 4.25)

This building consisted solely of its structural elements cut into the natural chalk. There was no associated stratigraphy and no related internal features could be identified largely because of destruction caused by the large number of intercutting later features.

The doorposts, phs 9093 and 9152, were both of similar form and size measuring 0.5 m deep and 0.30 and 0.36 m in diameter. The fills were both similar consisting of subangular chalk lumps which had fallen (or been thrown) in after the posts had been removed. The wall slot (G281) defined a circular floor area 6.4 m in diameter. The slot was 100–200 mm in width and 100–140 mm in depth with a V-shaped profile. The positions of a number of stake-holes were clearly visible except for a length along the northern side where the stakes cannot have penetrated the natural chalk. The fill

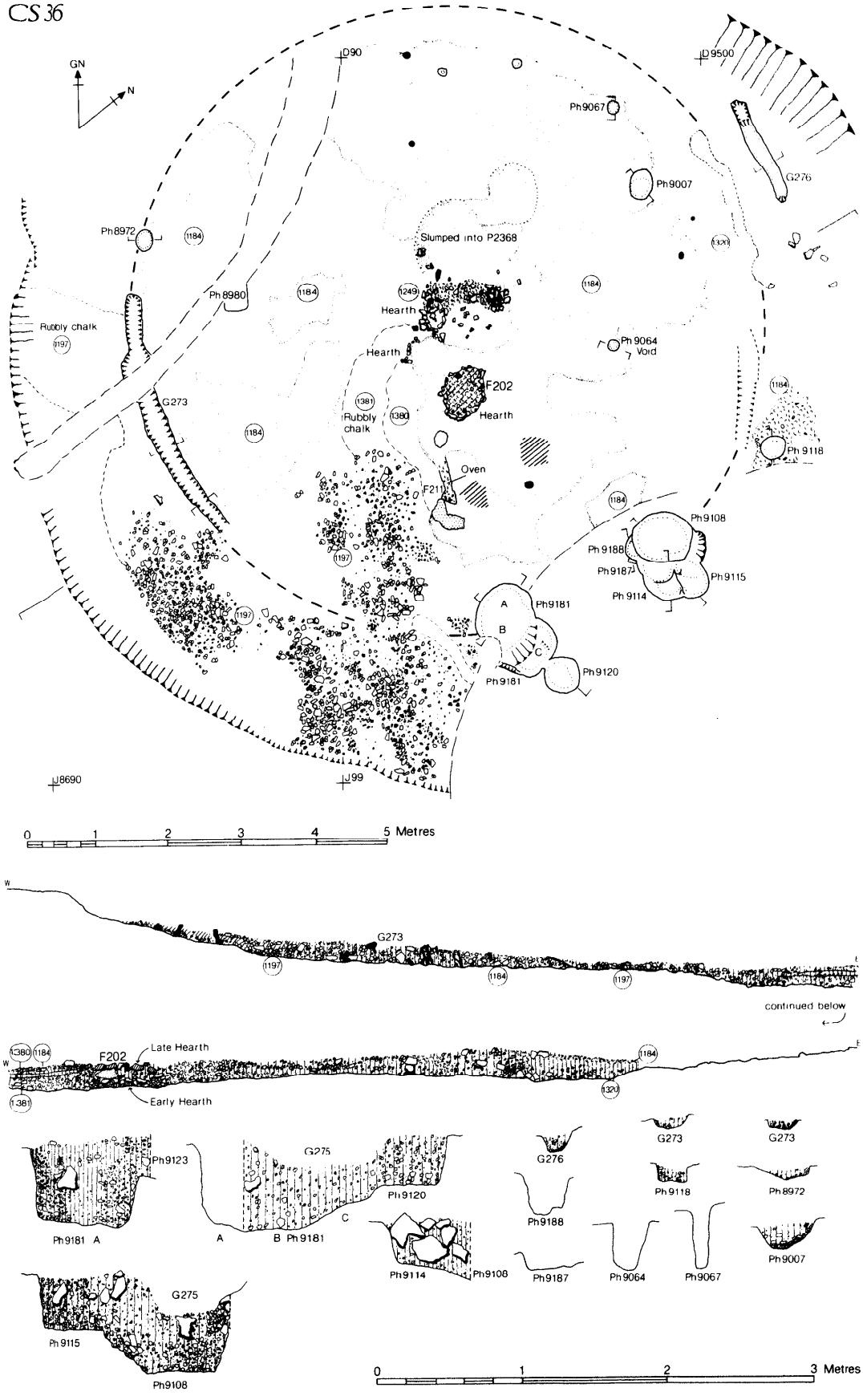

CS 36
GN
N
D90
D9500
Ph9067
Ph9007
G276
Ph8972
1184
Slumped into P2368
1320
Ph8980
1249
Hearth
Rubbly chalk
1197
Ph9064
Void
Hearth
F202
G273
1381
Rubbly chalk
1380
Hearth
Ph9118
Oven
F21
Ph9108
Ph9188
Ph9187
Ph9115
Ph9114
A
Ph9181
B
C
Ph9181
Ph9120
J8690
J99
0 1 2 3 4 5 Metres
W
G273
1197
1184
1197
E
continued below
1380
1184
W
F202
Late Hearth
1184
1381
Early Hearth
1320
E
Ph9123
Ph9181 A
G275
Ph9120
A
B Ph9181
C
G276
G273
G273
Ph9118
Ph8972
Ph9188
Ph9007
Ph9114
Ph9108
Ph9187
Ph9064
Ph9067
G275
Ph9115
Ph9108
0 1 2 3 Metres

Fig 4.24

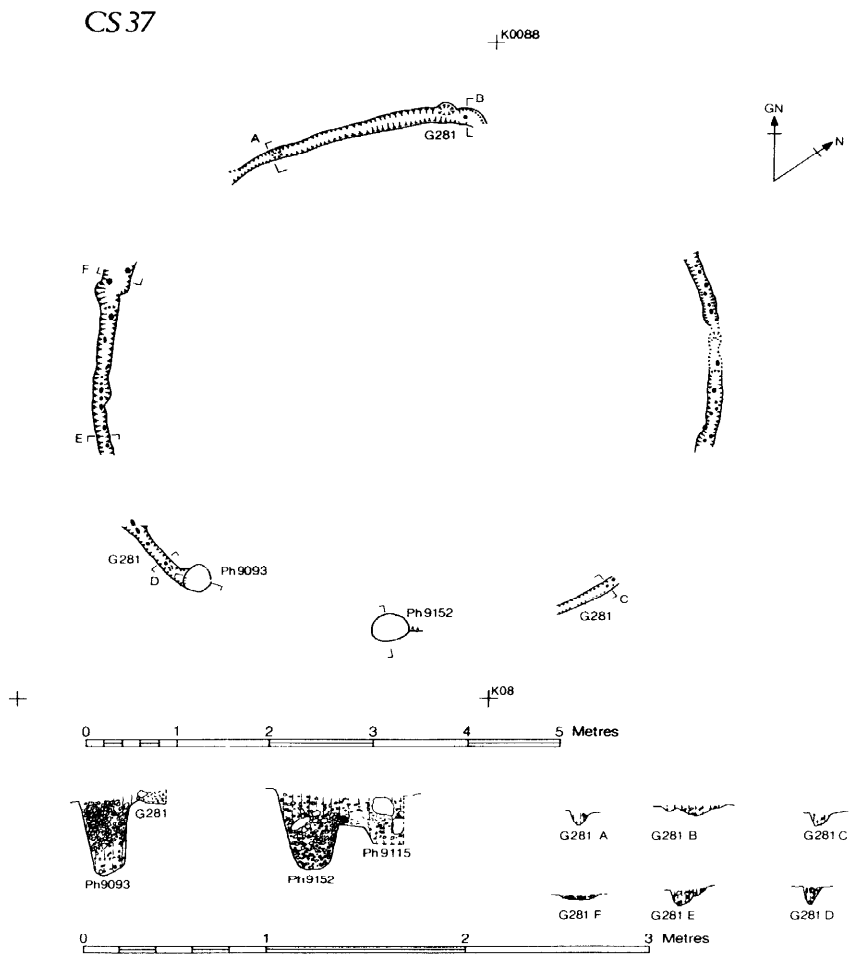


Fig 4.25

of the gully consisted of a pale brown chalky silt essentially the same as the layer (1353) which sealed the structure.
CS37 is the earliest feature on this part of the site.

CS38a, b and c. Circular house with two rebuildings: 1984 (Figs 4.26–4.28 and Pl 44)

CS38 is a complex of superimposed structures of at least three separate phases. The disentangling of the sequences was made difficult by the degree of slumping, into underlying pits and the quarry hollow, which the structures had suffered and by the disturbance caused by the uprooting of a large fir tree which had been blown over by the wind.

The structure was sited over the filling of a quarry hollow (F223). The surface of the silts was reasonably even and required no artificial levelling but on the east side some terracing into the tail of the rampart had occurred (F203). Throughout the occupation of the structures slumping into the tops of pits beneath caused continuous distortion.

First house (CS38a)

The earliest house is the least well understood. No doorposts can be assigned to it (allowing the possibility that it was not a house at all) but a length of circular slot (G279) and a series of chalk spreads imply that some kind of circular structure occupied the site. The slot (G279), which could have taken the base of vertical timbers, was partly cut away along its southern edge by the later G271. Its northern continuation, had there been one, could have been destroyed by G278. The slot was about 250 mm wide and averaged 150 mm deep with a U-shaped profile. The fill was of chalky silt mixed with burnt chalk, flint and charcoal.

Just south of the west end of the later gully, G278, there was a marked scarp between the edge of an extensive rammed chalk spread (1314) and the floor of the circular structure. The scarp seems to represent a step down into the structure from outside. The chalk spread (1314) was a densely compacted mass of subangular chalk lumps (up to 80 mm) in a chalky grey silt: the surface had been worn and trampled as would befit the approach to an entrance.

The interior floor surface of the structure was composed of several overlapping chalk spreads. The first in the sequence was 1344 composed of chalk fragments (up to 60 mm) crushed and trampled in a chalky greyish-brown silt: it was best preserved where it had slumped into pit tops but was otherwise patchy. To the south and east the layer merged with 1376, a layer of rounded chalk lumps and grit. In the north-west corner, near the supposed

Fig 4.26

entrance layer 1344 is overlaid by 1340, a spread of dark brown clayey silt containing patches of worn chalk lumps and some occupation debris. In one place there is a dump of dark yellow daub (F212) and within layer 1340, slumped into P2377 were the remnants of a daub hearth, F252. Around the south and west side of the structure the floor was composed of puddled chalk in brown silt (1200) which extends right up to the 'wall slot' (G279). A similar but more diffuse chalk spread (1330) continued southwards and merged with layer 1332, a worn chalk spread, roughly in the centre of the structure, which continued here as the floor in the later phases. The northward extension of 1200 (layer 1356) may have been part of the consolidation of the entrance area of which 1314 formed the major part.

The only internal feature which may possibly be assigned to this phase is the hearth or oven base (F205). It lay at the level of the phase a floor but all surrounding stratigraphy had been destroyed by root disturbance. The feature measured 0.6 by 0.7 m and in plan appeared to be an oven with a possible flue on the east side. It was composed of daub, baked red-brown and was filled with


GN
N
G278
K08
Ph 8963
Ph 8962
Ph8979
G269
Ph 8961
Ph 8964
Ph8978
K0075
Root hollow
G274
Section A
Section C
G271
K07
0 1 2 3 4 5 Metres
G272
Ph 8978
Ph 8961
Ph 8964
Ph 8979
Ph 8963
Ph 8962
0 1 2 3 Metres

Fig 4.27

CS38c

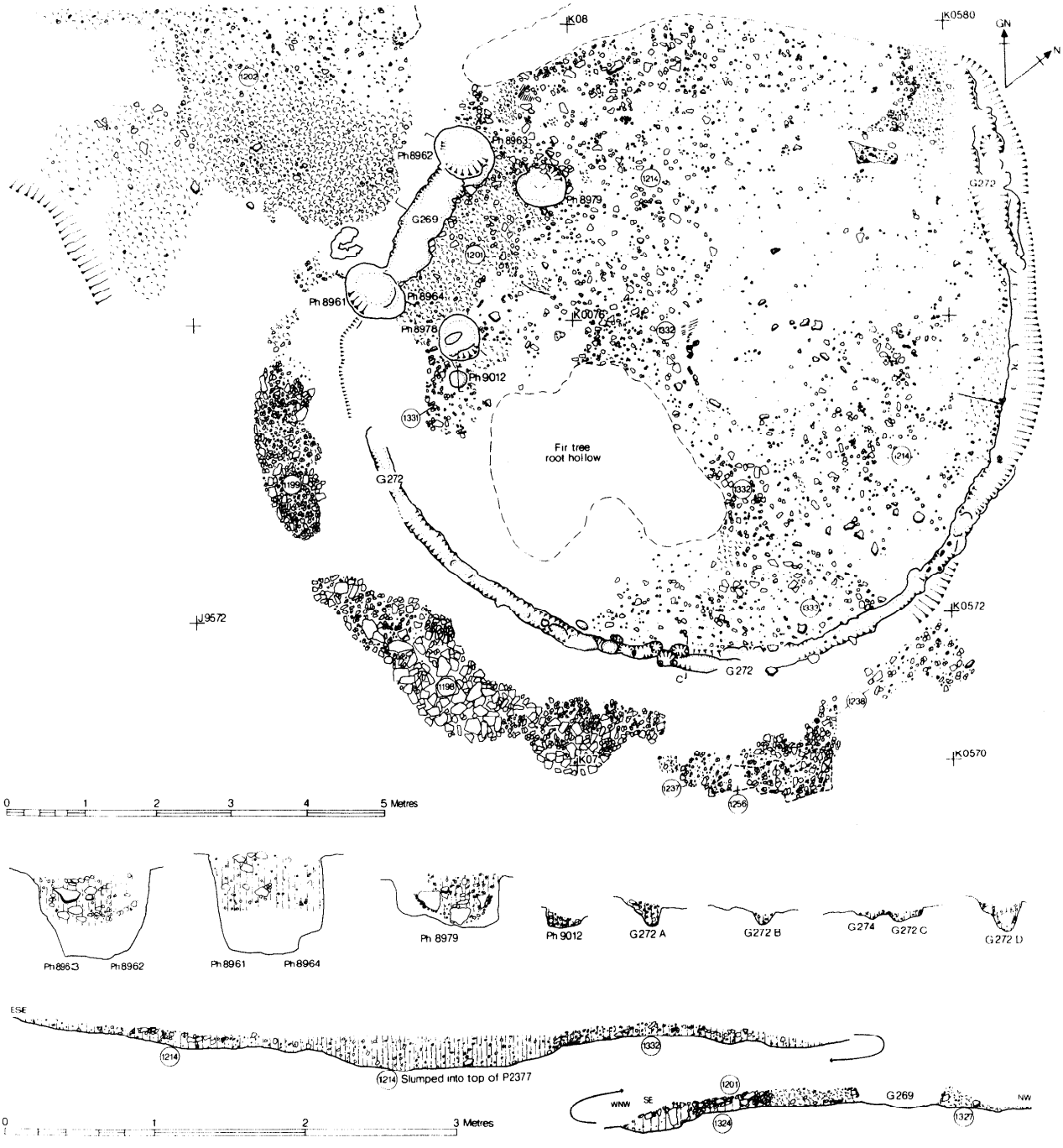


Fig 4.28

broken masses of the same substance mixed with charcoal and burnt flints.

The second house (CS38b)

In the second phase a circular house 9 m in diameter was constructed. Its major elements survive well.

The doorway lay at the north-west side and was formed of four large post complexes (phs 8961–8964, 8978 and 8979). The outer pairs averaged 0.65 m deep. No post voids were visible and it is likely that the timbers had been deliberately uprooted, resulting in the collapse of the chalk packing, allowing occupation debris to accumulate in the upper fillings. Running between the outer posts was a slot for a timber doorsill (G269) measuring 0.5 m wide and 100-160 mm deep. The inner pair of posts, ph 8978 and 8979, were shallower, averaging only 0.33 m deep. Voids were visible in both suggesting vertical D-sectioned timbers made from halved trunks. They were packed in position with chalk rubble. The purpose of this inner pair is not immediately clear but they could have formed an internal porch.

Between these four post-holes a surface of small lumps of puddled chalk (1325) had been laid and subjected to considerable trample and wear. Outside the door the threshold had been further consolidated with another spread of compacted chalk rubble mixed with grey silt (1299). The surface was worn smooth. This layer extends from the door of CS38 to the entrance of F215 (GC22/CS50) with which it was evidently contemporary.

The line of the wall was defined by G274 which survived on the west and south sides. The slot measured 80-180 mm wide and 60–100 mm deep and deepened to 150 mm where stake-holes penetrated the bottom. The stakes were spaced at varying intervals: some, very close together, either represent pairs or less likely replacements. The line of the wall could be traced along the east side of the house between the edge of the floor and the scarp of the terrace. The north side has been removed by the later gully, G278.

The floor surface within the house was represented by two layers. The earliest (1343), visible north of the door, consisted of small lumps of chalk in greyish-brown silt incorporating daub and charcoal fragments. Much of the rest of the floor was surfaced with a layer consisting of rounded chalk lumps loosely packed in a dark yellowish-brown clayey silt matrix (1214). No internal features survived unless the oven (F205) assigned to phase a really belongs to phase b.

Outside the north wall of the house two layers of chalk had been dumped to form a narrow bank (1308 and 1301). Both consisted of subangular chalk lumps (up to 60 mm) packed in greyish-brown silt. Both had a trampled, worn surface at the west end where they are separated by a black silty occupation deposit (1298). A similar sequence was observed in front of the door where the threshold (1299) was separated from an upper chalk spread (1312) by a thin trampled occupation silt (1313).

To the south west of the house a curved drainage ditch (G271) had been dug about a metre from the house wall. It measured 1.0–1.6 m wide and 0.4–0.65 m deep with sloping sides and a flat bottom. Although the ditch may have been cleared out from time to time, a layer of greyish-brown clayey silt containing some scraps of occupation material (1244) was eventually allowed to accumulate in the bottom.

The third house (CS38c)

In the final structural phase it would appear that the same door structure continued in use. There is some indication that the post-holes had been recut (but it would have been possible to set new timbers in the old holes leaving little archaeological trace). The area between the post-holes was resurfaced with a layer of puddled chalk (1201) 80 mm thick separated from the lower doorsill by a layer of grey clayey silt mixed with some occupation debris (1324).

The position of the house wall was defined by a wall slot (G272) which survives for about two-thirds of the circumference on the west, south and east sides, having been cut away by G278 on the north side. It was 200–350 mm wide and 100–230 mm deep, with a V-shaped profile. In the base a number of stake-holes spaced at differing distances were evident. Traces of a second row, just inside the arc of the wall on the south side, suggest a partial rebuilding.

Inside the house the floor level of phase b (1214) continued to serve as the floor over the north-eastern area but in the south-western part several new floor surfaces were laid. Two separate spreads were identified (1331, 1333): all three were similar consisting of subangular lumps of chalk (up to 100 mm) densely compacted in a matrix of brown clayey silt. These surfaces are fairly well worn and trampled though some areas are quite uneven.

In front of the door an area had been consolidated with a substantial chalk spread (1202/1220) extending 7 m north-west from the door. It had remained in use for some time but the northern edge, which had subsided into an earlier gully (G275), was resurfaced on two subsequent occasions with chalk spreads (1218 and 1208).

Around the exterior of the house on the south and west sides G271 remained in use gradually silting up with greyish-brown clayey silt containing some chalk and occupation debris especially pottery and bone with lesser amounts of daub and charcoal (1245, 1239, 1188). The uppermost layer (1188) gradually extended up to the edge of the wall and sealed the earlier wall slot (G274). To consolidate what must have been a potentially muddy hollow the surface was finally filled with dumps of chalk rubble (1198, 1199, 1237, 1238) consisting of subangular chalk (up to 350 mm) loosely packed and generally unworn except close to the door.

CS39 (F200). Circular house: 1984 (Fig 4.29)

A level terrace (F200) had been created for this structure by quarrying away the natural chalk to a maximum depth of 0.65 m on the western part of the site and dumping a series of chalk tips (1282, 1284, 1287, 1290, 1292, 1293) over the eastern part. These layers, composed of large angular chalk blocks in a matrix of dark greyish-brown silt, were rather heterogeneous and the distribution of chalk so variable as to give an overall patchy appearance. The surface of these dumps and of the natural chalk served as the house floor.

The structural elements of the house consisted of a set of doorposts, a doorsill slot and part of the wall slot. The main door features were represented by two doorposts (phs 8975 and 8960) with a slot for the doorsill (G266) between them. The post-holes were 0.37 and 0.46 m deep while the slot, 0.38–0.50 m wide, was 0.12 m deep: its sides were irregular but the base was level. The voids in the doorposts were poorly preserved but that in ph 8975 was oval in section measuring 150 by 200 mm. In front of the two main doorposts were two smaller holes (ph 8959 and one largely cut away by ph 8957). These may have taken porch posts contemporary with the door. Ph 8957 and the length of slot (G267) with which it is contemporary probably represent the resetting of one

Fig 4.29

side of the door at a later date, the other side presumably continuing to be in ph 8960. Phs 8984 and 8985 were earlier features (PS463) unrelated to the house.

The line of the wall was defined by G265 which survived on the south and south-west sides. It measured 180–380 mm wide and 90–230 mm deep and had a U-shaped profile. Settings of small posts and stake-holes could be defined at points along its length with a packing of chalk blocks around them. The slot could not be traced across the artificially made up terrace nor, in spite of careful search were any stake-holes discernible. In all probability the stakes in this sector were simply hammered into the

soft make-up and were later removed allowing the surrounding chalk rubble to fall back into the holes. Another possibility is that subsequent erosion of the terrace may have removed superficial layers bearing traces of the stakes. Doorpost ph 8957 and the slot (G267) may represent a local rebuild. The slot is 220 mm wide and 260 mm deep with a U-shaped profile.

The surface of the natural chalk and of the terrace make-up served as the floor but over the tops of some of the earlier features some evidence of a chalk floor survived having slumped into the upper hollows. In pit 2352 a remnant of the chalk floor (1288) was found 0.45 m down. It was a tightly packed layer of chalk rubble 20–100 mm thick with a heavily trampled surface. The surface had been burnt close to a circular hearth (F210) made of daub 80 mm thick fired in position. Overlying the hearth was a thin deposit of charcoal and ash. It is possible that a layer of chalk slumped into P2362 (layer 2) may also have been part of the house floor.

Around the edge of the terrace a light yellowish-grey silt and chalk wash (1181) had accumulated either during the occupation or subsequently. After the structure fell into disuse natural silting (1164 and 1154) filled the terrace.

CS40a and b and GC45. Successive circular houses: 1979, 1988 (Fig 4.30)

The area occupied by CS40 was partly excavated in 1979 and was completed in 1988.

The evidence for the early house consisted of a pair of post-holes (PS496) and an arc of a penannular drainage gully on the uphill side of the supposed structure (G130=GC45). While it is possible that these features were not part of a circular structure at all the fact that the exact location was used for a definite circular house in the subsequent phase would argue that an early house existed. No trace of a wall line has survived later terracing.

The doorway was composed of two post-holes. Ph 10080 was 0.3 m in diameter and 0.34 m deep; ph 10083 was of the same diameter but 0.55 m deep.

The gully on the north side of the supposed house varied considerably in depth and profile but was generally U-shaped and at its southern extremity, close to the entrance, reached a maximum depth of 0.4 m. A slight trace of a gully or slot was noted on the south side but the area was heavily disturbed by rabbits and it was not clear during excavation that this feature was a gully belonging to the early phase rather than simply a rabbit burrow.

The later house was much more clearly defined. The floor area of the earlier house was levelled by the cutting of a terrace which removed natural chalk over the northern part of the area to a maximum depth of 0.16 m. The terraced area was approximately 7 m in diameter.

The principal structural elements to survive were the door features and part of the stake-built wall.

The door structure was of two phases. The earliest pair of post-holes, ph 10043 and ph 10082, were replaced by a second pair, ph 10079 and ph 10044. The early doorposts ph 10043 and ph 10082 had a width of 0.66 by 0.44 m and 0.66 m respectively and depths of 0.33 m and 0.48 m. Much of ph 10082 had been cut away by the later post-hole, but part of the void with a fill of compact greyish-brown silt with a scatter of chalk and part of the packing of small subangular chalk lumps was visible. Most of ph 10043 was preserved: the oval void 0.50 by 0.3 m contained a grey silty soil with a little chalk surrounded by packing of rounded chalk lumps up to 70 mm in puddled chalk. This post-hole was partially sealed by layer 1982, as was ph 10082.

The later post-holes measured approximately 0.6 m wide and 0.45 m deep. The void of ph 10079 was D-shaped, the post presumably being a split trunk, measuring 0.26 by 0.15 m, whilst that of ph 10044 was oval, 0.45 by 0.5 m. The voids had fills of dark grey silty soil containing a little small chalk, surrounded by packing of chalk rubble 50–100 mm in puddled chalk; in both cases the lower part of the packing contained a silt element.

Running between these post-holes was a shallow slot G328, which held the doorsill. Its full length was not preserved owing to disturbance from rabbit burrows. It measured 0.25 m wide and 0.1 m deep. It had a fill of grey silty soil with small chalk pieces and flecks of charcoal. About halfway along the gully was a stake-hole, which may have helped hold a wooden plank in place for a doorsill.

The other major structural element, in addition to the door, was the wall. Evidence of this survived immediately north of ph 10044 in the form of a shallow slot, G327, of which just over 1 m in length survived. It was 0.18 m wide and 0.12 m deep with a fill of grey chalky soil. This presumably held the stake-built wall of the house, which is represented as a line of stake-holes on the north-west edge of the terrace. The stake-holes here are quite small (possibly because just the tips were preserved) and occur at about 0.1 m intervals. There were also three small post-holes around the north side of the house, which possibly held larger posts to provide the timber framing for the house.

The southern arc of the wall line was possibly marked by G325, a shallow slot whose line was roughly delineated but undermined by what was originally thought to be a rabbit burrow. The slot was approximately 0.25–0.3 m wide and about 50 mm deep; it had a fill of blackish-brown soil with flecks of charcoal and burnt clay and a small dump of sling stones at one end.

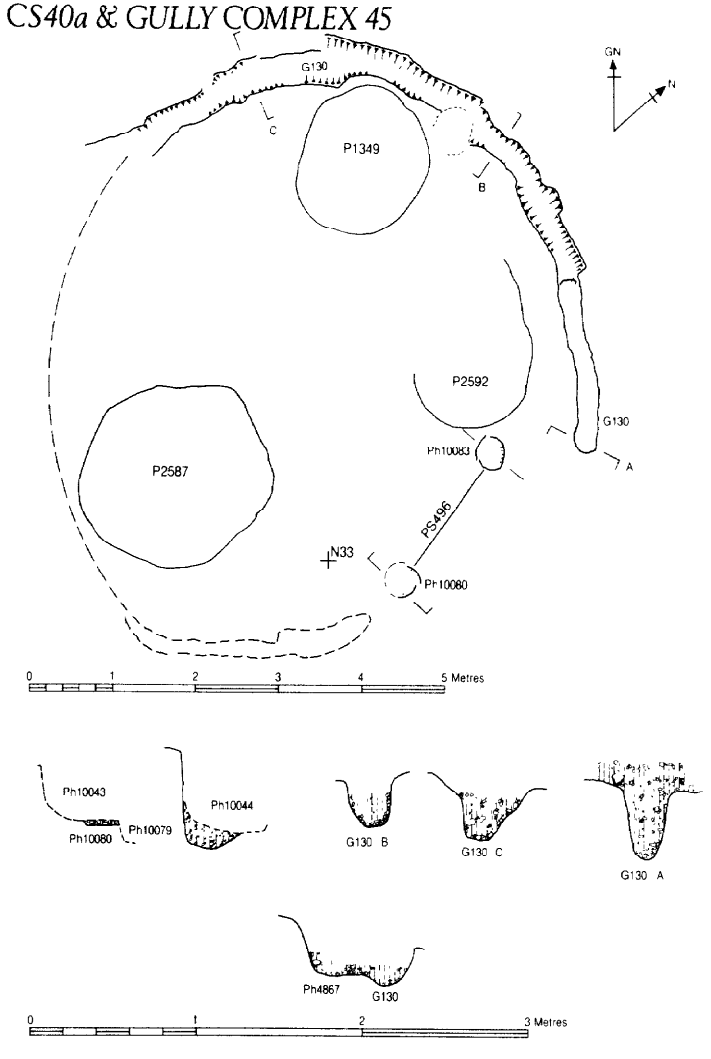
Four post-holes inside the structure could be contemporary, possibly forming two two-post structures.

A small patch of flints towards the centre of the floor could be the remnants of a foundation of a hearth.

Over the northern half of the structure the natural chalk served as the floor and resting on this was found a hoard of iron objects (hoard 2, Volume 5). In the central area there were remnants of an early chalk floor (layer 2035), which concentrated around the south side of pit P1350 partly overlapping its chalk blocking wall and perhaps consolidating the area of greatest wear. This was formed of small subrounded chalk lumps up to 50 mm tightly packed in puddled chalk and grey silt, with a dump of daub embedded in the surface.

Partly overlapping this was the later chalk floor which covered the southern half of the house extending both inside and outside. This floor (layer 1982=1937) was quite variable in character with some quite rubbly patches and others where it consisted of chalk lumps mostly *c* 30 mm in size, but including some up to 80 mm tightly packed in puddled chalk or a grey silt matrix. The surface was worn and rounded, but below the chalk was fresh and angular.

Overlying the floor was a thin occupation deposit (layer 1976) of dark brown chalky silt with flecks of charcoal and burnt clay and occasional flints and pebbles. The equivalent outside the door was layer 1984 forming a patch over the threshold in a hollow in front of the door. It was a dark brown silt with extensive black sooty mottles, containing a little chalk grit, some burnt chalk and a lot of pot sherds.


CS40a & GULLY COMPLEX 45
GN
N
G130
C
P1349
B
P2592
G130
A
Ph10083
P2587
PS496
N33
Ph10080
0 1 2 3 4 5 Metres
Ph10043
Ph10044
Ph10080
Ph10079
G130 B
G130 C
G130 A
Ph4867
G130
0 1 2 3 Metres

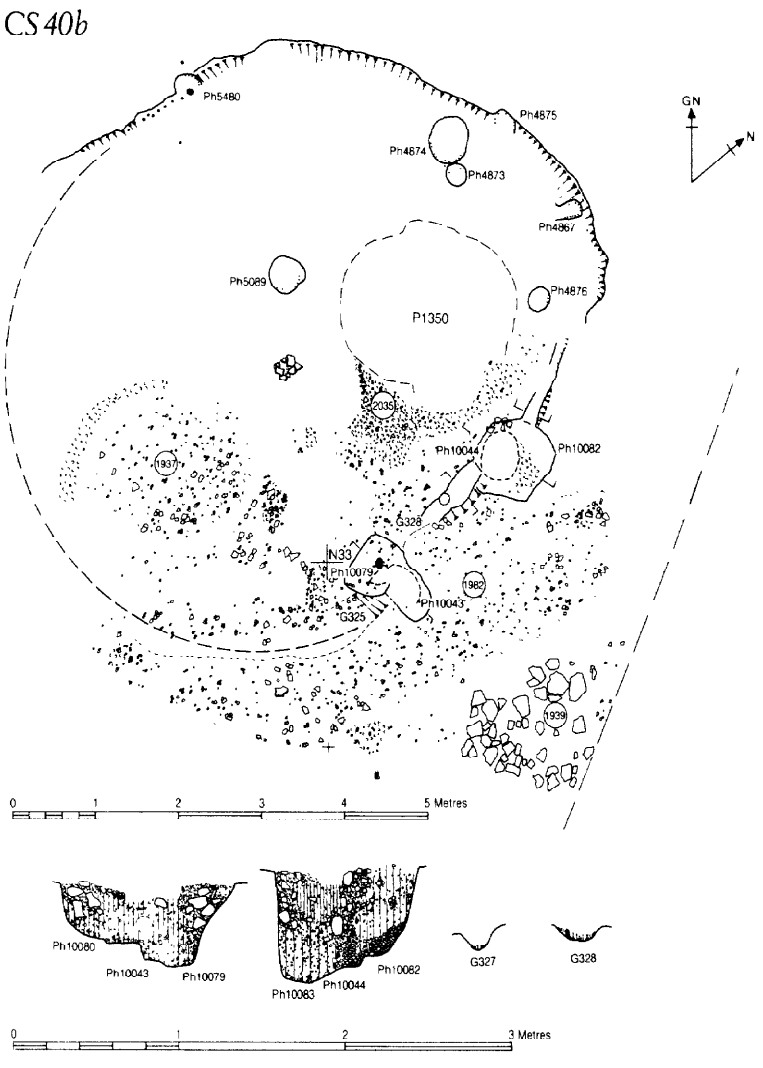

CS 40b
GN
N
Ph5480
Ph4875
Ph4874
Ph4873
Ph4867
Ph5089
Ph4876
P1350
2035
1937
Ph10044
Ph10082
G328
N33
Ph10079
1982
Ph10043
G325
1939
0 1 2 3 4 5 Metres
Ph10080
Ph10043
Ph10079
Ph10083
Ph10044
Ph10082
G327
G328
0 1 2 3 Metres

Fig 4.30

This and the southern part of layer 1982 were sealed by layer 1974. It seems likely that the house itself went out of use at this stage, and was sealed by a dark greyish-brown silt (layer 1938=587), which contained a moderate quantity of subrounded chalk, some burnt, and flecks and fragments of charcoal scattered throughout.

CS41 and GC29. Circular structure?: 1979 (Fig 4.31)

A gully complex, one small arc of which lay within the excavated area, may represent the site of a circular house structure of similar type to CS40.

G129 was the earliest feature to be cut, enclosing an area estimated to be 7 m in diameter. It was somewhat irregular but with a U-shaped profile 0.13–0.19 m deep and 0.36–0.43 m wide. The filling was of dark brown chalky silt containing occasional flints and scattered charcoal. G129 was cut by G131 (which also cut through two pits (P1364 and P1414) destroying the relationship of these to the earlier gully). It was irregular but of U-shaped profile, 0.15–0.35 m deep and 0.75 m wide. The basal layer was of a light brown silt: above this the fill was more chalky. The gullies were not structural but may have been dug as drainage ditches around a largely unexcavated circular structure.

G131 was sealed by a fine brown silt (618), 130 mm thick, which was in turn sealed by a chalk spread (588). It is possible that G129 related to a circular structure, possibly being the wall slot. However G131 looks much more like a penannular gully that would enclose a post structure. This is more likely if a comparison is made with structures found stratified on the south side of the fort, eg GC42, GC43, and GC11 and PS395.

CS42. Circular house: 1979 (Fig 4.32)

CS42 lies on the north side of road 2. The road hereabouts had been metalled on several occasions but CS42 lay beyond the limits of the surviving stratigraphy. It may, however, have been contemporary with the other circular structures (CS43-CS46) which could be shown to belong to the early phase of the road.

The surviving elements were doorposts and a wall slot cut into the natural chalk giving the structure a diameter of *c* 7.5 m.

The door is obscure but four post-holes survived (partly cut away by later features). It is possible that two separate doors are represented ph 4095/4097 and ph 4094/4096 but this would make them narrower than is normal. A more likely alternative is that there was only one door, ph 4094/4097, the other posts being irrelevant to the structure.

The wall slot survives on the north (uphill) side as an arc of gully (G124/G126), 0.14–0.2 m in depth and 0.28–0.4 m in width: the profile varied from V- to U-shaped. The filling was of chalky silt there being no trace of vertical timbers. A small length of gully (G124) could have been part of the structure but it does not follow the supposed wall line very closely and need not belong to this structure at all.

CS43. Circular house: 1979 (Fig 4.33)

Circular structure lying immediately to the south of road 2. Much of the area has been destroyed by tree roots and a large pit complex.

The structure was represented by an arc of wall slot (G142) cut into the natural chalk on the uphill side. The estimated diameter of the floor was 5.5 m. The slot ranged in width from 0.1–0.2 m and in depth from 0.06–0.15 m. The profile was V-shaped. No timber positions were visible in the chalky silt fill.

Around the south side of the projected wall line were a number of post-holes some or all of which may have been part of the wall structure. Three posts (phs 5314, 5324 and 5335) are large enough to be considered as doorposts but it is equally possible that phs 5237 and 5244, which

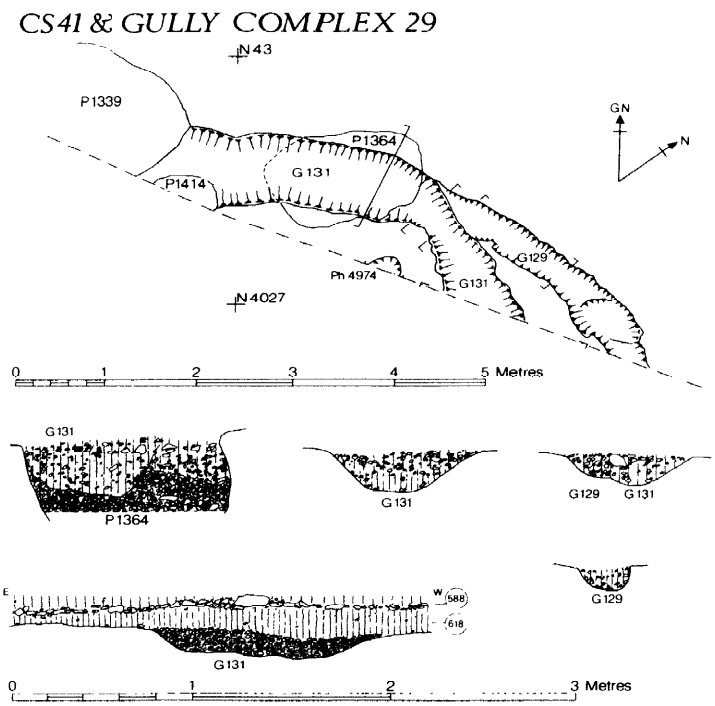


Fig 4.31

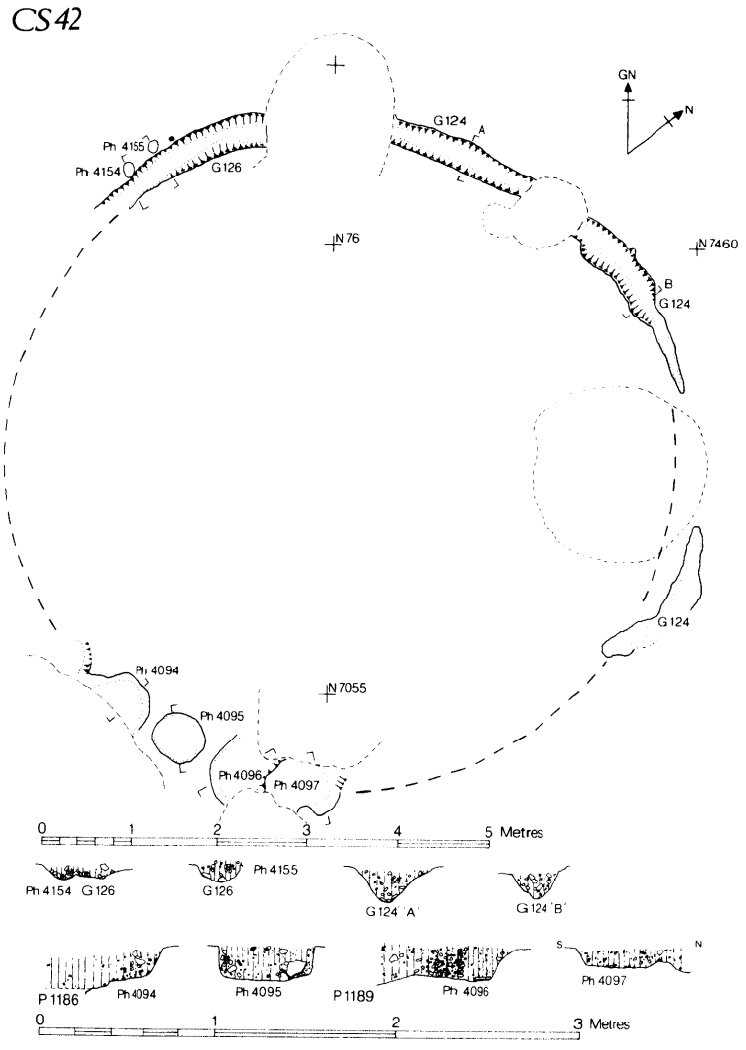


Fig 4.32

were slightly off the projected line, could have been part of the entrance. Various combinations are possible: there can be no certainty but the best matched pair are phs 5314 and 5237.

CS44a and b. Successive circular houses: 1980 (Fig 4.34)

CS44 consists of two superimposed circular structures lying on the south side of road 2 and related to the road stratigraphy (p. 220).

The first house (CS44a)

The earliest building was represented by G141 which was contemporary with the earliest road metalling (619). The slot defined an area 6 m in diameter. It measured 80–200 mm in width and 20 to 180 mm in depth, with a profile varying from U- to V-shaped. Several stake-holes were seen in the gully bottom and sides implying that the structure was of stake-walled type. The doorposts of this phase are most likely to have been phs 5246 and 5271 both of which were of comparable size being 0.44 m wide and 0.45 m deep.

The second house (CS44b)

The second house was represented by a length of wall slot G140). The f eature numbered as ph 5267/5268 may, in fact, be the intercutting ends of the two slots. The estimated diameter is 5.5 m. The slot measured 100–200 mm wide and 50–140 mm deep. There are indications that it held a stake-built wall while the three small post-holes along the line (phs 5433, 5434 and 5435) were probably broadly contemporary and may have held rather more substantial timbers. Phs 5249 and 5273, also on the projected wall line, could have been part of the structure. The doorposts were probably held in ph 5247 and 5270, both of which cut the earlier doorposts and were somewhat wider and shallower.

CS44b was contemporary with the second phase of road metalling (616/592) since G140 cut 615 and 617, an accumulation of occupation debris on the earlier ground surface of the first phase structure. G140 was sealed by layer 613 (see p. 220).

CS45a, b. and c. Successive circular houses: 1980 (Fig 4.35)

CS45 was represented by three arcs of gullies (G137–9) arranged roughly concentrically. They were not related to the stratigraphy of road 2 but may have been broadly contemporary with the nearby structures (CS43, CS44, CS46).

The outermost arc (G137) would have had a maximum

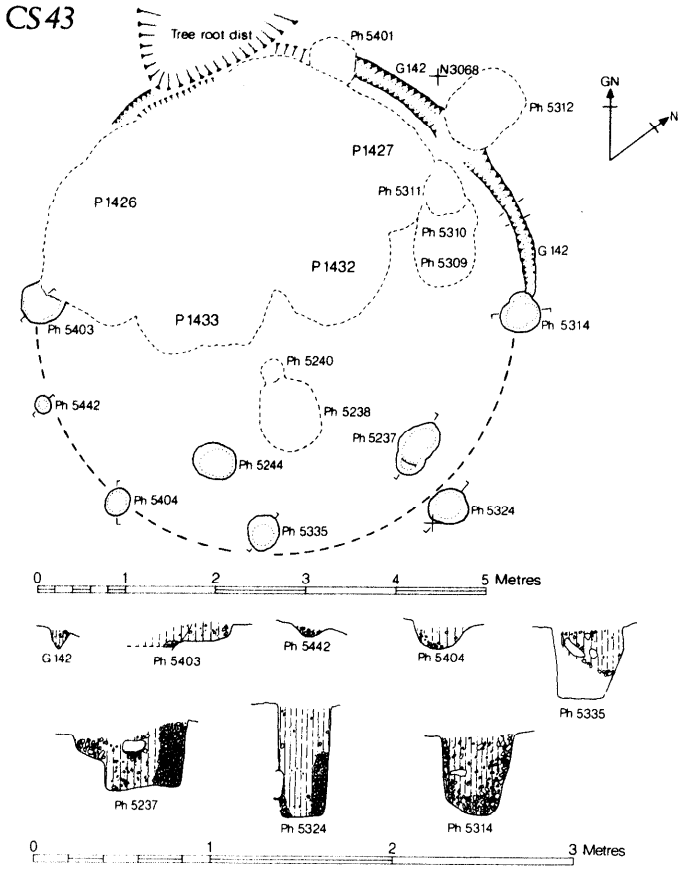


Fig 4.33

diameter of *c* 10 m which would have been large by the average standard of house size at Danebury. The proportions of the slot, 0.14–0.35 m in width and 0.2 to 0.1 m in depth, were, however, not those of a typical drainage gully. Moreover there was also a small post-hole set in the base at the west end suggesting the possibility that the slot once held a row of small timbers. It could, of course, have been part of an enclosure fence and not a house at all.

Immediately to the south lay another slot (G138) measuring 6 m in diameter and only 0.1–0.27 m wide and 0.03–0.1 m deep. A few stake-holes were visible in the base indicating the one time existence of a wattle wall. Two post-holes (phs 4594 and 4595) cut the slot but are not necessarily part of the structure.

Further south is the third slot (G139) suggesting a structure 5 m in diameter. It measured 0.08-0.2 m in width and 30–80 mm in depth.

The area immediately to the south of these slots was densely packed with pits and post-holes some of which form the post structure PS251. The complexity of the palimpsest makes the recognition of potential doorposts a remote possibility: there are none which readily present themselves.

CS46. Circular house: 1980 (Fig 4.36)

CS46 was a circular structure lying across the line of road 2 which it pre-dated. It was probably contemporary with CS48 or CS47.

The wall line was represented by a slot (G160, G164) which defined an area of 8 m diameter. The north-east segment was probably destroyed by wear along road 2 while the south-west segment had been destroyed by later pits and by root disturbance. The slot measured 0.16–0.22 m wide and 40–120 mm deep: in profile it had a flat base and steeply sloping sides though in some areas it was less regular. No evidence of wall structure was seen and the gully was filled with chalky silt. Some larger post-holes on the wall line may have been contemporary with the structure and have supported more substantial timber uprights (eg phs 5584, 6389, 6333 and 5786).

On the south side were two double post-holes, 2 m apart, which were probably the doorposts. Phs 5642 and 5643 on the east have a very similar fill but no indication of post voids. On the west ph 5860 was in reality two post-holes in both of which voids, *c* 0.25 m in diameter were detectable. The fillings suggest that the two post-holes in each pair were contemporary.

Within the structure were the remains of another small curved slot (G162). It may represent a separate structure or simply have been a partition within the larger structure.

In the western part of the building was an oven (F76) which may have been contemporary with the structure. It measured 0.54 m in diameter and was set in a shallow pit cut into the natural chalk to a depth of 0.2 m. The wall, made of daub 60 mm thick, survived only below the level of the surface of natural chalk. Across the floor was a thin layer of charcoal and ash above which was the collapsed and broken up superstructure. Two subrectangular pits, P1454 and P1461, situated inside the building, may have been contemporary with it. There was no stratigraphical evidence to show that this was so

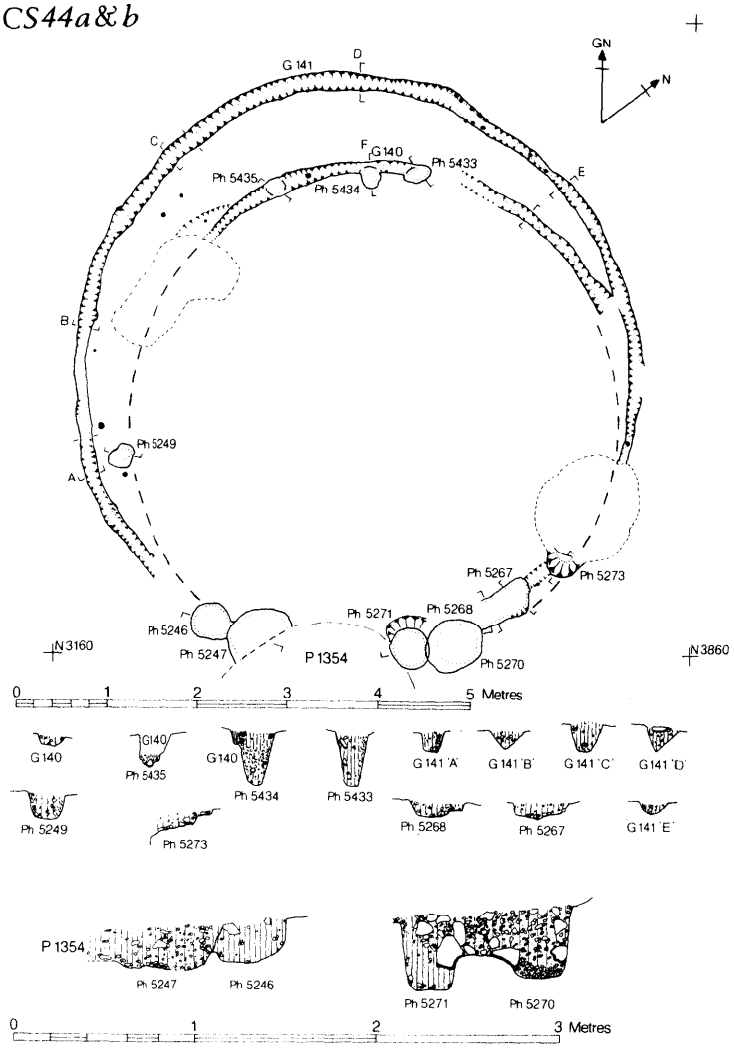


Fig 4.34

but a house found beneath the rampart in 1975 (CS9) could be shown to have had several contemporary rectangular pits inside arranged in a similar fashion. P1454 was sealed by the flint cobbling of road 2 (641) which had slumped into the pit top.

CS47. Circular house: 1980 (Fig 4.37)

CS47 was a circular structure lying across the line of road 2 which it pre-dated. The northern part of the house is unexcavated.

The wall slot survived on both sides of the structure (G169 and G173) indicating a diameter of 6 m. On the south-west side it has been destroyed probably by wear on the road. The slots vary slightly in size: G169 measured 140 mm wide by up to 70 mm deep while G173 was more irregular varying in width from 120-200 mm and up to 70 mm deep. No evidence of stake-holes survived. Ph 6342, on the wall line, may represent the hole of a more substantial timber support. Two likely doorposts can be identified (phs 6353 and 5918). They measured *c* 0.5 m in diameter and 0.4 m deep. The filling of ph 6353 preserved a clear 'void' 0.15 m wide while that in ph 5918 measured 0.14 m.

The local stratigraphy allows CS47 to be related to other structures in the area (see pp. 226–7). Features of the house are cut by PS319 and G171(= GC9). Thus CS47 is one of the earliest structures in the area.

CS48 and GC9. Circular house and gully: 1980 (Fig 4.38)

CS48 consisted of a house set within a penannular drainage gully (separately identified as GC9) measuring some 10.5 m in diameter. It extended partly across the line of road 2 which it probably pre-dates. Stratigraphitally it can be shown to be later than CS47 and PS319 but earlier than PS320 and PS321. Its relationship to PS322 could not be defined.

The best preserved elements were the two ends of what is presumed to be a single penannular gully. G171 was regularly cut with a V-shaped profile varying in width from 0.5 to 0.95 m and up to 0.43 m deep. The fill was largely a natural silting though there were tips of occupation debris in the upper levels. At the end it narrowed slightly to a squared terminal. G161 was less substantial measuring 0.5 m wide and 0.15 m deep. The filling was a natural silty soil. An earlier length of gully (G172) survived immediately to the west of G171. It could represent an early phase of the gully complex or part of an earlier circular structure.

Of the circular structure which the drainage gullies

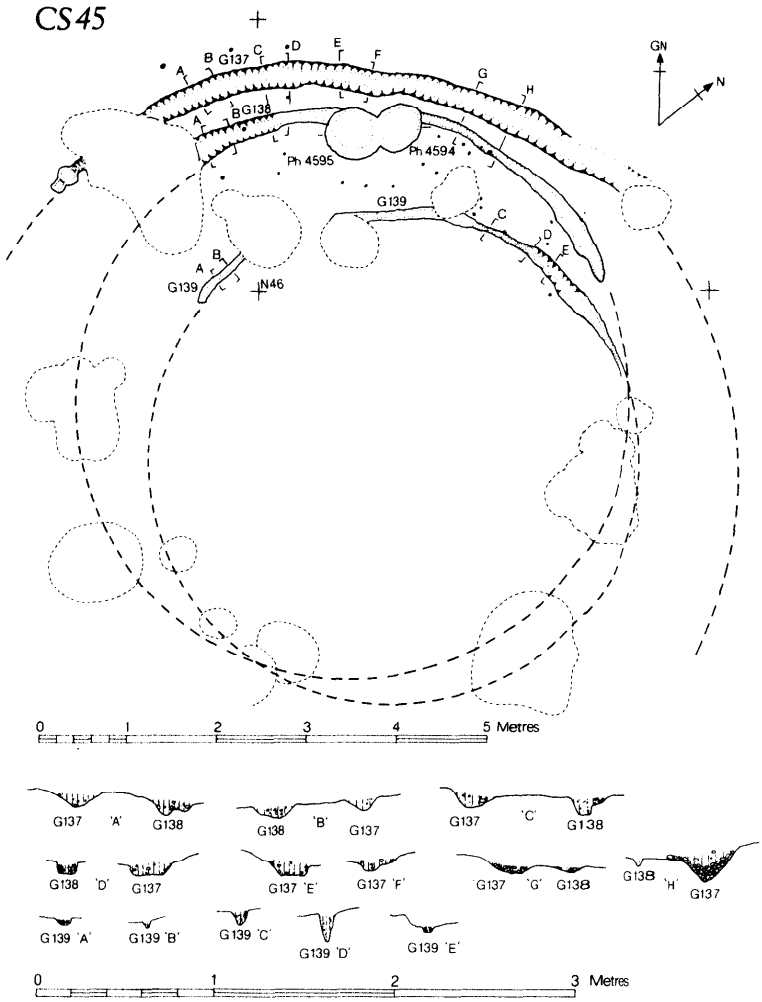


Fig 4.35

enclosed little survived apart from a pair of post-holes (phs 6943 and 5924) which measured 0.6 m in diameter and *c* 0.45 m deep. Ph 6943 preserved a clear 'void' measuring 0.23 m wide. Another pair of posts aligned with the main doorposts (phs 5797 and 6960). They averaged 0.35 m in diameter and 0.4 m deep. Ph 5797 was cut to a triangular plan, probably to take a post quartered from a trunk. A 'void' survived in the fill of ph 6960 measuring some 170 mm wide. While the two sets of posts could have belonged to successive structures it is presumable that they were contemporary giving rise to the door arrangement noted elsewhere (eg CS20 and CS38).

No trace of the wall line survived.

CS49. Possible circular structure: 1984 (Fig 4.39)

CS49 is a possible 'circular' structure defined by an arc of gull and a number of post-holes; it measured 6 m N-S by 5 m E-W.

The gully (G284) survives as an arc of some 3 m length. It measured 300 mm wide and 100–150 mm deep, with a flat bottom and straight sides. Four subsidiary gullies radiated from it. Both these and the main gully bore the impressions of stake-holes in the bottom.

Several post-holes lay in the gully or on the supposed circumference of the putative building. A possible entrance, on the southern side, may be represented by ph 9058 and ph 9147/9062.

These features were all sealed by layer 1342 which was the lowest silt in this part of the quarry hollow.

CSSO (F215) and GC22. Circular structure: 1984 (Fig 4.40 and P1 41)

This complex of features consists of a circular working area defined by a slight bank outside of which is a penannular ditch 12–13 m in diameter. It will be convenient to describe the gully complex (GC22) first before considering the internal activity.

The ditch was at its most substantial around the western perimeter where it measured up to 1.8 m wide though averaging 1.0 m. The depth was normally 0.35–0.4 m but reached 0.75 m at its southern end. There were two breaks in the ditch one on the east side where it came close to the rampart and one on the south where the entrance lay. The south-east segment of ditch was shallower and generally smaller than the rest. On the west side the ditch had been cut through earlier silts and chalk spreads down to the natural chalk but on the east it was cut almost entirely within the earlier layers rarely touching the natural chalk. The ditch presumably functioned as a drain to collect rain-water and to prevent the activity area from flooding.

Around the inside of the ditch a low bank had been constructed. It was highest, *c* 0.25 m, on the south-west where it consisted of chalk rubble in compacted chalk and brown silt (1179) capped by a thin spread of smaller

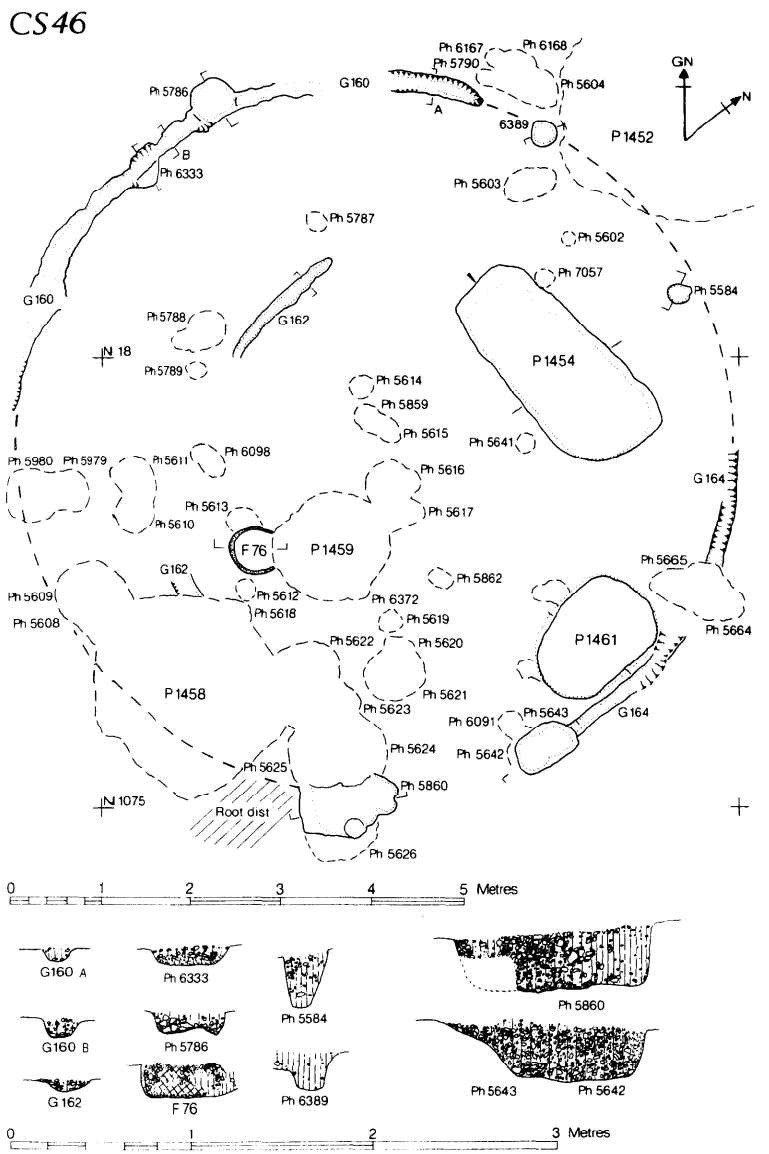


Fig 4.36

chalk lumps (1173). The wear on these layers may have resulted from a later phase of activity since the upper surfaces remained exposed for some time. The bank material was probably derived from the digging of the ditch. On the north and east sides the bank was lower (0.1–0.15 m) and was made up largely of brown loamy silt containing some small angular chalk lumps. The more soily nature can be accounted for, as G275, from which the layers were derived, here cuts through silt and not natural chalk.

Enclosed within this area was a complex of daub structures and occupation debris. The floor was represented by discontinuous spreads of trampled chalk (1265). Elsewhere the underlying silt (1262) had had chalk trampled into its surface to serve as a floor. In the area of the entrance an additional chalk spread (1283) had been laid slightly overlapping 1265, where wear in the entrance had been most intense. Contemporary with it was another chalk spread (1314) extending from the entrance to the threshold of CS38 showing both structures to have been contemporary. A similar chalk spread (1299) resurfaced both thresholds at a slightly later phase partly covering 1314 and 1283.

The activity within the area is indicated by a range of domestic features, including hearths, an oven, and the debris derived from them. The oven (F207) was circular measuring 1.1 m in diameter. Its base had been cut into the underlying silt (1262) and a slightly concave floor formed of highly compacted chalk (1297) had been laid butting up to the oven and forming the lower part of its wall. The daub wall, 120 mm wide and surviving to a depth of 100 mm, was composed of yellowish-brown daub with chalk aggregate baked to a pink or yellowish-red around its inner surface. Burning on the chalk floor (1297) may have resulted from hot ashes raked out of the oven. Areas of daub (1267, 1266, 1268 and 1300) lying around and sealing the floor may have derived from the destruction of the oven.

Three hearths were exposed. The first (1263) was formed of a foundation of flints covered by a rammed layer of chalk. It measured 1.45 by 1.1 m and a distinct patch of intense burning could be seen towards the centre. There

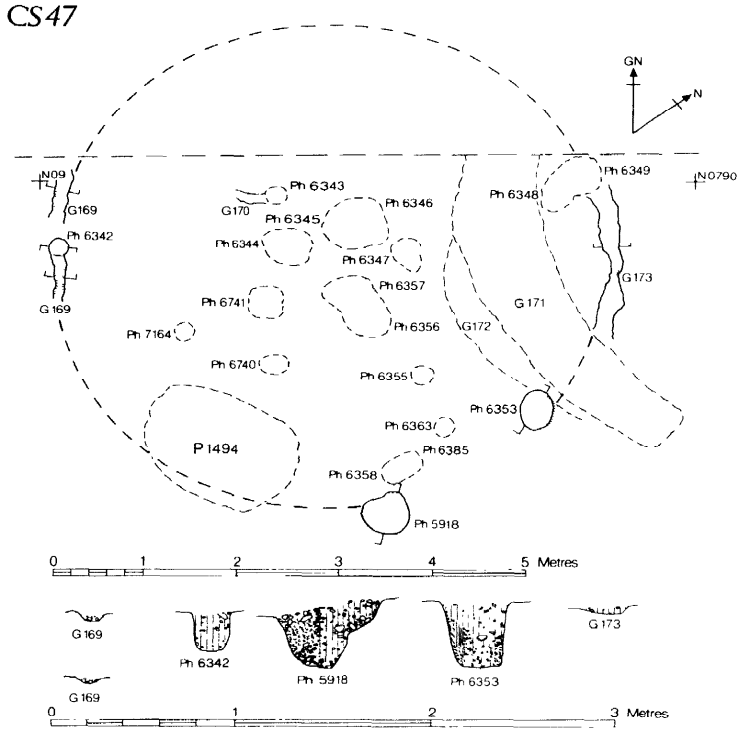


Fig 4.37

were patches of burnt clay or daub around the edges. The hearth was probably constructed at about the same time as the oven though it may have remained in use longer. To the south of the oven was a smaller hearth (1264) constructed after the oven had gone out of use. It was oval, measuring 0.6 by 0.35 m and was made of hard baked yellowish-red daub with chalk temper. Heating had obviously been intense since the hearth had completely baked through (60 mm) and the underlying surface had been discoloured to a depth of 110 mm suggesting a period of prolonged and intense heat. A third hearth (1260) lay to the east. It measured 0.5 m in diameter and had been built on a flint base covered with a layer of puddled chalk. The surface showed signs of burning.

Around the northern edge of the oven (F207) and the large hearth (1263) was a very thin spread of occupation debris (1261) formed of ashy silt and charcoal mixed with small pieces of burnt chalk and daub, presumably derived from the use of these features. There was nothing to suggest that the area had been used for industrial rather than normal domestic activity.

CS51a and b (F216). Successive circular stake-built houses: 1985 (Fig 4.41, Pl 42 and Fig 4.113 section 71))

A little over half of the plan of CS51a and b lay within the excavated area. It had been built in quarry hollow F223 after layers of silt (1378, 1406) had accumulated naturally.

No doorposts occurred within that part of the house excavated but the wall of stake-holes was well preserved indicating a diameter for the building of 6.5 m. The individual stake-holes were distinctly oval in plan measuring between 40 and 100 mm in maximum diameter with some, apparently double stakes up to 120 mm across. On average the holes were spaced at distances of 200 mm. Some large tabular flints aligned with the wall on the north side may indicate packing or repair around the wail base at this point.

The internal features suggest two main phases. In the first phase the floor (1392) consisted of a spread of puddled chalk rubble showing some, but not extensive, wear. Three post-holes cut the floor (phs 9426, 9418 and 9404). The packing of ph 9418 was sealed by the floor but ph 9404 cut the floor and was still in use when the later floor was laid (1391). Thus ph 9404 could be a replacement for ph 9418.

In the centre of the house was a subrectangular hearth, F220, 0.8 by 0.84 m. It was formed of a lower foundation of burnt chalk and flints over which had been rammed a thin layer of chalk lumps in puddled chalk burnt to a light grey. It seems likely that much of this upper surface had been worn away.

The floor and the hearth were sealed by an accumulation of silt and occupation debris (1394). This was only 20–50 mm thick in the eastern and central area but in the vicinity of the stake-holes it was up to 200 mm thick. In the central area there was much charcoal, ash, daub, smears of clay and quantities of pottery and bone.

Over this the second floor surface (1391) had been laid. It was discontinuous and largely missing from the central area. On the eastern side the spread was formed of large subangular and rounded lumps of chalk (50–100 mm) in a dense mass of smaller lumps and puddled chalk. The layer varied from 30-150 mm thick being thinnest towards the centre where it had entirely worn away around the hearth (F217). The surface had been trampled smooth. A small area of chalk rubble patching (1390) was separated from 1391 by a thin occupation layer (1401).

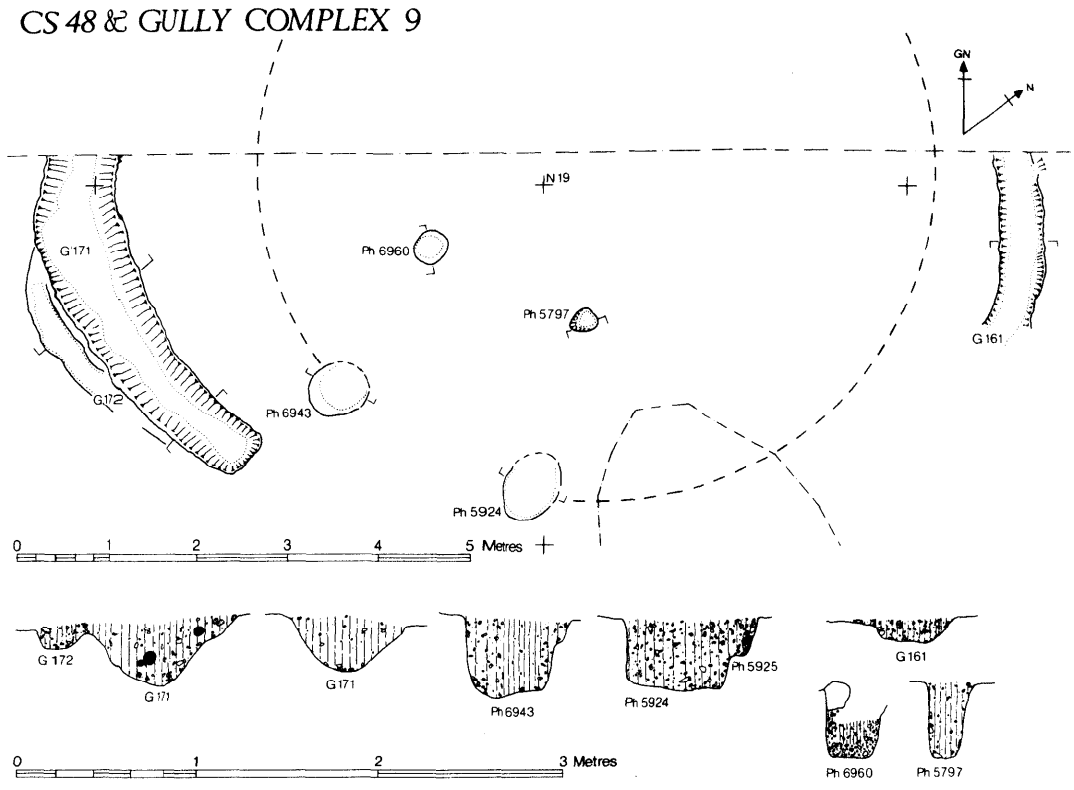


Fig 4.38

Probably contemporary with this phase was the hearth (F217) which had been set in a small pit cut into the lower floor (1392). It was subrectangular, measuring 1.0 by 0.95 m and was constructed on a foundation of large flints closely packed together. Over this a surface of small rounded chalk lumps had been packed and puddled together to form a surface, subsequently burnt grey or pinkish grey. Nearby was an oven (F219), probably assignable to this later phase. Its base was cut down some 50 mm into the chalk make-up pre-dating the house (1382). The oven measured 1.1 m in diameter. It was circular and probably had a flue on the east side. The walls, formed of baked daub, were 200 mm wide and survived to a height of 150 mm. The oven floor was a compact mass of chalk lumps. Above this the lower fill was of fine powdered charcoal mixed with burnt flints. Higher in the fill was the fragmented remains of the daub superstructure.

Within the house ph 9404 continued in use, while ph 9403 was erected later. It is tempting to see all three small posts in this area as representing successive replacements for an essential fixture of some kind.

The later floor level was sealed by an occupation layer (1385 and 1275) formed mainly of a brown, slightly clayey silt containing some small fragments of chalk, charcoal, daub and a quantity of bone and pottery.

The structure was enclosed by a circular gully in both phases. The earliest gully (G305) enclosed an area some 9.0 m in diameter. It was 0.5–0.7 m wide and 0.2–0.35 m deep. The fill was largely natural consisting of a primary layer of eroded chalk followed by a brown silt. In the second phase the gully was replaced by G304, measuring 0.5–0.7 m wide and 0.25 m deep. The fill consisted largely of subangular chalk blocks in a matrix of brown silt representing a deliberate infill.

The entire area of the house and gullies was finally sealed by a natural accumulation of dark silty clay (1367).

CS52. Circular house: 1985 (Fig 4.42)

CS52 is a well defined circular house 6.0–6.5 m in diameter.

The doorway features survived in some detail. The door frame was formed of two double post-holes of which the inner posts, phs 9260 and 9567/9340, held half trunks measuring 200 by 300 mm and 180 by 300 mm respectively. In front of these were two smaller post-holes. Ph 9386 on the west held a plank-shaped timber 80 by 200 mm while ph 9258, on the east, contained a wedge-shaped timber measuring 240 by 180 mm. Of the post-holes themselves, the two main post-holes were oval in plan 0.5 and 0.6 m wide; the fronting post-holes were *c* 0.3 m in diameter. Between the two main doorposts was a slot (F247) for the doorsill, 0.35 m wide and 1.6 m long and 60 mm deep on the inside against the floor. On the outside, where successive thresholds had been packed against it it was 300 mm deep. Four additional post-holes in the vicinity of the door probably represent a phase immediately post-dating the house but it is just possible that phs 9259 and 9312 were replacement doorposts.

The wall line was precisely delineated by the edge of the floor. There was no wall slot and in spite of very careful and prolonged search no trace of post-holes or stake-holes could be made out.

The floor surface (1458) was made up of chalk lumps (20–60 mm in size) hard packed in a matrix of puddled chalk. It was worn smoot h in the central area especially around the hearth but towards the edges it was more rubbly and rougher. A line of stake-holes, running across the floor, probably represents an internal partition.

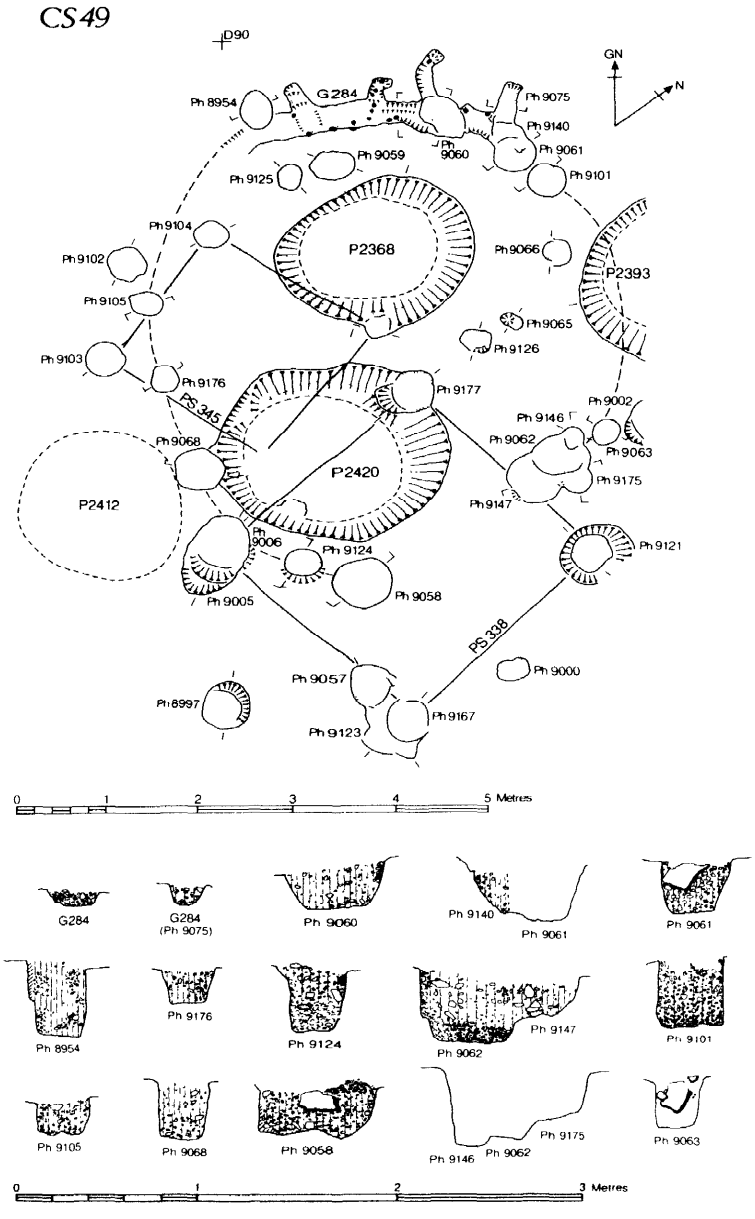


Fig 4.39

Roughly in the centre, and laid on the floor was a hearth (F249) measuring 0.5 m across. It was built of a layer of flints forming the base for a surface of burnt clay. There was some burning on the surrounding floor.

A number of post-holes cutting the floor were contemporary with the use of the house or immediately followed its disuse. It is tempting to see ph 9255/9322 as being related to the structural fittings around the hearth. In the north part of the house a layer of chalk rubble (1461) had been spread, sealing ph 9322: the surface showed some wear but not as much as the main floor.

After abandonment the house floor and associated features were sealed with an accumulation of fine crumbly dark brown silt (1459) containing considerable quantities of occupation debris including charcoal and unburnt clay from the Reading Beds. The same layer filled the doorsill slot and here contained a dump of broken quernstone.

Outside the doorway a considerable hollow way (F253) had been worn before a tip of chalk (1472) was laid at the threshold. Over this and covering a more extensive area was a black silty soil containing much fine charcoal (1468), equivalent to layers 1462, 1466, 1470 and 1475 which were dumps of occupation deposit and chalky silts which had accumulated outside the house during its use. Over much of this area an extensive chalk spread (1456) had been laid forming a pathway nearly 6 m long leading from the door of the house to road 6. The spread was

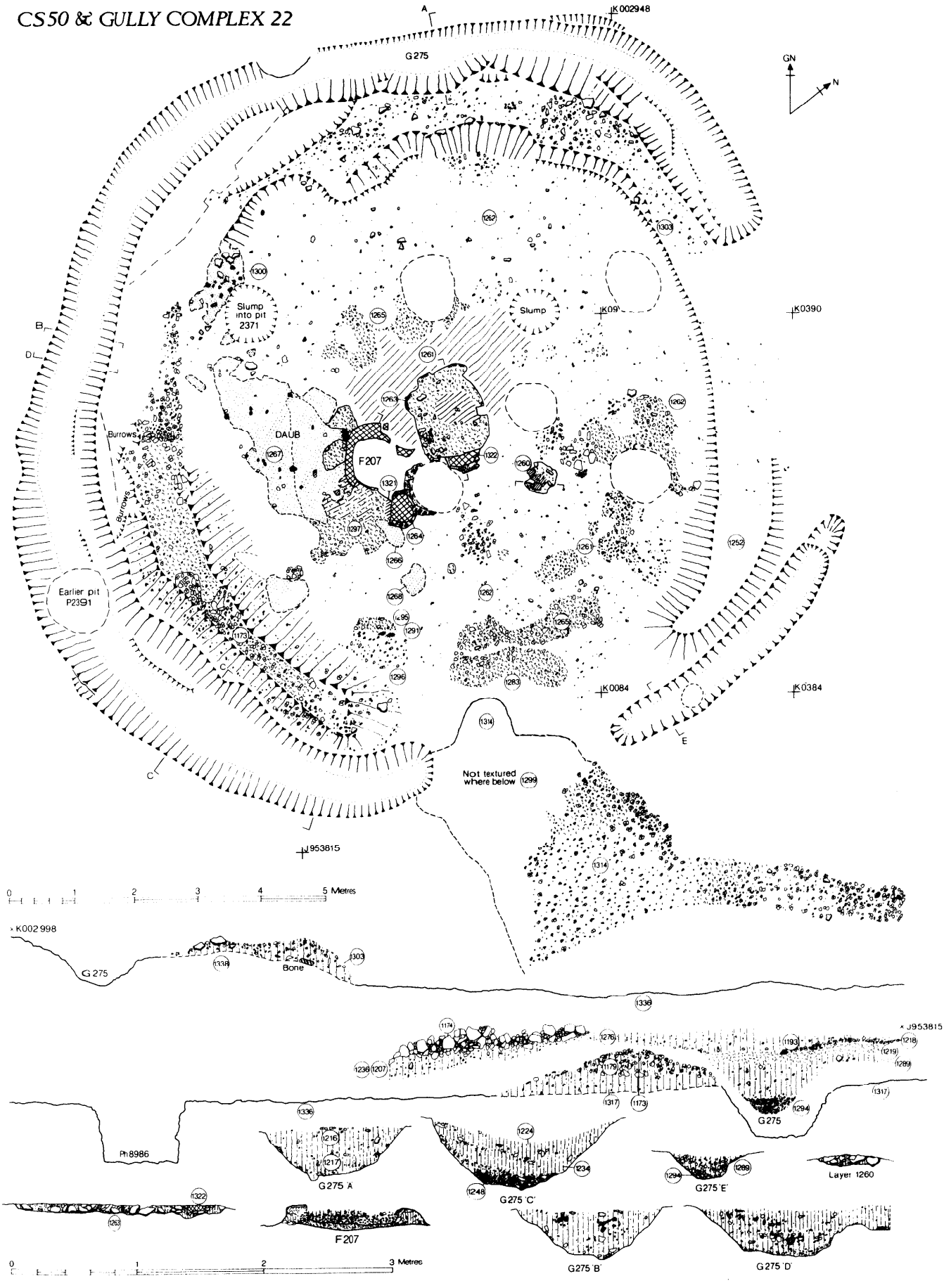

K002948
G275
GN
N
Slump into pit 2371
Slump
K0390
K0384
K0084
DAUB
F207
Burrows
Earlier pit P2391
Not textured where below (1299)
J953815
0 1 2 3 4 5 Metres
K002998
G275
Bone
(1336)
Ph8986
G275 'A'
G275 'B'
G275 'C'
G275 'D'
G275 'E'
Layer 1260
F207
0 1 2 3 Metres

Fig 4.40

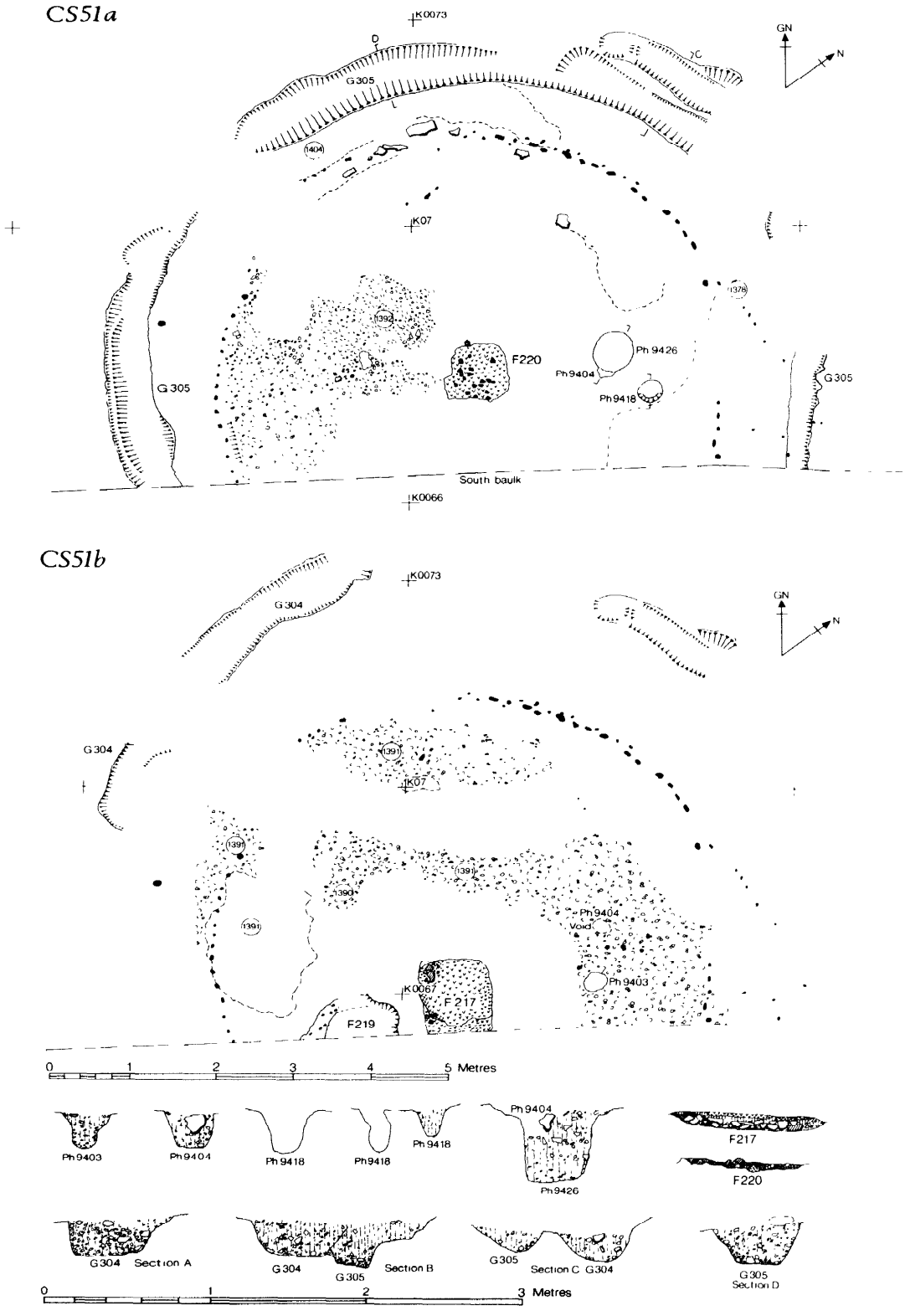

CS51a
K0073
D
G305
C
GN
N
1404
K07
1392
F220
Ph 9426
Ph9404
Ph9418
G305
1378
South baulk
K0066
CS51b
K0073
G304
GN
N
G304
1391
K07
1391
1390
1391
Ph9404
Void
K0067
F 217
Ph9403
F219
0 1 2 3 4 5 Metres
Ph9403
Ph9404
Ph9418
Ph9418
Ph9418
Ph9404
Ph9426
F217
F220
G304 Section A
G304
G305
Section B
G305
Section C G304
G305
Section D
0 1 2 3 Metres

Fig 4.41


CS52
GN
N
Ph 9257
(461)
Ph 9256
Ph 9322
Ph 9255
F249
Slumped into
P2448
Ph 9393
Ph 9314
Ph 9262
(458)
Root disturbed
Ph 9324
Ph 9261
Ph 9567
F 247
Ph 9260
Ph 9259
Ph 9386
Ph 9312
Ph 9258
Ph 9323
Ph 9313
Dist
Dist
(456)
Dist
0 1 2 3 4 5 Metres
Ph 9314
Void
Ph 9258
Void
Ph 9567
Ph 9260
Ph 9386
Ph 9313
Ph 9323
Ph 9312
Ph 9259
Ph 9262
Ph 9261
Ph 9324
Ph 9255
Ph 9322
Ph 9255
Ph 9256
Ph 9257
Ph 9393
0 1 2 3 Metres

Fig 4.42

composed of rounded chalk lumps (up to 150 mm) in a matrix of puddled chalk. The layer had been extensively worn in the centre but was more rubbly at the edge.

CS53. Circular house: 1985 (Fig 4.43)

CS53 is a circular house measuring 6.0–6.8 m in diameter. Little remained of the door structure because later post-holes have destroyed much of it; the west doorpost was totally removed by one of the recut posts of PS370 but the base of the east post-hole (ph 9499) survived though its upper levels were removed by posts of PS349 and PS370. Originally it would have been 0.5 m deep and *c* 0.4 m in diameter at the bottom.

The wall line was represented by a combination of wall slot and small post-holes. The slot (G290), which survives on the north and west, was 80–200 mm wide and 60-100 mm deep. It varied in profile from flat bottomed to V-shaped. On the south-east F263 and phs 9135–9 form the wall line and show clearly that it was constructed of small posts or stakes. There were also eight other post-holes on the wall line all measuring *c* 0.24 m in diameter.

No internal features survived except for a patch of burnt clay (F256) which could have been the remains of a hearth.

CS54 (F268). Circular house: 1986 (Fig 4.44)

The terrace for this structure had been cut into the silts and chalk spreads associated with the preceding structures (CS55 and CS59) on the north and west sides and into the natural chalk at the edge of the quarry (F271 and F286) on the east side. The terrace was approximately 10 m in diameter though the house itself appears to have been oval 9.0 by 8.4 m.

The door structure, on the south side, was well preserved. The main doorpost holes (phs 9779 and 9791) were oval in shape 0.7 m wide and 0.4 and 0.55 m deep respectively. In both the positions of the actual posts could be traced. Both timbers had been roughly squared, that in ph 9779 measuring 220 mm square while that in ph 9791 was slightly larger (260 by 300 mm). The 'voids' were filled with chalky silt and charcoal: the packing around them was of rammed chalk rubble. Two other post-holes in the vicinity of the door (phs 9771 and 9790) need to be considered. It is possible that they represent a replacement door structure but they could be a post structure completely unrelated to the house, built immediately after its demise. A length of slot (F267) is probably a sill slot associated with the original door. Its stratigraphical relationship to the various post-holes is unclear because of extensive rabbit disturbance.

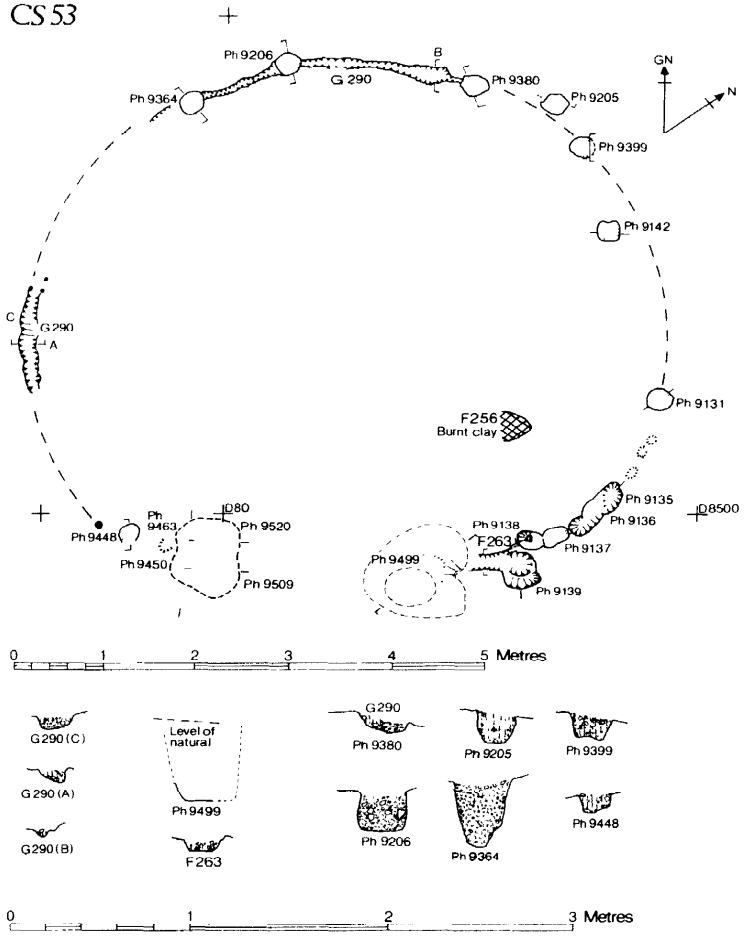


Fig 4.43


CS54
GN
N
Ph 9810
P2536
P2538
K10
P2549
1505
Ph 9789
Ph 9785
P2550
Ph 9778
Ph 9770
Ph 9779
P2537
F267
Ph 9771
Ph 9790
Ph 9791
F270
1521
0 1 2 3 4 5Metres
F267
Ph 9779
Dist
1521
Void
1505
Ph 9791
Ph 9771
F267
Dist
Ph 9791 (top only)
Ph 9790
Ph 9778
Ph 9810
Ph 9785
Ph 9789
Ph 9770
0 1 2 3Metres

Fig 4.44

The wall of the house was built of stakes. These were best preserved on the south-east and north-west sides, being more intermittent around the west and south-west. On the north and north-east sides the evidence has been largely destroyed by subsidence into the earlier pit (P2549). The stake-holes measured between 60 and 120 mm across and were spaced at intervals of roughly 0.25 m. The stake-holes along the upper edge of the terrace may be unrelated to the structure.

The chalk floor of the house (1505) had been badly disturbed by Late IA ploughing and by later rabbit burrows. The character of the floor was variable consisting of chalk rubble (up to 120 mm) with occasional flint nodules over the central and eastern area whereas over the rest it was of small chalk lumps well-compacted and puddled. This variation was largely due to the greater disturbance over the eastern half. The floor varied in thickness from 50-100 mm but close to the door was twice as thick where there had been additional patching to combat wear. Part of the floor survived in recognizable form where it had subsided 0.8 m down in the filling of P2549. It was composed here of burnt flints in puddled chalk very similar to the construction of hearth bases found elsewhere at Danebury. However, its position towards the rear wall is atypical and two other patches of burnt and puddled chalk are more likely to have been the remnants of hearths. One area was close to the north wall line but the other was more central.

Cutting the house floor were a few small post-holes and a small pit (P2536) all of which were probably contemporary with the use of the house.

In the north-west quadrant of the house a disturbed occupation deposit survived (1507). It consisted of a dark grey silt with dense concentrations of charcoal and other burnt material. Above this and forming an arc around the outside of the wall was a spread of worn chalk lumps (1519).

Outside the entrance was a chalk spread (1521) continuous with the house floor (1505). It was composed of chalk rubble which, near the entrance had been trampled and puddled: a hollow way, F270, was worn through it leading to the door.

The whole area of the house and the area to the south were covered with an accumulation of grey silt (1500, 1503, 1504) containing some chalk and occupation material. Over the eastern half of the house there was a thick accumulation of brown silt (1499) mixed with large flint nodules, derived from the rampart crest, concentrating over the hollow formed by the subsiding layers in P2549.

CS55 (F273). Circular house: 1986 (Fig 4.45)

CS55 utilized the terrace created by CS57 after a period of abandonment represented by silt layers (1571, 1577). The structure was roughly 7.7 m in diameter with its door facing south west towards road 6.

The major structural features were the two doorposts (phs 9812 and 9836). The void in ph 9812 was well preserved in plan indicating two timbers set side by side, a rectangular post 260 by 180 mm and a semicircular post 190 mm in diameter. The 'void' was filled with greyish-brown silt flecked with charcoal. Around this was a packing of subangular chalk rubble puddled together. The post-hole itself measured 0.64 m in diameter and 0.4 m deep but around the top was an extension (separately numbered as ph 9811). This would appear to have been roughly contemporary with the abandonment of the house and may have been something to do with the removal of the timber: the hole was deliberately backfilled. The second doorpost, ph 9836, measured 0.46 m in diameter and 0.33 m deep. No distinct 'void' could be seen but some chalk packing remained on the south side. The filling, of subangular chalk in brown silt, suggests that the post had been removed and the hole deliberately filled, the resulting hollow being patched with a spread of chalk rubble puddled on the surface (1561). There was no doorsill but a steep slope existed from the floor up to the threshold outside, 0.25 m higher.

The wall line was ill-defined being represented by a few stake-holes on the west side near the edge of the terracing. Other stake-holes, cut into the natural chalk on the east side, may belong to this structure. Along the south edge was a very shallow slot (F274) representing the wall line. It was irregular and filled with fine black charcoal dust mixed with lumps of reddish-yellow daub (1546).

The earliest floor surface (1558) covered the northern and central area and, over the northern part of the house, continued in use alongside later surfaces to the south. It was composed of tightly packed chalk lumps in a matrix of puddled chalk and grey silt: the surface was worn and trampled. Cutting through this layer was a well-defined line of stakes 2 m long comprising 11 stakes set at intervals of 0.2 m and measuring 60-80 mm in diameter: it presumably represented a partition within the house. A thin lens of greyish-brown silt with flecks of burnt clay and charcoal (1557) accumulated over 1558. Then followed a major resurfacing when another chalk spread (1548) was laid. It was well compacted and the surface was trampled and worn. Over this were preserved a few small patches of black silty occupation material with charcoal and burnt clay (1550, 1542 and 1554) preserved where they had been covered with later patches (1549, 1551 and 1553). Where the floor (1548) had subsided into earlier pits the hollow had been levelled with tips of chalk (1570 and 1555). All these later patches were similar consisting of chalk lumps puddled, compacted and worn smooth on the surface.

No internal hearth or oven existed though there was a patch of burning on the surface of the floor (1548). P2546 may have remained in use from CS57 since the rim of chalk around the top was integral with the chalk floor. Cutting the latest floor was a scatter of stake-holes and five small post-holes contemporary with the latest use of the structure.

The latest floor level was covered by a layer of occupation debris (1538) consisting of dark brown-black silt with flecks of charcoal and occasional burnt flints. The layer was discontinuous and extended beyond the wall lines implying that it had been deposited after the structural elements had been removed, thus representing a late use of the house terrace.

Outside the door of the house was a threshold (1524) composed of chalk rubble packed tightly in a matrix of puddled chalk in grey silt. The surface was heavily worn. A line of four stake-holes had been cut through it in a line 1.25 m long. Beyond the threshold were a series of overlapping chalk spreads creating a pathway running southwards to road 6. This series of layers (1522, 1534, 1539, 1536, 1528=505, 1531=504, 1542) consisted of alternating chalky brown silts and trampled chalk layers representing periodic refurbishment of the path following periods of silting.

CS56 (F275). Circular house and contemporary yard: 1986 (Fig 4.46)

CS56 was constructed within a circular terrace (F275) cut into a series of earlier silt deposits (1614, 1615, 1616). The house measured 6.5 m in diameter.


GN
N
Ph 9816
Ph 9812
Ph 9811
Ph 9822
Ph 9819
Ph 9836
Ph 9821
Ph 9820
Slump into pit
F274
0 1 2 3 4 5Metres
F277
F278
Ph 9839
P2554
0 1 2 3Metres

Fig 4.45

CS56

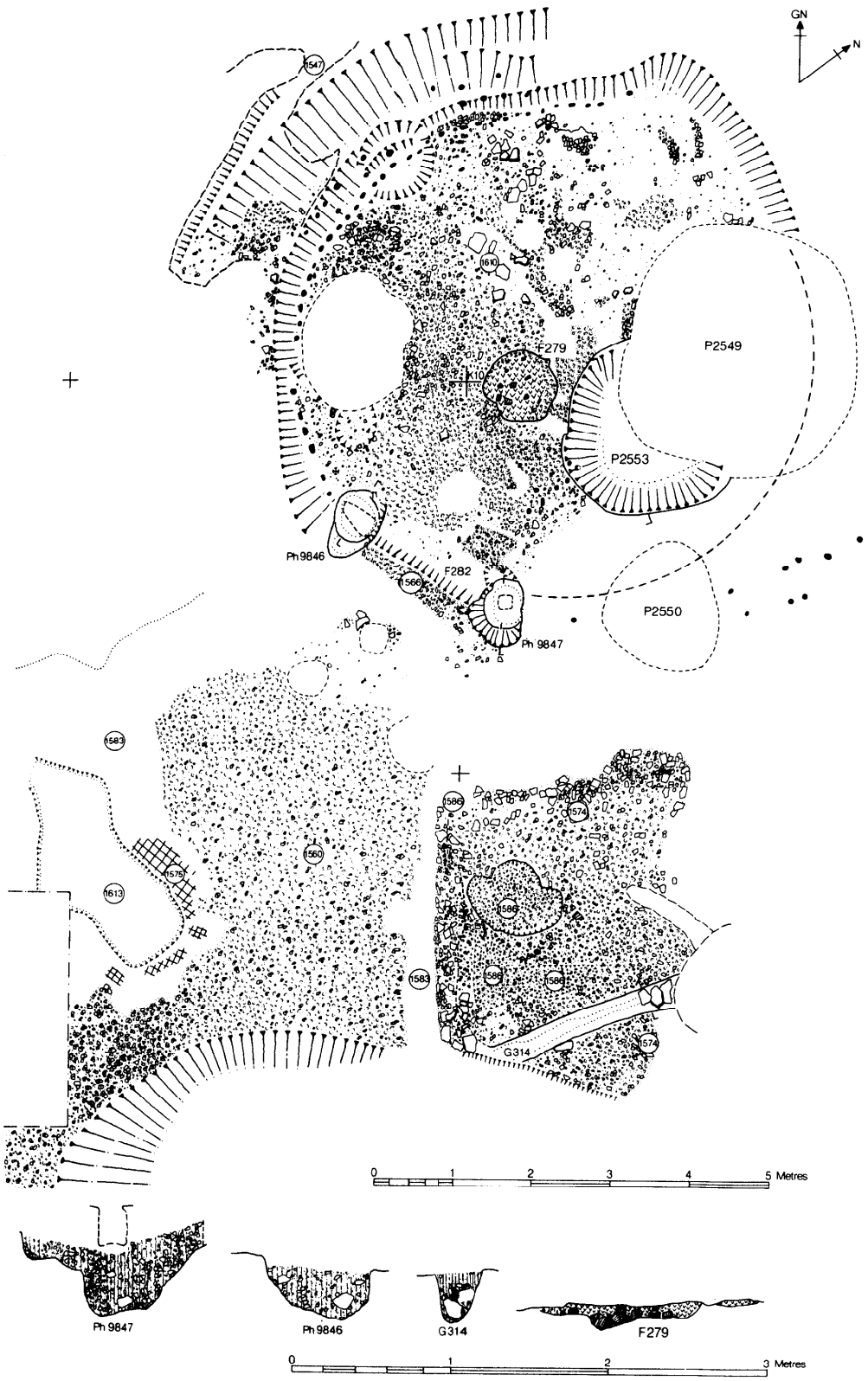

GN
N
1547
1610
F279
P2549
P2553
Ph 9846
F282
1566
P2550
Ph 9847
1583
1560
1575
1613
1586
1574
1583
G314
0 1 2 3 4 5 Metres
Ph 9847
Ph 9846
G314
F279
0 1 2 3 Metres

Fig 4.46

J&The door faced to the south-west and was constructed of two large posts (phs 9846 and 9847). The post-holes measured 0.4 by 0.5 m in width and *c* 0.45 m in depth. In the western post-hole (ph 9846) the 'void' indicated a large subtriangular post measuring 0.5 by 0.24 m, while in the eastern post-hole (ph 9847) the post was square, 0.2 m across. Both 'voids' contained a similar fill of loose crumbly chalky brown silt and both had large chalk blocks placed on the bottom presumably to chock up the posts. The packing around the posts was of small lumps of chalk.

Between the doorposts the doorsill (F282) was formed of a ridge of chalk (1566) 0.3 m wide with a steep slope down to the house floor. In all probability there had been a horizontal timber between the posts against which the chalk had been packed. The 'ridge' was formed of small chalk lumps in a matrix of very compacted fine chalk the surface of which had been heavily trampled.

The wall of the building was represented by an arc of stake-holes very well preserved along the west and north sides where there is clear evidence of a double row in places suggesting a partial (or perhaps total) replacement. The stakes were placed at regular intervals of 0.2 m and most measured *c* 100 mm in greatest width with an oval or rectangular cross section suggesting that they had been formed from larger timbers split to form stakes. Much of the east and south sides of the wall line was destroyed by pits (P2549 and P2550), the former also destroying much of the floor and part of another pit (P2553) which appears to have been contemporary with the house.

The house floor (1610) was made up of a very heter-ogeneous layer consisting of rounded chalk lumps in a matrix of compacted puddled chalk and silt. The layer was rougher and more rubbly in the northern area whilst between the door and the hearth the surface was much smoother and more trampled. There were several areas of patching, with puddled chalk, around the hearth.

The hearth (F279) was recessed slightly in the floor. It was circular, measuring 0.9 m in diameter and was of typical hearth construction having a base of flints upon which had been laid a compacted surface of puddled chalk, subsequently burnt grey.

Just inside the door, cutting the chalk floor was a short row of stake-holes forming some kind of internal partition. Some were cut by P2553 which belonged to a late phase in the use of the structure.

Over the floor an occupation deposit (1567) had accumulated. It varied in consistency but was basically greyish-brown silt containing occupation debris. In the area between the door and the hearth the silt was very dark, containing a high percentage of charcoal and some burnt daub, clay and flint. A nearly complete pot and many fragments of copper alloy were found. After the house had gone out of use a thick layer of silt (1506) accumulated covering the area of the house: it was contemporary with a similar layer (1540/ 1559) sealing the road and courtyard.

To the south of the house were several expanses of chalk rubble representing a contemporary courtyard surface between houses CS2 and CS56. One of the earliest was a rectangular patch of chalk (1586) with a heavily trampled surface. To begin with the pathway leading from the door of CS56 to road 6 had not been surfaced and a hollow-way had been worn into the underlying silt (1583) into the surface of which was trampled patches of daub (1575) and other occupation material (1584) consisting of grey silt, charcoal and flecks of burnt clay and burnt chalk. To the east another chalky brown silt (1563) had accumulated, partly overlapping a chalk spread (1586) most of which was sealed by a fine clean pale brown silt (1587). Over this a further chalk spread (1574) had been laid. The west and north edges were formed of large chalk rubble (100–300 mm in size) but towards the centre most of the chalk was smaller *(c* 40 mm). Some areas of wear resulted in the underlying chalk (1586) being exposed. It was probably at about the time that 1574 was being deposited that another chalk spread (1560) was laid immediately to the west forming a threshold outside the door of CS56. It was continuous with the layers forming the surfacing of road 6 (516 and 524).At the junction of road 6 and the path there was considerable wear which led to the formation of a large pothole as the layers beneath were worn away to the level of an earlier chalk spread (1613).

The chalk spread (1574) was cut by a deep gully (G314). It is unlikely to have been for drainage since it would have drained directly into the back of CS2. It is therefore more likely to be structural possibly supporting a fence to restrict access between the courtyard and the passage between the east side of CS2 and the rampart. The slot was filled with brownish silt containing occupation debris.

After the courtyard area had gone out of use it was sealed by a thick accumulation of silt (1540/1559) continuous with the silt (1506) sealing the house.

CS57a and b (F276). Successive circular houses: 1986 (Fig 4.47 and Pl 46)

CS57 occupied a circular terrace (F276) cut to a depth of 0.2-0.3 m into earlier silt and chalk layers (1614, 1615 and 1642) and into the natural chalk at the east edge of the quarry hollow (F272). The house was *c* 7 m in diameter.

The door faced south-west and was represented by two post-holes (ph 9835 and ph 9840). Both measured 0.5 m deep and 0.5 m wide and in both the 'voids' for the timbers were clearly preserved. The 'void' in ph 9840 was D-shaped, representing half a trunk, measuring 250 by 180 mm, while that in ph 9835 was more triangular, 300 by 180 mm and may have been a quartered trunk. The 'voids' were filled with a very loose grey silt with some small chalk. The packing in both post-holes consisted of puddled chalk rubble.

Between the doorposts was a slot (F278) for the doorsill. Along its southern edge was a void 2 m long and 0.3 m wide, which probably held a timber, and along the inner edge there was a packing of large chalk blocks and flint nodules. The packing was sealed by the chalk floor of the house.

The wall line was represented by stake-holes best preserved on the west side. Their spacing was irregular, between 0.15 and 0.3 m. In shape the stakes were usually oval up to 100 mm across.

The floor surface in the southern two-thirds of the house was well preserved (1580) and remained in use through-out theearly phase of occupation. It was composed of small chalk lumps (10–20 mm in size) tightly packed in a matrix of puddled chalk. It had a smooth and worn surface. In the northern third the floor was less well preserved partly because of destruction by burrowing animals and partly because of subsidence which necessi-tated reflooring. The earliest floor level here was a discontinuous chalk spread (1607) made up of small chalk lumps packed in brown silt and puddled. This was sealed by a thin brown chalky silt with some occupation debris (1596) over which a further chalk spread (1578) had been laid. The house floor was covered by a thin accumulation of occupation debris (1579), mainly in the

CS57a

CS57b

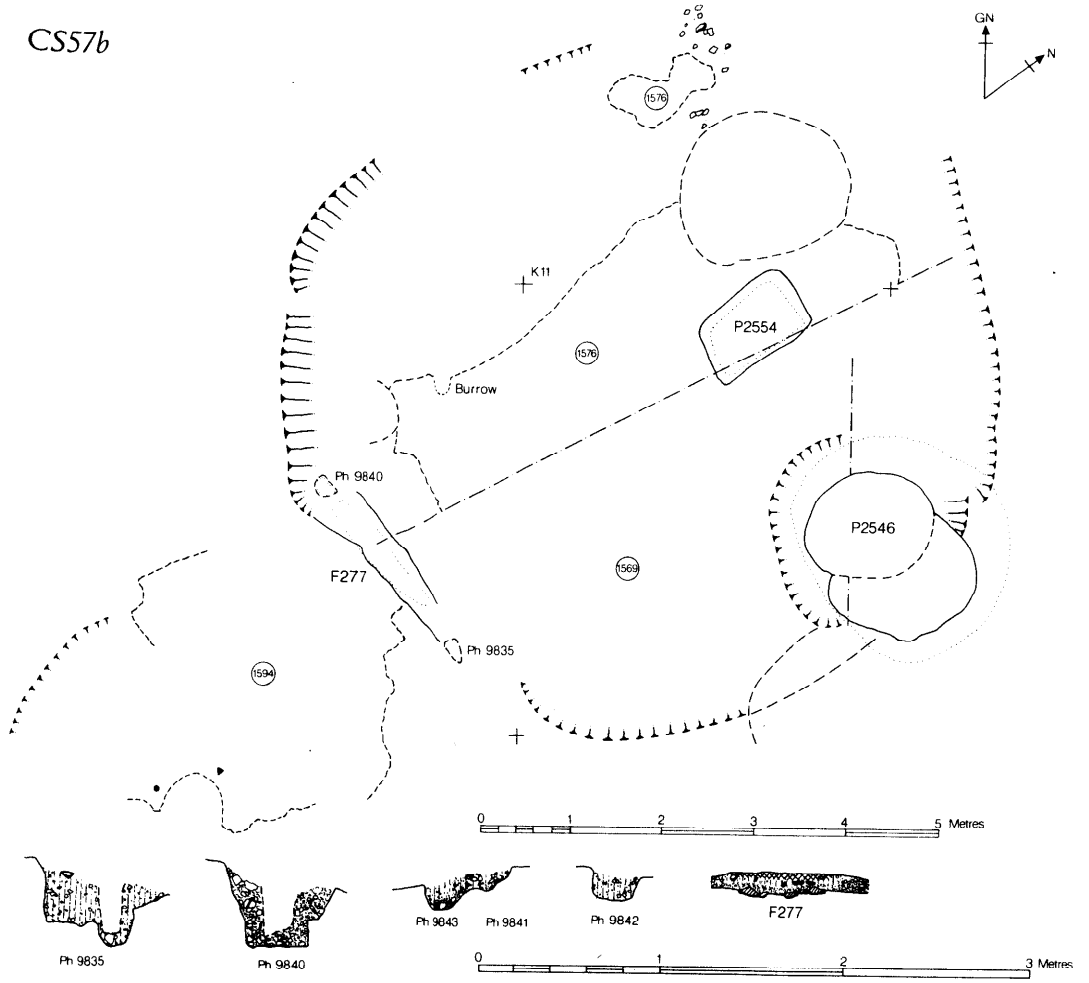


Fig 4.47

form of a fine dark brown ashy silt containing much fine charcoal dust, flecks of charcoal and daub but virtually no pottery or bone.

Just inside the door to the right was a row of stake-holes forming a short partition or structure. There were also four contemporary post-holes two of which (phs 9842 and 9843) were very similar and may have formed the uprights of a single structure, perhaps a loom.

In the centre of the floor was a circular hearth (F277), 0.7 m in diameter. It was recessed into the floor and was constructed of a basal layer of large flints over which had been spread a layer of puddled chalk 20-60 mm thick, burnt grey in the centre.

In the last phase of the structure's life (CS57b) a new floor 0.15-0.2 m thick (1569/1576) was laid. This consisted of lumps of chalk (up to 100 mm) in a brown chalky silt, heavily trampled on the surface and worn smooth. There was nothing to suggest that the door and walls of the original building did not continue after this refurbishment but the function of the building may have changed since the hearth was not replaced. A subrectangular pit (P2554) was contemporary with the use of this floor and P2546 appears to have been cut from this level. Over the floor a spread of occupation material (1573) accumulated, somewhat discontinuously in the southern part of the house but more extensively in the northern half. It consisted of a dark brown silt containing large quantities of occupation debris especially charcoal, burnt flints, sling stones, pottery and lumps of raw Reading Beds clay; small finds included an iron reaping hook and part of a shale bracelet.

Outside the door of the house was a hollow-way (F226) running towards road 6. In the bottom a greyish-brown silt had accumulated (1599) containing some occupation debris. Over this was a separate patch of occupation rubbish (1598) comprising a very dark grey silt mixed with a quantity of charcoal. Above this, immediately outside the door, a layer of chalk rubble (1597) had been dumped consisting of lumps of chalk tightly puddled together. This formed the first threshold. A thin lens (60 mm) of fine grey silt (1595) accumulated on this before the second threshold (1594) was laid. It was composed of subangular chalk lumps in a matrix of puddled chalk with occasional smears of daub and charcoal. It was continuous with 1547 which formed a narrow ridge of trampled chalk extending around the west side of the house and was probably equivalent to the reflooring of the house (1569/1576).

The whole area of the house and threshold was sealed by a chalky silt (1571, 1577, 1540) equivalent to that which buried CS56 to the south (1506, 1559).

CS58 (F283). Roughly circular working area: 1986 (Fig 4.48)

F283 was a roughly level area *c* 8 m in diameter scarped into the layers filling the quarry hollow on the north and the edge of the quarry hollow on the east. The area seemed to have served as a working area represented by several broadly contemporary features.

In the central area the natural chalk (between quarry hollows F272 and F286) served as the floor with a layer of large chalk rubble (1602) packed into the top of pit P2564 to form a solid surface. The southern part of the area was floored with a spread of chalk in brown clayey silt (1637). This layer was cut in the final stage by the two northern post-holes of PS381.

Above the floor (1637) were a series of spreads of chalk and occupation material. The first was a chalk spread (1636) which was followed by a thin brown clayey silt (1631) mixed with occupation material. Above this was a discontinuous spread of yellow daub (1626).

The major structural features are a two-post structure PS384, an oven, a hearth, several small post-holes and a beehive pit (P2560). PS384 measured 1.3 m long and was composed of two rectangular post-holes, 0.36 by 0.3 m and 0.3 by 0.24 m, cut into the natural chalk. The hearth (F285) measured 0.88 by 0.7 m and was recessed into the underlying silt. It was built of a basal layer of flints set in a matrix of puddled chalk over which had been laid a surface of daub, smoothed and baked hard. Nearby were some patches of daub, charcoal and fine black charcoally-soil. Close to the hearth was an oven (F284), 1.15 m in diameter with the flue to the south. The walls, built of chalky daub, were 0.2–0.24 m wide and had survived to a height of 60 mm. On the floor was a thin layer of fine black charcoally ash.

Much of the working area around the central features was sealed by a thin occupation layer (1601) containing quantities of charcoal and small fragments of daub. Elsewhere 1626 was sealed by a greyish-brown chalky silt (1624) with some admixture of charcoal and daub while along the southern edge of the working floor was a dump of yellow and reddish-yellow daub (1520) possibly derived from the demolition of the oven when the site was being cleared prior to the construction of CS57.

CS59. Circular working area: 1986 (Fig 4.49)

The area previously occupied by CS56 (F275) was subsequently utilized as an open working space of roughly circular shape *c* 6.2 m in diameter after a layer of greyish-brown silt (1506) had accumulated.

The entrance was in the southern side, roughly in the same place as the entrance to CS56 but slightly to the east. A spread of chalk (1564) had been laid over the old doorsill, into the interior: beyond this the surface of 1506 served as the floor. The chalk spread was composed of rounded lumps of chalk (up to 80 mm) tightly compacted together. Chalk rubble had been packed into P2553 to form a rough chalk surface.

It was at this stage that P2549 appears to have been dug. It was unusually large, 3.8 m in basal diameter and 3.3 m deep. Considerable subsidence in the fill (by *c* 0.8 m) suggests that organic material in the lower fill had rotted and compacted. The lowest layer contained a mass of burnt grain mixed with ash. Such a deposit could be the remnants of a partially burnt dump of grain of which only the carbonized material has survived. It seems likely therefore that CS59 served as the working area contemporary with the use of the pit. Other contemporary features in the vicinity included P2550 and ph 9823.

CS60 (F336) and GC34. Circular house: 1986-7 (Fig 4.50 and Fig 4.113 sections 66 and 67))

CS60 was built on a terrace, F336, cut into the silts of the quarry hollow. The diameter of the house was 6.2 m and about three-quarters of it lay within the excavated area.

The door features consisted of two triple post-holes with a sill slot (F338) between. The relationship of the floor level (1893) shows that, when the floor was in use, only one post on each side of the door was standing. The other two could either have been related to the construction process or could have held the verticals of door frames pre-dating the chalk floor. The western group (phs 9958, 9965, 9966) measured 0.5–0.6 m in diameter and 0.45–0.55 m deep: the eastern group (phs 9962, 9963, 9964) were 0.48–0.65 m in diameter and 0.32–0.5 m deep. The relationship of the earlier post-holes to each other is not clear, though ph 9966 may have cut ph 9965 which

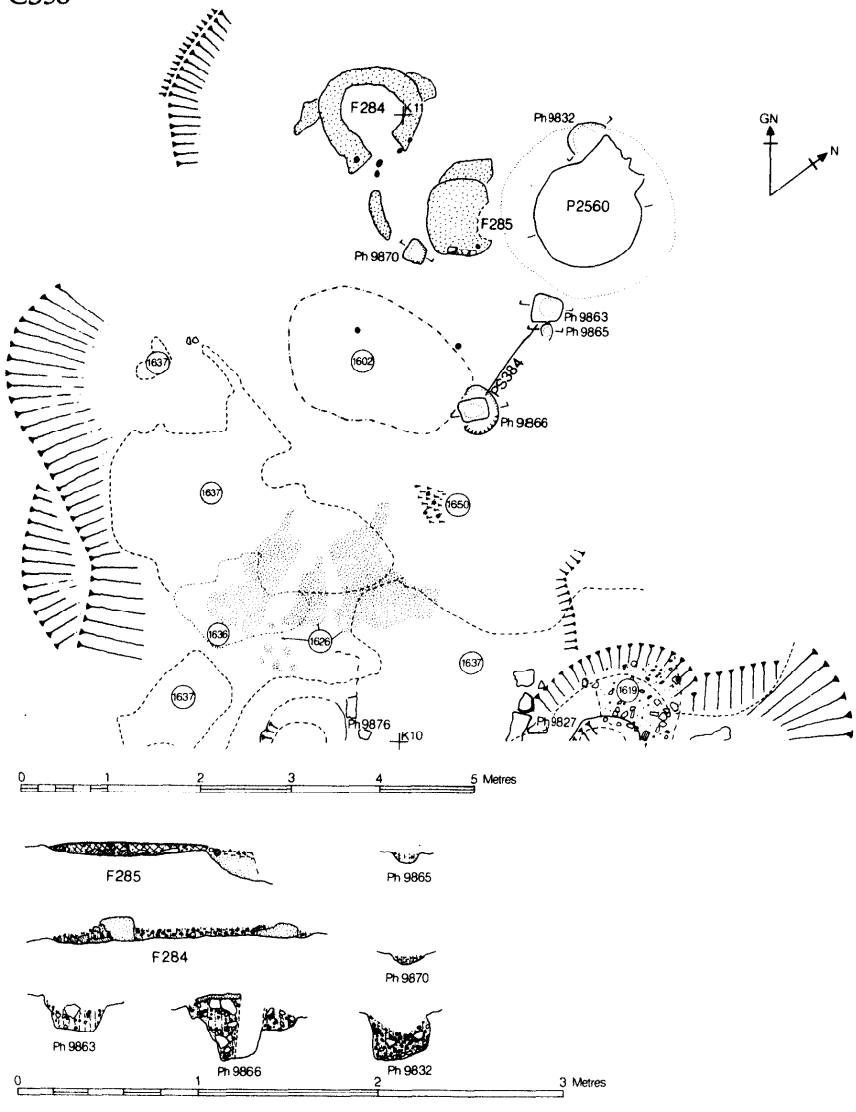


Fig4.48

has the remnants of a void and chalk packing visible. The two actual doorposts were of similar form having a soft silty fill in the 'voids' surrounded by a packing of chalk silt and hard packed chalk blocks which are probably a continuation of the floor surface. The voids were clearly visible in plan: that in ph 9958 was subrectangular, 150 mm square, while that in ph 9962 was wedge-shaped measuring 180 by 100 mm decreasing to 60 mm. Between these two posts was the sill slot (F338) 70 mm wide by 70 mm deep. The place of the timber sill had been replaced by a silt containing some occupation debris.

The wall of the house was stake-built. On the west much of the line had been destroyed by P2575 but a length survived to the north where the individual stake-holes were at 0.15–0.2 m intervals. The eastern side of the house was marked by a scatter of stakes but the pattern is confused.

The floor of the building was formed by a single layer of chalk lumps (averaging 20–40 mm) puddled and crushed together (1893). The surface was very worn: it had served throughout the life of the building with only minor repairs of greyish-brown chalky silt (1892) and puddled chalk (1894). Between the original floor and the patch (1892) was a thin layer of occupation material (1890) equivalent to the lower part of 1869.

Cutting the floor was a line of stake-holes running from the west doorpost for a distance of 2.3 m. The stake-holes were at intervals of 0.1–0.2 m. Where the row ended, their line was continued by a strip of puddled chalk (1894). Various possible interpretations present themselves, the most likely being that the stakes represent an internal partition with the chalk serving as a sill to a doorway. At this time P2577 was probably in use with a narrow mouth kept covered while F342 was an early feature pre-dating the partition: access to the supposed door would not therefore have been difficult.

Several internal features were created at various stages during the use of the building. F342 was a small oval scoop, 0.82 by 0.58 m and 0.27 m deep, filled with brown chalky silt and some occupation debris. In addition two pits were contemporary with the house, P2577 and P2580, but it was not possible to be certain whether they were in use together or consecutively. Both were well preserved uneroded beehive pits of roughly similar size and both had a raised chalk ridge around

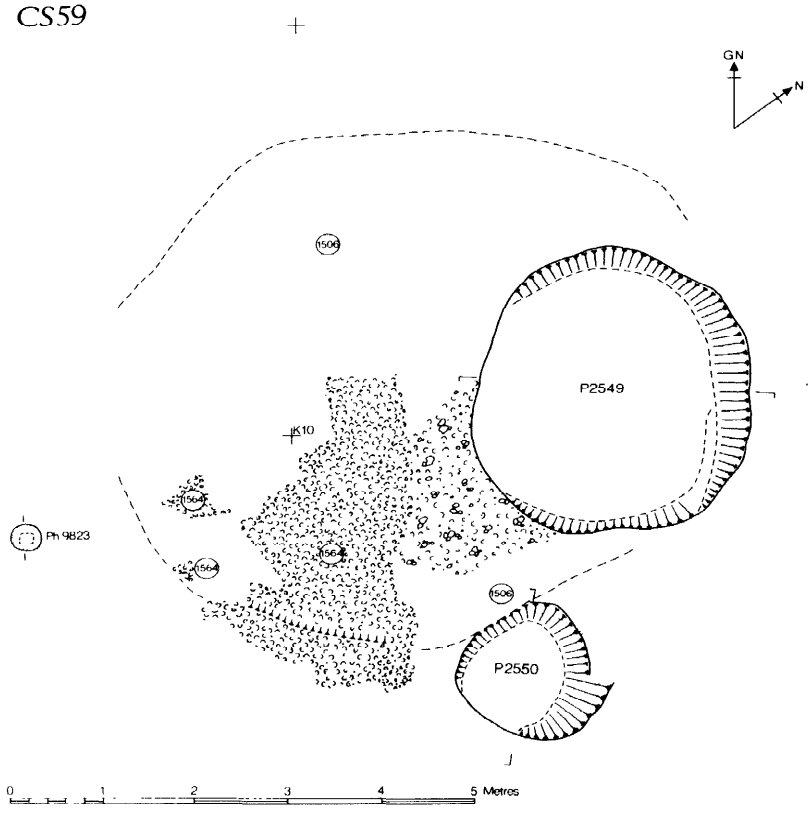


Fig 4.49

their rims. In the case of P2577 the structure was a substantial layer of puddled chalk (1927) over a base of flint nodules (1926) presumably intended to prevent erosion and wear around its upper edge which here was cut through quarry hollow silts. P2580 had only the fragmentary remains of a rim of compacted chalk (1870) around it.

In the centre of the house was an oven and two hearths. The oven (F326) was recessed into the floor and the underlying silt and was probably constructed at the same time as the floor was laid. It measured 1 m in diameter and survived to a height of 0.3 m. The walls were 0.12–0.25 m thick and the flue, 0.25 m wide, lay on the south side. The base, of puddled chalk, was sealed by charcoal and shattered, heavily burnt flints. It is one of the best preserved ovens from Danebury.

Immediately to the south of the oven was the base of a hearth (F343) constructed integrally with the chalk floor. It measured 0.9 m in diameter and 80 mm deep. Only the foundation of large flint nodules survived. The puddled chalk packed around them had been burnt grey but the original surface had been worn off.

This hearth had been replaced by another (F340) constructed on the east side of the oven. It was built over a lens of burnt debris which rested on a thin layer of daub continuous with the oven flue. The hearth was constructed on a base of angular flints closely packed with yellow daub integral with the daub forming its surface. The upper part of the daub had been reddened and the surface was burnt hard and black.

To the south east of the oven-hearth complex was an extensive lens of ashy material (1889) mixed with charcoal and some fragments of daub. This presumably represents burnt residue derived from the hearth and oven. To the north of the oven were two patches of daub (1895 and 1896= F339). F339 could be the remnant of an early oven.

Over the surface of the floor an occupation deposit (1869) had accumulated. It consisted of a dark greyish-brown silty soil, with some small chalk, mottled with charcoal fragments and containing some burnt flints. Overlying the occupation in the centre of the building was a patch of yellowish daub (1860) with several large flints in it. This was apparently the demolished remains of the oven.

Outside the door of the house the threshold had been built of a series of chalk spreads. The earliest (1865) was heavily compacted and puddled. It was probably continuous with, or may have overlapped, 1897/8. Further spreads (1871 and 1872) were separated from 1865 by a layer of fine grey charcoally silt (1873). These spreads were equivalent to 1592. The layer forming the threshold sloped up to join road 6 to the south-west of the building.

To the south-east of the house and contemporary with it lay a drainage gully (G323) measuring 0.6–0.7 m wide and 0.4 m deep forming an arc of some 6 m in length. G323 was largely destroyed on the south by a shorter gully (G316) which may have been a replacement (though it is not clear whether G316 is contemporary with the later use of CS60 or with CS61). It was 1.0 m in width and 0.45 m in depth. Most of the fill consisted of brown chalky silt but a thin charcoally silt covered the bottom.

Following the disuse of CS60 the building was demolished and CS61 was built.

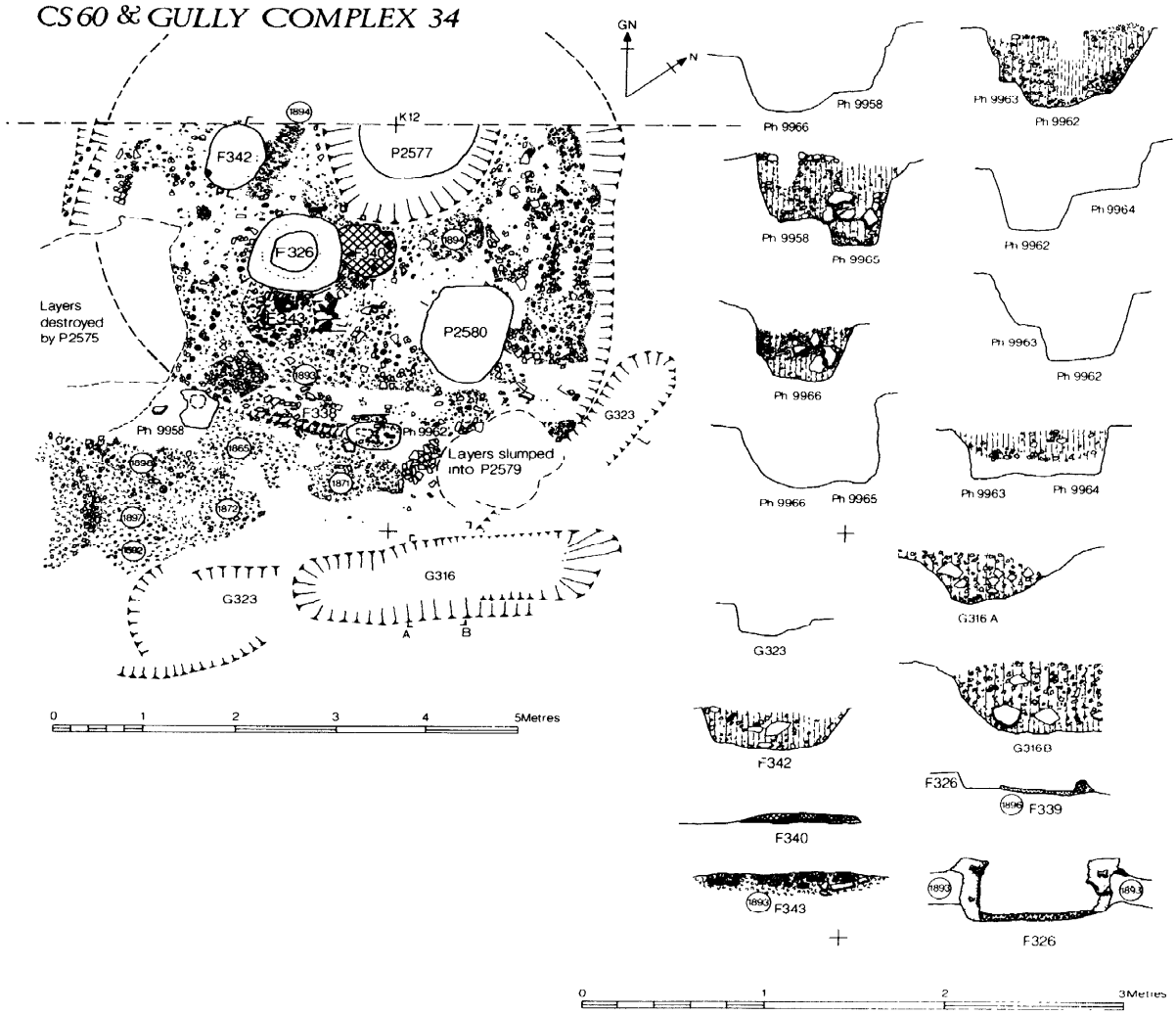


Fig 4.50

CS61 (F337) and GC32. Circular house: 1987 (Fig 4.51 and Fig 4.113 sections 66 and 67)

CS61 immediately succeeds CS60 with no accumulation of silt between them. However the structure was larger requiring additional terracing into the side of the quarry hollow on the west, the threshold of CS60 (1865 and 1897) on the south-west and into the quarry hollow silts on the east. The resulting terrace was 9.5 m across allowing the structure to be *c* 8.5–9.0 m.

No evidence of a doorway lay within the excavated area and must therefore have been sited on the north side.

The wall was stake-built. Only a few stake-holes could be found on the east side where the wall cut the underlying silts but on the west side at least three concentric arcs of stake-holes were clearly visible cut into the natural chalk. The individual holes were spread at intervals of 0.2–0.25 m and many were of a distinctive rectangular shape, 80-100 mm by 50 mm: circular examples were 40–80 mm in diameter. Part of the inner arc continued across the threshold of CS60. Ph 9991 lay roughly on the wall line. While the concentric arcs could represent a single contemporary structure they are more likely to reflect rebuildings.

Inside the house the floor was represented by a series of chalk spreads and trampled occupation debris. In the south-west area the chalk spreads forming the threshold of CS60 (1865, 1897 and 1898) served as the floor surface. In the central area the floor was formed by a layer of chalk rubble and flints (1868) mixed with brown silt and occupation debris. The surface wasworn but was loose and uncompacted. To the north-east the floor consisted of greyish-brown silt (1867) containing chalk rubble much of which had been burnt. The surface was worn and compacted.

In the south-east part of the house was a ridge of chalk (1866 and 1900) surrounding P2579 which was contemporary with the use of CS61. The pit was a well preserved, uneroded beehive similar to those contemporary with the preceding house but smaller. However its top was packed with chalk so it probably went out of use before the house.

In the north-west quadrant there were patches of daub, burnt clay and a scatter of flint and chalk blocks. The most extensive layer was daub (1860) resulting from the demolition of the oven of house CS60: the surface was trampled.

Fig 4.51

Roughly in the centre of CS61 were the remains of a hearth and an oven. The hearth (F323) measured 0.85 m in diameter and 0.1 m thick. It had been recessed into the floor surface and its base was formed of angular flint nodules. The surface consisted of a layer of puddled chalk burnt grey. Immediately to the east was an oven (F324) which had been broken up by subsidence, about half of it slumping into the top of P2580. Originally it measured 0.98 m in diameter with walls 0.12–0.2 m thick surviving to a height of 0.15 m. Both walls and base were made of pale brown daub and the flue was probably on the south side. On the base was a thin layer of ash and charcoal covered by fine shattered flint. Outside the house, demarcating its southern edge, were two gullies. G316, the earlier, may have come into use during the last phase of CS60. G315 was larger, measuring 4.5 m long, *c* 0.8 m wide and 0.45 m deep. Most of the fill was a naturally accumulated silt but there was a deliberate dump of chalk blocks in the top.

Over the floor of the house was a mixed layer (1859) of dark grey silty soil mixed with chalk and occupation debris, resulting from erosion processes post-dating the abandonment of the house, and incorporating occupation layers which had accumulated in the house. Sealing the whole area was a clean brown crumbly silt (1856) which had accumulated naturally.

CS62. Circular house: 1986–7 (Fig 4.52)

This structure is represented by two short lengths of gully preserved beneath the tail of the rampart (rampart period 3). Only part lay within the excavated area and much of that had been destroyed by the quarry hollow for the rampart. The house could have been contempor-

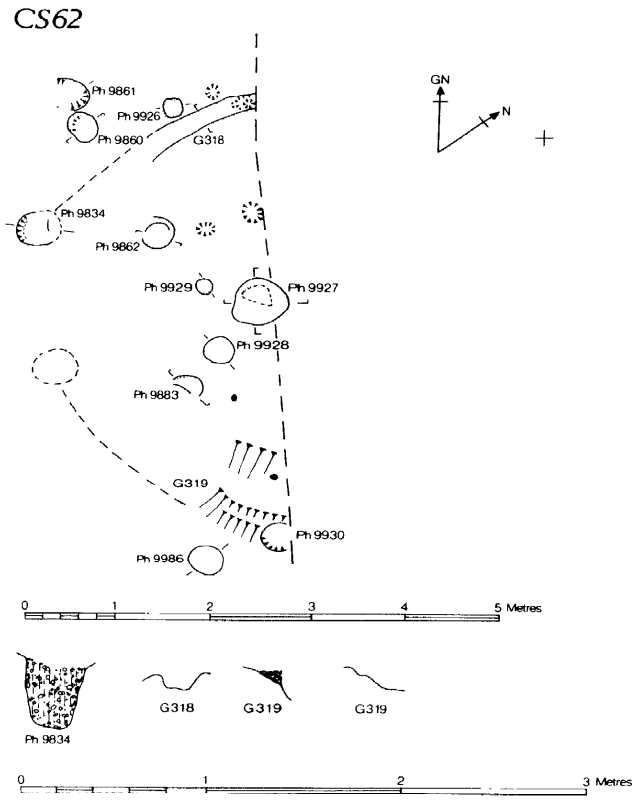


Fig 4.52

ary with rampart 1 (and sealed by rampart 2) or it could have been terraced into the tail of rampart 2 and sealed only by rampart 3.

The main structural elements were two lengths of gully (G318, G319). G318 was evidently intended to hold vertical timbering since it contained well preserved chalk packing and there were post indentations in its base. It measured 0.2–0.24 m wide and 0.12 m deep. G319 was partly cut away by F347 and its filling was largely disturbed by rabbits.

The entrance is most likely to have faced west but the area has been largely destroyed by the quarry hollow and by later pits. However ph 9834 could have been one of the doorposts: it measured 0.4 m in diameter and 0.45 m deep. Its counterpart would have been destroyed by a pit.

No associated stratigraphy was preserved but it is possible that ph 9927 was in some way related to the structure.

CS63 (F112). Circular house: 1982 (Fig 4.53)

CS63 was most probably a house. It consisted of a roughly circular platform, of which about half was excavated, terraced into the underlying brown silt (751) at the western edge.

No structural evidence of a wall survived and it could therefore be argued that the structure was an open working area. However there is some evidence to suggest the existence of a door on the north-eastern side. Here a rectangular patch of chalk (833) had been laid with a slot through the centre which could have taken a horizontal timber sill. No post-holes were noted from the level of the floor but two holes became apparent after its removal (phs 8472 and 8465) and though disparate in size these could have served to take the vertical posts of a door frame. Ph 8472 showed a 'void' 160 mm in diameter and a patch of chalk of the floor (745) fitted around the edge of the void in such a way as to suggest that the post was standing when the chalk spread was being laid. Ph 8465 had a more substantial void, *c* 250 mm in diameter, which was largely clear of chalk floor surfaces. The disparity in the size of the posts is unusual but not unknown among the door structures of the Danebury houses. If the evidence for the door is accepted then CS63 may be regarded as a house.

The surface of the underlying silt (751), outside the structure, had had a considerable amount of chalk trampled into it: inside a distinct chalk floor (754) had been laid. It consisted of small subrounded chalk lumps and occasional flints making a total thickness of 70–100 mm. Just inside the door the layer was very hard and tightly packed but towards the edges the chalk became sparser. In the central area there were patches of burning on the surface, no doubt associated with the two hearths (F115 and F116) which were integral with the floor. Both hearths were of identical construction and similar size, F115 measuring 0.76 m in diameter and F116 0.68 m. Both were built of flint nodules set in fine puddled chalk which also once formed an even surface above the flints. The central area had been burnt grey or pinkish-brown.

In the north-west part of the structure lay P2115. The pit was contemporary with the use of the building since it was surrounded by a raised ridge of tightly packed chalk rubble (750) which was one with the floor surface.

Overlying the chalk floors (750 and 754) was a thin (20 mm) discontinuous occupation layer (749) consisting of a fine dark brown silt containing much fine charcoal dust as well as larger fragments of charcoal and burnt clay. This was sealed by a spread of chalk rubble (744) which covered the whole area but was piled up around the rim of P2115 accentuating the ridge and showing that the pit was still in use. The surface of this chalk spread was worn and well trampled.

CS64. Circular house: 1978 (Fig 4.54)

A sector of what may be a circular house was exposed when the tail of the third period rampart was cut back in the area of sequence A (1977–8). It was not designated as a circular structure at the time but a reassessment of the evidence suggests that it should so be regarded. The section has already been published in Volume 1 (Fig 4.100).

The structural remains comprised a single doorpost ph 3735 (the northern post-hole having been destroyed by P1150) and a length of wall slot G110. The post-hole was oval in plan 0.50 by 0.42 m and nearly 0.50 m deep. The wall slot G110 survived for little more than a metre in length and has been partly destroyed by P1130. The gully measured 220 mm in width and *c* 120 mm in depth: it was filled with grey chalky silt containing large flints up to 200 mm long and smaller chalk pieces *c* 0.7 m, which presumably formed packing. The evidence of stake-holes in the base suggests that it had held a stake-built wall.

The packing in the gully was sealed by a chalk spread (layer 578) which formed the floor surface of the house. Three patches of the chalk spread survived, two adjacent to G110 defined the line of the actual wall. The layer was very hard and compacted, composed of small rounded chalk in puddled chalk, and had a smooth trampled surface. Contemporary with this layer, inside the house,

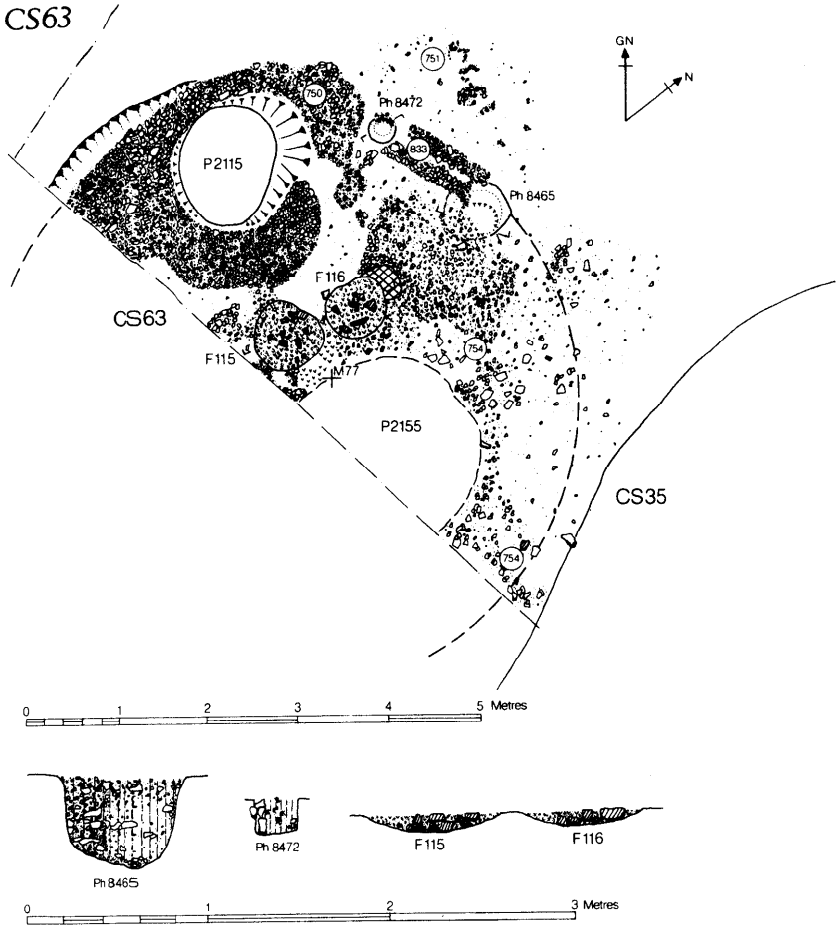


Fig 4.53

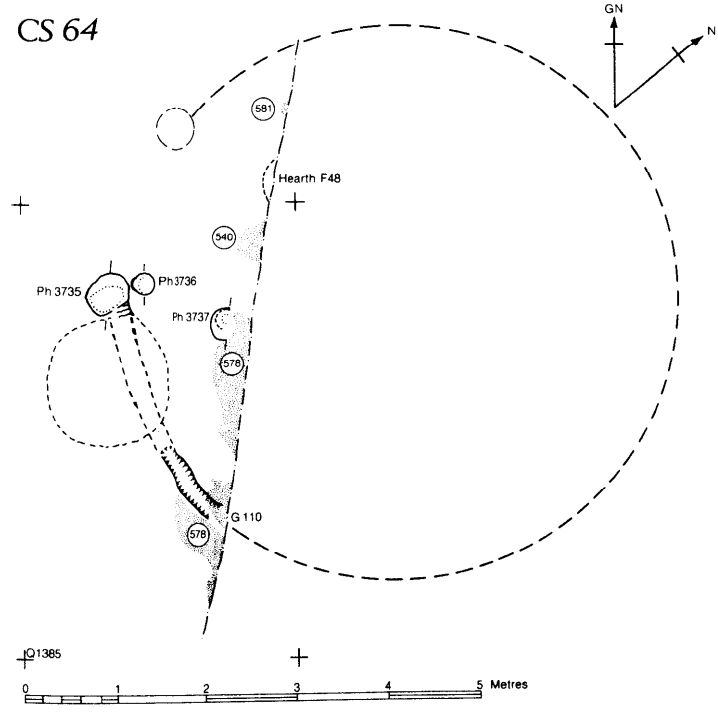


Fig 4.54

was ph 3737, the packing of which appeared to be sealed by the chalk spread though its void was not.

On the north side, layer 581, though not planned, appeared in section to end on the projected wall line, giving the structure a diameter of approximately 6 m, which fits the curvature of G110. Layer 581 consisted of massive chalk blocks (tilling the hollow above layer 580), with the upper surface formed of small angular chalk lumps, well compacted, smooth and trampled.

Contemporary with this was a hearth, F48, which was exposed in section: only a small arc extended into the excavation. It was constructed of a foundation, 60–120 mm thick, of burnt flints and chalk blocks 100–150 mm in size in a matrix of puddled chalk with a smooth upper surface (layer 583). This appears to have been resurfaced with a thin skim of reddish-brown daub 15 mm thick.

Over the chalk floors was a scatter of occupation debris. To the north of the hearth was a layer of black charcoally soil (layer 582) which was probably raked off the hearth. On its surface at the north end was a lens (15 mm thick) of red burnt daub, which could be debris from a hearth or a poor quality hearth in situ. Immediately south of F48 was another thin layer of black silty soil (layer 540), with flecks of chalk, daub, charcoal and small flints; this also has the character of debris from a hearth or oven.

The long section shows possible resurfacing of the floor by chalk lenses.

CS65. Possible circular house: 1977 (Fig 4.55)

A reassessment of the excavation record suggests the possibility of there having been an unidentified circular structure in the area excavated in 1977. The evidence is far from conclusive but the possibility deserves to be considered.

The north-west side was represented by a curved terrace, cut into the edge of the quarry hollow, the base of which was at the same level as the surface of layers 442 and 435, which were contemporary with G82 on the opposite, south-east, side. The terrace and the gully provide the limits of the supposed structure, indicating a diameter of roughly 7 m. Approximately half the structure lay in the unexcavated area on the north.

G82 was wide and shallow: 1.2 m in width and 0.4 m in depth. Only 2 m in length was exposed, with a possible further shallower extension of 1.7 m on the south; the shape of the unexcavated quarry hollow edge suggests it may have continued for a further 2.5 m on the north. This gully does not appear to have been structural but may have served for drainage.

The floor (layers 442 and 435) was formed of fragments of chalk in a matrix of compacted chalky silt. It varied in thickness from 0.1–0.3 m, Over layer 442 was an occupation deposit (layer 441), which was only 50 mm thick and composed of black charcoally soil with daub flecks and small burnt flints.

The door of the house possibly lay on the north, unexcavated, side. Layer 467, which lies just beyond the projected wall line, has the appearance of a doorsill. The spread consisted of compacted chalk rubble in a soil matrix and was 0.1–0.2 m thick. It was sealed by an occupation deposit (layer 475) of fine soil with crushed charcoal and pieces of daub.

CS66. Possible circular working area or house: 1978 (Fig 4.56)

The area to the south of building CS7/8, part of which had previously been occupied by CS5, was described as a working area in the first volume of this series. A restudy of the excavation records allows the possibility that in one phase it may have supported a circular structure: the evidence, however, is slight and the area had been considerably disturbed by root action and burrowing animals.

The principal structural evidence consisted of two possible doorposts, ph 3426 and 3428/3600 and the trace of what may once have been a stake wall on the north and east.

On the north a number of individual stake-holes survived cutting layer 498 and around the east side there were smears of charcoal, some apparently individual stake-holes, but elsewhere forming a continuous line. In Volume 1 this was attributed to CS5, but while it coincides with the alignment of the wall slot of CS5 on the south-east, to the north it apparently continues on a slightly different alignment. This gives a diameter for the building of *c* 7.5 m.

The floor surface was provided partly by the preceding chalk spreads (layers 498, 481), which were laid between CS5 and CS7 during phase k, and partly by a deliberately laid chalk surface within the house, layer 473. On this surface were the remains of three hearths. (Their relative positions on the matrix is based on the amount of wear, not actual stratigraphic relationship, on which basis all would be shown as contemporary). The earliest appears to have been layer 471, which consisted of large flint nodules over which compacted chalk had been packed and burnt in the centre; there was little evidence of the original surface which was presumably of compacted chalk. Next to this was layer 469 of the same basic construction, but with the flint foundation showing only at the edges and with the burnt puddled chalk that had been packed over the top to form the surface better preserved. The third hearth, layer 468, appears to have suffered little wear and had a well preserved upper surface of compacted puddled chalk domed and heavily burnt. None of the foundation showed in plan and as it was not sectioned a flint foundation can only be presumed.

There was some evidence of patching of the floor in the form of a small patch of chalk lumps up to 150 mm (layer 470) tightly packed in a soily matrix.

The floor of the house was covered by an occupation deposit (layer 453), which consisted of brown silt with patches of charcoal, daub fragments and burnt chalk. It varied in thickness from 50–250 mm.

This structure went out of use before CS8 and its northern end was covered by chalk spreads (layers 413 and 414), which were renewals of the threshold in front of the door of CS8.

CS67. Circular structure or fenced enclosure: 1971-79 (Fig 4.57)

This structure is represented by a length of gully G12-G119, which was just over 9 m in length. The gully was curved suggesting a diameter of just over 8 m, except that the curve straightens out at its east end.

The gully measured 0.16 m wide and 0.05–0.15 m deep. Around its north edge were deeper depressions for stakes or small posts 0.14–0.18 m wide, 0.2 m deep and at intervals of 0.3–0.4 m. One of these on the west side was individually numbered as ph 4220.

The gully profile varied considerably from V-shaped to flat-bottomed with near vertical sides. The fill consisted of crumbly grey silty soil with flecks of chalk scattered throughout and subrounded lumps c 20 mm.

Fig 4.55

Fig 4.56

Although the whole area of the structure was not excavated, there was no evidence of doorposts, which would most likely have been on the northern half of the structure, rather than facing the rampart. There were no potential doorposts where the gully terminated on the north-east. It seems unlikely that this was a house, but was perhaps some sort of fenced enclosure.

CS68 (F350). Circular house: 1988 (Fig 4.58)

CS68 was constructed in a terraced platform, F350, cut through a layer of silt (layer 1974) and the tail of rampart 3, to a depth of 0.75 m. The building measured 5 m in diameter. The main structural elements consisted of two pairs of doorposts and a stake-built wall.

The doorposts were relatively small. The western pair were the most substantial. The inner post, ph 10039, was the larger measuring 0.3 m in diameter and 0.38 m deep whilst the outer, ph 10038, measured 0.15 m in diameter and 0.3 m deep. Their voids were respectively 100 mm and 50 mm in diameter. The eastern pair were similar with the inner, ph 10042, measuring 0.25 m in diameter and 0.32 m deep and the outer, ph 10041, measuring 0.2 m in diameter and 0.1 m deep. Their voids were 0.12 m and 0.1 m in diameter respectively. In the doorway, but slightly off-centre to the west was a single post, ph 10040, measuring 0.26 m in diameter, 0.18 m deep and with a void of 0.12 m in diameter. Just outside this post-hole was a row of three stake-holes. It was not clear whether these additional features were an integral part of the door structure or some later addition. However the post-holes all appeared to be contemporary and were very similar having a loose soily fill in the void, surrounded by packing of small chalk lumps and flint nodules set in puddled chalk.

The wall line, best preserved on the south, was formed of stake-holes 50–80 mm in diameter set at intervals of

CS 67

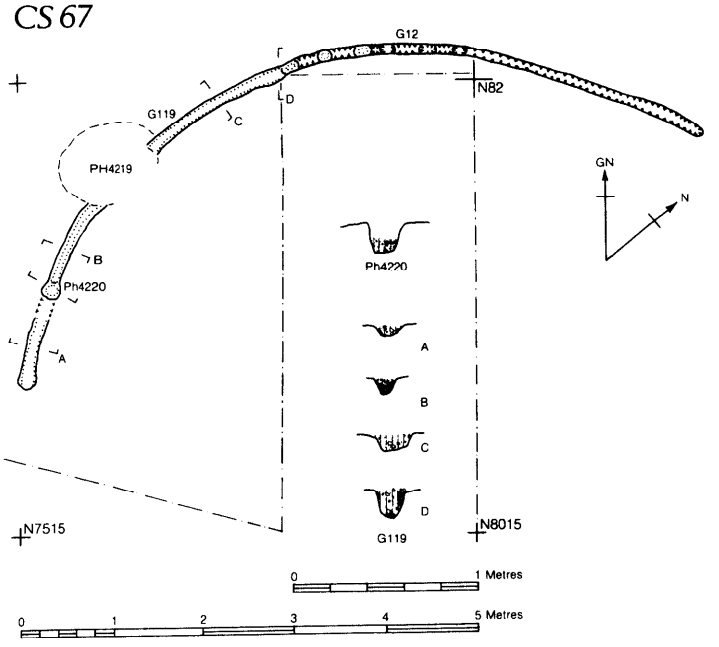


Fig 4.57

CS68

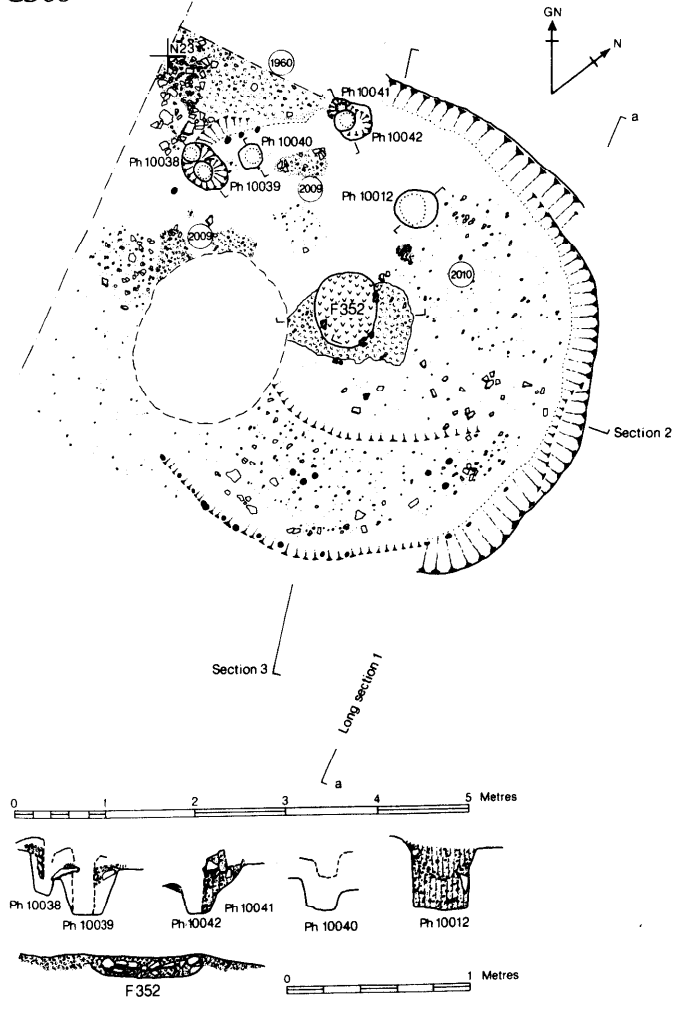


Fig 4.58

about 0.2 m. There were also two groups each of three stake-holes inside the house, which may have been part of an internal feature.

Remnants of a chalk floor (layer 2009) survived only in patches; it was composed of subrounded chalk lumps hard packed in puddled chalk with a well trampled smooth surface. Set in one patch of the floor was an oval hearth, F352, measuring 0.68 by 0.82 m with a total thickness of 0.12 m. It was constructed on a foundation of large angular flints 50–120 mm packed in puddled chalk over which had been laid a surface of compacted puddled chalk up to 50 mm thick. The surface was very smooth and worn, slightly concave and burnt grey.

Where the floor had not survived (or had not been laid) the underlying soil, layers 2010 and 1986, had a scatter of chalk trampled into the surface. Cutting this was ph 10012, which is likely to be contemporary, as its fill had a high proportion of charcoal and occupation debris similar to that which had accumulated on the house floor.

Overlying the house floor was a layer of fine black ashy silt (layer 1963) with large fragments of charcoal (some apparently in the stake-holes suggesting at least part of the structure was burnt down), very little chalk and a scatter of burnt flint, 30–70 mm in size. The layer was about 30 mm thick in the centre of the building increasing to about 100 mm against the walls. Finds were relatively sparse except for a mass of small finds concentrated in the eastern half of the area.

Following this, after the house had been demolished or abandoned, a tip of subangular chalk rubble (layer 1964) in a matrix of greyish-brown chalky silt had been dumped in the north-west quadrant inside the door. Infilling the whole structure was a greyish-brown silt (layer 1962=1965) containing a moderate amount of chalk grit and lumps up to 50 mm, with occasional flints 80–150 mm, flecks and fragments of charcoal and burnt clay. It also contained a quantity of pottery, bone and a number of small finds.

Outside the door of the house the only layer that could, with certainty, be regarded as contemporary was layer 1960. This was composed of small subangular chalk closely packed in a matrix of brown silt and puddled chalk. It formed the threshold outside the door and sloped down between the doorposts merging with their packing to form the doorsill. Some of the dumps of chalk preceding this could have had the same function, but they may have pre-dated it.

CS69. Working area?: 1988 (Fig 4.59)

CS69 was either an open working area or a lightly built house of which no trace of walling survives. It occupied the partially silted quarry hollow, F365, and covered an

Fig 4.59

area of approximately 7 m in diameter. A floor surface had been created with a spread of subangular chalk rubble (layer 2025) mixed with brown silt dumped and trampled above the earlier silt, layer 2026.

The only structural elements to be recognized were two pairs of post-holes, between which was a shallow slot G331. The post-holes measured between 0.5 m and 0.8 m in diameter and between 0.45 m and 0.62 m in depth. Their fills were a mixture of soil and chalk, which appeared to be deliberate infill, but some remnants of chalk packing survived in situ. The slot, G331, was 0.26 m wide and 0.19 m deep and in profile had shallowly sloping sides and a curved base. The fill was a chalky brown silt.

Though these features initially give the impression of doorposts and doorsill, the post-holes were considerably larger than the average doorposts of well preserved houses and this suggests that they may have belonged to a free-standing structure defining the entrance to the working area.

Inside, in the north-west quadrant, sealing the chalk rubble floor was a chalky brown silt (layer 2022). On this was a small patch of occupation debris (layer 2023), mainly charcoal, burnt chalk and burnt flint, typical of the debris from inside an oven. Over this was a spread of closely packed chalk rubble (layer 2020) in a matrix of crushed chalk and brown silt.

In the south-east quadrant, butting up to G331 and the adjoining post-holes, was a well compacted trampled chalk spread (layer 2021) composed of subangular chalk in a puddled chalk matrix. Over this just inside the entrance was a similar small patch of small rounded chalk in compacted chalk and silt (layer 2019). The main floor (layer 2021) covered an area of about 2 by 3 m between the entrance and a hearth, F363, which had been constructed against the north-west edge of the floor.

The hearth was subrectangular and measured 0.9 by 1.0 m with a maximum thickness of 0.13 m. It was constructed on a foundation of broken flint nodules, some burnt, 50-200 mm in size, over which had been packed puddled chalk which formed the surface of the hearth. This was very smooth and had been burnt grey, except for a band round the edges.

Just to the east a small subrectangular patch of chalk blocks in puddled chalk (layer 2024) with a few flints set within it could be a patch of floor equivalent to layer 2021, but from its general appearance it may have been intended for use as another hearth.

Over the floor of CS69 was a yellowish-brown silt (layer 2006), which contained a moderate quantity of small chalk and grit and some flecks of charcoal. The layer was patchy and discontinuous, but contained a high proportion of worked flint debris, which may suggest the work area was used for making flint tools or for an activity which required the use of flint blades.

Outside the entrance was a small dump of chalk blocks up to 150 mm (layer 2032) in a matrix of puddled chalk and grey silt. It was well compacted and trampled and formed a ridge along the south-east side of G331.

Outside the entrance, after the deposition of layer 2032, a yellowish-brown chalky silt (layer 1987) had accumulated; it contained a moderate quantity of chalk, as well as some larger blocks and flint nodules. Over this was a dump of coarse chalk rubble in a brown chalky silt (layer 1978). At about the same level was another dump of closely packed chalk (layer 1971) in a puddled chalk matrix containing copious charcoal flecks. Over this a thin dark grey silt (layer 1979) with a high proportion of charcoal, occasional flints, burnt chalk and flecks of daub had accumulated. This was sealed by a grey silt (layer 1970) with a few chalk pieces and grit and a moderate quantity of occupation debris especially charcoal and daub. Also above layer 1987, but of uncertain relationship to the other layers in the vicinity was another small patch of chalk blocks (layer 1989) in a matrix of grey silt and occupation debris including fragments of charcoal. These spreads of chalk and accumulations of silt and occupation debris appear to relate to the entrance of CS69, rather than the later house CS68 and presumably represent periodic attempts to consolidate the approach.

CS70. Circular house: 1988 (Fig 4.60)

Only a small segment of this structure was exposed in the trench at the west end of the 1988 excavation. It had a diameter estimated at about 7 m from the curvature of G334.

The main structural feature was part of a circular gully G334, which presumably held the wall timbers. Its full extent was not planned in detail due to the collapse of the west baulk. The gully measured about 0.3 m wide and 0.2-0.35 m deep. It was roughly cut with a flat base and steeply sloping sides, though in places this became more U-shaped. The filling was of greyish-brown silt with a moderate quantity of subangular chalk and in the north-west quadrant it contained a considerable quantity of carbonized grain and charcoal.

There was a single post, ph 10154, along its length, which may represent a wall timber, but the interrelationship with the gully was not clear. It is unlikely from its size and position to have been one of the doorposts. The door is more likely to have been positioned on the north or the east, in which case it would have been destroyed by the large seventeenth century pit (F78).

The relationship of G334 to another gully, G336, on a slightly different alignment is also uncertain. It is not clear whether it was a completely separate structure or gully complex or merely another phase of CS70.

Inside G334 and partially marking its inner edge was part of a chalk floor (layer 2097), which was composed of angular chalk blocks up to 120 mm in size closely packed in a matrix of compacted puddled chalk, together with occasional flint nodules. The surface was worn smooth, where it survived inside CS70, but was rougher where it occurred outside the building. This just extended into the 1980 area of F84, where it was numbered 637 and the same characteristics noted.

CS71. Possible circular post-built house: 1973 (Fig 4.61)

This setting of post-holes possibly represents a circular post-built structure measuring in width 12.5 m N-S and 12.0 m E-W. There were 11 post-holes on the line of the circle, but three of these are common to other structures (PS27, CS72). However one of these post-holes, ph 1220, in common with CS72 was recut and so the intercutting post-holes could belong to separate structures.

The size of the post-holes varied from 0.2-0.57 m in diameter having an average of 0.38 m and the depths ranged from 0.06 m to 0.32 m with an average of 0.19 m. There were no post-holes that stand out from the rest to suggest doorposts. Nor were there any post-holes beyond the ring of posts, which could represent the entrance.

CS72a and b. Possible circular post-built house: 1973 (Fig 4.62)

This setting of post-holes could form a circular post-built structure, slightly overlapping in area CS71. Depending

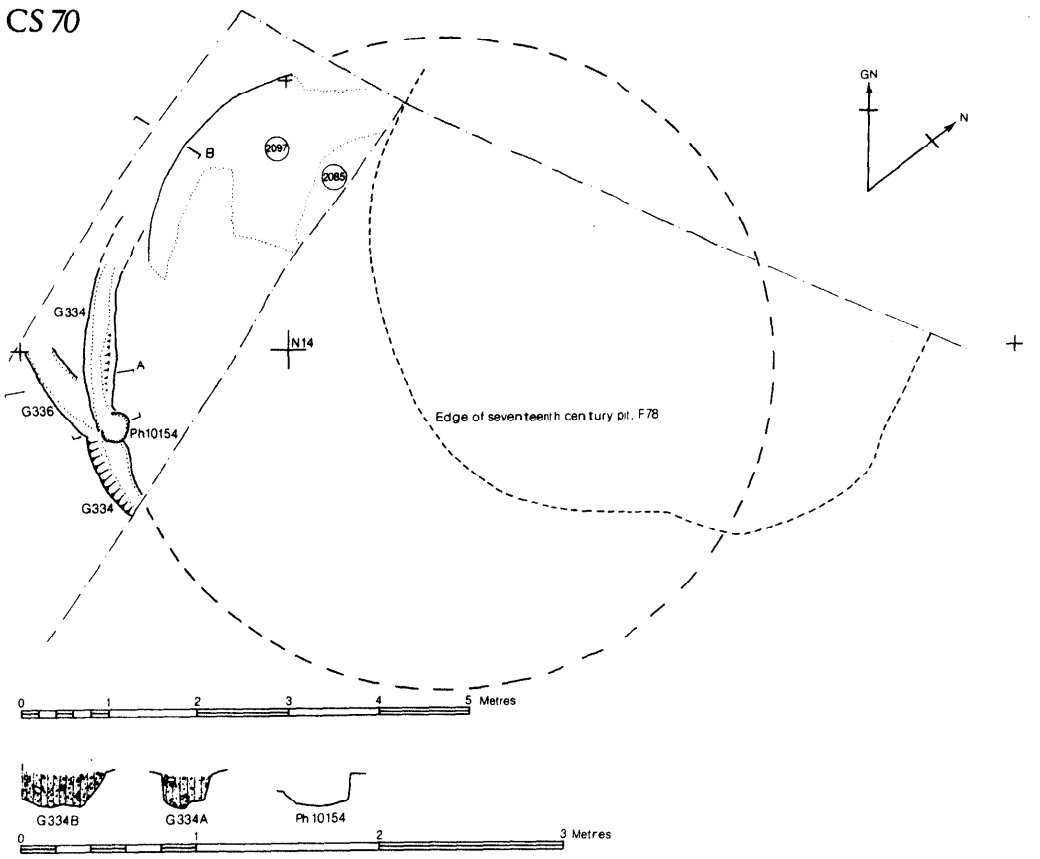


Fig 4.60

on one's view of the post-holes, it is possible to opt for a small circle of post-holes, CS72a, which would be 11 m in diameter or a larger circle, CS72b, which would measure 13 m E-W and 15 m N-S. Alternatively the two could be contemporary forming a large outer circle, with a smaller inner semicircle.

The post-holes of CS72a vary from 0.33–0.6 m in diameter having an average of 0.42 m and in depth from 0.1–0.34 m with an average of 0.23 m. However out of 11 post-holes, not including CS72b, there were eight common to other structures (CS71 and post structures).

The post-holes of CS72b varied in width from 0.16 m to 0.58 m with an average of 0.38 m and in depth from 0.06 m to 0.48 m with an average of 0.21 m. Of the 12 posts that make up the supposed wall line two are common to other structures (CS71, PS27). There are no post-holes that stand out as doorposts, either on the wall line or beyond it.

CS73. Circular structure: 1982 (Fig 4.63)

This small circular structure measured only 4.5 m in diameter. It probably belongs to phase b of the stratigraphic sequence G.

The main structural features were three post-holes and a gully. An arc of a circular gully, G227, survived on the north-east, running for a length of 3.5 m. It disappeared in a mass of tree root hollows that dominated and obscured the north-west quadrant. Ph 8121 which lay on the wall line may have been part of the structure. The gully was very even and regular measuring mostly 0.2 m wide, but thinning briefly to 0.13 m. The depth was fairly constant at 0.16–0.18 m. The profile was U-shaped and it had a fill of chalky brown silt.

The gully ended on the south at ph 8500, which was probably the northern doorpost. It measured 0.4 m in diameter and 0.23 m deep. The void measured 0.2 m wide and was surrounded by flint packing. At a distance of 1.7 m to the south west were two intercutting post-holes, which presumably formed the other doorpost. These had apparently been truncated by the quarry hollow F119, which may account for their smaller dimensions. Ph 8498 measured 0.2 m wide and 0.15 m deep, whilst ph 8499 measured 0.28 m in diameter and 0.16 m deep. They both had a very similar silty fill, but ph 8498 is possibly the later. They were sealed by layers 774 and 775 in the base of the quarry hollow.

The gully does not reappear on the south west but a scarp in the natural chalk here may represent terracing for the house, rather than being part of the quarry hollow F109.

4.2.2 Rectangular trench-built structures

No new rectangular trench-built structures were found during the 1979-88 excavations.

4.2.3 Rectangular post-built structures

During the excavation of 1969–88 over 10,000 post-holes have been recorded. Of these about a quarter can be resolved into recognizable post structures composed of between two and nine posts. In all some 499 post structures have been identified. The majority of those excavated in 1969–78 were described and illustrated in Volume 1 of these reports and a general discussion based on this data was there presented (pp 92–5). In this volume a further 359 are considered. These came largely

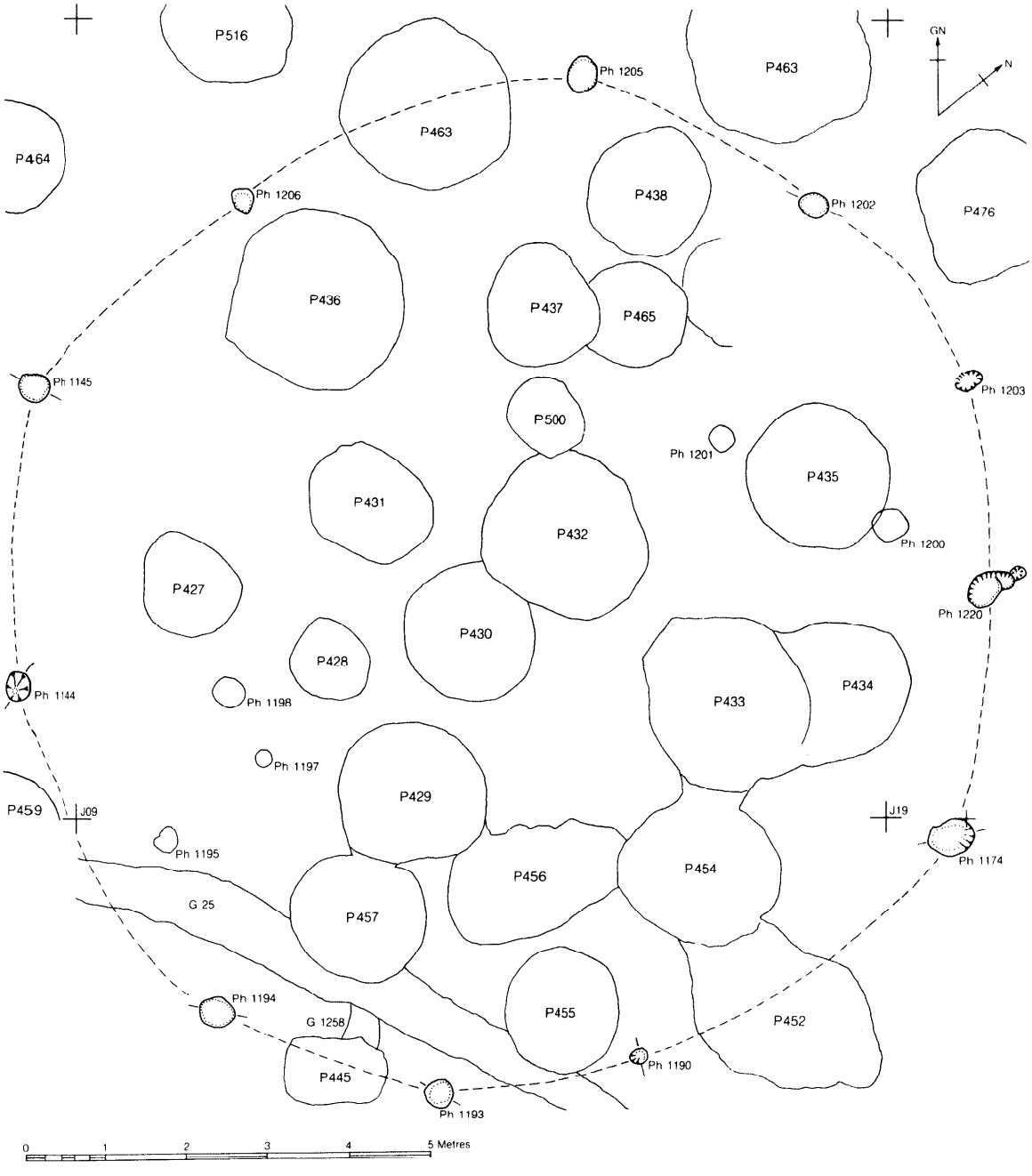


Fig 4.61

from the excavations of 1979–88 but include a few from 1969–78 most of which have been defined following a detailed reconsideration of the stratified sequence excavated in 1977–78.

Each of the structures is illustrated and described in the fiche report (Fiche 19–22) and from the corpus a selection has been made to illustrate this section (Figs 4.68–4.90). The majority of those selected come from the stratified deposits where the individual buildings can be seen in relation both to their contemporary ground surfaces and associated stratigraphy and to the surrounding structures. Details of these relationships are given in Section 4.3 below.

All the data relating to the structures has been recorded on computer and has been manipulated to provide the basic parameters used in the description of the individual types described here. Various additional analyses have been carried out and these are fully discussed below together with the results of a computer search for post structures from the totality of the post-holes found in 1979–80.

Of the total of 499 structures, 66 were of two phases, 34 of three phases, nine of four phases and three of five phases. Where the relationships of the post-holes were sufficiently well defined it was possible to sub-divide some of these multiphase structures and these were

CS72

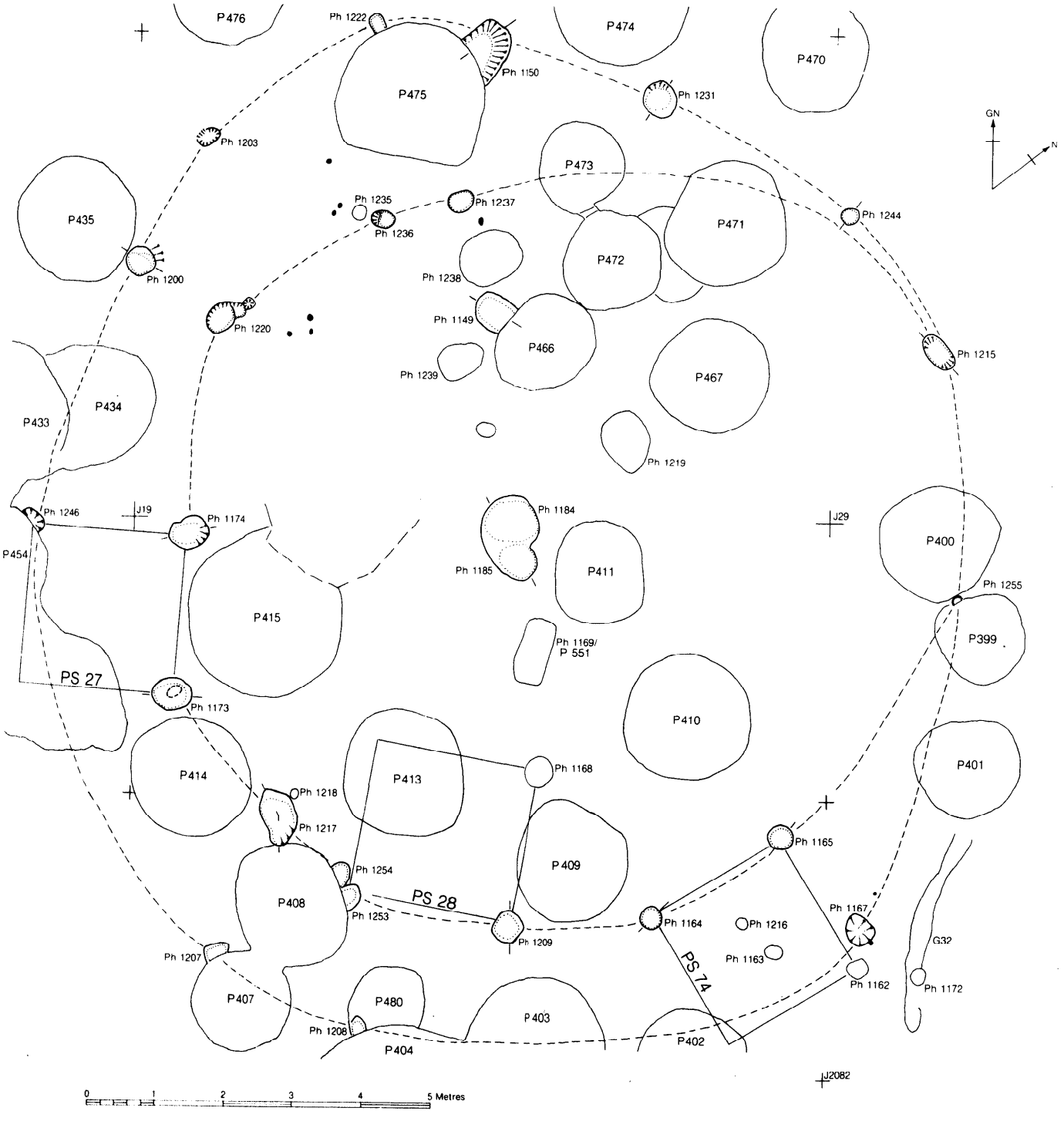

P476
Ph 1222
P474
P470
Ph 1150
P475
Ph 1231
GN
N
Ph 1203
P473
Ph 1235
Ph 1237
Ph 1236
P435
P471
Ph 1244
P472
Ph 1200
Ph 1238
Ph 1220
Ph 1149
P466
Ph 1215
Ph 1239
P467
P434
P433
Ph 1219
Ph 1246
J19
Ph 1174
Ph 1184
J29
P400
P454
Ph 1185
P411
Ph 1255
P415
P399
Ph 1169/
P 551
PS 27
Ph 1173
P410
P401
P414
Ph 1168
P413
Ph 1218
Ph 1217
Ph 1165
P409
Ph 1254
P408
PS 28
Ph 1253
Ph 1164
Ph 1216
Ph 1167
Ph 1209
Ph 1207
Ph 1163
PS 74
G32
Ph 1162
P407
P480
P403
Ph 1172
Ph 1208
P404
P402
J2082
0
1
2
3
4
5 Metres

Fig 4.62

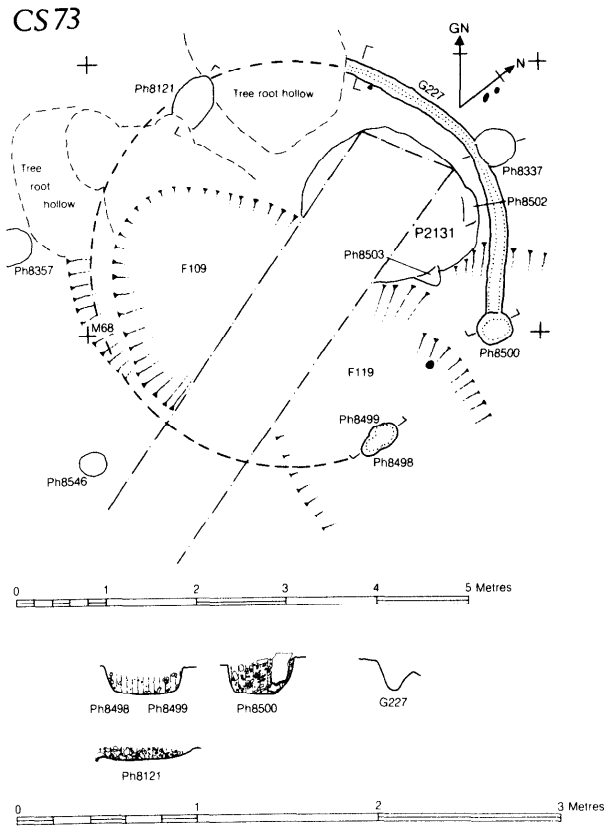


Fig 4.63

treated as individual buildings for the purpose of computer recording resulting in a total of 543.

Form and typology (Figs 4.65–4.67)

In the first volume of this series a simple typology was proposed sub-dividing the structures into types A to L. This terminology has been retained but the greatly increased dataset and the use of computer sorting has allowed modifications to be made particularly with regard to types K and L.

Structures vary in size from just over one metre in length to 5 m which in terms of floor area means from 1.5 sq m to 25 sq m. Post-hole diameters range from 0.19 m to 1.04 m with a mean of 0.55 m, while depths range from 0.07 m to 0.98 m with a mean of 0.37 m. The PPFs (post-hole-profile ratios obtained by dividing depth by diameter) range from 0.15 to 2.09 with a mean of 0.7. The post void diameters, present in 378 structures, ranged from 0.06 m to 0.53 m with a mean of 0.27 m. It was rare for post voids to be preserved in all post-holes so the average taken for each structure can represent anything from one void to the maximum possible.

The typology adopted here may be summarized as follows:

Small four-post structures:	type E
	type F
Small six-post structures:	type C
Large four-post structures:	type G
	type H
	type J
Large five-post and seven-post structures:	type K
Large six-post structures:	type A
	type B
Large nine-post structures:	type D
Two-post structures:	type L

Small four-post structures

Type E (Figs 4.65, 4.68 and 4.70)

There was a total of 98 structures of this type, of which five were of two phases and one of three phases. Five were part of multiphase structures of different types; four changed type mostly from E to F and one from G to E.

The sides measured 1.5–3.4 m by 1.6–3.6 m with mean, median and mode. all close to 2.4 m. The area of the structures varied from 2.4 sq m to 11.88 sq m with a mean of 5.9 sq m, median of 5.76 sq m and mode of 4.0 sq m. The majority fell between 4 sq m and 8 sq m.

The post-hole diameters ranged from 0.3 m to 0.63 m and had a mean and median of 0.42 m and a mode of 0.39 m. By comparison, post void diameters measured 0.12 m to 0.4 m, though the majority fell between 0.2 and 0.3 m. The mean and median were 0.23 m and the mode 0.2 m.

Post-hole depths ranged from 0.11 m to 0.38 m with mean and mode of 0.24 m and a median of 0.23 m. The PPF varied from 0.22 to 1.2 with a mean and median of 0.58 and a mode of 0.82. In reality the maximum was 0.9, as one aberrant post structure of 1.2 was in fact classified as E/F, but its post-hole depths were uncertain.

Only two of these structures occurred in the stratified deposits, the rest occurring in the central part of the fort with a high proportion in zones S2, S3, N3 and the northern periphery and fewer in zones N2 and N.

Type F (Figs 4.65 and 4.68–4.70)

There was a total of 69 type F structures of which four were of two phases and one of three phases. Included are six multiphase structures, four of which succeeded type E, one preceded a type H and one was sandwiched between type G and H.

The sides measured 1.2–3.1 m by 1.3–3.3 m, but few structures were less than 2 m in size. The mean, mode and median were all 2.6 m for the longer sides, whilst for the shorter the mean and median were 2.4 m and mode 2.3 m. In area the structures covered a range from 1.56 sq m to 9.9 sq m, with few less than 4.0 sq m. The mean was 6.37 sq m, the mode 6.76 sq m and the median 6.25 sq m.

Post-hole diameters measured from 0.3 m to 0.59 m, though only a few were greater than 0.5 m. The mean was 0.43 m and the mode and median 0.44 m. Post voids were present in 50 structures and ranged from 0.1 m to 0.34 m with a mean and median of 0.23 m and a mode of 0.2 m.

Post-hole depths covered a wide range from 0.27 m to 0.87 m, but the majority fell between 0.3 and 0.65 m with a mean of 0.46 m, median of 0.45 m and mode of 0.4 m. The profile factor (PPF) had a minimum of 0.65 and a maximum of 2.09; the mean is 1.11, the median 1.04 and mode 0.84. There is obvious overlap at the lower end of these values with type E structures, suggesting either intermediate types or that the two structure types really form a continuum of a single type.

A total of 20 of these structures occurred in the stratified deposits, mainly on the south, east and west sides, but noticeably absent from the north and north-east areas of stratigraphy. In general they occurred most commonly in the southern zones S2 and S3 and in the northern zone N3, only a few occurring in N1, N2 and N4.

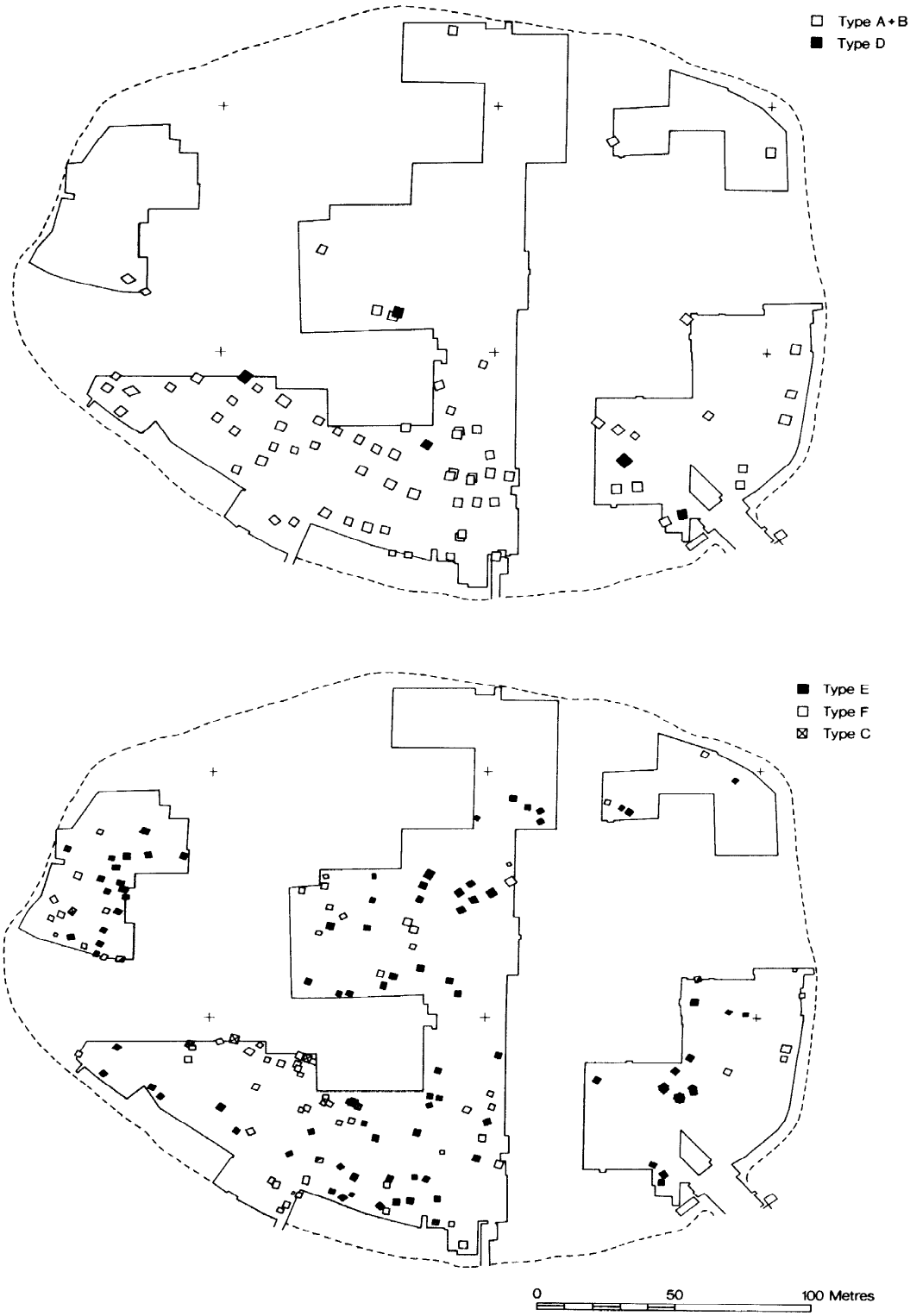


Fig 4.65 Distribution of selected types of post structures

DANEBURY

PLAN OF RECTANGULAR POST BUILT STRUCTURES OF ALL DATES

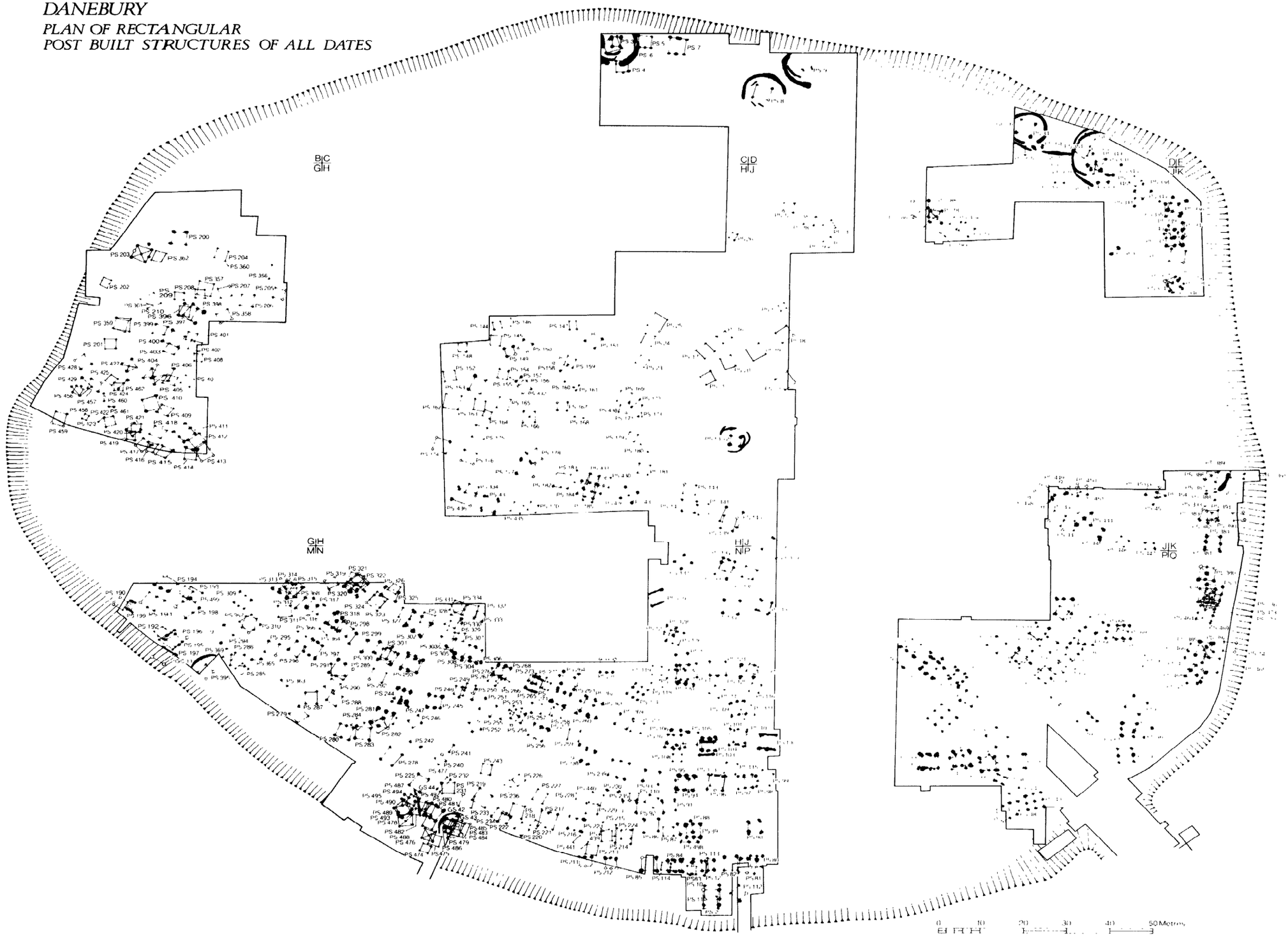


Fig 4.64

Fig 4.66 Distribution of selected types of post structures

Small six-post structures

Type C (Figs 4.65 and 4.69)

There was a total of five of these small six-post structures. (One possible additional one PS332 was included in type F, as not all six post-holes were surviving.) Four are single-phase structures and one is of two phases. Except for one structure these have sides measuring 2.0-2.4 m long. There is one aberrant structure only partially exposed, which measured 3.8 m long. In terms of size this should place it amongst the large six-post structures, but in other characteristics it is like type C. The areas range from 4.0 sq m to 4.84 sq m, except for PS322, which is 14.44 sq m.

Post-hole diameters ranged from 0.32 m to 0.47 m. Post voids were present in four structures varying only between 0.18 m and 0.24 m. Post-hole depths varied from 0.41 m to 0.58 m. The PPF values covered the range 1.02 to 1.42.

One of the structures was associated with stratigraphy being sealed by the later rampart just north of the blocked entrance and the large one, PS322, was sealed by the stratigraphy in sequence J. Of the remainder two are close to the rampart, one on the south and one on the west, and the last one lay in zone S2.

Except for the size of PS322, these structures fell well within the parameters of type F structures, the only difference being the additional post-holes in type C structures.

Large four-post structures

Type G (Fig. 4.66)

There was a total of 56 structures of this type, which includes seven two-phase structures and four three-phase. Six were part of multiphase structures, which metamorphosed into different types, mostly G/A or G/H.

The length of the sides measured 2.2–4.0 m by 2.3–4.0 m. There were however relatively few of less than 2.7 m. The mean, mode and median were between 3.0 m and 3.3 m for both side measurements. In terms of area the sizes range from 5.06 sq m to 16 sq m. However the majority are clustered between 7.5 sq m and 14.5 sq m, with a mean of 10.43 sq m, a mode of 9.0 sq m and a median of 10.24 sq m.

The post-hole diameters ranged from 0.37 m to 0.88 m, but the majority fell between 0.5 m and 0.75 m with a mean of 0.61 m, a mode of 0.59 m and a median of 0.62 m. Post voids were present in 40 structures and measured between 0.13 m and 0.47 m in diameter, with mean, mode and median of 0.3 m.

Post-hole depths varied from a minimum of 0.09 m to a maximum of 0.37 m; the majority however fell between 0.2 m and 0.35 m. The mean and median were 0.24 m and the mode 0.2 m. The PPF ranged from 0.15 to 0.59 with a mean and median of 0.4 and a mode of 0.25. The spread of values was fairly even.

No type G structure occurred in the stratified deposits. In the interior the highest proportions occurred in the southern zones S2 and S3, with a lesser number in the central area N3 and in the north-west area N5. There were almost none in the north and north-east areas of the fort.

Type H (Figs 4.66 and 4.71–4.76)

A total of 87 of these structures have been recognized. Included in these were 17 two-phase structures, five three-phase and six which were part of multiphase structures of different types. These multiphase structures were equally divided between F-H, G/H, and H-B.

The sides measured between 2.0 m and 4.0 m in length with a mean value of 3.0 m. The main peak occurs at 3.2–3.3 m, but there is a secondary peak at 2.5-2.7 m. In area the structures ranged from 4.84 sq m to 16 sq m. The mean is 9.48 sq m, the median 9.9 sq m and mode 10.24 sq m. The secondary peak in the side measurements is reflected by a higher proportion in the group 6-8 sq m, but this is less pronounced with the areas.

Post-hole diameters ranged from 0.44 m to 0.92 m, though there were few above 0.8 m. The mean value was 0.64 m, the median 0.62 m and the mode 0.55 m. Post voids were present in 62 structures and measured from 0.15 m to 0.45 m in diameter. The mean, mode and median values were all close to 0.3 m; the majority fell between 0.25 m and 0.4 m.

The post-hole depths had a wide range from 0.22 m to 0.98 m, with a mean value of 0.48 m. The median was 0.45 m and the mode 0.3 m. The main concentration of values was between 0.3 m and 0.8 m. The PPF value ranged from 0.38 to 1.49 having a mean of 0.78, a mode of 0.67 and a median of 0.7. There is a clear overlap with the type G PPF figures, which could indicate that the two types are an artificial sub-division or the dividing line is indistinct.

Twenty-eight structures occurred in the stratified deposits, distributed fairly evenly, except for a higher density in the northern periphery (N1) excavated in 1984–5. Over the fort in general a high proportion occurred in the southern part in zones S1, S2 and S3, contrasting with a distinct absence in the northern areas, apart from the stratified deposits and a few in zone N3.

Type J (Fig 4.66)

There are nine of these structures, which are basically large four-post structures similar to type G or H but with an additional fifth post-hole along one or more of the sides. They were all single-phase structures.

The sides measured between 2.4 m and 3.8 m and had a mean of 3.25 m, a mode of 3.0 m and a median of 3.3 m. The areas ranged from 6 sq m to 14.44 sq m and were fairly evenly distributed between these extremes. The mean was 10.75 sq m.

The post-hole diameters ranged from 0.37 m to 0.88 m and had a mean of 0.62 m. The main concentration was between 0.5 m and 0.76 m. Post voids were preserved in eight structures and ranged from 0.24 m to 0.4 m with a mean value of 0.3 m.

Post-hole depths varied from 0.16 m to 0.57 m with a mean of 0.36 m and values were spread evenly throughout this range. The PPF values ranged from 0.26 to 1.59 with a mean of 0.66. Most of the values were below 0.9 however.

Four of these structures occurred in stratified deposits, including a group of three in the lee of the rampart on the north side of the fort. Most of the others were in the south-east area. These structures appear to have been fairly localized and perhaps should really be regarded as sub-types of G, H or F, as appropriate.

Large five- and seven-post structures

Type K (Figs 4.66, 4.78 and 4.81–4.85)

This structure type is characterized by a central post-hole, placed in what would otherwise be regarded as a large four- or six-post structure. There are 14 five-posters and five seven-posters. Of these there are two of two phases and one of three phases. One (Fig 4.78) becomes a type B structure in its late phase.

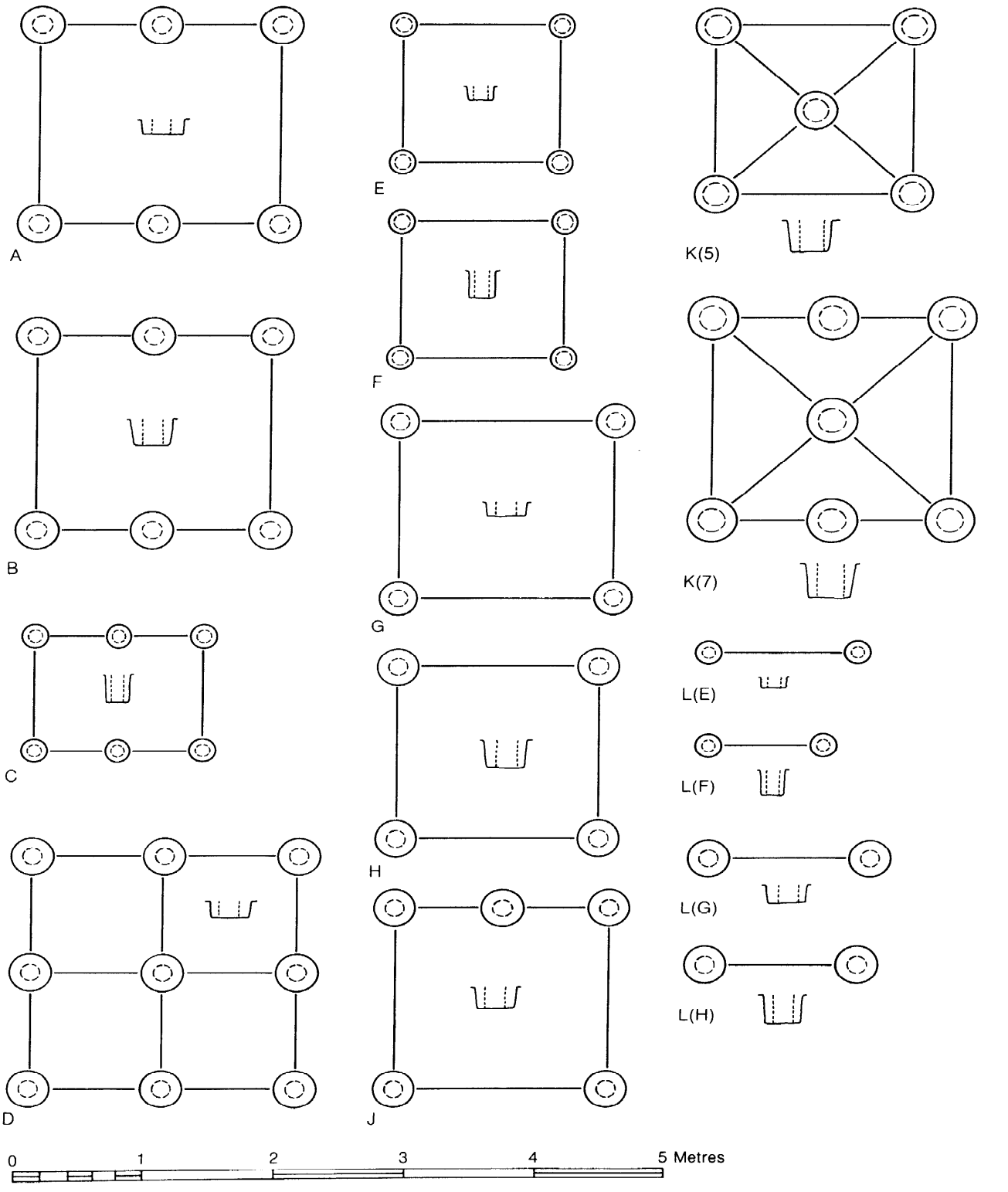


Fig 4.67 Diagrammatic plans of post structure types

In size the sides vary from 2.5 m to 3.8 m with a mean length of 3.3 m. The mode is 2.9 m and the median 3.2 m. The structures have a minimum area of 6.75 sq m and a maximum of 14.44 sq m, The mean size is 10.77 sq m and both mode and median are 10.24 sq m.

Post-hole diameters ranged from 0.51 m to 1.04 m, with mean, mode and median all around 0.72 m. Post voids were present in 14 structures and varied from 0.25 m to 0.51 m in diameter. The mean was 0.38 m, but in general they were evenly spread throughout the range.

Post-hole depths ranged from 0.21 m to 0.79 m. However the majority were greater than 0.38 m and were spread across the values fairly evenly. The PPF had a minimum value of 0.34 and a maximum of 1.58, but the majority were evenly scattered between 0.5 and 1.1.

All except four of these structures were found in the stratified deposits and appear to have occurred in discrete groups. The main concentrations are on the east side in zone N1 and the north-east in the area excavated in 1984-5 with a few on the south in S1 (stratigraphical sequence H) and the west (stratigraphical sequence F).

This group appears to be a distinct type confined to certain areas, but having characteristics in common with type H or B structures. The central post-hole also invites comparison with type D.

This type was not recognized until 1985 with the excavation of PS335, and only subsequently were those in the 1977-8 area defined. It was therefore decided to scan a selection of the plans to see if central post-holes had been missed. Where the central area was not obscured by other features, only nine structures, out of 143 total in the 1969-78 areas, could potentially be type K and in the 1979-80 area there were a possible ten (out of 123 total). In the case of the structures described in this volume (PS144-PS499) the possibility of a central post is discussed in the individual structure descriptions, but no structure has been recategorized.

Large six-post structures

Type A (Fig 4.65)

This type of six-post structure totalled 44. The majority (24) are single-phase structures, but there are 16 of two phases, three of three phases and one of four phases. Also included are nine structures, which form one or two phases of a multiphase structure of different types, either G, H or B.

The sides ranged from 2.9 m to 4 - 4 m in length having a mean of 3.6 m. The sizes are generally evenly distributed through this range, though there is a slight increase at the upper end of the range. The areas of the structures cover a range from 8.41 sq m to 17.64 sq m with a mean of 13.02 sq m. The areas are evenly distributed throughout this range of values.

The post-hole diameters have a minimum of 0.42 m and a maximum of 0.87 m, with a mean of 0.67 m. However there are few measuring less than 0.55 m and a high proportion are between this and 0.7 m. Twenty-eight structures have post voids present and their diameters extend from 0.12 m to 0.39 m with a mean, mode and median all at about 0.3 m.

The post-hole depths have a minimum of 0.15 m and a maximum of 0.37 m with a mean of 0.25 m. The PPF values vary from 0.2 to 0.54, with a mean of 0.38 and mode and median of 0.36. The apparent sudden increase in values above 0.5 perhaps suggests an overlap in type B (which shows the same effect) suggesting borderline cases were difficult to define or overlapped.

All except one occur outside the stratified deposits and the vast majority (39) occurred in the southern area of the fort in zones S2 and S3. In particular many of them lined roads 1, 2 and 3.

Type B (Figs 4.65, 4.68 and 4.77-4.80)

There are 46 examples of this type of six-post structure, of which 22 are single phase, 15 of two phases, seven of three phases and two of four phases. Included in this number are seven examples, which form one or two phases of a multiphase structure of two or more types, mostly A or, more rarely, H.

The sides of the structures measured 2.8 m to 4.3 m by 2.9 m to 4.5 m. The mean values are 3.4 m by 3.6 m. In general the numbers of structures are evenly distributed through the range of measurements. In area the structures are evenly distributed between a minimum of 8.4 sq m up to a maximum of 18.92 sq m, though numbers decrease above 16 sq m.

The post-hole diameters covered a range of 0.46 m to 0.97 m and had a mean of 0.65 m, a mode of 0.63 m and median of 0.64 m. There was a distinct decrease in numbers above 0.76 m. Post voids were present in 50 structures and ranged from 0.1 m to 0.53 m in diameter. The majority were grouped between 0.25 m and 0.44 m, with the mean, mode and median all at 0.31 m.

Post-hole depths varied from 0.22 m to 0.68 m, but only one example was less than 0.3 m in size. The main concentration (nearly 80%) falls between 0.35 m and 0.55 m. The PPF values range from 0.45 to 1.18, though most are less than 1.0, forming a fairly even spread across these values. The mean, mode and median are all close to 0.7.

About 20% of type B structures occurred in stratified deposits, the main concentration being just north of the east entrance (12%) in sequences A-D. In general in the fort the greater part (over 80%) are concentrated in the southern half of the fort mainly in zones S2 and S3, and to a lesser extent S1.

Large nine-post structures

Type D (Figs 4.68 and 4.80)

These large nine-post structures total five. There is one example with three phases and the remainder are single phase.

The sides of the structures measured between 3.4 m and 5.0 m and had a mean of 4.1 m and mode and median of 4.0 m. The areas ranged from 12.24 sq m to 25.0 sq m and had a mean of 17.34 sq m and a mode and median of 16.0 sq m. In general the values were concentrated at the larger end of the scale for post structures.

Post-hole diameters covered a small range from 0.6 m to 0.7 m with a mean of 0.64 m. Post voids were present in all five cases and ranged from 0.21 m to 0.38 m in diameter with a mean of 0.3 m, and were spread evenly throughout these values.

Post-hole depths varied from 0.23 m to 0.47 m with a mean of 0.32 m. The PPF values ranged from 0.34 to 0.83 with a mean of 0.51.

These nine-post structures have most characteristics in common with the large six-post structures, except for the additional middle row of post-holes.

Only one is associated with stratigraphy and this is in the interior of the fort in sequence J, where the layers appear to relate to the structure. Most of the structures are in the southern area of the fort in zones S1 and S3 and one aligned on the north side of road 1 in N3.

Post structures - Linear (Type L) (Figs 4.64 and 4.86-4.90)

Linear post structures are defined as those composed of two similar and contemporary posts. No systematic attempt was made to distinguish two-post structures in 1969-78 but for the excavations of 1979–88 the data was thoroughly scoured resulting in the recognition of 159 structures. They have been divided into five types. Types L(E), L(F), L(G) and L(H) are distinguished on the basis of post-hole characteristics echoing types E, F, G and H above. It is, of course, possible that the post pairs are half or a third of a four- or six-post structure, in which case the possibility is discussed in the descriptive text and the code L/F, L/H, G/L, etc is used, the first letter indicating the most likely category. Type L(C) refers to all doorpost arrangements associated with circular structures: the definition is based on function rather than post-hole characteristics. Of the 159 linear structures recognized 62 belong to type L(C).

Type L(E)

Twenty-four structures of this kind have been defined most of which were of only one phase. One example belonged to a two- phase structure, one to a three-phase and one to a four-phase. Two were part of multiphase structures of different types.

Post-hole diameter ranged from 0.23 to 0.53 m with a mean, mode and median concentrating around 0.36-0.40 m. Post voids were present in 16 structures and ranged from 0.06–0.35 m. The mean, mode and median clustered at 0.20–0.25 m and the majority were between 0.16 and 0.26 m in diameter. The post-hole depths ranged from 0.07 to 0.32 m with a mean and median at about 0.2 m, though the mode was 0.14 m. In general the distribution is evenly spread throughout the range. The PPF values have a range of 0.22-0.8 and show a fairly even spread, the mean and median fall at about 0.55, whilst the mode is 0.3.

Only three examples occurred in stratified deposits in sequences B and D. Over the rest of the areas excavated there is a fairly even scatter.

Type L(F)

There was a total of 23 structures of this type, of which three were of two phases, the remainder being single phase structures. Two were parts of multiphase structures, one becoming a type L(H) in its late phase and one developing from a type L(E).

This type ranged in length from 1.0–2.9 m; the mean and median were both 1.7 m, whilst the mode was 1.1 m.

The post-hole diameters range from 0.19 m to 0.61 m in diameter, with the mean, median and mode all grouped at 0.36–0.37 m. The malority are concentrated between 0.30 and 0.45 m. Post voids occurred in 13 structures and ranged from 0.10 to 0.33 m in diameter with a mean, mode and median all falling at 0.20 m. The values are evenly spread throughout this range.

Post-hole depths varied from 0.20 to 0.65 m with a mean and median occurring at 0.44 and 0.48 m respectively, whilst the mode was at 0.22 m. The values present an even spread across the range except for a slight gap at *c* 0.35–0.40 m.

The PPF values range from 0.71 to 1.68 with the majority over 1.0. The mean and median are 1.2, with the mode slightly less at 1.03.

This structure type is fairly evenly spread across the settlement, with nine examples occurring in stratified deposits. These are equally divided between sequences D, E and H.

Type L(G)

This is the smallest subgroup with a total of 15 examples. Of these one is of four phases, one of three phases and the rest single phase, though one of these is part of a multiphase structure type L(E) in its other phase.

This type measured between 1.7 m and 3.0 m in length with the mean and median falling at 2.2 m and the mode at 2.0 m. The post-hole diameters ranged from 0.44 m to 0.79 m with the mean, median and mode all clustered at about 0.60 m. In general however the distribution was fairly even. Post voids were present in seven structures and ranged from 0.18–0.39 m; the mean and median values were *c.* 0.31 m.

The post-hole depths measured from 0.08–0.40 m with a mean and median of 0.31 m. The major concentration was over 0.3 m. The PPF values varied from 0.17 to 0.63 with a mean of 0.46 and median of 0.5.

Three examples of this structure type occurred in the stratified sequences D, H and I. In general they were sparsely scattered over the site apart from a concentration of nearly half on the east side of the site in zones N1 and N2.

Type L(H)

There are 34 examples in this group, of which nine are two-phase, two three-phase and one five-phase. There is one example which is part of a multiphase structure, which is L(F) in its earlier phase.

This type ranged in length from 1.2 m to 3.8 m, with a mean and median of 2.3 m and a mode of 2.4 m.

The post-hole diameters ranged in value from 0.34 m to 0.82 m with mean and median values of 0.6 m and a mode of 0.64 m. The post voids were present in 23 structures and measured from 0.2 to 0.5 m in diameter with mean and median values of about 0.3 m and a mode of 0.25 m. Post-hole depths ranged from 0.16 m to 0.83 m with mean and median both close to 0.51 m and the mode at 0.59 m. The majority of values were clustered between 0.3 and 0.7 m. The PPF values covered a range from 0.37 to 1.32 with the majority being above 0.6. The mean value was 0.86, the median 0.9 and the mode 0.64.

About 68% of this type occurred in the stratified deposits with a particularly high proportion (40%) occurring in sequence E, with only a small number occurring in each of the sequences A, D, G, H and I. Apart from the one concentration this type forms an even scatter over the excavated area.

Type L(C)

This type is grouped solely on the basis of function, the criteria being that they formed the doorposts of circular structures. The reason for including them here is to provide comparative data with which the other types could be compared. A full analysis and comparison with the other groups of type L structures will be made in Volume 6, but here a basic description based on 43 examples is presented.

The length of the structures measured from 1.5 to 2.8 m, with a mean and median of 2.1 m and a mode of 2.2 m. A very high proportion were clustered at 2.0–2.2 m.

Post-hole diameters varied from 0.29–0.74 m, with the mean, median and mode clustered around 0.5 m. Post voids occurred in 32 structures. Their diameters varied from 0.14 m to 0.42 m in diameter with the mean and median at 0.24 m. The post-hole depths measured from

0.17 to 0.61 m with the mean, median and mode clustering around 0.42 m. The values for the PPF were 0.27 to 1.55 with mean and median values of about 0.85 and a mode of 0.64.

A high proportion of these structures occurred in stratified sequences.

Discussion of the rectangular structures

Spatial patterns

The general spatial patterns noted in Volume 1 are emphasized in the more recent data. The alignment of large four-and six-post structures along the roads, especially roads 1, 2 and 3 is very clear. It can also be seen in zone N1 with the structures in the stratified sequence A-D aligned on road 6 and to some extent in the north-east area with structures aligned on roads 5 and 6. The small structures still appear to be fairly randomly scattered, though some are aligned on the roads.

However other patterns have become more apparent. Very similar types of structure have been noted in association. For example PS59 and PS61 were closely comparable in overall structure, size and post-hole characteristics. Similarly, PS100 and PS103 with their posts set in foundation trenches were close together and three type J structures stood near to each other in the stratified sequence B.

On a slightly larger scale, type K structures are generally confined to the stratigraphy (sequences A, D and E) on the east and north-east of the fort, the seven-post subgroup of type K being largely confined to the stratified sequence A-D. All the type K structures either occur in the stratified levels preserved in the quarries or close by in the lee of the ramparts.

Another distinct pattern to emerge is that certain types, eg types E, G and A, rarely occur in the surviving stratigraphy. However these may have been structures of type F, H and B the posts of which have been reduced in depth by erosion. Alternatively, certain types of building may have been considered suitable only for the quarry hollows. It is particularly noticeable that large structures with very substantial post-holes were often the first buildings to be constructed in the base of the quarries. This may represent the choice of a particular type of structure to perform a function specific to these locations.

Construction and function

This theme has been dealt with in general in Volume 1 where the commonly accepted views were briefly discussed. There will be no repetition here except where directly. relevant to the evidence under consideration. Reference will be made to a number of structures: descriptions and illustrations of these will be found in the catalogue (Fiches 19–22) from which a selection of plans has been taken for illustration here (Figs 4.68–4.91).

One of the commonest features relating to construction is the number of multiphase structures. In many of these the relationships are sufficiently clear to show which succeeded which. The most corm-non are two-phase structures (66), followed by a moderate number of three-phase (34), whilst four- or five-phase structures (four and two respectively) are very rare. However, the complex intercuttings of the post-holes of the last group usually obscure most of the relationships, so making it difficult to separate individual phases. Many of these rebuildings retain the same type in all phases, but nearly 20% change type from one phase to another. For example, PS381 (Fig 4.79) changes from H in its early phase to B in its middle and late phases. PS302 changes from B to A, PS256 G to A, PS304 A to B, PS215 H to G, PS243 E to F, PS359 F to H, PS255 G to H and PS300 G to F to H. The most common transformations are from E to F, G to H or A, H or A to B and B to H; more rarely H to G and G/E occur.

These observations can most simply be interpreted in one of two ways: either the structures were being completely rebuilt on the same site, or timbers rotting in the ground were being replaced or repaired. The structures that did not change type may represent the replacement of supporting timbers by jacking up the frame of the superstructure, one side at a time, to add new supports. Some support for the repair theory is provided by a number of structures where post-holes have been recut more times on one side than another, eg PS302 and PS320 (Fig 4.80). In the former case, the post-holes along the road side have been recut four times, whilst those on the north side of the building were replaced only twice: PS320 shows an almost identical pattern. Further support comes from the structures with central post-holes (types K and D), where the central post-hole is often not replaced, whilst the outer ones were. The continued use of the central post in PS320 is very clear, whilst the outer ones were replaced. This strongly suggests repair rather than total rebuilding. In terms of construction this must mean that the superstructure was built in such a way that it could be jacked up and separated from its base, which implies a raised floor.

Where the structure type changed from one phase to another, a complete rebuild is more likely to have taken place. This is especially so where the number of post-holes change, eg PS262, PS256, PS381 (Fig 4.79),

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The large structures showed a much higher proportion of multiphase construction when compared to small structures. Only 7% of small structures were of two or three phases, together with 6% of mixed type, compared to 23% multiphase type G and H plus 8% mixed type and 49% multiphase six-post structures plus 18% mixed type. This could imply a quite different method of construction for the small structures, suggesting that repairs were not practical or worthwhile. It is possible the timbers set in the ground formed an integral part of the timber framing. If so once the timbers started to rot at the base, the building would fall apart in which case it would have been easier to abandon the building plot, salvaging any usable timbers for building afresh elsewhere.

Other variations in construction may be implied by differing ground plans. For example the type J structures, with the additional post-hole on one side, might reflect internal subdivisions or some additional structural feature. The structures with trench foundations imply a different foundation structure. It is possible that the trench held a horizontal beam, but since the individual post positions remained visible, it could not have been continuous but may have braced the post bases in short lengths jointed to the upright timbers. Having so much timber below ground was hardly an efficient building technique. This may be why the variety is not very common! There were only four examples, all single-phase six-post structures.

The overall size of the superstructure must remain entirely hypothetical, but judging from the post sizes it is likely that many were of two storeys, or at least had a loft above the raised first floor level. This may be hinted at by the numbers of large structures built in the bases of newly-dug quarry hollows. One explanation for the

preference for such positions could be that an upper floor or loft would have had easy access from the higher ground at the side of the quarry, perhaps by means of a wooden ramp. Although this explanation may not be appropriate in all cases, because of the size and shape of the quarry, it would work well with PS200 (Fig 4.71), PS381 (Fig 4.79) and PS386 (Fig 4.84).

For the majority of the buildings there is little indication of the character of the superstructure. The detailed study of the daub now suggests that it is unlikely that the walls were daubed so infill between the structural timbers would have been of wattle only or more likely simple weatherboard. However in a few cases, found in the stratified deposits, the contemporary ground surface survives and from this evidence a number of variations in structure may be deduced. Around the posts of some buildings continuous silting occurred. This is particularly clear with PS335 (Fig 4.81), where a continuous accumulation of pale grey crumbly silt (layers 1236, 1207) 0.2 m thick built up around the posts both inside and outside the structure. The implication is that the whole of the lower part of the building was open and unused, as the soil accumulated evenly over the area and there were no signs of trample or wear. There were, however, dumps of chalk rubble round the outer edge on the south side, with some blocks rolling into the silt and a trampled chalk spread (layer 1235) indicating that the entrance to the structure was on this side. As the chalk did not extend right up to the post-holes it is possible the superstructure overhung the foundations to some extent.

In the case of PS196 (Fig 4.77) there were chalk spreads (layers 752,753) around the outside of the structure, but inside there was a continuous soil accumulation (layer 834) to a depth of 0.2–0.25 m. This suggests the presence of a raised floor allowing unimpeded silting beneath the structure; that the lower area was apparently unused might imply that the floor was too low to allow access.

In other cases chalk spreads extended both inside and outside, In PS379 (Fig 4.83) there was a chalk spread (layer 549) over the northern part of the interior, which was continuous with a substantial and extensive chalk spread outside (layer 1613). The spread within the structure had been subjected to greatest wear. In PS381 (Fig 4.79) there were chalk spreads associated with all phases. In the early phase layer 1632 extended right across the area of the structure and to either side. In the middle and late phases the chalk spreads (layers 1665 = 1653 followed by layers 1619, 1637) were confined to the northern end of the structure and outside to the north, suggesting that the entrance lay on this side and only the area subjected to greatest wear was resurfaced. Other structures having substantial chalk spreads associated with them were PS466 (Fig 4.80), PS468 (Fig 4.85) and PS377 (Fig 4.74). In the case of PS377 the chalk spread (layer 1382) was laid in its late phase and it showed no evidence of walls, showing, once again, that the lower part of the structure was open: no differentiation of wear was observed on the chalk surface.

The evidence outlined above shows clearly that the ground floor level of many structures was unenclosed. This fact, combined with the massive nature of the vertical timbers is sufficient to suggest that these buildings were normally provided with raised first floors. In some cases the first floor may have been high enough to allow the space beneath to be used but in others the accumulation of silt shows that the area remained unused possibly because the floor was too low to allow sufficient head room.

Much of what has been said about the construction of post structures is directly relevant to any consideration of their function. The commonly rehearsed suggestions have already been outlined in Volume 1: in summary the preferred interpretation is that they were granaries. Yet a wide range of activities could have taken place in buildings of this kind. One has only to look at the varied uses to which eighteenth and nineteenth century granaries are now put to appreciate the flexibility of this type of structure. In the last ten years, however, excavation in the well stratified positions around the perimeter of the fort, where contemporary layers survive, has provided some indication of function.

We have already presented sufficient evidence to show that many (if not all) of the buildings had raised floors. The reason for taking the trouble to provide such a facility must surely have been to create a dry, well aerated and rodent-free area for storage or food preparation. That many of the larger post structures face onto roads is a further indication that ease of access was an important factor in their siting. This would support the idea of the bulk storage of materials such as grain or wool which could more easily be brought right up to a building by cart rather than by being manhandled. There was no doubt a wide range of products requiring storage of this kind in addition to grain: bales of wool, cheese, and smoked and dried meat are likely possibilities. Indeed there is no reason why a building should not have been used to store a variety of goods particularly if we are correct in suggesting that some buildings may have had two floors. The view that each post structure stored grain, exclusively, is patently nonsense. It is better to avoid the word ‘granary’ and substitute the less specific ‘store house’.

Where contemporary ground surfaces survive some evidence of associated activity may be deduced. The carefully laid chalk floors beneath and around PS468 (Fig 4.85), PS377 (Fig 4.74) and PS466 (Fig 4.80) anticipate wear: in some cases worn areas are found inside (or beneath) the structures, in other cases outside. A number of examples suggest that this activity may have been of a domestic nature and several structures were associated with occupation deposits of a kind more usually found in circular structures. In the case of PS386 (Fig 4.84) an occupation-rich silt containing charcoal and burnt clay (layer 1913) had accumulated around the outer edge of the structure. PS320 (Fig 4.80) was even more revealing. Here a considerable accumulation of layers had taken place (described as sequence J in Section 4.3.12). These comprised a series of chalk spreads, occupation deposits, dumps of daub and possible hearth or oven bases. This was one of the largest post structures with an area of 16 sq m and though small compared with the area of the average circular structure (20–30 sq m) it could have served a domestic activity.

Seven structures were associated with hearths, all but one occurring in the deeply stratified levels. Some were actually inside (or beneath) the structure (PS379 (Fig 4.83), PS377E and L (Fig 4.74) and PS482 (Fig 4.72)) whereas others were just outside to one side (PS347 (Fig 4.76), PS433 (Fig 4.68)) or actually on the ‘wall line’ (PS386) (Fig 4.84). Other contemporary features include a post-hole ‘inside’ (PS381E) (Fig 4.79) and a short length of linear gully full of occupation debris (PS386) (Fig 4.84) which may have related to a wall or door. PS377 (Fig 4.74) had additional, contemporary post-holes while PS377 was associated with a two-post structure (PS378) constructed parallel to its east wall very close to it. A similar arrangement occurred with PS468 (Fig 4.85) which had a two-post structure (PS470) aligned along its west wall. PS386 (Fig 4.84) also had a

two-post structure (PS387) contemporary with one of its phases but in this case the two-poster was more distinct and was probably a separate structure.

Interpretation of all these observations is difficult but in no case does the evidence imply that the structures were walled to contain domestic activity as would be the case if they were rectangular houses. A simpler explanation is that the space beneath the raised floors, where the head room was sufficient, sheltered a range of activities which could vary from cooking to the storage of farm equipment. In some cases the activity could relate to the material stored, eg spinning and weaving for wool, churning for cheese, etc. Few communities would have overlooked the convenience of such a space.

Another interesting association was provided by PS469 (Fig 4.70) and pit P1115. It was clear that the structure had been built on the chalk cone around the pit top. The structure therefore sheltered the pit (and may have been one of the factors contributing to its excellent preservation). In this case it is possible that the posts simply supported a roof protecting the pit top and performed no other function. Its smaller than average size (5.29 sq m) might be thought to support such a view. Outside the stratified zone it is impossible to establish the contemporaneity of post structures and pits but a scan of PS1-PS150 produced 36 structures which wholly enclosed pits. In some at least of these juxtapositions both features may well have been contemporary but proof is lacking.

Other features associated with post structures are circular or penannular gullies which enclose them. Five were described in Volume 1 (PS3, PS6, PS8, PS9 and possibly PS13). Examples from the 1979–88 excavation included: PS395 and GC11 (Fig 4.75); PS347 and GC26 (Fig 4.76); PS386 (Fig 4.84) and GC33 (Fig 4.86); PS479 and GC43 (Fig 4.85); and PS483 and PS484 with GC42 (Fig 4.70). In addition PS335 (Fig 4.81) utilized the platform with an earlier gully complex (GC22) and GC29 is likely to be associated with a post structure though too little of the internal area was exposed to confirm this. All of these examples, with the exception of PS13, occur in stratified deposits in the lee of the rampart. Although circular gullies occur in the interior of the fort, no example is known to enclose a post structure. This may be fortuitous but on the available evidence the combination of post structure and gully does favour the peripheral siting behind the rampart. The reason for this may simply be that in such situations provision was needed to prevent surface water from accumulating around the posts: gullies on the uphill sides would have been sufficient for this in times of heavy rain.

Chronology

In Volume 1 we offered the generalization that small structures were early and large structures were late. Though this is still broadly true, there is now sufficient detail from relationships both of one structure to another and of structures to the stratified deposits, to show that the picture is rather more complex. In the discussion to follow three broad categories will be used: small structures, large four-post structures and large six-post structures (including type K). Table 2 shows these categories in relation to Ramparts 1, 2 and 3 using all those structures found in the peripheral stratigraphy.

The first notable feature is that all groups occur in all phases. However, further examination shows up certain trends. The small structures do tend to be earlier and there is clear evidence from the 1988 area (sequence H) that at least one, and probably more pre-dated the construction of the rampart altogether. While it could be argued from the table that small structures are evenly divided between all phases it should be remembered that the period following Rampart 3 was significantly longer than the others. It is also noticeable that the early structures following the third rampart are all confined to the early phases of the quarry hollow sequences.

The large four-post structures (including type J) were the commonest group to he found in the quarry hollows and show an even spread throughout. There are eight structures between Rampart 1 and Rampart 2, four between Rampart 2 and Rampart 3 and 26 after Rampart 3. There is a particularly high proportion of large four-posters in the earliest phases in the quarry hollows, with a dramatic decrease in the middle phases and none in the latest stages.

The type K structures occur from very early to very late. The earliest, in sequence H, occurs between Rampart la and lb, and another between Rampart 1 and Rampart 2. There is a gap between Rampart 2 and Rampart 3, after which there is an even spread right up to the later phases.

The large six-post structures are the least well represented category in the peripheral stratigraphy. However in sequence H, where early deposits were well preserved, two six-posters were found one dating between Rampart 1 and Rampart 2 and one somewhere between Rampart 1 and Rampart 3. After Rampart 3 they occur regularly through the early and middle parts of the quarry hollow sequences, but there are only two late six-posters.

Before interpreting these trends it should he noted that circular structures tend to take over and become the dominant structure type in the later phases of the post-Rampart 3 quarries. If the purpose of building large post structures in the base of quarries was to have easier access to an upper storey, this advantage may have been lost as the quarries filled.

The smaller numbers of large six-post structures could be regarded as merely a reflection of the fewer numbers in the fort generally compared to the other groups. However, if the six-posters are more commonly a late type, their absence in the peripheral stratigraphy, particularly the latest phases could reflect the changes in the use of the quarries with circular structures replacing post structures. Where other groups of post structures can be related to each other, these show similar trends of large structures replacing small, and sometimes type D being one of the latest structures. If type D were a late development in the life of the fort, this may be the reason why none occur in the quarries and why they are not common in general.

The examination of the phasing does support the generalization that small structures are early and large ones late and that the complexity and number of post-holes increases with time. However this is a broad trend and not a rigid rule. There was considerable overlap of structure type, with some small structures replacing large and four-posters replacing six-posters. The period of occupation at Danebury represents a time when building techniques for post structures was undergoing considerable innovation and change. In some cases natural conservatism may have preserved small structures, even though they were becoming old fashioned as new types were designed and developed. Possibly some of the small groups such as type J or ones with trench foundations represent innovations, which were found to be impractical or unpopular and never caught on. The type D nine-post structures are some of the largest post structures on Danebury and those which can be phased are clearly late. Their sparsity may be a result of the type

Table 2. Post structures in the stratified sequences

	Small rectangular structures (four- and six-post)	*Large four-post structures* (G,H,J)	*Large rectangular structures Type K*	*Large six-post structures*	Circular *structures*	*Large linear structures Type L(G) and L(H)*	*Small linear structures Type L(E)* and *L(F)*
6viii			PS335		CS38c CS54 CS39 CS31 CS52	PS375	PS382
6vii			PS1	PS59, PS61	CD55, CS59 CS30	PS346 PS348 PS392	
6vi		PS347	PS385 PS349		CS36b CS61 CS28 CSS1b CS57 CS29b CS56 CS33b CS34b CS2		
6v		PS467	PS379	PS340	CS60 CS58 CS36a CS51a CS27 CS29a CS33a CS34a	PS350 PS376 PS344	PS9 PS384
6iv							
6iii		PS471 PS336	PS373 PS3 PS4 PS5 PS359 PS200 PS201 PS377 PS337 PS338 PS339 PS343 PS468	PS464 PS466		PS393	
6ii	PS136 PS469 PS472	PS383 PS394	PS380 PS386	PS381/B-C	CS35-L CS63-L		
6i	PS359-1 PS362	PS381-A	PS203 PS374 PS473	PS7 PS196	CS35-E CS63-E	PS388 PS378 PS342 PS341 PS497	PS387 PS496
		PS429	PS476				
RAMPART 3				RAMPART 3			RAMPART 3
	PS389 PS390 PS192	PS195 PS395 PS459	PS488		CS25 CS32 CS62	PS477 PS494	PS389 PS39a PS352
RAMPART 2				RAMPART 2			RAMPART 2
	PS2 PS345 PS202 PS428	PS10 PS14 PS465		PS489			PS371 PS372
	PS487 PS197 PS480 PS483 PS485 PS484 PS190, PS486 PS482 PS490		PS479 PS478	PS481	CS37 CS49 CS59	PS391 PS499 PS493 PS495	PS491
RAMPART 1				RAMPART 1			RAMPART 1
	PS474 PS475						

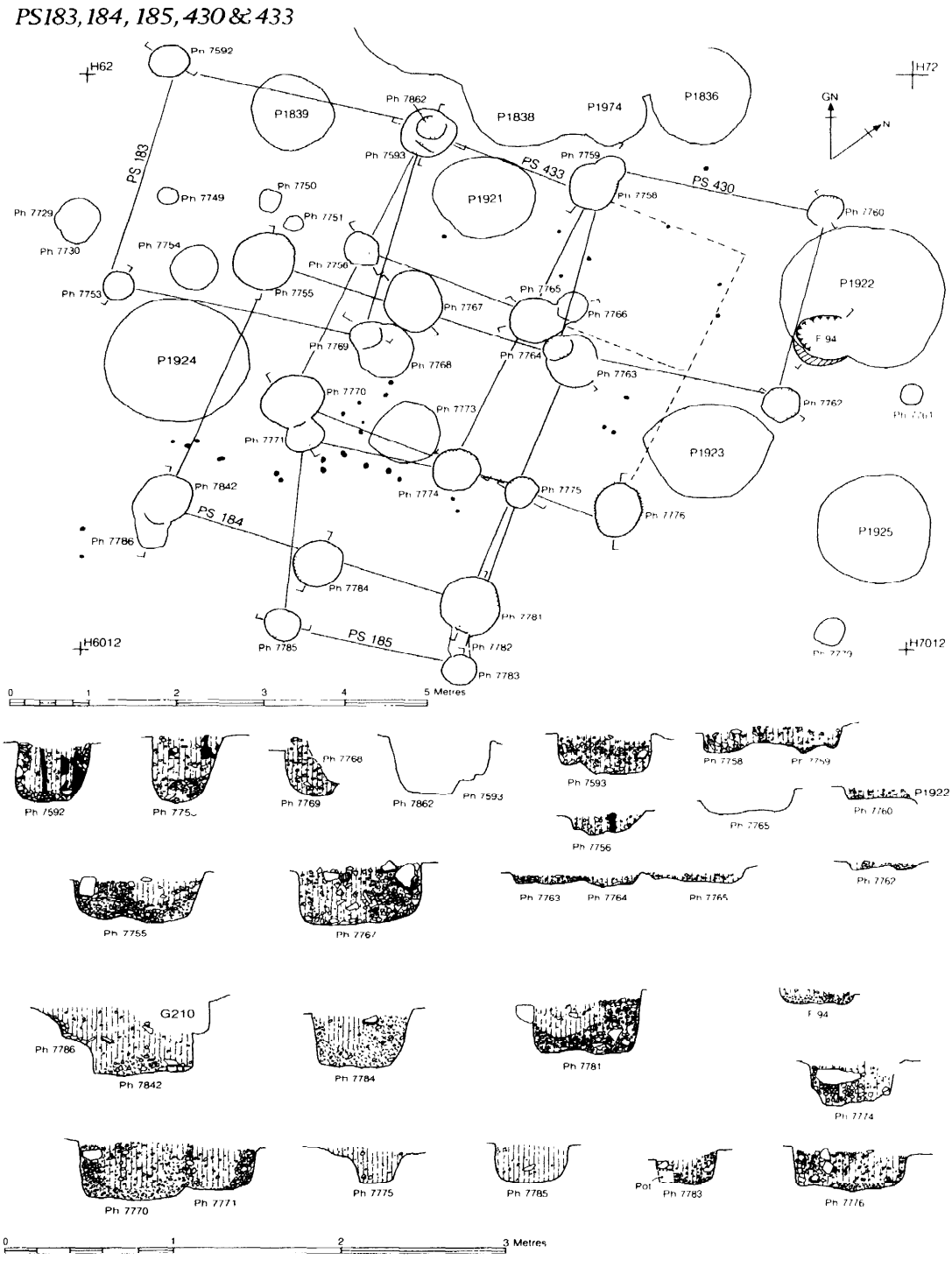
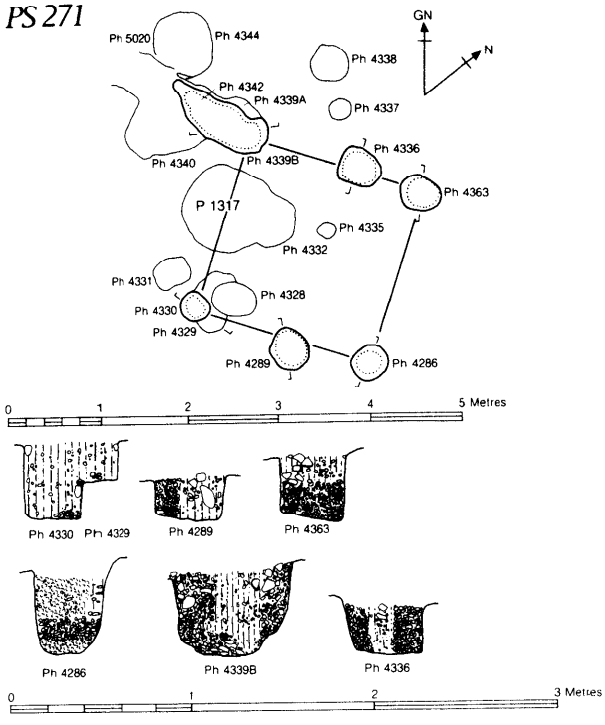
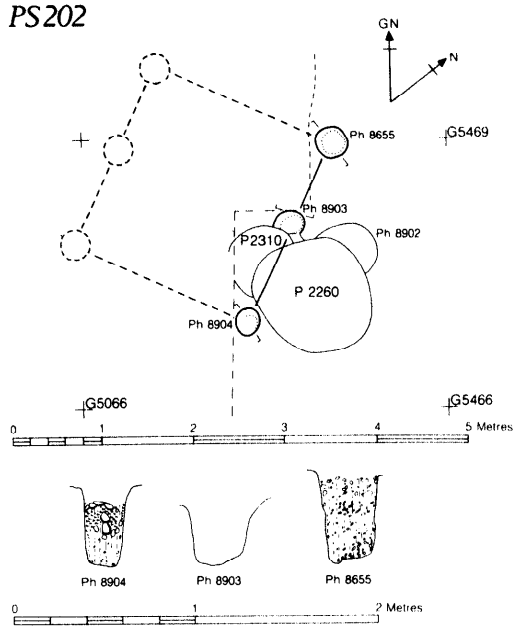
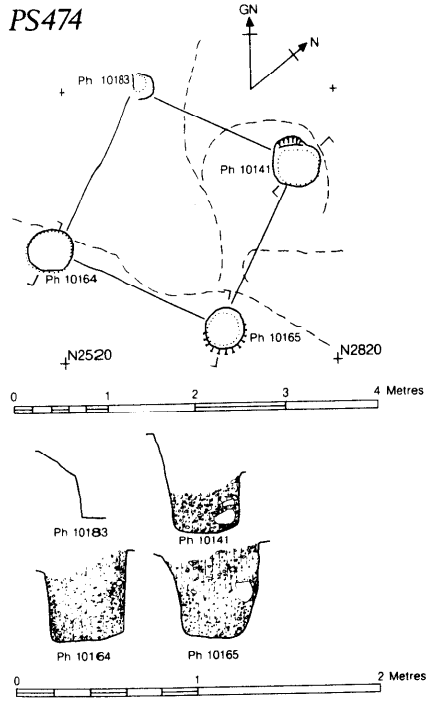


Fig 4.68 Multiple complex of post structures: type E (PS185 and PS430), type F (PS183), type B (PS184), type D (PS433)







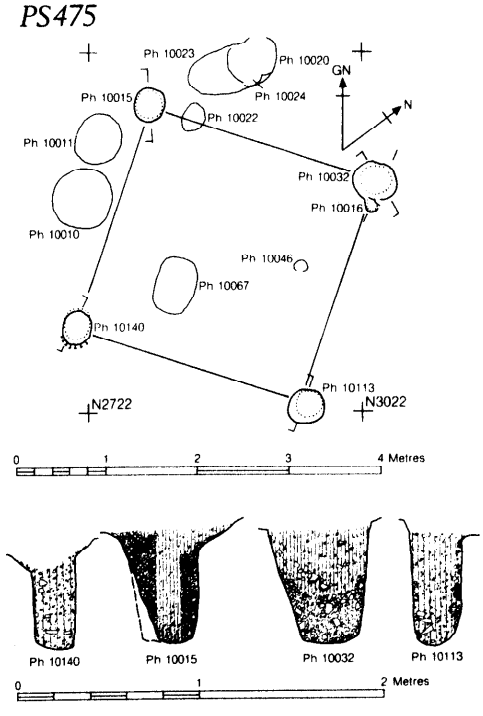


Fig 4.69 Post structures of type C (PS271 and PS202) and type F (PS474 and PS475)

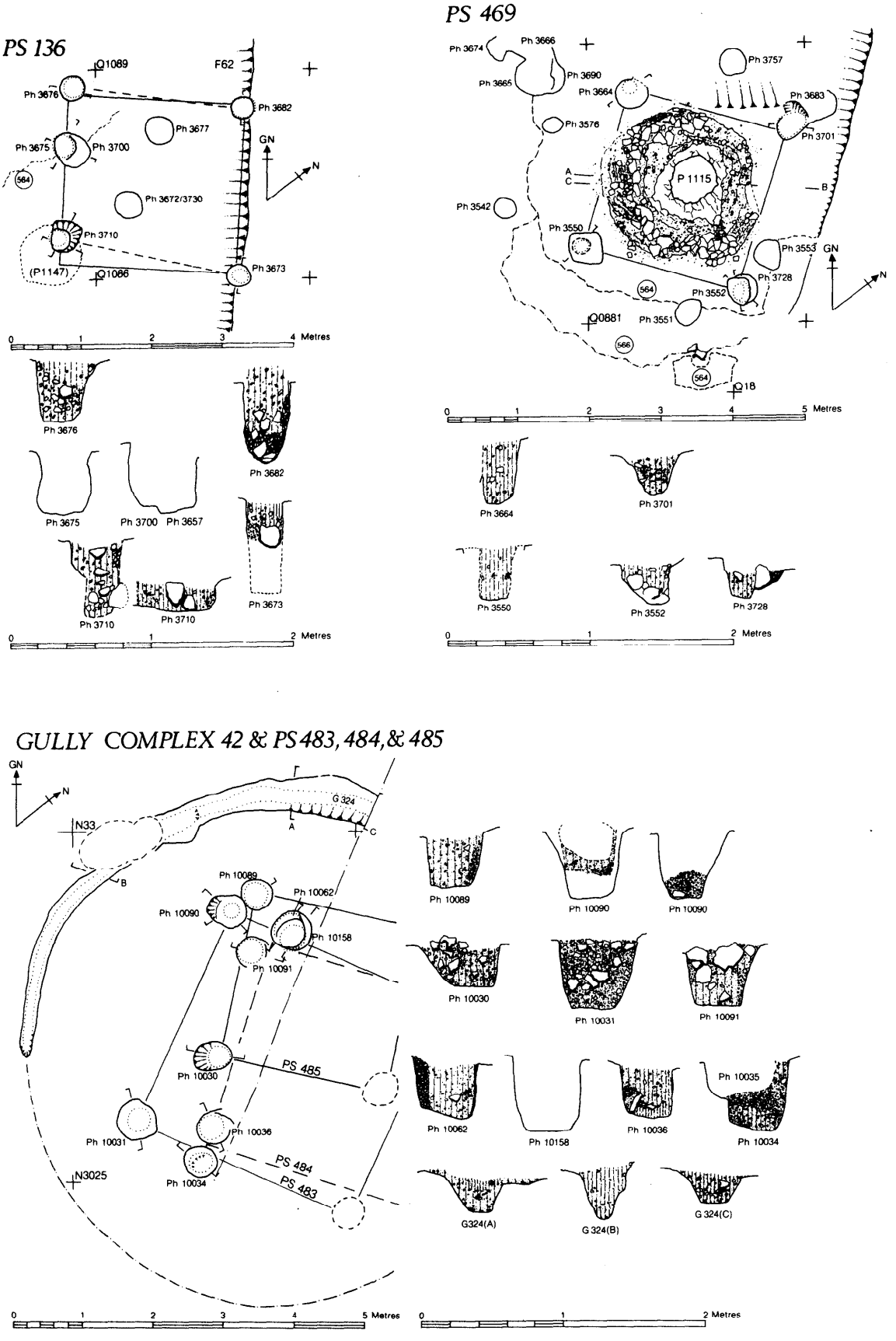


Fig 4.70 Post structures of type F

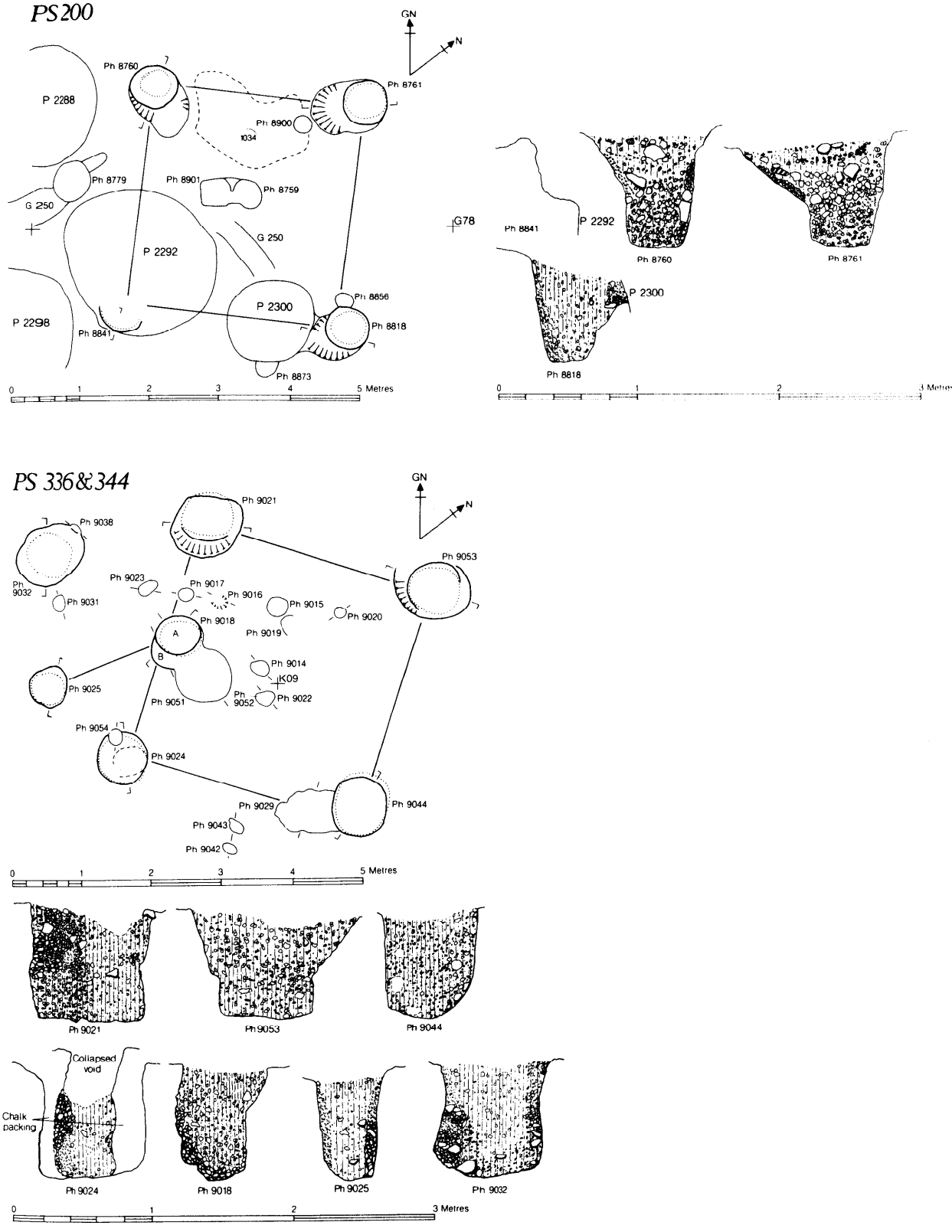


Fig 4.71 Post structures of types H and L(H)

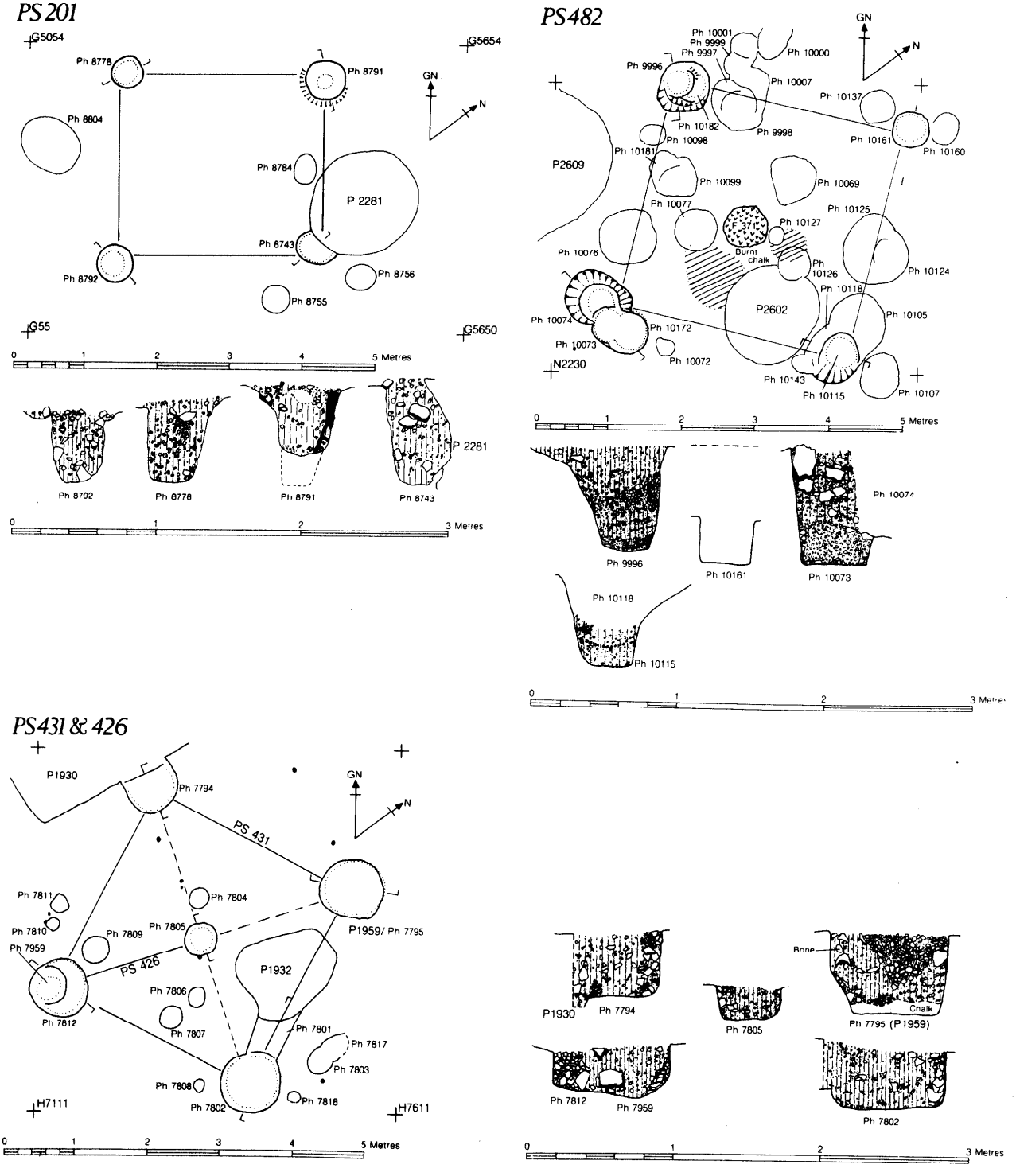


Fig 4.72 Post structures of types H and L(E)

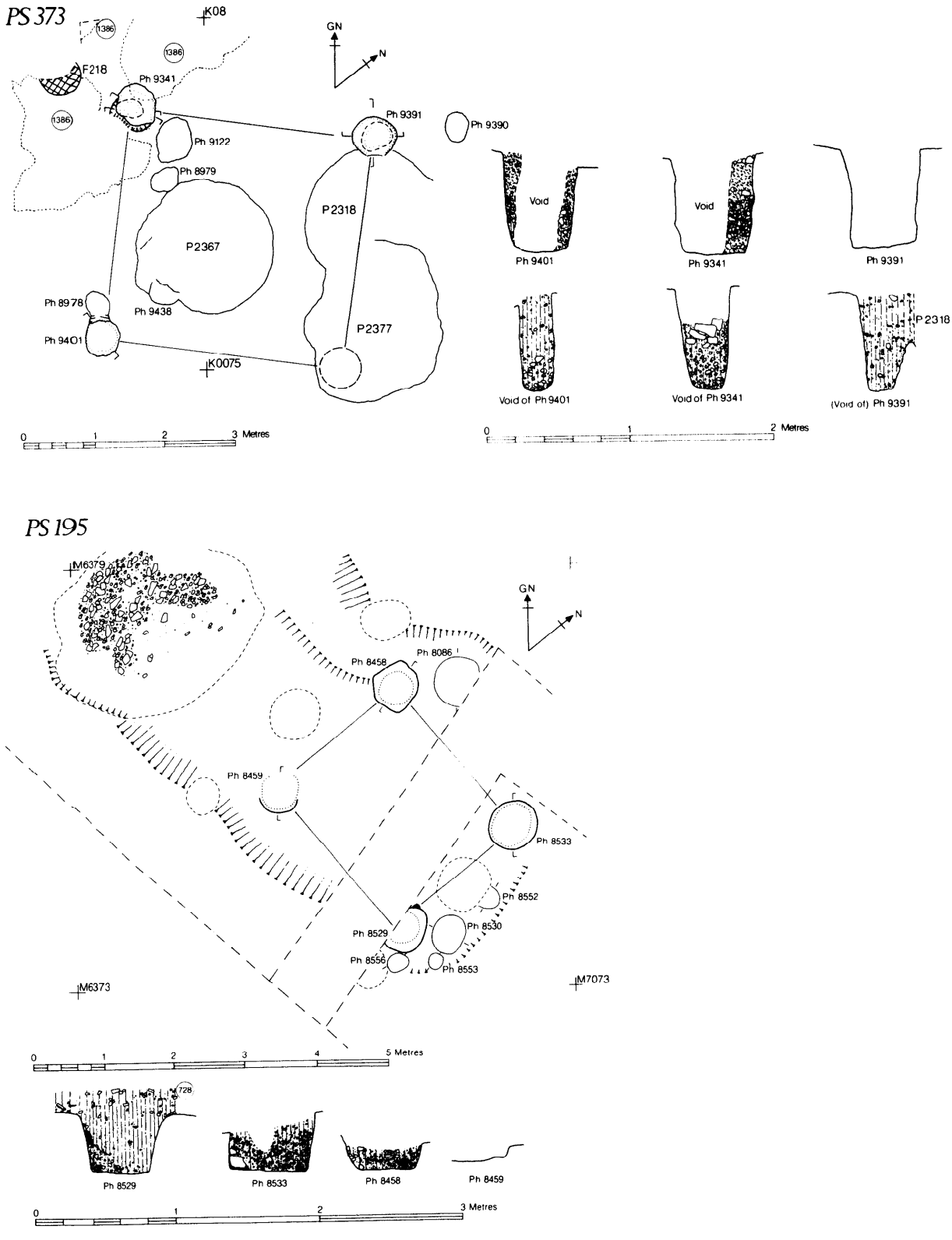


Fig 4.73 Post structures of type H

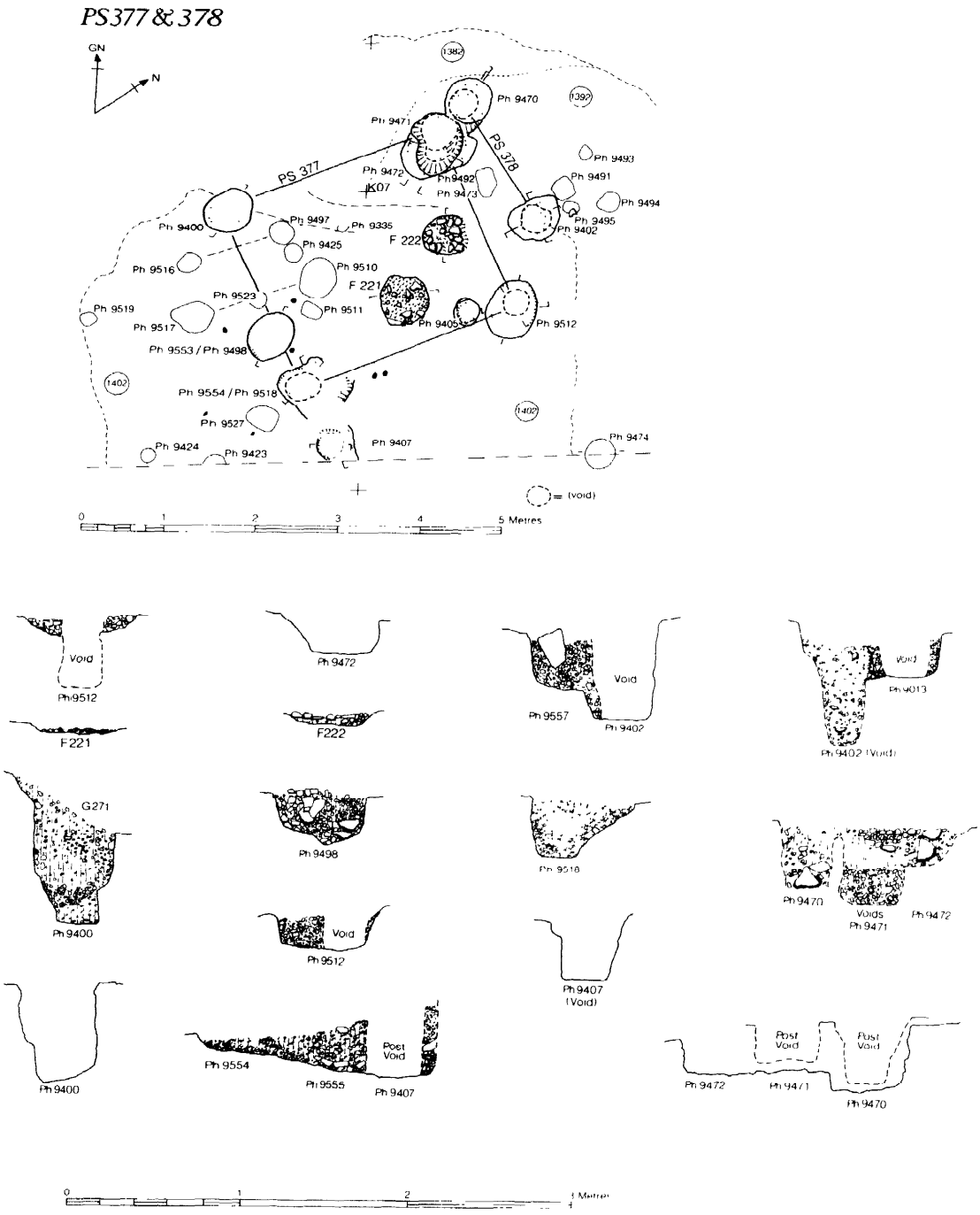
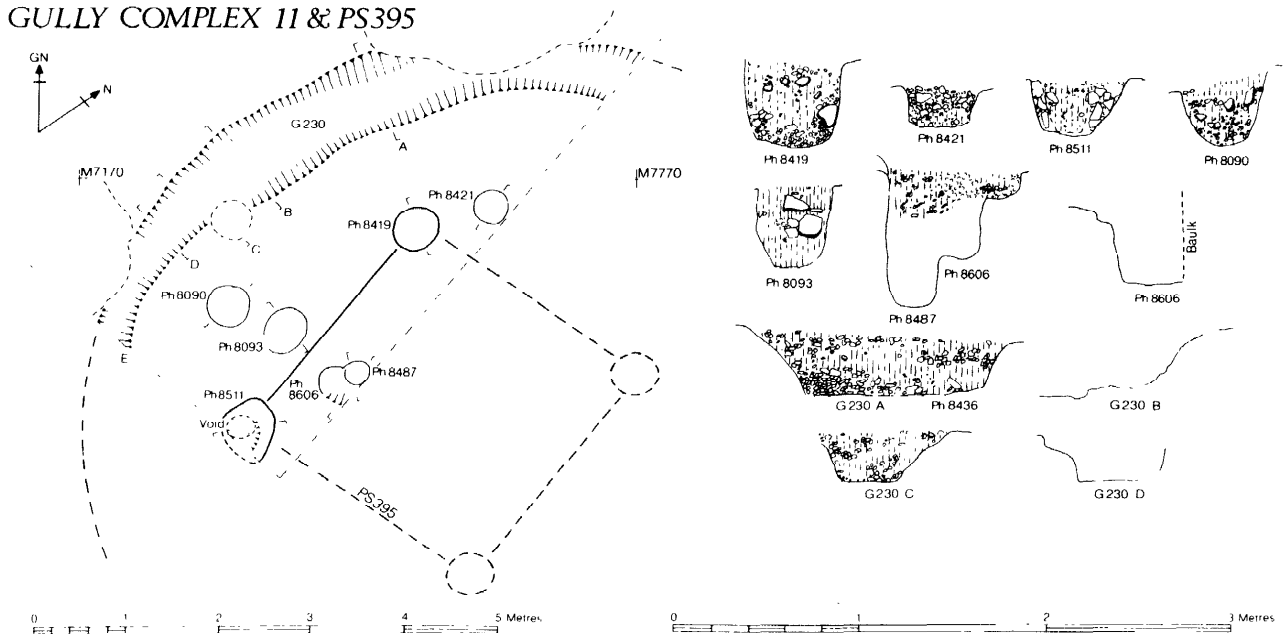


Fig 4.74 Post structures of types H and L(H)



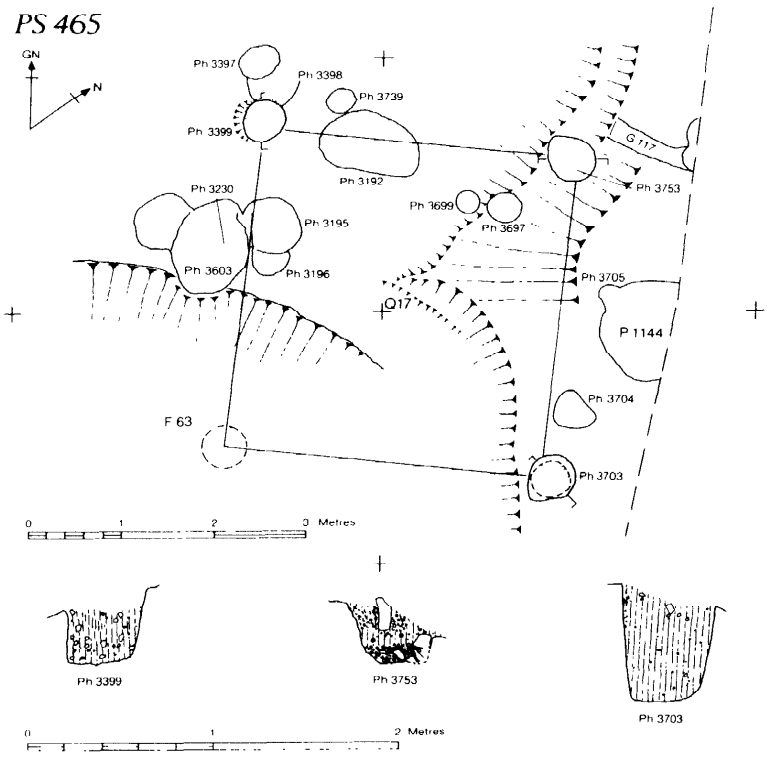


Fig 4.75 Post structures of type H

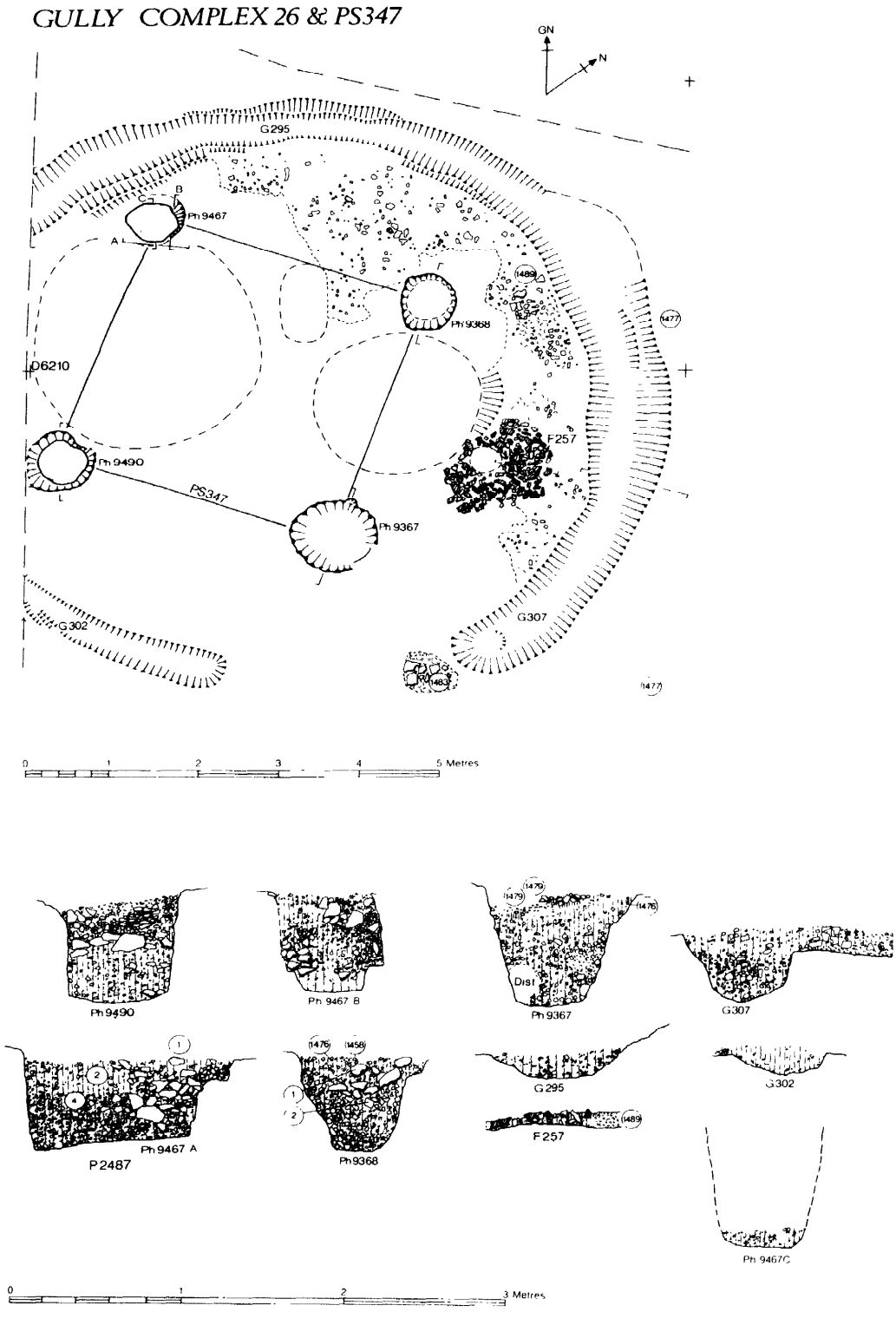


Fig 4.76 Post structure of type H

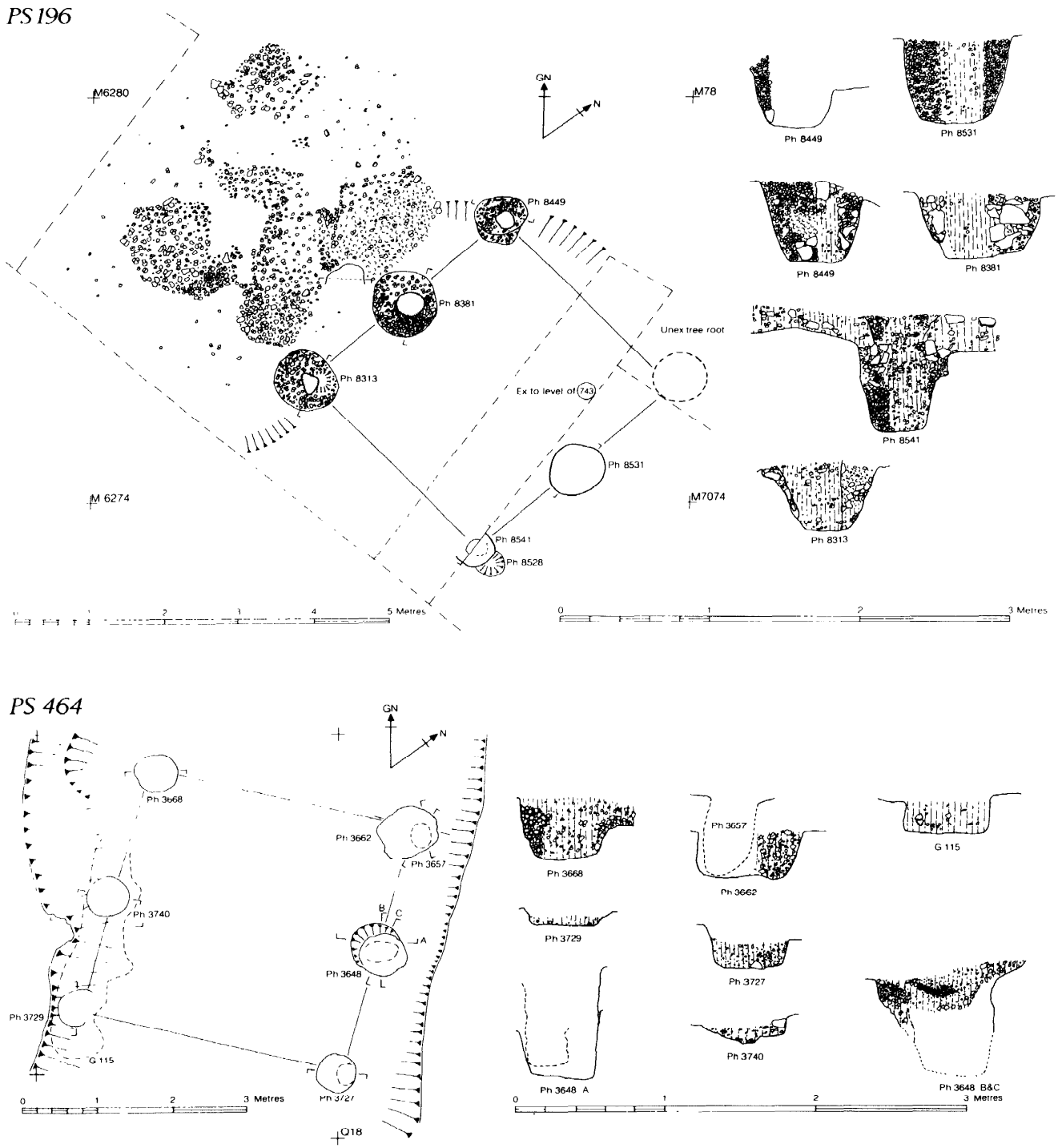
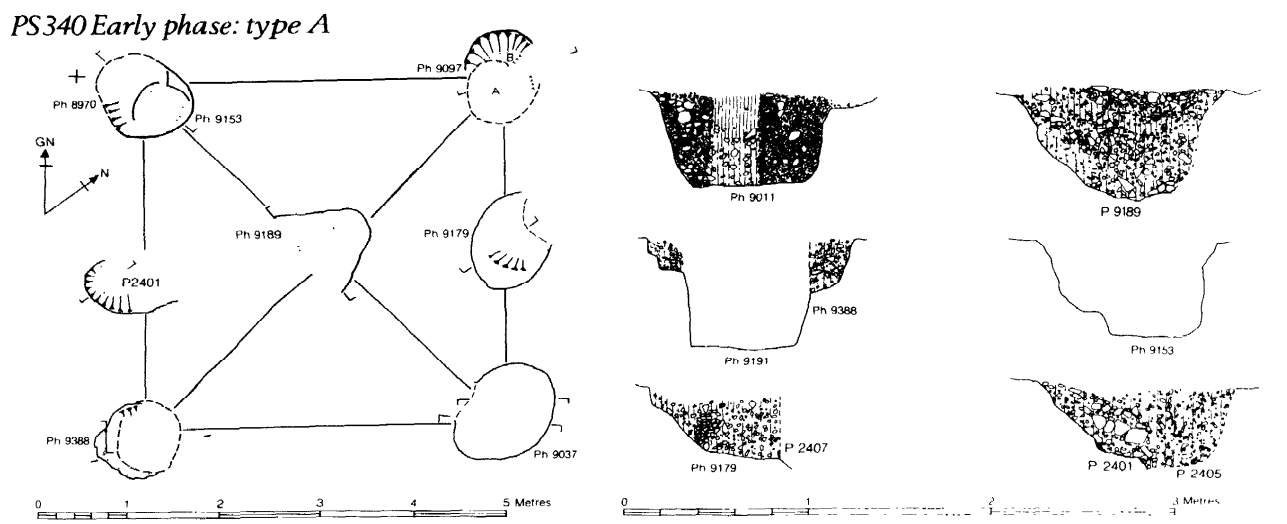


Fig 4.77 Post structures of type B



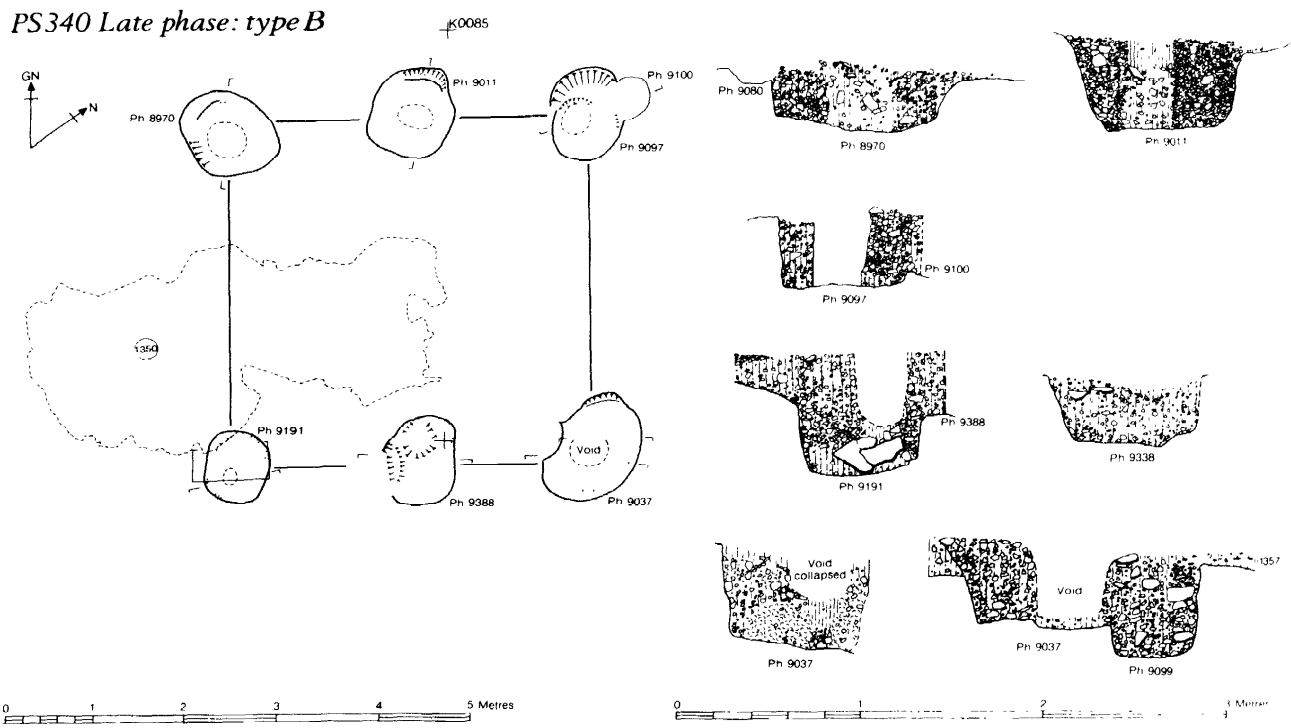


Fig 4.78 Post structure of type K rebuilt as type B

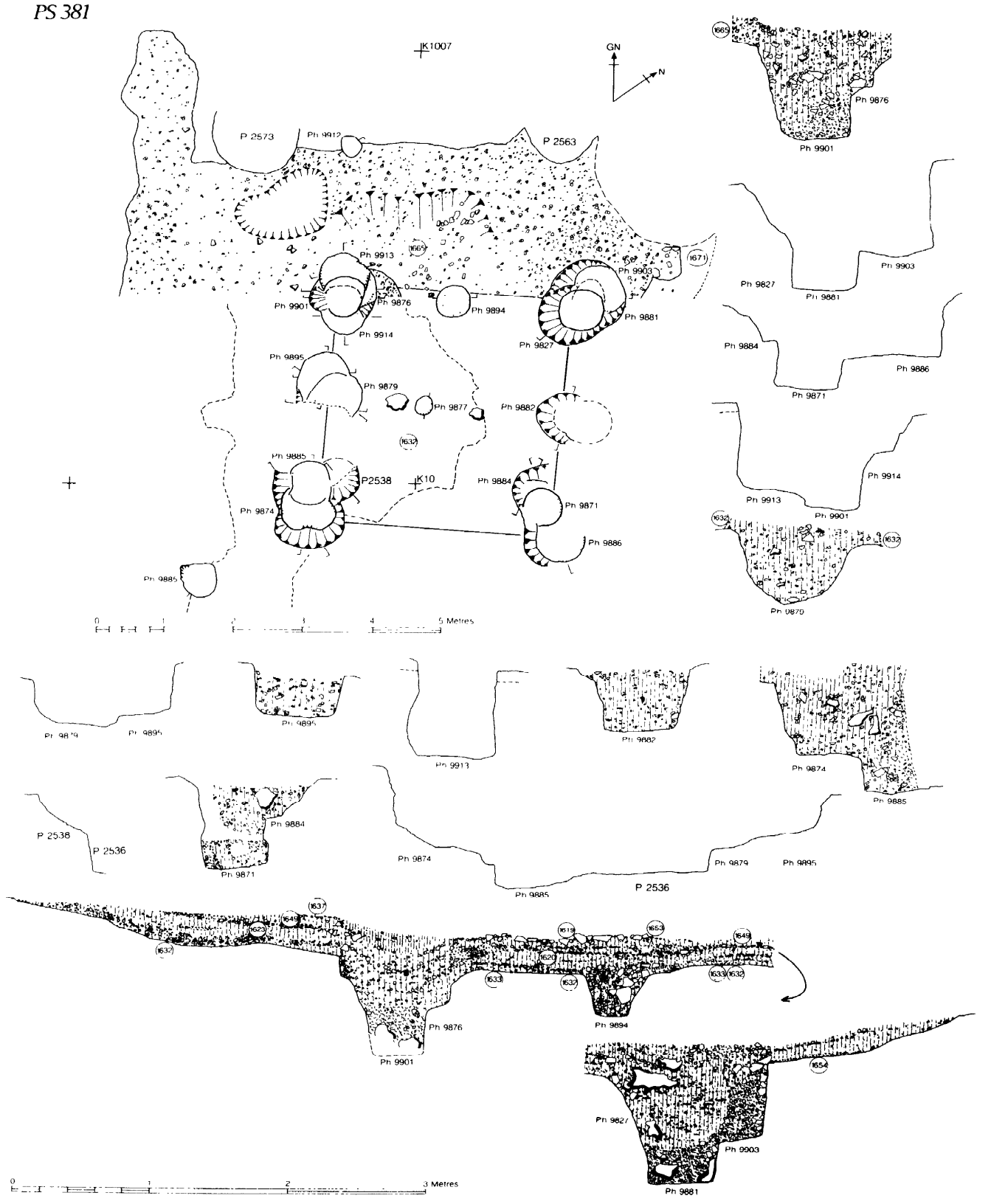


Fig 4.79 Post structure of type H rebuilt as type B

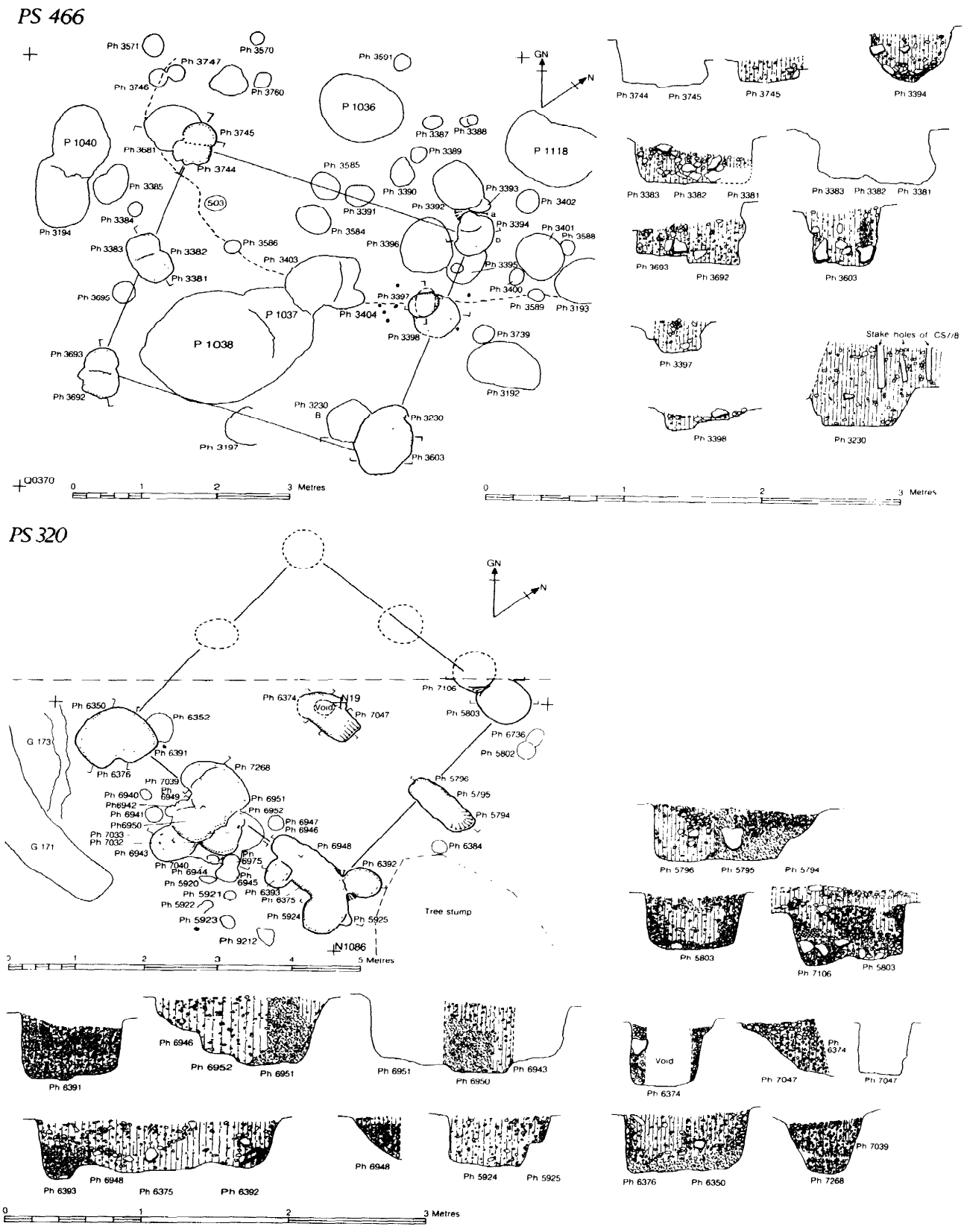


Fig 4.80 Post structures of types B and D

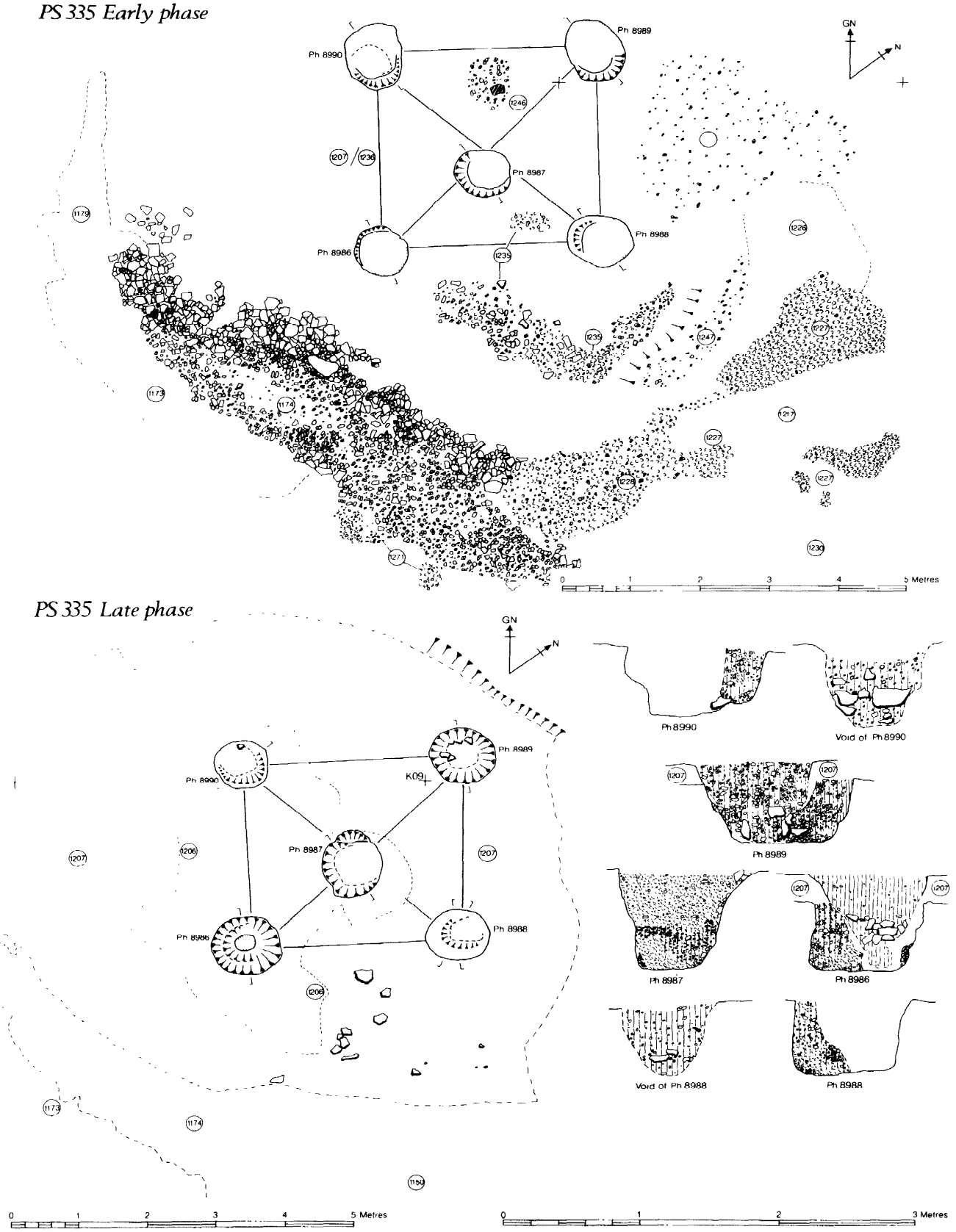
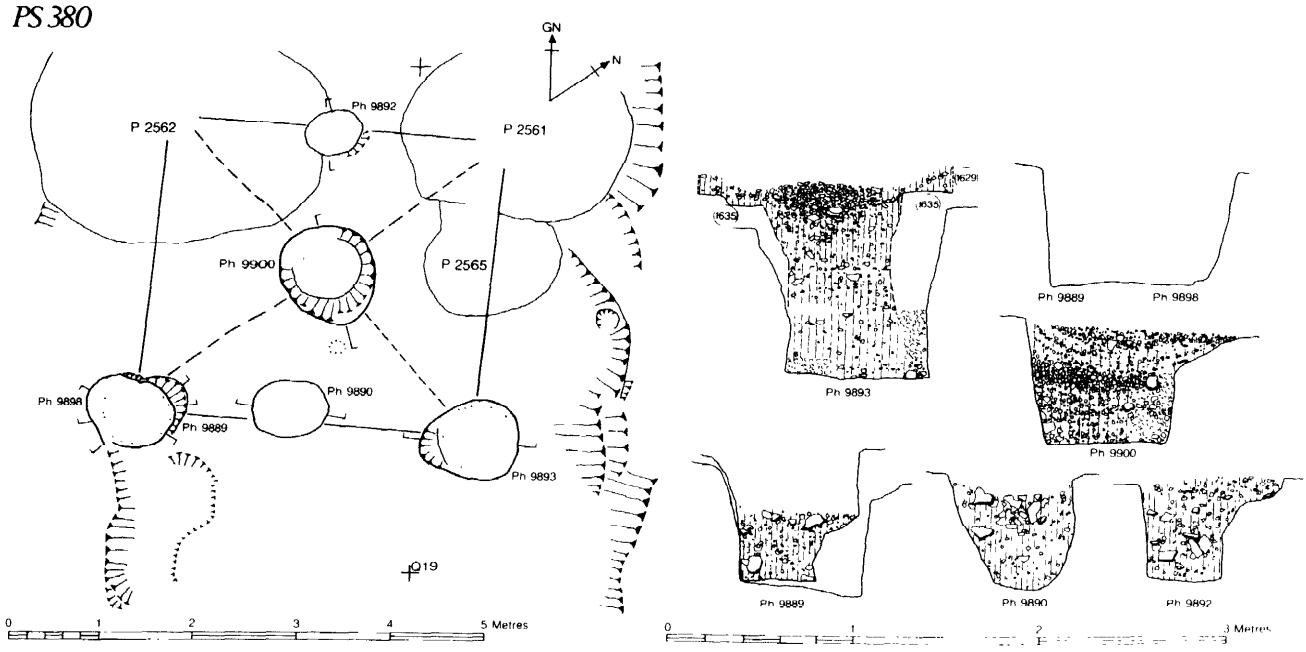


Fig 4.81 Post structure of type K



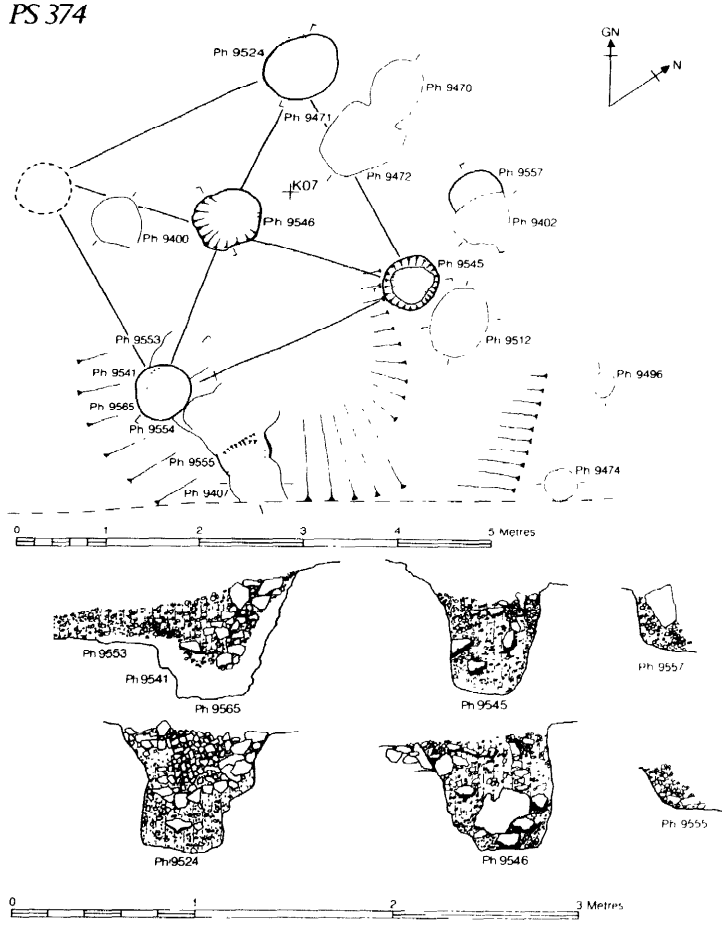


Fig 4.82 Post structures of type K

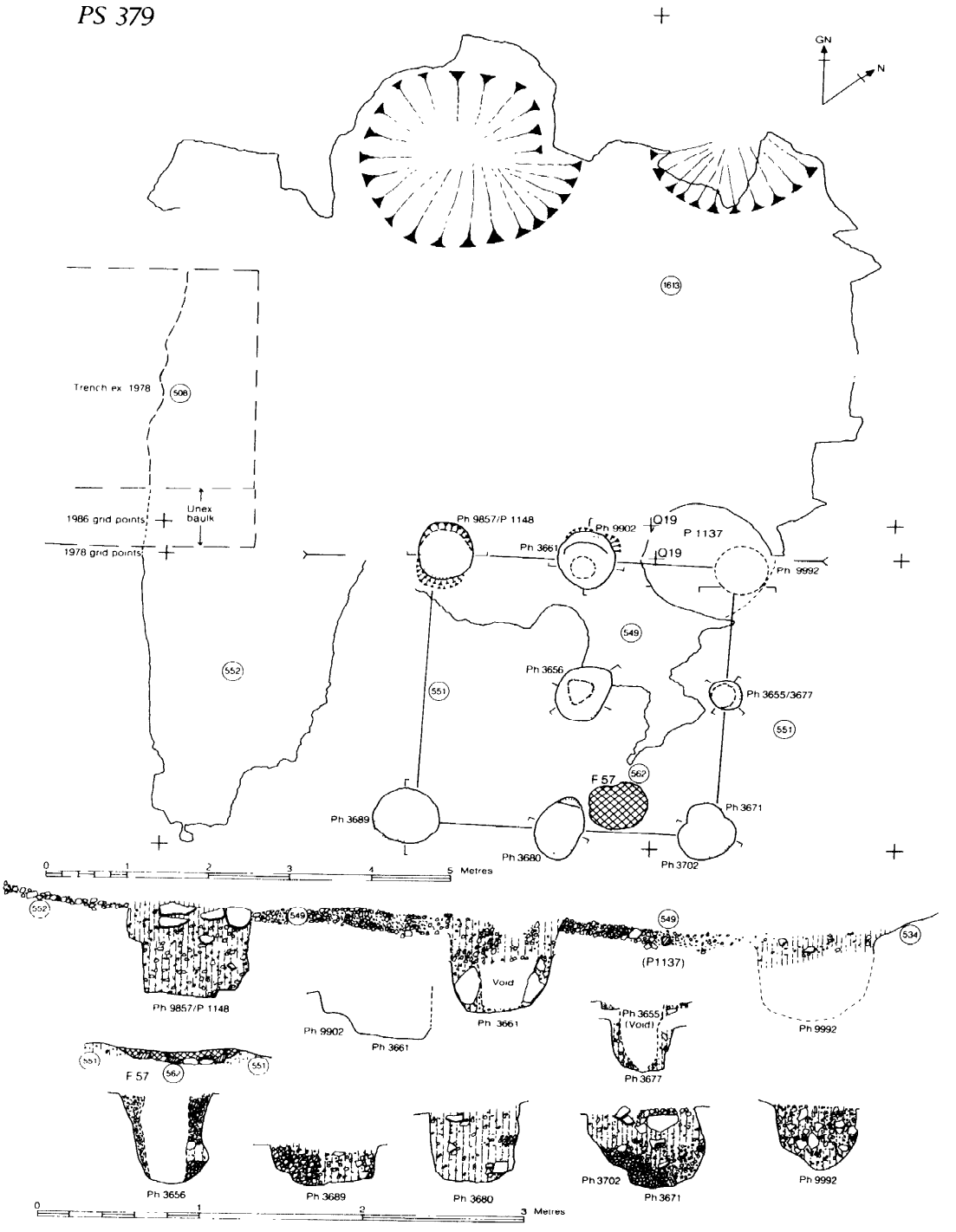
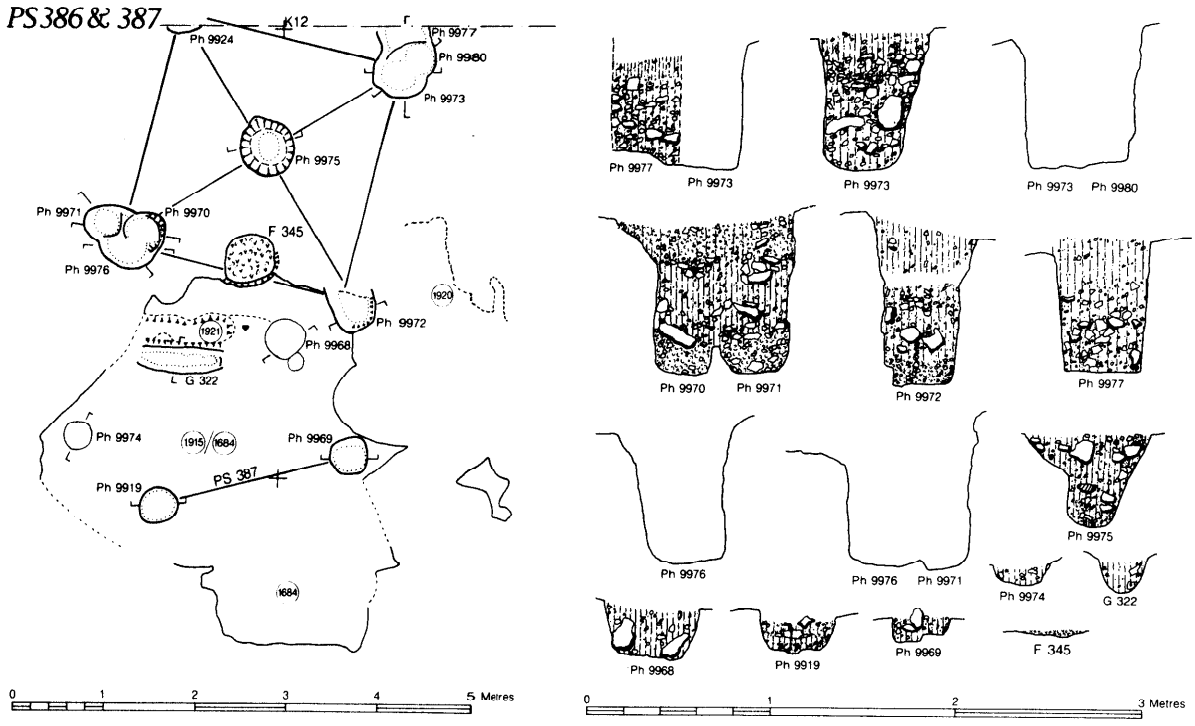


Fig 4.83 Post structures of type K



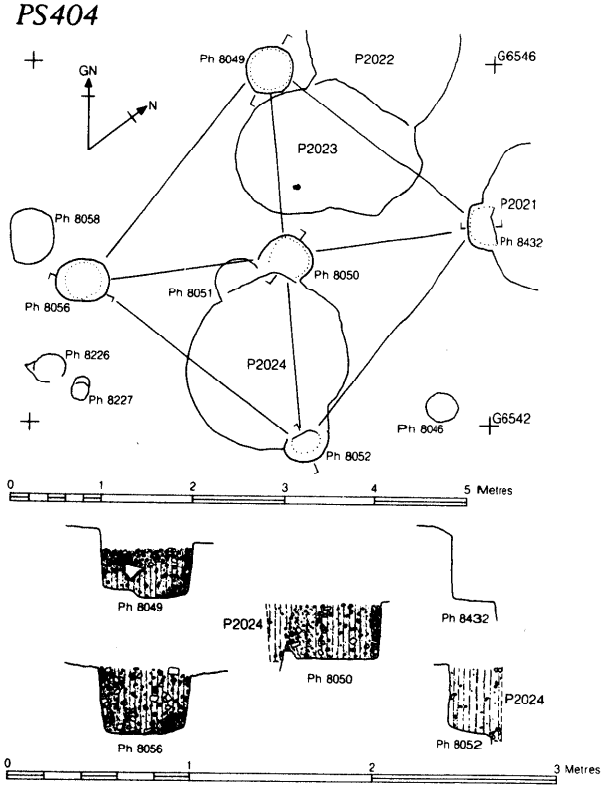


Fig 4.84 Post structures of type K

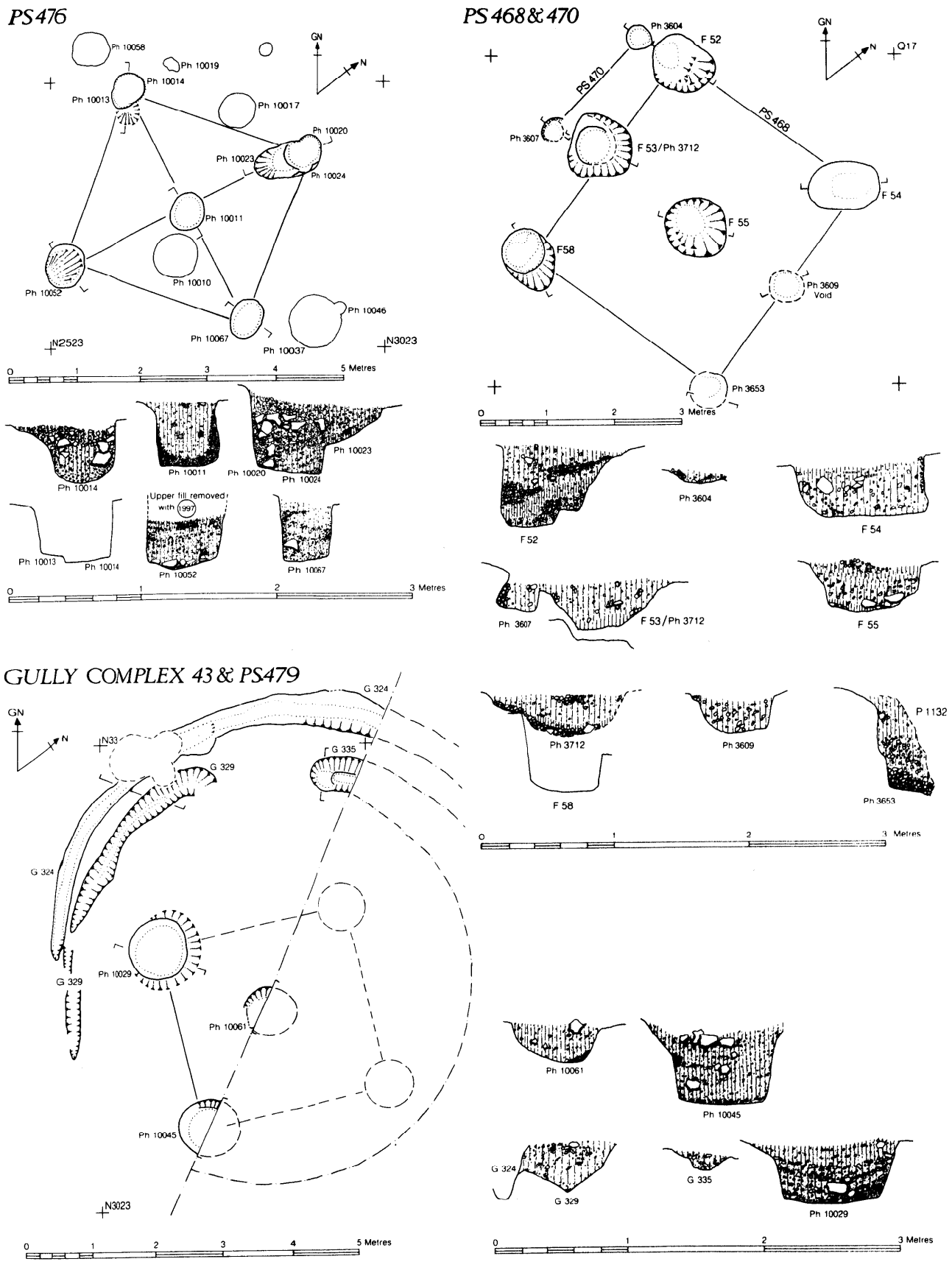


Fig 4.85 Post structures of type K

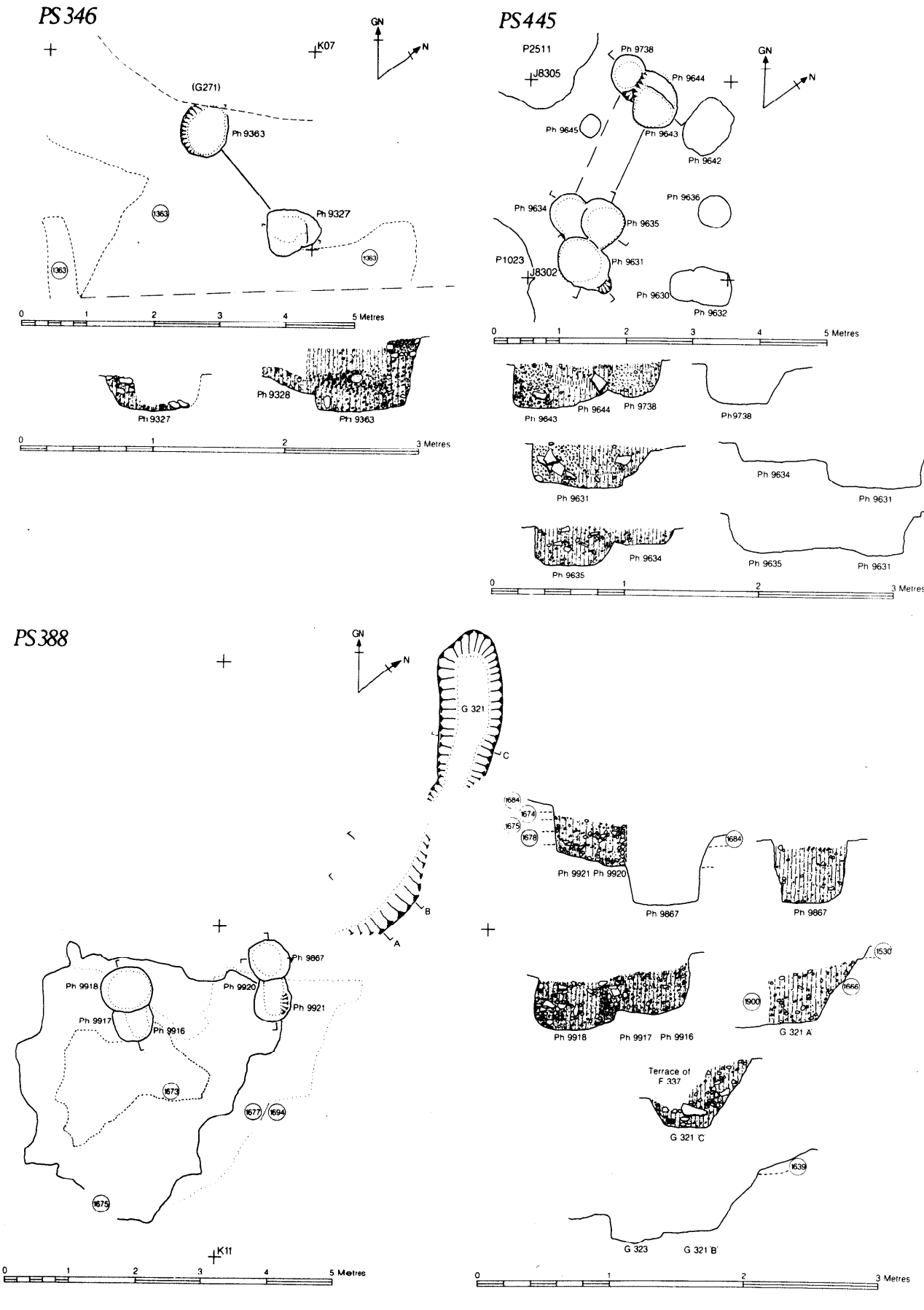


Fig 4.86 Post structures of type L(H)

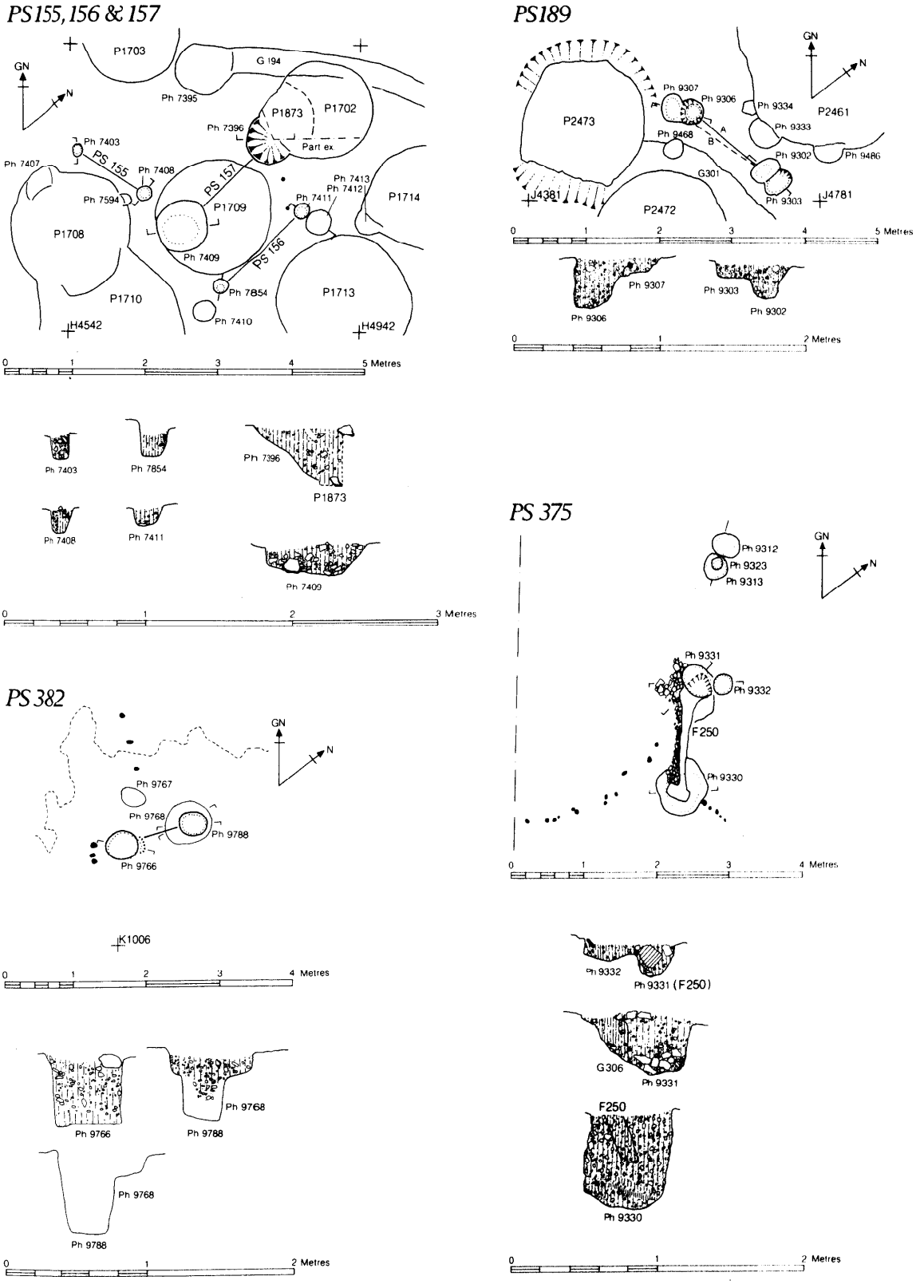


Fig 4.87 Post structures of types L(E), L(F), L(G) and L(H)

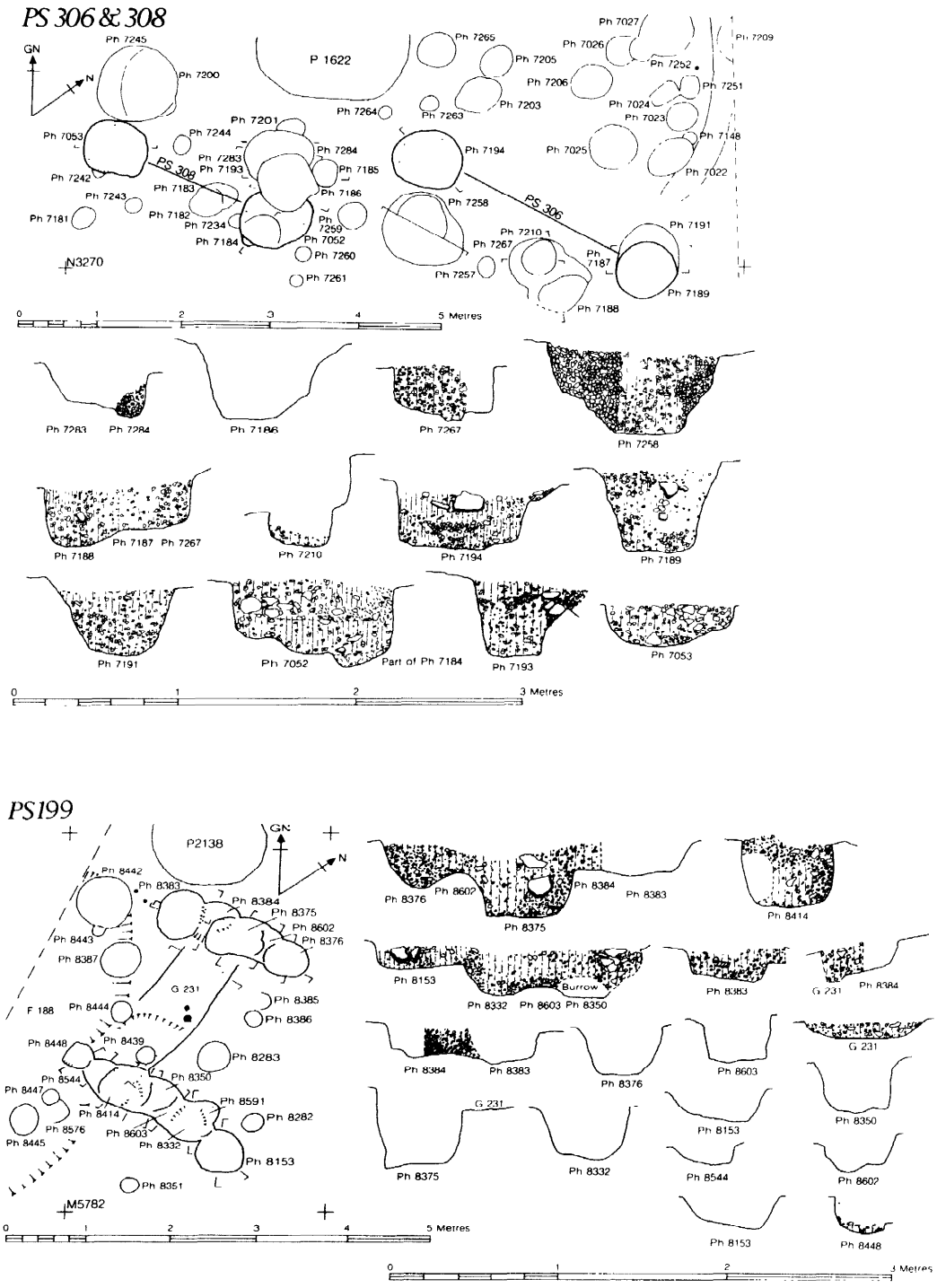


Fig 4.88 Post structures of type L(H)

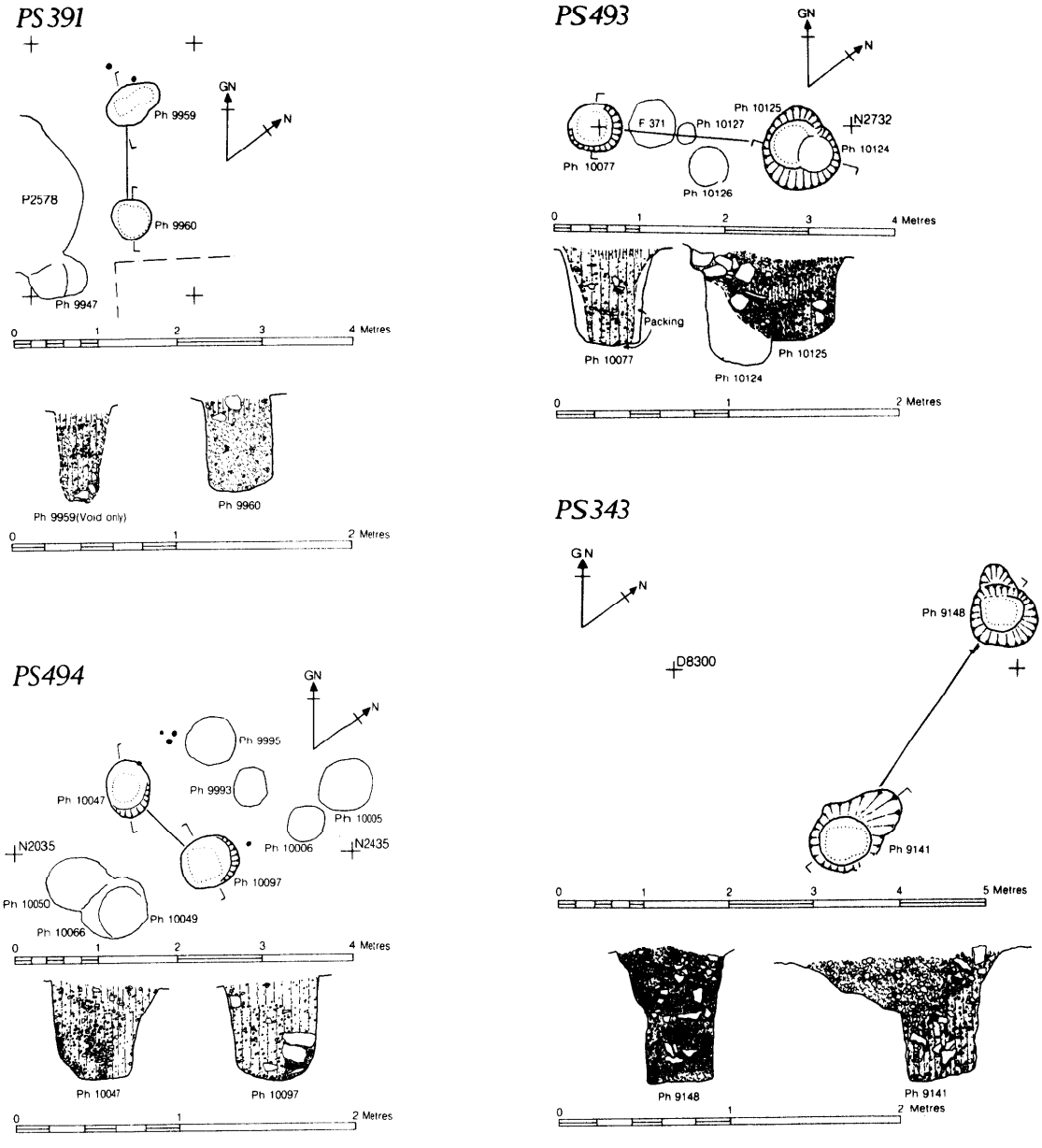


Fig 4.89 Post structures of type L(H)

being developed at the time when the fort was going out of use. It would be interesting to know if nine-post structures became popular elsewhere in the succeeding period but the evidence is not yet available.

Finally we should remember that type may be loosely linked to function and that the trends visible may, in part, reflect the changing storage needs of the community. These are intriguing matters but cannot be approached even with a large body of evidence of the quality of that provided by Danebury. At best the complexity of the dataset serves as a reminder that simple generalizations and over ambitious calculations of storage capacity are to be avoided.

Discussion of the linear post structures

From the descriptions given above it will be evident that considerable variation occurs even within the defined subgroups. There appears to be no direct relationship between structure length and post-hole size. This is noticeable even within typeL(C) which can be assigned to a specific function (ie doorposts). In the light of this variation it is clearly impossible to assess functional variation with any degree of certainty.

Some clues, however, may be provided by associations. PS376, from its association with GC24 and from its general characteristics is likely to be a door frame. Similarly PS496 (with GC45) may represent an early door for CS40 while PS497 from its position at the edge of CS69 and its association with chalk spreads similar to a door sill could be some form of door frame. PS375, which had a slot full of charcoal between the posts may also have been a door structure (Fig 4.87).

Other associations with gully complexes, eg PS348 with GC27, PS477 with CC44 and PS388 with CC33 (Fig 4.86) were all of type L(H) measuring between 1.8–2.3

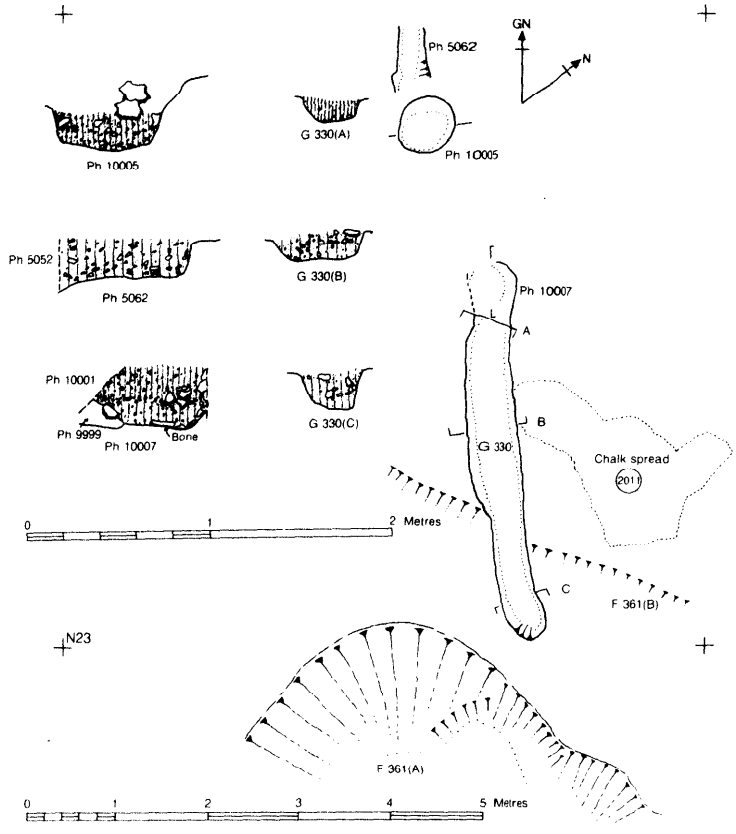


Fig 4.90 Post structure of type L(H)

m long with large post-holes. These could all have been part of the entrance structure of the enclosures.

Linear post structures are also found in association with rectangular post structures, eg PS378 alongside PS377 and PS470 alongside PS468 (Fig 4.85). In the former case they were certainly contemporary and in the latter very probably. Their function is difficult to guess but they could have provided steps up to the raised floors of the rectangular post structures. There are some examples of very short or small linear structures, some of which occur within circular houses or open work areas, eg PS384 in CS58 and a pair of posts in CS57A. Several similar structures occur unrelated to buildings: nearly all were short, 1.0–1.5 m long, and were mostly of type L(F) or sometimes L(E). If voids occur they tended to be 0.12–0.20 m in diameter. One possible explanation for these is that they were the bases of upright looms.

The traditional view that two-posters were hay-drying racks seems somewhat unlikely for a site like Danebury since fodder drying was an activity more appropriate to farmsteads. However other functions can be suggested including fodder racks and frames for hide preparation and one has only to look around a farmyard or workshop today to appreciate how useful a pair of vertical posts can be.

The illustrated structures

In the first volume a number of post structures were illustrated and described in the main text (Vol l, 95–110) while the remainder were presented in fiche. In this volume we have chosen to publish a full catalogue of all post structures in fiche (Fiches 19-22). However, a selection of the more significant and typical are presented here in Figs 4.68–4.90 to illuminate the text. Full details of each will be found in the relevant fiche.

4.2.4 The structural use of daub, clay and timber

Clay and daub

A total of 1595 samples of clay, baked clay and daub have been recovered from the excavations of 1979–1988, the samples varying considerably in size from a gram to nearly 50 kg. In the following discussion all quantification is based on weight since fragment counts would be very misleading. The samples come from 1299 contexts divided as follows:

388 pits	405,772 gm
183 post-holes	47,945 gm
24 gullies	2,681 gm
31 misc features	102,574 gm
230 layers	115,002 gm

Baked clay has been used to make ‘wall daub’, ovens, hearths and a range of small objects such as weights, spindle whorls, sling shots, metal-working accessories, etc. These small objects, described in Volume 5, account for 47,882 gm (7.09%) of the total but in the discussion to follow they are excluded from the totals and percentages. Among the structural clay and daub raw clay amounts to 2.86% (19,317 gm) and unidentifiable fragments to 14.4% (97,388 gm). This leaves 510,587 gm (75.6%) which can be assigned to definite structural use.

The fabrics

Analysis of the daub from the excavations of 1969-78 allowed the definition of twelve fabrics (Vol 1, 110–13). All twelve were represented in the more recent collection together with three additional ones. Little need be added to the original descriptions except to say that fabrics C, D and E are probably variants of one basic fabric the differences depending on degree of baking. The additional fabrics may be briefly described:

Fabric M. Similar to E but flint and chalk temper are in larger fragments . Extremely hard.

Fabric N. Natural clay occurring on the hilltop: dark brown clay with manganese and iron staining and some broken flint.

Fabric P. Light brown fine sandy clay. Some flint and chalk inclusions. Lightly baked, soft and flaky.

The quantities of the fabrics are as follows:

A	80,999 gm	12.0%
B	2,818 gm	0.42%
C	208,198 gm	30.84%
D	1,025 gm	1.52%
E	193,545 gm	28.67%
F	63,959 gm	9.47%
G	4,614 gm	0.68%
H	1,633 gm	0.24%
J	9,566 gm	1.42%
K	50,922 gm	7.54%
L	16,907 gm	2.5%
K/L	15,721 gm	2.33%
M	1,952 gm	0.29%
N	11,660 gm	1.73%
P	1,491 gm	0.22%

Wall daub (Fig 4.92)

Wall daub is characterized by having interwoven wattle impressions on the inside. In general it has a fairly smooth outer surface and ranges in thickness from 10-40 mm. The wattle impressions are usually clearly interwoven with rods woven around sails. The latter were on average thicker than the rods though the range of diameters overlapped. In Volume 1 (113–5) wall daub was interpreted as daub from buildings, probably from the panels infilling the walls of four- and six-post structures. The association of wall daub and type 1 oven plates was noted but there was no reason to believe them to have been part of the same structure. In 1988, however, wall daub and oven plates were found together in the debris associated with two oven bases, F353 and F356. This caused some reconsideration. In retrospect the same associations were recognized in the case of layer 626. All these examples involved the smaller type 2 ovens but as we have seen above, the same range of material is found in the dumps of daub deriving from the massive type 4 ovens. In no case has wall daub been found associated with type 1 ovens.

There is good reason therefore to suggest that much or all of the wall daub came from oven superstructures including the dome-shaped tops. These parts were thinner than the bases and would have needed support. Some samples show moulded rounded edges, sometimes clearly curved, which presumably came from the opening giving access to the upper baking chamber: this could have been continuous with the stoke-hole below.

A comparison has been made between the wattle sizes used in wall daub, oven base/wall and oven plates. The wall daub from known ovens was separated out and divided into phases. The general impression given is that the wattle rods increased slightly in diameter with time: 9–14 mm in cp 3; 11–16 mm in cp 7; 15–18 mm in cp 8. Comparisons with rod size exhibited on wall daub not associated with ovens shows very little difference (details in Fiche 24:A5–8).

The wall daub associated with ovens F353, F356 and L626 were considered separately. The wattle diameters measure between 4-20 mm in diameter with the peak at 10–13 mm.

The sails measured 9–50+ mm with the main concentration evenly spaced between 14 and 28 mm. In general the sails were larger than the rods though there was considerable overlap in size. However there were a number of examples of double sails and a high proportion of split poles.

Measurements for wattles from oven base/walls range from 4–53 mm with a peak at 15 mm but this range includes both rods and sails which could not be separated when so few impressions occur on any one sample. The pattern is generally similar to that shown by the wall daub.

Wattle measurements from type 1 oven plates show a quite different pattern. The sizes range from 4-45 mm with the majority below 16 mm, where values were fairly even except for peaks at 6 and 10 mm. Thus the oven plate wattles were generally smaller than those of the wall daub or oven base daub and this may indicate that the plates were not made to be a structural element in the ovens. It is possible that the wattle impressions, which include leaves, were made by branches upon which the plates were composed and were not a part of the integral structure.

It is clear therefore that much of the wall daub belongs to the superstructures of ovens but this does not mean that it all has to and other possibilities must be considered.

The most obvious is that the daub came from the walls of circular stake-built houses but this is unlikely on the grounds that the sails of these structures were much larger than those exhibited on the wall daub and, moreover, daub was seldom found in proximity to the houses. The other possibility, suggested in Volume 1, is that the wall daub came from the panels facing the walls of rectangular post structures. This now seems unlikely on the grounds that very little daub has been found in layers associated with post structures either in the form of broken fragments or as clayey deposits which might have resulted from the weathering and degrading of the daub facings. Only one structure, PS320, is associated with quantities of daub but this must have come from the nearby oven L626.

The evidence therefore suggests that the wall daub from Danebury very probably all came from the superstructures of ovens.

A total of 94,216 gm of wall daub was recovered, 15% of the total structural daub.

Hearths (Figs 4.91 and 4.93)

A total of 44 hearths were recognized *in situ* between 1979-88 compared to 12 or 13 in 1969-78. Hearths can be divided into three types, two of which were found *in situ* in the stratified deposits, nine in sequence D, 19 in sequence E, six in sequence F, two in sequence G, three in sequence J and four in sequence H. Hearths probably once existed in the central area but if so they would have been destroyed by erosion. Just over half of the recorded hearths occurred within circular structures; six were found in open working areas and seven beneath post structures. The remainder were isolated.

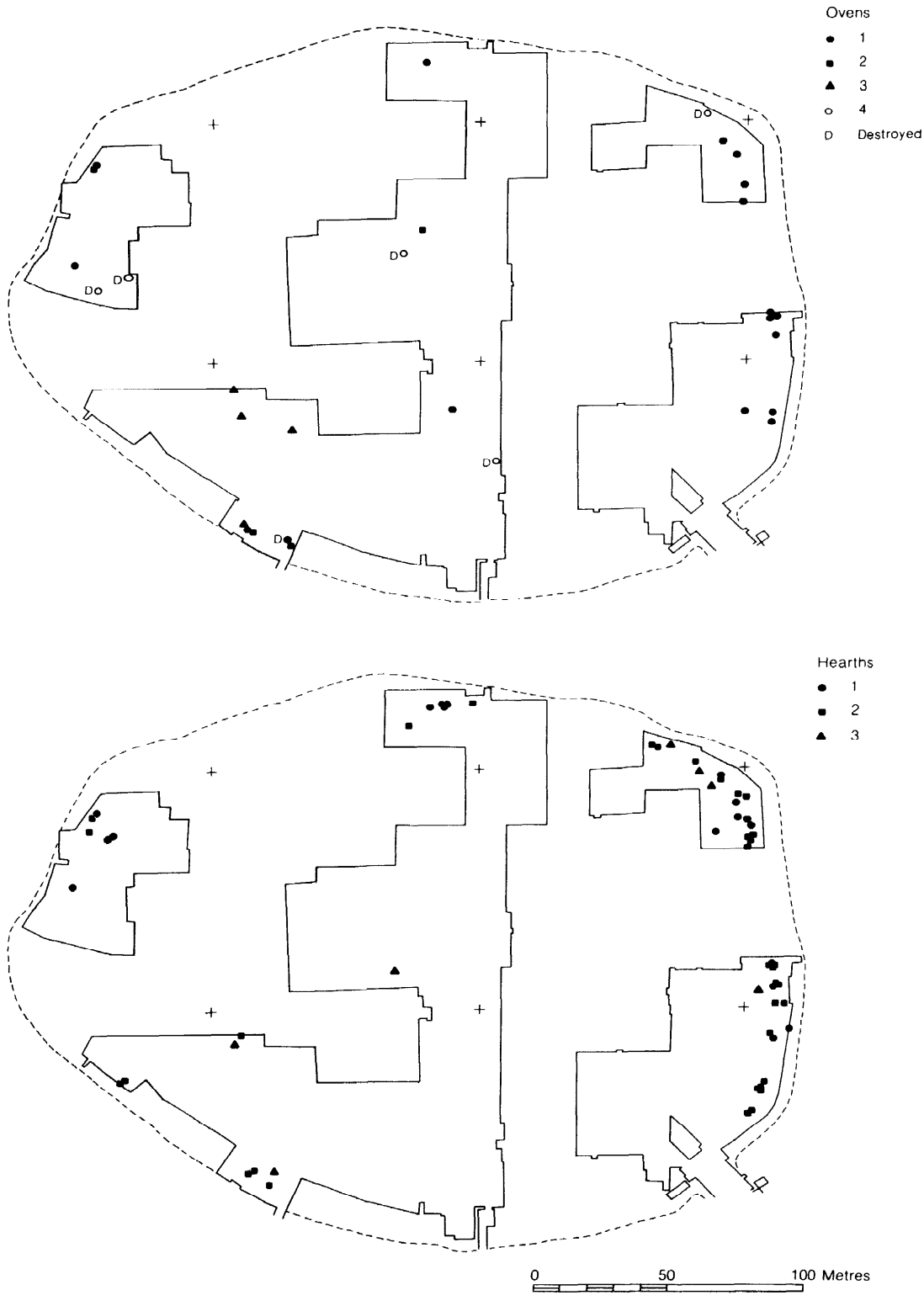


Fig 4.91 Distribution of oven and hearth types

Fig 4.92 Distribution of clay, daub and related material (1979–88 excavations only)

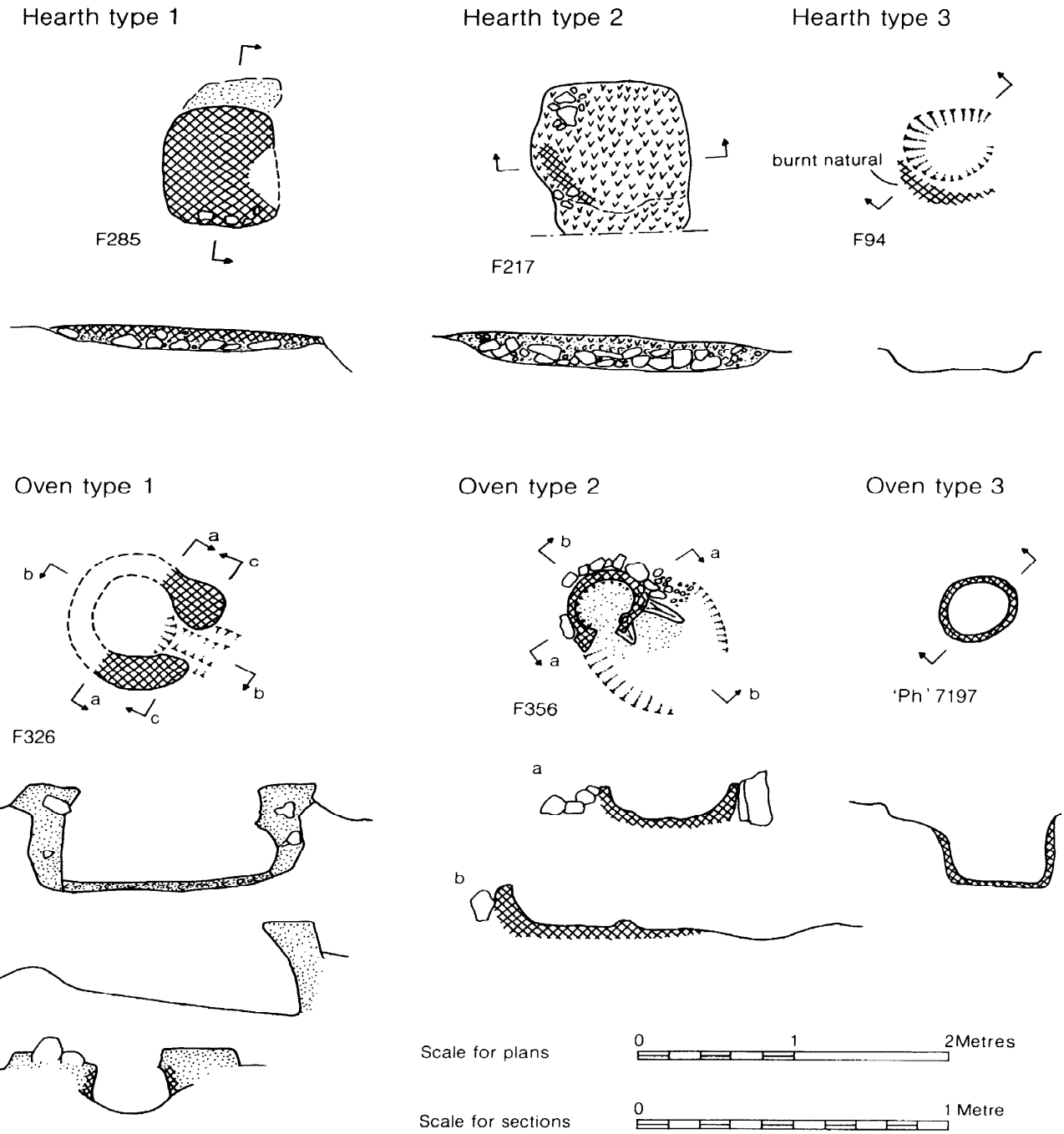


Fig 4.93 Hearth and oven types

Detailed descriptions of each hearth will be found in Fiche 23:F3–G14.

Type 1: hearth of daub (Fig 4.93)
Twelve hearths of this type have been recognized, in sequences D, E and F. One dates to cp 3–5, one to cp 6 and the rest to cp 7.

In plan they are usually circular or oval but sometimes subrectangular measuring from 0.45 by 0.54 to 1.0 by 1.3 m but averaging 0.8 m. Most were constructed on chalk floors, often recessed into a hollow (eg F137) or constructed integrally with the floor (eg F138). They range in thickness from 0.05–0.15 m. Structurally, they are all very similar consisting of a basal layer of tightly packed flints, sometimes with chalk, over which was packed a layer of daub, mostly of fabric E but sometimes C. Burning varies in extent and intensity. One hearth, F138 in CS31A, was decorated with impressed circles.

Type 2: hearth of chalk (Fig 4.93)
Twenty-one hearths of this type occurred in sequences D-J. One dates to cp 3, two to cp 6, the rest to cp 7.

In plan they may be circular, oval or subrectangular, averaging from 0.4 by 0.5 to 1.2 by 1.5 m but averaging 0.8 m. Most were constructed on chalk floors with which many were integral (eg F352 and F277). Others were recessed into the floor (eg F279).

The basic structure was similar to type 1 the only difference being that the flint base supported a surfacing of compacted chalk. Where hearths were constructed in one with the floor the flint nodules were laid first with a continuous chalk spread above. The position of the flints must have been marked in some way because the burning always took place above.

Type 3: burnt natural (Fig 4.93)
Only seven examples of this type occur in sequences D, E, H and J and one unstratified in the 1981 area. Of the dated examples one belongs to cp 3, one to cp 3–5, two to cp 6 and two to cp 7.

Hearths of this type are generally small, 0.4–0.6 m and most are circular. They involved no form of construction. Many may have existed but have since been totally eroded.

The distribution of hearths is almost exclusively in the stratified sequences and are clearly biased to zones in which houses have been located. This may reflect a real distributional pattern but it could well have resulted from destructive erosion removing all trace of those once occupying the central areas.

Hearth daub sometimes occurs in isolated fragments but only 1745 gm (0.34%) has been identified.

Ovens (Figs 4.91–4.94)

Eighteen oven bases were found in position in the excavations of 1979–88. Some of these were well preserved and associated with quantities of collapsed superstructure which has enabled the general form of the structures to be reconstructed. Four oven types can be defined.

Detailed descriptions of all ovens are given in Fiche 23:A4–F2. Daub from oven bases accounts for 196,534 gm (31%) of the structural daub.

Oven type 1 (Fig 4.93)
This is the most common type of which 12 examples were found. One dates to cp 3 the rest to cp 7.

The type is represented by a penannular daub wall, up to 1 m in diameter with walls 0.1–0.2 m thick. The walls rarely survive to a height of more than 0.1-0.15 m, the maximum being 0.3 m. A stoke-hole was constructed in one side often to the south or south-east. The oven walls were usually carefully moulded around the stoke-hole where the most intense burning often occurred. The top of the stoke-hole had, presumably, been finished as a semicircular arch but none has survived in position.

The base of the oven was usually recessed into the surrounding layers to a depth of about 0.1 m either in a deliberately cut pit (eg F326) or because additional layers were built up around it. The oven floor was usually made of a deliberately laid spread of puddled chalk usually 30–50 mm thick and in a few examples this was covered with a thin skim of daub. Surprisingly the floors showed little evidence of intense heating.

The walls were always made of chalk-tempered daub, either fabric C or E and it was common to find within the walls courses of broken flint nodules and occasional chalk lumps. The daub was often burnt or baked red on the inner surface to a depth of 10 mm.

Over the base of all ovens there was invariably a black ashy silt rich in charcoal, varying in thickness from 10-50 mm. Above this, though not always preserved, was a layer of burnt flints mixed with ash and charcoal representing the remains of the last fire. The function of the flints had presumably been to maintain the oven temperature without the need for a blazing fire. Many of the 'occupation tips' found in pits were clearly dumps of debris cleared out of ovens. In several cases the fallen, or demolished, superstructure of the oven was found in and around the base but isolated dumps of oven daub were also encountered in the stratified levels.

In the case of F219 and F284 the associated daub was identical to the walls of the oven base. The collapsed debris associated with F326 had been reddened by burning and some of the pieces bore wattle marks. Occasionally wattle impressions survive in *in situ* oven walls. The evidence therefore shows that at least some of the ovens were constructed on a framework of wattles. The absence of any fragments of oven plate from ovens where much of the superstructure survives suggests, but does not prove, that oven plates may not have been used in all ovens.

Oven type 2 (Fig 4.93 and Pls 47 and 48)
These ovens are generally much smaller than type 1 and were different in the form of the superstructure. Four have been identified, one dating to cp 4, the rest to cp 7. They range in size from 0.42 m in diameter to 0.64 by 0.75 m (ie from 0.14 sq m to 0.38 sq m). The walls were relatively thin ranging from 30-100 mm but averaging *c* 60 mm: they survive to a maximum height of 0.15 m. Two of the ovens were constructed in slight hollows in the underlying silt.

Where evidence for a stoke-hole exists it tends to lie on the south side. The stoke-hole of F356 was very well preserved and was in fact a double stake-hole with two openings of 0.12 m width set side by side. No evidence of a stoke-hole was found in F142 which was represented by an unbroken wall of daub destroyed virtually to its base. Both F356 and L626 appear to have had a bowl-shaped base curving continuously with the sides. F142, though much less well preserved, was probably of a similar form. Three had both 'wall daub' and type 1 oven plate fragments covering the base and spread around the outside. Both were usually made in the same daub fabric. The oven plate was on average *c* 40 mm thick except in

the case of L626 where there were two groups: one 10–20 mm thick which may have come from the oven base and another 60–70 mm thick, which seems too large for a type 2 oven. The associated 'wall daub' has clear wattle impressions on the inside, of both rods and sails between 4 and 26 mm and 15 and 40 mm respectively. All the daub is of fabric C or E and is well-baked.

In the case of F356 there is some variation in the daub fabric between the oven walls and floor. Wattle impressions occurred in the *in situ* wall base with some particularly large ones on either side of the stoke-hole. The carbonized ends of these survived. The wall daub appears therefore to have formed the upper part of the oven, in the case of F356 starting at the base but in other examples it is possible that the wattles began only above the level of the oven plate,

Resting on the floors of these ovens was usually a thin sooty layer above which was a layer of burnt debris including much fallen daub. Burnt flints, though present, were not found in the same quantity as in ovens of type 1.

Oven type 3 (Fig 4.93)

There were three examples of this type from the 1979-88 excavations together with a further three from the excavations of 1969-78. They were found in all phases between cp 3 and 6.

The main characteristic of the type is that their bases were cut down into the natural chalk: not surprisingly therefore they are the only type to occur outside the stratified deposits. They were generally smaller than ovens of type 1 being similar in size range to ovens of type 2. They measure from 0.3–0.65 m in diameter and were cut to a depth of from 0.21–0.36 m into the chalk. In some cases the sides were undercut, perhaps reflecting the angle or curvature of the above ground walls. In several cases there is evidence that the base was daub-lined but otherwise little of the superstructure has survived. The only example in which the stoke-hole survived was F355 where it was clearly defined by a sloping slot with rounded base 0.23 m wide and 0.4 m long. At the end was a wide circular depression (ph 10087) which is best interpreted as an area of wear associated with the use of the oven. F27 produced a number of broken fragments of the stoke-hole arch (Fiche 3:E12). No oven plates were found in or near type 3 ovens.

All the ovens were filled with charcoal ash and burnt flints.

Oven type 4 (Fig 4.94)

Type 4 has been created as a category to contain several large dumps of daub recovered from pits dating to cp 7 or 8: no structural evidence has been found *in situ.* It is clear from collections of daub found in four pits during the excavations of 1979-88 that ovens much larger than types 1–3 had occurred somewhere within the fort. (A reassessment of the daub from 1969–78 has produced further examples summarized in Fiche 23:E10.) Some indication as to the size and shape of these structures is given by the fragmentary oven covers or oven plates found in P1285, P2032 and P2110.

P2032 provides the most complete picture since it contained parts of the oven base/walls, including the edge of the stoke-hole, wall daub and a large quantity of type 1 oven plate and oven cover. The fragments of oven cover together account for an area of 6.2 sq m and since they include straight sides and comers the cover must have been square or rectangular (if square then *c* 2.5 m square). The oven plate fragments amount to 3.9 sq m (ie 1.97 m square). The difference in size can neatly be accounted for by supposing the oven walls to have been 0.2–0.25 m thick: the oven plate would fit inside while the oven cover covered the top.

Areas could also be estimated for the oven plate from P2110 which covered 1.56 sq m (1.4 m in diameter if circular and 1.25 m across if square) and for the oven cover in P1285 which covered 2.28 sq m and was square (1.5 m) or rectangular. These measurements can only be approximations but it seems unlikely that structures of this sort were significantly larger than that found in P2032. The oven covers from P2032 and P1285 both had the same dimple decoration formed by impressing the finger tip into the clay.

The walls of these ovens were massive incorporating quite large timbers, as well as wattles in their construction. The type 1 oven plates associated with them were equally massive and also incorporated wattles for strengthening. Some fragments show evidence of burning on the upper surface suggesting that they may sometimes have been used as grates. The consistent association of oven plate with wall daub suggests that the upper oven walls were constructed over a wattle framework and were somewhat thinner than the lower walls. The oven covers, usually made in a different fabric to the rest of the oven, must have been placed on top of the walls the decorated surface uppermost. The circular flue 120–150 mm in diameter, which is usually present in the oven cover, may have been centrally placed but there is no firm evidence to indicate its position.

Oven plates

Oven plate: type 1 (Fig 4.95, nos 27–29)

Oven plates of type 1 were defined and described in Volume 1 (118). The excavation of 1979–88 has produced more material allowing significant details to be added.

Oven plate fragments were recovered in some quantity, a total of 64 samples weighing 66,670 gm (11% of the structural daub), coming from 51 contexts including 29 pits, 12 post-holes, three ovens, and six layers. Nearly all was made in fabrics C, D, E.

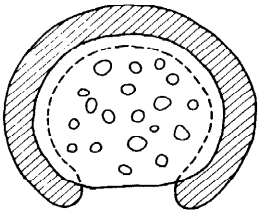
The forms of these plates have been described in Volume 1. In summary they consist of a flat plate usually with a flat, well smoothed upper surface, pierced by a number of perforations. The undersurface can be very variable from flat and smooth to very irregular. On 38 samples the base was covered with straw impressions while on others there was a combination of straw and wattles and small stem impressions occasionally with leaves attached. In a few cases (eg P2032) the leaf impressions were dense. One example (P1350) was impressed with fern or bracken fronds. The vegetation base upon which the plates were fashioned simply made for ease of working and prevented the plate sticking to the ground.

The thickness of the plates varies from 20–160 mm but in general averaged 30–60 mm. However, in a significant number of samples the plate was particularly thick, over 50 mm. These thicker plates bore wattle impressions (eg P2032 and P2110).

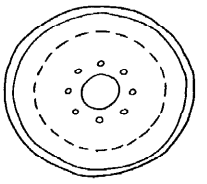
The distinguishing characteristics of these plates were the vertical perforations the sizes of which varied from 15–80 mm in diameter. They were generally circular, though oval and subrectangular holes also occur. Most are cylindrical in profile but a high proportion are funnel-shaped and a few are biconical.

A number of samples show a distinct burning and blackening of the perforations around the flat upper

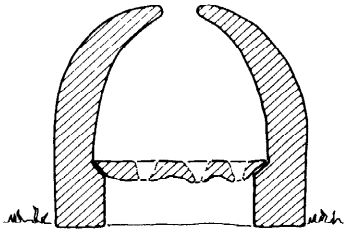
OVENS TYPE 1 & 2 Alternative arrangements



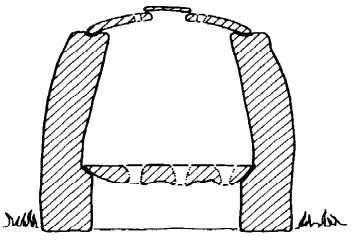
Plan of oven base & oven plate



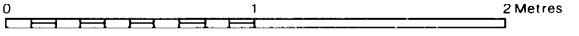
Plan of top of oven



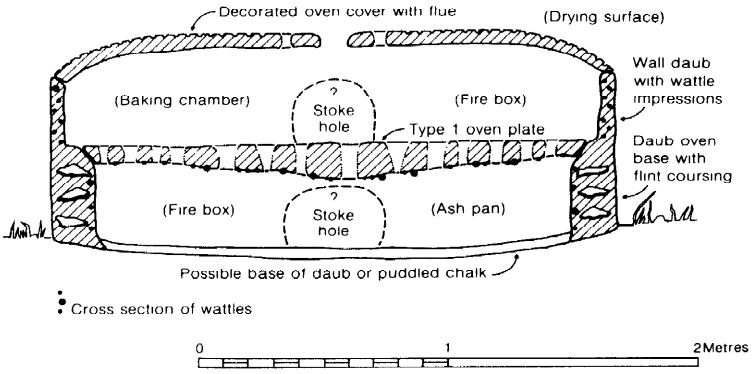
Section through centre of oven



Alternative with type 2 oven plate forming oven cover (with removable damper)



OVEN TYPE 4 Hypothetical reconstruction



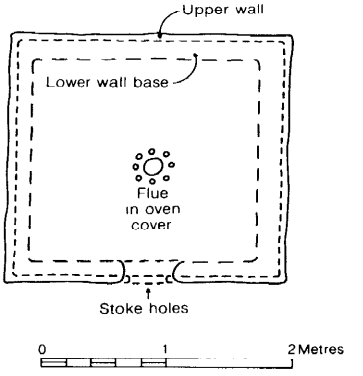


Fig 4.94 Tentative reconstructions of oven types

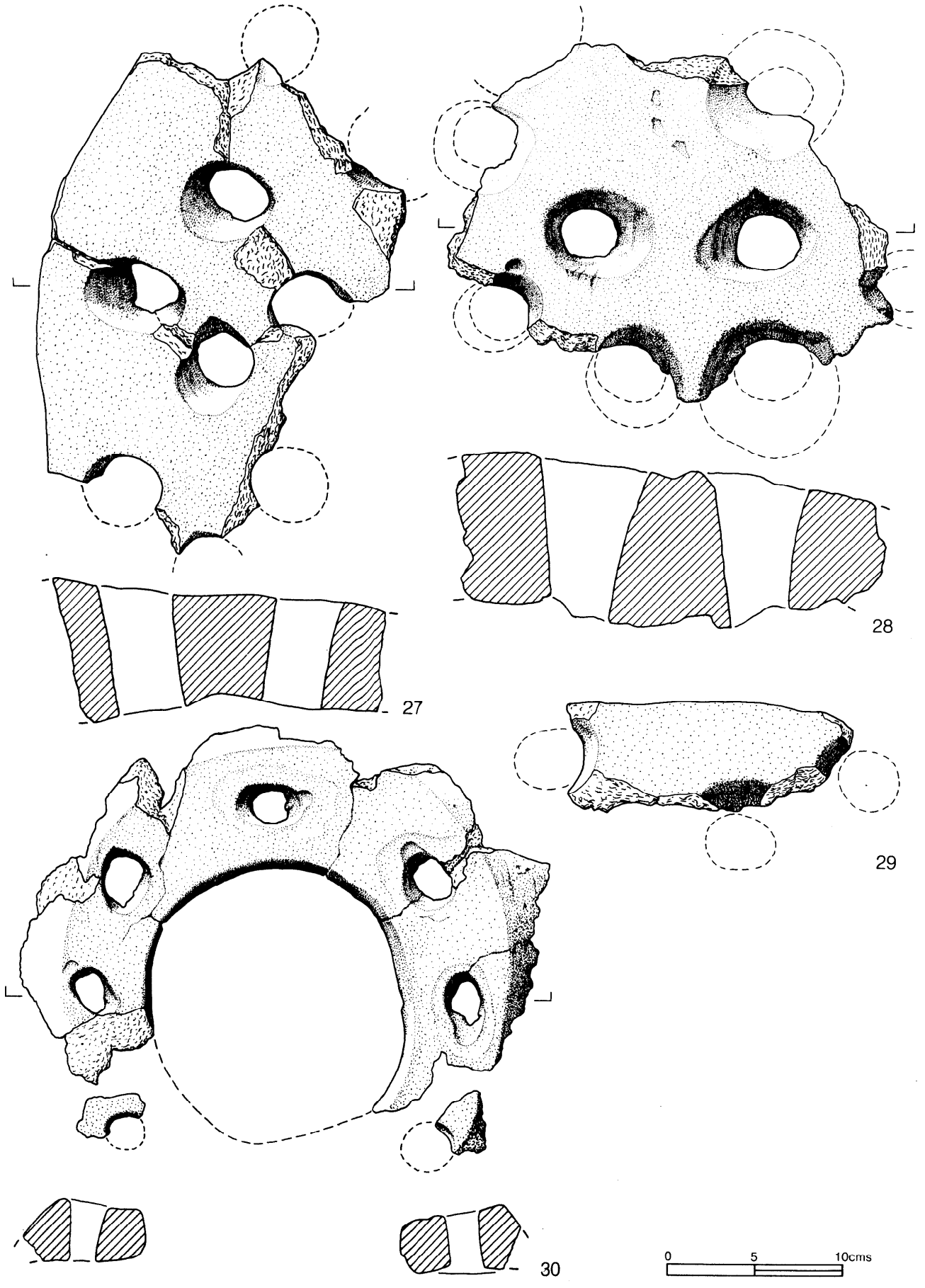


Fig 4.95 Oven plates: type 1 (27–9); type 2(30)

surface. This might suggest a use, in some cases, as grates, with the fire on top. This would allow the ash to fall through while the fire would be well ventilated from below. Alternatively the plates could sometimes have been inverted before being placed in the ovens though this would often result in an irregular upper surface.

Details of the individual samples are given in the fiche section (Fiche 23:D7–14). In summary the evidence of size suggests that the plates belonged with the ovens with which they were associated which implies an overall size approximating to the internal diameter of the oven, *c* 0.3-0.45 m. This corresponds to the well-preserved example found in the recent excavation at Maiden Castle, measuring 0.4 m in diameter and compares with those excavated by Wheeler which measured c 0.35-0.4 m.

In addition to this group, much larger plates were found in P2032 and P2110. These have been discussed above in the descriptions of ovens of type 4. Some of these were square or rectangular and were probably as much as 2 m by 2 m.

Oven plate (or cover): type 2 (Fig 4.95, no 30)

These structures have been discussed in Volume 1 (118–21). The excavations of 1979-88 produced 21 samples from 16 contexts (13 pits, two layers and a gully). Two, from P1393 and P1710 were well preserved, the rest being fragmentary. The total sample weighs 24,723 gm and forms 4% of the structural daub. The fabric was generally A/H but occasionally A/J, F or K. They occur from contexts of all periods. All samples are described in detail in Fiche 23:E1–7.

The type is characterized by having a large circular flue, 120–150 mm in diameter, placed centrally. Around it were a number of smaller perforations 20-30 mm in diameter placed about 20–25 mm from the edge of the central flue. The plates were usually 24–60 mm thick but a few were as thin as 18 mm. The surfaces were generally well smoothed though some finger striations and ridging may occur. There may also be some slight ridging around the base of the perforations.

The shape varies. Some were flat others convex, some circular others rectangular. The material from P1393 was flat or very slightly convex in the area around the flue and perforations but just beyond the perforations was a shoulder at which point the surface sloped steeply away. The samples from P1710, however, showed that the plate was square or rectangular with a moulded edge. In this case the plate must have been movable. Type 2 oven plates bear certain similarities to oven covers, in particular the shape of the flue and the fact that some were rectangular and movable.

No complete plate has been found and samples are too fragmentary to allow size to be accurately estimated but the general impression is that they would have been about the same size as the average oven base found *in situ.* No plate of this type has, however, been found in association with any oven bases.

Oven covers (Fig 4.96, nos 31–4)

Oven covers have been discussed in Volume 1 (121). The excavations of 1979-88 produced 15 samples, totalling 112,865 gm (18% of structural daub) including two large groups from P2032 (53 kg) and P1285 (48 kg). They occurred in contexts dated from cp 3 to cp 8 but 14 out of the 16 individual covers were found in cp 7 and 8 contexts. The majority were made in fabric K but there were a few in fabrics F, J and A/H.

In form the covers were characterized by a central circular flue 120–150 mm in diameter, though one was as small as 100 by 87 mm. The thickness varied from 25–70 mm though the norm was 50–60 mm. They were generally flat, slightly convex or plano-convex. The underside was usually smooth but it may show shallow parallel ridges resulting from finger smoothing, invariably running at right angles to the outer edge. This lower surface is often burnt black. In some areas of the cover the daub may be fired right through to the upper surface, but elsewhere the upper part may remain in the state of unfired raw clay.

The upper surfaces were generally well smoothed. In two large samples from P1285 and P2032 the surface was covered with impressed decoration in the form of small oval or circular depressions created by finger impressions. No pattern could be discerned. One fragment bore rectangular impressions (cf Vol 1, fig 4.78). Evidence for the outer edge indicates that these covers were generally square or rectangular. The side surfaces were flat or acutely angled.

Estimates of surface area range from 2.3 sq m to 6.2 sq m, distinctly larger than that of the *in situ* oven bases. It is clear that these covers were separate pre-fabricated items but how such massive slabs could be moved into position is a matter of conjecture. In all probability they belonged to ovens of type 4.

Miscellaneous daub associated with ovens

A small number of daub items have been found consistently associated with oven material. These included flat slabs usually 10–15 mm thick some of which had wedge-shaped profiles. No complete examples have been found but they are unlikely to have been more than 100–150 mm long. It is possible that they served as dampers over flues or stoke-holes to control the draught.

A different kind of artefact was represented by two objects of oval or subrectangular form, about the size of a clay weight measuring no more than 140 mm by 125 mm and *c* 70 mm thick. On one side was an irregular oval depression pointed at the base. They were tied black in places. One came from P647 the other was found in the stoke-hole of F356. Their function is unclear.

Other artefacts of daub which constantly occur with oven debris take the form of irregular lumps often with flattened oval shape with an elliptical section. The majority were made from fabric F but there were a few in fabrics B, C, E and G. The distinguishing characteristic is that nearly all are covered in straw or chaff impressions and some have straw or chaff mixed throughout. The majority date from cp 6 or cp 7. While they may simply be waste material they may have been intended to perform some, now unknown, function.

Discussion

It has been argued above that the structural daub found associated with ovens and hearths or dumped as tips of debris in pits, is likely to have derived from the superstructures of ovens of various types. A small percentage of the wall daub may have come from the walls of timber buildings but if so it is difficult to identify.

Various forms of oven were in use (Fig 4.94). There is some evidence to suggest that the smaller structures tend to be early but some are certainly late. The large type, reconstructed from debris and called here oven type 4, is invariably late, belonging to cp 7 and 8.

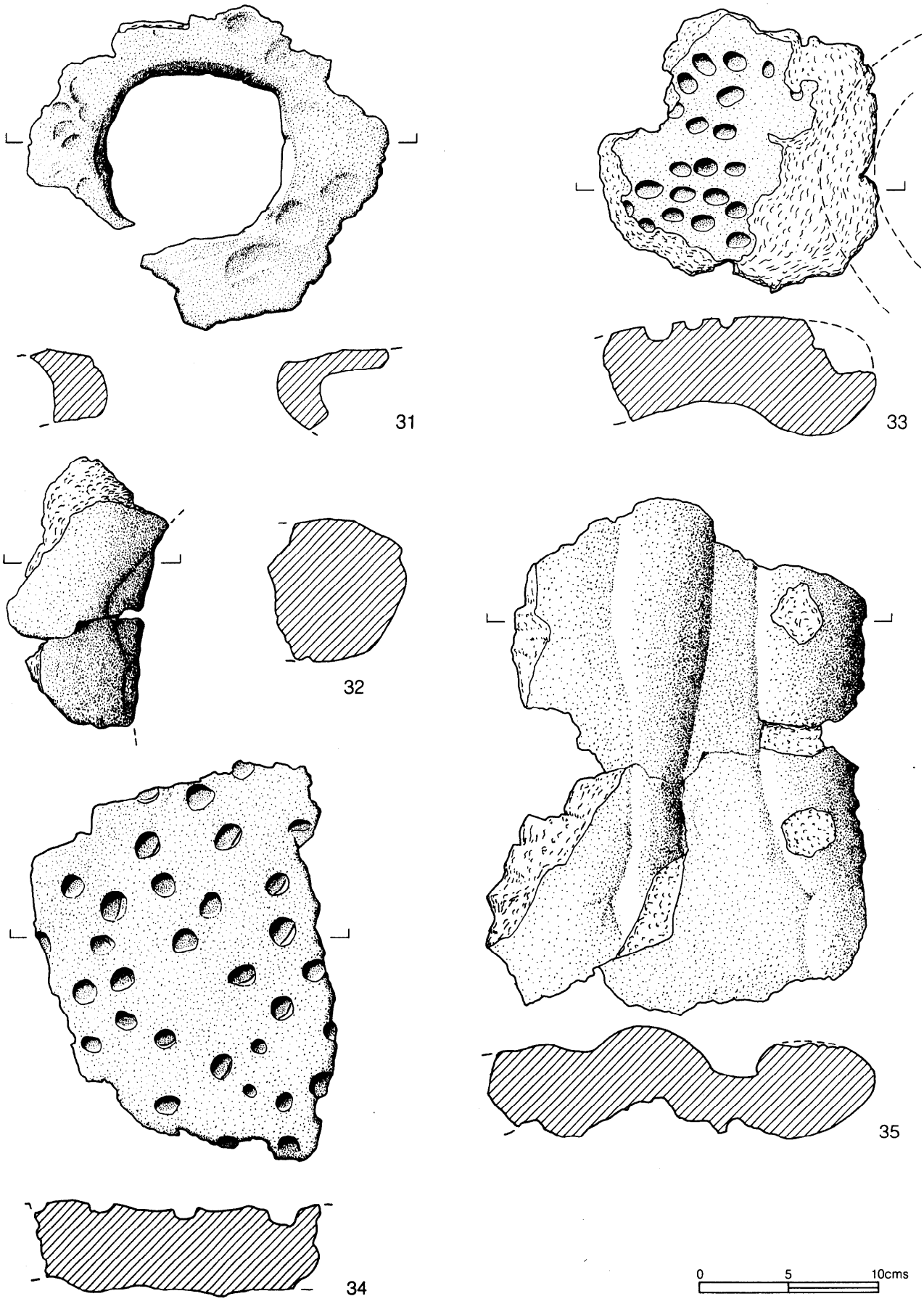


Fig 4.96 Oven covers (31–4) and oven wall from stoke-hole area (35)

The different types of oven probably reflect different functions. Type 1 ovens nearly all occur in circular structures or in open working areas and these are most likely to have performed simple domestic functions such as cooking or baking. Some were probably very simple consisting of a single undivided chamber heated by a fire set in the base which would be raked out when the oven had heated up so that food could be put in. Alternatively flints could be added to the fire and left in, their heat-retaining capacity providing a higher temperature cooking environment. In other cases it is clear that an oven plate was used creating two chambers, the plate serving as a cooking surface or rarely as a grate.

The type 4 ovens were altogether different. Their considerable size suggests that they may have performed an industrial function. The fact that baking of the daub was not intense implies that much less heat was used. Possible functions include the drying of pots to a leather-hard condition before firing or the drying of grain. It is surprising that no *in situ* basal structures have been found but this could be explained by suggesting that they were sited away from the houses, in the central part of the fort, where no structures need be expected to survive. Until further structural detail is available their function will remain obscure.

Structural timberwork

A discussion of the structural use of timber was given in Volume 1 (121–2). There is little to add to what was said there. Details of the wattle impressions found in wall daub have been discussed above and the timber used in circular houses and post-built structures has been considered at length in the relevant sections.

The only additional evidence comes from deposits of carbonized timber found on several pit bases mainly in the 1982 and 1983 areas. These appear to have been pieces of planking up to 0.15 m wide and 0.65–0.82 m long. The best preserved material came from P2110 where it was associated with a number of metal objects including three bolts and a latch lifter which may indicate that the planks had once formed part of a door. Direct evidence for planks is rare but they must have been in constant use for building carts and similar constructions.

4.2.5 Gullies and ditches (Fig 4.5)

Gullies and ditches found within the defences at Danebury fall into two categories: linear, and circular or penannular.

Linear gullies

Linear gullies were rare at Danebury. One was found in 1969–78 (Vol 1, 187) running along the north side of the main road close to the entrance, and continuing north-westwards to delimit the northern side of the group of rectangular trench-built structures in the centre of the fort. It produced pottery of cp 8.

The more recent work has brought to light several gullies of similar proportion all of which can be shown to belong to the latest phase of occupation. The most notable of these is GC39/40/41 (1979, 1980 and 1988) which appears to delimit a roughly rectangular area behind the southern rampart within which evidence of cp 8 occupation was discovered. The ends of several similar gullies have been recognized cut into the silt behind the rampart on the east and north-east side of the fort. Though not as extensive as GC39 it is a distinct possibility that they too originally defined enclosures against the back of the rampart but were shallowly dug and did not survive as recognizable features away from the rampart tail. These are shown together with other contemporary cp 8 structures on Fig 4.154.

Two earlier linear gullies were discovered both associated with gates, GC27 (1985) and GC44 (1988) (Fig 4.90). Details of these will be found in the sections describing the relevant stratigraphical sequences (sequence E and sequence H) and full descriptions occur in the fiche section (Fiche 24:B1–D12).

Circular or penannular gullies

Circular or penannular gullies were more common. They were probably dug to drain away surface water and to prevent it from accumulating around structures or flooding activity areas. Of the 34 discovered during 1979-88, nine surrounded circular structures, and seven enclosed post structures. Of the remainder at least four protected some kind of open working area. These are considered in the appropriate section. The rest comprise a somewhat generalized group found in the central part of the fort. Only sectors of these have survived, usually on the uphill side of the hill slope. Their incompleteness may be explained by supposing that when originally dug some attempt was made to keep the gully bottom level. This would have required the uphill sector to be dug deeper cutting-down through the superficial soil into the chalk bedrock. Since, in the central area of the fort, the only features to survive are those cut into the chalk, it follows that where the soil was thick a gully may not have touched the chalk at all. The 14 recorded examples are therefore only the surviving few of a once more extensive phenomenon otherwise unrepresented in the archaeological record.

What kind of structures the gullies represent is uncertain- In one case (GC18) there is some evidence to suggest that vertical timbers were set in it. Another example (GC7) enclosed a terraced area with floor surfaces indicative of a house. The rest are more ambiguous: the gully profiles and fills suggest that they had been subject to natural erosion and silting as might be expected in a drainage gully but equally it could be argued that they had begun life as wall trenches, the timbers later being removed to be followed by natural weathering processes. If, however, some or most of the gullies were originally dug as drains what evidence is there of what went on inside? The answer is very little. In those examples where the entire area lay within the excavation no convincing pairs of doorposts were found, as might be expected if the gullies had surrounded circular stake-built houses, nor was there any evidence of rectangular post structures. In some cases it is possible that later pits had removed what little structural evidence might have been expected, but it is equally likely that the gullies were dug to drain open working areas of the kind found in the peripheral zone: no trace of these activities would have survived in the central areas. This does, however, raise the interesting possibility that contemporary houses may have been sited nearby.

The distribution of all gully complexes is given on Fig 4.5. Those found in association with circular structures have been described and illustrated in the discussion of those structures above (Section 4.2.1). Gullies surrounding post structures are considered in the texts describing the stratified sequences (Section 4.3) and are illustrated on the accompanying phase plans: more detailed plans appear in the fiche dealing with the post structures (Fiche 19–22) and a selection of these are reproduced on Figs

4.68–4.91. The remainder of the gullies are described and illustrated in the fiche section (Fiche 24:B1–D12).

The following list provides a guide to where descriptions and illustrations of the various gully complexes can be found.

GC1–6	1969–78		Vol 1. 123–7
GC7	1980	penannular	Fiche 24
8	1980	enclosing ?	Fiche 24; Pl 8
9	1980	enclosing CS48	pp 75; Fig 4.35
10	1980/2	penannular	Fiche 23
11	1982	enclosing PS395	Fig 4.75
12	1980	penannular	Fiche 24
13	1980	penannular	Fiche 24
14	1980	penannular	Fiche 24
15	1981	penannular	Fiche 24
16	1981	penannular	Fiche 24
17	1981	penannular	Fiche 24
18	1981	penannular	Fiche 24
19	1982	penannular	Fiche 24
20	1983	penannular	Fiche 24
21	1982	penannular	Fiche 24
22	1984	enclosing CS50	pp 76–8; Fig 4.37; Pl 41
23	1984/5	enclosing working yard	Fiche 24; Pl 34
24	198415	enclosing working yard	Fiche 24; Pl 34
25	1984/5	enclosing working yard	Fiche 24; Pl 34
26	1985	enclosing PS347	Fig 4.76
27	1985	linear with PS348	Fiche 24
28	1984/5	enclosing working yard	Fiche 24
29	1979	enclosing CS41	pp 72; Fig 4.28
30	1985	penannular	Fiche 24
31	1985	penannular	Fiche 24
32	198617	enclosing CS60	pp 91–3; Fig 4.47
33	1986/7	enclosing PS388	Fig 4.86
34	1986/7	enclosing CS61	pp 94-5; Fig 4.48
35	1983	penannular(?)	Fiche 24
36	1982	enclosing CS33	pp 60–1; Fig 4.18
37	1983	enclosing CS28	pp 51–2; Fig 4.13
38	1984	enclosing CS51	pp 78–9; Fig 4.38
39	1979 1980, 1988	linear	Fiche 24
40	1979	linear	Fiche 24
41	1979	linear	Fiche 24
42	1988	enclosing PS483, PS484 and PS485	Fiche 24; Fig 4.70
43	1988	enclosing PS479	Fiche 24; Fig 4.85
44	1988	linear with PS477	Fiche 24; Fig 4.90
45	1988	enclosing CS40	pp. 70-2; Fig 4.27
46-53	1969-79	isolated	Fiche 24

4.2.6 Roads (Fig 4.97)

The road system within the fort is summed up in Fig 4.97. It is essentially a dendritic pattern of six roads radiating from a large open area just inside the east gate. Some details were given in the first report (Vol 1, 128). New observations resulting from the second ten-year programme are offered here.

The main road (road 1) ran from the east gate to the south-west gate where details of successive surfaces were observed (pp 29-30). Once the gate had been blocked pits and other structures were allowed to encroach upon the road line at its extreme western end but much of it seems to have remained uncluttered throughout the life of the fort presumably to provide easy access to the western part of the enclosure. Apart from cobble metalling preserved beneath the gate blocking, no surfacing was noted but the fact that through the centre of the fort virtually no hollowing had occurred suggests that the surface had once been metalled.

Road 2 was further examined in 1979–80 and in one area a considerable complex of resurfacings survived. The sequence is described in detail below (Section 4.3.11): in summary, after an initial period of occupation dating to within cp 3 six separate phases of metalling were observed associated with the continuous rebuilding of flanking structures. Metalling began in cp 6 and continued into cp 7. The earliest two phases were thin metallings of cobbles while the four succeeding resurfacings involved laying spreads of chalk rubble to form a base for flint cobbled surfaces. This was an efficient system for it not only raised the surface but the chalk rubble formed a base of almost concrete-like consistency holding the flints tightly in position. The survival of the succession of metalling layers in this one place is difficult to explain but is likely to be the result of some local protective phenomenon.

Road 3 was further observed running westwards through the area excavated in 1979 and 1988. At this point it began to converge on the back of the rampart and upon the large quarry hollow dug to provide material for Rampart 3. At first the road swerved south around two houses, CS40 and CS41 and then north to flank the quarry but as time proceeded the houses were abandoned and the quarry was deliberately filled, with a succession of chalk tips, creating a wide open area. The four- and six-post structures which lined the north side of the road at this point (PS225, PS278, PS283 and PS280) were clearly laid out in relation to the first phase of the road when it was still forced to take a sinuous course around the edge of the quarry. This is especially clear on Fig 4.64. Early post structures in sequence H also seem to follow this road line.

Road 4 continued through the corner of the area excavated in 1981.

Road 5 was tentatively postulated as the result of the excavation of 1976 when a gap was noted in the pattern of pits and post-holes. A similar strip of largely undisturbed chalk was seen running diagonally across the 1985 area on much the same alignment, towards houses on the north side of the fort excavated in 1973-5. No trace of metalling was seen along its line.

Road 6, which, it was suggested, ran roughly along the upper edge of the quarry hollow on the east side of the fort, was traced in the same general position through the excavations of 1986–7 and 1985. It was not a metalled road like road 2 or of the same proportions as roads 1 and 5 but was essentially a pathway no more than 2 m wide linking the structures in the quarry hollow. It was surfaced from time to time with discontinuous spreads of chalk rubble, some of them continuous with the side paths leading to the thresholds of the individual houses. It seems probable that road 6 converged with road 5 and that together they continued around the north side of the fort linking the houses and other structures sheltering in the lee of the rampart. The spreads of chalk found here were similar to those noted along the road line on the eastern side of the fort. Clearly road 6, in its surviving form, must post-date the digging of the internal quarry in *c* 350/300 BC but it is quite possible that it succeeded an earlier road serving the early period houses behind the rampart before the rampart was extended in Rampart phase 3.

The six roads described above can be clearly seen standing out as largely undisturbed strips against the background of pits and post-holes. This fact alone suggests that they were likely to have been in use throughout all or much of the fort's life. But there must also have been other paths across the site coming into use or being abandoned as needs dictated. Short-lived ways of this kind are likely no longer to be recognizable among the palimpsest of features. The plan gives the impression of there being back alleys parallel to the roads between

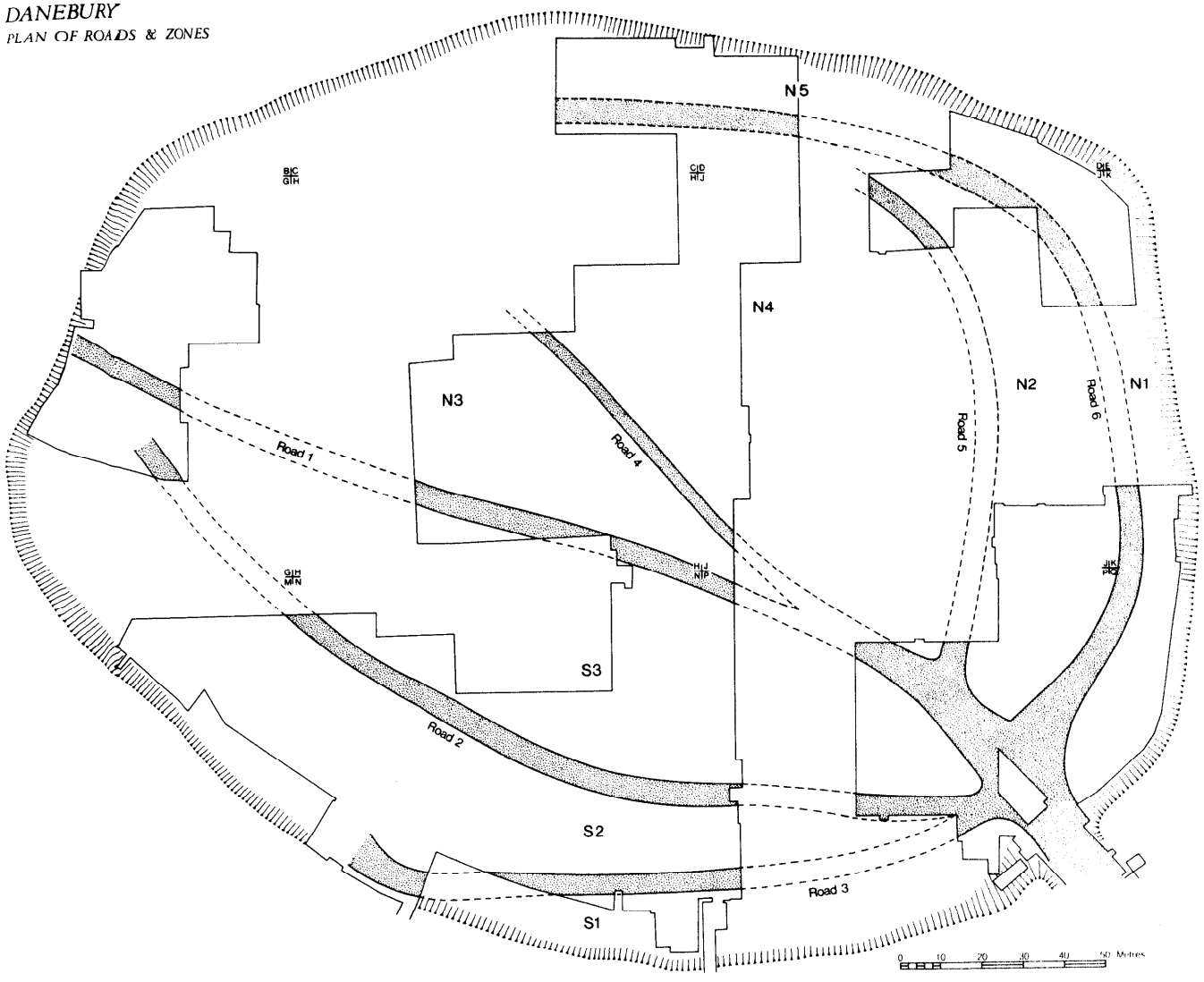


Fig 4.97

the post structures in the 1979–80 area where the structures set back from the roads adopt the same alignment as those fronting the roads.

4.2.7 The pits (Figs 4.98–4.102, Pls 49–54)

Introduction

The total number of pits observed during the excavations of 1979 to 1988 was 1277, of which 645 were fully excavated. This brings the total pits located during the entire excavation to 2399, the total excavated being 1707. The procedure adopted for excavation and recording have been discussed in Volume 1 (128). In summary all pits were excavated in half section: the section was drawn and the other half was then removed. Samples for flotation from a randomly selected 10% of pits were usually taken from the second half. The site archive consists of: a plan (drawn at 1:20) recording the pit top at the surface, the narrowest diameter and the plan of the base; a measured section (drawn at 1:10); a description of each layer; a description of pit characteristics including blocking walls and tool marks; and plans and photographs of any special burials or noteworthy structural details. Data on each pit was recorded on computer using the format developed during the first ten-year programme.

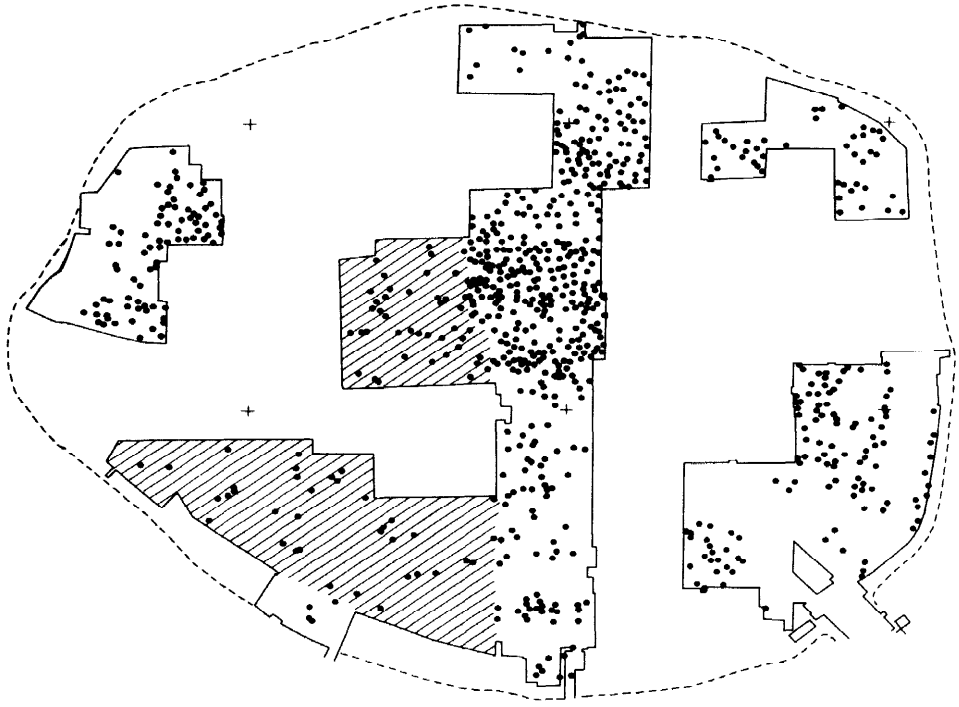
This report is intended simply to supplement points made in the first report (Vol 1, 128-46). For reasons which will become apparent during the course of the discussion several potential analyses have not been carried out at this stage but will feature in Volume 6.

We have chosen to illustrate this account with four simple distribution maps (Figs 4.98 and 4.99) and a limited selection of section drawings (Figs 4.100–4.102). A few details of selected pits are also illustrated as Plates 49–54. We have not produced an extensive fiche section in the belief that a sufficient sample has already been offered in this medium but a small selection of the more significant sections have been included (Fiche 24:F9–14). The site archive therefore forms the essential data bank.

Construction

The majority of the pits dug at Danebury survive in the archaeological record except where the deep quarries dug during cp 6 have removed all, or most, trace. For the

PITS CERAMIC PHASES 1 & 3



PITS CERAMIC PHASES 4 & 5

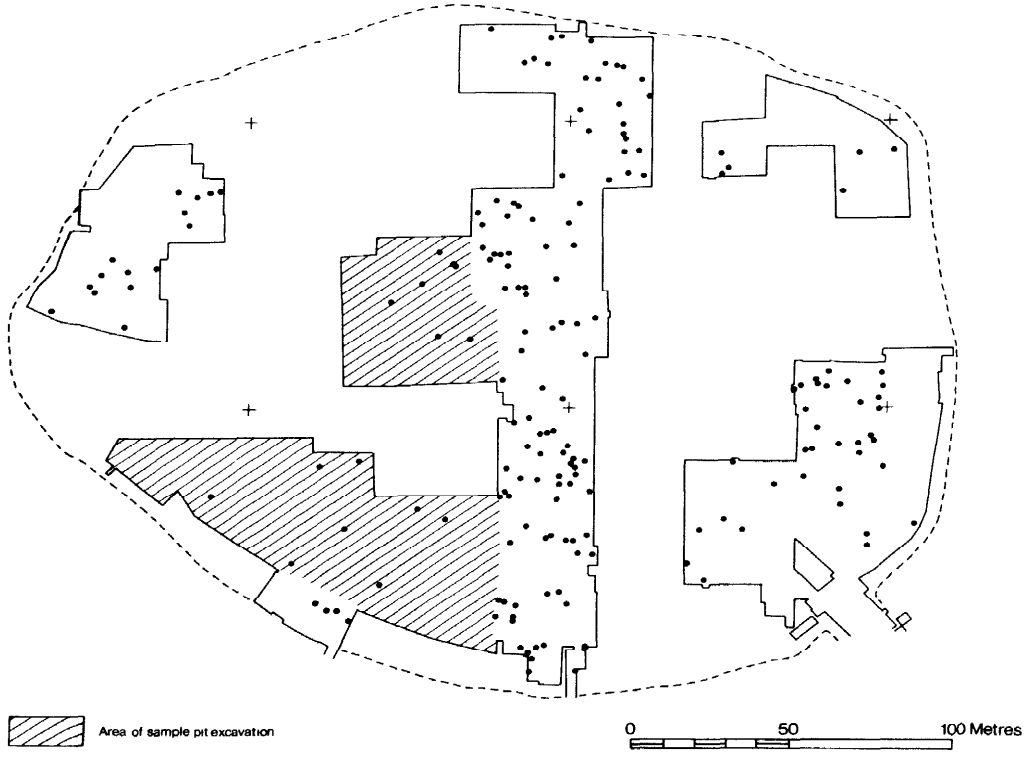


Fig 4.98 Distribuition of pits by ceramic phase

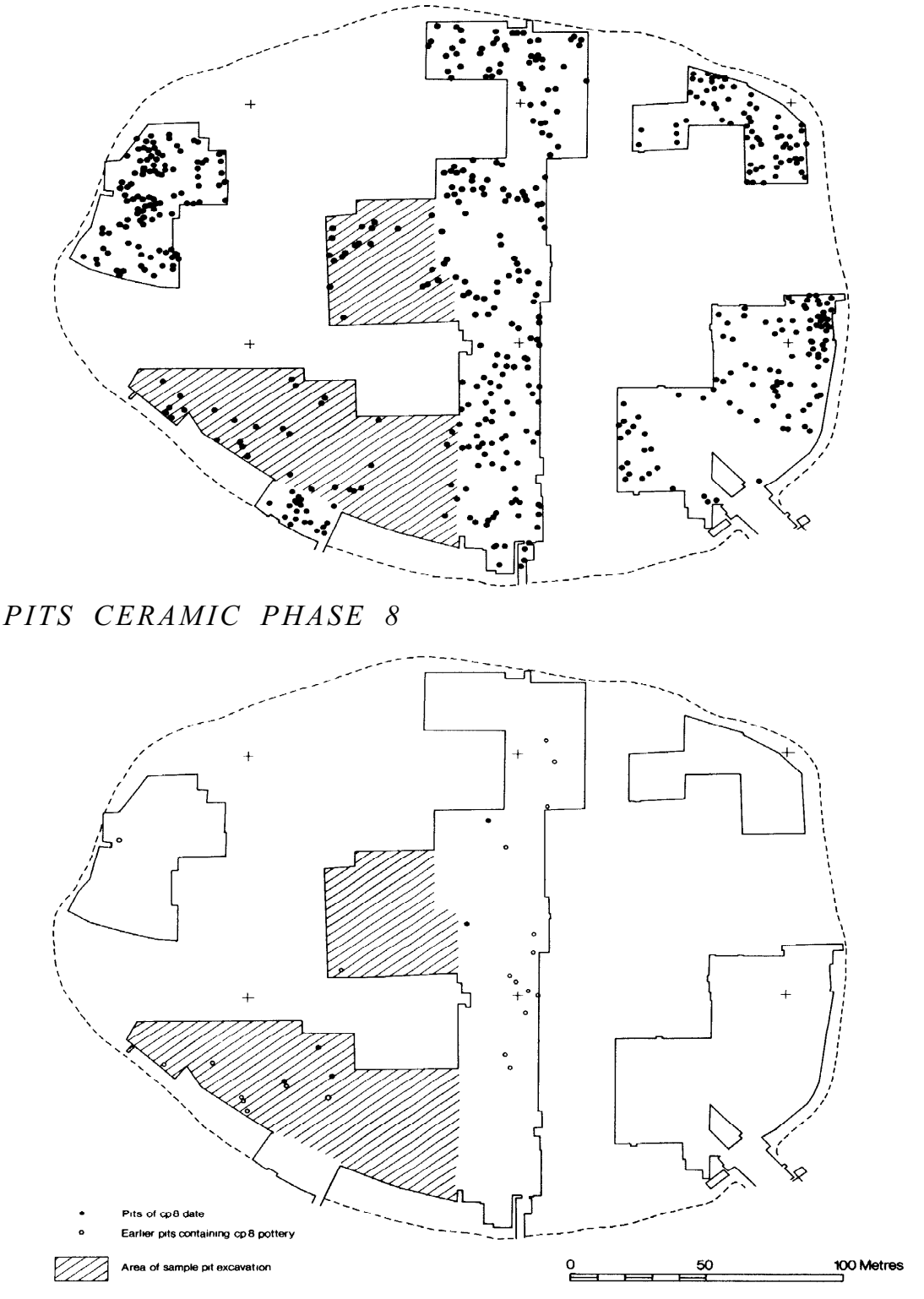


Fig 4.99 Distribution of pits by ceramic phase

Fig 4.100 Pit sections

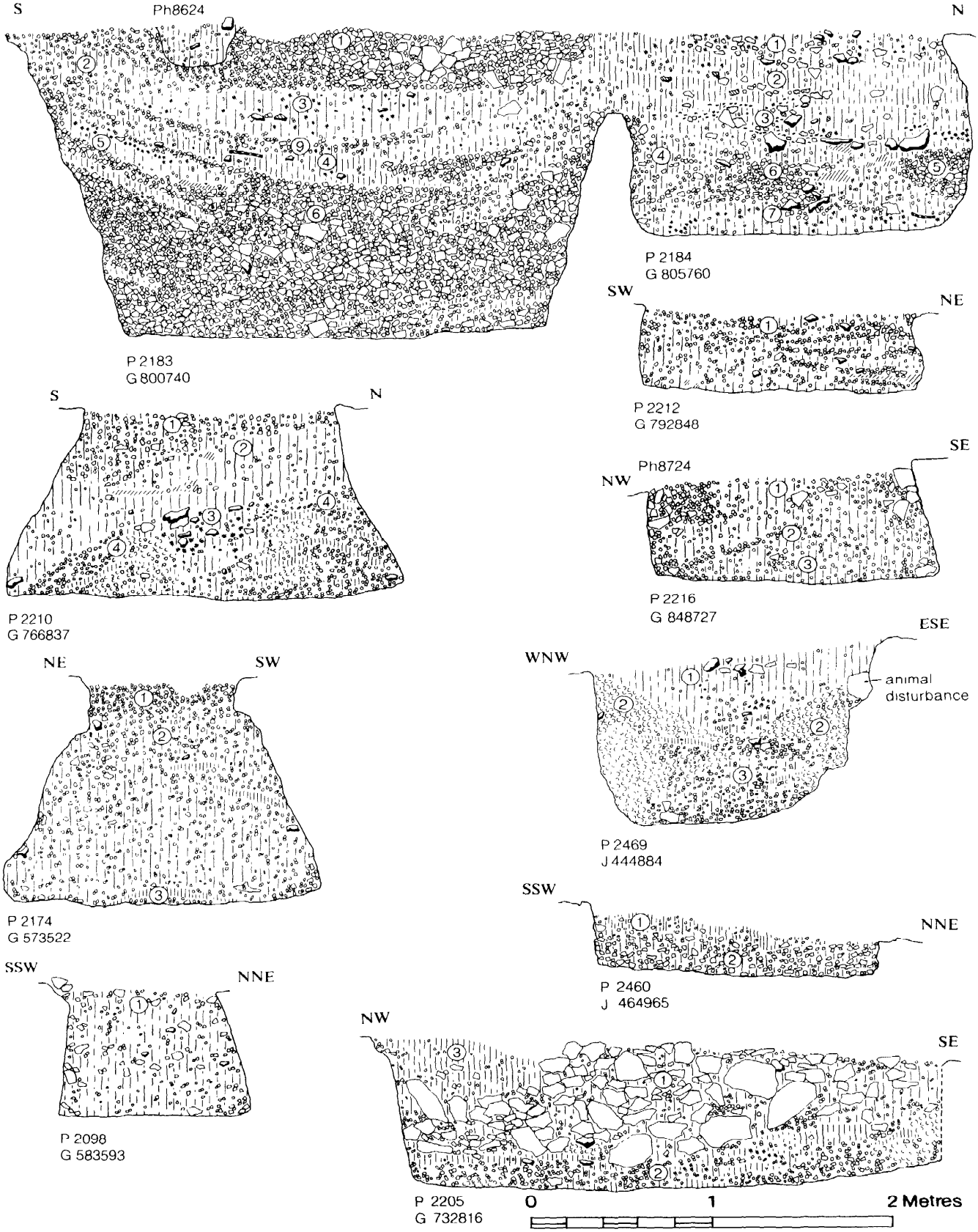


Fig 4. 101 Pit sections

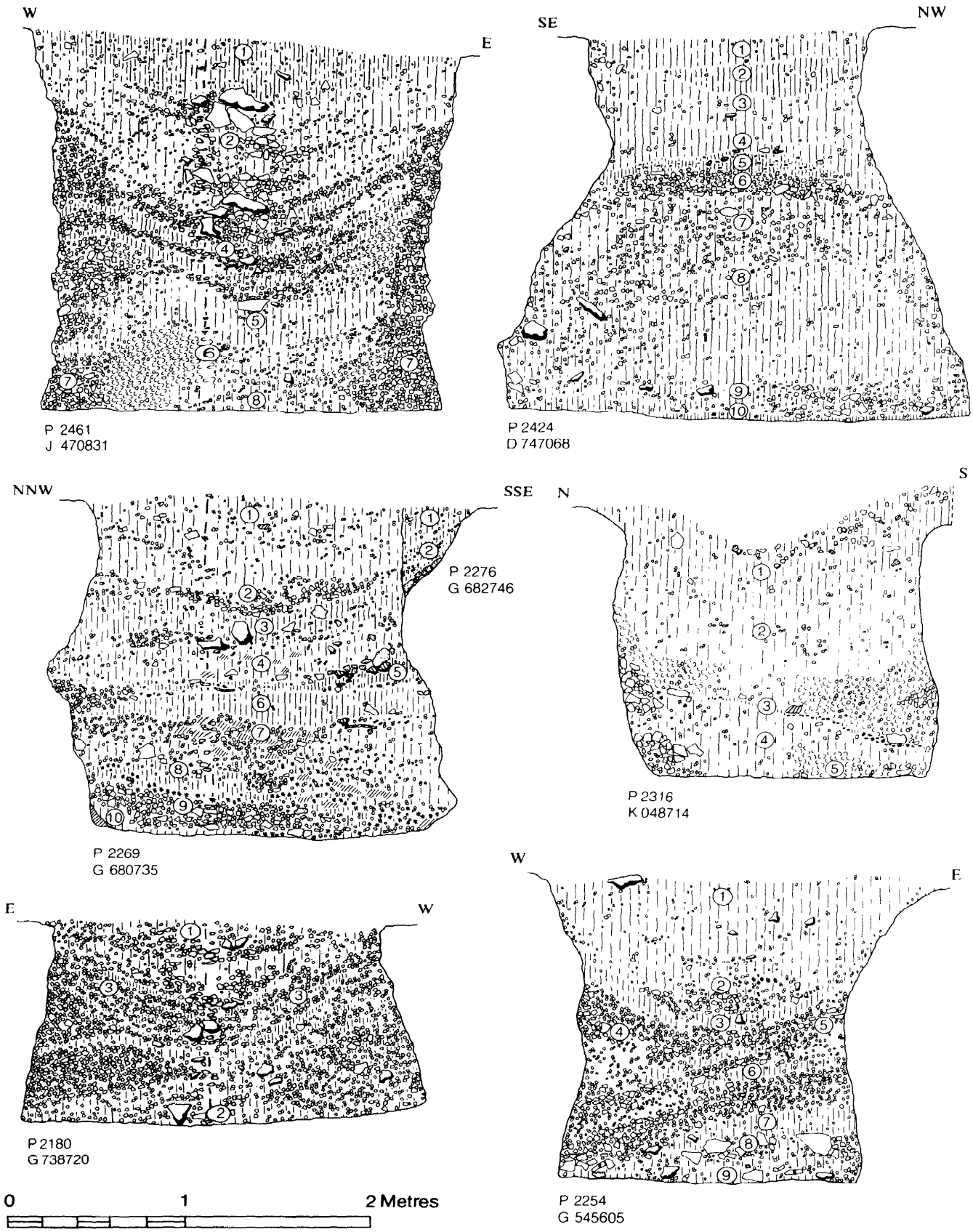


Fig 4.102 Pit sections

most part the original form of the pit – beehive, cylindrical, subrectangular or conical – can be distinguished but about 60% have suffered some form of erosion which may have altered considerably the upper profiles.

The question of pit construction has been fully discussed in Volume 1 (128–30) and there is little to add.

Irregularities in the bases of some of the pits confirm the view that the chalk was often removed in spits working from one side to the other (eg P1350 and P2506) or in a radial fashion leaving an irregular hump in the centre (eg P2392). Some rectangular pits (eg P2607) provide evidence of having been dug as two separate holes joined up in the final stage leaving a ridge between the two differing floor levels. But that this was not the only method used is shown by P2523 which was dug as a single subrectangular trench. One side, with a near vertical wall had been dug deeper than the other which was left irregular and sloping. The impression is that the pit was unfinished when abandoned.

The quality of the workmanship over all was very high. This is shown in the regularity of the profiles (with the plan at the top being concentric with that of the base) and the careful finish of the sides. Tool marks were frequently recorded on the bases and sides of pits. Of the 645 fully excavated, 279 produced some evidence of tool marks and of these 257 were pits of beehive type: tool marks are much less frequent on cylindrical and subrectangular pits. Where tool marks are recorded they are usually found on the bases or the lower part of the sides but this is likely to be due to the erosion of the upper part. In those rare cases in which the pit had been filled rapidly, preserving it from erosion, the entire profiles are found to have been tooled. Generally the blade marks of the short-handled adze used to dig them can be clearly seen but in a few cases the cutting was so careful that the individual tool marks could not be distinguished.

The question of there having been a daub lining was considered in Volume 1 and dismissed. A few additional observations might be added in support of this view. Had there been such linings they would have been of unbaked clay. None of the daub recovered derived from pit linings and in only one case (P1455) was any clay found in position. This consisted of a layer extending across the base and not up the sides. It may have derived from the clay used to plug gaps in the chalk blocking wall between P1455 and P1456. Similar plugging was found in a number of examples particularly in the area excavated in 1980 and one pit, P2320 (Fig 4. 100), had a well preserved clay blocking wall still in position.

It would have been difficult, in the later stages of the occupation, to avoid digging new pits into earlier pits long since filled. In a few cases the new pit was modified to miss the earlier one. This seems to have been the case with P2547 which ended up with a crescent-shaped plan so as to avoid P2546. In this example the fill of the earlier pit may have been considered too unstable to allow the later pit to be cut into it. There may however be other reasons, now no longer recoverable, for this curious arrangement.

Where a new pit was allowed to cut through the filling of an earlier pit without deflection the old filling, if it had become suitably compacted, could be left unsupported to form part of the wall of the new pit. In many cases, however, part of the old fill was scooped out and a blocking wall inserted to continue the side of the new pit. Usually the blocking walls were of chalk lumps the quality of the work ranging from irregular pieces to finely squared blocks (Pls 51–3). In rare cases walls of daub, flint or puddled chalk have been encountered. No evidence of blocking walls or of other support has been found in pits cut wholly or largely through the stratified layers which had accumulated in the quarry hollows. Since these pits were quite often of beehive shape it is difficult to see how the upper sides could have retained their shape unless the pits had been filled with grain immediately after digging. While organic linings are possible (as suggested in Volume 1) no evidence for this was encountered. In any event these its could hardly have been used more than once and the majority of them were deliberately backfilled to prevent collapse.

Little evidence survives for the treatment of the pit tops but a few observations can be added to those offered in the first volume. The reconsideration of the stratigraphy exposed in sequence A (1977–8 area) showed that the very well preserved pit, P1115, which had an upstanding chalk rim around it had been enclosed by a small four-post structure PS469, a fact which no doubt partly accounts for its excellent preservation. A similar, though more worn chalk rim was found around P2115 which was contemporary with, and therefore probably protected by, CS63 (Fig 4.53). The top of P2546 was also surrounded by a rim of chalk blocks and puddled chalk partly continuous with the floor of CS57 (Fig 4.45) with which the pit was contemporary. The 'rim' was a secondary feature infilling a shallow hollow encircling the pit top (Fig 4.97). Similar hollowing was also noted around P2575 but in this case no subsequent chalk rim was added nor was the pit enclosed with a structure. These hollowings, and indeed the wear on the chalk rims, were, no doubt, the result of much activity around the pit tops.

We have nothing further to add to the figures offered in Volume 1 concerning the labour needed to dig pits but the question of the disposal of the spoil requires some comment. The need for chalk as hardcore around the settlement was considerably underestimated. Chalk rubble was extensively used to consolidate the ground in and around structures built in the quarry hollows. This applies to the floors of circular structures and post structures and also to the paths and open spaces between them. In all these cases thick layers of freshly quarried chalk were used and there can be little doubt that it was derived from pit digging. In the central area of the fort, where stratigraphy is generally lacking, it is impossible to be certain that comparable chalk spreads were laid but if the evidence from sequences I and J are typical of what has elsewhere been lost in the interior then we can be fairly sure that the chalk dug out of pits was usually spread nearby to level hollows or to provide consolidated surfaces.

One feature not previously found in pits at Danebury, but noted in the 1979–88 sample, was the occurrence of single small holes cut into the bases of several pits. These were deliberately cut as holes and were not the beginnings of new spits in unfinished pits. Two were found in beehive pits and one in a subrectangular form. The smallest was in the centre of the subrectangular pit, P2183 (Fig 4.101), and measured 0.48 by 0.25 m, by 0.14 m deep. In P2578 the small pit was placed off-centre towards the north-east side; it measured 0.6 by 0.7 m by 0.47 m deep. That in P2535 was the largest measuring 1.14 by 0.92 m by 0.47 m deep and was oval in plan: it had been placed against the north-west edge under the overhang of the pit wall. The fills of all three pits were unexceptional and no special finds were made in any of them. It is difficult to see how they could be functional.

Form

The division of the pits into four types, used in the

classification of pits found in 1969–78, holds good for those found in 1979–88 (Vol 1, 130). In summary the four types are:

1 Beehive
2 Cylindrical
3 Subrectangular
4 Conical.

Only in the case of the conical pits is there anything to add. Two subtypes should now be recognized: those with straight sides sloping into a narrow rounded base; and those in the form of a truncated cone with more steeply sloping sides and somewhat wider flatter bases.

Now that the full set of data relevant to pit shape is available attempts will be made to search it to see if significant subdivisions can be made on statistically valid criteria. These matters will be considered in Volume 6.

The quantities of the different pit types are summarized in Table 3.

Beehive

This is the most common variety of pit amounting to about 72% of the excavated examples. This would imply that about 400 of the unexcavated circular pits are likely to be of this type.

The main characteristics are a circular (though occasionally oval or squarish plan) with the mouth and base concentric. The mouth, by definition is of lesser diameter than the base. The sides vary in profile from straight to concave though on occasion at either the mouth or the base the sides may start vertically before sheering away at an angle. The sides usually meet the base at an abrupt angle though it may be slightly rounded on occasions.

The diameter of the mouth ranges from 0.6 to 2.6 m in the case of 109 uneroded pits, the base diameter ranging from 0.75 to 3.8 m, the depth from 0.2 m to 3.2 m. True volumes can only be given for the uneroded pits. For the others the measurement of the mouth is taken to be the narrowest surviving diameter but since this will always be larger than the true (now eroded) mouth the volumes calculated will be in excess of the original volumes. The greater the erosion the greater the divergence between calculated volume and original volume (for volumes see Fiche 24: E11).

Cylindrical

This is the second commonest variety but cylindrical pits form only 13% of the total. The main characteristics of the type are a circular mouth of equal or only slightly larger diameter than the base. The sides are vertical or steeply sloping and are usually straight.

The size range tends to be generally smaller than the beehives ranging in depth from 0.1 to 1.6 m and in volume from 0.07 to 4.45 cu m.

Subrectangular

The main characteristics of this type are a subrectangular or oval plan with vertical or near vertical sides. The majority are uneroded but only a few exhibit any tool marks. Depths varied from 0.2 to 2.6 m and the volumes from 0.17 to 14.6 cu m. Long axes varied from 0.9 to 3.28 m with short axes from 0.33 to 2.64 m. Nearly 80% of the excavated sample belonged to cp 1/3. No more than two or three were dated to any subsequent phase.

Conical

The conical pits may be divided into two subtypes. The group was originally defined as pits of inverted cone shape with a rounded or pointed base. Of this type two further examples have been found. They vary in depth from 0.71 to 1.35 m, in mouth diameter from 1.45 to 1.95 m and in base diameter from 0.20–0.25 m.

The new subgroup is of similar truncated cone shape but with a definite flat base. These are generally small varying from 0.88 to 2.36 m at the mouth and 0.32 to 1.4 m at the base. They tend to be fairly shallow. Only five pits have been found in this subgroup. They may equally well be considered to be a variant of the cylindrical group.

Function

The question of the primary function of pits was considered at length in the first volume (Vol 1, 132–7). In summary, apart from the conical pits which were used for mixing clay, the majority of the pits were believed to have been used for storage purposes and various statistics and calculations were given. The following section is intended simply to put a gloss on that discussion and to raise some of the problems of which, in recent years, we have become aware.

The first issue, of some significance, is the question of phasing. The primary means of phasing is by reference to the pottery which each pit contains. The latest pottery indicates the ceramic phase to which the pit is assigned. It should, however, be appreciated that a pit dug in say cp 7 which contains no pottery after cp 3 will be assigned to cp 3 unless there is other evidence which indicates a later date. For those pits found in the central areas of the fort there may well be no additional evidence but where a pit occurs in a stratigraphical sequence its position in the

Table 3. Pits by type

Type	Uneroded	Eroded	Unfinished	Assigned to type but questionable due to heavy erosion		Total
Beehive	121	361	3	3	–	488
Cylindrical	74	15	3	2	–	94
Subrectangular	39	4	2	–	–	45
Conical	7	–	–	–	–	7
Unclassified	–	–	–	–	–	33
Unexc. circular	–	–	–	–	576	576
Unexc. subrect.	–	–	–	–	32	32
Total	241	380	8	5	608	1275

A range of metrical data is given in Fiche 24: E9–F8.

sequence may indicate its real date. Thus *all* pits have a *ceramic phase* based on contents and some pits may have a *preferred phase* based on stratigraphical position. While the *preferred date* is likely to be the actual date of the filling the *ceramic phase* may well be earlier than the date of abandonment.

For the pits excavated between 1979–88 the following figures summarize the situation.

Total number of pits	1277
Number of pits with a ceramic phase	773 (60.3%)
Number of pits with no ceramic phase	509 (39.7%) (of these 385 are unexcavated)
Number of pits with a preferred phase	226 (17.6%)
Number of pits with a preferred phase different from the ceramic phase	104 (46%)

In other words if 46% of the pits found in the stratified sequence are assigned a ceramic phase on the basis of contents which is in contradiction to its preferred phase based on stratigraphical evidence then it is not unreasonable to suppose that a similar percentage of the pits found in the central area for which only a ceramic phase can be given are wrongly phased (ie they are assigned too early a date). This is a problem to which we shall return in Volume 6: in the meantime, in the calculations to follow, all phasing is based on ceramic phase only. The distribution by phase, presented in Figs 4.98 and 4.99, is similarly based.

Comparison of the two plans suggests a concentration of pits in the north and central area of the fort in the early phase but not in the later when the pattern became more dispersed. The differences are striking but when it is remembered that an unknown percentage of the early pits are likely to belong to the later period it will be appreciated that the true pattern must have been less contrasting allowing the possibility that the area was reserved for pit storage throughout.

No attempt has been made in this volume to consider the relationships of groups of pits found in the stratified zone and the buildings with which they were contemporary. This study, made complex by the range of variables available for comparison, will be presented in Volume 6.

Pit volumes, subdivided by ceramic phase, are provided in Table 4. The largest pits are in general assigned to the late phases and since these will not be affected by refinements in phasing the observation is likely to hold good. However, since a number of the 'early' pits, dated by contents alone, are in reality late the total storage capacity of the later periods has been underestimated.

Table 4. Total and average pit volumes by phase

	no excavated	total vol (m^3)	av vol (m^3)
cp 1–3	253	675.23	2.669
4	30	88.40	2.947
5	46	190.35	4.138
6	82	317.45	3.871
7	120	527.0	4.392
8	24	145.84	6.077

(For volumes by type and cp see Fiche 24: E11)

Specific function

No direct evidence survives for the primary use of storage pits. In Volume 1 classical sources were cited and the experimental evidence relevant to the storage of grain was considered. We have nothing further to add.

Various calculations were given for the quantities of grain which it was thought could have been stored and based on these further estimates involving consumption and acreage were advanced. Much of this discussion assumed that the pits were re-used but there is no reason to make such an assumption: indeed the evidence might suggest the contrary. Experiments have shown that where pits are re-used the sides and bottom become worn. This was clearly not the case at Danebury where, invariably, the tool marks remained fresh. While it could be argued that after each use the sides and bottom were re-cut the simpler suggestion is that the pits were used only once. If so the estimates of grain stored in pits will have to be drastically reduced.

Nor is it certain that all pits would have been used for grain storage. It is a distinct possibility that different sizes and shapes of pits were designed for different storage needs. This is particularly so with the subrectangular pits with large mouth area which could not easily have been sealed. These frequently occurred within buildings and may have served as cold stores for a variety of food. Even so the likelihood remains that the majority of the circular pits were used for corn storage.

Several strands of circumstantial evidence point this way. First we may cite the common presence of small rodents, the bones of which were often found in considerable numbers on pit bases. Scratch marks from the claws of rodents have also been observed on pit walls. While rodents do not prove grain storage their presence in such number might be thought to suggest it. A second point of some significance is that the stratigraphy of certain pits clearly demonstrates that they had contained a depth of organic material on abandonment, the rotting and subsequent compaction of which had caused considerable slumping of the upper stratigraphy. This is particularly clear in the sections of P2269/P2276 (Fig 4.102). So great was the slumping that P2276 was originally interpreted as a small early pit cut by P2269. It seems more likely that the fill of P2269 faulted and slumped a distance of 0.6 m the marker horizon being the layer of daub (P2269 layer 5 = P2276 layer 3). The original surface layer was probably the chalk (layer 2) comprising the slumped floor of house CS31a.

A similar effect was noted in P2352 where the hearth and floor of CS39 had slumped to a depth of 0.45 m below the chalk surface, and also in P2549 where the hearth and floor of CS54 had slumped a distance of about 0.7 m. In this last case there was a basal layer of carbonized grain overlain by ash. It is a distinct possibility that the entire lower part of this pit had been full of grain when abandoned, all that survives now being the charred fraction. In the other two cases grain, without any of it having been charred, may also have been present. A further implication is that many of those pits with layers of charred grain in the bottom may once have been partially full when abandoned. Reasons for abandonment of grain could range from it having gone mouldy to ritual deposition.

Decay and secondary use

Each pit involves a series of acts which may be interspersed with periods of inactivity. We may summarize this complex in ideal form as follows:

Stage	Activity	Inactivity
A	Pit digging	—
B	'Storage'	—
C i		Primary silting
i i	Deposit	—
iii		Silting
iv	Deposit	—
etc.		
D	Deliberate fill	

In other words, after the pit has been dug (stage A) and has served its primary 'storage' function (stage B) there follows a further sequence of events (stage C) which may in some cases terminate with the deliberate filling of the upper remaining hollow (stage D). What concerns us here is stage C.

In general terms, having reviewed the range of data available to us from the 1979-88 programme, it is clear that the majority of pits show periods of inactivity represented by natural silting and erosion interspersed by one or more phases of activity. These phases of activity may be defined as reflecting a deliberate act of deposition. The physical manifestation of these acts of deposition (or events) is varied: it may include the placing of human or animal remains in the pit, the deposition of single artefacts or artefact groups or the tipping of domestic debris. It is of course highly likely that other events took place which have left little or no archeaological trace, eg the burial of bales of wool or skins or the pouring of libations.

In the first volume we focused briefly on the human and animal 'special burials' but it is abundantly clear as the result of the current review, that the pattern of deposition was far more complex. What is now required is a detailed reassessment of all 1707 pits and a multivariate analysis of the acts of deposition, folowed by a chronological and spatial study to see what regularities and trajectories emerge. Only then will it be possible to assess the patterns of social behaviour captured in the fillings of the pits. This programme of reassessment is now underway and will be reported on in Volume 6.

One final observation may be added here. A number of excavated pits were left open after the excavation of 1986 and the results observed in the following year. The effects of erosion are illustrated by the plans of the pits as excavated and the subsequent plans drawn a year later. PS2560, a previously uneroded beehive had suffered most with the loss of 0.3–0.6 m around its circumference. The change in profile was also recorded. The pits affected had suffered most erosion on the east side probably because the overhang was greatest on this side. It is clear that the bulk of the erosion could occur in a single season as the profiles would have altered little after further exposure.

Some future considerations

While it would be unwise to offer too much speculation in advance of firm data it is perhaps worth raising a few general thoughts here in anticipation of what may follow.

For the last 50 years or so it has become conventional to regard Iron Age pits as functional containers for the storage of grain. Experiments have shown that pits, once sealed, performed well for corn storage but their large volume and the fact that once the seal had been broken the contents would rapidly disintegrate has led to the belief that pits were used to store seed grain while above-ground granaries were used for the consumption grain. The theory is plausible and many calculations have been based on it.

It is however worth questioning a few of the inherent assumptions. The obvious question is why go to the trouble of storing grain below ground when perfectly good above-ground structures were available? The usual assumption is that it was to protect the seed corn from raid or wanton destruction but this begs various questions not least the vulnerability of the community's consumption grain if, as is generally believed, it was stored in granaries. Another assumption is that pits were in constant and regular use throughout the life of the community but was this so? At Danebury there were about 4500 pits representing 450 years or so of occupation. This would allow for ten pits to be dug each year. Only by assuming that the life of the pit was five or ten years can we produce enough storage capacity to look reasonable for a community of the size which is thought to have used the fort. Clearly there are many imponderables here and ample scope for special pleading in any direction but given the growing evidence for the limited life of pits it is -becoming increasingly difficult to argue for sufficient pit storage capacity for the community's seed corn.

One further question may be raised. Why was pit storage so limited in time and space? It is not that pits were only dug in congenial bedrocks – witness the presence of pits in the Oxfordshire gravels and their absence in the Welsh borderland hillforts. And why did pit storage cease quite suddenly in the early first century BC?

It is easier to raise questions than to answer them but given the doubts expressed here together with the complex ritual behaviour which it is now apparent took place after pits ceased to be used, it is clear that our current preconceptions need to be rigorously examined.

A more comfortable model would be to see the act of pit digging as ritual activity – a deliberate penetration of the underworld. If corn or other commodities were stored for a period, then acts of propitiation would be required at the end of the procedure. Such a model could still accommodate the idea that the seed corn was stored in this way and indeed it would be appropriate for seed corn to be placed in the protection of the powers of the underworld. We should, however, allow the possibility that pit storage was a much rarer phenomenon than archaeologists have assumed in the past. If it is accepted that the process of pit digging was embedded in the belief system of the community (and not simply an economic expedient) then the geographical limitations of the procedure would reflect the extent of that particular pattern of beliefs and its cessation could be seen as part of the widespread transformation in belief systems which came about in the first century BC.

These argumentative points are raised here, in advance of a more rigorous examination, to explain why we have not presented simple statistics of the pits and their contents conditioned by current preconceptions. The question of the pits in their broader social and geographic context will be fully addressed in Volume 6.

4.2.8 Internal quarries (Fig 4.2)

In the area excavated in the centre of the fort in 1981 several irregular holes were found dug down into the natural chalk. These are best interpreted as quarries created at times when chalk was needed for some undefined purpose such as the levelling of pits or the surfacing of floors and paths.

The two quarries to the north of the road (F89 and F91)

were of roughly similar proportions. Both were irregular. In F89 the silting was largely natural at first but later the remaining hollow was partially levelled from the north side with a tip of chalk rubble. F91, on the other hand, was filled with rather more deliberate tipping. F91 cut a number of pits (P1946, P1955, P1771 and probably P1894) the latest pottery from which was cp 3. The filling of the quarry produced pottery of cp 7. The pits cut through the quarry fills (P1825, P1956 and P1947) contained only a few sherds of cp 3–6 which is best regarded as rubbish survival. F89 cut several pits (P1941, P1821, P1822 and P1943). P1822 produced pottery of cp 6, the rest cp 3. The quarry fill yielded sherds of cp 5 which must therefore be regarded as earlier rubbish since the date of deposition must be cp 6 or 7.

To the south of the road were several smaller shallower quarries (F95, F96, F99, F100, F102, F103, F104) sufficiently similar to suggest a broadly contemporary date. The fills varied considerably from natural erosion to deliberate tips. Dating evidence was sparse; F103 produced three cp 3 sherds, F96 one cp 4 sherd and F95 yielded a few sherds of cp 6/7. Related pits add nothing except that the erosion cone around the top of P1900 (of cp 7 date) cut F96 and F99. In all probability the quarries were broadly contemporary dating to cp 6 or 7. Detailed descriptions and illustrations of all internal quarries will be found in Fiche 26:A3-10.

4.3 The establishment of a chronological sequence

4.3.1 Introduction and principles

Immediately behind the ramparts is a strip some 10–15 m wide within which stratified layers are extremely well preserved. Preservation is largely the result of two processes: quarrying for material for the rampart, which has created deep hollows, and continuous silting from the rampart and from inside the fort which has preserved and separated successive phases of occupation activity. Strictly this peripheral deposit can be divided into a northern and a southern half the two gates providing the points of division. The *southern* periphery is characterized by a series of small discrete quarry scoops belonging to rampart phases 1 and 2 within, around and above which structural activity and silting have given rise to a metre or so of stratified deposit representing the entire range of occupation from the time of the construction of rampart period 1 until the end of occupation, the phases being directly related to the different rampart phases. Quarrying for material for rampart period 3 was of limited extent thus destroying little of the earlier stratigraphy. The *northern periphery* is quite different. Here the dominating feature is the wide and largely continuous quarry dug to provide material for rampart period 3. The only earlier material to survive is embedded beneath the tail of rampart period 3 or remains in features truncated in the quarry sides and bottom. The quarry, however, once dug, was intensively used and, because of its generally low-lying nature, layers of washed-in silt tend to be quite thick thus protecting and separating the superimposed structures and their contemporary occupation layers. The northern periphery therefore provides an ideal context for the study of the sequence following the construction of rampart period 3 sometime about 350/300 BC.

The excavation strategy adopted has been to sample both the north and south peripheral deposits at intervals (Fig 4.103). Of the southern periphery, which has a total length of 3 10 m, 31 m were sampled in 1969–78 (the area next to the main entrance and sequence C excavated 1969-71) and a further 73 m were sampled in 1978–88 (sequence G in 1982, sequence F in 1982–4 and sequence H in 1979, 1980 and 1988). Thus 33% of the total southern periphery has been excavated. Of the northern periphery, totalling 450 m in length, 112 m were sampled in 1969–78 (sequence B in 1973–5 and sequence A in 1977–8) and a further 135 m in 1979–88 (sequence D in 1986–7, sequence E in 1984–5 and sequence F in 1982–4). Of the northern periphery 55% has therefore been excavated.

In the first volume the three separate stratified sequences, A-C, examined in the peripheral zone between 1969 and 1978, were described (pp 146–73): in the present volume five additional sequences, D-H, are considered.

The excavation of 1979-88 rather surprisingly exposed two patches of stratified layers within the fort associated with the middle length of road 2 in the southern part of the site. These layers were of value in that they allowed a sequence of superimposed buildings to be unravelled. The individual sequences are described below as sequence I (1979-80) and sequence J (1980).

The selection of evidence for presentation in this section has not been easy but the general principles developed in the first volume have broadly been followed. Each sequence has been treated separately and has been divided into phases based on internal evidence. Only in the case of sequence D (1986–7) has an attempt been made to link the phasing to a pre-existing sequence, sequence A (1977–8) with which it was contiguous.

The indices crucial to the detailed understanding of the interrelationships between the individual layers and features are the matrix diagrams (presented in fiche 25 and 26). This data is summarized visually in the phase plans and the selected sections published below. The text which accompanies them is essentially a commentary on the more significant relationships. Further detail of the individual structures is provided in the descriptive accounts in section 4.2 above. The text is necessarily rather turgid since chalk spreads and silt layers hardly lend themselves to creative writing. For those unwilling to submit to these rigours the phase plans contain the essential information. The more general implications of this very rich body of data are explored in section 4.3.13 unpromisingly entitled ‘Correlations and chronology’.

4.3.2/5 Sequences A, B and C excavated in 1969–78

These sequences have been set out briefly in volume 1 (146–73) a summary of the main correlations being provided on pp 172–3. The implications of this data are considered in relation to the excavation of 1979-88 in section 4.3.13 below.

The sequence of deposits in the quarry hollow immediately to the north of the main gate, examined in 1977–8 (sequence A), has been reconsidered in the light of the 1986–7 excavation. The main sequence presented in summary in Volume 1 (146–57) was largely confirmed but a number of minor modifications have been made. The most significant include the resolution of many of the post-holes of phases h-j into post structures and the separation of the features of phase j into two subphases. In addition three *possible* circular structures not previously identified, have been tentatively isolated: CS64 belonging to phase a-e is tolerably certain; the other two,

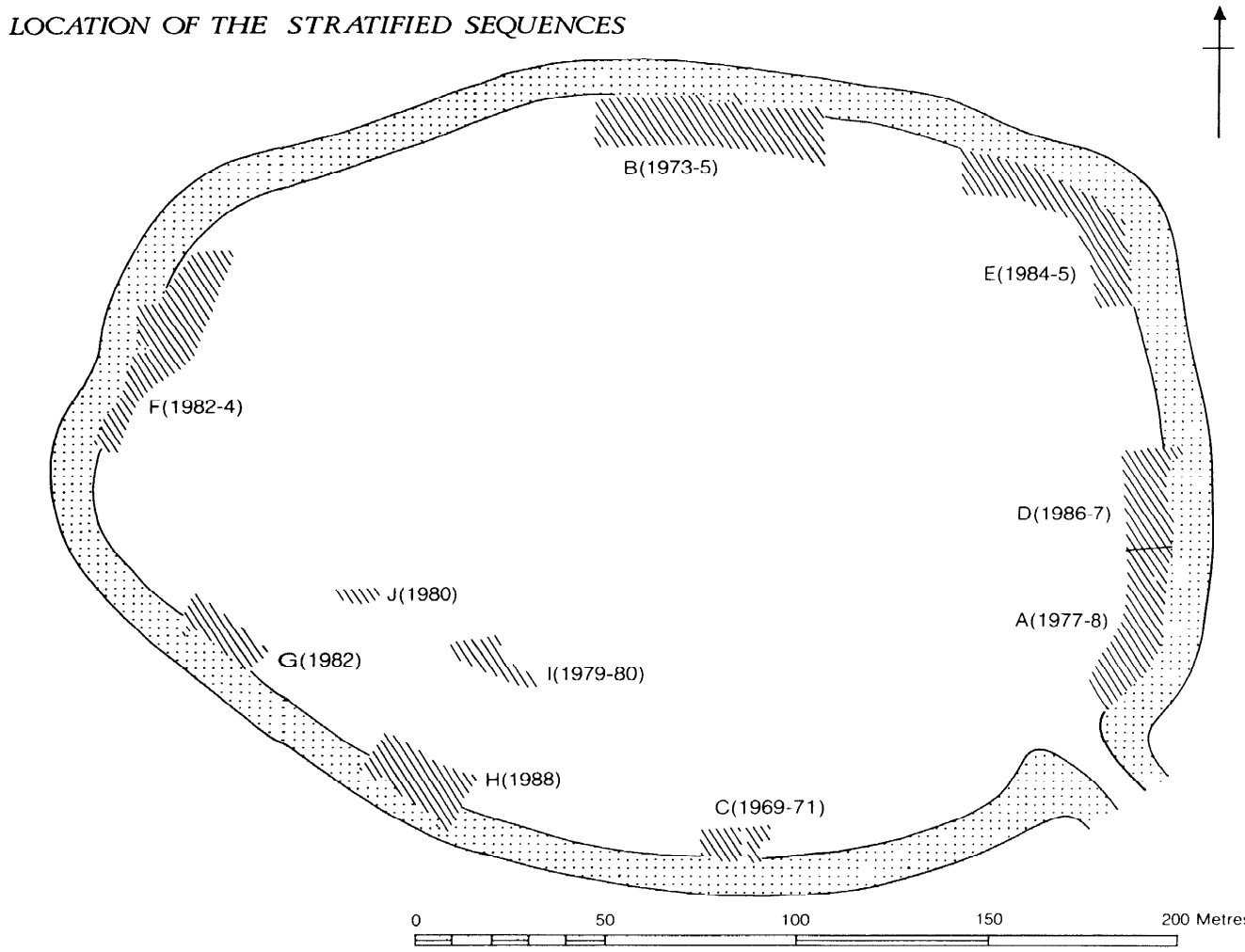


Fig 4.103

CS65 and CS66, may be little more than open working areas but are, nonetheless, worthy of special consideration.

A detailed discussion of these matters is provided in Fiche 25:B1–10. All features are included on the phase plans (Figs 4.104–4.112) while descriptions and illustrations of the circular structures will be found in Section 4.2.1.

4.3.6 The excavations of 1986-7: sequence D (Figs 4.104–4.113 and Pls 22, 23, 26–30)

In 1977–8 a length of c 50 m of the quarry hollow, lying behind the rampart and extending north from the main gate, was totally excavated exposing a complex of well-stratified occupation levels divisible into a number of distinct phases. The data was of high quality but it was felt that in order to be able to arrive at useful generalizations about spatial organization a larger sample was required. With this in mind a further 30 m length of the quarry hollow area was excavated in 1986–7.

Although, for ease of reference, we have called it sequence D it is strictly a continuation of sequence A described in Vol 1 (146–57) and discussed here in more detail (Fiche 25:B1–10). To facilitate comparison between the two sequences the plans provided here incorporate much of the detail presented in the first volume modified in the light of reassessment. The same phase divisions are also used though it has been necessary to introduce some subdivisions to accommodate the greater complexity of the 1986–7 stratigraphy.

The pre-quarry occupation (Fig 4.105)

The 1987 rampart cut, described in detail above (Section 3.1.8) allowed the sequence of defences to be displayed, together with their associated occupation levels, in the period leading up to the final rebuilding of the rampart (rampart period 3) and the contemporary creation of the massive linear quarry. Five distinct phases can be recognized:

a. Palaeosol
b. Rampart la
c. Brief pause

d. Rampart lb
e. Occupation.

It should be stressed that the five pre-rampart period 3 phases exposed in trimming back the tail of the latest rampart in 1977–8, and also called phases a-e do not necessarily correlate directly with the 1986-7 phases a-e but, nonetheless, are likely to approximate to them.

Phase a

This phase is represented by a palaeosol (1757) preserved beneath rampart period 1. It was a pale yellowish-brown clayey silt with some small chalk fragments, and occasional flints and flecks of charcoal. To the south of the quarry, F325, a chalky silt (1760) noted in section 68, may be its equivalent.

Phase b

The clay dump comprising rampart la was deposited in this phase. It has been described above (pp 18–19).

Phase c

A brief pause during the construction of the first rampart. It is possible that the chalk rubble (1758) was laid on the old ground surface at this time and suffered some wear.

Phase d

Phase d is represented by the completion of rampart 1 (1 b) (described above p. 18–19) and the digging of two quarries F325 and F318.

Quarry F325 was only partly excavated, but appeared to be roughly subrectangular in shape, measuring 3.5 by 2.5 m with a shallower extension at the south-west corner. The maximum depth, to the somewhat irregular bottom, was 1.1 m.

Quarry F318 was considerably larger and roughly circular in shape measuring 5.5 by 6.5 m with a maximum depth now of 1.65 m. The east and north-east edges had been largely removed by the period f quarry (F272) but on the west and south the sides were near vertical: the base was flat but uneven.

Further to the south were two similar quarries. F49 was partially excavated in 1978 and was described in Vol 1 (p. 149). F294 was largely excavated in 1978 and re-examined in 1986. In the first report it was thought to be part of the phase f quarry but re-examination in the light of the excavation of F318 suggests that it should belong to this earlier period. It was roughly circular measuring *c* 3.0 by 4.0 m in area and 1.4 m deep. The sides, where they had not been truncated by the later quarry (F62/F271), were nearly vertical while the bottom was flat though irregular.

The fuller understanding of the period d quarries arising from the 1986-7 excavation, raises the possibility that F64 might also belong to this phase.

Phase e

Immediately following the construction of rampart 1 the quarry began to silt up largely as the result of natural erosion. In F325 (section 68) the lowest fill (1747) consisted of a clean yellowish-brown chalky silt which seems to have resulted from the weathering of the sides and the surrounding area. Above this was a browner more chalky silt (1746) and sealing this, but concentrated more in the shallower south-west extension was a layer of chalk fragments in a matrix of pale greyish-brown silt (1745). In F318 (section 69) the thin basal layer was a grey silt mixed with shattered chalk (1901). This was sealed by a thick deposit of finely shattered angular chalk (1862), loose and incoherent with fine banding sloping towards the centre of the quarry. Within it was a band of larger chalk blocks, which had mostly rolled to the bottom of the hollow, together with lenses of fine compact chalk representing periods of intense weathering. The upper part of 1862 was discoloured by fine brown silt which had filtered down from layer 1902 above, a pale brown silt containing a scatter of small chalk lumps. Overlying the lower edge of 1902 was a dump of chalk blocks and chalky silt (1903) which appears to be the basal tip of a large dump (1848) of massive chalk blocks (averaging 300 mm in size but reaching 450 mm). The chalk lumps were sharp and angular clearly representing freshly quarried material, perhaps from a pit dug nearby, dumped into the top of the quarry hollow.

In quarry F294 the filling (512, 521) was almost entirely of frost-shattered chalk blocks, 50–100 mm in size with occasional lenses of silt and layers of compacted heavily weathered chalk.

The initial silting of the quarries can have taken little more than two or three years. During this time or soon after occupation activity began to impinge on the tail of the period 2 rampart. This was apparent in the 1987 rampart cut where part of the tail had been cut away possibly to provide a level terrace for a house. Here a series of layers accumulated. The first was an occupation deposit (1751) consisting largely of ash and charcoal. Over this was a dump of chalk (1750) composed of angular chalk blocks (up to 250 mm in size) in a matrix of finer chalk. The surface had been trampled and worn. This layer was continuous with a mass of chalk rubble (1744) dumped into F325. The only difference between the two layers was that the chalk rubble of 1744 was mixed in a matrix of ash and charcoal. This layer merged upwards to become 1743 which was essentially another dump of chalk blocks loosely packed in a matrix of grey silt containing charcoal and other occupation debris. Layers 1744 and 1743 are best interpreted as deliberate fill thrown in to level F325.

Above layer 1750 was a trampled patch of chalk (1753) and a more rubbly chalk spread (1749) also trampled on the surface. It seems, therefore, that the area to the north of F325 was subjected to almost continuous wear.

To the south were a number of features either sealed by rampart 3 or cut by the quarry contemporary with it. They must therefore belong either to phase c or phase e. These include PS389 and PS390, which are either two-post settings or the remnants of four-post structures, a circular house CS62, as well as several post-holes sealed by an occupation layer (1686). The evidence is sufficient to confirm the impression given by the 1977–8 excavation that occupation behind the period 1 and 2 ramparts was well-developed.

Rampart 3 and the quarry: phase f (Fig 4.106)

The material for construction of rampart period 3 (p. 19) was derived largely from a wide quarry trench dug around the fort immediately beyond the tail of the enhanced rampart. The quarry was a continuous cutting some 13 m wide with a steep western face and a more shallowly sloping eastern face merging as an unbroken

slope with the back face of the rampart. The overall depth averaged 0.6 to 1.0 m but at intervals there were discrete circular or oval delves cut a metre or so deeper: these were individually numbered, F271, F286 and F272.

F271 was the northern extension of quarry F62 excavated in 1978. Overall F271/F62 was 18 m in length, 11.5 m wide and 1.65 m deep. The northern end was rounded with gently sloping sides becoming steeper on the east and west. To the north of F271 was a narrow neck of chalk dividing it from the next quarry scoop F286. F286 measured 10 m long, 9 m wide and 1.3 m deep: it had a flat base and gently sloping sides on the east but steeper sides on the north and west. To the north was a 9 m-wide unexcavated causeway before the next deep quarry, F272 began. F272 truncated the partially-filled quarry of period d (F318). It too had a flat base with steep east and west edges and measured 10.7 m wide and 2 m deep. In length it exceeded 9 m.

Viewing the period f quarry examined in 1977/8 and 1986/7 as a whole it can be seen to exhibit a degree of consistency throughout. The continuous wide trench, 10 to 13 m wide and about a metre deep, was apparently dug first. Thereafter individual gangs dug deeper quarries through the floor of the trench using the undug areas in between as causeways and ramps along which the baskets of chalk rubble could be hauled to build up the rampart. The southern group of quarries (F63, F39 and F38) were deeper than the others reflecting the need for more material to build the rampart higher as it approached the gate. The steepness of the quarry sides in this region may have been the reason why the southern end of the quarry seems to have been little used in subsequent periods.

Occupation within the quarry hollows

Very soon after the quarry had been dug and the rampart heightening completed structures began to be built in the quarry hollow. Seven distinct phases can be recognized (phases g-m) with several of them exhibiting subphases. To begin with, in phases g-i activity was confined largely to the individual deep quarries each of which exhibits its own discrete stratigraphy, This makes cross correlation difficult and is why these phases are described together below. After the end of phase i silting and successive make-ups had levelled out irregularities. The stratigraphy of the succeeding occupation, therefore, tends to be more extensive making the correlation of the phases over the whole site far easier.

Phases g, h and i (Figs 4.107, 4.108)

The earliest sequence of occupation in the quarry, designated here phases g, h and i, is represented by a series of rectangular post-built structures and their associated chalk spreads, several two-post structures, a few pits and a number of isolated post- holes. Because the occupation areas were restricted to the quarry bottoms, and in one case to the flat area between two quarries (F272 and F286) cross correlation is difficult. It is therefore necessary to discuss the individual sequences first and then to consider possible cross correlations.

Quarry F62/F271.

In the 1977/8 excavation in F62 the sequence was interpreted as a series of post-holes and pits together with associated chalk spreads representing phase g. After a period of silting there was further activity generating a greater density of post-holes (Vol 1, 149). After reconsideration almost all have resolved themselves into post structures (Fiche 25:B1–10).

In the northern part of the quarry hollow (F271) excavated in 1986–7 the sequence was more complex. The earliest feature was P2565 which was cut into the base of the quarry. After it had gone out of use and was filled it was sealed by a chalk spread (1635) which had been laid after the vertical timbers of PS380 were in position. This relationship is demonstrated by the fact that the layer sealed the packing of the post-holes but not the positions of the actual timbers which showed as voids. PS380 is a type K seven-post structure (characterized by a central post). Type K structures are not common and seem to be largely restricted to the NE and E part of the site in the stratified sequences A/D and E (eg PS1, PS335, PS374 and PS386).

The chalk spread (1635) comprised a mixture of small lumps of chalk in brown chalky silt with occasional flints and, in one place, part of an articulated animal skeleton. It served as an important horizon since it was continuous with layer 563 (excavated in 1978) and also extended northwards to become layer 1632 in the adjacent quarry hollow (F286).

PS380 and the associated chalk spread (1635) were sealed by a brown chalky silt (1629) which contained a few pieces of charcoal. Where the silt had slumped into the tops of the post-holes the area had been consolidated and levelled by a dump of chalk rubble (1634). There were no features associated with this levelling. Over the chalk a thin silt (1628), containing some charcoal, burnt clay and burnt flints, had accumulated. The silt sealed ph 9902.

It was from this level that three pits, P2561, P2562 and P1137 were cut. They lay within a roughly rectangular hollowed area, worn presumably by the activity associated with the pits. A little later a layer of chalk rubble (1630) was spread over the area to provide a firm working surface. After the pits were abandoned and left to silt naturally by erosion a clean pale brown silt (1617) accumulated above the chalk surface (1630) in the hollow around them.

Several correlations are possible: the lower silt (1628) is equivalent to layer 513, over the filling of F294, and to layer 551 in F62. Here the situation was more complex than was first recognized. In 1978 only one silt layer (551) was recognized but the new sequence demands that this be divided and the existence of a hearth (562) within the layer hinted that such a division was needed. Here we reserve the layer number 551 for the lower part of the silt and assign the number 547A to the upper part.

Quarry F286.

This quarry was occupied by a single four/six-post structure, PS381, throughout phases g-i. It can however be divided into three constructional phases, by reference to the recutting of its post-holes some of which can be firmly related to the associated stratigraphy.

The earliest phase (A) was a large four-post structure with deep post-holes all very similar in shape, size and profile. Their relationships to the stratigraphy have been destroyed by later recutting so it is not clear whether they had been cut directly into the floor of the quarry or after the accumulation of a greyish-brown silt (1633). The silt, 20–40 mm thick contained a high concentration of charcoal fragments and a few pieces of burnt clay. In all probability the silt had accumulated before the construc-

tion and the succeeding layer, a worn and well trampled chalk spread (1632) was laid as a floor to the early structure.

The chalk spread was cut by four post-holes (additional to those of PS381). Two were probably directly associated with the building: ph 9894 occurred about half way along the north side and may have been connected with steps or providing support for a door above. The other, ph 9877 was smaller and occurred within the setting of six posts. The fact that the chalk floor (1632) extended both inside and outside the structure suggests that the lower part of the building was open, though probably utilized in some way, with a raised upper storey. Layer 1632 is stratigraphically equivalent to layer 1635 to the south (in F271) thus establishing the contemporaneity of PS381A and PS380. Over the chalk floor a layer of silt (1620, 1623 and 1647) had accumulated around PS381. The silt was pale brown with very little chalk but occasional fragments of charcoal and burnt flint. A thin and discontinuous chalk lens noted within 1620 and 1623 may represent trample associated with the digging of the post-holes of the second phase (B) of PS381.

The rebuild of the post structure (PS381B) involved a change of plan from a four- to a six-post structure, with a slight increase in area. This implies a complete rebuilding rather than simply a replacement of rotten posts. This second structural phase was contemporary with an extensive chalk spread (1665, 1648, 1653, 1568, 1625) composed of lumps of chalk up to 60 mm in a matrix of compacted chalk. The surface varied from being highly trampled and worn to being rough and uneven. To the north of the post structure was a slightly hollowed area; a patch of larger, rounder chalk lumps had been dumped here suggesting that the entrance was on this side, the greater strength of the floor anticipating greater wear.

On the west side some of the chalk spreads were integral with the first surfacing of a pathway (road 6) which was created and maintained along the western edge of the quarry hollow. The earliest chalk surfacing (1683=1904) overlay a grey chalky silt (1688=1905) which had accumulated on a natural ledge created along the quarry edge. The surface of the first 'metalling' was worn and trampled. Once established this 'road', remetalled on a number of occasions, remained in use throughout much of the rest of the fort's life. A hearth F305 was established on the natural chalk at the side of the road.

The chalk floor around PS381B (1665), the earliest road surface (1683) and the hearth (F305) were sealed by a pale brown chalky silt (1656). Above this was a localized patch of compacted chalk (1661) covered in turn by greyish-brown silt (1660). Sealing this, and the rest of 1656, was an elongated chalk spread (1643 and 1657) aligned with the west edge of the quarry. Cutting through this was a small beehive pit (P2573). Next came a further layer of greyish-brown silt (1644) mixed with some occupation debris. The layer is significant in that it covered the area of F286, north of PS381, and ran across the neck of chalk to F272: it was continuous with 1649, 1640, 1654, 1645 and 1659. Together this blanket of silt forms a convenient horizon dividing phases g-i from phase j. It was evident that PS381B continued in use and was probably still standing whilst the silt accumulated since, it will be argued below, the building was reconstructed in phase j as PS381C.

Quarry F272.

To begin with there was little activity in the base of the quarry apart from the digging of several small post-holes. Erosion of the western edge of the quarry gave rise to a chalk shatter (1909) which merged into a more silty deposit (1864) in the centre. Erosion and frost shattering continued creating a rather finer and more silty shatter (1906) which was equivalent to a yellowish-brown silt (1914), derived from the weathering of the rampart, along the east side of the quarry. Layer 1914 graded to the south, to become 1858 — a paler version with a little more chalk and charcoal. Following this initial phase of erosion a pit was dug (P2583). After it was abandoned it was left to erode and fill up naturally, suggesting that there was still little activity in the quarry.

After this a phase of intensive occupation began with the construction of a five-post structure of type K (PS386). It was relatively small, measuring 2.5 by 2.7 m, but with distinctive deep post-holes suggesting a substantial superstructure. From the number of recuts three distinct phases could be defined. The relationships of the post-holes to each other and to the associated layers was not very distinct but the indication is that the building remained in use throughout phases g-i. The fact that the central post was not replaced could be thought to suggest that the structure had not been rebuilt but simply that the corner timbers had been replaced (the central post having remained in use longer since it was protected from weathering). Alternatively the structure could have been totally rebuilt changing from a five- to a four-post configuration.

To the south of the building the early silt layer (1858) was sealed by a chalk spread (1857=1923) composed of small rounded chalk lumps. The surface was uneven but showed signs of wear and had been weathered. This was the first of a series of superimposed layers of chalk, alternating with silt, which built up to the south of PS386. First came a layer of pale brown silt (1678). This was followed by a chalk spread (1677=1694) which extended up the slope of the quarry. In the quarry bottom its surface had been worn smooth but higher up the slope it became more eroded and weathered. Overlapping this layer (in the hollow which still existed over the fill of the early quarry F318) was a patch of occupation debris (1849) containing charcoal, pottery, bone, daub and burnt flint. This was sealed by a grey chalky silt (1688) and a resurfacing (layer 1683=1904) of the path (road 6). Above the main chalk spread, 1694, a pale brown silt (1693=1676) had accumulated and this, in turn, was sealed by another spread of chalk rubble (1692) with a well worn surface.

This continual resurfacing of the area immediately south of PS386 presumably represents the need to keep the approach to the building serviceable. Less attention was paid to the east side of the quarry hollow where the accumulating layers were largely natural. Here the lower silt (1914), which pre-dated the building, was covered by a dump of angular chalk rubble (1920) approximately equivalent to 1923. Ph 9967 was cut through it. Then followed a layer of chalky brown silt (1912) containing some larger lumps of chalk and a moderate quantity of charcoal and animal bone. It had accumulated at the edge of the quarry and must have resulted partly from natural silting and partly from human activity associated with PS386. Over this, and outside the post structure, was a discontinuous chalk spread (1911). This was sealed by a thick deposit of brown clayey silt (1910) mixed with eroded chalk, the entire layer deriving from the erosion of the rampart. The equivalent layer on the west side of the quarry was a greyish-brown chalky silt (1905) which sealed P2583 and was equivalent to 1688. Over this was a further trampled chalk spread (1904 equivalent to 1683) which formed part of the surface of the path (road 6) the later layers of which have been described above in the consideration of quarry F286.

Towards the middle of the quarry hollow the chalk spread (1911) was overlapped by an occupation-rich silt (1913) containing charcoal, baked clay and other occupation debris. This layer appears to have accumulated within and around the post setting of PS386 throughout the life of the building, but before this the corner posts had been replaced and the central post was removed altogether. The high occupation content in the layer suggests that the area beneath the raised floor of the structure was used for some kind of domestic activity. It was probably at about this time that Gully complex 33 was cut. This comprised a curving gully (G321), dug around the south-east side of PS386, terminating on a two-post structure (PS388), possibly a gate, which underwent rebuilding on two or three occasions. G321 cut layer 1910 but its relationship to the chalk spreads on the south side had been destroyed by later features. PS388 was probably cut from the level of 1692 or 1675, the subsequent chalk spreads and silts accumulating around the standing posts.

The uppermost chalk spread described above, immediately south of PS386 (ie layer 1692) was covered by yet another chalk spread (1675). Then followed in succession an accumulation of brown chalky silt (1674), a trampled chalk spread (1673), a pale brown silt (1685=1922) and a more extensive chalk surface (1684=1915) which covered the flat area in the base of the quarry and extended around PS388 up to the edge of PS386. The surface of this layer was smooth and heavily trampled and appears to relate to the final phase of PS386. Cut into this layer were three post-holes two of which were sufficiently similar to suggest being a two-post structure here designated PS387. A small hearth (F345) was built in a hollow scarped into the surface on the line of the south side of PS386. Just to the south of it was a short gully (G322), 0.28 m wide and 0.22 m deep associated with a short mound of chalk (1921) presumably derived from the digging of the gully. The function of this complex of features is not immediately apparent but the fill of the gully contained a quantity of occupation debris suggesting some form of outdoor domestic activity.

This assemblage of features together with the floor with which they were associated (1915=1684) were sealed by a layer of greyish-brown slightly clayey silt (1918=1672) varying in thickness from 50 mm in the south to 200 mm in the north. Cutting it was a single post-hole, ph 9968. Then followed the deposition of a chalk spread (1917=1669) tightly packed and with a well worn surface. This was the final spread in the resurfacings outside PS386 that was contemporary with PS388.

The neck between the two quarries F272 and F286. On the neck of chalk to the south of F272 there were a few post-holes cut into the natural chalk and sealed by a chalky brown silt (1644=1645). In addition there was a two-post structure, PS393, and two four-post structures, PS383 and PS394, whose interrelationship is impossible to determine but both were cut by P2586, which provides a *terminus ante quem.*

Following the disuse of these structures the area appears to have been used for pit storage with P2564, P2567, P2570, P2586 and possibly P2573, dating to this phase. P2570 was cut through a silt layer (1664=1666=1667) with a few lenses of occupation material which extended around the northern edge of this area. This silt sealed the chalk spread 1669 and ph 9911 of PS393. Stratigraphically it was equivalent to the silt in the bottom of the quarry hollow (1916) but there was no direct correlation. Above the silt (1664=1666) were two small chalk spreads 1668 and 1670 and above 1670 was a further chalk spread 1663 which was equivalent to 1908. Another isolated remnant of chalk (1919) must have been roughly contemporary. Together these chalk spreads were similar in composition to the earlier chalk spreads outside PS386, and date to the final use of the post structure.

A small oval pit, P2571, cut the chalk spread 1663 and was in turn sealed by a very extensive layer of silt (which was given several different numbers) and covered much of quarry F272, part of the neck of chalk to the south and also part of the quarry F286. In F272 the silt (1899) sealed layers 1908, 1913, 1919 and PS383. It was equivalent to 1640 = 1645 = 1649 = 1654 = 1659 = 1644 described above under F286. It had slumped into the top of the silted up P2567 and over the area north of this. Overall this blanket of silt was remarkably consistent comprising a pale brown silt with a few small rounded chalk lumps and very occasional flecks of charcoal. It must have accumulated during a period of inactivity.

The reassessment of the stratified sequence (sequence A) in the contiguous area immediately to the south is presented in detail in the fiche section (Fiche 25:B1-10).

Summary of phases g-i.

Standing back from the mass of detail so briefly summarized above it is possible to offer certain generalizations. In the first place, at this stage the site divides itself into four separate locations: Qh F271; Qh F286; space between F286 and F272; and Qh F272. In the beginning of the period g-i the stratigraphy was discrete but as time went on, and the quarries filled with debris, layers became more extensive and some cross correlations were possible. The period ends with a phase of widespread abandonment and silting the only structure surviving (at least as standing timbers) being PS381 in F286. Table 5 offers a tentative correlation:

Table 5. Correlation of features in phases g-i

phase	F272	F272/–/F286			F286	F271
i2	silt =	silt	= silt			silt
i1	PS386C/GC33	PS387	PS393	P2570 P2564 P2567 P2586		P2562 P2561 P1137
h	PS286B/GC33	PS	PS381B			chalk levelling
g	PS386A	–	–		PS381A	PS380

For a more detailed assessment it is necessary to refer to the matrix on fiche 26. The accompanying plans (Figs 4.107 and 4.108) offer a visual summary. More detailed plans of the stratigraphy associated with the individual post structures will be found in the description of post structures offered above (Section 4.2.3) and the accompanying fiche (Fiches 19–22).

Phase j (Figs 4.109, 4.110)

In the excavation of 1986-7 phase j proved to be complex: it was thought advisable, therefore, to divide it into two separate stages j 1 and j2.

The principal features of phase j1 are summarized in Fig 4.109. Briefly: in F271 the area seems to have been left as an open space associated with PS379 on its south edge; in F286 the old post structure was rebuilt (or more likely

the foundations were renewed) as PS381C; area F286-F272 served as an open working area designated CS58; while in F272 a circular house, CS60, was built. It will be convenient to begin the detailed discussion with PS381C in F286.

The rebuilding or refurbishment of PS381 involved the use of rather larger timbers than in the previous phases giving the structure increased overall dimensions though it is possible that the superstructure remained largely unaltered. The first chalk spread to be laid to the north of the building (1637) extended up to posts ph 9876 and ph 9827 and was integral with the post-hole packing. The surface was extensively worn suggesting an approach to the building from the north side. Over this had been dumped a layer of chalk rubble (1619) which extended both inside and outside the structure. Since its surface was uneven and unworn it seems probable that the dump had been deposited for some reason just before the building finally went out of use. On the west side of PS381 there were two chalk spreads, 1621 and 1622, roughly contemporary with the final phase of the structure. From their location it is evident that they represent surfacing for the path (road 6).

Sealing PS381C and the associated chalk spreads was a layer of silt (1614=1615=1616), layers 1614 and 1615 forming a continuous strip around the west edge of the quarry while 1616, with a greater density of occupation debris, sealed the area of PS381. It is possible that 1616 began to accumulate a little earlier than 1614=1615. These silts were stratigraphically equivalent to 1583 in the adjacent quarry, F271, and mark the end of phase j1.

During this phase, in F271 to the south, a thick layer of chalk rubble (1613) was dumped and spread to level the area: it averaged 0.3 m thick and was composed of rounded chalk lumps upto 150 mm in size. This layer was continuous with 549, 552 and 508 in F62. For the most part it was largely unworn (except where 549 was utilized as the floor of CS2). Layers 552 and 508 formed a strip along the west edge of the quarry representing the path (road 6). This open area appears to have formed some sort of yard associated with PS379, a large type K seven-post structure 3.7 m square. Though aligned on road 6, the building appears to have fronted onto the open area to the north. The recutting of most of the post-holes, suggests the structure was of two phases, though this may only have involved repairs to the supporting posts rather than a complete rebuild. Most of the structure itself lay in F62 (the 1978 area).

Sealing the chalk make-up (1613) was a pale brown silt (1612) above which was a thin charcoal-rich lens (1608) incorporating burnt daub, and burnt flint. This was sealed by another silt (1611) with a rather more chalky silt (1609) above. All these layers above 1613 were confined to the northern end of F271 where the layers slumped into P2561 and 2562. Apart from this the general area remained clear until a substantial silt (1583) was allowed to form blanketing the entire area. This was equivalent to 547A (in F62) and 1615 (in F286). It contains a high concentration of occupation debris and marks the end of phase j1.

Turning now to the area north of PS381, the silt which had accumulated over the neck of chalk between F286 and F272 was sealed by a series of chalk spreads (1662, 1639, 1641 and 1642) with one interleaving lens of silt (1646). It seems probable that these layers represent a consolidation of the ground immediately prior to the creation of an open working area, called here CS58. A detailed description of CS58 is given above, suffice it to say here that the main structural elements were a hearth (F285), an oven (F284), a pit (P2560), a two-post structure (PS384) and several isolated post-holes.

Further to the north, in F272, the layer of silt which marked the end of phase i (ie i2) was followed by the construction of a circular house CS60.

In summary, in phase jl the area can be divided into a northern and a southern half: in the northern half there was intense occupation activity manifest in the house CS60 and the working area CS58 while in the southern half activity was briefer and less intense and was followed by a period of inactivity during which time a thick layer of silt was allowed to accumulate.

Phase j2 saw large-scale rebuilding but essentially within the same grid of spatial organization which had been established in phase j1. A comparison of Figs 4.109 and 4.110 is sufficient to demonstrate the point.

The four structures lying within the limits of the 1986-7 excavation, CS2, CS56, CS57 and CS61, have all been described in considerable detail above and it is unnecessary to repeat the descriptions here. Suffice it to say that (starting from the north): the house CS60 was replaced by another somewhat larger, CS61; the working area CS58 was replaced by a house CS57; the area once occupied by PS381 was used for a new house CS56; the open area south of this was maintained as an open area; and PS379, to south again, was replaced with a house CS2. It might also be noted that the house CS3/4, excavated in 1977-8 replaced earlier post structures.

Following the disuse of CS2, CS56 and CS57 a thick layer of silt was allowed to accumulate. Over CS2 it was not differentiated in excavation from 523, with which it merged imperceptibly but the remnants could be observed under the packing of the post-holes of PS1. This has been redesignated 523B. Over the area of CS56 the silt continued as layers 1506 and 1581 and outside the house to the west and south as 1540=1559. Over CS57 it was designated 1571=1577. For the most part these accumulations consisted of a pale brown silt with small fragments of chalk and varying concentrations of charcoal and other rubbish. Layer 1581 contained flint nodules and some chalk blocks derived from the erosion of the rampart.

The stratigraphy over CS61 was more complex. Here the equivalent silt (1859) contained a considerable concentration of occupation material and was regarded, during excavation, as an occupation deposit within the house. The simplest explanation is that it originated as the occupation on the floor but was subsequently exposed and weathered at which time a silt component was added. Over this a cleaner silt layer (1856) began to accumulate but was interleaved by two discontinuous chalk spreads (1854 and 1855). The equivalent to 1856 on the east side of the terrace for CS61 was a rather more chalky silt (1863 and 1862) which had eroded from the rampart. It is the upper part of 1856 and 1863 which are the best equivalents to the final silt of phase j2 noted further to the south.

Phase k (Fig 4.111)

Phase k represents a significant reorganization after a period of abandonment. The terrace occupied by CS2 was now used for a new post-built structure, PS1, constructed on a base of seven large post-holes measuring 3.8 m square. It is possible that PS1 was constructed directly on the floor of CS2 with some silting taking place before later patching was placed around the top of the post-holes. No floor layers were associated with it and the silt (523B) which had begun to form at the end of phase

j2 simply continued to form around the posts (523A). Immediately to the north of it was a completely open area where again the silt of phase j2 (1559) continued to develop.

The terrace created for CS56 in phase j continued to be used (CS59) but there were no structural elements erected, simply a roughly circular chalk spread (1506 and 1564) covering the floor area of the old house, from the level of which a large pit, P2549, had been dug. Another pit, P2550, was roughly contemporary. The simplest explanation for this arrangement is that the old house terrace was seen to be a convenient place to site a large pit to provide a flat working area nearby possibly for threshing. The details of CS59 are given above.

Immediately to the north, the site of CS57 was utilized for another circular house, CS55, the details of which are given above. The house was approached by a series of chalk spreads (1524, 1531, 1534, 1536) representing the continuous remetalling of the path (road 6).

North of CS55 the area previously occupied by CS61 was completely reorganized. A new roughly level terrace was created (F281) which necessitated the cutting back of some of the southern edge of F272. The levelling process seems to have been intended to provide a flat surface which was subsequently surfaced with chalk spreads: there was no associated structure. Irregularities in the surface, especially over the soft fillings of the earlier gullies, were made good with tips of chalk rubble (1590, 1593, 1544). The surface of 1544 was worn smooth and is equivalent to 1852. Above this a layer of brown silty soil mixed with chalk blocks and flints (1690=1696) had been dumped. This layer was similar to and probably continuous with 1545. Then came two chalk spreads (1543 and 1695=1851) before the area was levelled again with a mass of redeposited chalk rubble, soil and flints, variously numbered to record the differences (1850=1699=1639=1698=1689=1585=1589) but all essentially part of the same process of levelling. Overlapping 1589, at the southern edge of F281 was a rubbish tip (1588) consisting of a dark greyish-brown silt mixed with flints, charcoal and quantities of animal bone.

On the west side of the made-up area the chalk spreads were cut by P2575, the upper edge of which was surrounded by a circular hollow with a trampled base presumably resulting from its use.

On the eastern side of F281 the uppermost chalk, overlying the main spread was layer 1691 the edge of which contained the scarped edge of F281. This layer was probably equivalent to a dump of subangular chalk blocks, 1535, the surface of which was puddled and trampled.

The complex of chalk spreads and P2575 were sealed by a light greyish-brown silt (1680) containing a scatter of small chalk lumps and occupation debris. This in turn was sealed by a thick layer of silt (1679) which marked the end of activity in this part of the quarry hollow. The other structures to the south went out of use at the same time and were followed by a period of inactivity during which silt accumulated. CS55 was sealed by a greyish-brown silt (1525=1529). This extended across the south edge of F281 and merged with the base of 1679. No silt survived over CS59 but this may be because the area was subsequently terraced for a new building. Over PS1 lay a dark greyish-brown silt (523A=1512).

Phase l (Fig 4.112)

In this phase a single large circular house (CS54) was built covering the area occupied by CS59 but extending beyond it. The house has been discussed in detail above. It was rebuilt on at least one occasion. CS54 is very similar to CS7/8 some 17 m to the south. CS7/8 was also rebuilt. It is tempting therefore to suggest that the two houses may have developed in parallel with each other.

To the south of CS54 were a series of chalk spreads, silts and occupation layers. The lowest chalk spread (15 17) sealed the silt (523A=1512) which in turn sealed PS1. It was equivalent to the chalk spread (1521) immediately outside the door of the house. Above this was a thin charcoal-rich occupation layer (1511) continuous with 522=456. Then followed another chalk spread (1513) continuous with 533. This was roughly equivalent to 1510, a greyish-brown silt containing much charcoal and a few fragments of daub and burnt flint. Above 1510 was a thin skim of black silt and charcoal (1508). Finally came a small chalk spread (1501). There were no features in the area between the two houses a fact which, together with the stratigraphy described above, suggests that the area remained an open working space throughout phase 1, chalk spreads being laid as and when local conditions demanded resurfacing.

To the north of CS54 were a series of chalk spreads associated with pit digging. The earliest pits were P2545 and P2547: the latter was cut by P2548. Ph 9809 was also a small pit of this date. At the time of the pit digging, just to the north of the group, a crescent-shaped mass of chalk rubble (1533) was dumped. This was sealed by a thin lens of grey chalky silt (1532) which separated it from a further chalk spread (1530), composed of large blocks up to 300 mm in size (and sealing ph 9809). These dumps of chalk, probably deriving from the digging of the pits, slope down to the north and the west and were cut by P2544. These layers and all the pits were sealed by another extensive chalk spread (1516) cut by four post-holes two of which were of similar proportions and may have formed a two-post structure (PS382). Above the chalk spread, and sealing the post-holes, was a thin layer of grey silt (1515) mixed with some occupation debris. Above this was a final tip of chalk rubble and some flints (1514). The group of pits together with the associated dumps of chalk suggest that the area was reserved for grain storage in the early part of the phase but later was levelled and used as an open working space.

This phase represents the final occupation of the quarry hollow.

Phase m

Over the northernmost part of Quarry F272 over F281 silt (1679) had presumably started accumulating at the end of phase k. To the south of this, over 1514, a similar silt (1502) began to form in phase m. It was greyish-brown and contained small fragments of chalk and flints but within it at one point was an isolated dump of large chalk blocks (1509). The equivalent silts to the south, over CS54, were 1500, 1504, 1503, 1499. They were grey and chalky with some occupation debris probably derived from underlying levels and within 1499, where the layers had slumped into the top of P2549, was a mass of flint nodules which had tumbled from the rampart.

In the vicinity of CS54 there is clear evidence that the silt had been ploughed. A series of plough (or ard) marks (F269) were seen scored into the underlying chalk floors (1505 and 1521) and continuing up the west side of the quarry hollow in the chalk spread of the path (road 6). The clearest were running north-south parallel to the length of the quarry, which at this stage was still a substantial hollow. Much fainter were the grooves

QUARRY HOLLOW
1986-7
ALL FEATURES

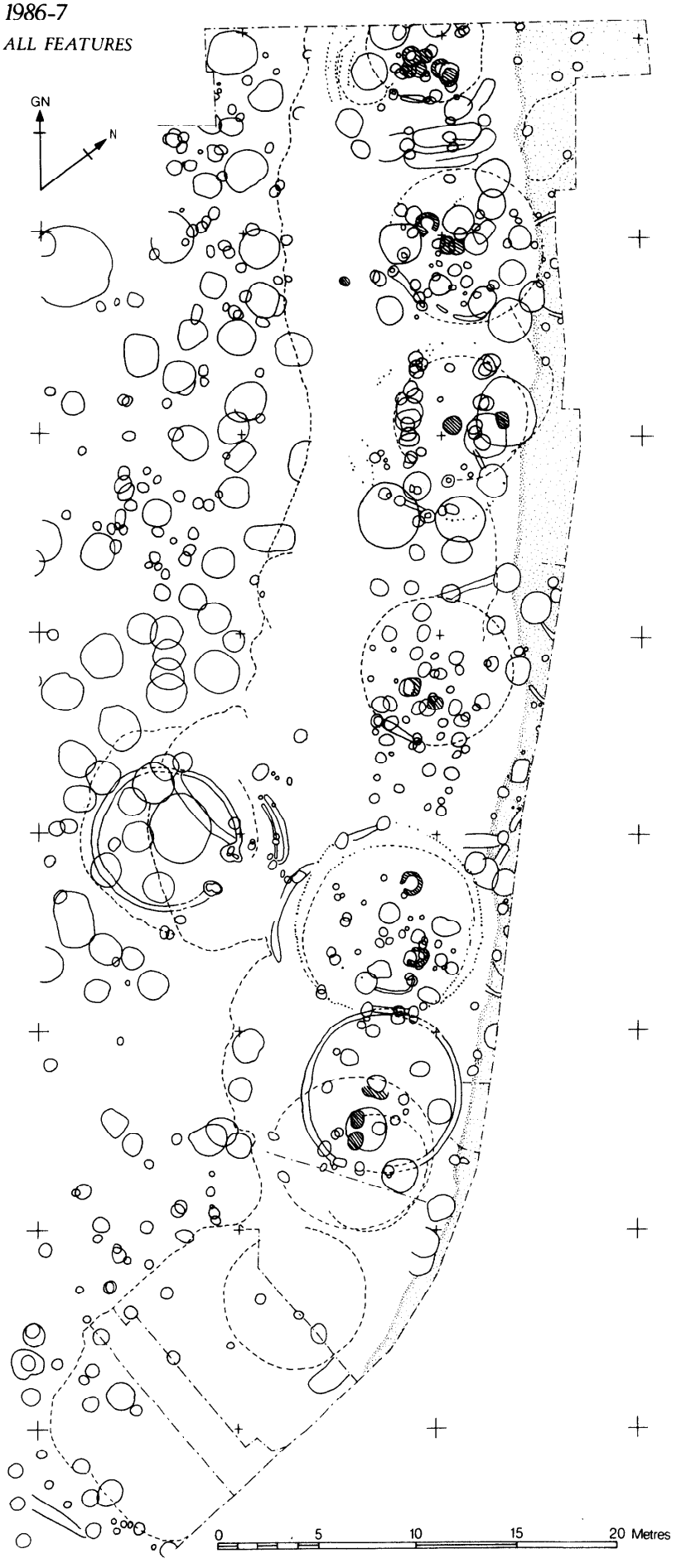


Fig 4.104

QUARRY HOLLOW
1986-7
PHASE a-e

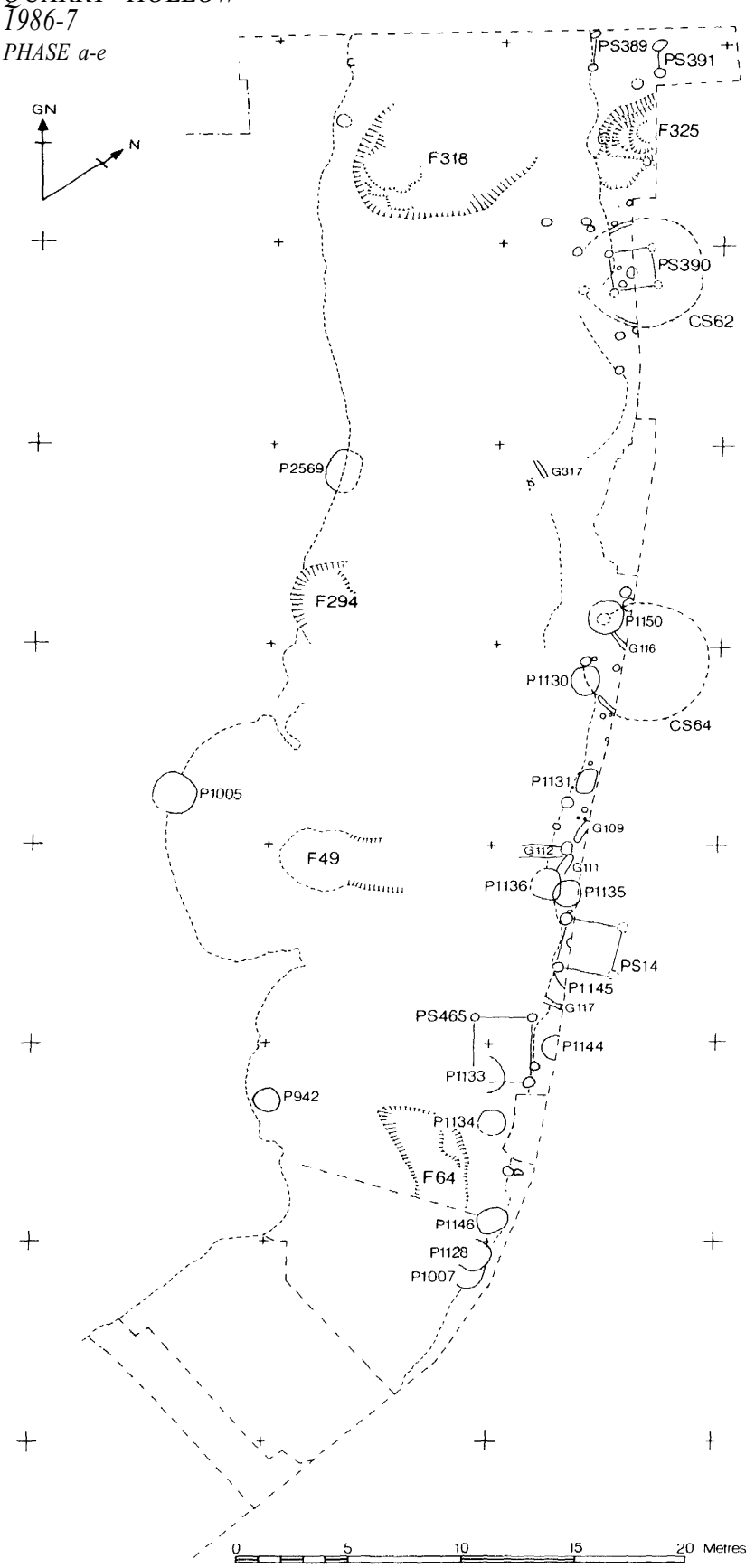


Fig 4.105

QUARRY HOLLOW
1986-7
PHASE f

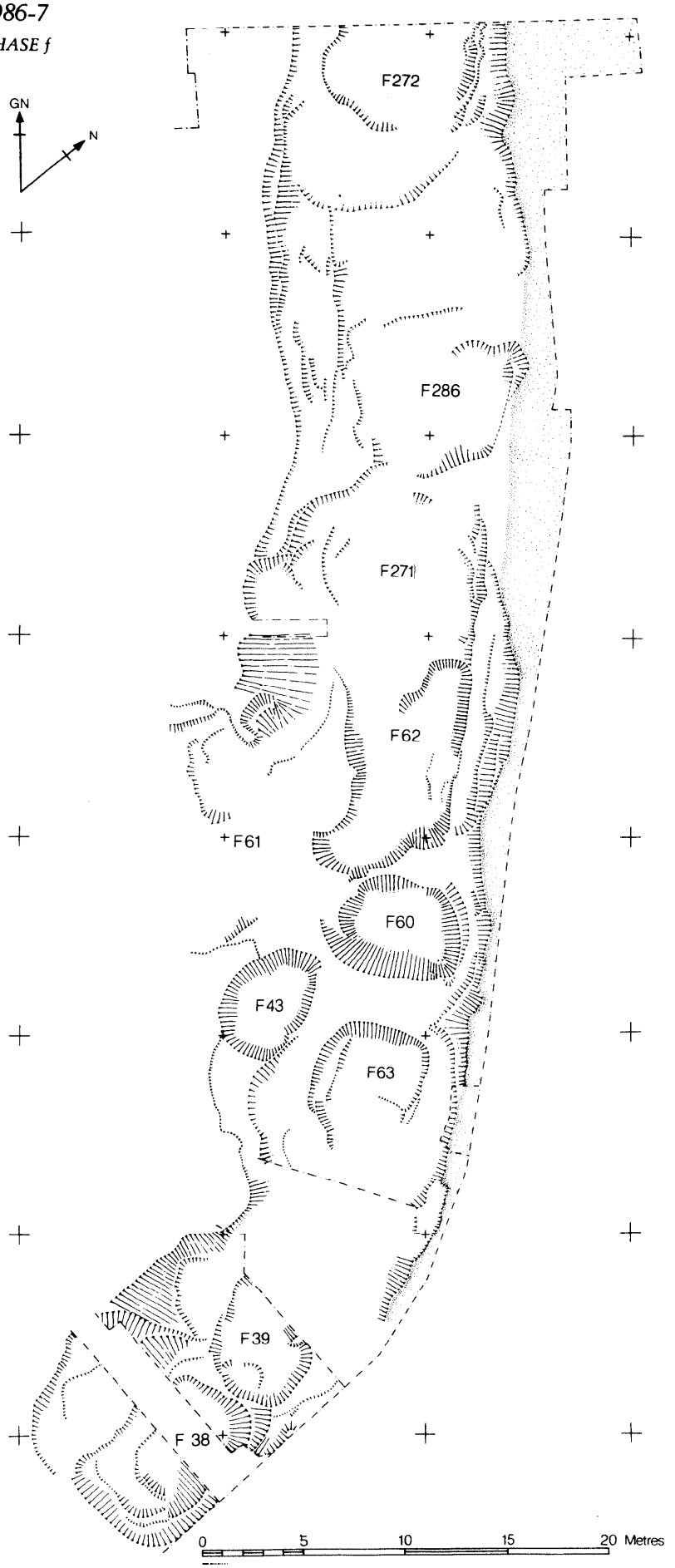


Fig 4.106

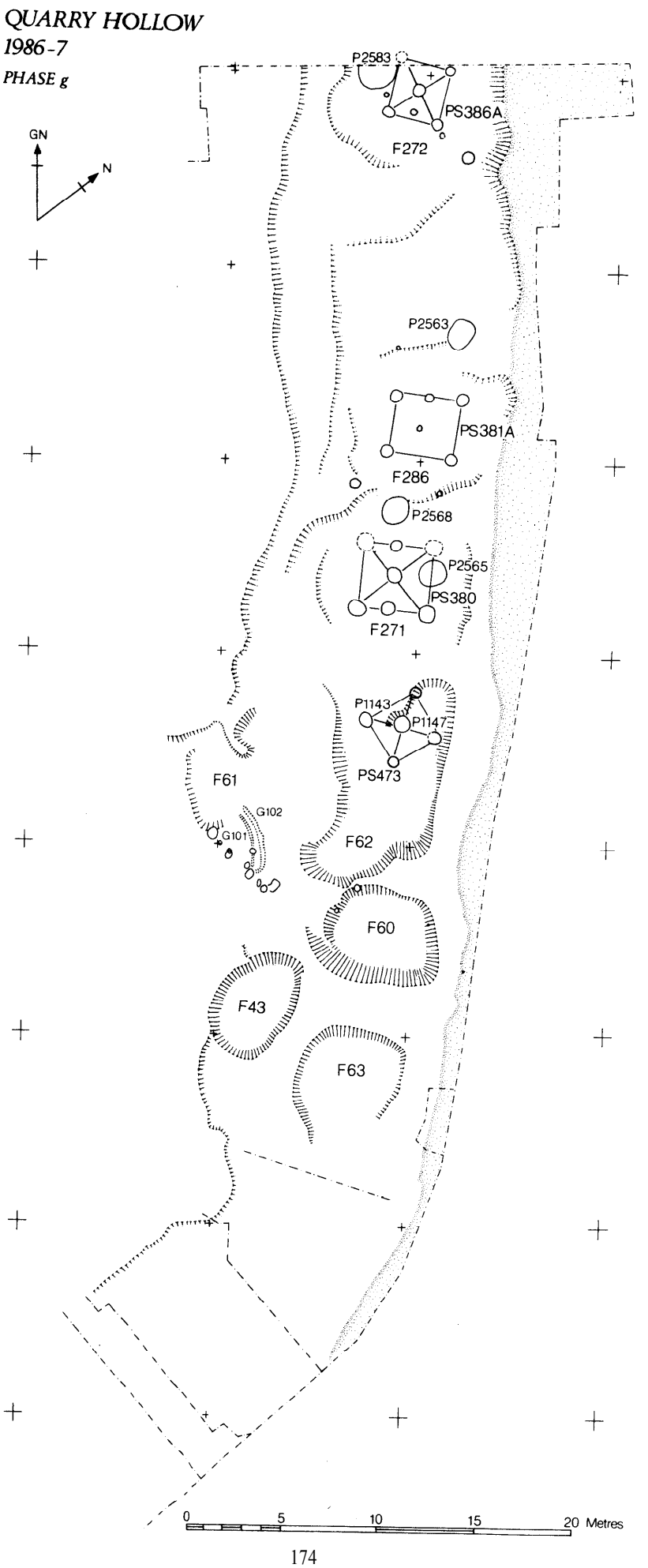

QUARRY HOLLOW
1986-7
PHASE g
GN
N
P2583
PS386A
F272
P2563
PS381A
F286
P2568
P2565
PS380
F271
P1143
P1147
PS473
F61
G102
G101
F62
F60
F43
F63
0
5
10
15
20 Metres

Fig 4.107

QUARRY HOLLOW
1986-7
PHASE h-i

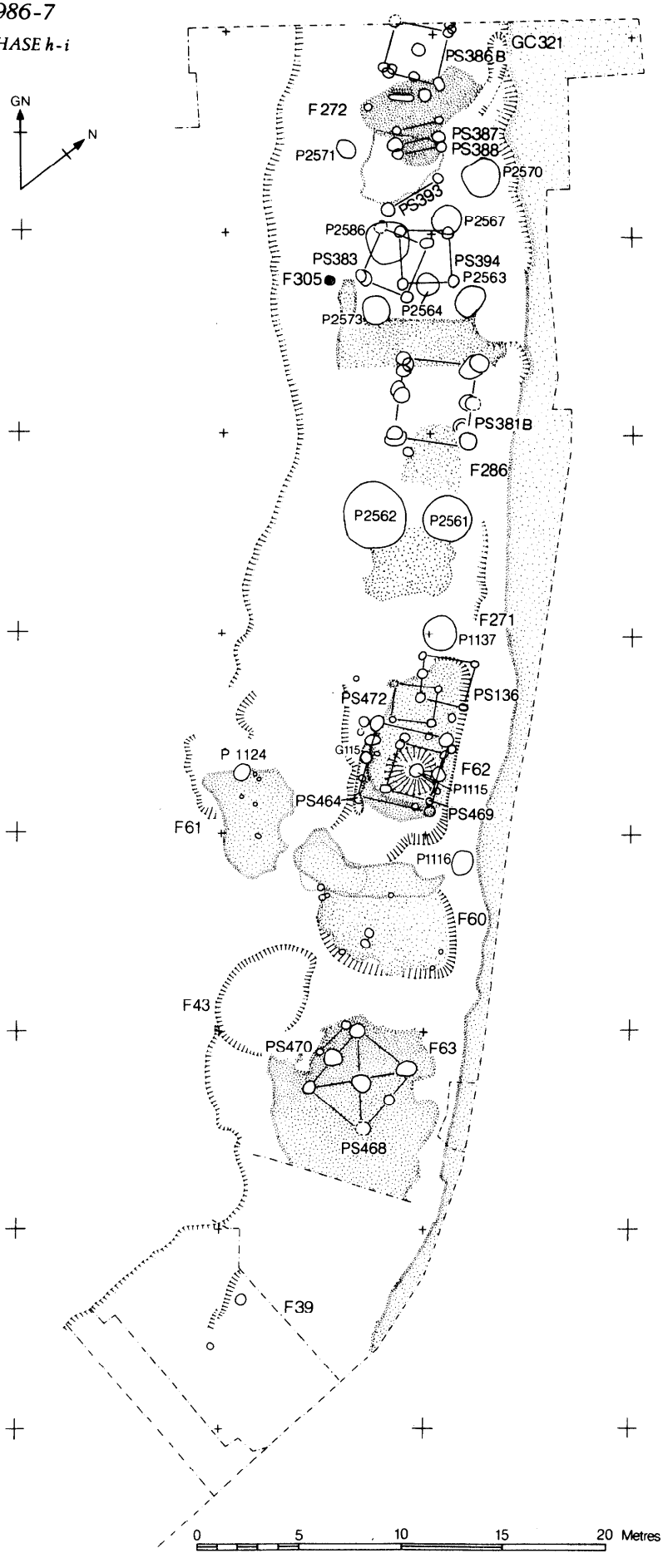


Fig 4.108

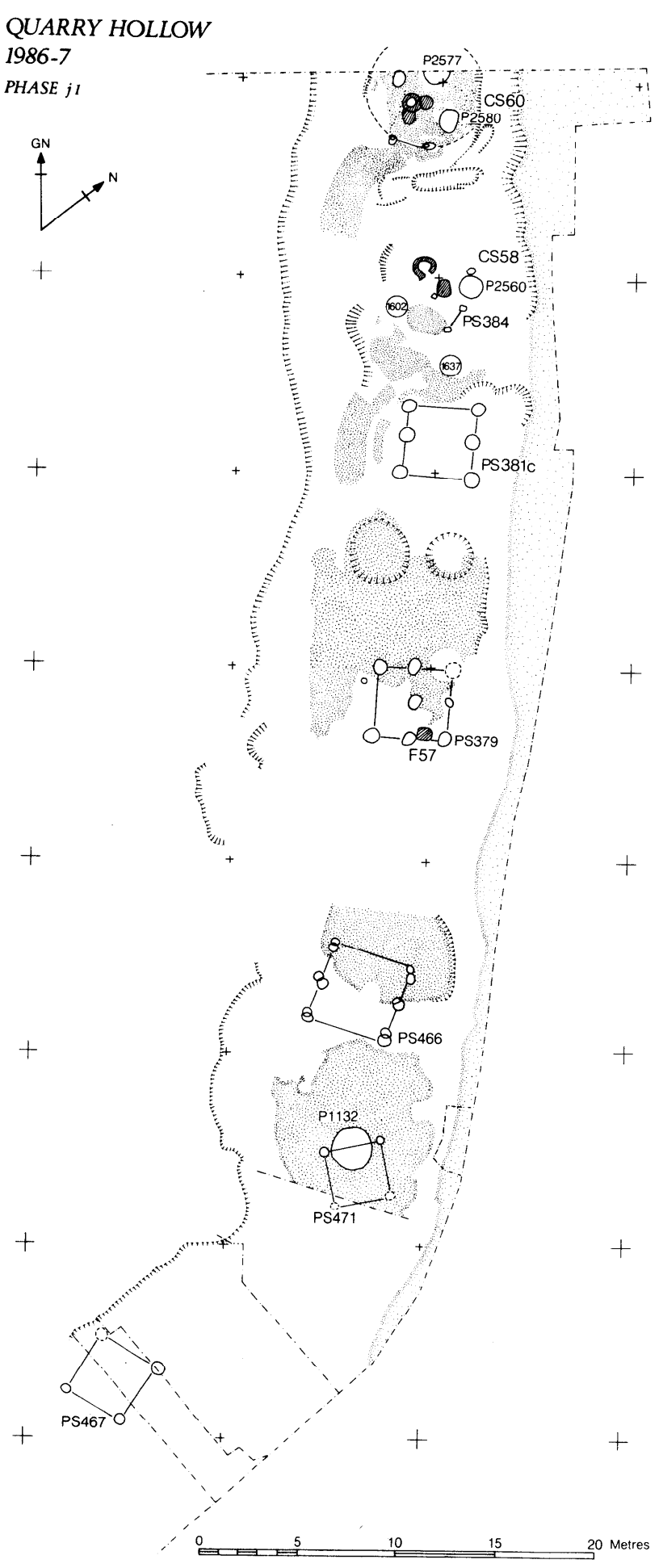

QUARRY HOLLOW
1986-7
PHASE j1
GN
N
P2577
CS60
P2580
CS58
P2560
1602
PS384
1637
PS381c
PS379
F57
PS466
P1132
PS471
PS467
0
5
10
15
20 Metres

Fig 4.109

QUARRY HOLLOW
1986-7
PHASE j2

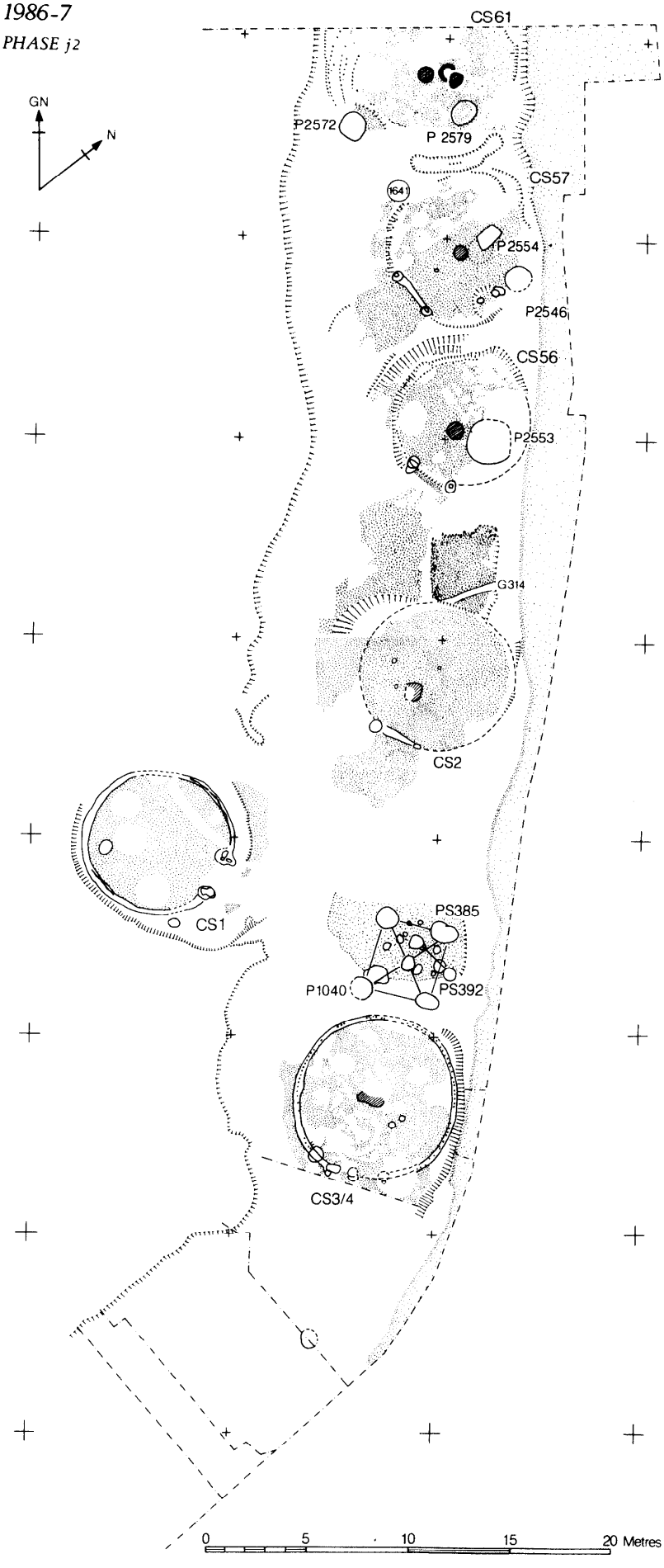


Fig 4.110

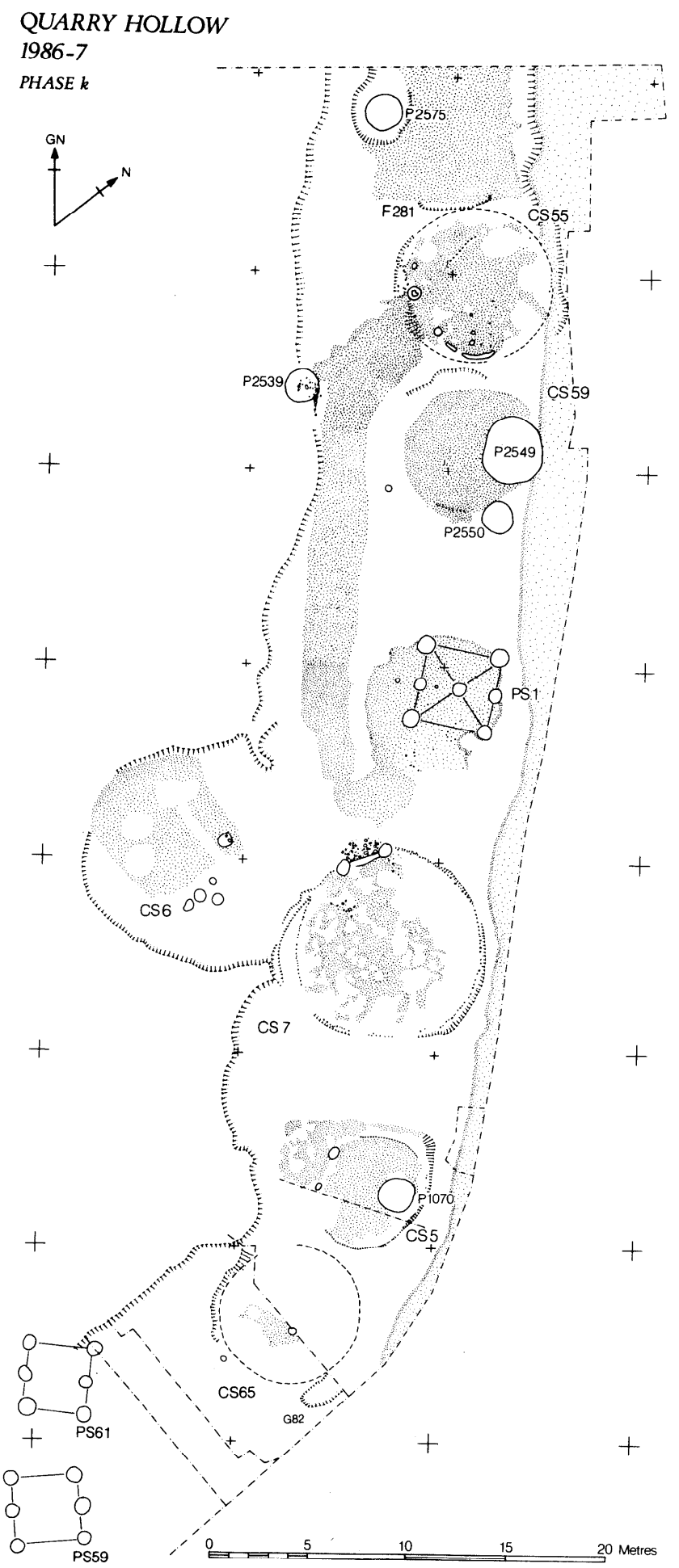

QUARRY HOLLOW
1986-7
PHASE k
GN
N
P2575
F281
CS55
P2539
CS59
P2549
P2550
PS1
CS6
CS7
P1070
CS5
CS65
G82
PS61
PS59
0
5
10
15
20 Metres

Fig 4.111

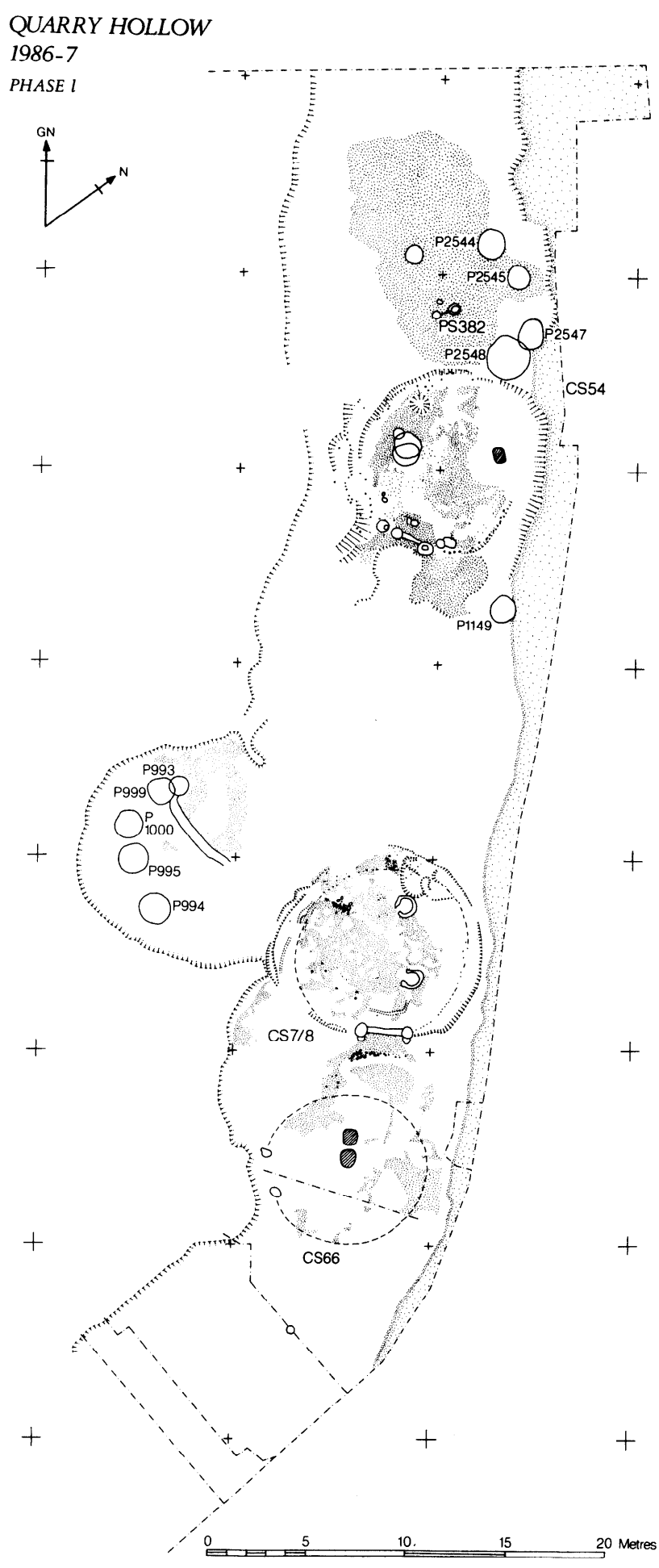

QUARRY HOLLOW
1986-7
PHASE 1
GN
N
P2544
P2545
PS382
P2547
P2548
CS54
P1149
P993
P999
P 1000
P995
P994
CS7/8
CS66
0
5
10
15
20 Metres

Fig 4.112

running east-west which appear to have resulted from just the tip of the ard scoring the chalk and may therefore have been later after a greater depth of soil had accumulated. The best preserved were 70–100 mm wide and of variable profile though generally of V-shape: there was no evidence to suggest that they were asymmetrical. In those places where only the tip of the ard had scored the chalk the groove was 15 mm wide. The depth of the marks varied from 1–60 mm.

Since the activity of ploughing implies a certain depth of soil, it is unlikely that the ard marks immediately post-date the occupation of phase 1. It is possible that they represent farming activity associated with the farm established in the southern part of the fort in the latest Iron Age or early Roman period.

One feature which may have been contemporary with the ploughing was a gully G313 running at right angles to the rampart but turning northwards at the east end.

Sealing the final activity in the quarry was a grey-brown silt which had accumulated to a depth of *c* 1 m before the surface was stabilized by vegetation.

Summary of stratified sequence

From the above description it will be evident that the sequence observed in the 1986–7 excavation was complex — the most complex found at Danebury. It can however be resolved into a series of distinct phases which are best summarized in Table 6.

Summary of dating evidence

The ceramic dating evidence is summarised on Fiche 25. Phases a-e contain nothing later than cp 3. Phases g and h produce some pottery of cp 6. Cp 7 pottery appears first in phase 1.

4.3.7 The excavation 1984-5: sequence E (Figs 4.113–4.122 and Pls 21 and 37)

In 1984 and 1985 an area was excavated in the north-east corner of the fort immediately behind the rampart, extending from the rampart tail for a distance of about 20 m, providing a continuous arc of some 60 m in length. Over much of that area stratified deposits were recovered. An additional area, roughly 20 by 20 m, was examined immediately adjacent to the main area but here the natural chalk lay immediately below disturbed topsoil. The discussion to follow will be largely restricted to features found in the well-stratified zone.

The principal characteristics of the area are the rampart which bounded it on the north and east and the stratified occupation deposits preserved immediately behind. In this it is similar to other parts of the northern periphery of the fort the only significant difference being that the quarry hollow, dug to provide material for rampart period 3 was restricted to two deep delves, F264 at the north-western limit of the area and F223 at the south-eastern end. Between very little of the original pre-rampart period 3 ground surface has been destroyed.

In order to facilitate discussion the features of each period will be described in a clockwise direction by reference to the five zones NW, N, NE, E and SE, into which the occupation naturally falls. These zones are indicated on Fig 4.114.

Pre-rampart 3 occupation: phases a-d (Fig 4.115)

Nowhere, within the excavated area, was the rampart of period 3 removed to expose earlier features, though a few layers were observed in the sections of pits and will be described later. For this reason we are ignorant of the rampart sequence but given the two sections exposed, in 1975 to the west of the excavation, and in 1987 to the south, we may assume the following:

pre-rampart ground surface
- a rampart 1
- b occupation
- c possibly rampart 2 and discrete quarries
- d occupation
- e rampart 3 and quarry hollows

Thus the pre-rampart 3 features span at least four significant phases covering a period of roughly two centuries and may be expected to show complexity and intercutting.

In the NW and SE zones the later quarry hollows have destroyed the original ground surface, removing all early stratigraphy and shallow features, but in between, in zones N, NE and E a number of structural details survive which can be assigned to the early period. Because of the

Table 6 Correlation of structures in sequence A-D

m			ploughing								m
l		pits	CS54			pits	CS8	CS66	open	PS61B	l
k	F281	CS55	CS59	open	PS1	open (CS6)	CS7	CS5	CS65	PS59 PS61A	k
j2	CS61	CS57	CS56	open	CS2	CS1	PS392 PS385	Cs3/4	open	open	j2
j1	CS60	CS58 + PS384	PS381C	open	PS379	open	PS466A + B	Pit and (?) PS471 pit	open	PS467	j1
i2											i 2
i1	PS386C	PS387 PS393 pits	PS381B	pits	PS136 PS464	open	open	PS470 PS468	open	open	i1
h	PS386B	PS388 PS383 PS394	PS381B		?P472 PS469 Pits		open	open	open	open	h
g	PS386A		PS381A	PS380	?PS473	open	open	open	open	open	g
f	Quarry F272	Rampart 3	Quarry F286	Quarry F62	Quarry F61	Quarry F61	Quarry F60/F43	Quarry F63	Quarry F39	Quarry F38	f
e	Occupation PS389 PS390 PS391 CS62 CS64				CS64			PS465 PS14			e
d	Rampart 1b and Quarries F325, F318, F294 PS391							F64			d
c	pause										c
b	Rampart 1a										b
a	Original turf										a

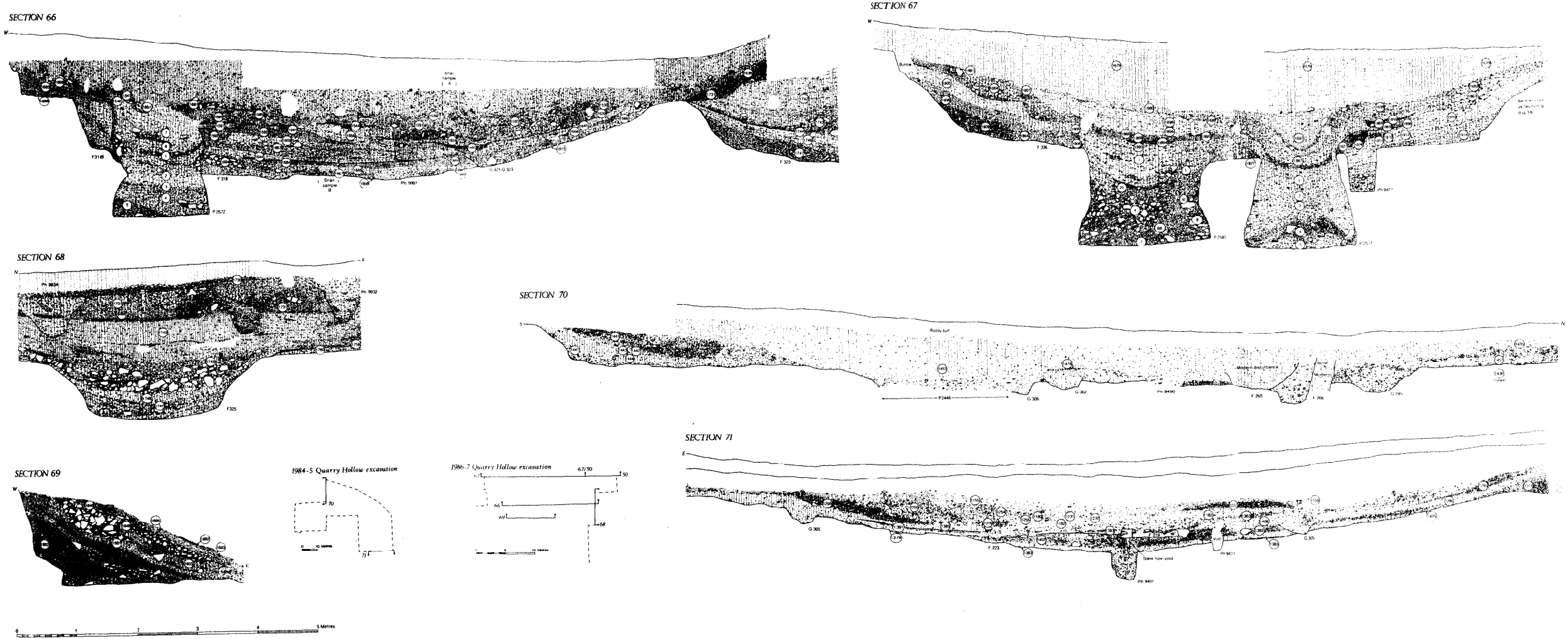


Fig 4.113 Sections of stratigraphy 1984–5 and 1986–7

general lack of stratigraphical build-up in this area in phases a-f there is little positive evidence that all the features shown on the phase plan (Fig 4.115) belong to a-d rather than phase e or f but everything chosen for inclusion has produced no pottery later than cp 3. Moreover, the structures included are all typical of those of the early period found elsewhere in the fort.

The N zone was occupied by a small circular house, CS53, measuring 6 m in diameter: its stake-built wall was set in a narrow ring-groove and its simple doors lay on the south side. Broadly contemporary with this phase were two two-post structures, PS371 and PS372. A small four-post structure (PS351) in the same area is likely to pre-date CS53 because its two easternmost post-holes were truncated by the terrace created to take the house.

The four pits shown on the plan produced only early (cp 1–3) pottery and the top of P2423 was apparently truncated by the terracing for the house.

In the NE zone lay an oval structure (CS49) measuring 6 by 5 m with its entrance on the south. It overlapped, but was clearly not contemporary with the small four-post structure PS345. To the south, in the E zone, lay another circular structure CS37 6.5 m in diameter built in much the same style as CS53 with a ring-groove taking a stake-built wall and with a simple south- facing door. Between the two houses, but overlapping the site of house CS49, were 11 pits of which nine were heavily eroded beehive pits with largely sterile chalky fills. Some of these could belong to phase f. The two shallow rectangular pits at right angles to each other close to CS37 (P2394 and P2395) are typical of the early period.

In the SE zone the two pits, P2317 and P2321 were truncated by the quarry hollow (F223) of phase e and both therefore belong to phases a-d. The remaining pits shown produced no pottery later than cp 3 and could all be shown to pre-date phase g.

In several places on the east side of the site patches of stratigraphy pre-dating rampart period 3 were exposed. In the E zone an area of dark brown silty loam (1369) was seen, containing some chalk and occupation material and a concentration of articulated animal bone. This was probably an old ground surface. Roughly contemporary with it was a gully (G285) about 0.9 m wide and 0.55 m deep a short length of which was exposed but disappearing beneath rampart period 3 at both ends. It had been filled naturally with fine weathered chalk merging upwards to clayey soil.

In the E zone early layers were visible in the edges of later features. The earliest was a palaeosol (1411) formed on the natural chalk. It was 140 mm thick and exposed in the edge of P2410. Probably contemporary with it were the two post-holes (also seen in the side of P2410) here designated PS352. These could represent a two-post structure but equally could be part of a post structure of type C or less likely, type F. Overlying 1411 was a thin occupation deposit (1413) 20–60 mm thick, which consisted of a dark brown silt containing chalk lumps and a quantity of charcoal and daub. Directly above was a dump of chalk rubble (1412), mostly subangular lumps densely compacted and puddled like a floor surface. Sealing this (and in places 1411 and 1413) was a second palaeosol (1407) with a little occupation material scattered through it. This sequence of levels reflects the intensity of occupation in this area in phases a-d. The pits shown with broken line in the unstratified area contained only pottery of cp 3.

The period 3 rampart and the quarry hollow: phase e (Fig 4.116)

The tail of the period 3 rampart was exposed along most of the eastern side of the site but no part of it was removed. In the NE zone, it was composed of small subangular chalk lumps (1370) in a compacted chalk matrix. In the E and SE zones the chalk was somewhat larger and more angular and compacted (1410). In both zones the rampart tail sealed layers of phases a-d (1369 and 1407).

Two quarry hollows were exposed. In the NW and N zone the quarry (F264) was a wide shallow feature *c* 10 m across. It had a flat base with a steeply sloping south edge cutting into the natural chalk and clay-with-flints to a depth of 0.6 m. The slope on the north side, to the tail of the rampart, was gentler. Eastwards the slope was very gradual merging into the natural slope.

The quarry hollow in the SE zone (F223) was *c* 11 m wide and up to 1.0 m deep: it had gently sloping sides and a dished base.

The structural sequence in the quarry hollows: phases f-k

Phase f (Fig 4.117)

Phase f represents the first phase of occupation following the construction of rampart period 3 and the digging of the quarry hollows. It should be remembered that some of the pits assigned to phases a-d could, on stratigraphical grounds equally as well belong to this phase. The occupation areas are concentrated at a series of foci with blank areas of undisturbed chalk in between. These concentrations are much the same as those observed in phases a–d, a fact which may suggest a degree of 'territorial' continuity.

In the NW zone the earliest phase of activity is suggested by a number of pits and post-holes dug into the floor of the quarry hollow. The post-holes seem to be concentrated approximately into two zones but this may be entirely fortuitous. No obvious structures are evident though some pairings are possible (eg ph 9479/9387; 9505/9433; 9507/9430). One deep post-hole (ph 9482) is totally different in scale from the others.

Whilst these structures and pits were in use, material was being eroded or dumped along the south edge of the quarry hollow (Fig 4.113, section 70). The earliest of these deposits was a dark reddish-brown clay containing broken flints and occasional flecks of charcoal with areas of manganese enrichment (1438, 1445). The clay was completely dominant on the east, whence it was clearly derived from the erosion of the natural clay-with-flints through which the quarry was, at this point, cut. Westwards the layer became mixed with lenses of puddled chalk finally giving way to small eroded chalk lumps in a clay matrix. These naturally eroded deposits were thick against the edge of the quarry hollow, thinning northwards. They were overlain by a clayey soil (1444, 1447) which was also partly the result of natural erosion and soil formation. An early silt layer (1428) accumulated on the base of the quarry hollow and was overlain by a thin compacted chalk spread (1430) which may be equivalent to dumps of hard compacted chalk lumps, or puddled chalk (1439, 1443) dumped along the

edge of the quarry hollow. In one area a light brown silt wash (1442) separated this from the next dump of small compacted chalk lumps (1441, 1446). These dumps may be detritus derived from pit digging or a deliberate attempt to consolidate slippery slopes adjacent to road 6.

Equivalent layers on the north side of the quarry are represented by a light brown clayey silt (1437) which had accumulated on the exposed surface of natural. Sealing this was a spread of chalk rubble (1490) packed in a silt matrix. This, in turn, was overlain by a layer of subrounded chalk rubble (1436) with a smoothed, trampled surface.

The N zone was occupied by a large two-post structure PS343 measuring 3.3 m and built with substantial post-holes. Nearby were several scattered post-holes and small pits. Some of the pits lying to the west of the structure and shown on the plan of phases a-d could belong to this period.

In the NE zone was one four-post structure (PS338) and at least one two-post structure (PS341). Another possible pairing may be ph 9102/9059. Several pits were found nearby.

In the E zone a greater density of activity and intercutting allow subphases of phase f to be recognized. The earliest features include a two-post structure (PS342) and several pits (P2404 and P2405 certainly and possibly P2396 and P2407). Following this two large four-post structures of type H were erected, PS337 and PS339 both on the same alignment and of the same size. One replaced the other but in what order is not known. South of this was another large four-post structure of type H (PS373). One post-hole was destroyed by a later pit but all the others are well preserved with post voids *c* 0.4 m in diameter clearly visible. The structure is roughly contemporary with either PS337 or PS339: on grounds of spacing PS339 would be more likely. Post-dating these structures was one cylindrical pit, P2398, similar to P2373 in the NE zone. Also roughly contemporary were P2397 and P2408. One of the latest features in the area, P2381, may have still been silting up in phase g. A number of isolated pits and post-holes cannot be closely placed within this phase. Post-dating PS339 but apparently preceding the silting of phase g was the early phase of PS340A, at that stage a type K structure.

Features were more dispersed in the central area. A two-post structure (PS463), replaced once may be represented by phs 8984, 8985, 9172 and 9173. South of these is an irregular and partially circular setting of small post-holes which could have formed some kind of structure.

In the south-east zone phase f can be subdivided into two clear subphases. The earliest occupation (f1) occurred directly on the base of the quarry hollow where a number of large posts were erected some of which were still standing in phase f2 since their voids remained visible until this time. The earliest structure was a five-post structure (PS374) measuring 2.9 m square with posts *c* 0.4 m in diameter. Contemporary with it were two post-holes outside the structure (ph 9555 and ph 9557) which could have been related to an access stair. PS374 was deliberately dismantled and the post voids packed with chalk and flint rubble: the two adjacent post-holes were treated in the same way. Immediately following this a new structure (PS377) was erected on the same alignment but slightly to the south. It was built in f1 but continued in use into f2. It was slightly smaller than its predecessor but with no central post though it appears to have had an intermediate post in its western wall. At the north corner there was another additional post on the inside of the corner post. Its function is obscure: it was not a repair timber since during the life of the structure it had been removed and the hole packed with flints against the still-standing corner post. Alongside the east wall was a two-post structure (PS378) which continued in use into phase f2. It is unclear whether it was a totally separate structure or in some way integrated with PS377. In phase f1 a fire appears to have been lit on the floor below the building: it survived as a thin spread of burnt puddled chalk.

It was probably in the late stage of f1 that a silt layer (1383, 1403) was forming: it was a pale yellowish-brown clayey silt, largely formed of material eroded off the rampart and from the interior of the fort into the quarry hollow and accumulating to a thickness of 100 mm. This was succeeded by the deliberate deposit of a thick layer of chalk (1402 and 1382) — both layers being part of a single process of make-up. The lower layer (1402), up to 0.25 m thick, was dumped around the outside of PS377 the trampling on its surface occurring while 1382 was being laid. The surfaces of both layers were trampled as one. The maximum thickness of this make-up was 0.4 m at its northern edge. The make-up was clearly deposited to form a floor surface around PS377 and PS378 and also ph 9407 the post voids of all of which showed through it. Within PS377 the surface of the make-up (1382) supported two hearths: F221 was cut into the floor and constructed, on a foundation of angular flints, of smooth puddled chalk. F222 was similar but most of its upper surface had been removed by the cutting of the later gully G271.

Many of the post-holes cutting 1382 were quite small and probably result from activity inside and outside the building. The presence of the hearths might suggest a domestic function but the total absence of evidence for walls in the surface of 1382 suggests that the lower floor of the structure was entirely open. The massive nature of the main posts strongly suggests an upper storey.

Ph 9407, which was clearly contemporary with PS377 could have been part of the structure or one post of a separate structure which lies beyond the limit of excavation. There were also two pairs of post-holes which look like two-post structures. These lie across the wall line of PS377 but since there were no walls they could be contemporary rather than later.

Phase g

Phase g was a period of abandonment between phases f and h represented by an accumulation of silt found throughout the area.

In the N zone, in the quarry hollow, a light brown clay containing some chalk and occasional flecks of charcoal (1492, 1467, 1478) sealed the earlier features: it averaged 30–50 mm thick, thickening eastwards to a maximum of 250 mm. In the NE and E zones the features of phase f were sealed by an accumulation of natural silt covering the whole area (1342, 1318, 1270, 1353, 1355). In the southern part of the E zone the silts could be subdivided into alternating silt and chalk washes (1317, 1337, 1362; 1359, 1360, 1361). Finally in the SE zone the occupation of phase f was followed by a blanket of silt (1406, 1378) which had accumulated naturally over the whole area.

The evidence is sufficient to suggest that the entire quarry hollow area was abandoned for an unspecified period of time.

Phase h (Fig 4.118)

In phase h the same zonal divide seems to hold good. In

the NW zone activity was largely confined to pit digging together with a few scattered post-holes. On the south edge of the quarry hollow a semicircular area, F225, had been terraced into layer 1446 which formed the chalk surface at this point. The base of the terrace was well trampled and a number of stake-holes were found, many towards the perimeter. The pattern appears to be random but they may represent a succession of windbreaks put up as temporary shelter. Infilling the feature, and extending beyond it were a series of occupation and silt deposits of varying character. Some contained a high proportion of charcoal, daub and other occupation rubbish (1496, 1448); some were grey silts with only moderate amounts of debris (1486, 1497) while others contained very little occupation material at all (1460,1449,1498). Along the southern edge of the quarry a further series of deliberate tips had been dumped: first angular chalk rubble (1495) and then chalky brown silt (1494).

In the N zone a long curved gully (GC24 = G288 and G289) was dug, the first of a series which was to occupy this area in subsequent phases. It was comparatively small and shallow and was probably dug for drainage, serving to define an open area behind CS36. On the south it terminated at a two-post structure PS376, possibly a gate. Several broadly contemporary layers were defined within the general vicinity of the entrance area. The earliest was a pale brown silt (1433) containing lumps of chalk and some charcoal. It was probably equivalent to 1491. Over this was a thin and patchy compacted chalk spread extending from the entrance area to the south. West of the gully terminal, and spreading down the slope was a more substantial chalk rubble spread (1484 – similar to 1495 further west in the quarry), up to 0.3 m thick with a heavily worn surface. Cutting this were G293 and G309. The latter runs parallel to G288 and may represent a second phase of the gully complex. G293 on the other hand lies at the top of the slope and could belong to this or any of the succeeding phases. Overlapping the chalk is a layer of red clay and flints (1431) derived from the nearby natural clay with flints. It is a deliberate dump and contains small worn chalk lumps and quantities of charcoal.

In the N and NE zones the silt which had accumulated naturally in the preceding period was levelled with substantial dumps of chalk blocks (1341, 1336, 1353) creating a solid make-up up to 250 mm thick which served as a hard surface from which a number of features were cut.

The principal structure to be built was a circular house CS36. It was erected on a flat terrace created by cutting away part of the tail of the rampart (on the N and E), layers 1341 and 1348 (on the S and W) and layer 1320 (on the SE). The resulting terrace was 10–11 m in diameter but the house was only 8 m. The wall was probably formed from small posts or stakes set in a shallow gully with a simple door replaced on one or two occasions.

Outside the house to the south were a number of post-holes and a well preserved beehive pit (P2371). P2381 may still have been infilling at this time but it is possible that the deliberate fill in the upper half of this pit may have formed part of the same process as the laying of the chalk spread 1336. The major structure dominating the area, PS336, was a large four-post structure of type H (measuring 3.5 m square). Either before or after its use a two-post structure, PS344, was built partly overlapping its wall line. Most of the other post-holes cutting 1336 were small, insubstantial and form no coherent pattern but one of them, Ph 9032, was massive. In proportion and fill it matched those of PS336 but could not logically form part of the same structure, though some association may have once existed.

To the south of these structures, in the E zone, was a six-post structure of type B 4.0 m square (PS340B). It was probably constructed a little earlier than the structures to the north since only its post voids were visible at the level of 1336. During the later life of PS340 a layer of chalk rubble (1350) was laid to consolidate the ground surface where severe wear had occurred.

In the SE zone, in quarry hollow F223, a circular house, CS51, *c* 6.5 m in diameter was erected (Section 4.2.1). The wall was built of stakes but the door was not exposed suggesting that it lay on the south or south-west side in the area not excavated. The contemporary floor was patchy and uneven but a central hearth was preserved. The house was enclosed by a drainage gully (G305).

Along the west edge of the quarry hollow were a series of silt layers (1374 and 1375) alternating with tips of chalk rubble (1371, 1372, 1373).

Although it is difficult to generalize from even a sample of this size the arrangement of the different structural elements suggests that we are dealing with two social units one based on each of the houses. The one complete example lying within the excavated area comprises a house (CS36) with its granaries in front of it, and a yard beyond with its storage pits beyond that.

Phase i (Fig 4.119)

Phase i represents a strong degree of continuity with the preceding phase h with both houses continuing in use though with some relocation of the ancillary structures.

The N zone was totally reorganized in this period with the laying of a considerable spread of chalk rubble (1464) much of it loose and angular, some of the blocks measuring up to 200 mm. The layer varied in thickness from 20 mm to 550 mm. It was put down at the same time as a penannular gully (GC26) was dug, enclosing an area 8.5 m in diameter, with an entrance on the south side. Inside was a large four-post structure of type H (PS347) surrounded on the north and east sides by a chalk spread (1489). The layer was well compacted at its southern extent and showed considerable wear on the surface. Laid into the surface was a circular hearth (F257) formed of angular flints set in a matrix of puddled chalk: the chalk layer which would normally have covered a hearth of this kind had been destroyed.

At the entrance to the enclosure, close to one gully terminal were the remnants of a layer of tabular flints (1483) laid in a matrix of puddled chalk. Originally the layer probably extended right across the entrance but had been largely destroyed by later wear.

In the N zone, immediately to the east of GC26/PS347, a thick layer of chalk rubble was spread (1477) contemporary and continuous with the chalk make-up to the west (1464). A few of the features cutting it may belong to phase i but these have been arbitrarily assigned to phase j on the assumption that the chalk spread was laid to create an open space. At the south side a layer of silt (1481) had washed down over the chalk but this was sealed by a further spread of chalk (1480).

In the eastern part of the N zone a new curved gully (GC25) was cut to replace GC24. It consisted of a substantial semicircular gully (G287 and G291) defining the west and north sides with a slightly inturned terminal on the south and a further short length of gully (G270) running from the entrance to the edge of the terrace for CS36. The layer assumed to be contemporary with GC25 is 1432 though no physical relationship exists between

them. It covered the central southern area of the enclosure but did not extend beyond the entrance. It was probably contemporary with the chalk spread through which G270 was cut. A number of post-holes cut layer 1432 suggesting that a large proportion of the unphased post-holes within the entrance to the north and west also belonged to this phase. From among these, two distinct structures can be recognized: first a two-post structure (PS370) at the entrance which could be a gate or a door of a circular structure which was followed by a large four-post structure of type H (PS349) measuring 3.2 m square. A second two-post structure, PS350, also belongs to this phase but cannot be related to the other post structures hereabouts.

Immediately to the east of the enclosure the circular house (CS36), built late in phase h, continued in use. Its floor was resurfaced, its hearth relaid and the door frame was probably replaced (above p 61).

In the NE zone it is possible that the two massive post structures, PS336 and PS344 may have continued in use but by the end of phase i they had gone and the site was covered by a natural accumulation of brown silt (1262) and a silty occupation deposit (1323). During this period a series of layers (1349, 1351, 1337, 1280) derived from the erosion of the back face of the rampart, were deposited over the area. They consisted generally of greyish-brown silty soil containing quantities of chalk rubble and some flints. A number of slingstones were also recorded especially in 1349. The clear implication, then, is that the old storage buildings were allowed to decay and collapse being replaced, perhaps, by new structures in the enclosed yard north-west of the house.

In the E zone PS340 had gone out of use and the area was covered by a thin brown clayey silt (1329). Overlapping this layer and continuing southwards were a series of dumped deposits and silts forming the upper filling of the old quarry hollow. Discontinuous occupation deposits (1212, 1326, 1335, 1345) were sealed by patches of clayey silt (1211, 1346, 1339). This area appears to have been given over largely to pit storage represented by five large pits (P2314, P2316, P2318, P2320 and P2377).

In the SE zone the circular house CS51 continued in use with the resurfacing of its floor with a discontinuous chalk spread (1391). A second hearth (F217) was probably contemporary with this phase and an oven (F219) was constructed at the same time. The gully around the house was partially recut on the northern side (G304). After the house had ceased to be used the superstructure of the oven collapsed into a mass of daub (1393) and a silty occupation layer developed over the floor (1385, 1275).

At the west edge of the quarry hollow the accumulation of silt alternating with chalk tips which began in phase h continued in this period with the development of a crumbly brown silt (1286) through which was cut P2356. Later a chalk tip with worn surface (1285) had been spread over the area.

Phase i is essentially a continuation of the basic settlement first laid out in phase h. The principal differences are that the storage buildings of house CS36 were transferred to the ditched enclosure while its storage pits which originally lay just beyond the enclosure were now resited to the south-west of the building. The southern unit based on CS51 continued much as before with pit storage to the north of it developing. It is possible that the penannular ditch (GC26) and four-post structure (PS347) which now occupied the NW zone was the storage component of another unit lying to the west in the unexcavated area.

Phase j (Fig 4.120)

Phase j marks a major reorganization in the social arrangement of this part of the quarry hollow area.

In the N zone the four-post structure (PS347) and its enclosing gully (GC26) went out of use and the area was totally reorganized. Two linear gullies (G303 and G306 = GC27) were dug roughly parallel to the rampart and some 9 m away from the rampart tail thus defining a rectangular enclosure in excess of 14 m long. A gap between the gully terminals, constituting the entrance, was contrived immediately in front of a complex two-post structure (PS348) which presumably represents a gate feature. If so it must be free-standing (and ?symbolic) for no trace of an accompanying fence was found. Within the enclosure the chalk spread (1477), laid down in the preceding period, continued to serve as the ground surface. Through this several large storage pits were dug.

G303 butts up to the circular enclosure gully GC28 (which succeeds GC25 in much the same location). GC28 (composed of G286 and G297) was the western side of a roughly circular enclosed area of which the eastern side was represented only by a short length of gully (G308) to the east of the entrance gap. The area enclosed was about 10 m in diameter. To the east CS36 had gone out of use leaving only a slowly silting up hollow.

The NE zone was now occupied by a large circular working area (CS50) enclosed by a penannular ditch (G275 = GC22) delimiting an area 12–13 m in diameter: around the inner lip of the ditch was a low bank formed of material thrown out of the ditch. The enclosed area was filled with a mass of structural and occupation debris including several hearths, an oven, dumps of daub and other burnt debris. Since there were no post-holes or other features which could be interpreted as evidence of superstructure, it must be concluded that the working area was entirely open. The entrance lay on the south side where a gap in the ditch was found to be metalled with spreads of chalk (1314 and 1299) which ran south to the door of CS38.

The circular structure, CS38, occupied the E and part of the SE zone. The house, measuring 8.5 m in diameter was stake-built with its door facing the north-west. It had undergone renovation several times. The features from its earliest phase were not well preserved though part of the wall slot survived on the west together with areas of chalk flooring and part of a chalk spread in front of the doorsill. During the second phase the position of the doorposts was more evident and the wall was realigned in a new slot with stake-holes in the base. Inside the floor was remetalled with chalk rubble (1214, 1343) while just outside the door the approach was consolidated with additional tips of chalk (1312, 1301). A large drainage gully G27 was now cut around the western side of the house: in form and function it was very similar to GC22.

The area immediately to the south-west of the house was occupied by a two-post structure, PS346, associated with a chalk spread (1363). These features were sealed by accumulations of chalky silt (1182, 1316, 1328) which were cut by P2366. West of CS38, along the upper slopes of the quarry hollow, a darkish brown silt (1282) was allowed to accumulate.

Phase k (Fig 4.121)

Phase k represented a degree of continuity with the preceding period in that CS50 and CS38 continued in use but several new structures were added.

In the NW zone a new circular house, CS52, was

constructed directly over the area once enclosed by GC26 (above pp 79–80). The house was 6 m in diameter with its doorway of double posts facing south. No structural evidence of the wall survived but its position was neatly outlined by the edge of its floor of compacted chalk (1458). This had been worn smooth, especially in the centre around the hearth (F249). The northern part of the floor had been partly resurfaced with more rubbly chalk (1461). Outside the door of the house there was a threshold of chalk rubble (1472) packed against the doorsill. At first a hollow-way formed along the path approaching the door and in the hollow-way and over much of the surrounding area an extensive occupation deposit had accumulated (1468, 1462, 1465, 1466, 1470, 1475). The layers more distant from the building had a higher silt and chalk content and probably accumulated over a longer period of time, compared to those immediately in front of the door which were sealed by a substantial chalk spread (1456). This formed a pathway running south from the door for 5.5 m. Within the house the floor was sealed by an occupation deposit (1459) which consisted of dark greyish-brown silt containing quantities of charcoal, pottery and bone.

The area immediately to the east of CS52 seems to have reverted once more to being an open area. It was sealed by a series of light brown clayey silts containing some small rounded chalk lumps (1463, 1471, 1474, 1476), which developed largely as the result of natural processes.

In the N zone GC28 was replaced by GC23. The new gully complex comprised two semicircular lengths of gully (G268 and G294) enclosing an oval area roughly 9.5 by 15 m. The entrance gap 5 m wide lay on the south side. Inside there is little evidence of structural activity or occupation. It is, however, possible that some of the pits cutting layer 1348 (of phase h) could belong in this later phase. Some remnants of puddled chalk spread (layers 1187 and 1379) are contemporary with G268.

In the NE zone the ditched enclosure, GC22, continued to be a prominent feature and at one stage the bank was heightened (1174) but the ditch had started silting up during the preceding period and this process was completed in phase k. This is demonstrated by the fact that the extensive chalk spread (1202) laid down outside the door of CS38 partly seals the ditch fill. Within the enclosure the hearths and oven were swept away and a massive five-post structure, PS335, was constructed. It seems to have remained in use for some time since a considerable thickness of clean silt (1207, 1236) accumulated around it to a depth of 0.25 m. The approach to the building remained through the original entrance gap and it was in this area that dumps of occupation material mixed with layers of silting occurred. It is probable that this rubbish was cleared out of the nearby house CS38 and was nothing to do with the use of PS335 since the silt immediately around it was devoid of occupation debris.

In the E and SE zones house CS38 continued in use in its final form. The original door was retained but the wall was completely rebuilt in a new wall slot (G272). The floor and the threshold were resurfaced and extensive spreads of chalk rubble (1202) paved the area outside the door. The drainage gully (G271) was gradually allowed to silt up and finally the muddy hollow formed in the top was filled with a dump of chalk rubble (1199, 1198, 1237).

To the west of CS38 along the upper slopes of the quarry hollow a series of deliberate tips of large chalk rubble in dark greyish-brown silt (1284, 1293, 1292, 1290 and 1287) were built out to form a level platform continuous with the semicircular area terraced into the natural chalk to the west. It was on this terrace that a new house CS39 was built. It measured 8 m in diameter with its double door facing north. The wall line was defined on the west by a ring groove (G265). The house features were poorly preserved but a remnant of its floor and hearth (F210) was found, partly subsided into the top of P2352.

The structures of phase k represent the last phase of extensive occupation on this part of the site.

Phase l (Fig 4.122)

Activity in this late phase was limited and probably occurred after the main phase of occupation of the fort was over. The only new structure was found in the NW zone. This was a two-post structure, PS375, cut into the edge of 1456 which was still exposed and served as the contemporary ground surface. It was formed of two large post-holes in one of which was a clear rectangular post void which was continuous wih a slot (F250) running between the two posts. The fill of the slot and the post voids was fine black charcoal, presumably the remains of timbers burnt *in situ*. There was chalk rubble packing along the west edge where the chalk surface (1456) was missing. An arc of stake-holes and two other small post-holes also belong to this phase.

To the north the site of CS52 was covered by a brown chalky silt (1457) containing little occupation material. This was cut by P2447 which had a human skeleton placed on the bottom before it was allowed to fill up naturally.

Elsewhere on the site three pits have been selected, on various grounds, for placing in this late phase. P2410 cut G310 which is itself of phase l but both pits 2426 and 2346 could, on stratigraphical grounds be placed in the preceding phase.

Four linear gullies (G292, G277, G278 and G310) appear to belong late in the sequence: all extend from the rampart at right angles and all were of similar proportions with natural chalky silt fills. Interpretation is difficult but one possibility is that they were the ends of field ditches preserved where they were deepest cutting the eroded tail of the rampart and shallowing to the interior.

In the NE zone there were a series of chalk dumps (1172, 1178, 1175, 1195) forming a roughly trapezoidal-shaped platform and incorporating the banks of GC22. These layers were partly overlain by a dump of clayey brown silt (1189) over which a further series of chalk spreads had been tipped (1190, 1177, 1176, 1194 and 1196) to form a level platform. All the spreads were composed of random tips of angular chalk in a matrix of fine chalk and greyish-brown silt except for 1190 which comprised a series of large rounded blocks (100–200 mm in size) arranged in a definite NE-SW alignment continuing the line of G277. To the west of it, at a lower level, were similar blocks possibly forming a deliberate rough-laid surface. On the east side of the alignment was an oblong area 1.4 by 0.56 m covered by a smooth worn chalk surface of small chalk lumps hard packed in pounded chalk. These layers are evidently of structural significance but the nature of the building of which they form a part, is obscure.

Phase m

The whole of the stratified area was finally covered by a series of naturally accumulated silts: 1151, 1156, 1158, 1160 over the chalk surfaces of phase 1 and the area to the south; 1166 and 1155 sealing CS38; 1452, 1469, 1485,

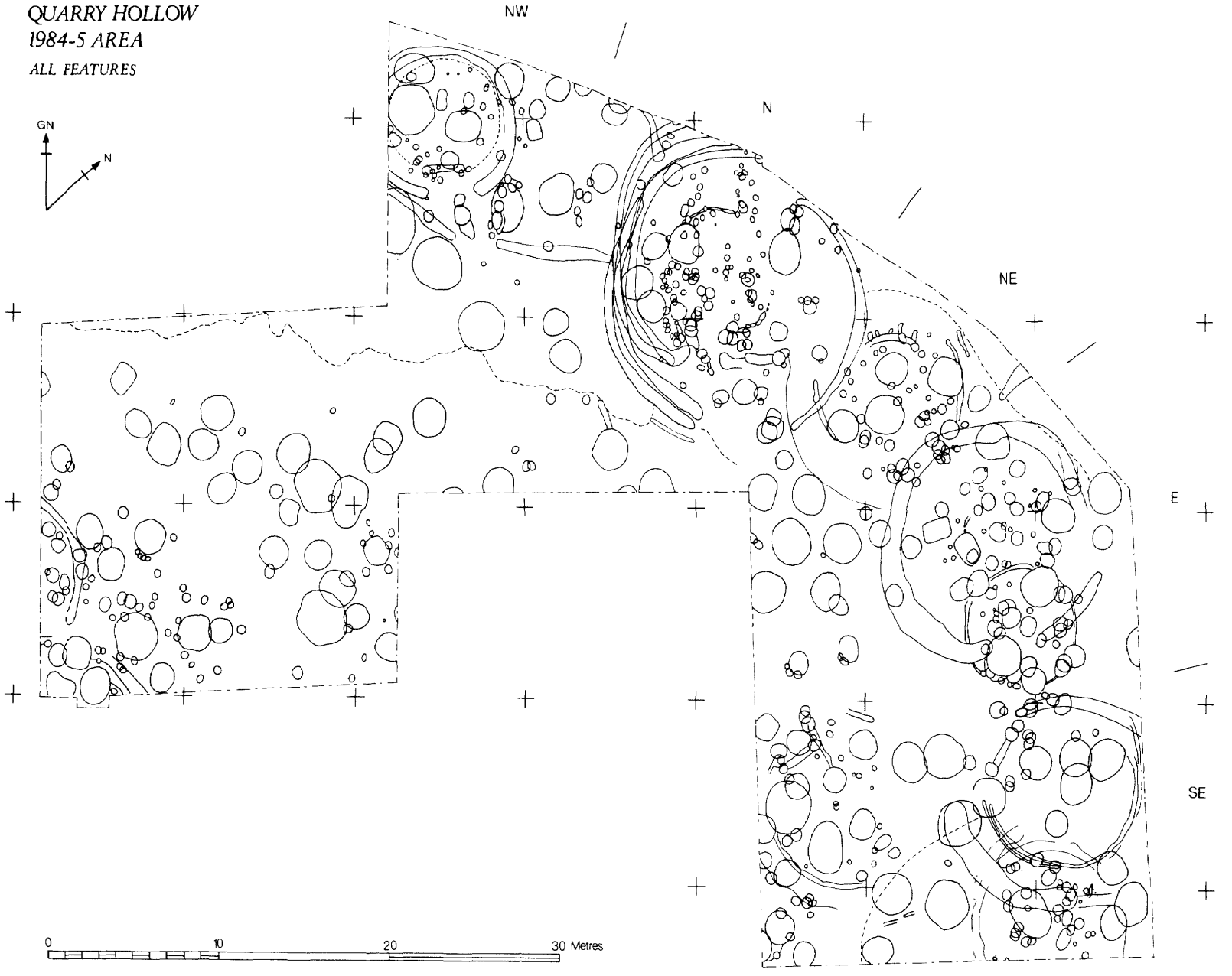

QUARRY HOLLOW
1984-5 AREA
ALL FEATURES
GN
N
NW
N
NE
E
SE
0
10
20
30 Metres

Fig 4.114

QUARRY HOLLOW
1984-5 AREA
PHASE a-d

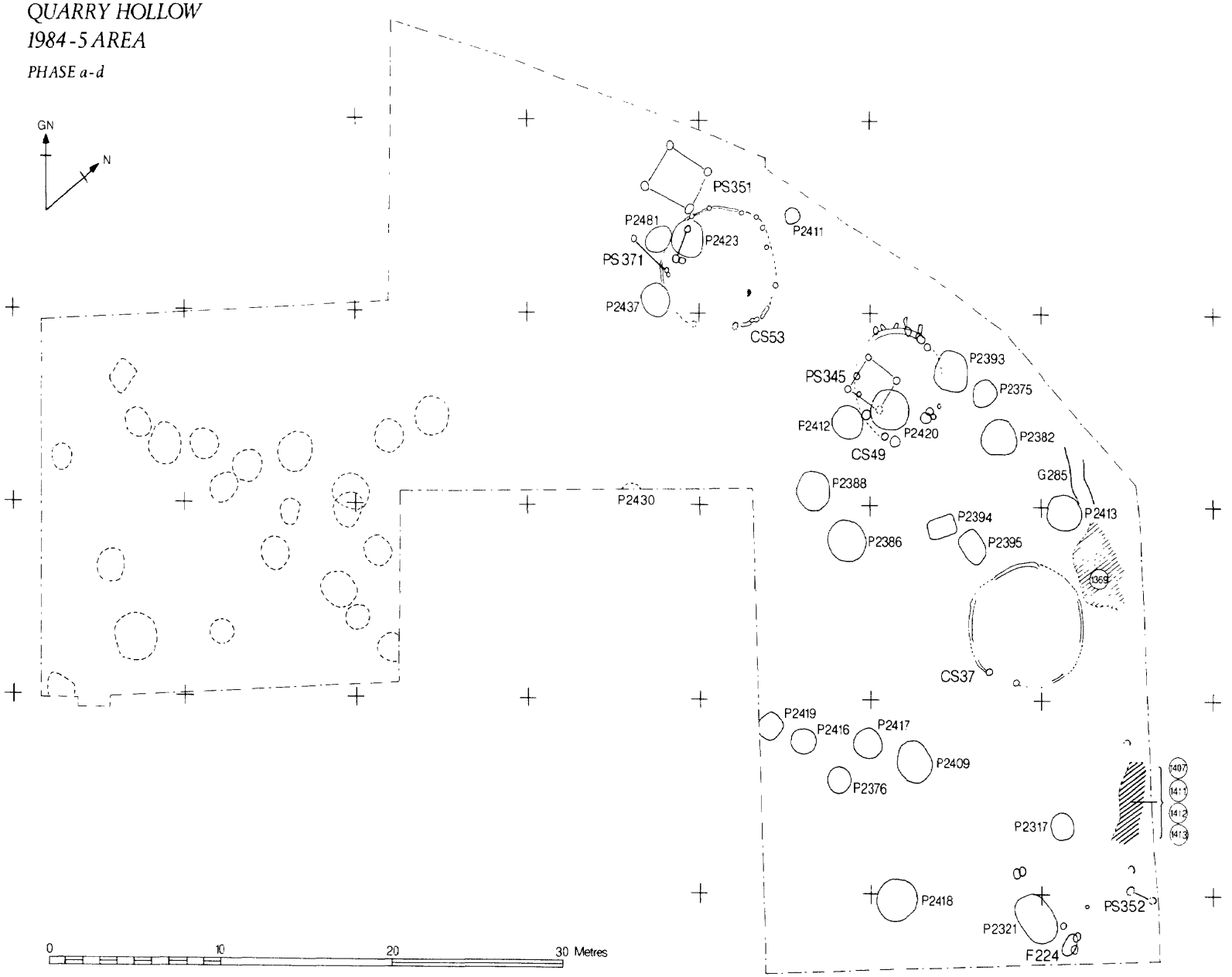


Fig 4.115

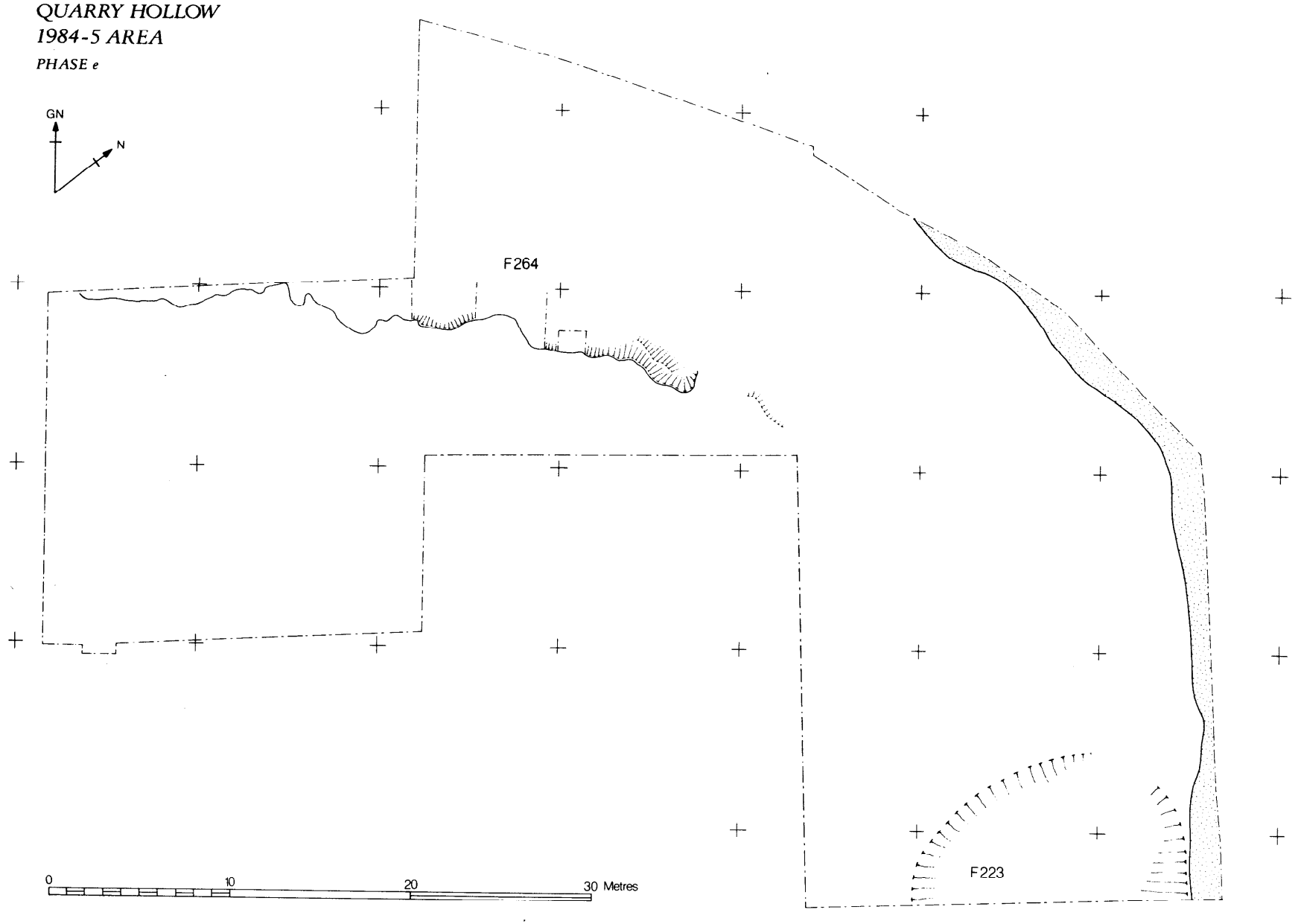

QUARRY HOLLOW
1984-5 AREA
PHASE e
GN
N
F264
F223
0
10
20
30 Metres

Fig 4.116

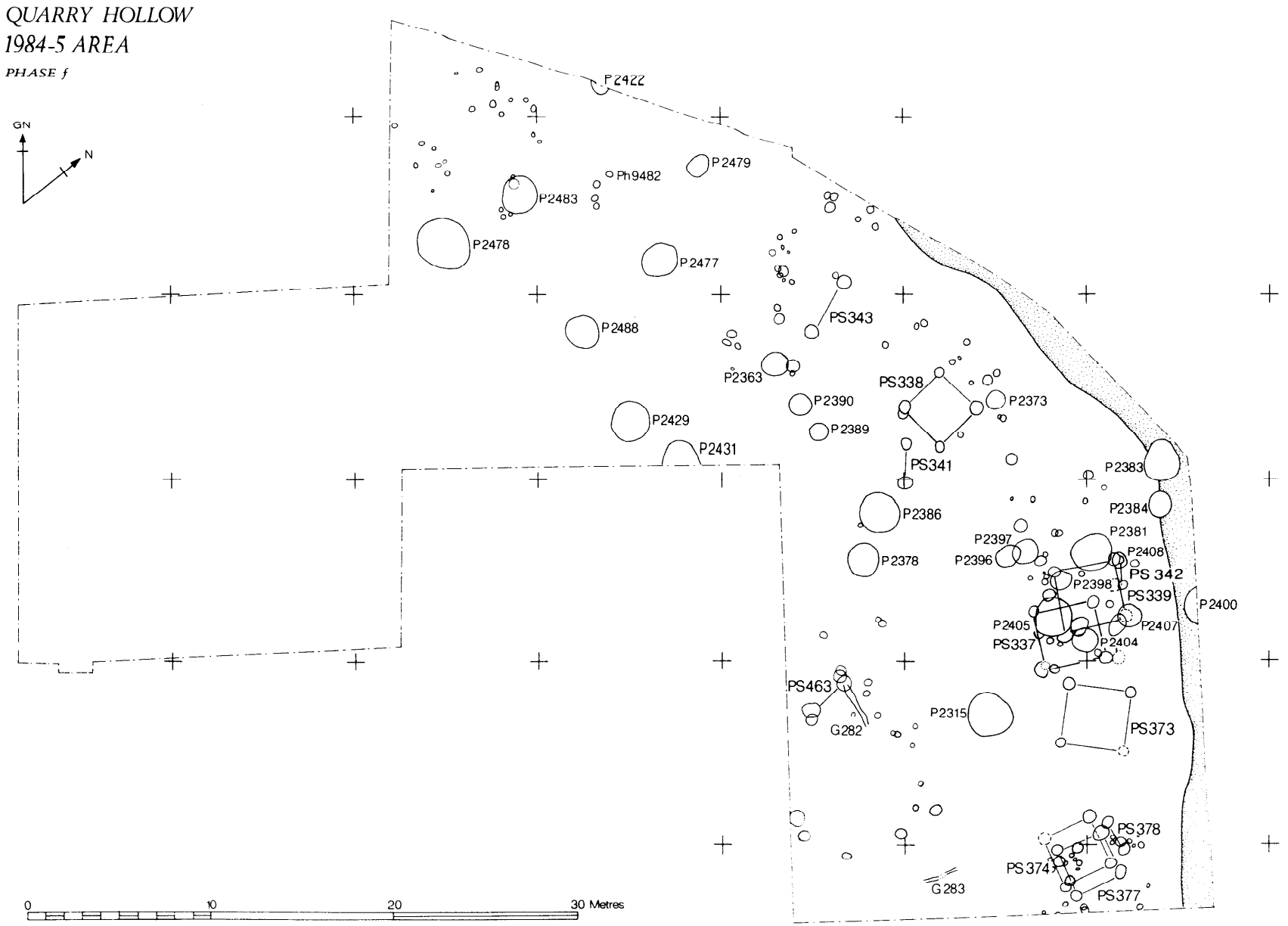

QUARRY HOLLOW
1984-5 AREA
PHASE f
GN
N
P2422
P2479
Ph9482
P2483
P2478
P2477
P2488
PS343
P2363
PS338
P2373
P2390
P2389
P2429
P2431
PS341
P2383
P2384
P2386
P2381
P2397
P2396
P2408
P2378
PS 342
P2398
PS339
P2400
P2405
P2407
PS337
P2404
PS463
P2315
G282
PS373
PS378
PS374
G283
PS377
0
10
20
30 Metres

Fig 4.117

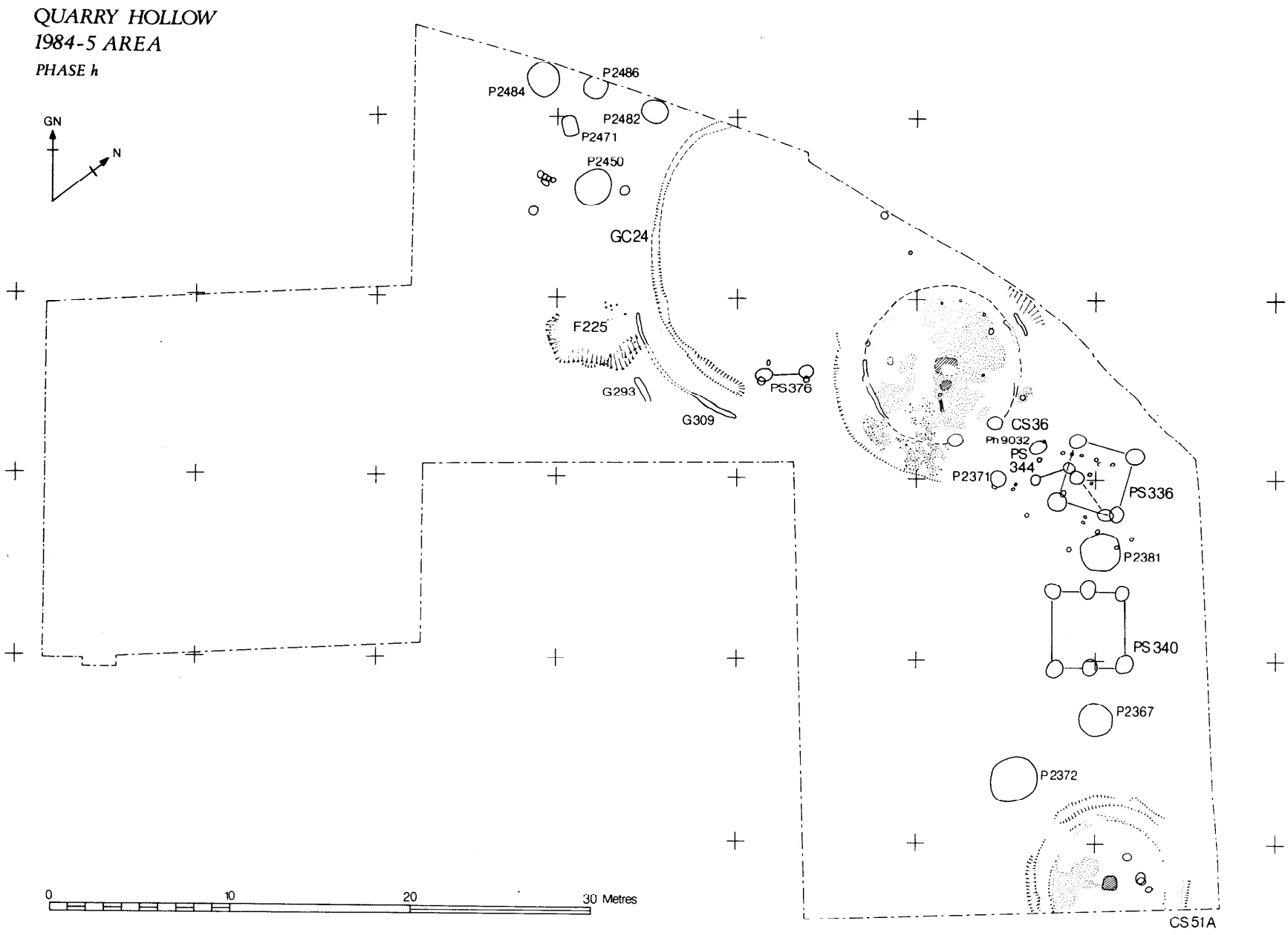

QUARRY HOLLOW
1984-5 AREA
PHASE h
GN
N
P2484
P2486
P2482
P2471
P2450
GC24
F225
G293
G309
PS376
CS36
Ph9032
PS 344
P2371
PS336
P2381
PS340
P2367
P2372
CS51A
0
10
20
30 Metres

Fig 4.118

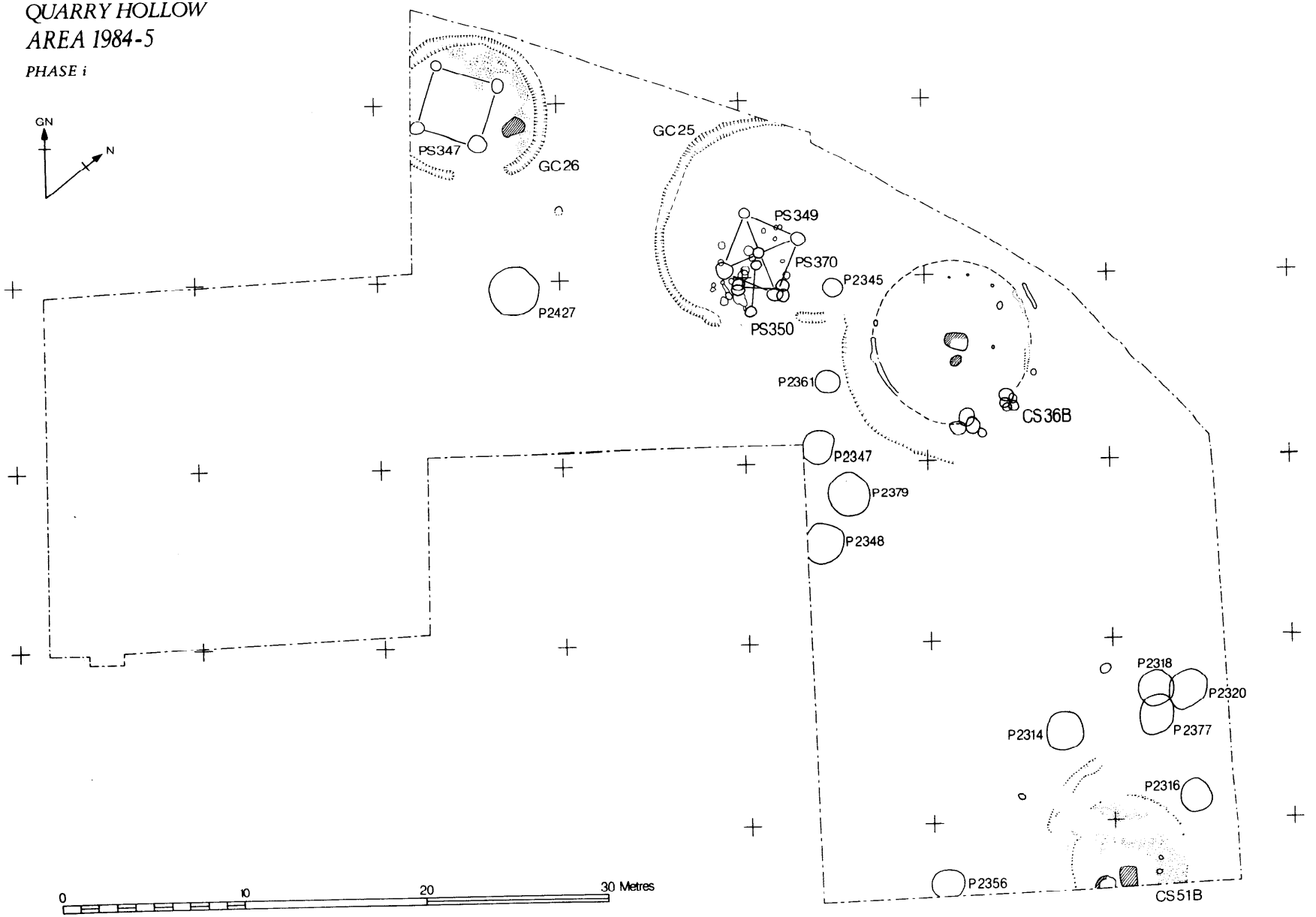

QUARRY HOLLOW
AREA 1984-5
PHASE i
GN
N
PS347
GC26
GC25
PS349
PS370
P2345
PS350
P2427
P2361
CS36B
P2347
P2379
P2348
P2318
P2320
P2377
P2314
P2316
P2356
CS51B
0
10
20
30 Metres

Fig 4.119

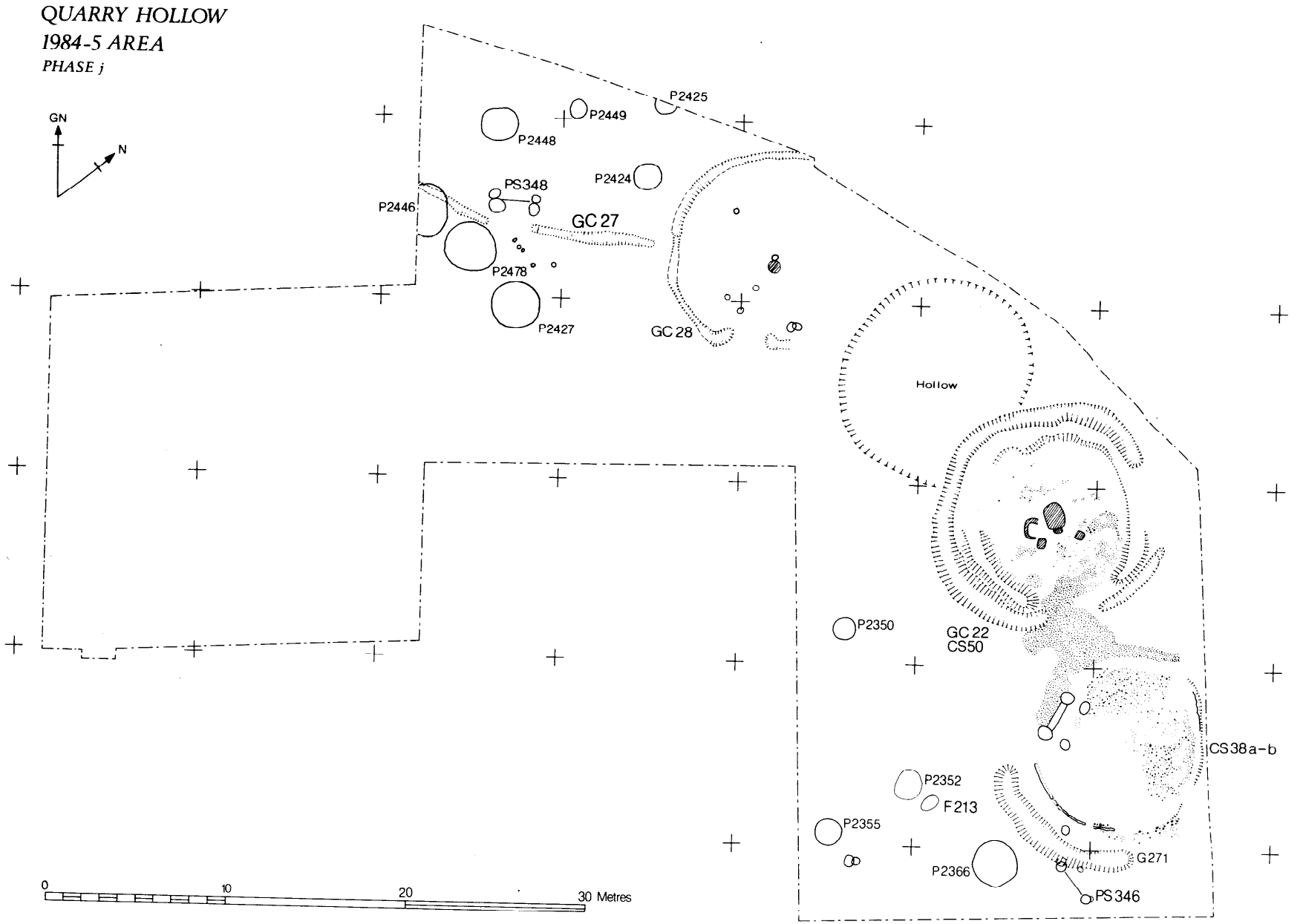

QUARRY HOLLOW
1984-5 AREA
PHASE j
GN
N
P2425
P2449
P2448
P2424
PS348
P2446
GC 27
P2478
P2427
GC 28
Hollow
P2350
GC 22
CS50
CS38a-b
P2352
F213
P2355
P2366
G271
PS346
0
10
20
30 Metres

Fig 4.120

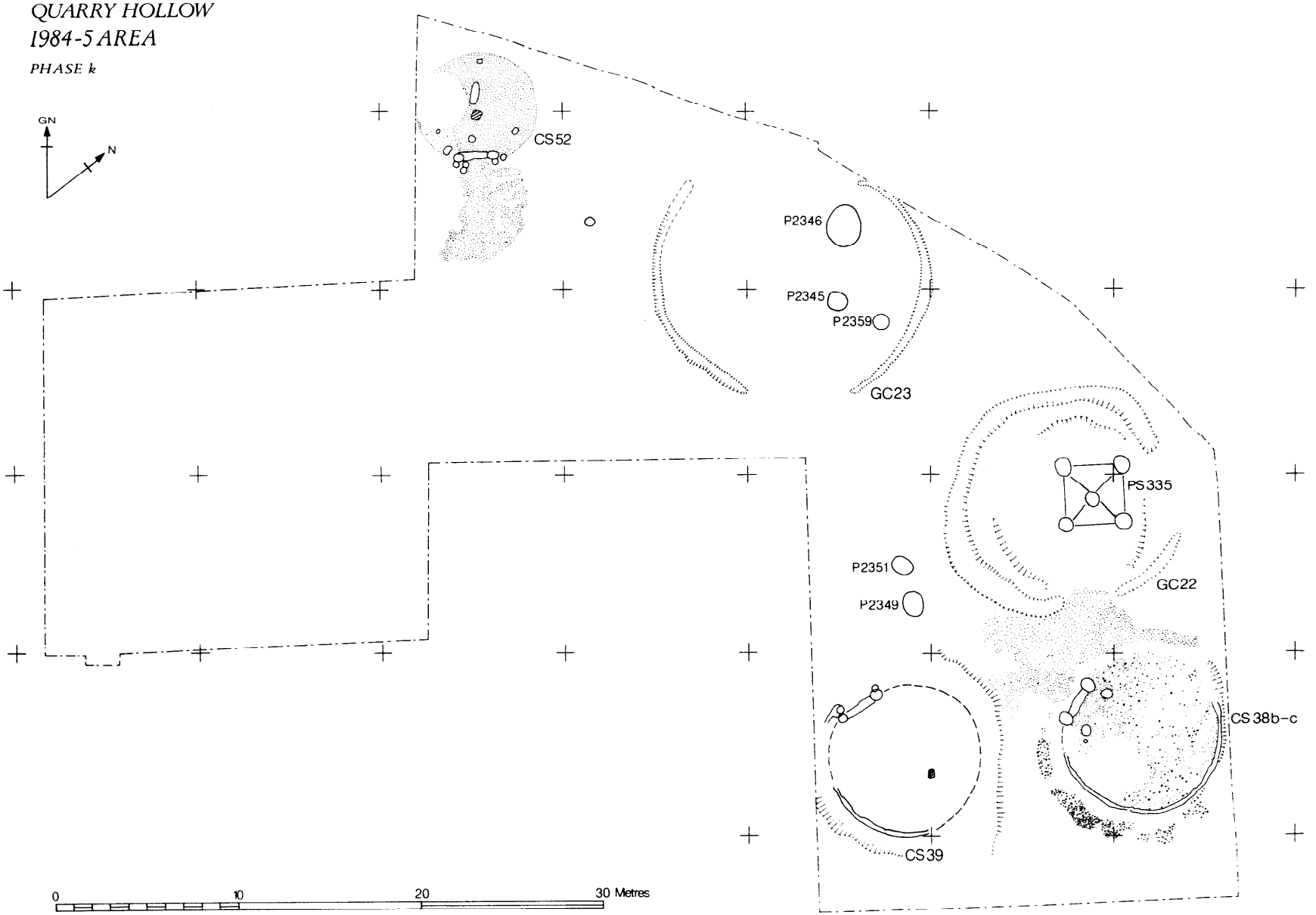

QUARRY HOLLOW
1984-5 AREA
PHASE k
GN
N
CS52
P2346
P2345
P2359
GC23
PS335
P2351
P2349
GC22
CS38b-c
CS39
0
10
20
30 Metres

Fig 4.121

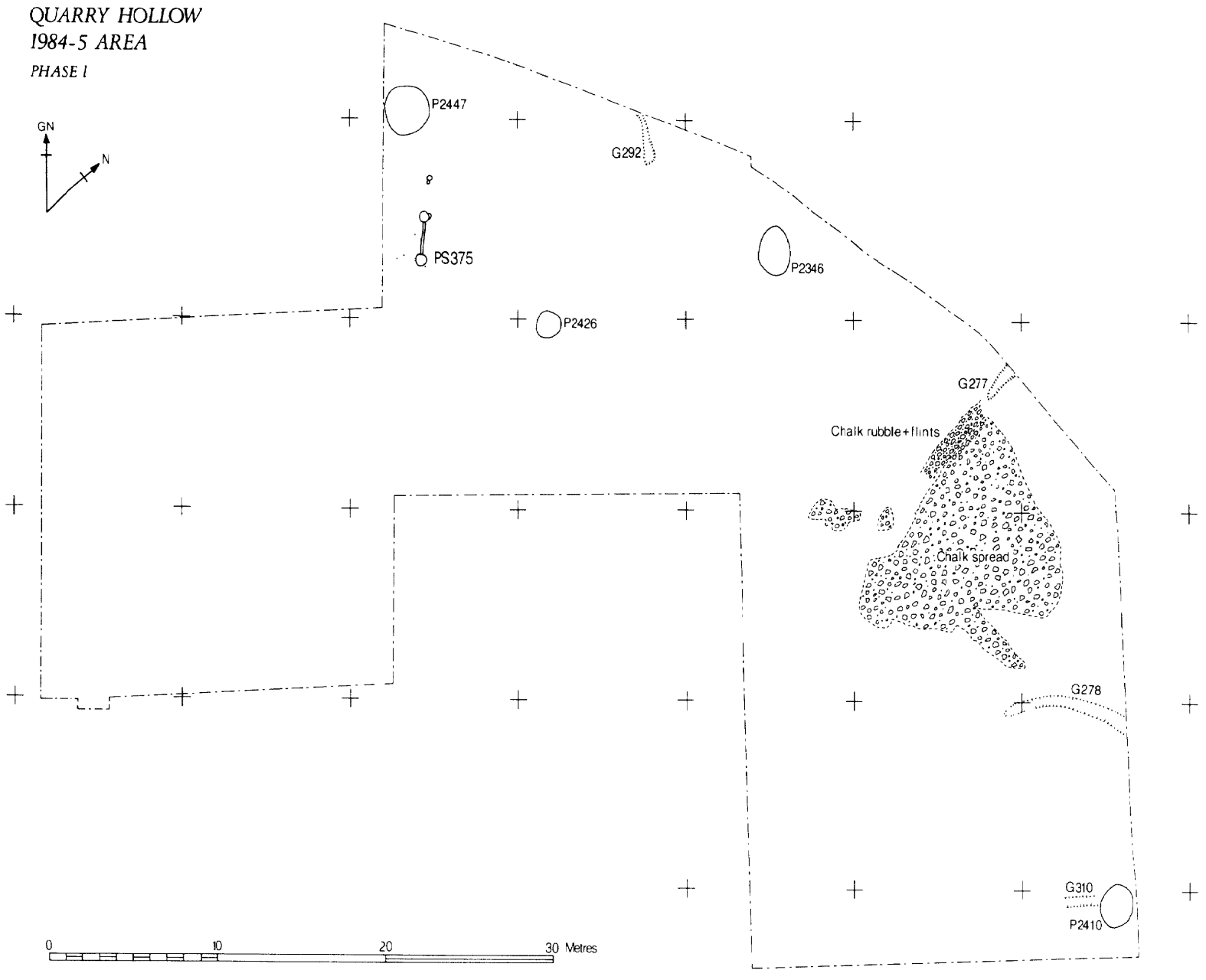

QUARRY HOLLOW
1984-5 AREA
PHASE I
GN
N
P2447
G292
PS375
P2346
P2426
G277
Chalk rubble+flints
Chalk spread
G278
G310
P2410
0
10
20
30 Metres

Fig 4.122

1161, 1159 over the area of GC23; and 1451 and 1453 in the NW over CS52 and PS375. Some of these silts may have started accumulating in phase 1. All along the inner edge of the rampart silt (1151, 1152, 1163, 1165, 1272) mixed with large flint nodules from the rampart crest washed down to fill any hollows or irregularities that may still have existed.

Summary of the stratified sequence

The stratified sequence explored in 1984–5 allows the development of this part of the site to be set out in fine detail which may now be briefly summarized:

phase a rampart period 1	The early ramparts were not seen.
b occupation	The occupation of b and d includes CS53, CS49 and CS37 together with four-post structures and pits
c rampart period 2	
d occupation	
e rampart period 3 :	quarry hollows F223 and F264
f occupation:	large four-post structures (PS338, PS337, PS339, PS373, PS374, PS377, PS372). Two-post structures (PS341, PS342, PS343, PS378) and many pits
g silting and abandonment	
h occupation:	CS36a and CS51a with related post structures (PS336 and PS340) and pits
i occupation:	phase h houses rebuilt on some sites: CS36b and CS51b. Post structures repositioned PS347 and PS349
j occupation:	major reorganization with new houses CS38a + b and an outside working area (GC22/CS50) together with GC28 and GC27
k occupation:	phase j houses rebuilt on some sites: CS38c with new houses CS39 and CS52 added. PS335 and GC23
l abandonment:	some field ditches and a hardstanding
m silting	

Summary of dating evidence

The ceramic dating evidence is laid out in Fiche 25:C2–8. Phases a-d produce nothing later than cp 5. Phases f and g contain pottery of cp 6 while from phase h onwards cp 7 pottery becomes increasingly common.

4.3.8 The excavation 1982–4; sequence F (Figs 4.123–4.131, Fig. 4.136 and Pls 19, 20, 36 and 38)

Between 1982 and 1984 an area was dug on the west side of the fort to examine the blocked entrance and its approaches and to expose, for study, the stratified deposits on either side of the entrance in the lee of the rampart. The 1982 excavation (the south half of the final excavated area) demonstrated the exact position of the original entrance. In the next year an area of equivalent size was dug to the north and all the layers subsequent to the entrance blocking were excavated. Finally, in 1984, part of the entrance blocking was removed to allow the form of the early gate to be studied. Details of the rampart structure and the gate sequence have been dealt with fully above (Section 3.4).

Apart from the gate blocking, which is contemporary with rampart 3, comparatively little of the later rampart was removed to expose early levels. To the south of the gate, however, the tail of the rampart was cut back (insofar as large tree roots allowed) and one small section was taken through the rear slope of the rampart down to natural chalk. To the north of the gate only a few square metres of the rampart tail were removed. The sequence was similar to that discovered elsewhere around the defensive circuit and may be summarized as follows:

a rampart 1
b occupation
c rampart 2 — represented only by lateral extensions on either side of the gate
d occupation
e rampart 3 and large quarry hollow

Rampart 1 was seen in the southern (1982) rampart cut and contemporary layers were exposed on either side of the gate. Rampart period 2 was represented by lateral extensions on either side of the gate.

Pre-rampart 3 occupation: phases a–d (Fig 4.124)

To the south of the blocked entrance, levels of phase a sealed by rampart 1 were exposed. The original ground surface was well preserved and displayed a natural soil profile with the lower, C, horizon (829) of weathered chalk, sealed by a brown clayey silt (828) representing the A/B horizon. Worm sorting had created a stone-free soil with a lens of small stones at its base. Elsewhere the old ground surface (740, 824, 798) was more disturbed. A single feature, ph 8582, cut the soil while above the soil were found intermittent trampled chalk spreads (826, 830) and patches of occupation material (821). These were sealed by the construction of rampart 1 (phase a).

Following this there ensued a period of occupation (phases b-d) evidenced first by remains of PS459 and subsequently by the digging of pits (P2159 and 2171) and the construction of a circular house (CS32). Throughout phases a-d the gate was open and the main road remained in use.

To the north of the blocked entrance little of the rampart 3 was removed to expose early levels and the large quarry hollow had destroyed much of the adjacent early ground surface but several features of phases a-d were visible. The earliest recognizable activity was the digging of two discrete quarry hollows (F159 and F160) presumably to produce material for the construction of rampart 1. The lower fills of both hollows (though not fully excavated) appeared to be natural deposits of silt and chalk washes (1031, 1043, 1042). The only man-made feature recognized was pit 2301 which, following its disuse, was covered with a dump of chalk rubble (1041) followed by further silting (865).

Other evidence of early occupation consists of features cut by the later quarry hollow or sealed beneath the tail of rampart 3. In addition to the pits, post-holes and lengths of gully (shown on Fig 4.124) two circular structures, presumably houses, can be recognized. On the east side

of the later quarry was part of a terrace of circular plan, cut into the natural chalk (F166) which is assumed to have been the site of a circular house (CS26). No structural evidence survived but a layer of occupation debris (1045) had accumulated on the trampled surface of the natural chalk before the scarp was filled and levelled with a dump of chalk rubble (1044).

On the opposite side of the hollow, largely sealed by rampart 3, was another circular structure (CS25) of which two doorposts and a length of wall slot were excavated. Inside were the remains of a discontinuous chalk floor with patches of occupation debris (1040).

To the south of the later quarry hollow were several other early features including pits 2257 and 2310 together with a number of post-holes, three of which may have been the west side of a six-post structure (PS202), a gully (G253) and also PS428 and PS500.

In addition to the features which can be shown on stratigraphical grounds to belong to phases a-d, Fig 4.124 shows all other features within the excavated area which produce only pottery of cp 3. The overall arrangement gives an indication of the intensity and distribution of occupation activity at the time when the road was in use.

The period 3 rampart and the quarry hollow: phase e (Fig 4.125)

The blocking of the entrance and the heightening of the rampart were part of a single process the details of which have been discussed above (pp 30–2). Much of the material used in this process was derived from scraping up soil and rubbish from inside the fort and from digging away the causeway and deepening the ditch outside. However, these sources were not adequate and to augment the supply of heightening material large quarries were dug to the north of the old road line. The main quarry hollow within the excavated area was a large roughly oval feature (F135) with a smaller, more circular quarry (F132) extending from its northern edge. The sides on the east are very steeply sloping compared to a much gentler incline on the west, which would have made direct access to the rampart easier. The base of the quarry was fairly flat. To the north a narrow strip of unquarried chalk was left before the edge of the next quarry hollow (F128) was reached. Only the southern edge of this lay within the excavated area.

The structural sequence in the quarry hollow and the adjacent area: phases f-k

The stratigraphy within the quarry hollow allowed a number of distinct structural phases to be isolated, but outside the quarry stratigraphical control was lacking. However, along the back face of rampart 3, over the blocked entrance and to the south of it, a number of buildings and other features were isolated which could be roughly correlated with the quarry hollow stratigraphy: some attempt at this has been made on the accompanying plans (Figs 4.127-4.131).

In the description to follow, the quarry hollow sequence will be described first and this will be followed by an assessment of the sequence to the south. The simplified plan illustrates all features which can be shown to post-date rampart 3 together with isolated pits and post-holes containing pottery of cp 6 and 7. This gives a composite view of the occupation covering the period *c* 350/300–100 BC.

Phase f (Fig 4.127)

The earliest activity in the base of the quarry hollow (F132/135) was the digging of numerous pits and post-holes. One of the earliest features was a massive four-post structure, PS200, of sufficient proportions to have been a tower (and comparable in size to PS2 and PS13); another was PS203, a large type K structure. It was superseded by a rash of pits, gullies and post-holes including PS362. F128 was not fully excavated but is likely to have presented a similar picture in this phase.

Phase g

The earliest structural features were overlain by a natural accumulation of sediments of silt and chalk (972, 976, 914, 1009, 1038, 1008,968). This phase was represented in F128 by the accumulated silts visible in the sides of features cutting through the quarry fill and terminated in chalky silts (1024, 1021). Phase g therefore seems to represent a period of inactivity possibly of some considerable duration. Thereafter nearly all the subsequent deposits in the quarries resulted from construction or deliberate infill.

Phase h (Fig 4.128)

The next phase of occupation is represented by the construction of a circular building CS27 which had been partly scarped into the west side of the quarry hollow and a small slot (G259) cut to delimit the wall line on the east. The natural chalk had been utilized as the floor surface. Within the house were several small post-holes of which one, ph 8857, was used to bury a collection of iron vehicle parts (hoard 1, see Volume 5) which may have been deposited as a votive offering of some kind. A gully (G256) may have served to drain the area immediately outside the house. A dark brown charcoally silt (1025) had accumulated on the floor: it survived only where it had been protected by the later bank (1027, 1028) of CS28. Over the occupation layer a chalky silt (911) had been allowed to accumulate.

The contemporary phase in F128 was probably represented by the construction of a circular house (CS29A) about a third of which was exposed showing the double doorposts cutting through a chalk floor (1022) which was delimited by a wall slot (G251). Outside the house to the south the contemporary ground surface was represented by a compacted trampled chalk spread (1018) forming a courtyard in front of the house.

Phase i (Fig 4.129)

In quarry hollow F135 the main occupation was represented by a circular structure, CS28, consisting of a stake-built house with a pair of double doorposts on the south side. Outside were a series of chalk spreads (1016, 1017, 1015, 891) which served to consolidate the path leading to the door. Inside the house the earliest floor level was a thin spread of chalk lumps trampled into the top of the underlying silt (911). On this was a circular hearth (F163) and a thin deposit of occupation debris (949) which were sealed by a more substantial chalk floor (948) followed by further occupation and silt deposits (892). Surrounding the house was a substantial penannular gully, G248, which had been cut through the side of the quarry hollow and some of the deposits filling it. Between the gully and the house wall was a bank (1020, 1026, 1027, 1028) — partly a contemporary construction

and partly the result of leaving earlier silts undisturbed between the ditch and the house terrace.

During this phase, in F132 north-east of the house, a series of deliberate tips and silt layers accumulated. The first was a dump of occupation rubbish (947, 1007) which was overlain by a chalky silt (946) at the edge of F132 and elsewhere by a discontinuous chalk surface (945). Further silting followed (944) and was covered by dumps of fresh chalk rubble (933), then more silting (921) over which was dumped a layer of redeposited clay-with-flints mixed with some occupation debris (913, 918). This was sealed by further chalk spreads (910, 931, 984) and finally the area was filled with a thick dump of clay-with-flints (917, 916). This series of essentially chalk spreads and make-up interleaved with occupation material probably represents the activity in a working area contemporary with CS28 or possibly the continuation of road 6.

At this time, in quarry hollow F128, a new circular structure was built (CS29B) overlying CS29A. The doorposts and part of the wall slot were exposed together with two floor levels: the earliest (882) consisting of chalk trampled into the underlying silt, followed by a more substantial layer of puddled chalk (881). Around the doorsill and in front of the house were similar chalk spreads. The earliest was 1003: on it had accumulated a fine silt (1004) before another chalk spread was laid (922). Outside the house a build-up of clayey silt (1012) had formed the foundation for a chalk surface (996).

Phase j (Fig 4.130)

Following this phase of occupation natural silting mixed with tips of occupation debris was allowed to accumulate over the abandoned houses. In the northern quarry hollow (F128) silts (935, 843) were overlain by dumps of chalk and occupation material (841, 842, 925) which were followed by further silting (934). In the hollow left by the abandonment of CS28, silt accumulated (893) before the tipping of a dump of occupation debris (919) which may have been rubbish from the working area (CS30) immediately to the north. The gully around CS28 began to fill with eroded sediments and rubbish (920, 966, 967).

The central area between the two abandoned structures (designated CS30) continued to be heavily utilized. This was represented first by pit digging (P2204 and P2296) before silt and occupation debris built up (988, 982) and then by the digging of P2297. The working area was not properly defined until a chalk floor 956 was laid. There were no obvious structural elements to suggest that the area had been protected by a building but several post-holes cut from this floor level may have supported some kind of shelter. A circular oven (F142) had been constructed on the floor and two more pits (P2191 and P2206) were dug at this stage.

A second phase of activity was signalled by the laying of another substantial chalk spread (915), which partly overlay 956 and continued to the south-east to form a continuous surface with 981, a thick dump of freshly quarried chalk rubble which infilled part of the hollow of the main quarry (F135) leaving an elongated hollow (F130). This may represent a road line alongside a working area. On the surface of 915 was constructed a hearth (F139) and an oven (F140) and all around was allowed to accumulate a thick layer of charcoal and occupation debris (939, 979). Contemporary with and possibly a continuation of, this work area were discontinuous patches of chalk, silts and occupation debris (926, 962, 929, 959, 853) lying immediately to the north. A few pits and post-holes in this area were broadly contemporary with this phase.

Phase k (Fig 4.131)

In this, the latest phase, the main occupation area lay in the southern part of F135. The hollow (F130) remaining over the site of the house terrace of phase i (CS28), after partial deliberate infilling in phase j, had been gradually filled with eroded sediments (905, 889) and with silt and rubbish (906, 907, 873, 874, 888) some of it no doubt derived from the activity area to the north (CS30).

The major structure of this final phase was a large house CS31. To create a platform for it a hollow in 981 was levelled with deliberate dumps of chalk and clay (977, 912) and a terrace was partly cut into the natural chalk on the east side and into some of the layers filling F132 (917, 916). In its earliest phase the house was represented by a pair of double doorposts with a sill slot between and a floor surface (955) trampled into the top of the underlying layers (981, 977). On the floor was constructed a hearth of daub with a decorated surface. Outside the door was an area of trampled chalk (978), laid to consolidate the approach path. A thin occupation layer (954, 971) sealed most of these early features. All pits within the house are probably contemporary with this early phase.

In the second phase a new chalk floor (839) was laid incorporating another hearth. New doorposts were dug inside the line of the earlier ones and a spread of puddled chalk (975) was packed around the posts and along the edge of the sill slot: a thick chalk spread (952) consolidated the threshold outside the door. In the last stages of use the house floors were allowed to accumulate a thick deposit of occupation rubbish (838).

During the use of CS31 the remaining hollow in the quarry (F130) was partly infilled with dumps of chalk (900, 899, 872, 883) though it may have been allowed to remain as a still-substantial feature in order to accumulate surface water. The final process of silting (851, 862, 864, 880) started during the life of CS31 but may not have been completed until all occupation had ceased.

After abandonment the area of the quarry hollows was gradually covered with silt and sediment eroded from the interior of the fort (837, 844) and chalky silt (848, 849) and flint tumble (869, 867, 835) washed down from the rampart.

The stratigraphy south of the blocked entrance (Figs 4.127–4.131)

The blocking of the entrance and heightening of the rampart in phase e was immediately followed by a phase of building activity represented by the erection of at least one substantial four-post structure, PS201. There may have been others to the south destroyed by later pits or obscured by recent tree roots. After a while PS201 was abandoned and a pit was dug (P2281) cutting through one of its post-holes.

The next phase saw the levelling of the area with a layer of chalk rubble (877, 796) prior to the construction of a circular building, CS34, the terrace for which had been partially scarped into the chalk spread (877). The floor of the building (876) was essentially the smooth trampled upper surface of 877, the wall line being defined for part of the circumference by a narrow slot. In the centre of the floor was a small oval hearth. No evidence of a doorway

QUARRY HOLLOW
1982-4
ALL FEATURES

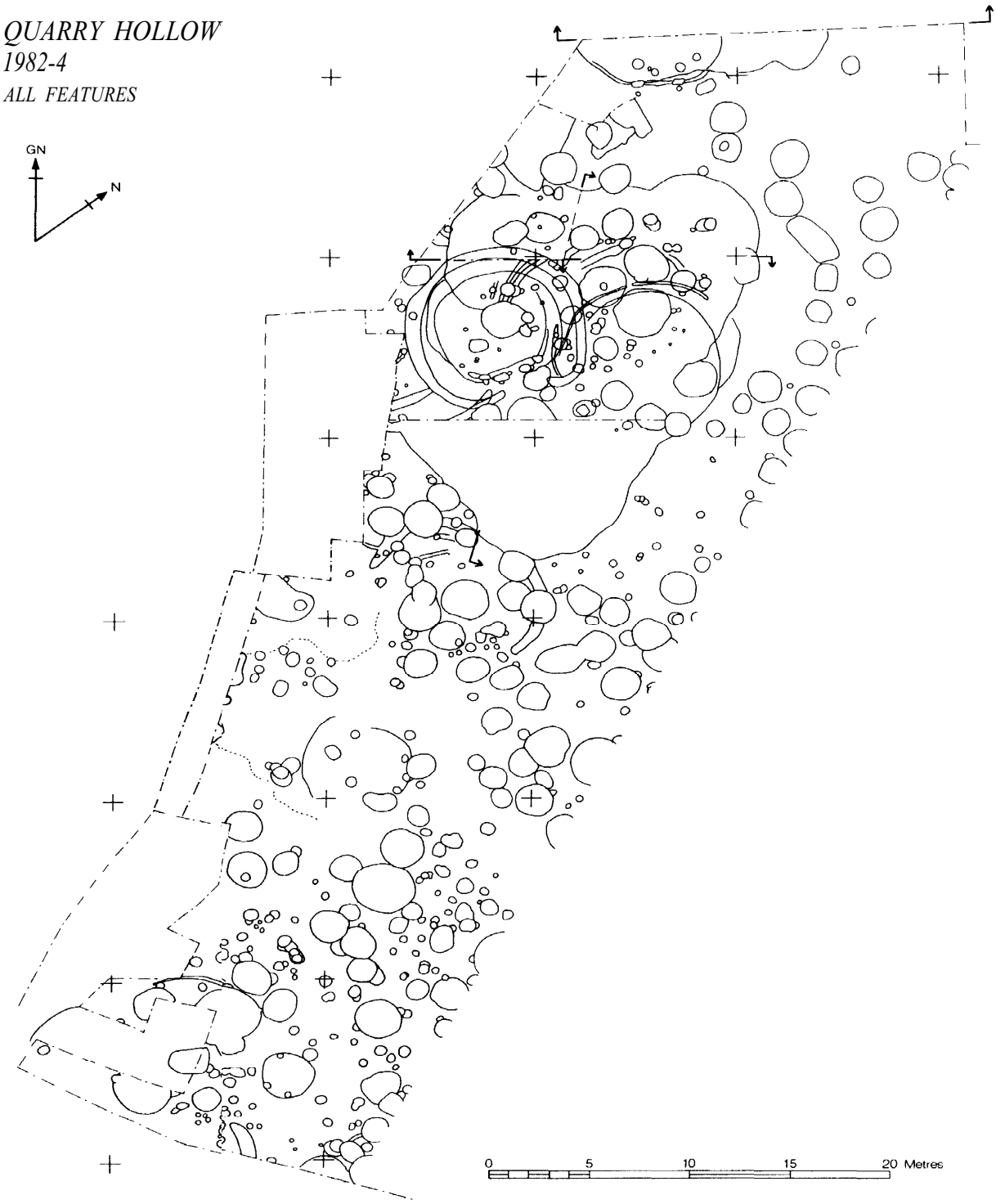


Fig4.123

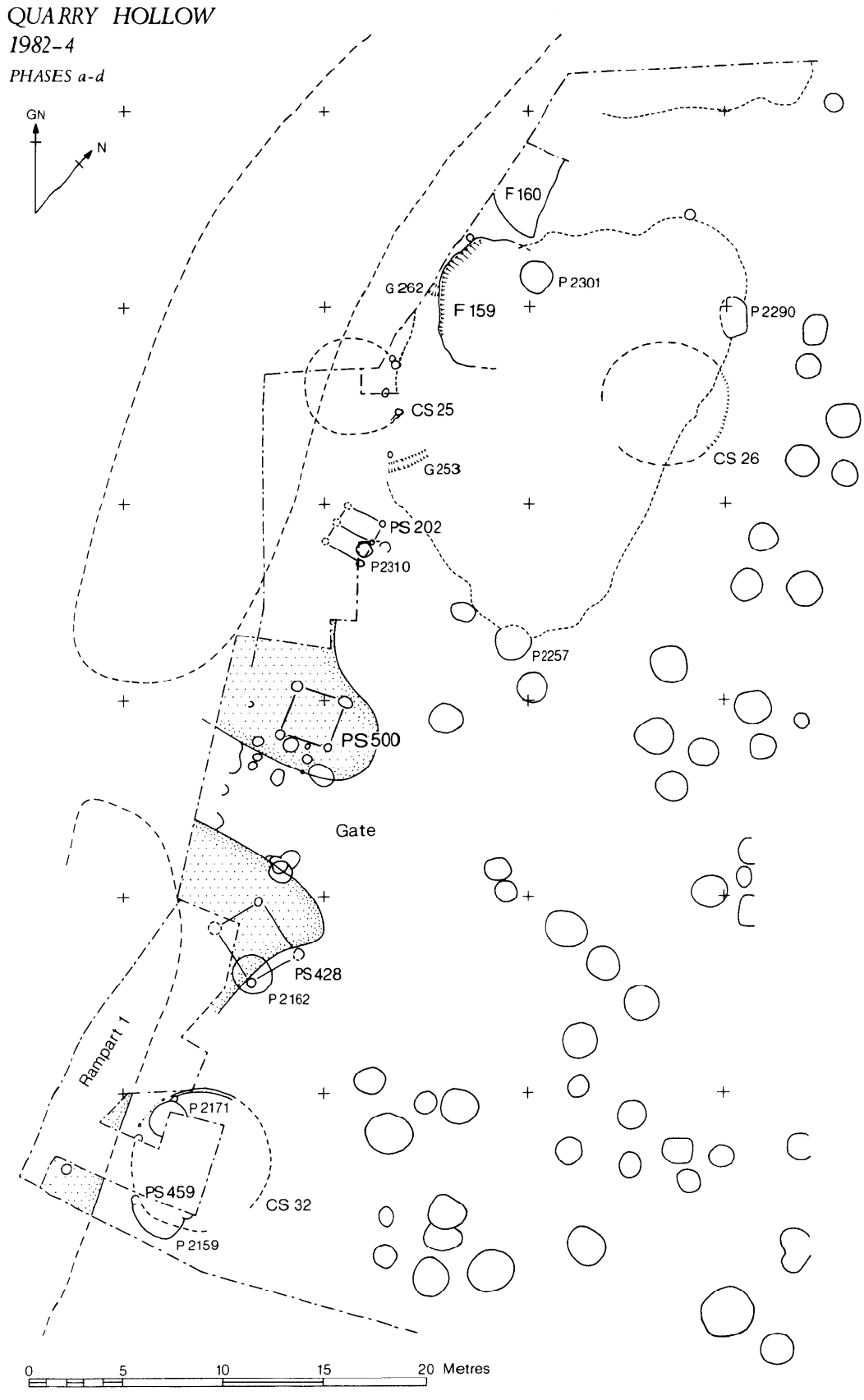

QUARRY HOLLOW
1982-4
PHASES a-d
GN
N
F 160
G 262
F 159
P 2301
P 2290
CS 25
G 253
CS 26
PS 202
P2310
P2257
PS500
Gate
PS 428
P 2162
Rampart 1
P 2171
PS 459
CS 32
P 2159
0
5
10
15
20 Metres

Fig 4.124

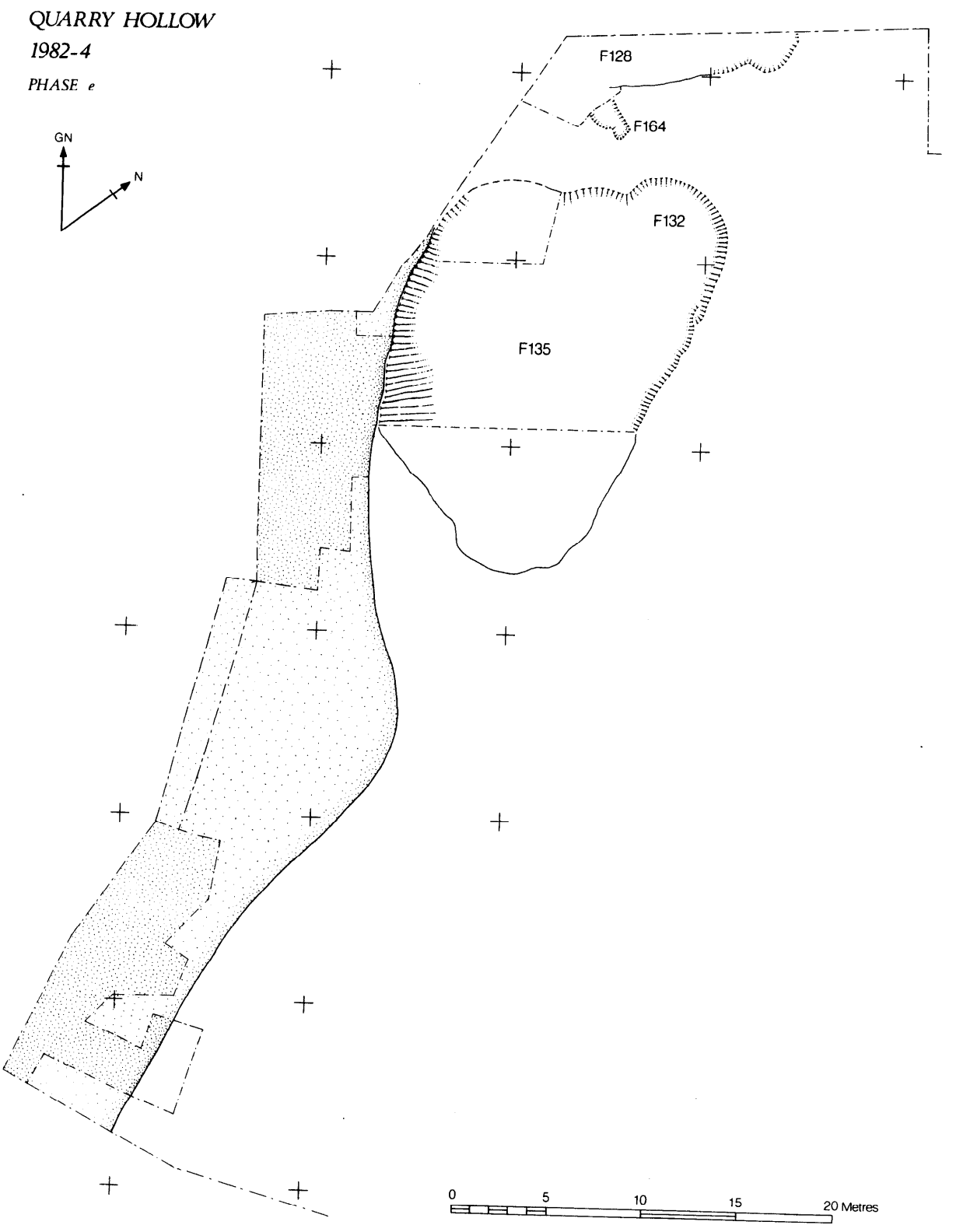

QUARRY HOLLOW
1982-4
PHASE e
GN
N
F128
F164
F132
F135
0
5
10
15
20 Metres

Fig 4.125

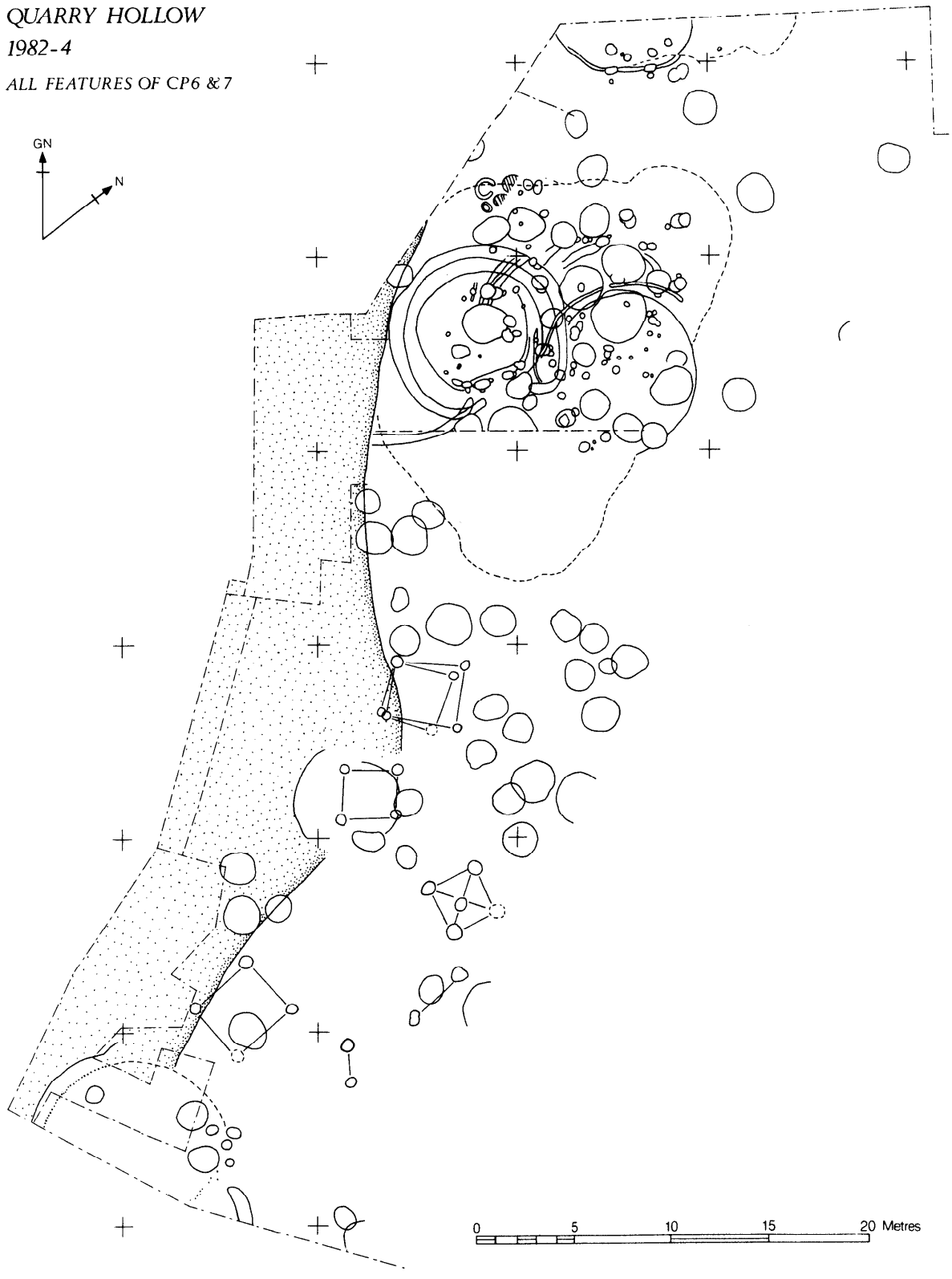
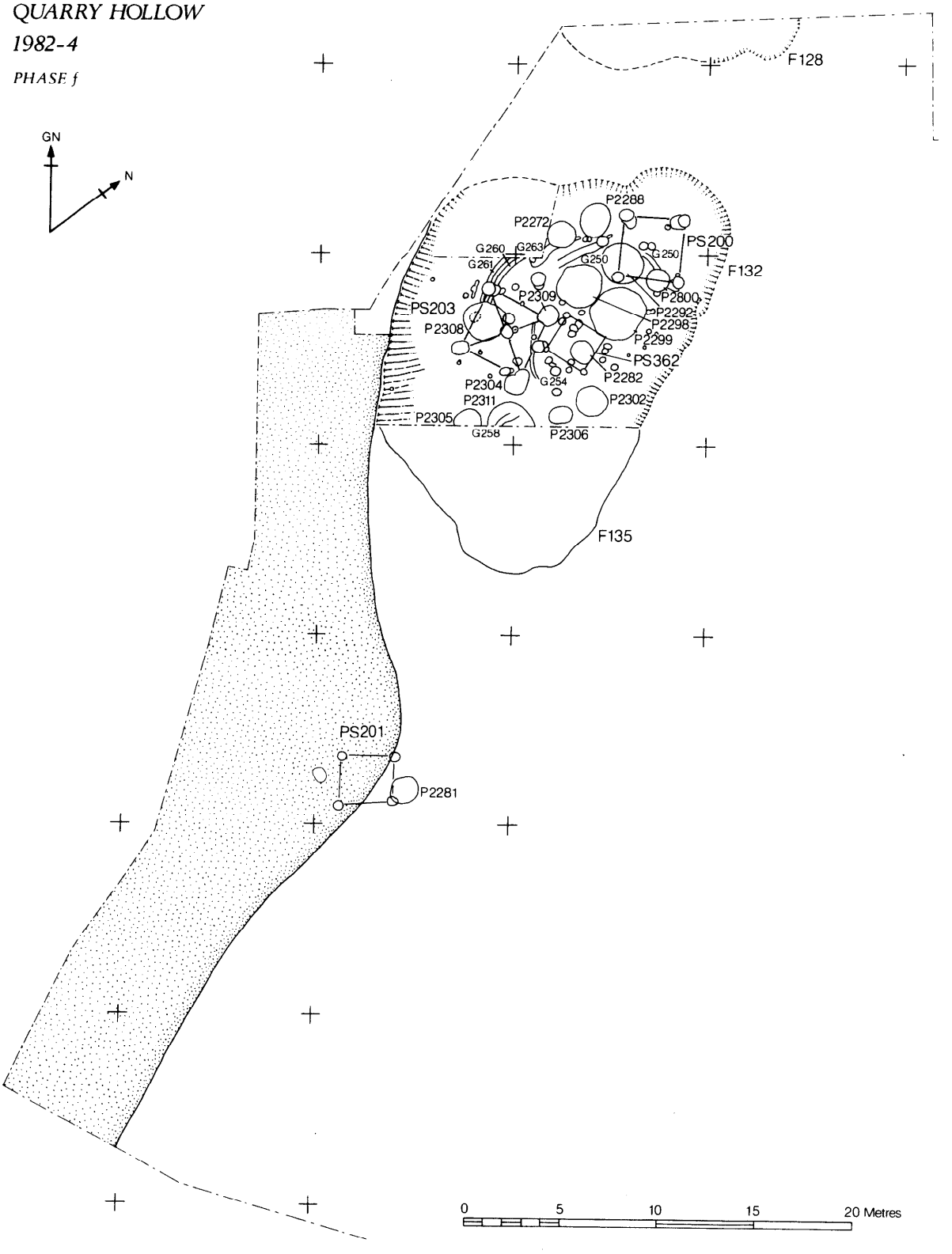

QUARRY HOLLOW
1982-4
ALL FEATURES OF CP6 &7
GN
N
0
5
10
15
20 Metres

Fig 4.126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PHASE f
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F128
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PS200
G260
G263
G261
G250
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F132
P2309
P2800
PS203
P2292
P2308
P2298
P2299
PS362
P2304
G254
P2282
P2311
P2302
P2305
G258
P2306
F135
PS201
P2281
0
5
10
15
20 Metres

Fig 4.127

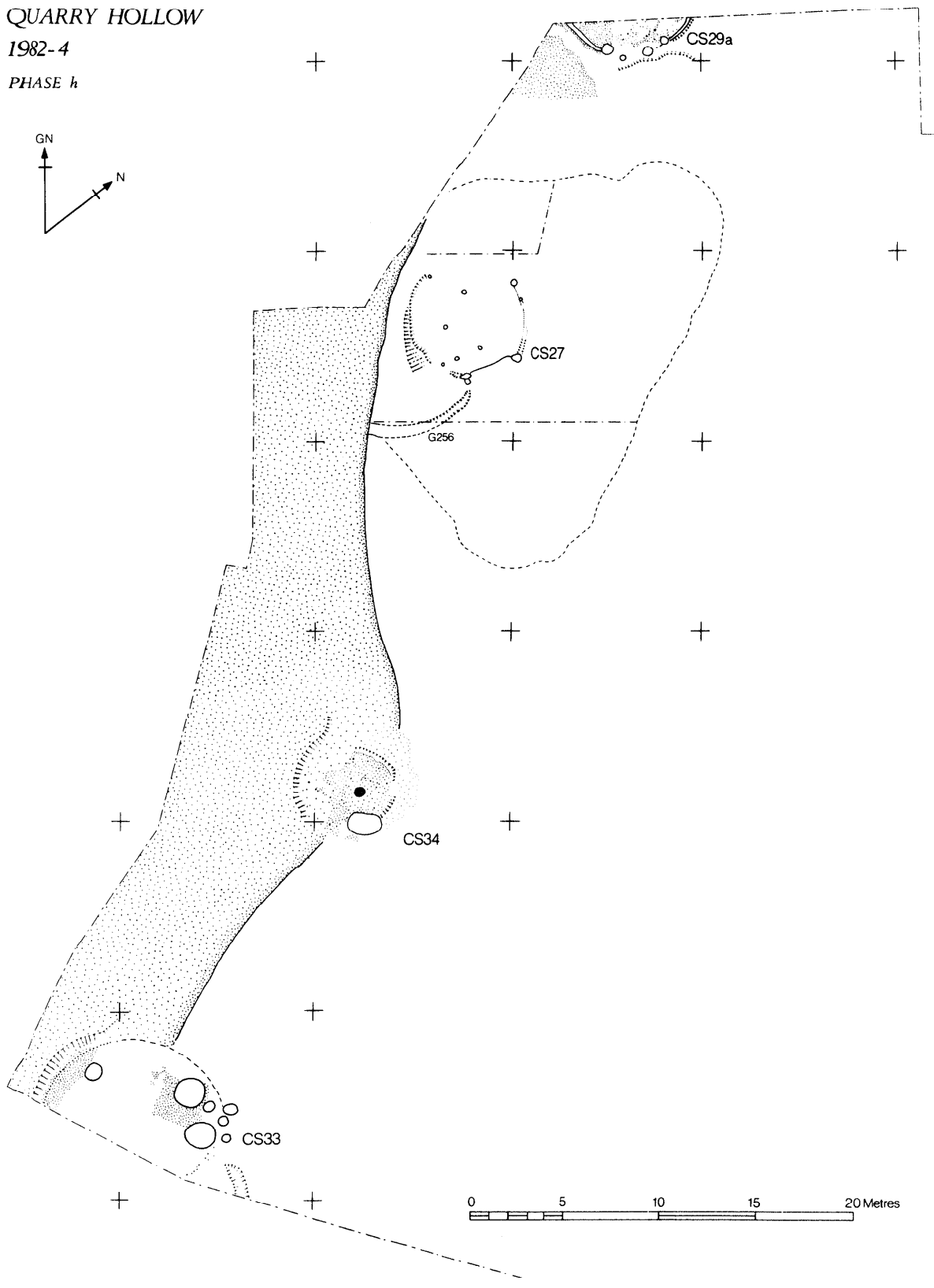

QUARRY HOLLOW
1982-4
PHASE h
GN
N
CS29a
CS27
G256
CS34
CS33
0
5
10
15
20 Metres

Fig 4.128

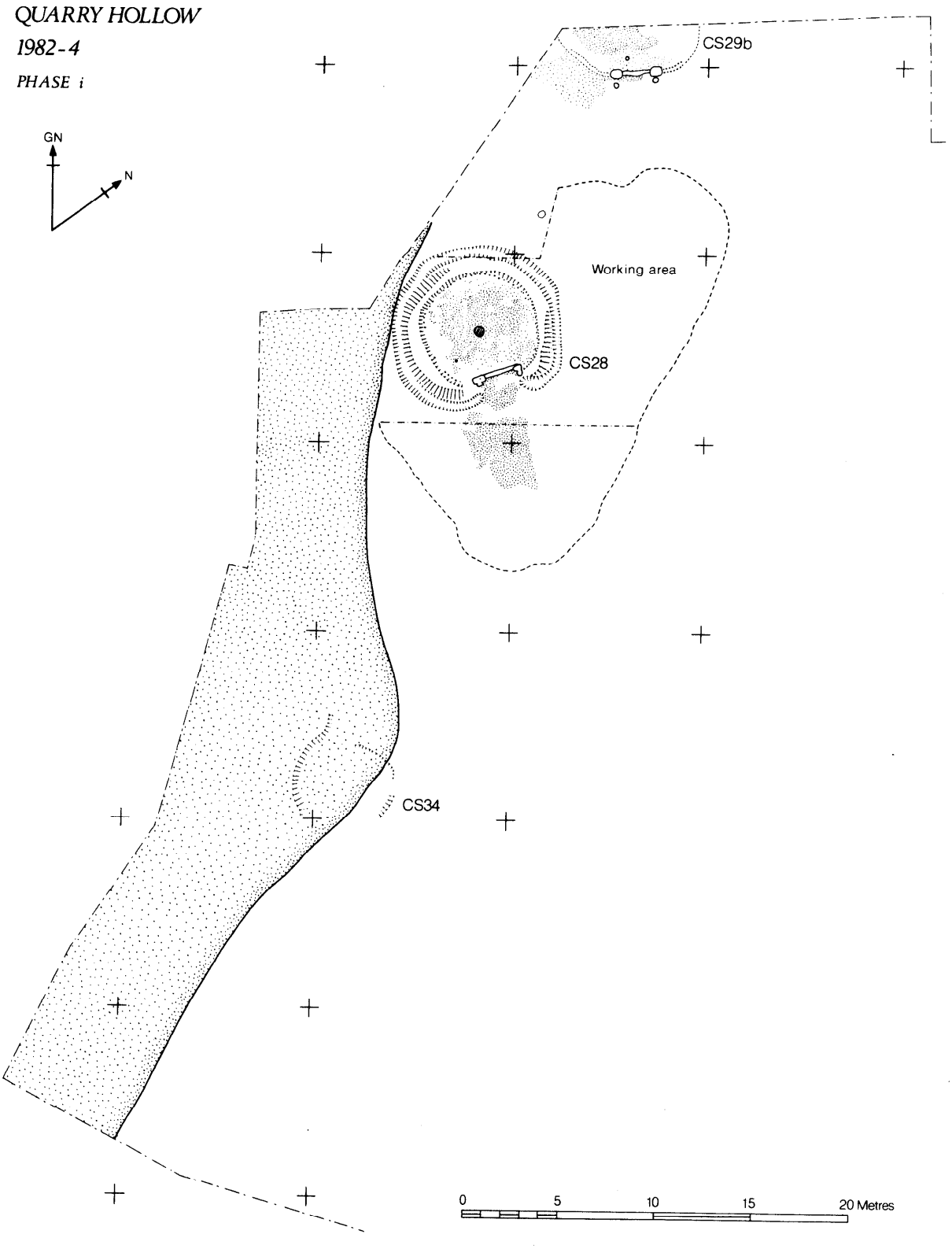
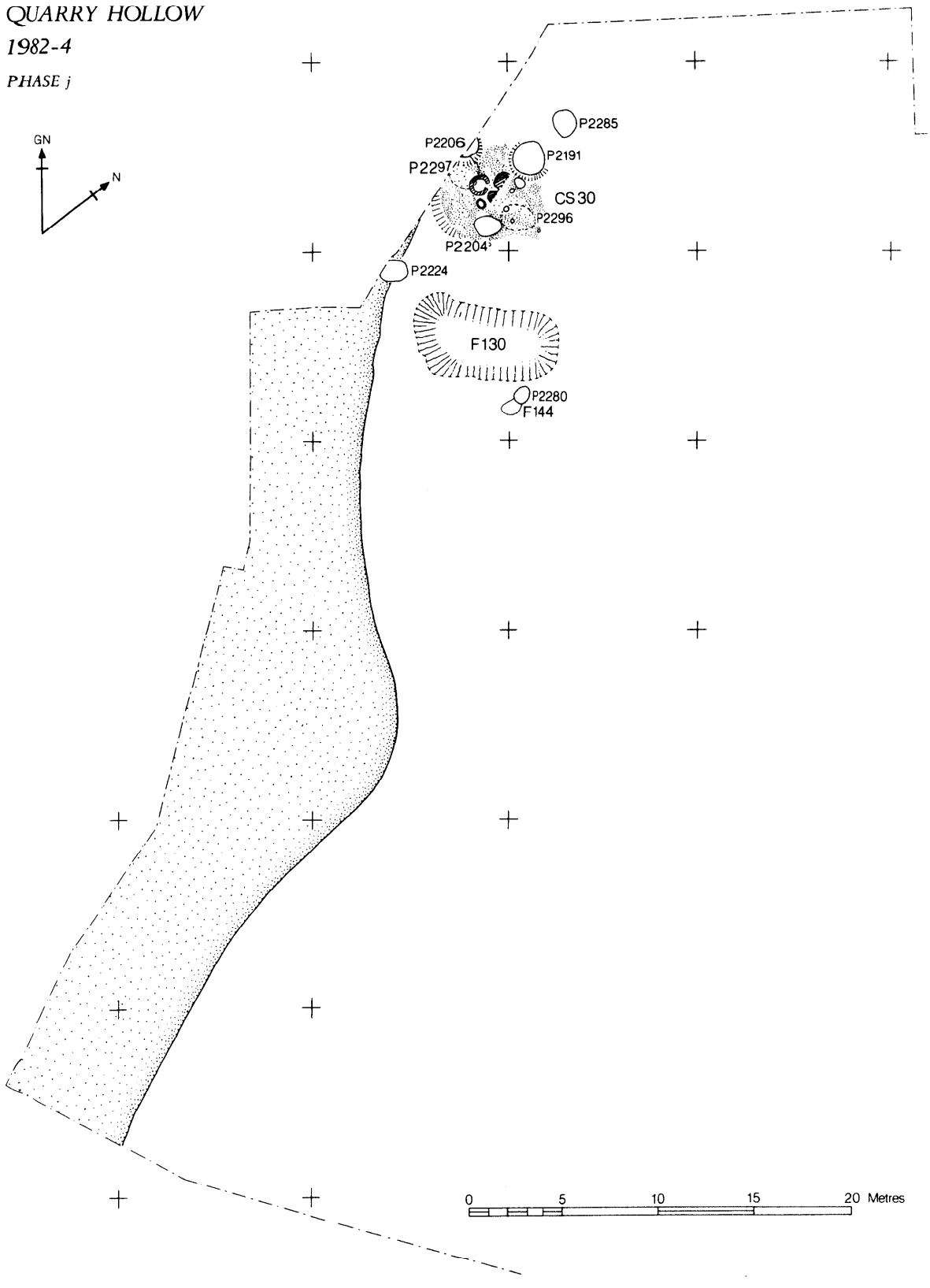

QUARRY HOLLOW
1982-4
PHASE i
GN
N
CS29b
Working area
CS28
CS34
0
5
10
15
20 Metres

Fig 4.129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1982-4
PHASE j
GN
N
P2285
P2206
P2191
P2297
CS30
P2296
P2204
P2224
F130
P2280
F144
0
5
10
15
20 Metres

Fig 4.130

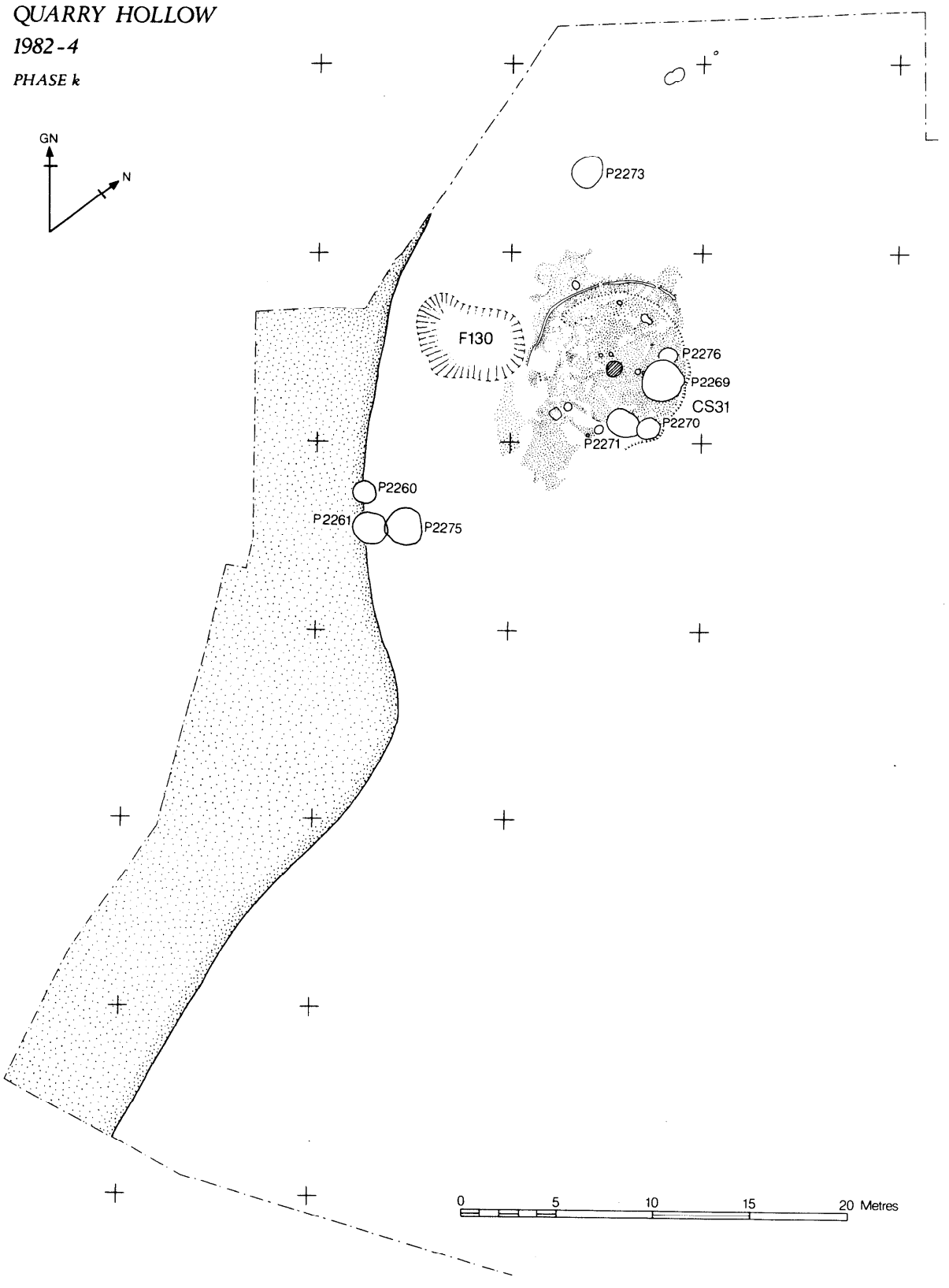

QUARRY HOLLOW
1982-4
PHASE k
GN
N
P2273
F130
P2276
P2269
CS31
P2270
P2271
P2260
P2261
P2275
0
5
10
15
20 Metres

Fig 4.131

was found but the posts, had they existed, could well have been destroyed by P2081.

After a short period of time, during which a layer of silt (870) accumulated within the house, a further chalk spread (859) was laid. This may be interpreted as a reflooring of the house in a second phase, but no trace of contemporary structural timbers were found associated with it. Above this were accumulations of silt (858, 857, 863, 795, 793,850) alternating with discontinuous chalk spreads (791, 854, 855, 845) of uncertain function.

To the south of this area another zone of structural activity was examined at the southern extremity of the excavated area. Here a terrace had been scarped into the back face of the rampart to create a platform for a large circular structure (CS33) of which the floor and a row of stake-holes, belonging to the western wall, survive. Over the western part of the house the chalk rubble of the rampart served as a floor while to the east a chalk floor (738) had been deliberately laid. Though the floor (738) was found to be at a lower level than the base of the western scarp, this can be accounted for by the consolidation of the loose sediments subsiding into the top of P2159. The doorposts were not located but these may well lie in the unexcavated southern side or were obscured by tree roots on the north-east side.

Over the floor had accumulated a layer of occupation debris (799) before a second chalk spread (736) was laid presumably representing a reflooring. On this a further occupation deposit (725, 721) was allowed to develop. The area was finally covered with layers of silt, chalky silt and flints eroded from the top and back slope of the rampart (715, 716, 718, 719, 720, 723, 724).

Summary of the stratifed sequence

For phases a-e the main rampart sequence provides a means of correlating the sequences and structures along the western fringe of the site but thereafter direct correlation between the quarry hollow sequence and the structural sequences found to the south, around the rampart tail, is impossible. However, taking the quarry hollow sequence as a yardstick some broad correlation may be offered and the entire sequence may be summarized as follows:

phase a. rampart period 1; discrete quarry hollows (F159, F160)
b. occupation
c. rampart period 2; lateral extensions to the entrance passage
d. occupation; CS25 and CS32; PS202, PS428, PS459, PS500 and pits
e. rampart period 3 (including the blocking of the gate); quarry hollows (F128, F132, F135)
f. occupation in quarry hollow; many pits and post structures (PS200, 203 and 362). To the south, PS201 and pits
g silting in the quarry hollow: ?abandonment
h. occupation: CS27 and CS29a. To the south it is possible that CS34 and CS33 belong to this phase. If contemporary the four structures would be evenly spread
i. occupation: CS28 and CS29b replace the earlier houses. To the south it is possible that the second phases of CS34 and CS33 belong to this period
j. occupation: limited to the working area CS30. Elsewhere silting
k. occupation: CS31. Elsewhere silting.

(NB It would be equally possible to assign CS33 and CS34 to the later phases of the sequence but the regularity of spacing which appears if they are correlated with phases h and i would argue (marginally) for the notional phasing suggested here.)

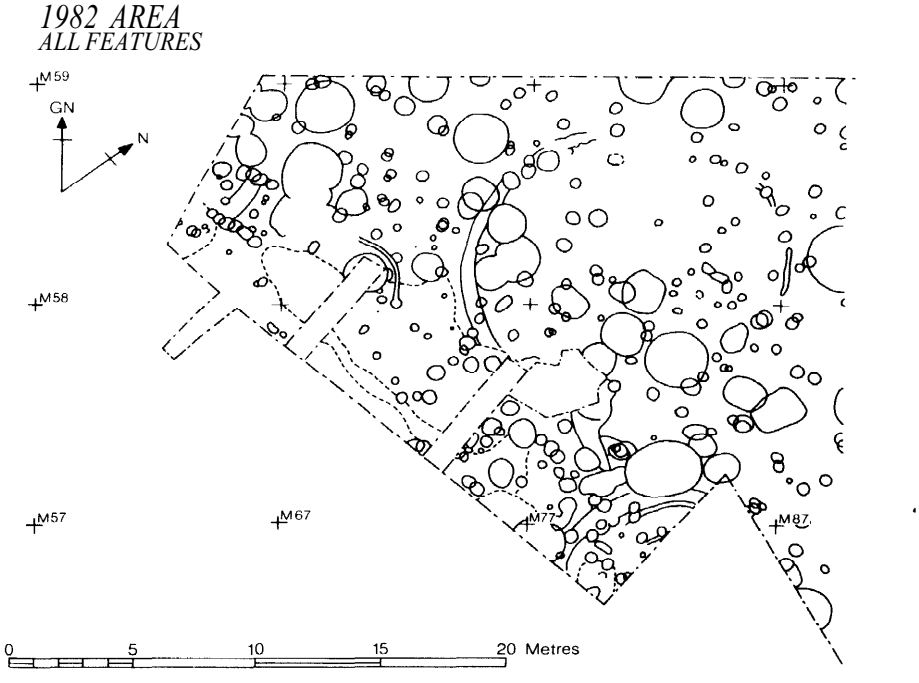


Fig 4.132

Summary of dating evidence

The stratified pottery, listed in Fiche 25:C2–8, shows that phases a and b belonged to cp 3. The upper filling of the quarries dug for rampart period 1 produced a few sherds of cp 5. From the construction of rampart period 3 (phase e) onwards the contexts were dominated by cp 7 sherds.

4.3.9 The excavation of 1982: sequence G (Figs 4.133–4.136 and Pl 31)

In 1982 an area excavation some 25 m in length was cut through the layers behind the rampart on the south-west side of the fort with the intention of exploring the stratified sequence in an area where previous work had suggested that no substantial quarry hollows had been dug to enlarge the rampart in rampart period 3 (Vol 1, 167–72). The stratified deposits extended outwards from the rampart tail for a distance of 6 m but had been heavily disturbed by tree root activity and by burrowing animals. Nevertheless a number of distinct phases of occupation could be identified and related directly to the rampart sequence. The excavation was particularly valuable in allowing something of the pre-rampart period 3 occupation to be explored. The upper part of the sequence, post-dating the construction of rampart 3, was less well preserved.

A small trial trench was cut further into the tail of the rampart to relate the sequence more exactly to the rampart phases. Details of the rampart development have been given above (Section 3.1.5).

Pre-rampart occupation: phase 0

It was possible to define a phase of activity pre-dating the first rampart (phase 0) to which three post-holes can be assigned. One was cut by the phase a quarry hollow and two were sealed by the palaeosol (732), a yellowish-brown clayey silt equivalent to other remnants of soil (760 and 822) below which were the remains of ancient root hollows (F125).

The earliest rampart and subsequent occupation: phases a and b (Fig 4.133)

The earliest rampart (R1) was seen only in the narrow trial trench (Fig 3.2) where the rampart tail, of chalk rubble (814) was sectioned lying on a disturbed soil level (732). Immediately behind it were four discrete quarry pits (F118a, F121, F124, F122). The two at the east end (F122 and F124) were both small, roughly oval in plan with steeply sloping sides nearly vertical in places: they were cut to a depth of 0.5–0.6 m from the natural chalk surface. F121 was an elongated trench, measuring 6 m in length and no more than 3 m wide. Its sides were more gently sloping. At the west end F118a was only partly exposed in the corner of the excavated area: it was formed of the deepest of three separate delves, which, towards the rampart, reached a depth of 0.5 m. All four quarry pits were covered by subsequent extensions to the rampart.

Either at the time of rampart construction or soon afterwards two very deep (0.7–0.9 m) post-holes were dug and subsequently recut (PS197). While it is just possible that they pre-date the rampart and represent an early palisade line, it is more likely that they were part of an early four-post structure. One of the pairs (ph 8534/8620) were sealed by an accumulation of silt (832) with chalk (831) packed into the hollow above. There is some indication they were cut after F121 had been dug but the precise relationship is not clear.

Following the construction of the rampart and the digging of the quarries (phase a) there was a period represented by occupation and silt layers (phase b).

1982 AREA
PHASE a-b

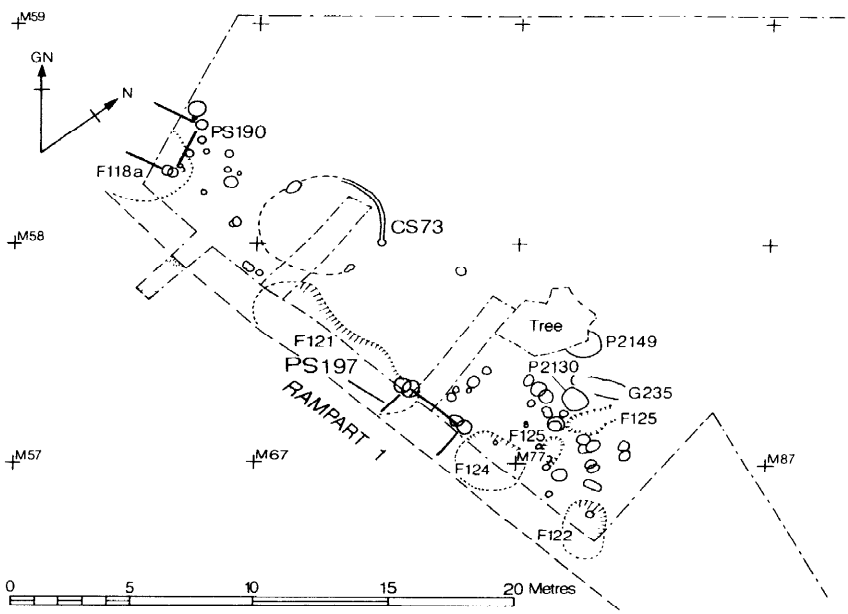


Fig 4.133

Over the base of F118a was a layer of weathered chalk (780) on top of which in the deepest area were deliberate tips of chalk blocks in chalky silt (1111), probably intended to level the base of the quarry hollow. It varied in thickness from 0.05 to 0.25 m. Over this was an accumulation, 0.1 m thick, of silt (1112) containing a scatter of small chalk and grit. On the surface was a thin lens of black silt (762) containing fine charcoal, burnt flints and flint pebbles and overlying this was another chalky silt (1113) 50–100 mm thick.

Overlapping the chalky silt (1113) and the eastern edge of the quarry were remnants of a thin chalk spread (1114). Resting on the surface of this was a thin lens of charcoal (1120), which could possibly be equivalent to 731. These could represent a chalk floor with occupation either for a structure or open working area.

A number of post-holes belong to this phase, but exactly how they related to the layers cannot be determined with certainty. However PS190, part of a type F four-post structure, was sealed by 762.

A few post-holes in the vicinity of F118 could belong to this phase or phase c. Immediately to the east was an arc of gully (G227) associated with a pair of post-holes of which the southern setting had been truncated by F119a: these features are probably a house, designated CS73. In the central area were a small number of post-holes truncated by quarry hollow F119a but further east away from the area of quarrying the number of post-holes is much greater.

In the lee of the first rampart, and extending into the long quarry (F121) various deposits had accumulated. In the base of F121 was a brown crumbly silt (790) containing a little occupation debris which had accumulated to a thickness of 0.1 m. On top of it was a distinct layer of occupation rubbish (789) containing quantities of charcoal, burnt flint and pottery but measuring only 20-30 mm thick. This was sealed by a light brown crumbly silt (785) containing some charcoal and small lumps of chalk: it varied in thickness from 0.1–0.2 m and its surface was consolidated with a tip of chalk blocks and flints (784). Resting on this was a dark occupation layer (779) largely composed of charcoal fragments and dust mixed with a little chalky silt. This was sealed by a substantial layer of brown silt (778) with some small chalk lumps and occupation debris. Then followed an intermittent layer of occupation debris in a fine brown silt (731). This layer, as well as extending across F121, continued over the tail of the primary rampart (814) where it contained burnt flint and rather more pottery and occupation debris. In places it rested on thin patches of chalk which may have represented a floor level. Above this had been tipped some loosely packed, rounded chalk blocks (812) becoming smaller and more compacted at the southern edge. This was possibly a deliberately laid floor surface: on it had accumulated a thin lens of charcoal and other burnt material (813) barely 30-40 mm thick.

These alternating layers of silt, chalk and occupation rubbish represent successive phases of occupation with phases of inactivity between during which silt accumulated. The nature of the occupation was impossible to elucidate in so small an area. The chalk surfaces could have been house floors but no structural elements were recorded: alternatively they may have been external working surfaces.

In the western quarry (F118a) the early sequence was less complex. The base of the quarry was filled with a thick deposit of angular chalk blocks (780) tightly packed in a matrix of fine brown silt. This was probably a deliberate attempt to level the hollow. Any subsequent deposits were destroyed by later quarry hollows.

Meanwhile the other quarry hollows, F122 and F124, had filled with natural accumulations of chalk and silt (805, 806, 811) though a deliberate spread of chalk rubble (759) and areas of puddled chalk (807a and 823) had been laid partly sealing the top of F 124. This was sealed by a layer of brown chalky silt (758) containing charcoal fragments and stratigraphically equivalent to layer 778. It sealed a number of post-holes some of which cut layer 807a.

The stratigraphy relating to phase b evidently represents an intensity of occupation in this area.

The first addition to the rampart (R2): phase c (Fig 4.134)

The rampart was heightened and extended back into the fort by some 3 m sealing the levels assigned to phase b. The material for this extension was derived partly from superficial layers of occupation material from within the fort (730) and partly from freshly quarried chalk (815) obtained from a quarry pit (F109a/119a) which measured 11 by 4 m and was dug to a depth of 0.5–0.65 m. It was somewhat irregular in shape with gently sloping sides and a flattish base. Additional material was obtained from quarry F118b which was up to 3 m wide, 0.4–0.7 m deep of which only the eastern end was exposed.

Occupation following rampart period 2: phase d (Fig 4.134)

Cut into the presumed base of the western quarry (F118b) was a single post-hole, ph 8504, which was the only thing to mark the interface between layer 1113 of F118a and 1118 infilling the base of the later quarry and sealing the post-hole.

The quarry was almost entirely filled with a continuous layer of silt (1118) containing a scatter of small chalk and a number of larger chalk blocks and flint nodules *c* 80–180 mm size. The layer was between 0.2 and 0.3 m thick. Overlying 1118 in a limited area close to the tail of the rampart was a thin layer of burnt material (729) — fragmented burnt flints 20–60 mm in size and charcoal, which had the appearance of debris from an oven.

Immediately following the digging of the quarry pit (F109/119) occupation activity is evidenced by a patch of burning on the floor of the pit and the construction of PS192. Then followed the accumulation of a pale brown chalky silt (775) containing much occupation debris (charcoal, burnt clay, bones, pottery and daub) to a thickness of 0.1–0.15 m. Over this a discrete layer of large rounded chalk blocks (774) had been dumped to consolidate the area. Most of the quarry was then filled with light brown silt containing small lumps of chalk and some sparse occupation debris (773 and 747) which appears to have eroded into the hollow from within the fort and from the adjacent rampart.

A similar sequence occurred to the east where early post-holes and other features were sealed by natural silting (751).

For the most part, therefore, the layers of phase d represent natural accumulations developing in the lee of the rampart. The amount of occupation debris incorporated in them, however, suggests occupation activity nearby.

Several pits were dug during this period and some of the

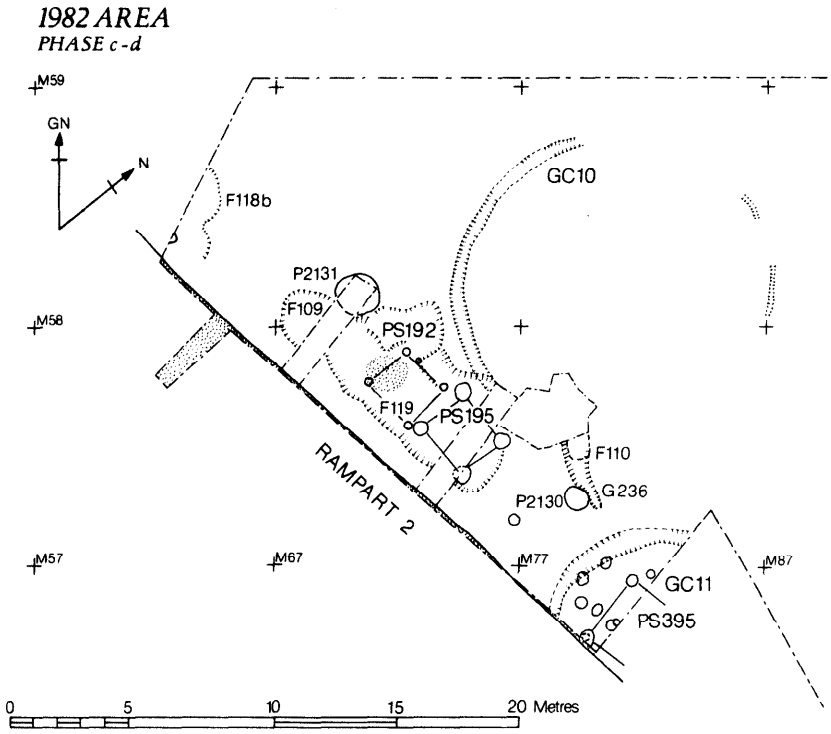


Fig 4.134

others in the unstratified area to the north were probably of this date. So too was the circular gully (GC10) one part of which cut the fill of the quarry (F119) but was sealed by layers post-dating rampart period 3 (phase f). At the east end of the site another gully complex (GC11) enclosing a four-post structure (PS395) belongs to this period.

The second addition to the rampart (R3): phase e (Fig 4.135)

The third phase of the rampart extended the tail of the rampart further back into the fort. It was composed largely of occupation rubbish and other material (728) derived from inside the fort requiring the digging of only shallow quarry hollows, F119b and F118c. These late quarry hollows appeared to have been created by scooping material from preceding quarries.

The material used for the construction of R3 (728) was difficult to distinguish from material eroded off it and this resulted in certain confusion of the records during excavation, when 728 was regarded as extending across the whole area of stratigraphy. In reality the tail of the rampart probably extended about 0.5-0.8 m into the excavation, whilst the greater part of the silt over the quarry areas was soil eroded off the rampart and from the interior of the fort (renumbered 1117).

Occupation following the construction of rampart period 3: phases f-h (Fig 4.135)

After the final addition to the rampart had been made there is evidence of considerable activity in the area.

Phases f and g

At the east end of the site a circular house was built (CS35) only part of which extended into the excavated area. It was stake-built and for the most part the natural chalk served as a floor level. An internal gully suggests the possibility of a rebuild, or internal subdivision.

To the west was another circular structure (CS63) with a substantial chalk floor and a large contemporary pit (P2115) inside, together with two hearths. While it is possible that this structure was an unroofed working area a pair of post-holes seem to represent a door suggesting that it was a normal circular house. Overlying the first chalk floor (750 and 754) was a thin occupation layer (749) which was sealed by a second chalk floor (744) laid with respect to the still-functioning pit (P2115). Probably contemporary with this second phase was a similar chalk spread (745) which had been packed into the top of F111 (CS35).

A similar two-phase sequence can be seen in the six-post structure (PS196) which lay immediately to the east of CS63. Two of the six post-holes were cut through the tail of the rampart (728). The posts had been packed around with chalk lumps and puddled chalk. To the west of the structure, presumably outside the front, a chalk spread had been laid (752, 753). It was packed hard and the surface was puddled and smooth from wear. There was no equivalent surface inside the structure and it seems that silt (1117) had been allowed to accumulate largely eroded from 728 suggesting the presence of a raised timber floor. Over the chalk floor a thin occupation deposit (777) had formed before a further chalk spread (741 and 742) was laid to consolidate the surface. At least three of the post-holes showed clear evidence of a second phase as more packing had been placed around the bottom of the posts. It is possible that a chalk spread (743) within the building may be a floor belonging to this later phase: the chalk was rubbly and loosely packed with no evidence of trampling. At the west end of the area there were further chalk spreads (734, 735) consisting of small rounded lumps packed in a grey silt matrix.

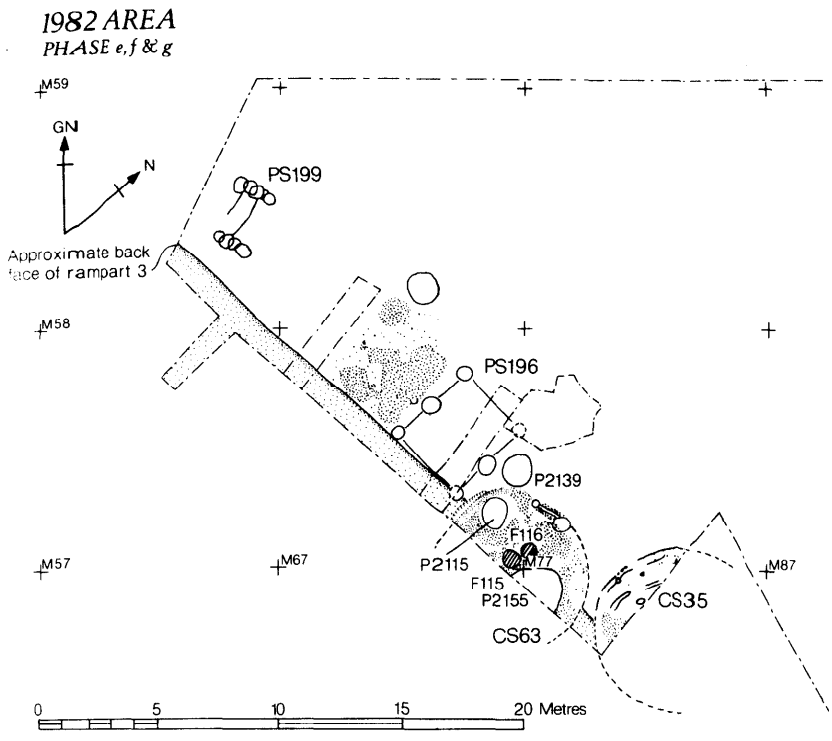


Fig 4.135

The three structures CS35, CS63 and PS196, therefore, each showed evidence of two phases suggesting that we may be justified in correlating the early phases of each and calling it phase f and the later phases as phase g, recognizing that the occupation was continuous.

In F118c P2137 was cut fairly early in phase f, whilst across the bottom of the quarry a chalk spread (1115) accumulated. It was generally only *c* 50 mm thick consisting of rather dispersed small chalk lumps. Over this was the thick silt layer 1117 0.2–0.25 m thick, which in the south of F118c merged into flint rubble (1116) in similar silt, which had eroded from the rampart. Whilst these layers were accumulating PS199 was probably in use. This was a multiphase two-post structure and it would be possible for it to have first been constructed in phase d and possibly continued into phase g. In phase g the area was generally covered by the chalk spreads 734 and 735, which were probably contemporary with the more extensive chalk spreads to the east, associated with pS196 and CS63.

Phase h

The latest activity was the digging of pits 2155 and 2139. Thereafter the area was blanketed with natural accumulations of silt (727 and 739) interleaved with layers of flints which had tumbled from the ramparts (722, 726, 733).

Summary of the stratified sequence

The sequence may be summarized as follows:

0 Turf line disturbed and pre-rampart structures
a rampart period 1 and quarry hollows F118a, F121, F124, F122
b occupation: G227 and PS197
c rampart period 2 and quarry hollow F109/119a, F118b
d occupation: GC10 and GC11 with PS395 and PS190, PS192 and PS195
e rampart period 3 with shallow contemporary quarry F119b and F118c
f occupation: CS35, CS63 and PS196 (first phases) and PS199
g occupation: CS35, CS63 and PS196 (second phases)
h occupation: pits 2139 and 2155 abandonment and silting.

Summary of dating evidence

The stratified pottery, listed in Fiche 25:C13–14, provides a useful guide to chronology. Phases a-c produced only pottery of cp 3. The occupation on the tail of rampart period 2 (ie phase d) contributed a quantity of cp 6 types. From the construction of rampart period 3 onwards cp 7 pottery was in evidence. A single sherd of cp 8 from a phase g context could be an accurate reflection of the date but at this point in the sequence, when roots and animal burrows caused much disturbance, it could equally well be intrusive.

4.3.10 The excavations of 1979, 1980 and 1988: sequence H (Figs 3.4 and 4.137-4.143)

The southern limit of the excavations of 1979 and 1980 began to expose stratified layers as the tail of the rampart was approached. The 1988 excavation was designed as a 30 m long extension linking these layers to the stratigraphy of the rampart and thus exposing the potentially well-preserved sequence of structures and deposits on the southern side of the fort — an area about which little was known.

The rampart sequence examined in the 1988 excavation has been discussed in detail in section 3.1.6 above. Here

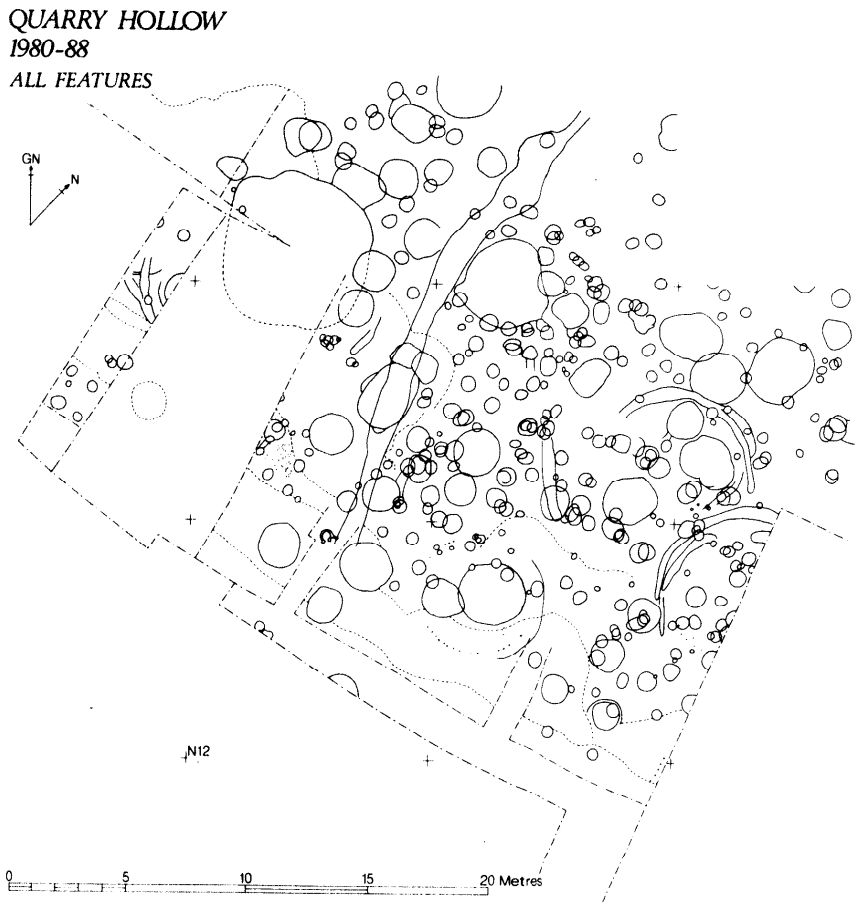


Fig 4.137

we will be concerned to describe the sequence of occupation interleaved with the rampart phases.

Pre-rampart occupation — phase 0 (Fig 4.138)

Firm evidence was found of structural activity pre-dating the first rampart of the Iron Age fort. At the east end of the trench a small four-post structure, PS474, was discovered partly sealed by the buried soil (layer 2042) and partly cut by the quarry trench F370 which dates to the construction phase of the first rampart. Immediately to the north of this structure were two ancient tree root holes (ph 10026 and ph 10027 filled by layer 2071) which were partly sealed by a discontinuous spread of puddled chalk (layer 2070) possibly dating to the pre-rampart phase. Cutting this spread was a second four-post structure (PS475) which belongs either to a late phase of the pre-rampart occupation or to the earliest phase of the hillfort occupation. Some of its post-holes were sealed by a layer of chalky silt (layer 2043) which began to accumulate soon after the first rampart had been built. It is possible that some of the other four-post structures found immediately to the north may also have belonged to this pre-rampart phase. Several are of 'early' type but there is no stratigraphical proof of a pre-rampart date.

At the west end of the trench five post-holes were found sealed either by the pre-rampart soil (layer 2109) or by the layers of the primary rampart (layers 2094, 2054). The area exposed was too small to determine whether any of these belonged to post structures but some at least probably did.

Sealing this pre-hillfort phase was a palaeosol (layers 2042, 2095, 2096 and 2109) comprising a yellowish-brown clayey silt, with the density of chalk gradually increasing towards the solid chalk bedrock, suggesting an undisturbed soil.

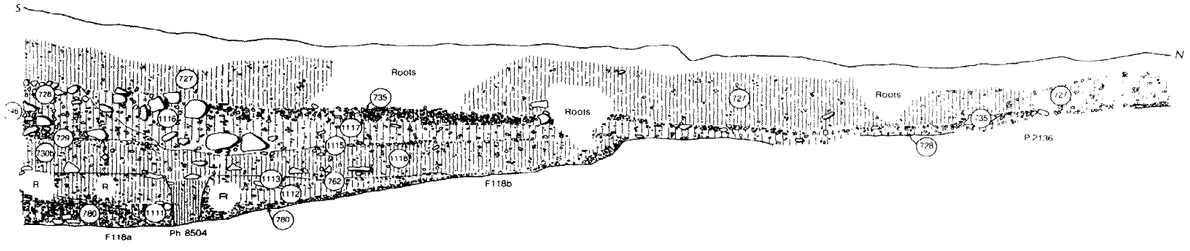
First rampart, primary construction (rampart la) —phase al-a2 (Figs 3.3 and 4.138)

This phase includes the digging of the marking out/ quarry trench and the construction of the primary rampart, the details of which are given in section 3.1.6.

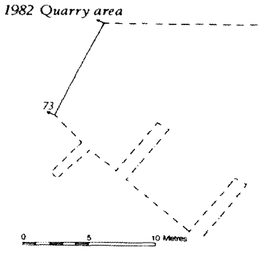
Early occupation, primary period — phase b (Fig 4.139)

The only area of occupation activity which can be firmly attributed to this phase is that which occurred adjacent to the central section of the rampart and consisted of a few isolated post-holes, the remains of two ovens and some associated layers. One of the ovens (F355) appears to have been contemporary in construction with a chalk spread (layer 2086): the later oven (F366) was constructed on an occupation deposit (layer 2080) and was poorly preserved. It is possible that the area scarped into the tail of rampart la was an open working area. Most of the deposit filling it (layers 2080, 2077 and 2082) contained a high density of charcoal ash and small burnt, shattered flints, typical of rubbish derived from the use of the nearby ovens.

SECTION 73



1982 Quarry area



SECTION 74

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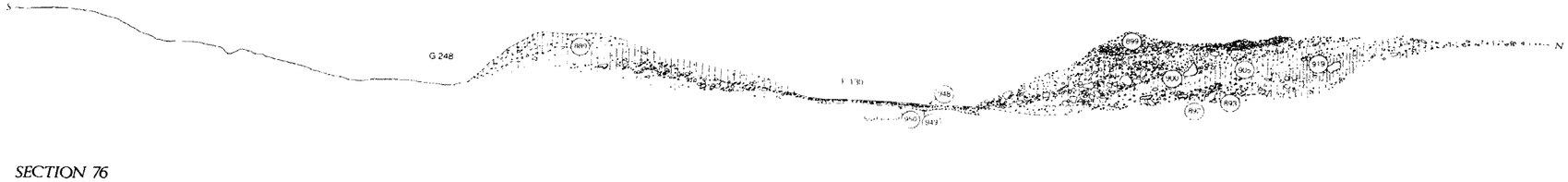
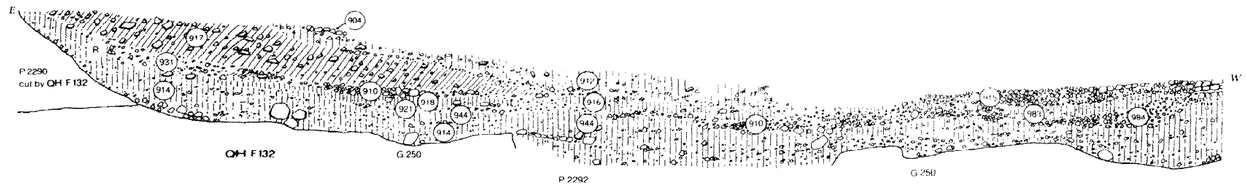


SECTION 76

SECTION 77



1983 Quarry area

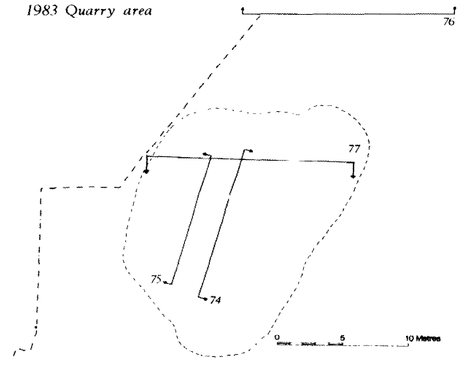


Fig 4.136 Sections of stratigraphy 1983

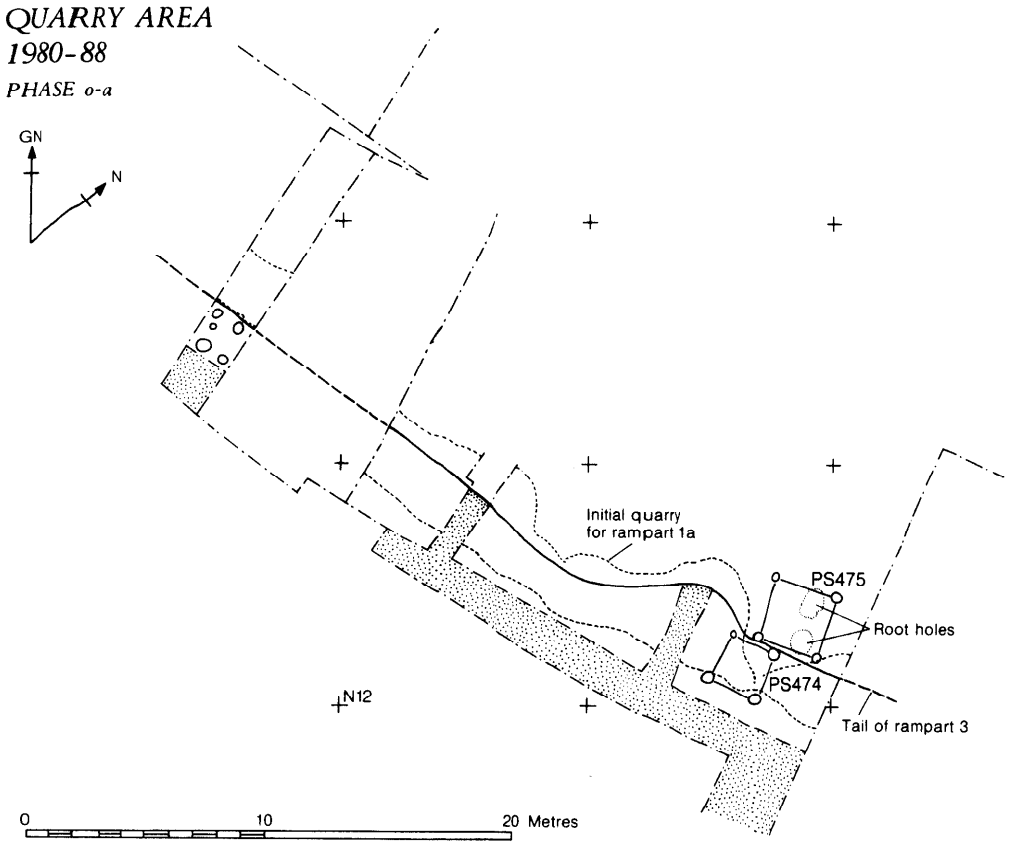


Fig 4.138

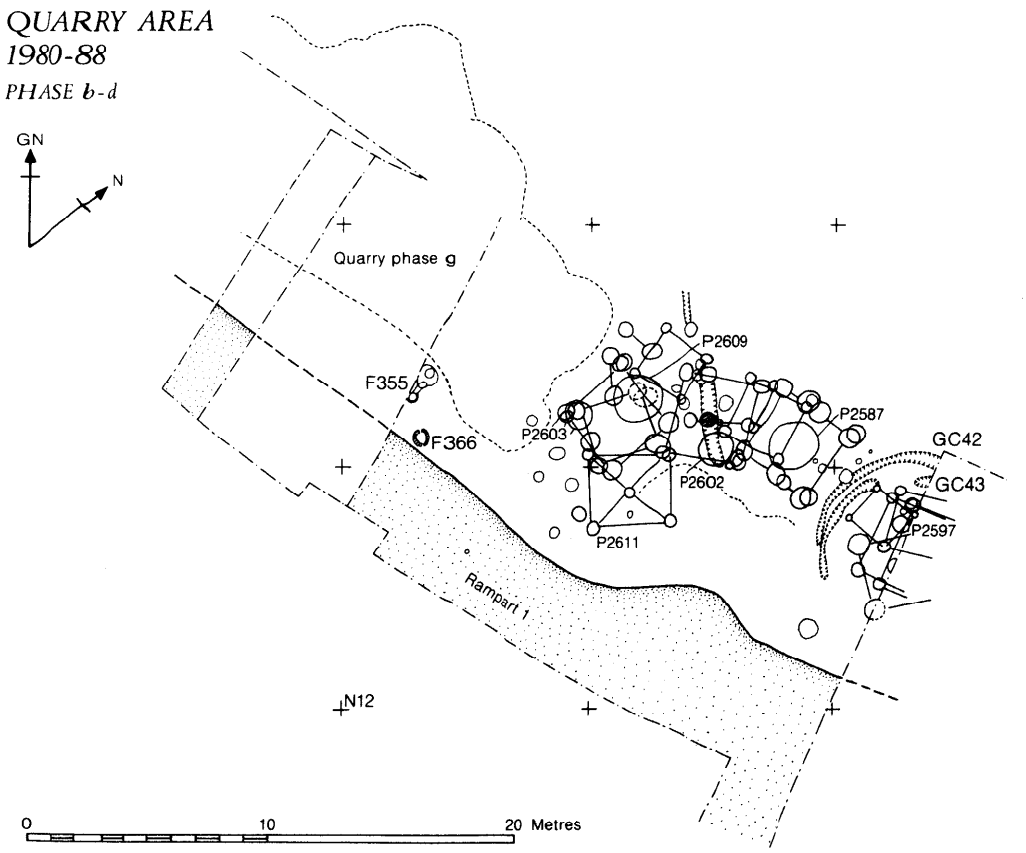


Fig 4.139

The layers accumulating in the east end of the quarry trench F370 probably belong to this phase. First a chalky brown silt (layer 2040) formed as a thick accumulation in the basal angle over the rampart tail (layer 2028). On top of this a thin charcoal-rich soil (layer 2030) was deposited, over which a thicker layer (2031) of fine black silty soil with charcoal, burnt clay and a very little chalk grit accumulated. This was sealed by a layer of greyish-brown silt (layer 2029) dominated by chalk grit with some larger chalk blocks up to 120 mm, flints and fragments of charcoal. Most or all of these layers were probably deliberate tips, rather than natural soil accumulation. Some of this deposition may have taken place in phase d.

First rampart, addition (rampart 1b) — phase c

This localized heightening was noted only in the central area and is fully described in section 3.1.6.

Early occupation, second period — phase d (Fig 4.139)

In the central area, over the localized addition to the rampart (phase c) there was a further accumulation of material in the top of the quarry hollow. The first deposit was an occupation layer (2074) consisting of dark brown crumbly silt with much small chalk, a few flint nodules and chalk lumps and a considerable quantity of charcoal fragments and fine charcoal lenses. Following this a dark brown silty soil accumulated (layer 2045) containing some chalk, burnt flint and chalk, sling stones and charcoal. A small uneroded beehive pit (P2611) cut this layer and was sealed by a layer of loosely packed coarse chalk rubble (layers 2048 and 2049) rounded and worn on the surface but fresh and angular beneath, set in a matrix of small chalk and grey silt. Mixed with it was a large quantity of animal bone. This was sealed by a chalky brown silt (layer 1999) mixed with some occupation debris, representing a period of soil and rubbish accumulation. It was equivalent to 1997, a dark brown silt with charcoal lenses, some small chalk fragments and flint nodules and a high proportion of animal bone including several articulated groups. The only other feature which can certainly be assigned to phase d is a post-hole (ph 10162) which was sealed by layer 1999.

Elsewhere, clear of the rampart tail, it is not easy to relate features and structures to the rampart phasing. In these areas the occupation of phases b to f formed a continuum and therefore no attempt has been made to sub-divide it.

The area of largely undisturbed chalk occupying the eastern half of the site, to the east of the large late quarry hollow (F365) was densely covered with features of which the majority were post-holes. Many of these could be resolved into settings of four or six comprising post structures of types B, F and H with some two-post settings of type L. The relative phasing of some of these structures has been established by inter-relationships, but in other cases it is possible only to say that certain structures could not have been contemporary. Eleven structures could be assigned to the earliest phase of activity together with a number of isolated post-holes and a pit (P2602). It is possible that a hearth (F371) and associated burning on the chalk bedrock were contemporary with PS482.

In the eastern area of the excavation most of these structures were wholly or partly sealed by a light brown silty soil (layer 2015). Resting on this was a thin lens of occupation material (layer 2014) consisting of ashy, burnt soil, patches of daub, charcoal fragments and flecks of burnt clay: this layer was of limited extent. The silty soil (layer 2015) was cut by two gullies: the earliest were G329 and G335 which form gully complex 43 and the latest was G324, designated gully complex 42. Both probably enclosed post structures but since the enclosed areas were only partly within the excavated area the plan of associated features is incomplete and the relationships uncertain. Gully complex 43 had its entrance on the north side and it is likely that PS479 (probably a type H or K structure) was contemporary with it since it would have aligned roughly with the entrance. PS479 partly cuts layer 2043 and is sealed by a chalk spread (layer 2004) which would place it somewhere in phases b-d. The entrance of gully complex 42 was not exposed. Parts of two post-structures, PS483 and PS484, lay within the excavated area and may have been contemporary with it. Sealing gully complex 42 was a thin spread of sub-rounded chalk in a matrix of puddled chalk and brown silt (layer 2013). This was cut by PS488, a type H four-post structure which was probably in use in phase f. Following this the eastern area was sealed by an accumulation of clean light brown silt (layer 1998) containing small pieces of chalk and flint.

In the western half of this eastern area, following the early period dominated by post structures, there was a spread of occupation debris (layer 2012) which comprised a high proportion of charcoal in a silty matrix, containing fragments of quernstone, burnt chalk and burnt flint. Above this was a brown chalky silt (layer 2016) which was succeeded by a tightly packed chalk spread (layer 2011). This was cut by a gully (G330), which formed gully complex 44 with ph 5092 (a remnant of a gully rather than a post-hole) between which was a two-post structure, PS477, which may have formed some kind of entrance feature. This gully complex was probably in use sometime during phases d-f. Since it appeared to end at the north edge of the phase e quarry hollow (F361a) it may tentatively be assigned to phase f.

West of G330 were two pits, P2599 and P2609, which can be assigned to phases d-f. They were sealed by chalk spreads (layers 2033 and 2034) which were probably of roughly equivalent date.

First rampart addition (rampart 2) — phase e (Fig 4.140)

This phase represents the addition of a layer of chalk rubble (layers 2005 and 2052) to the back face of the rampart. The material was probably derived from a long narrow quarry, F361a, of which only the base has survived, the upper part having been truncated by the later quarry. At the west end of the site the phase e quarry has been totally destroyed by the later quarry, F365 (unless a deeper scoop in the base of F365 are the remnants of the earlier quarry). For details of the rampart see section 3.1.6.

Middle period occupation - phase f (Fig 4.140)

There was little occupation activity in the base of the quarry of phase e apart from a few small post-holes. Sealing these and covering the base of the quarry hollow was a brown chalky silt (layer 2017) containing sparse occupation debris. The silt was largely a natural formation which extended up the side of the quarry hollow covering the adjacent chalk to the north. (It was probably equivalent to layer 1998.) The silt sealed many of the

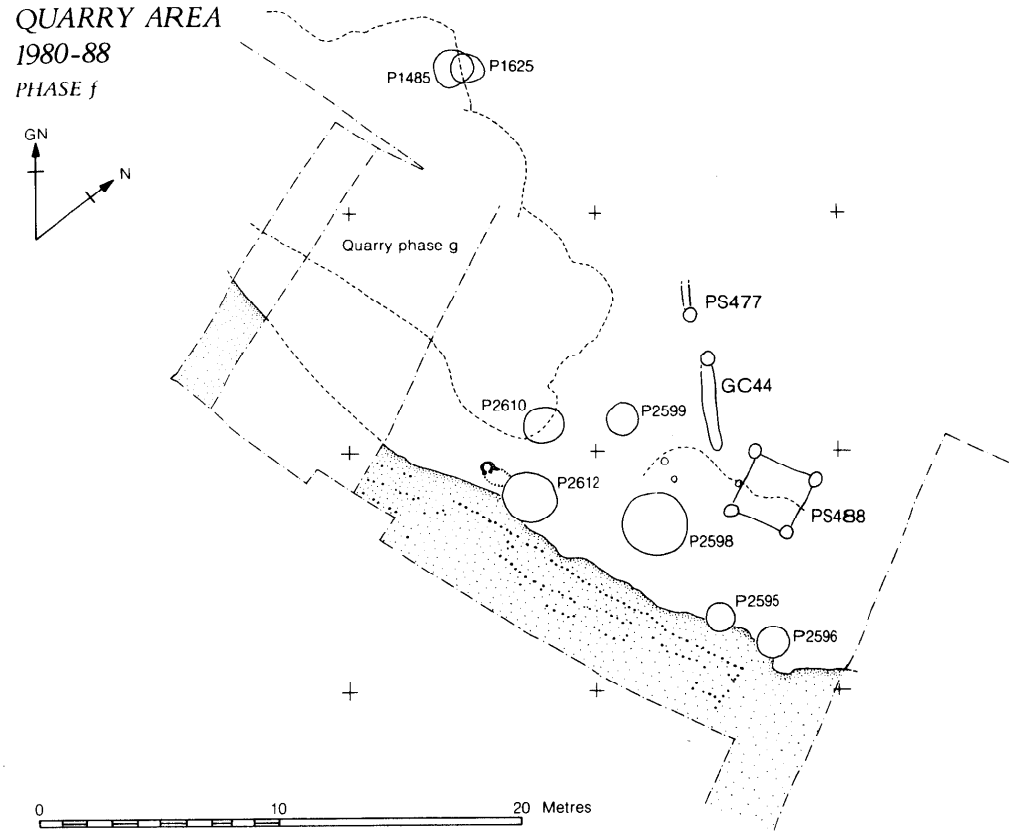


Fig 4.140

post-holes assigned to the early phases and also pits P2603 and P2610.

Cutting the silt layer was a large beehive pit, P2598, which, after use, had been allowed to erode and silt naturally. Also belonging to this phase were a number of features cutting through the tail of rampart 2. These included a pair of similar size pits, P2595 and P2596. Both were small and deliberately filled and both contained a half of the same quernstone placed on the base. There was also a well preserved oven, F356, the lower part of which contained much of the collapsed superstructure.

In general there was little occupation that could definitely be assigned to this phase in all probability because the period between ramparts 2 and 3 was relatively short lived.

Sealing P2598 and the adjacent areas of the quarry hollow was a thick layer of dark yellowish-brown clayey silt (layer 2010=1977). This layer was particularly thick where it had formed over the pit. Here it was sealed by a discrete layer of large angular flints in a brown chalky silt (layer 1986).

Second rampart addition (rampart 3) — phase g *(Fig 4.141)*

In this phase the rampart was heightened with a series of dumps of soil and chalk the details of which are given above in section 3.1.6. To provide much of this material a series of quarry hollows were dug. At the east was F361b, an irregular linear hollow clearly defined on the north side where it was scarped into layer 1998. It was *c* 5 m wide and nearly 11 m of its length was exposed. To the west the quarry was more massive: F365 was roughly circular measuring 8 m wide and more than 6 m long. It merged into F369 of which only a small section was exposed in a narrow trench at the west end of the excavation. F369 formed the south part of the quarry excavated in 1980 (F84) their combined widths measuring *c* 11 m. It is probable that F365 and F369 were part of the same continuous quarry of which more than 22 m has been exposed. These western quarries were more substantial than the eastern quarry and had cut into the chalk to a maximum depth of 1.1 m whereas quarry F361b was relatively shallow, only 0.3 m in depth at the maximum.

Late occupation — phase h (Fig 4.141)

In quarry F361b a few post-holes of this period could be identified five of which made up a post structure, PS476. It is probable that layer 1996 started to accumulate at the end of phase h.

In quarry F369 a few isolated post-holes and a pit, P2617, had been dug. These were sealed by a pale grey silt (layer 2101) containing occasional burnt flints and flecks of charcoal.

In the base of quarry F365, the edge of a slightly deeper hollow was exposed. This was filled with a pale grey chalky silt (layer 2079) over which had accumulated a yellowish-brown chalky silt (layer 2073) containing some burnt chalk and charcoal. On this had been laid a chalk spread (layer 2036) of closely packed chalk blocks. This had a distinct curved edge and may have formed the floor of a, largely unexposed work area or structure. Cutting this layer was pit P2600. Other pits cutting into the base

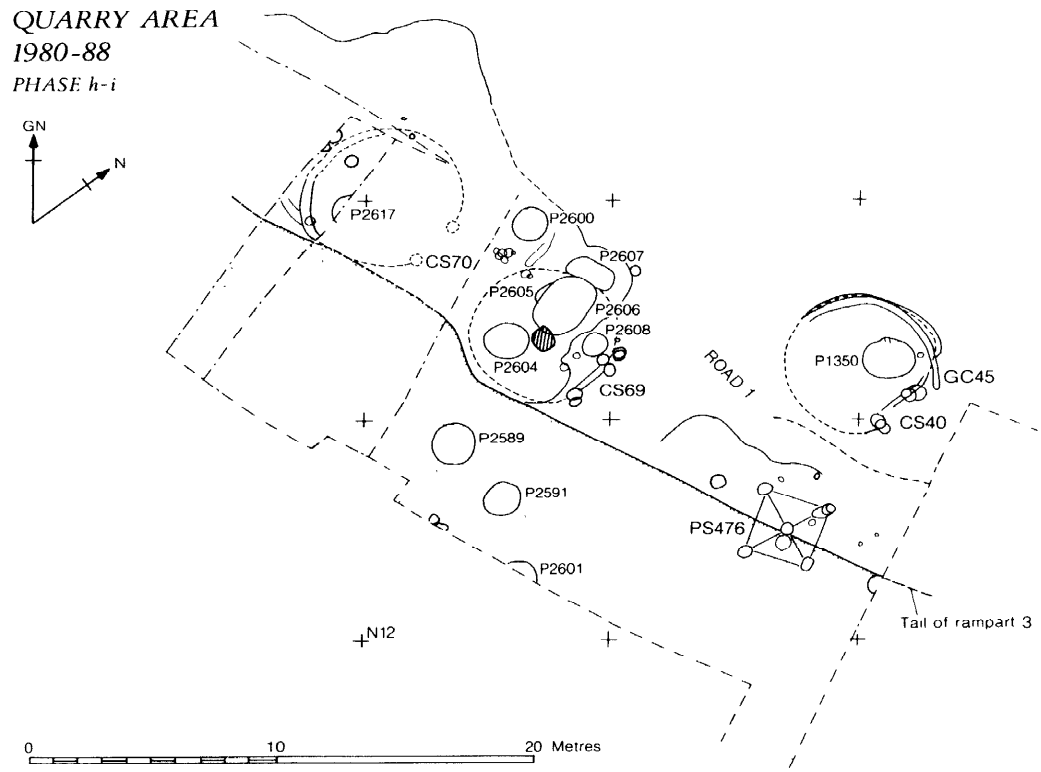


Fig 4.141

of the quarry were probably roughly contemporary. Of two subrectangular pits, P2607 was dug first, followed by P2606 in the top of which was dug a shallow pit to hold a human burial, P2605. These were all sealed by a yellowish-brown chalky silt (layer 2026) which was equivalent to layer 2101 in F369.

To the north of the eastern quarry, F361b, was an arc of a gully, gully complex 45. It is possible that it partially enclosed a circular structure of which the two posts, PS496, formed the door. There was no trace of a wall line but this could easily have been destroyed by later terracing and by the digging of later pits. The supposed circular structure is designated CS40a and was replaced by a definite circular structure, CS40b, in phase i. A path or roadway probably ran between CS40a and PS476 in this period continuing the line of road 1 observed in the area excavation to the east. Three pits within the arc of the gully, P2592, P1349 and P2587 could belong to this phase but they are not stratigraphically related and are more likely to be earlier.

Late occupation - phase i (Fig 4.141)

The area occupied by the tentatively-defined circular structure CS40a was now partially levelled by the creation of a circular terrace, F68, upon which another circular structure, CS40b, was constructed. This is described in detail above (pp 70-2). To the south, in the quarry F361b there appears to have been a period of inactivity during which a light brown chalky silt accumulated (layer 1996) containing lumps of chalk (up to 80 mm) and flint nodules together with quantities of sandstone fragments, possibly debris from quern production. The layer seems to be the result of successive tipping mixed with natural soil accumulation.

In the western quarry hollow (F365) a thick layer of chalk rubble in a matrix of brown silt (layer 2025) was dumped over the silt which had already accumulated. This formed the base for a circular structure, CS69/F364. The main features were a pair of double post-holes joined by a slot, a hearth and a series of chalk floors with patching. The structure is described in detail above (pp 102-3). Outside the door to CS69, on the ridge of chalk between the two quarry hollows were a series of layers of silt, chalk and occupation debris, which appear to have resulted from the use and consolidation of the approach to CS69.

In the westernmost end of the quarry, F369, there was evidence to suggest the presence of a circular structure, CS70, in this phase. Only a segment of it was exposed consisting of a circular gully, G334, and a chalk floor (layer 2097). The details of CS70 are described above, p 103. Cutting the floor and apparently infilling the top of a pit was a dump of large chalk blocks in a matrix of greyish-brown silt (layer 2085).

Late occupation — phase j (Fig 4.142)

This phase is characterized almost entirely by a series of deliberate dumps of various materials laid presumably to level up the area and consolidate the ground for road 1 which was now realigned and widened.

In the eastern quarry, F361b, there was a massive dump of loosely packed chalk rubble (layer 1983) the surface of which was irregular, undulating and unworn: it varied in thickness between 0.3 and 0.5 m. Over this was an

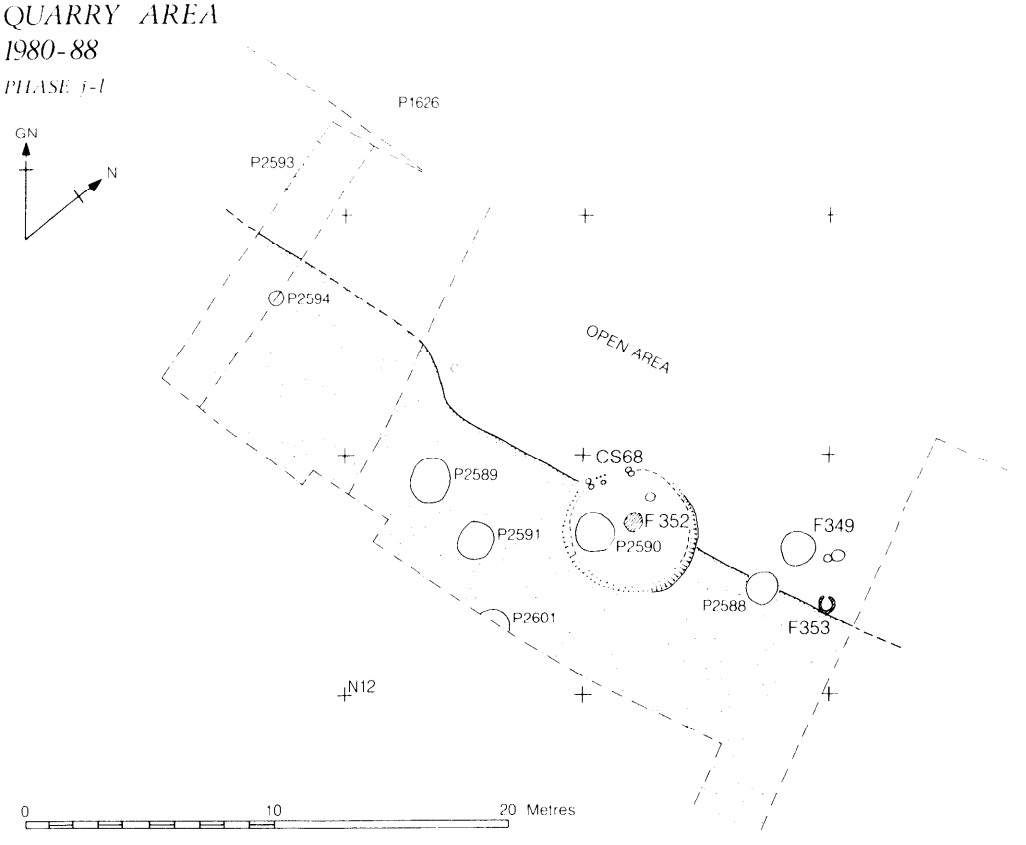


Fig 4.142

accumulation of light greyish-brown chalky silt (layer 1974) with chalkier concentrations suggesting that it was, in part, a series of deliberate dumps. Intermixed with it were groups of partially articulated animal bones. This 'silt' blanketed most of the eastern half of the site.

To the west of this, over the quarry F365, there was also a series of dumped layers. The first, tipped down the north slope of the quarry, was a yellowish-brown silt (layer 622) containing some small chalk lumps and flints. Over this was tipped a mass of loosely packed chalk rubble with occasional nodules of flint (layer 621). A few stake-holes were observed in this chalk. This was followed by a tip of yellowish-brown clayey silt (layer 2002) mixed with small subangular chalk fragments. Over this, along the north slope of the quarry, more chalk rubble (layer 2001) had been tipped. The surface, near to the upper edge had been trampled but downslope it turned into a scree of discrete chalk blocks. Following this there had accumulated a yellowish-brown chalky silt (layer 2000) containing a scatter of occupation debris. Sealing this was another dump of chalk blocks (layer 1956). Once again the upper edge was trampled smooth while at the base was a tumble of loose rubble. Finally, infilling the hollow left in the middle of the quarry was a dump of yellowish-brown silt (layer 1955) containing small chalk fragments and mixed with large blocks of chalk and occasional flint nodules.

A similar sequence can be seen in the westernmost part of the quarry excavated (F369/F84). Here, over the floor of CS70 was a dump of clayey brown silt containing chalk fragments, chalk lumps, flint nodules and quantities of charcoal and flecks of daub (layer 2075=636). This appears to have been a deliberate dump of occupation debris tipped from the north edge of F84. Over the southern side of the quarry was a grey slightly chalky silt (layer 2062) which was probably a deliberate dump. Over the base of the quarry and CS70 this merged into a very similar deposit (layer 2084) but containing more daub and charcoal. Above layer 2075 was a lens of greyish-brown chalky silt (layer 2083) containing charcoal flecks. This was sealed by a thick dump of yellowish-brown chalky silt (layer 2065) with charcoal, flints and larger blocks of chalk (probably equivalent to layer 674 in F84). On the south side of the quarry a grey silt (layer 2061) was probably contemporary: it contained a moderate quantity of small chalk, occasional flints and some charcoal. The deliberate tipping in the large quarry F365/F369/F84 was clearly spread over a period of time and suggests a periodic consolidation of the northern edge of the quarry interspersed with periods when silt mixed with tipped rubble was allowed to accumulate in the hollow. This is consistent with the suggestion that a road ran along the northern edge of the quarry.

Late occupation — period k-m (Figs 4.142, 4.143)

Following the phase of deliberate dumping there followed a period of sporadic occupation associated with further levelling.

At the east end of the site a few features were cut into the dumped silt (layer 1974) consisting of a few post-holes, a pit, P2588, an oven, F353, and a clay mixing pit, F349. The features could have been in use at any time during this phase. Outside the entrance to CS40 were a series of chalk spreads alternating with silt layers which could represent patching in holes in road 1 (it is unlikely that

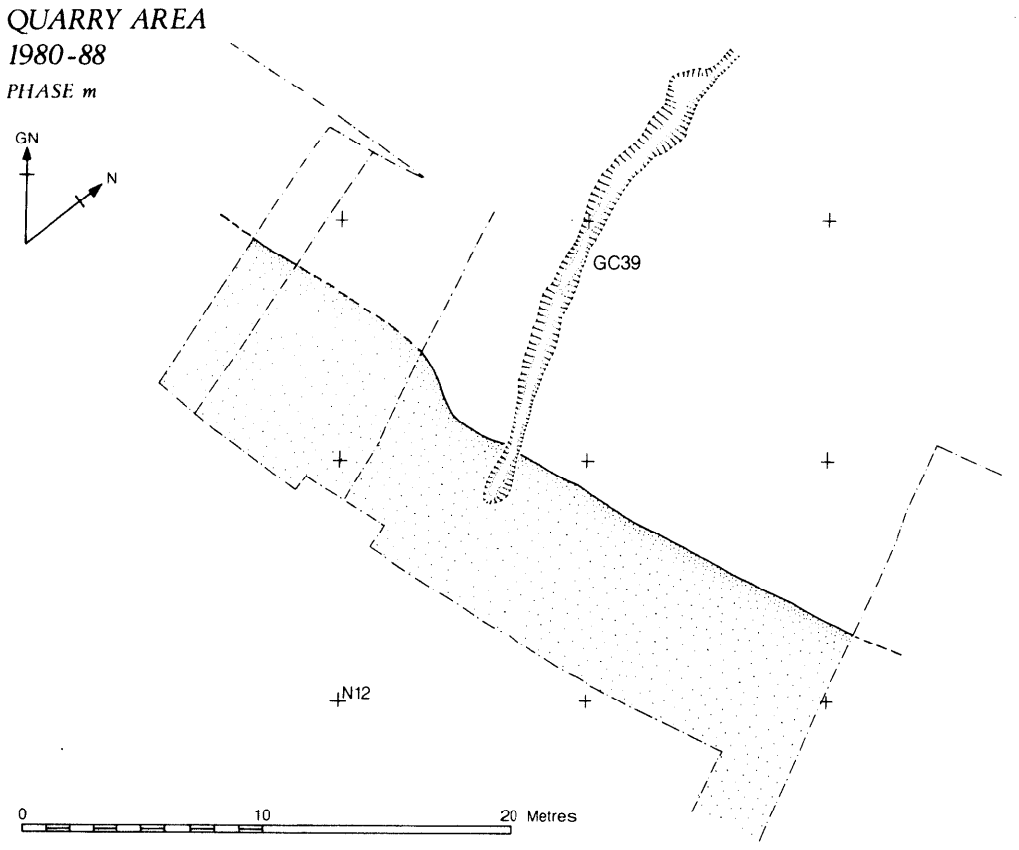


Fig 4.143

CS40 was still in use at this time). The first was a dump of chalk rubble (layer 1932) puddled together and with a roughly trampled surface. Over this came a light brownish chalky silt (layer 1973) on the surface of which was a patch of charcoal containing fragments of pottery and daub (layer 1972). This was followed by a further greyish-brown chalky silt (layer 1931). Finally the area was levelled with a dump of chalk (layer 1928) tightly puddled together and with a roughly trampled surface.

In the central area the principal feature was a small circular house, CS68, constructed in a terrace, F350, cut into the preceding layers and with stake-built walls and a door facing north-west. The remnants of a chalk floor (layer 2009) survived incorporating a burnt chalk hearth, F352. On the floor had accumulated a charcoal-rich occupation deposit (layer 1963). A detailed description of the house is given above, pp 100-1. Outside the door of the house a series of silts and chalk spreads had accumulated some of which extend over the edge of the quarry, F365. The first was a grey chalky silt (layer 1981) containing a scatter of charcoal flecks: this infilled the hollow and F365. Above it was a dump of chalk rubble (layer 1980) in a matrix of chalky silt containing charcoal and carbonized grain. Close to the door of CS68 was a similar dump of chalk rubble (layer 1961) at the same level. This was sealed by a further dump of large flint nodules and chalk blocks (layer 1985) mixed with daub, sandstone and charcoal. Sealing these layers was an extensive deposit of brown silt (layer 1968=1969) containing chalk blocks, flints and charcoal. This in turn was sealed by a similar silt (layer 1967) but lacking occupation debris. Above this were a further series of dumps of chalk blocks and nodules of flint (layers 1958 and 1959) and overlapping the edge of layer 1959 was a trampled patch of puddled chalk (layer 1960), which clearly formed the threshold outside the door of CS68. The relationship of the preceding layers to CS68 is unclear: they could have been a continuation of the dumping processes of phase j or successive resurfacings of the threshold of CS68.

Further to the west, over F365, there was a thick accumulation of brown silt (layers 1990 and 1991) which contained a moderate quantity of small chalk together with large blocks of chalk and flint nodules with patches of occupation debris including charcoal, burnt chalk and burnt flint. This would appear to be a mixture of tips of soil and rubble rather than a natural accumulation.

After the house, CS68, had gone out of use a dump of chalk rubble (layer 1964) was tipped into it. This was followed by an accumulation of silt and occupation debris (layer 1962=1965). Subsequently the whole house terrace was infilled by a thick dump of subangular chalk (layer 1941). The upper surface of this was worn and weathered but the lower part consisted of fresh angular blocks with occasional flint nodules, loosely packed. This layer was probably the result of the digging of pit P2590 within the house terrace. The surface of the chalk rubble (layer 1941) was probably worn while the pit was in use and during its subsequent infilling. On the slope of layer 1941 there were some dumps of occupation debris including a tip of daub (layer 1943) and a nearby lens of black sooty soil (layer 1945) mixed with fragments of charcoal and shattered flints. Both of these tips resulted from the use and demolition of an oven.

It is possible that the extensive chalk spread (layer 1957), over F365, was contemporary with pit P2590 and the late activity in the hollow of terrace F350, as the spread

extends up and through the entrance area of the now abandoned CS68. This layer consisted of small chalk lumps plus occasional larger blocks in a matrix of puddled chalk. It apparently formed a major resurfacing of road 1 and provided a path leading from the road to the late activity in F350.

Finally the hollow remaining over P2590 was filled with a crumbly brown silt (layer 1944), which contained a high proportion of weathered chalk. It was a very mixed layer incorporating dumps of stone rubble. This was essentially continuous with a chalky brown silt (layer 1940), eroded off the rampart, and, to the north, with a chalky greyish-brown silt (layer 1966) containing occupation material and sling stones. Above this was a thin lens of occupation debris (layer 1934=1935) which consisted largely of charcoal fragments, occasional burnt flints and daub in a chalky silt. Much of this debris could have been derived from oven F353. Finally a dump of chalk rubble (layer 1929) covered the area and became dispersed towards the edges, where smaller chalk was trampled into the underlying silt. This layer was equivalent to layer 1928 though the two were not actually continuous.

Over the main western quarry hollow, F365, the area was almost exclusively covered by a series of dumped layers continuing the pattern of the preceding phase. Over the chalk spread (layer 1957), in the hollow of F365, a dark grey chalky silt (layer 1988) accumulated. There was little occupation debris in it and it probably resulted from a build up of mud and soil on road 1. Above this was a dump of large irregular blocks of chalk rubble (layer 1946). This was dumped to form a bank on the south, adjacent to the tail of the rampart, and thinned out into the hollow where it merged with layer 1954 which formed a dump to the north of subangular chalk rubble well compacted in a matrix of chalky brown silt. Cut into the top of layer 1946 was a single post-hole, but no other structural activity was in evidence in the area. A discrete layer of occupation debris (layer 1948) overlapped the edge of layer 1988. Over this was a dump of angular chalk blocks (layer 1947) in a matrix of compacted chalk and silt.

In the hollow which remained between layers 1946 and 1954, a brown chalky silt (layer 1949) containing occasional blocks of chalk, flint nodules and flecks of charcoal accumulated. This was sealed by a grey chalky silt (layer 1950) incorporating some burnt chalk, flints and lenses of charcoal. Over this, the final layer to accumulate was a dark grey, chalky silt (layer 1930) containing patches of charcoal, burnt chalk, flint and daub, which represented individual tips within the developing layer.

Cutting through these accumulations was the southern end of gully complex 39 (G143 and G134; Fig 4.143). It was clearly the latest feature cutting across the stratigraphy to the base of the rampart. This was sealed by a brown chalky silt (layer 620) which developed after the fort was abandoned.

At the western extremity of the site, in F369, a single post-hole, ph 10173, cut into layer 2061/2065 of phase j: its relationship to nearby stratigraphy was removed by a later feature but is likely to have been contemporary with the chalk spread (layer 2060) which sealed layer 2061. The chalk spread was compacted with a well worn surface having the appearance of a deliberate chalk floor. Above this was a dump of subrounded chalk lumps (layer 2059) in a matrix of grey silt and sealing this was a thin band of grey chalky silt (layer 2058). These layers sloped into the quarry from the tail of the rampart and cutting them was a shallow subrectangular pit, P2593, which was filled largely with the debris of a demolished oven (layer 2063). Overlapping the edge of this, and dumped from the north, was a tip of large chalk blocks (layer 2064) in a matrix of greyish- brown silt with a few flecks of charcoal and daub. This is probably equivalent to layer 635 in F84. Above this, and filling the hollow over the pit, was a dump of large angular chalk blocks (layer 2057) and sealing this was a final accumulation of greyish-brown chalky silt (layer 2110). In F84 a similar succession of deliberate tips was observed but they cannot be directly correlated with layers in F369.

Cutting into the tail of rampart 3 were a number of pits, none of which could be closely assigned other than to phases g-k. However, they are most likely to be fairly late in the sequence. P2594 cut layer 2018 but was sealed by later tips: P2589 and P2591 must have been late because the hollows formed after they had eroded were filled with flints which had rolled down from the rampart crest after final abandonment. This layer was consistent around the perimeter of the fort and was sealed only by natural soil accumulation. Cut into the crest of the rampart was a small cylindrical pit, P2601, and two post-holes: these features are undated except that they succeed phase f.

From this rather lengthy summary of the stratigraphy belonging to phases k-m it will be clear that a considerable time span was involved during which time there was constant activity but the main preoccupation seems to have been to maintain much of the area excavated, as an open zone. It is not possible to divide the period into well defined phases but a threefold division seems reasonable. In the first (phase k) CS68 was built and occupied with an open working area to the east and road 1 crossing the site to the north. Thereafter, in phase 1, the house was abandoned and replaced by a pit and possibly other pits were dug nearby. During this time the road which had become a large open area was maintained and patched. The last recognizable feature, the linear ditch (GC39) is assigned to phase m.

Summary of the stratified sequence

The stratified sequence exposed in the 1980, 1988 excavations provides the best evidence available for understanding the range of activities practised along the southern perimeter of the site. In particular it allows the structures of the early period *(c* 550-350/300 BC) to be recognized in an area where later quarrying was of limited extent. The principal phases may be briefly summarized.

phase 0	pre-rampart occupation. A number of post-holes including at least one small four-post structure (PS474)
phase a	rampart period la, with quarry trench
phase b	occupation behind the rampart: ovens and occupation layers
phase c	rampart period lb. Localized addition to the rampart
phase d	occupation. A large number of four-, five- and six-post structures, some with penannular gullies around them: replaced many times; a few pits interspersed. Occupation rubbish accumulates immediately behind the rampart
phase e	rampart period 2. Chalk addition to the entire length of the rampart, the chalk being obtained from shallow quarries to the rear
phase f	occupation. Probably short lived and not intensive. Pits dug against the rampart with at least one four-post structure (PS488) nearby

phase g rampart period 3. Large-scale refurbishment requiring the digging of massive quarry hollows

phase h occupation. In the deep quarry hollow (F365/F369) pits and post-holes dug. To the east the first stage of house CS40 with a five-post store building (PS476) against the tail of the rampart. A path, road 1, ran between and skirted the deep quarry

phase i occupation. House, CS40, rebuilt and two new houses, CS69 and CS70, built in the quarry hollow

phase j occupation. The houses demolished (or abandoned) and the area levelled to create a wide continuation of road 1 or an open area

phase k occupation. House, CS68, built in a terrace cut into the tail of the rampart with a working area just outside to the east. The open area (road 1) is maintained

phase l occupation. House CS68 abandoned. Pit digging in the general area. The open area (road 1) is maintained.

phase m occupation has now virtually ceased. General silting everywhere. A ditch (GC39) is dug across the site possibly to create a cultivation plot or paddock.

Summary of dating evidence

The pottery from the stratified sequence is listed in Fiche 25:D1-6. In summary phase a contains only pottery of cp 1-3. The latest pottery from phases b and c is of cp 4. The latest from phase d is cp 6. From phase f onwards pottery of cp 7 becomes increasingly common.

4.3.11 The excavations of 1979-80: sequence I (Figs 4.143-4.148 and Pl 35)

It was most unusual for stratified deposits to be preserved in the central area of the fort away from the quarry hollows but in the 1979/80 area excavation a patch of stratified deposits survived relating to the continual resurfacing of a length of road 2. Nearby, to the north of the street, another area of stratigraphy remained associated with a post structure (PS320). This is described below as sequence J. There is no obvious reason why these two areas should have suffered less destruction than the rest of the interior in the post-Iron Age period. One possibility is that they may have been protected by pillow mounds belonging to the phase of rabbit farming but nothing survives to indicate that this was so.

a. The earliest pre-road features (Fig 4.145)

The earliest definable features on the site are a scatter of post-holes and pits, including a four-post structure PS267 all of which are sealed by the earliest stratified layers.

A row of three houses (CS43-5), which were probably broadly contemporary, may tentatively be correlated to the pre-road period. The earliest of these, CS44, is represented by a wall slot (G141) cut into the natural chalk. Inside was preserved a layer of dark brown silty soil mixed with a few lumps of chalk (617) which probably represents the pre-house ground surface. This is overlaid by a thin occupation deposit (615) representing rubbish which had accumulated within the building during its phase of occupation. The post structure, PS266, seems to be contemporary, possibly replacing PS267. GC8 belongs to this early phase as the road metalling (657) had slumped into the top of its fill, and PS330 pre-dates the gully complex.

b. The earliest road and associated features (Fig 4.145)

The earliest road surface (619), consisted of rounded flint pebbles (20-50 mm), angular broken flints and sub-rounded chalk lumps packed in grey silt. It represents the infilling of a hollow worn in the road (possibly accentuated by the presence of ph 5490). Another patch of metalling (688) was stratigraphically equivalent but more extensive. The flints *(c* 50 mm in size), packed in a matrix of brown silt, had become worn and rounded with use and in one place a pair of wheel ruts were discernible. The metalling (599) may also be assumed to be contemporary with this earliest phase (based on the correlation 592=616) and several patches of gravel in the tops of features (641, 657 and 603) can, arbitrarily, be assigned to this phase. There is no direct relationship between the metalling and the circular houses.

c. The second metalling and associated features (Fig 4.146)

The road was remetalled after a period of use. Over much of the area the new metalling was laid directly on the old but some patches of intervening layers survived. In one place the first metalling (619) was sealed first by a spread of chalk (593) above which had accumulated a layer of silt (594) before the new metalling was laid. Elsewhere the early metalling (599) was first sealed by a thin grey silt (598) over which had been rammed a tightly compressed layer of puddled chalk (595) perhaps the deliberate filling of a pothole formed by subsidence in the top of P1412. Over this another layer of silt (596) had accumulated before the road was resurfaced.

The main surface of the road (616, 687) comprised angular broken flints (30-150 mm), including several burnt fragments and some pebbles, tightly packed into a brownish-grey silt containing rounded lumps of chalk and some patches of puddled chalk. Trampled into the surface were fragments of pottery, bone and charcoal. The gravelling became sparser towards the edge of the road and merged gradually into a more soily material (663) representing an accumulation of mud at the road edge, which was itself well-trampled and with a scatter of pebbles on its surface. Although it has no physical link with 616, 592 is assumed to be equivalent on the basis of its close similarity and general location.

The circular house (CS44B) represented by G140, may have continued in use during this period though it was rebuilt a little further south than its first phase. No other structures can certainly be assigned to this phase though it is quite probable that some of the adjacent circular structures continued in use and PS276 could belong only to this phase.

At the north-west end of the road, overlying 687, was a dump of weathered chalk lumps (662) over which further metalling (658) of large broken flints had been packed and trampled into the silt matrix. This was probably little more than the local patching of a muddy hollow.

PS305, a large two-post structure, was probably in use during this phase, or possibly one of the preceding phases. PS304 may also have been constructed at this time and, as a multiphase structure probably stayed in use for some time possibly into phase e.

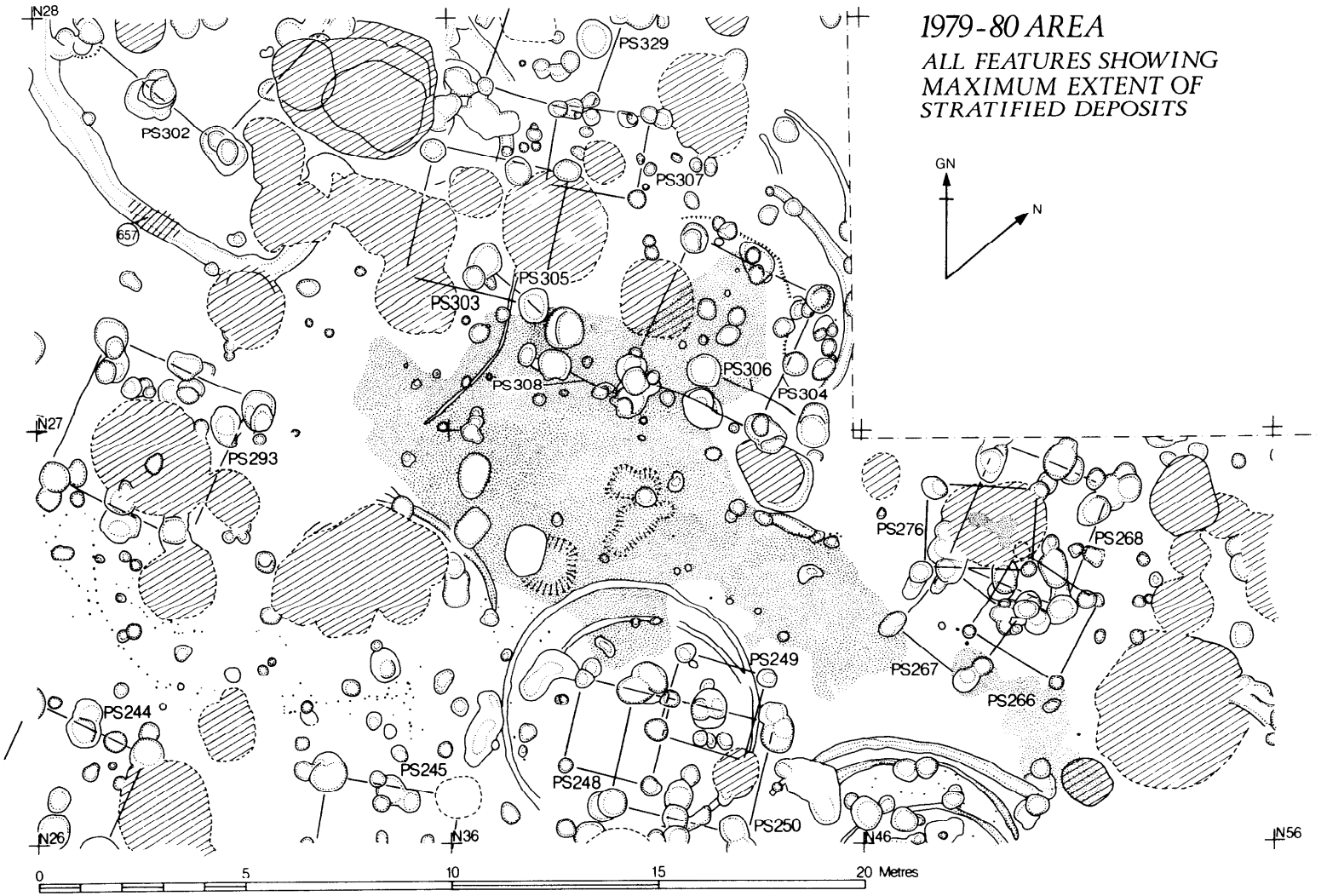

1979-80 AREA
ALL FEATURES SHOWING MAXIMUM EXTENT OF STRATIFIED DEPOSITS
GN
N
N28
N27
N26
N36
N46
N56
PS329
PS302
PS307
657
PS305
PS303
PS306
PS308
PS304
PS293
PS276
PS268
PS249
PS267
PS266
PS244
PS245
PS248
PS250
0
5
10
15
20 Metres

Fig 4.144

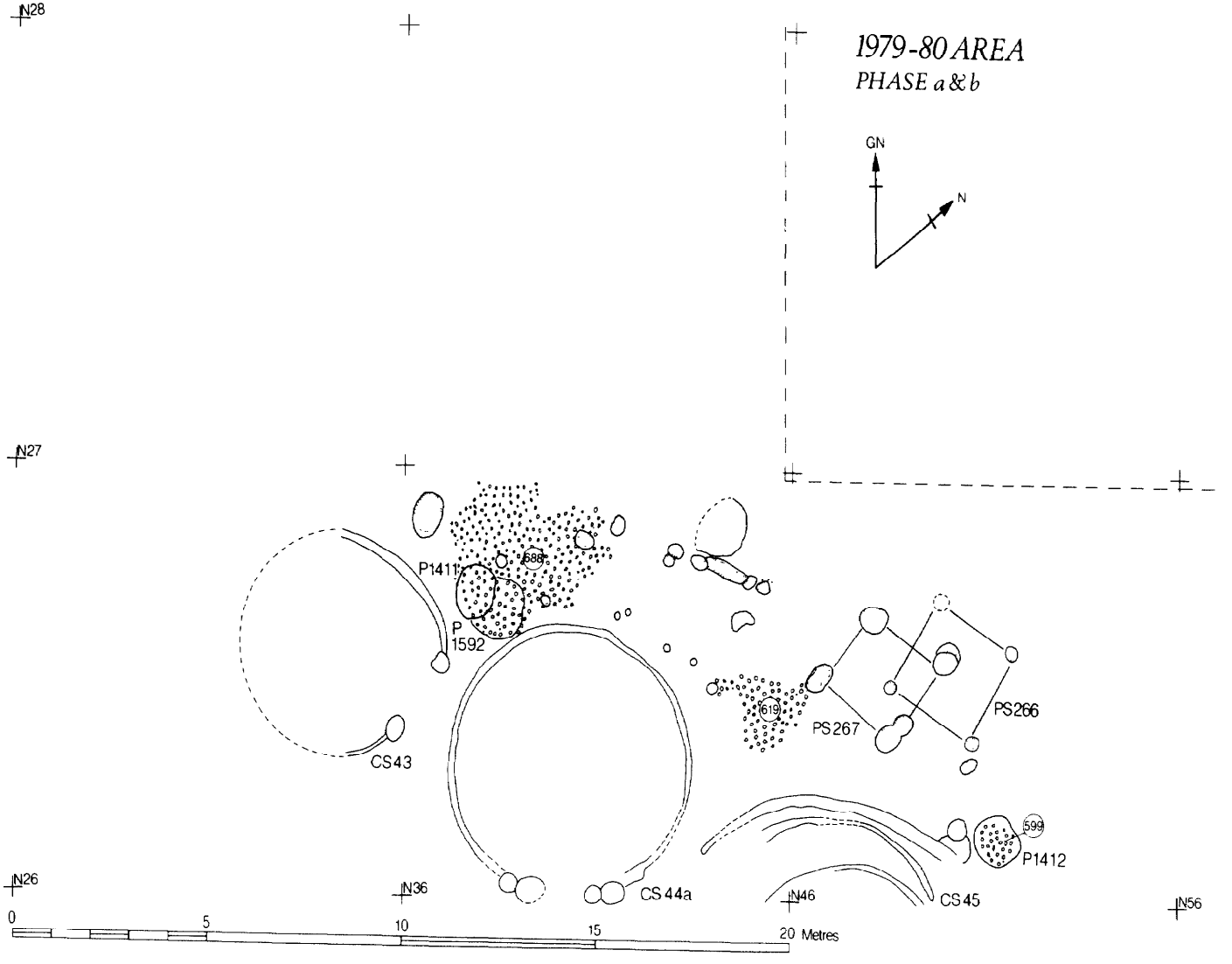

1979-80 AREA
PHASE a & b
GN
N
N28
N27
N26
N36
N46
N56
P1411
688
P 1592
CS43
619
PS267
PS266
599
P1412
CS44a
CS45
0
5
10
15
20 Metres

Fig 4.145

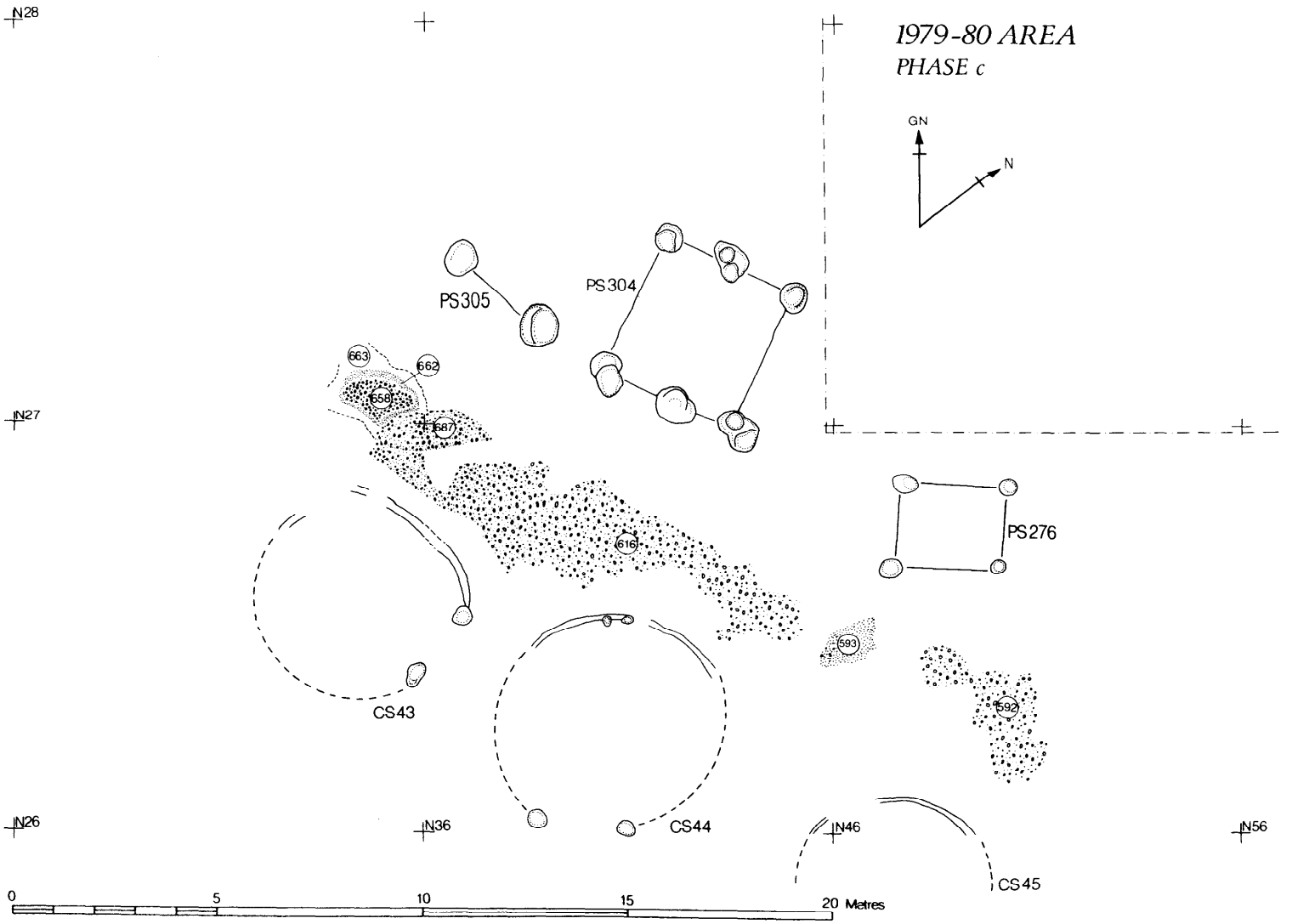

1979-80 AREA
PHASE c
GN
N
N28
N27
N26
N36
N46
N56
PS305
PS304
PS276
663
662
658
687
616
593
592
CS43
CS44
CS45
0
5
10
15
20 Metres

Fig 4.146

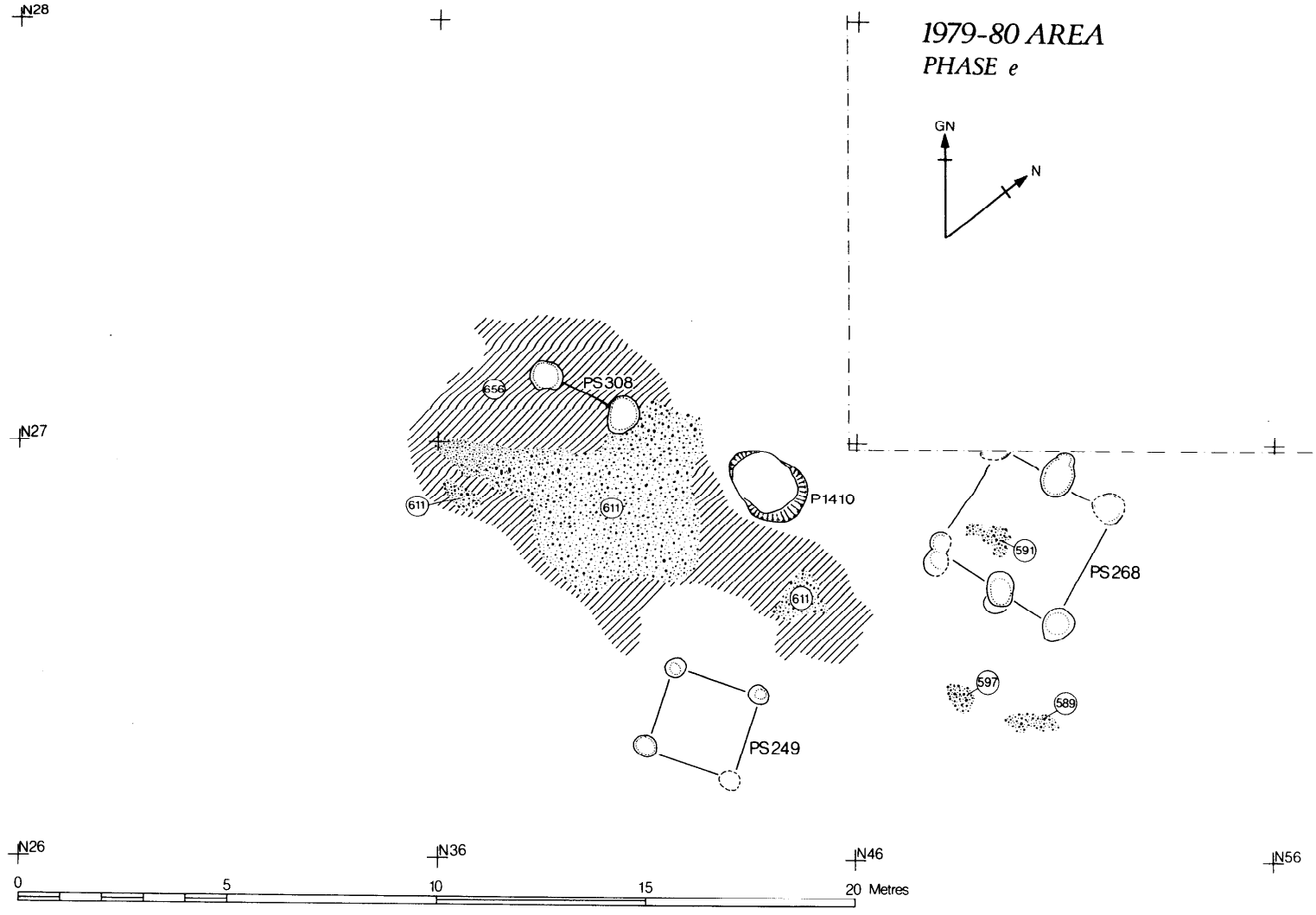

1979-80 AREA
PHASE e
GN
N
N28
N27
N26
N36
N46
N56
PS308
656
611
611
611
P1410
591
PS268
597
589
PS249
0
5
10
15
20 Metres

Fig 4.147

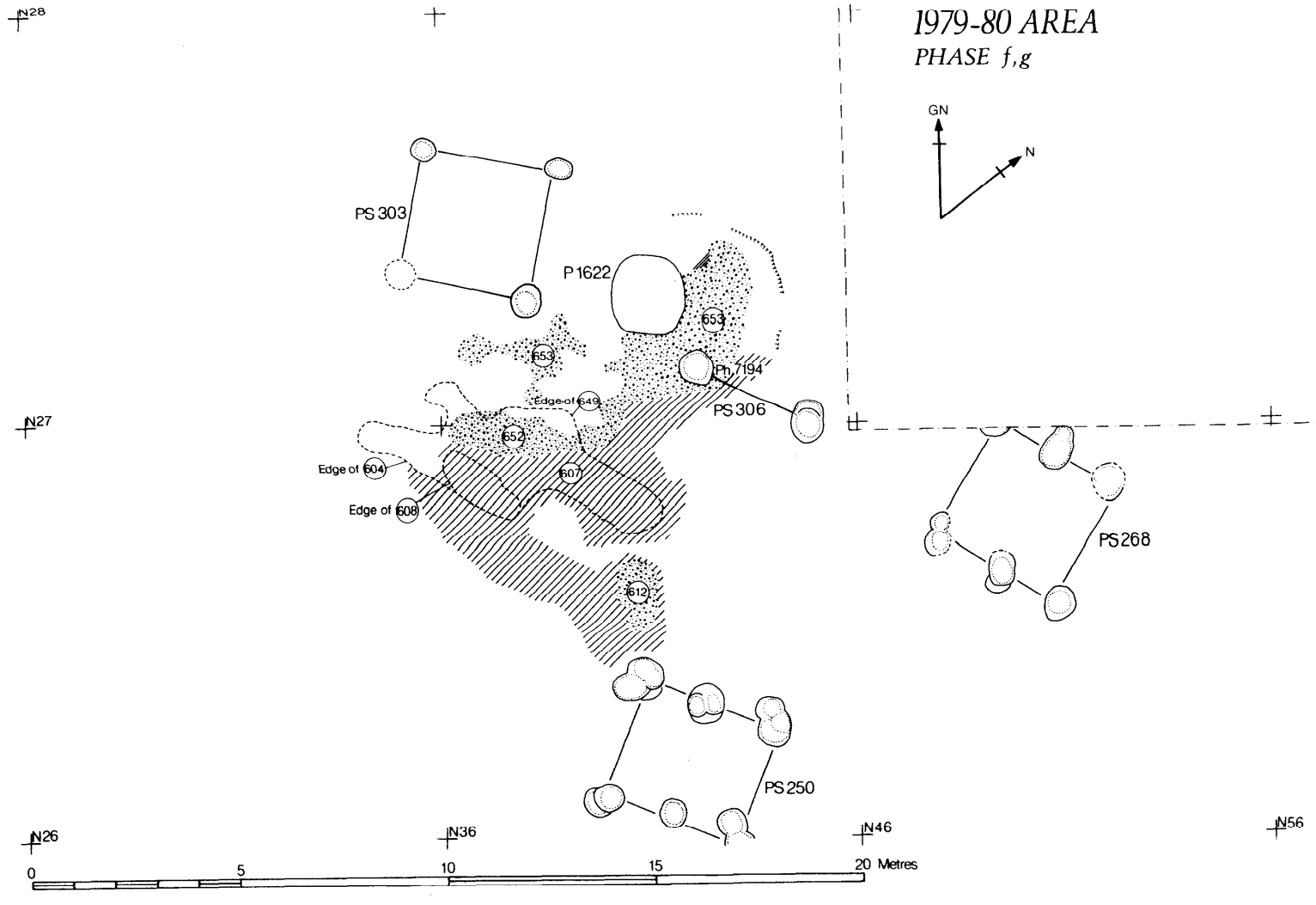

1979-80 AREA
PHASE f,g
GN
N
N28
N27
N26
N36
N46
N56
PS 303
P 1622
653
653
Ph 7194
PS 306
Edge of 649
652
Edge of 604
607
Edge of 608
612
PS 268
PS 250
0
5
10
15
20 Metres

Fig 4.148

d. Continued use of road

The road seems to have continued in use for some time during which a thick deposit of brown silt containing some chalk lumps was allowed to accumulate (613, 656). It was hard packed and trampled particularly along the centre of the road where it was only 50 mm thick thickening to 180 mm at the road sides. To the south-east a thin grey silt (590) probably belongs to this phase. This accumulation of silty sediment probably represents a build up of mud and rubbish along the road while it continued in use.

e. Late remetalling with chalk and associated features (Fig 4.147)

After a while it was decided to remetal the road line again this time with tips of chalk rubble (611 and 655 in the north-west area and 591, 589 and 597 in the south-east). Layers 611/655 form an extensive spread (0.1-0.25 m thick) composed of fresh angular chalk lumps (up to 100 mm) packed in a matrix of puddled chalk. Trampled into the surface were a number of flints suggesting that it may once have been more extensively metalled and had suffered considerable wear. Two post-holes of PS308 (phs 7052 and 7053) cut 654 and 655. It is not clear what kind of structure they belonged to but they could have been the remaining doorposts of a circular building. P1410 was also dug at this stage and it is possible that some of the post-built structures, including PS249, lining the road belong to this phase. The first phase of PS268 was almost certainly constructed at this time with two further rebuilds in later phases.

The chalk surfaces to the south-east were less extensive though probably contemporary with this phase. They were composed of compacted puddled chalk with a well-trampled surface. Layer 591 is more likely to be the floor of a contemporary building (PS268) than part of the road. There are no further deposits overlying these discontinuous chalk spreads.

f. The latest remetalling with chalk (Fig 4.148)

The north-western chalk make-up (611/655) was sealed by a grey silty soil (654, 607) containing some scattered occupation debris. It does not seem to have been trampled hard but was soon overlain by another tip of chalk with occasional flints packed hard in a matrix of puddled chalk (612 and 652). In the top of the layer was the remnant of a metalling of angular flints.

Other chalk spreads occurring at this level were probably floor levels of contemporary structures. Layer 653, a spread of coarse angular chalk rubble and flints, some of them burnt, occurred north of the road in association with ph 7194 of PS306 and may have been a domestic floor since its edge is concentric with a curved scarp in the natural chalk. A circular patch of burnt flints on it was possibly the remains of a hearth. Layer 653 appears to avoid the post-holes of PS308 suggesting that the structure may have continued in use. Layer 610, discontinuous patches of hard packed puddled chalk on which had accumulated a thin occupation deposit (605), are also probably domestic deposits rather than road surfaces.

To the south of the road PS250 had probably replaced PS249 at this stage and it may have continued in use, rebuilt twice, contemporary with the final surfacings. To the north PS303 cut layer 653 and therefore belongs to this phase or to phase g.

g. The final surfacings (Fig 4.148)

A small area of silting (651) sealed 652 before more deposits of chalk (604, 649) were laid down. These were more extensive than those immediately below and were formed of fresh subangular chalk (50-120 mm) tightly packed in puddled chalk or grey silt. Over this a small area of dark brown silt (609) containing some occupation material had formed. A final deposit of chalk rubble (608) was laid along the centre of the road, the area most subject to wear. It was composed of large chalk blocks (up to 100 mm) in brown silt. These latest layers had suffered considerable disturbance from post-medieval marling trenches and recent tree roots.

Summary of the road sequence and its dating

The sequence described above may be summarized as follows:

a. pre-metalled road
b. first pebble metalling and use
c. second pebble metalling and use
d. continued use of road
e. first chalk metalling and use
f. second chalk remetalling and use
g. the final surfacings and use.

Summary of dating evidence

The pottery from the stratified sequence was not particularly prolific (Fiche 25:D7-8) but was sufficient to provide a dating framework. The earliest features (phase a) produced only cp 1-3 sherds in securely dated contexts. The first road (phase b) contained sherds of cp 6. Thereafter, in phases c-f cp 7 pottery occurred persistently though in small quantity. A single sherd of cp 8 was found in a phase g context.

4.3.12 The excavation of 1980: sequence J (Fig 4.149)

To the north of the stratified metalled surfaces of road 2, described above, another small patch of stratified layers survived which, though unrelated to the road sequence, allowed the complex of structures flanking the road to be resolved into a sequence. Detailed descriptions of the individual structures (circular structures, post structures and gully complexes) are given in the appropriate descriptive sections. Here we will be concerned entirely with the evidence for sequence. This small patch of layers, barely 0.25 m thick and 8 sq m in extent provides a unique insight into the complex structural development of the interior which elsewhere is totally beyond recovery. At least five phases can be isolated.

The first structure was CS47 of which the wall slot (G169 and 173) and doorposts (ph 6353 and 6918) survive. The building lies across the line of road 2 and must have been constructed before the road came into use.

CS47 was succeeded by PS319 one of the post-holes of which appears to have cut the wall slot. PS319 is one of the earliest post structures in the area and though only two post-holes lay within the excavated area it was probably originally a four-post structure of type E, some 2.8 m square. It was succeeded on the same spot by a four-post structure of type F. The western post-holes were shallower than the eastern because they had been worn away by traffic along the road line. This observation together with the fact that flint cobbling had been packed into the top of the post-holes shows that the structure pre-dates the road metalling.

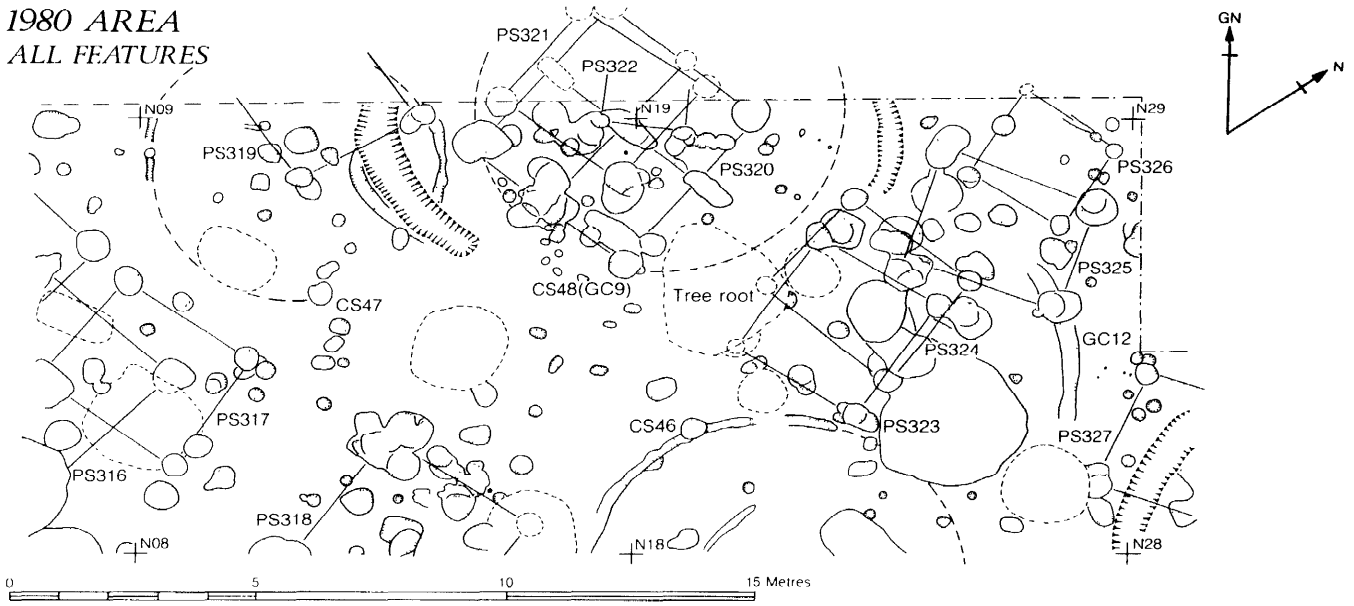


Fig 4.149

Contemporary with either CS47 or PS319 is PS322 which lay a few metres to the east. It must either pre- or post-date Gully complex 9 and though the relationship cannot be ascertained it was most likely to be earlier. PS322 was probably a six-post structure, the northern row of posts lying outside the excavated area. It conforms to type C and was 3.8 m long. The structure clearly pre-dates PS320 and PS321 but it could have been enclosed by GC9.

Gully complex 9 consists of two lengths of circular gully (G161 and G171) with the possibility of an earlier phase represented by G172. The gully was probably for drainage and may well have enclosed CS48 the doorposts of which (ph 6960/5797 and 6943/5924) pre-date PS320 and PS321. As there was no *direct* stratigraphical link between GC9 and PS320 and PS321 they *could* be regarded as contemporary but this is very unlikely as G171 encroaches upon the area of road 2 whereas the post structures are very clearly aligned on the road and are a very definite part of the new layout which went with the road.

PS321 was a four-post structure, 3 m sq, which was only partially exposed by the excavation. The southern post-hole of the complex (the only one fully exposed) suggests three phases. These post-holes were sealed by stratigraphy relating to PS320.

PS320 appears to have been the last structure to occupy this area. It was a large nine-post structure measuring 4.0 m square and aligned directly with the edge of road 2. The complex post-holes forming the southern wall of the structure suggest at least three phases but possibly more. The central row are of a single phase while the northern row though only partially exposed suggest at least two phases.

Before proceeding to discuss the layers associated with PS320 we may briefly sum up the sequence. The simplest interpretation would be to suggest five phases:

a) CS47
b) PS319 and PS322
c) GC9 and CS48 or PS322
d) PS321
e) PS320

but as the discussion above has indicated the real sequence could be much more involved.

The layers associated with PS320 (Fig 4.80) reflect closely upon the problem of the functions of these buildings and for this reason they will be described in detail.

Ph 6374 and 7047 though numbered separately were really a single post-hole as were ph 5796, 5795 and 5794. These elongated features were evidently dug to enable a long post to be slid more easily into position from the south-east side of the building. Once the posts were in the upright position in ph 6374 and 5796 the rest of the holes were filled with tightly packed chalk rubble. The packing was sealed by the earliest layer, 650. The 'void' for ph 6374 could be clearly traced through all subsequent layers until it was finally sealed by layer 625. This suggests that the central row of posts was not replaced throughout the life of the structure though the outside posts had to be repaired on several occasions. The implication, then, is that the recuts represent repairs only and not total rebuilds. It appears that most repairs were necessary on street frontages. Some of the other post-holes in this area, not directly associated with any structure could result from props or scaffold used in the repair work.

The earliest layer associated with the building is a layer of trampled chalk (650), some of it burnt, packed in a dark brown silt matrix with fragments of wall daub and charcoal trampled into the surface. One particularly burnt area with yellow daub trampled into it was numbered separately (647) and was probably a hearth.

Overlying this chalk floor was a layer of trampled silt and occupation debris (648). Much of the layer was composed of large patches of reddish-brown daub very heavily trampled on the surface. Partly overlying this, in a hollow over one of the post-holes of PS321, was a thin

very dark brown silty soil (644) containing a mass of charcoal and some daub possibly remnants from a hearth. (The occupation layer, 646, may be equivalent to this deposit.)

This was overlain by a hearth (645) built of flints surfaced with puddled chalk burnt to a depth of 20 mm. At the same general stratigraphic level were patches of daub. One patch, 631, could be the remnants of a hearth contemporary with 647: another (643) appears to be a dump above 644 infilling a slumped area. The most extensive layer at this level was a deposit of dark brown silt (642) containing much charcoal and burnt daub from an oven plate.

These daub layers were sealed by an extensive occupation deposit (627) formed of dark grey/black silt containing quantities of charcoal and burnt chalk and daub. It also had larger patches of yellow daub trampled into it possibly equivalent to 626 which appears to be embedded in or equivalent to 627. Layer 626 consists of burnt red and yellow daub probably a collapsed oven the base of which was seen in the north-west area. The daub was a mixture of a large amount of type 1 oven plate and lesser quantities of wall daub.

The final layer (625), partly sealing 626 and 627, was a chalk spread consisting largely of subangular chalk lumps loosely packed in powdery chalk and brown silt. There was no evidence of wear or trampling on the surface. Since the layer sealed the 'void' of ph 6374 it was presumably laid after PS320 had been dismantled.

The layers contemporary with PS320, chalk floors, remnants of ovens and hearths and occupation layers, are typical domestic deposits of the kind normally found with circular structures or working areas. This would suggest that PS320 may have had a domestic function, at least at ground level, but the massive size of the posts would allow a storage function in an upper storey.

Summary of dating evidence

Comparatively little stratified pottery was found (Fiche 25:D9). The majority of the sherds belonged to cp 3 and were probably rubbish survival. The only significant association was that GC9 contained pottery of cp 7 date. One post-hole (ph 6375) of phase g produced four sherds of a cp 8 bowl.

4.3.13 Correlations and chronology

In Volume 1 (section 4.3.5) a brief summary of the three stratified sequences was given and the question of chronology was addressed. The principal conclusions were that the sequences could be divided into two, the dividing horizon being the construction of rampart period 3 and the digging of the associated quarry hollow. The early part of this sequence was thus equivalent to the early and *middle* phase of the Danebury sequence while the later part, following the rampart reconstruction, represented the *late* period. Correlation with the pottery phasing showed that no pottery later than cp 5 preceded rampart period 3 while the first occupation in the bottom of the quarry hollow was probably cp 6. Thereafter occupation was continuous to the end of cp 7. By the *latest* phase (= cp 8) occupation had largely come to an end. Using the dates derived from the C14 programme the pre-rampart 3 occupation could be argued to date to the period 550-400 BC while the subsequent occupation dated to 400-100 BC.

The excavations of the last ten years have added much detail from the five new stratified sequences but the essential conclusions summarized above remain unchanged with one significant exception. The discovery of pottery of cp 6 in contexts pre-dating the construction of Rampart period 3 requires that the date for its construction be revised to *c* 350/300, this date providing the divide between the *middle* and *late* period at Danebury.

In addition to this chronological revision it is possible to offer a number of more detailed observations.

As an essential preliminary it is necessary to stress the differences between the northern peripheral zone and the southern peripheral zone. To the south of the main road the rampart of rampart periods 1 and 2 was not greatly enlarged in rampart period 3 and sufficient material for the heightening seems to have been available from the interior of the fort without recourse to deep quarrying except in isolated areas. The rampart around the northern periphery, on the other hand, was dramatically increased in size necessitating the digging of a quarry some 10 m wide and of varying depths around the perimeter of the fort's interior. The effects of this different treatment on the stratigraphic sequences are:

a) that the pre-rampart period 3 levels are well preserved around the southern periphery but had been largely destroyed around the northern periphery, except where they were preserved beneath the extended rampart;
b) the post-rampart period 3 levels were very well preserved in the quarry hollows of the northern periphery but were far less well represented around the southern periphery where contemporary erosion has affected them.

The early and middle periods

The internal phasing of the *early* and *middle* periods is entirely conditioned by the main rampart sequence. Following the construction of rampart period 1 (Da period la) there was a period of occupation (Da periods 1b-c), before the rampart was heightened in rampart period 2 (Da period 2a) and another period of occupation ensued (Da periods 2b-4b). Several of the stratified sequences have produced evidence of this period and a correlation may be offered Table 7).

The first rampart (rampart period 1) was seen in sequences B, C, D, F, G and H but is inferred in the

Table 7. Correlation of phases in the stratified sequences

Period	Defence	A	B (1977-8)	C (1973-5)	D (1969-71)	E (1986-7)	F (1984-5)	G (1982-4)	H (1982)	(1979-80, 1988)
1a	Rampart 1	}		Ba	Ca	Db	Ea	Fa	Ga	Ha
1b-c	Occupation	}		Bb-c	Cb-d	DC	Eb	Fb	Gb	Hb
2 a	Rampart 2	}	Ae-e	Bdi	Ce	Dd	Ec	Fc	Gc	Hc
2b-4b	Occupation	}		Bdii	Cf	De	Ed	Fd	Gd	Hd
5	Rampart 3		Af	Be	Cg	Df	Ee	Fe	Ge	He

others, while rampart period 2 was sectioned in sequences B, C, G and H. Sufficient evidence survives to show that some of the material which composed the rampart was derived from discrete quarry hollows dug immediately behind it. These are best preserved around the southern periphery where they have escaped destruction by the period 5 quarry hollow. Some sections of early quarries were also found in sequences A and D.

Of the two intervening occupation levels (1b-c and 2b-4b) there is little to be said because only a comparatively small sample has been excavated but from what does survive it is clear that occupation was intense. In sequence B and sequence E (where the later quarry was limited) and sequence F, circular houses have been found and the other sequences, especially sequence H, have produced evidence of many post structures. It is clear therefore that the entire peripheral zone of the early and middle periods was as densely occupied as it was in the late period.

Dating evidence has been presented in detail in Fiche 25:B1-D12. In summary, the levels of period lb-c have produced only pottery of cp 1-3 while the levels of periods 2b-4b additionally produce pottery of cp 4, cp 5 and cp 6.

The quarrying of period 5

The northern peripheral zone was, for the most part, occupied by a quarry *c* 10 m wide dug to provide material for rampart period 3 but the quarry was not continuous: in the area represented by sequence E for example a gap some 30 m in length was noted and in the area of sequence B parts of the quarry were quite shallow. Elsewhere in the northern zone it was deep particularly close to the main entrance (sequence A/D) and just north of the blocked entrance (sequence F). This may reflect the need to provide additional material to make the rampart more massive at these points. The quarry seems to have been formed in two stages: in the first a shallow, largely continuous, trench 10 m wide was dug; later individual delves of roughly circular shape were hacked deeper, representing, perhaps, the work of individual construction gangs.

Around the southern periphery superficial soil was gathered from within the fort to make a comparatively modest addition to the rampart except for one place (in sequence H) where a large isolated quarry had been dug. For the most part the earlier stratigraphy survived well in this zone.

The late period

Around the northern periphery in sequences F, B, E and A/D it was possible to recognize five or six clear phases of occupation, Although each sequence was discrete, a sufficient area has now been excavated to allow significant similarities to be seen from one area to another and a broad correlation may now be offered. In terms of the main Danebury sequence these phases are equivalent to Da 6a and 6b, a division based on the development of the main East gate. In order to avoid confusion the correlated sequence is numbered 6i-6viii (Table 8).

Whilst we need have no reason to *expect* similar development around the whole northern periphery in each of the eight phases what emerges from the study is a surprising degree of uniformity which may be summarized in general terms here. (The detailed spatial and social, implications will be considered fully elsewhere, p 239).

Table 8. Correlation of phases within the stratified sequences

	1997/8 A	1973/5 B	1986/7 D	1984/5 E	1982/4 F
6 i	Ag	Bg	Dg	Ef	Ff
6ii	Ah/i		Dh		
6iii			Di(i)		
6iv			Di(ii)	Eg	Fg
6v	Aj	Bh	Dj(i)	Ei	Fh
6vi		Bi	Dj(ii)		Fi
6vii	Ak	Bj	Dk	Ej	Fj
6viii	Al		Dl	Ek	Fk
7	-	-	Dm	El	-

In the first three phases (6i-iii) the principal activity was the erection and maintenance of rectangular post structures associated, in the later stage, with increasing pit digging. The extreme paucity of occupation debris from contemporary layers tends to support the view that, throughout this period the northern periphery was used essentially for storage purposes. Successive layers of silt, interleaved with discontinuous chalk spreads associated with the buildings and paths leading to them, show that the quarry zone was subject to periodic flooding but the mud was seldom more than ankle deep and will have provided little hindrance to the continuous use of the structures.

In phase 6iv, however, a more substantial layer of silt formed in a period which saw the large-scale abandonment of earlier structures (though one post structure in sequence D remained standing throughout). It is possible, therefore, that there was a temporary cessation of occupation in much of the quarry at this time but this need not represent a long period of time nor does it imply abandonment of the fort. It is best to see it as a period of transition and reorganization within the interior.

In phases 6v and vi the first houses were built in the quarries. Post structures and pits accompanied the houses of period 6v but by 6vi, in several areas, close spaced rows of houses had developed. In most cases the houses, once built in phase 6v continued in use, after one or more phases of rebuilding in phase 6vi. The general impression therefore is that phases 6v and vi represent a widespread continuity of occupation.

The beginning of phase 6vii suggests some degree of reorganization. Several of the old houses had been abandoned and some of their platforms were now used as open working areas. In general there were far fewer houses in use. In the final stage of intensive occupation, phase 6viii, there appears to have been some reallocation of space. The traditional 'building plots' which had been maintained since the beginning were in some places abandoned and in most areas (but not the area of sequence B) new houses of larger size were built with substantial open spaces between them. Some of these were rebuilt on the same plots before final abandonment.

The use of the northern peripheral zone in the succeeding phase (phase 7) is obscure. No buildings were erected and there is little sign of occupation. The rapid accumulation of silt together with remnants of a linear ditch system in some areas and of ploughing in others suggest a complete change over to agricultural activity. As we have argued elsewhere (pp 170-80) this is probably to be correlated with ceramic phase 8 and may well represent the end of permanent occupation.

The general similarity in settlement development around the northern periphery and the facility of dividing each of

the sequences into eight phases strongly suggests a degree of overall planning affecting the site as a whole. The time span of phase 6 is in the order of 200/250 years which would, very approximately, allow 25-30 years per phase. This might suggest that rebuilding was conditioned, at least to some extent, by the average life of a timber structure. Whatever its interpretation, however, the sequence provides the finest phasing possible on the site.

The stratigraphy of the southern periphery following the construction of rampart period 3 is far less well preserved and in the three samples examined little detailed subdivision is possible. What is, however, clear is that circular houses continued to be constructed here though there is some evidence in sequence H to suggest that by the end of the period an open area had been created.

4.4 The interior occupation in time and space

4.4.1 Introduction

In section 4.2 above the principal structural elements have been described while in section 4.3 the stratified sequences, mainly confined to the quarry hollows, have been discussed and illustrated in detail. The purpose of this section is to offer a consideration of the interior of the fort, as it is at present known, in terms of its chronological development, but first it is necessary to spell out the difficulties involved in such an exercise and to make explicit the constraints imposed by the limitations of the evidence.

The site divides into two, unequal, parts: the centre and the periphery. In the periphery the well-preserved stratigraphy allows successive phases to be distinguished (section 4.3 above): an average of about eight distinct structural stages can be recognized and this provides the finest division of time available on the site each phase representing roughly 25-30 years. In the centre, with rare exceptions, vertical stratigraphy is absent and the only method of ordering the thousands of features sequentially is by reference to their intercutting of each other. However, a high proportion are discrete and thus remain isolated. Where intercutting has occurred a *local sequence* can be established but the local sequences are themselves isolated. Sometimes, however, the plan of a single building, such as a rectangular post structure, can be used to relate several local sequences. On a different plane the patterning inherent in a group of structures may *suggest* a degree of contemporaneity but arguing at this level involves various assumptions which are several removes from the reliability of local sequences.

Another method for establishing broad phasing is by reference to the pottery contained in features. Details of the system of ceramic phasing have been given in Vol 2 (pp 233-4) and is referred to again in Volume 5. It provides a useful method of relative dating *where sufficient pottery exists to indicate a phase.* In reality this is seldom the case with post-holes or small features. The vast majority of the post-holes contain no pottery and those which do produce very little. Even then it is of limited dating value since there was much rubbish survival: a post-hole producing one or two sherds of cp 1-3 is equally as likely to belong to cp 7 as to cp 1-3. Only when distinctive sherds of cp 6 or 7 pottery are found can one be sure of the date.

The same reservations apply to a percentage of the pits. A small group of early sherds from a large pit do not necessarily preclude a late date. The implications of this can be tested and quantified in relation to the pits in the lower levels of the quarry hollows all of which must, by virtue of their stratigraphic position belong to late cp 6 or early cp 7. A further consideration of the problem in general will be offered in Volume 6.

There is one further complication. In 1979-82 a sampling procedure was adopted which entailed leaving 80% or so of the pits unexcavated. Strictly these are undatable but in reality the uppermost levels were often excavated to a depth of 100-200 mm to test for intercut features and this frequently produced a small group of pottery. In those examples yielding pottery of cp 6 or 7 one can be reasonably certain that the pits belonged to the late phase but where earlier pottery was produced the pits are best regarded as undated.

To convert these constraints into map form is not easy but several principles and assumptions have been adopted. On the detailed plans to follow (Figs 4.15 5 and 4.156) undated post-holes are shown in outline. Those which can be argued to belong to another phase are omitted while those which, by virtue of their assignment to dated structures, or which contain distinctive late pottery, are filled in in black. Excavated pits are assigned to plans on the basis of the latest pottery they contain except in those cases where stratigraphical evidence indicates a later dating. Pits producing no distinctive pottery are assigned to cp 1-3. Unexcavated pits are shown by broken line. Those producing late pottery from the uppermost levels are shaded on the late phase plans and omitted from the early phase plans.

The result of these mapping procedures is that the phase plans show in outline many post-holes that are not relevant to the phase and an unknown percentage of the pits shown on the early phase plans probably belong to the late phase. This background distortion cannot be avoided given the limitations of the evidence.

The coarse-grained quality of the data can most easily be appreciated by referring to the late phase plan (Fig 4.156) representing features of cp 6-7. In chronological terms this covers two or two and a half centuries *(c* 350/300-100 BC). On these plans all features in the quarry hollows have been conflated. Comparing this composite plan with the detailed phase plans given in section 4.3 provides a vivid illustration of the unavoidable limitations of phasing in the central area. It is a salutary warning that such data should not be exposed to sophisticated spatial analysis.

4.4.2 General spatial considerations

The general map showing all features (Fig 4.1) demonstrates that there is a certain patterning of features within the site controlled to some extent by a series of roads or pathways which appear to have remained in use for much of the life of the settlement. Six roads have been recognized (Fig 4.97): these have been used as a crude method for dividing the defended area into a number of zones. The most basic divide is provided by the main road (road 1) which ran between the two gates and continued as a major feature even after the south-west gate had been blocked. This divides the site into a northern and a southern half while the subsidiary roads provide further sub-divisions. It should be stressed however that since not all of the roads were necessarily in use for the entire period, and some may have formed communication axes through areas of linked activity, the use of roads to divide the site into zones is essentially an

arbitrary device to facilitate description. It should be taken as no more than that.

4.4.3 A simple chronological model

The excavation of the ramparts and of the two gates has provided a development sequence for the fort which can be further refined by reference to the stratified sequence preserved in the quarry hollows. The main arguments for this are laid out above (pp 35-6 and p 229). The *Danebury sequence* can be correlated closely with the ceramic phase scheme allowing isolated features, containing a suitable assemblage of potsherds, to be related to one of the main developmental stages.

The Danebury sequence can be divided into five main stages: *earliest, early, middle, late* and *latest,* the earliest stage pre-dating the first rampart, the early stage ending when the east gate was destroyed by fire and the late phase beginning when the rampart was heightened for the second time (rampart period 3) necessitating the digging of the internal peripheral quarry. This phase was a significant event in the history of the site and the act of digging the quarry provides a useful horizon which can be widely recognized across the enclosure. There is now ample evidence to show that it occurred after the first appearance of cp 6 pottery on the site, implying a date of *c* 350/300 BC.

The exact position of pottery of cp 4-5 is more problematical but since typologically and chronologically it fits between cp 1-3 and cp 6-7 and cp 5 ends before the beginning of the late period it is simplest to regard cp 4-5 as broadly coincident with the middle period. The *latest* period, which represents limited reuse of the enclosure after abandonment of large-scale occupation, is easily distinguished by its associated pottery of cp 8. Thus the simplified model which we can use may be summarized as follows:

Earliest	Period 0	cp 1?	before 550
Early	Periods 1a-2b (destruction)	cp 1–3	*c* 550–450
Middle	Periods 2d-4b	cp 4–5 and into cp 6	*c* 450-350/300
Late	Periods 5-6b (destruction)	cp 6–7	*c* 350/300–100
Latest	Periods 7-8	cp 8	*c* 100 BC-AD 50

This enables general plans of phased pits to be offered (Figs 4.98 and 4.99) together with detailed plans of the interior more broadly phased (Figs 4.155 and 4.156). From these the generalized plans of the Danebury sequence by phase, presented as Figs 4.150–4.154, can be extracted.

4.4.4 The earliest and early occupation (periods 0–2b) (Figs 4.150 and 4.151)

In a multiperiod site such as Danebury it is frequently difficult to separate the different phases of occupation but sufficient data of a disparate kind survives to allow some assessment of the broad chronological divisions to be offered. The principal stratigraphical considerations which enable features of the earliest and early period to be disentangled have been set out in the first volume (p 174) and may be summarized again in the light of additional evidence.

a. Around the periphery of the fort, particularly the northern periphery, the last addition to the rampart (rampart period 3) seals a complex of features and levels which must belong to the earliest, early and middle period. In the north-east corner of the fort (1984-5 area), where the quarry hollows were intermittent a substantial area of occupation deposits, including a series of houses, survives. How much of this pre-rampart 3 occupation belongs to the early period and how much to the earliest or the middle is difficult to say but in some areas the deposits are sealed by a soil accumulation which may indicate a local cessation of activity in the middle period. Another observation which points to the same conclusion is that the pottery associated with the great majority of these features belongs to cp 1-3 (but see reservations above in section 4.4.1).

b. In the excavations of 1979-80 the features in the vicinity of road 2 could be partially phased by virtue of their relationship to the patching and metalling of the road. This enabled a clear distinction to be made between the rows of large rectangular post-built structures and the contemporary road surfaces of the late period and a series of circular structures, small four-post structures and pits belonging to the earliest or early period (see section 4.3.11).

c. In the 1972 area in the centre of the fort it was possible to show that a number of the small four-post structures of type E pre-dated a series of pits containing only pottery of cp 1-3. It was argued that sufficient evidence survived to suggest that, in this area the two types of structure were chronologically distinct.

This observation was given enhanced significance by the discovery, in 1988, that at least one small four-post structure pre-dated the period 1 rampart. Taken together these relationships suggest that many of the early small four-post structures of types E and F may belong to the earliest period before the construction of the first rampart (see further p 212 above).

The general implications deriving from these sequences are that the use of the hilltop began in the earliest period (pre-550) when rows of small four-post structures were erected, enclosed either by a palisade (now destroyed) or by the outer earthwork. This was followed by the construction of the rampart (period 1) and the onset of intense and possibly continuous occupation during the early period (*c* 550-450). Houses and post structures were erected, numerous pits were dug and thick occupation deposits accumulated particularly behind the ramparts. Occupation continued into the middle period (c 450-350/300) but the level of activity may have decreased.

General spatial considerations

Before examining the different areas of the fort in detail a few generalizations may be offered.

The detailed plan of the early period (Fig 4.155) shows a number of small four-post structures which on stratigraphical or typological grounds are thought to belong to the period before *c* 350/300 BC. The stratigraphical evidence, where it exists, is clear cut: in the peripheral zones some of the post structures are sealed in layers pre-dating the rampart 3 extension while in the central areas, particularly zones N3 and N4, a number of post structures can be shown to pre-date pits containing only pottery of cp 1–3. Typology is a less satisfactory tool. While it is undoubtedly true that the majority of the post structures which can be shown on stratigraphical grounds to be early are of the small C, E and F category, a percentage, particularly those found in the 1988 excavation, are larger (types H and B). It can also be shown that some of the type E and F structures are found in late period contexts. As a general rule, however, types

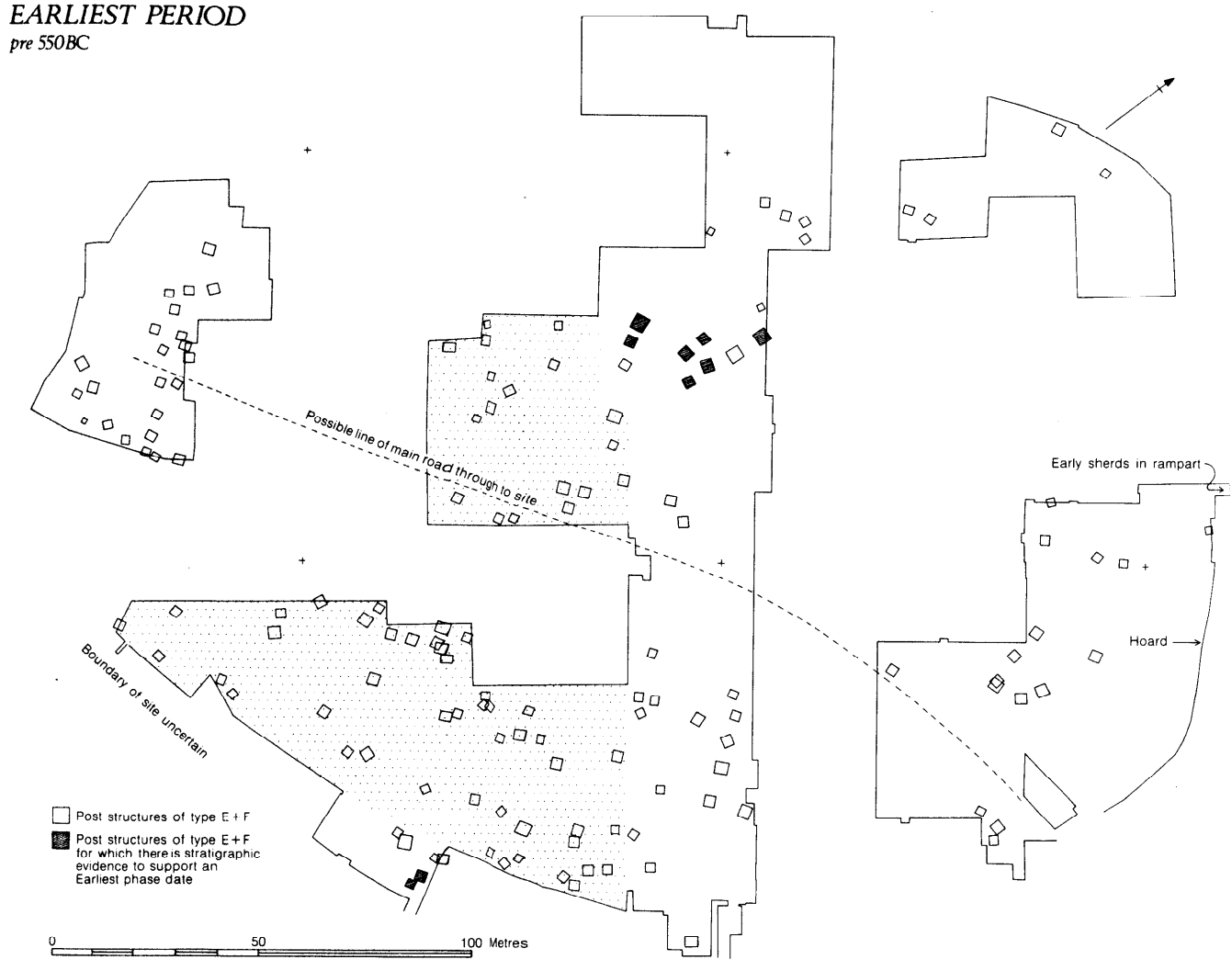


Fig 4.150

E and F can be said to be more likely to date to the pre 350/300 period. A more difficult question is how many of those shown on the early phase plans actually belong to the earliest period pre-dating the construction of rampart 1. On strict stratigraphical grounds only one, PS 474, found in 1988 definitely belongs to this period but many of those found in zone N4, which are stratigraphically earlier than the early pits and are arranged in rows suggesting contemporaneity, probably belong to the earliest period. In other words an unknown, but probably high, percentage of small post structures pre-date the early period.

Some post structures definitely belong to the early period. This is particularly clear in the excavation of 1988 and can be demonstrated elsewhere in the peripheral zone but the plan is likely to be incomplete for two reasons: some of those shown as late, on the basis of plan and layout, may be early; and among the vast number of unassigned post-holes in the southern zones there are likely to be unidentified early post structures partially destroyed and obscured by later structures and pit digging. The nature of the data is such that these problems cannot be resolved. They must not, however, be overlooked.

Turning now to the question of the pits, Fig 4.156 shows the overall distribution of pits containing only pottery of cp 1–3. In considering its significance three provisos should be borne in mind:

a. many of the pits shown in outline in the areas examined in 1979-81, which were unexcavated, may belong to this period;

b. some of the pits containing only pottery of cp 1–3 could be later, their contents being residual;

c. in the areas of the peripheral quarry early pits have been destroyed without trace.

Even allowing for these potential limitations the general pattern is clear enough. In the southern zone, south of the main E-W road and in the eastern part of the site, east of road 5 (zones N1 and N2) pits are scattered though there is some suggestion of clumping. In the northern part of the site, however (zones N3 and N4), pits are very dense. This might suggest that the two areas were used for different purposes throughout much of the early period, the northern central area (zones N3 and N4) being utilized entirely for pit storage. There are some indications that the north-west corner of the enclosure, where a substantial patch of clay-with-flints blankets the chalk, was generally avoided.

South of road 1 and east of road 5 the pits are interspersed with a number of circular structures and in

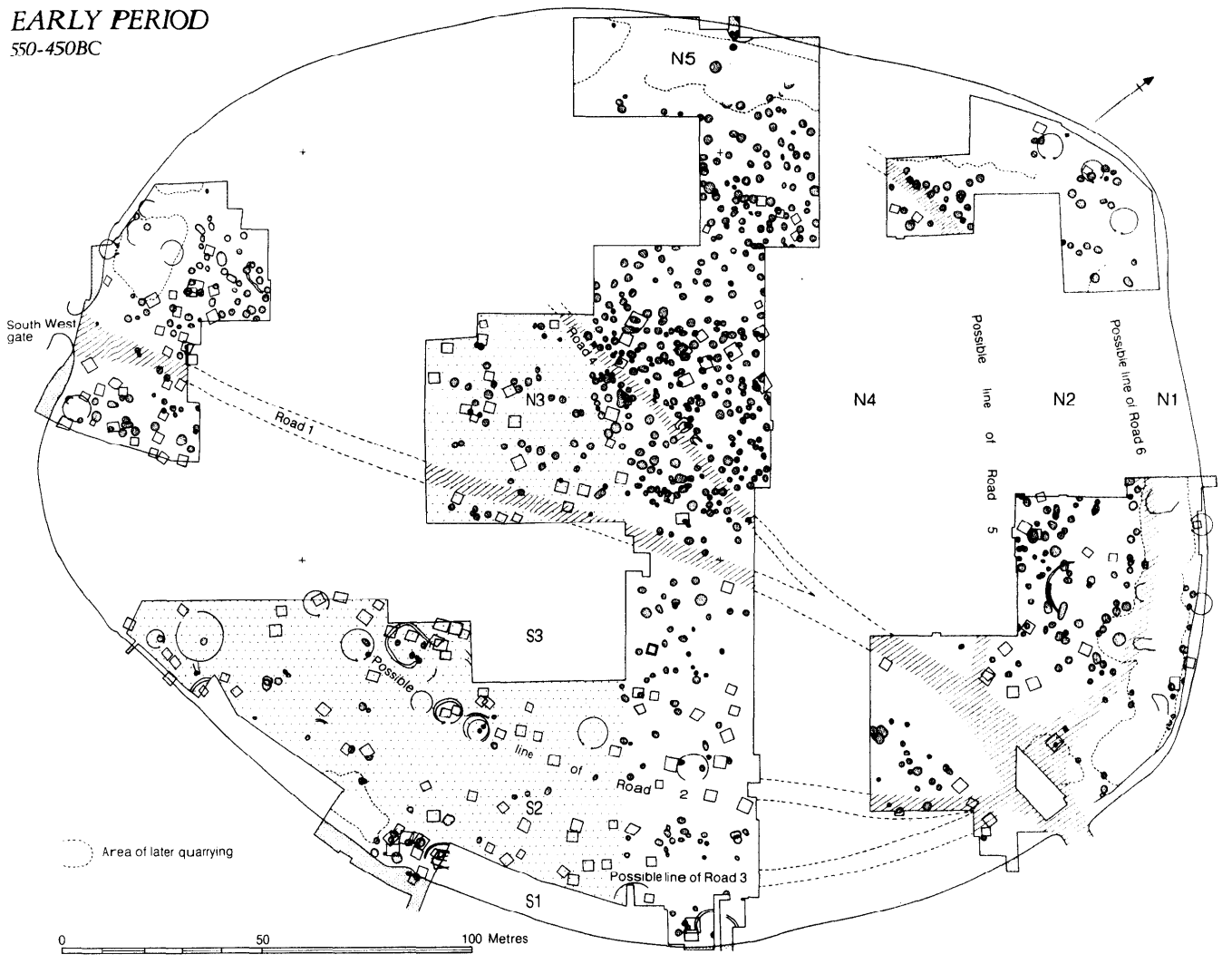


Fig 4.151 (In stippled area only a sample of pits were excavated

these areas there is a high percentage of rectangular pits. It was suggested in the first report (Vol 1, 174–5) that the rectangular pits may have served a different storage function to the circular pits (which were probably for grain storage) and that their concentration in areas occupied by houses might suggest a more domestic use. A further observation made then, and borne out by more recent work, is that overall there is more domestic rubbish in the pits south and east of roads 1 and 5 than in the pits of the central area. Taken together the evidence argues for broadly different use patterns in these two areas.

In summary, our understanding of the earliest and early phases must necessarily be incomplete, given the limitations of the data. We will now proceed to comment briefly upon the details of each zone bearing in mind that we are dealing with structures of both the earliest and early periods. An attempt to separate some elements of the earliest and early phases is provided by Figs 4.150 and 4.151.

The southern zone: S1-S3

The arrangement of the early features in zones S1-S3 is summarized in Fig 4.155 and are tentatively divided into phases in Figs 4.150 and 4.151. Several points deserve emphasis. The four-post structures, though somewhat haphazardly arranged, seem to be concentrated in two broad strips concentric with the rampart, with an area largely devoid of post structures in between. In the northern strip there is some overlapping of structures but in the southern strip the individual buildings are discrete. This may indicate that the northern strip was occupied by post structures for a longer period than the southern. Post structures are particularly dense immediately behind the rampart. Many of those found in the 1988 excavation, in zone S1, can be shown to belong to the early period.

The complexity of this northern strip was further complicated by the presence of a number of circular structures most of which were now represented by sections of wall trenches. Some arcs of stake-holes may be parts of other circular structures or simply wind breaks. It is difficult to be sure exactly how many circular structures occupied the area but there were at least 12, two of which (CS44 and CS45) were rebuilt more than once on the same plot. It seems likely that many of the scattered pits in the vicinity were directly associated with the houses. There are some indications that another strip of circular structures may have existed in a zone

concentric with the main distribution but further towards the rampart. All that now survives are scattered fragments of wall slots and gullies but it should be remembered that only a small percentage of the area immediately behind the rampart has been examined.

The pits are generally evenly scattered over the area but with a distinct concentration in the area of the 1971 excavation (between the later roads 2 and 3) and in a wide zone flanking the southern side of the main east-west road (road 1).

It is clear therefore that there was a distinct and persistent concentric zoning throughout the early period conditioned by the line of the rampart and the main central road, and it remains a possibility that one or more pathways ran parallel with the rampart, much as they did in the late period; but if so they may have been on different alignments.

The evidence is not susceptible to meaningful phasing: all that can safely be said is that the houses and pits suggest intensive and continuous occupation throughout the early period (Fig 4.151) but many of the small post structures could have pre-dated the rampart and would thus belong to the earliest period (Fig 4.150).

The northern zone: N1-N2

Zones N1 and N2 occupy the eastern part of the fort to the east of road 5. Although little of the road line has been exposed in the excavation sufficient of its southern and northern ends has been seen to suggest that it functioned throughout the life of the fort. In the early period it takes the form of an unencumbered strip along which pits and four-post structures seem to be aligned. Road 6, which divides zones N1 and N2, is known only in its late form within the quarry hollow. While it is possible that an early precursor existed there is no proof. For this reason zones N1 and N2 will be considered as one in the early period.

The area does in fact divide roughly along the line of the late period road 6. The peripheral zone (N1) has been largely destroyed by the later quarry but sufficient survives beneath the rampart tail (1986–7) and in areas between the quarry (1984–5) to show that a series of circular structures associated with pits and post structures occupied the strip. The close spacing of the structures and the complexity of the surviving stratigraphy points to a considerable intensity of occupation. The parallel zone (N2), further into the fort, seems to have been reserved largely for the digging of storage pits though it should be remembered that at least a percentage of the undated post-holes found in the area may belong to structures of this period. Towards the south of the zone, close to road 1, a small group of four-post structures could be recognized in an area where the pits were less dense and it is likely that the undated gully complex 5 represents a circular structure. It is possible, therefore, that the early arrangement in zone N2 was not unlike that in zone S2/3 with a linear arrangement of circular structures interspersed with clusters of pits.

The northern zone: N3–4

The northern zones N3 and N4, bounded by roads 1 and 5, occupy much of the highest part of the site. The zones are separated by a narrow path (road 4) which continued the line of the main road from the east gate towards the highest part of the hill which was capped with a thick layer of clay-with-flints.

Apart from the rectangular 'shrine' buildings close to road 4 (Vol 1, 81-7) the entire area was occupied by a comparatively dense scatter of storage pits and a number of small four-post structures. Where relationships between the two have been defined the post structures usually pre-date pits. While this cannot be taken to prove that the two categories are entirely of mutually exclusive date the likelihood is that they are and that the post structures should be assigned to the earliest period. The fact that comparatively few unallocated post-holes were found in the area suggests that little other activity took place. In other words the central zones appear to have been set aside for storage purposes.

There is some spatial patterning visible: both post structures and pits seem to have a degree of linear spacing and there are several large areas devoid of four-post structures. The pits also occur in greater numbers on either side of road 4 but the sampling procedures applied in the 1981 excavation makes it impossible to quantify this impression.

The northern zone: N5

The zone designated N5 occupies the northern periphery of the site behind the rampart extending west and south to the position of the blocked entrance. It is essentially a continuation of zone N1. It seems likely that road 5 ran concentrically with the rampart and eventually joined road 1 close to the south-west entrance.

Very little has survived the deep quarry hollows dug at the beginning of the late period but where the tail of the late period rampart has been removed and the early layers exposed circular structures, post structures, pits and occupation deposits have been found suggesting that the nature of the occupation was very similar to that encountered in the eastern sector of the peripheral zone (zone N1).

Summary of the earliest and early occupation

The earliest period (Fig 4.150)

We have argued above (p 231) that the hilltop was in use before the first rampart was constructed and we have just shown that many of the early four-post structures probably belong to this phase. What form of enclosure, if any, the settlement had at this stage is unclear but there may have been a palisade destroyed by the hillfort ditch. Another possibility is that the outer earthwork could have been the enclosing feature.

There is little evidence of occupation to add to the bare plan: some early pottery was found incorporated in the first rampart (Volume 5), a small pit was discovered in the entrance area (Vol 1, 12) and it is probably to this phase that the bronze hoard belongs (Vol 2, 335–40). The large 'ritual pits' outside the later defensive circuit may also relate to this earliest phase (Vol 1, 12). The location of these features is summed up in Fig 2.1.

Early hilltop enclosures characterized by small four-post structures associated with little occupation debris are a feature of the eighth to sixth century in central southern Britain (Cunliffe 1984). The earliest phase of Danebury conforms well to this category.

The early period (Fig 4.151)

Sufficient will have been said to show that the entire area enclosed by the first rampart was in use during the early period and that the fort seems to have been divided into a number of zones reflecting different functions.

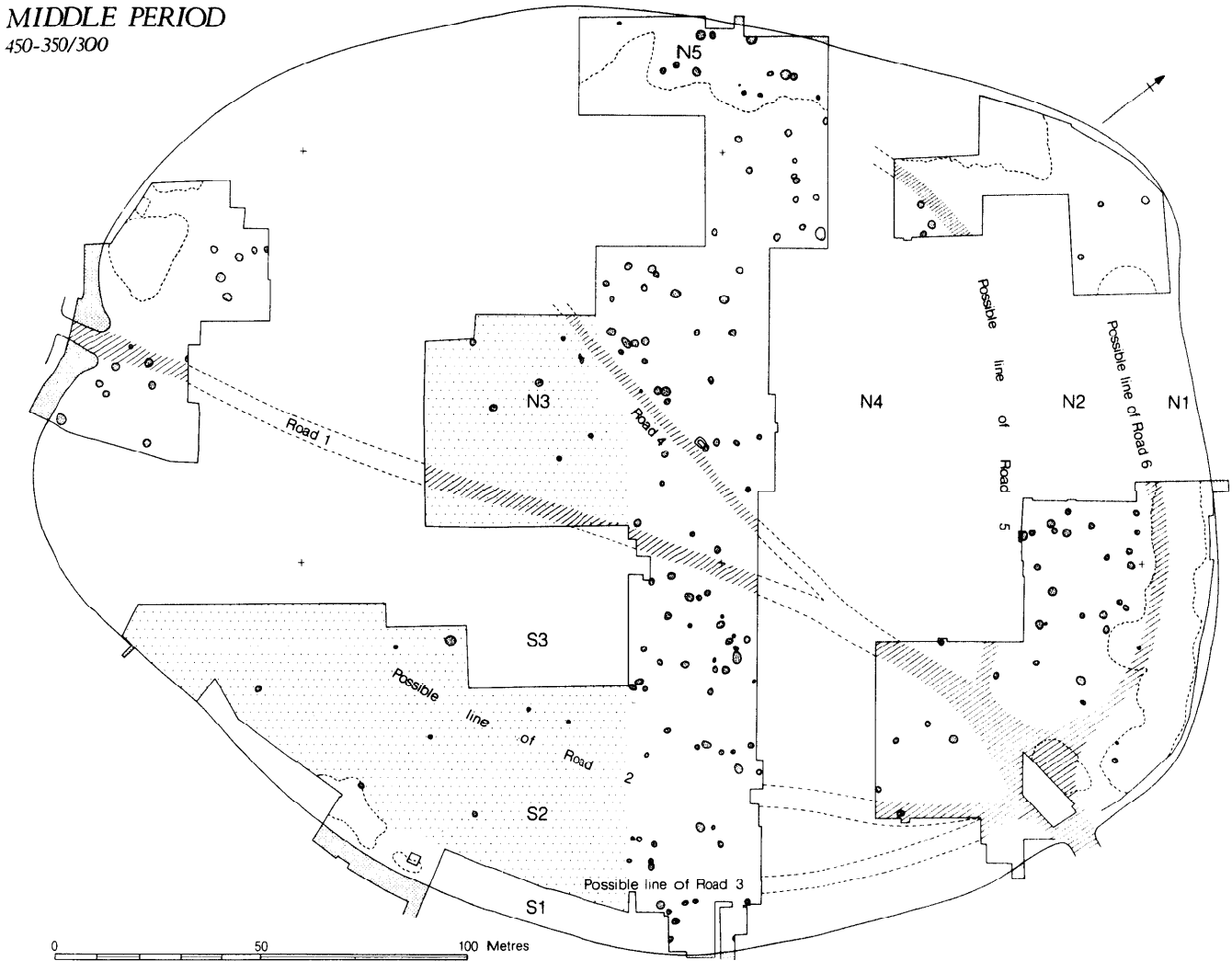


Fig 4.152 (In stippled area only a sample of pits were excavated

The principal divide lay between the northern and southern halves of the site separated by the main E-W road (road 1). The southern region (zones S1, 2 and 3) was occupied by houses, post structures and storage pits associated with a quantity of occupation debris. This, together with the fact that several of the houses were rebuilt on one or more occasions suggests that the southern zone served as a 'residential' area throughout much of the early period.

The northern region was quite different. It can be divided into two or three zones of varying functions. Around the *outer periphery* (zones N1/5) was an area set aside for houses with associated pits and post structures while in the *centre* (zones N3/4) was a very large area reserved for pits presumably reflecting a storage function. It is not immediately clear how the *inner peripheral* sector (zone N2) functioned at this time. Whilst it could well have been much the same as the centre there are some suggestions that there may have been houses here in which case the mixture of structures may imply that it was more like the southern region.

Against this overall spatial variation there is the problem of chronological development within the century or so of the early period. All that can safely be said is that the intensity of activity in the form of pit digging in the central area and house building around the periphery suggest that the fort was in continuous use and that the functional zoning, once established, was maintained. There is no evidence of significant changes of use nor are there indications of periods of inactivity.

4.4.5 The middle occupation (periods 2d-4b) (Fig 4.152)

The middle period is characterized principally by the use of pottery of cp 4–5. It can be shown that pottery of this type was current before rampart period 3 was constructed but had gone out of use before the rampart extension by which time pottery of cp 6 was in circulation. The change from cp 1–3 to cp 4–5 is difficult to define in terms of the structural sequence but the *destruction horizon* of period 2c seems to have occurred when cp 4 pottery was in use. Thus while the middle period is broadly coincident with pottery of cp 4–5 it began after the innovations distinguishing cp 4 had been introduced. This means that some of the features containing cp 4 pottery more properly belong to the early period but it is impossible to distinguish them. Similarly, some of the features containing cp 6 pottery must also belong to this middle period.

In terms of the broad development of the site the middle period represents a century or more (*c* 450–350/300) when there was little emphasis on maintaining the defences and when the two gates were in a fairly dilapidated state. It was brought to an end by the large-scale refurbishment of the defensive circuit.

General considerations

The general distribution of pits containing pottery of cp 4-5 (Figs 4.98 and 4.152) contrasts with that of cp l-3 pits in that the marked concentration in the northern zone (N3 and N4) in the early period is no longer maintained. The overall distribution of middle period pits is far more even.

It was argued in the first volume (Vol 1, 179) that the regular layout of large post structures in the southern zone began in the late period. These arguments are still valid and further support comes from the excavation of 1979–80 (especially sequence I). However, the 1988 area excavation showed that both types B and H could pre-date rampart 3.

It is fair to conclude therefore that the rows of large four- and six-post structures which line roads 2 and 3 were part of the same phase of reorganization which saw the refurbishment of the rampart in rampart period 3. However, large four- and six-post structures of type K came into use before this stage.

The question then arises what kind of structures in addition to pits occupied the site between the end of the early period *c* 450 BC and the beginning of the late period *c* 350/300 BC? The most reasonable explanation is that some of the circular structures and four-post structures shown on the early period plans continued in use throughout the middle period. Here again we must remind ourselves of the problems of dating. Very little pottery is recovered from post-holes or wall slots and a very high proportion of what there is is likely to derive from earlier layers. Therefore the presence of only pottery of cp 1–3 need not preclude a middle period date.

Some post structures are difficult to assign to type and could be regarded as transitionary between the distinctive early small post structures (type E/F) and the late large post structures (type G/H). They have been assigned to E/F or G/H depending on which characteristics tend to predominate and so may appear on either early or late phase plans.

Of the other structures within the fort a strong case can be made out for one of the shrines, RS4, belonging to the middle period (Vol 1,86–7). It would thus be intermedi-

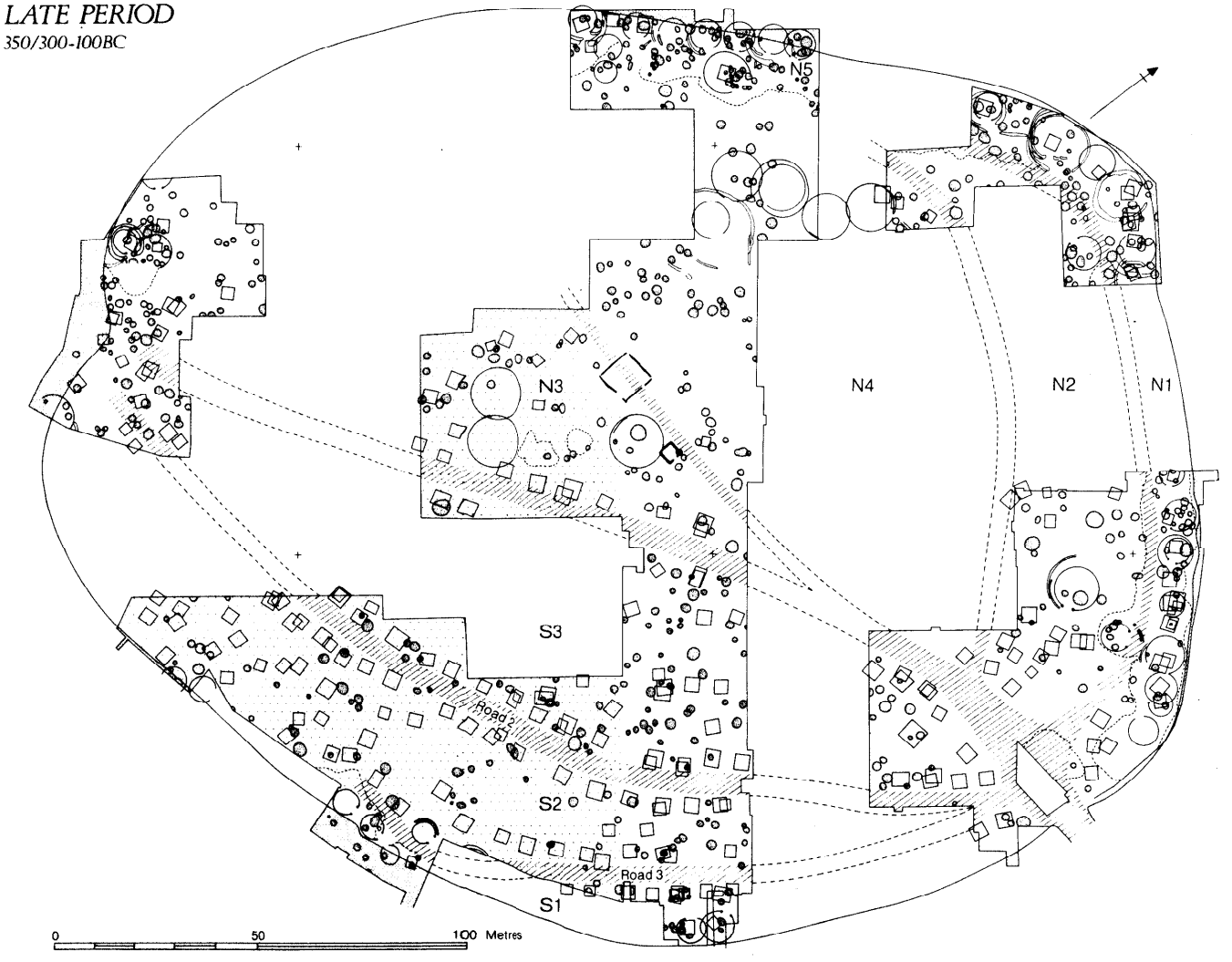


Fig 4.153 (In stippled area only a sample of pits were excavated

ate between building RS3 of the early period and RS2 of the late period.

Taken together the evidence for the middle period, though slightly uncertain in parts, suggests that the settlement which had developed during the early period simply continued to function throughout the middle period the only difference being that the density of pits in zones N3 and 4 had greatly decreased. This does not, of course, imply a decrease in intensity of occupation within the fort. Taking the crude statistics of pit numbers, 889 pits can be assigned to cp 1–3 ie 6–9 pits per year. The 234 pits of cp 4–5 give a comparable figure of 2–3 per year. It should also be remembered that an unknown percentage of pits assigned to cp 1-3 are likely to be of cp 4–5 date.

4.4.6 The late occupation (periods 5–6b) (Figs 4.154 and 4.156)

The late phase of occupation broadly coincides with the use of pottery of cp 6 and 7 which may be approximately dated to the period 400–100 BC, but since cp 6 pottery was already in use at the end of the middle phase a date of 350/300 is likely for the beginning of the late phase. In considering the phase we should constantly remind ourselves that the span of time is considerable and that our phase plan conflates many stages in the continuous development of the site. This is vividly demonstrated by comparing the gross plan of features found in the eastern periphery (zone N1) with the changing pattern of features separated out into subphases by virtue of the well-preserved stratigraphy. A rather different means of subdivision, using seriation of the pottery of cp 7 found in the pits, which allows five subphases to be postulated, shows how the pattern of pit digging changes through time (Vol 1, figs 4.130 and 4.131).

Although the late phase begins with the blocking of the south-west gate, the main road (road 1) which divided the site in the early and middle periods, still served as a major thoroughfare. Even more impressive is the fact that the broad divisions into functional zones established in the early period were still maintained. The southern zone (zones S1-3), the outer northern periphery (zones N1 and N5) and the central area and inner periphery (zones N2, N3 and N4) all served quite different functions, a fact which strongly suggests a considerable degree of continuity throughout the life of the fort.

In preparing the phase plan we have once more used a variety of evidence. The features in the peripheral zones can be securely assigned to the late phase by virtue of their stratigraphical position. Sound stratigraphical arguments combined with ceramic dating can be used to show that road 2 was first laid out in this period and that a number of large post structures flanking it were broadly contemporary (pp 220–6). This provides compelling support for the arguments put forward in the first volume that the regular layout of large post structures in the southern zone belongs to the late period. The ceramic dating evidence for the post structures is summarized on Fiche 19–22. All the pits shown on the phase plans contain pottery of cp 6 or 7 but some pits of late phase date will have been omitted because they have produced only residual earlier pottery. The dating evidence for isolated features such as gullies or wall slots, not otherwise occurring in stratified contexts, will be found in the appropriate descriptive section. Finally post-holes not associated with identifiable structures and not assignable on other grounds to the early period appear in outline on Fig 4.156, those producing pottery of cp 6 or 7 being shown in solid black. With all its imperfections the plan is the best approximation that can be offered.

The southern zone: S1–3

The zone is bounded on the north by the main road (road 1) and is sub-divided by two lesser roads (roads 2 and 3) which branch from the main road close to the entrance. Road 2 was continuous across the excavated area and may have continued through the area excavated in 1982 to join the main road close to the blocked entrance. Road 3 converges on the back of the rampart and, after swerving to avoid two circular buildings and the edge of the quarry hollows, cannot be traced further to the west. Both roads were lined with regularly spaced and frequently rebuilt large post structures. A similar row followed the southern edge of the main road. In between the rows there is a less regular and more sporadic placing of similar post structures. Pits are scattered among the buildings and the fact that in many instances pits overlap with the sites of the post structures is a clear reminder of the complex development which the site underwent.

Comparatively little of the inner periphery (zone S1) was examined but the sections excavated in 1971 (sequence C), 1982 (sequence G) and 1988 (sequence H) showed a complex history. In sequence C five separate structural phases were recognized, while sequence G offered three and sequence H, five. Circular houses with associated occupation levels were a feature of this zone. The absence of evidence for circular structures in zones S2 and S3 suggests that the entire area was set aside for storage in pits and post structures.

The northern zone: N1–N2

Zone N1 is confined to the eastern periphery and is bounded on the west by a path (road 6), metalled with tips of chalk which persisted throughout most of the late period. It seems probable that the path simply provided a means of access (rather than boundary) and that the structures and features which lay to the west of it, eg CS1 and CS39, were part of the same functional complex as the features to the east. The details of the sequence in zone N1 have already been discussed above. In summary the area was intensively used throughout the late period and at least eight distinct phases can be recognized. To begin with post structures and pits were the commonest features but later circular houses begin to dominate.

In zone N2 emphasis was on pits and post structures throughout. At the southern end of the zone, close to road 1 there was a clustering of post structures representing several phases and it is possible that the circular structure CS24 was associated with them (Vol 1, 26–7). The rest of the zone seems to have been given over to pit digging. It is possible that these pits provided storage capacity associated with the domestic structures in zone N1.

The northern zone: N3–N4

Most of the details have already been discussed in the first volume (Vol 1, 187). In summary, the central area, close to the narrow path (road 4) which divides N3 from N4, was occupied by rectangular structures thought to be shrines, while to the south, flanking the north side of road 1 was a row of post structures. To the north of the shrines, on the shoulder of the hill, several circular structures were sited. Elsewhere, pits were scattered unevenly throughout the area.

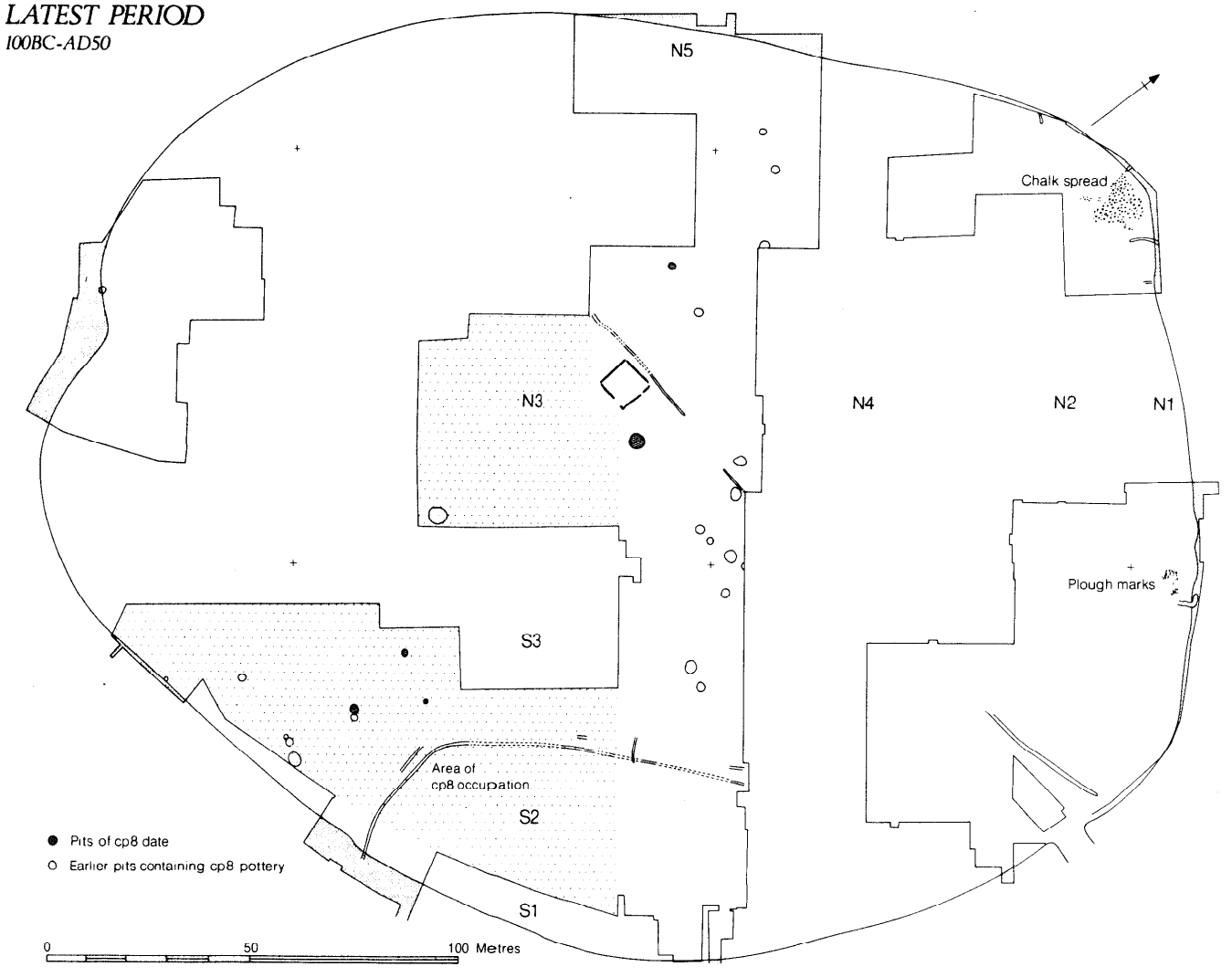


Fig 4.154 (In stippled area only a sample of pits were excavated

The more recent work has confirmed and extended this picture. The row of post structures flanking the main road can be shown to be continuous, probably right up to the blocked south-west gate but a number of structures extend north of the main road up to the line of road 4. They are interspersed with several ill-preserved circular structures which may represent a series of houses. The continuation of the row of circular structures on the shoulder of the hill, seen in zone N2, is demonstrated by similar structures being found in the excavation of 1985. Pits are generally scattered throughout the area but they appear to be largely restricted to distinct zones with undisturbed areas between, the largest of which lies to north east of road 4 close to the 'shrines'.

The northern zone: N5

Zone N5 is essentially a continuation of zone N1 occupying the outer periphery of the fort around the northern zone. Like zone N1, the periphery was densely occupied with a succession of structures beginning with post structures and pits but soon developing into a zone of circular houses. The details of the 1973–5 area (sequence B) has been considered in Volume 1 while details of the 1982–4 area (sequence F) are considered above.

Summary of the late occupation

The functional arrangement of the site in the late period shows a remarkable continuity with the early period in that throughout the life of the fort the interior divides into three distinct regions: a southern region, between roads 1 and 3 comprising zones S2–3, a northern region comprising zones N2, 3 and 4 and a periphery (zones S1 and N1/N5) each of which supported a different array of structures representing functional variations.

In the late period the southern region was given over entirely to seried rows of large post structures, most likely to have served as storage buildings, interspersed with storage pits and there is clear evidence for the maintenance of this arrangement over a considerable period of time. Little of the southern periphery is known but what evidence is available suggests that the intensity of occupation was not dissimilar to that of the northern periphery.

The northern periphery was an area of intense activity and seems to have been subjected to successive rebuildings in the late period much as it had been in the early period. A degree of order is implied by the comparative ease with which the individual stratigraphical sequences can be linked together in a series of eight phases.

The rest of the northern zone occupies more than half the enclosed area and seems to have been variously used. The rows of post structures of the southern zone spread to the north side ofthe central road. In the centre, focussing on road 4. were a series of shrines(?) while on either side two groups of circular structures; possibly houses, can be identified. It is unfortunate that the lack of stratigraphy in this central area prevents us from assessing the development of this northern zone throughout the 250 years or so of the late period.

4.4.7 The latest occupation (periods 7 and 8) (Fig 4.154)

Much of the evidence for the latest occupation within the fort was summarized in the first volume (Vol 1, 189). In summary, a scatter of pottery of cp 8 was found throughout the fort concentrating in the area close to the shrines, one of which (RS1) could have been built at this time. Most noticeable was the fact that of the large sample of pits excavated only two were open in the latest period. In itself this need not suggest a decline in use but simply that pits no longer formed part of the socio-economic system. However, other evidence points to large-scale abandonment. The northern peripheral zone, which had been intensely occupied ceased to be inhabited and a thick deposit of silt was-allowed to accumulate. In the area of sequence D there is now clear evidence that a period of ploughing followed the occupation (above p 170). The continuation of these agricultural activities could have accounted for the accumulation of a thick deposit of silt but the evidence of the snail fauna (Vol 2, 476–81) is more indicative of a pastoral use. It is possible that there was a change from agriculture to pasture during the latest period. Several ditches of this period have been located. One follows the north edge of roads 4 and 1 and may have served as a boundary dividing the sparsely occupied area to the south, from fields and pasture to the north. Within this northern area, especially in the peripheral zone short lengths of ditch may have served as subdivisions to a number of plots.

In the southern area, in addition to the spread of occupation debris close to the shrine area a second focus of occupation was found in the area excavated in 1979/80, identified by a concentration of pottery of cp 8 and 9.

This zone of occupation lies within a ditched enclosure but no recognizable structures have been identified.

4.5 Some spatial considerations

The purpose of this brief note is to indicate something of the range of spatial analyses to which the database may now be subjected.

On a macro level the divide between the north and south halves of the fort is most noticeable in all periods. Not only was the range of activities carried out in the two halves quite different but there are other indications that the divide may have had a symbolic significance. The different treatment of the ramparts is one indication of this. The fact that the inner face of the southern rampart was coated with a thin skin of chalk is more likely to have been occasioned by the need to differentiate the two halves of the site than to increase its defensive capabilities.

The blocking of the south-west entrance, and the associated increase in volume of the rampart, while superficially enhancing the defensive characteristics of the site could equally well be interpreted as a symbolic act of change not least because grandiose entrance foreworks which had originally adorned only the south-west gate were now added, for the first time, to the east gate. In other words the site was turned round.

Clearly there is much in these spatial considerations which is likely to reflect on the social systems of the inhabitants and their use of symbolism: the anthropological literature is redolent with comparable examples. To pursue the matter further it is necessary to explore the deposition patterns of artefacts and different classes of occupation debris. Only when this information is available will it be possible to offer useful generalizations.

On a more restricted level the occupation in the quarry hollows offers much scope for analysis. It is evident that each of the separate quarry hollows served as the location for a succession of structures over a considerable period of time and that only in the later stages were these boundaries abandoned. While this could, of course, reflect little more than the physical constraints imposed by the hollows on ease of building, constraints which no longer applied after much silting and levelling had taken place, it is possible that we are witnessing a degree of territoriality. Perhaps the individual quarry was the creation of a kin group who continued to own it.

It is also possible from the fine preservation of the stratigraphy in these peripheral areas to recognize contemporary ground surfaces and thus to distinguish what structures were in use at the same time. This allows us to begin to recognize the structural units which constitute a single social complex. Already, from the phase plans presented in section 4.3, some of these complexes can begin to be discerned but there is more to this than simple pattern recognition. We need to examine by the quantification and spatial plotting of artefacts and debris, the relationship of, among other things, the contents of pits to contemporary occupation levels inside and outside houses. We also need to explore the spread of debris across house floors. Some aspects of these approaches were outlined in Volume 1 (134-6, 186) sufficient to show that the potential is considerable. No attempt has been made in this volume to explore such matters but spatial and taphonomic studies will form a significant part of Volume 6.

The data set available from Danebury as the result of the excavations of 1969–1988 is now of such a size and quality that we can at last begin to approach some of the questions we set out to study at the beginning of the programme. As we have come to understand the complexities of the data and its fugitive nature we have learnt a new humility. Understanding Iron Age society is infinitely more difficult than we could have contemplated, but the preparation of these two volumes now clears the way for us to make a concerted attempt.

5 Radiocarbon age assessment

The experiment set up during the first ten years of the excavation and reported on in detail in the first volume (Vol 1) 190–9) was not repeated in the second decade on the grounds that the results would tend to be repetitive and would be unlikely to provide a more precise system of dating without the expenditure of very considerable sums of money on a large number of new samples. However charcoal, bone and carbonized seeds have been retained and are stored in the proper conditions to provide ample material for a new programme of dating should it be possible to make a convincing academic case for the appropriate expenditure.

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Plate 1 Danebury from the air

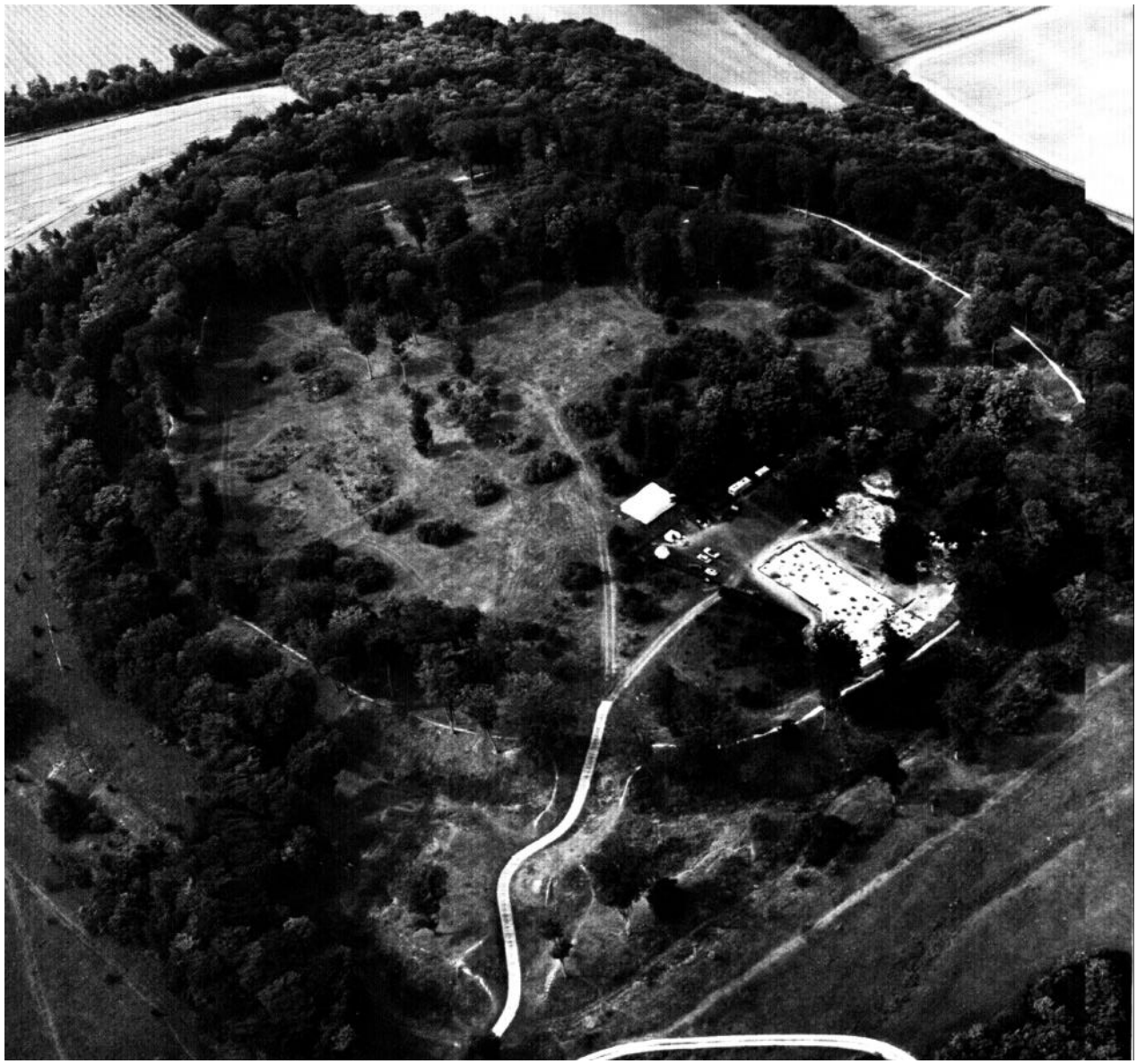

Plate 2 Danebury from the air

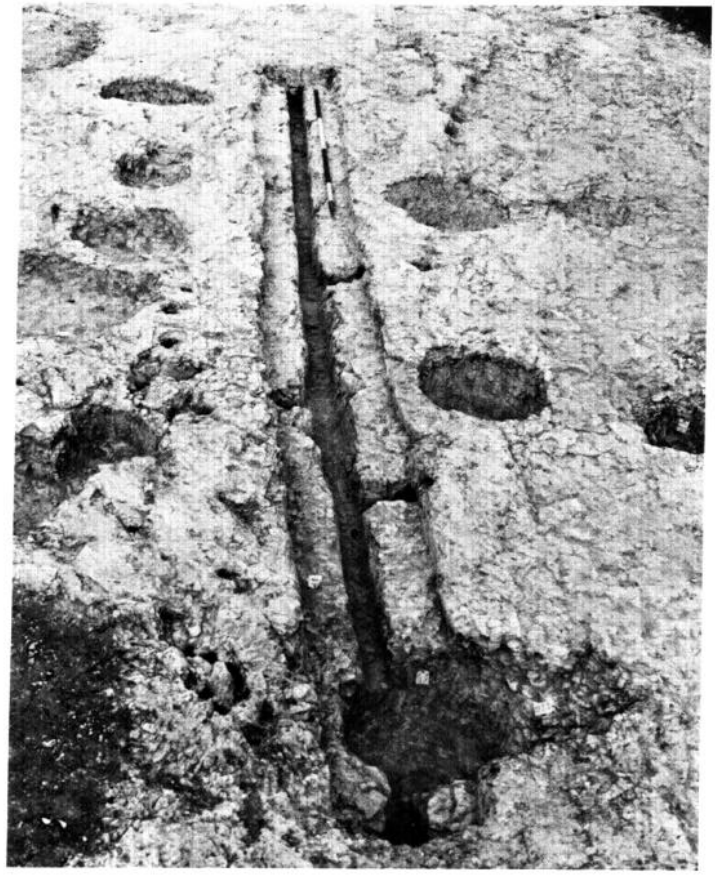

Plate 3 Rabbit warren F: showing two levels of construction and the carefully contrived exit holes

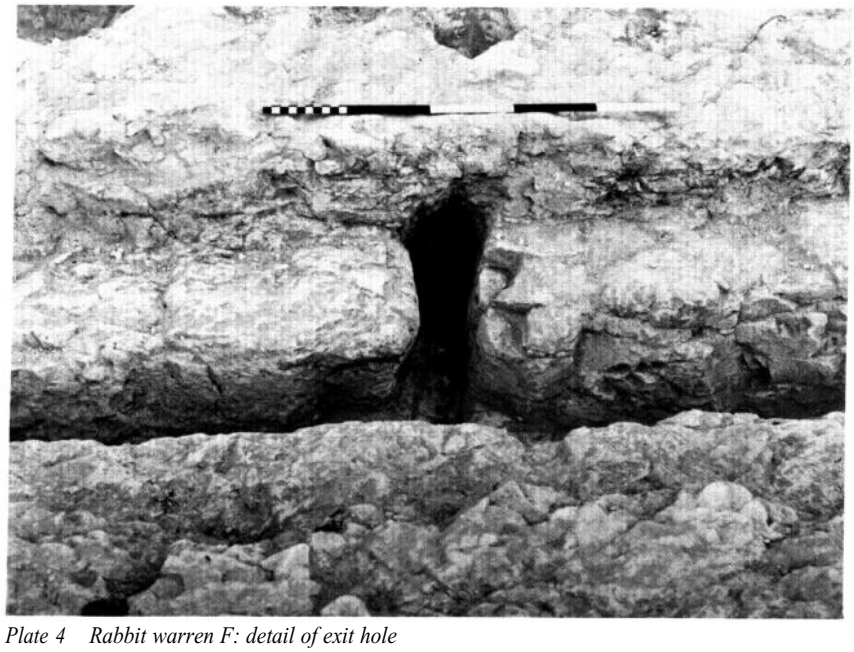

Plate 4 Rabbit warren F: detail of exit hole

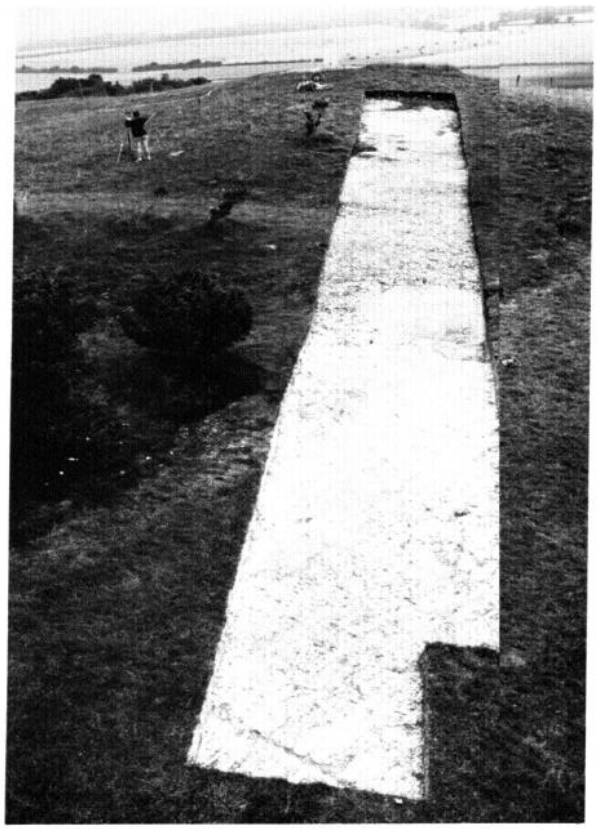

Plate 5 Trench 102: general view showing the trig point mound at the far end. The diagonal change in the vegetation marks the divide between ploughed and unploughed downland

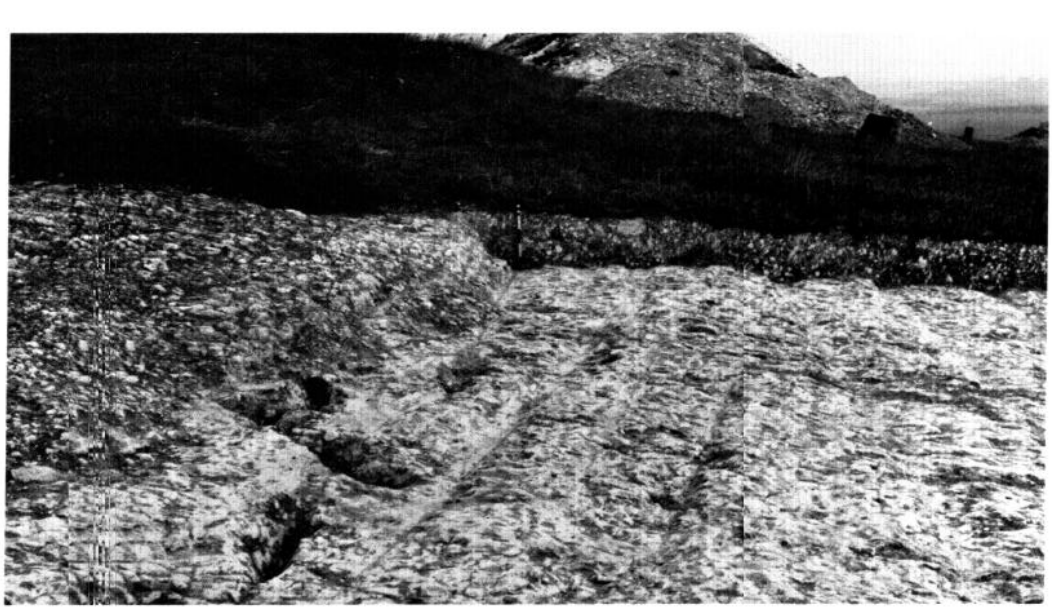

Plate 6 Trench 102: detail shows negative lynchet caused by modern ploughing over a period of 20–30 years. Plough ruts score the surface of the chalk

Plate 7 The linear earthwork from the trig point looking east

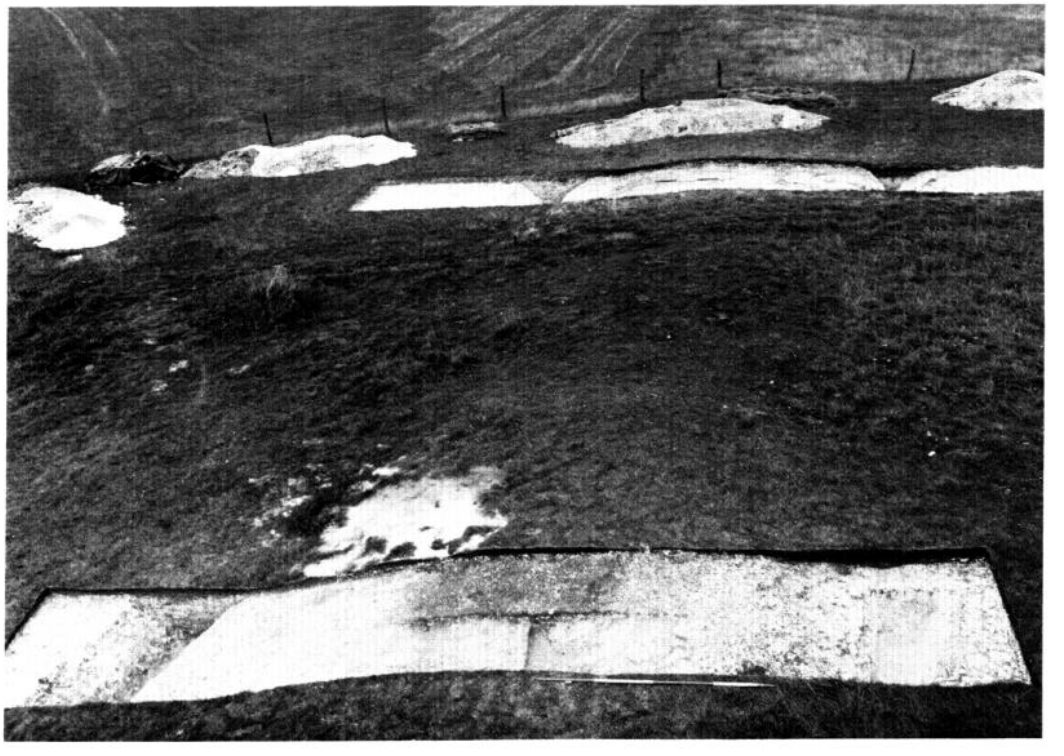

Plate 8 The linear earthwork looking east. Trench 122 in the foreground, trench 103 beyond. In trench 122 part of the original turf line beneath a thin layer of upcast is preserved in position

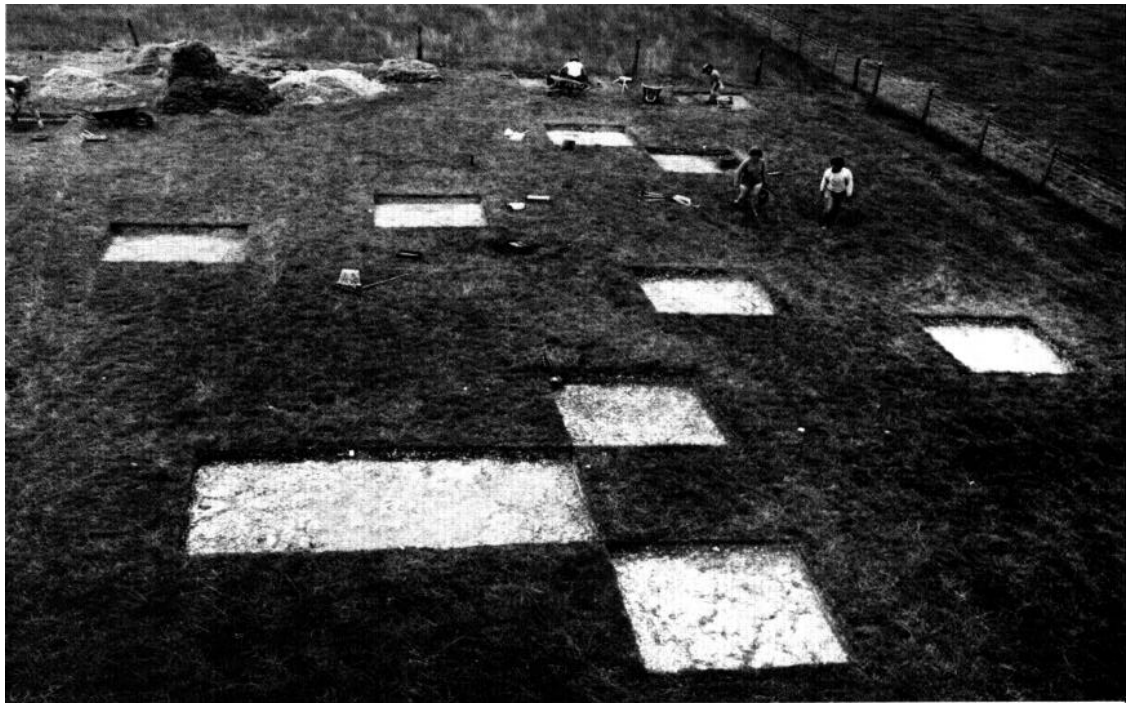

Plate 9 Area outside the fort sampled on random system at 10% sample the sampling unit being 2 m squares

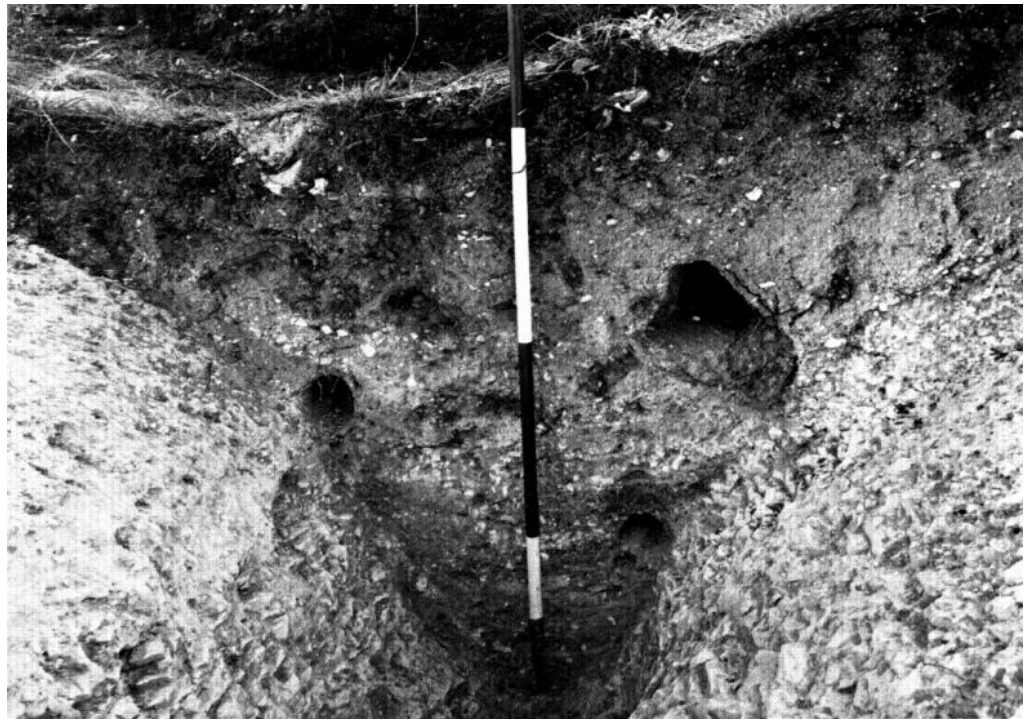

Plate 10 Section of outer earthwork ditch in its recut form seen in trench 132. Note the disturbance by rabbits

Plate 11 Rampart of period 1 partially sectioned in 1988. Behind the distant figure the chalk capping of period 3 is intact

Plate 12 Rampart of period 2 exposed in 1988. The chalk was 300 mm thick and was penetrated by rows of stake-holes

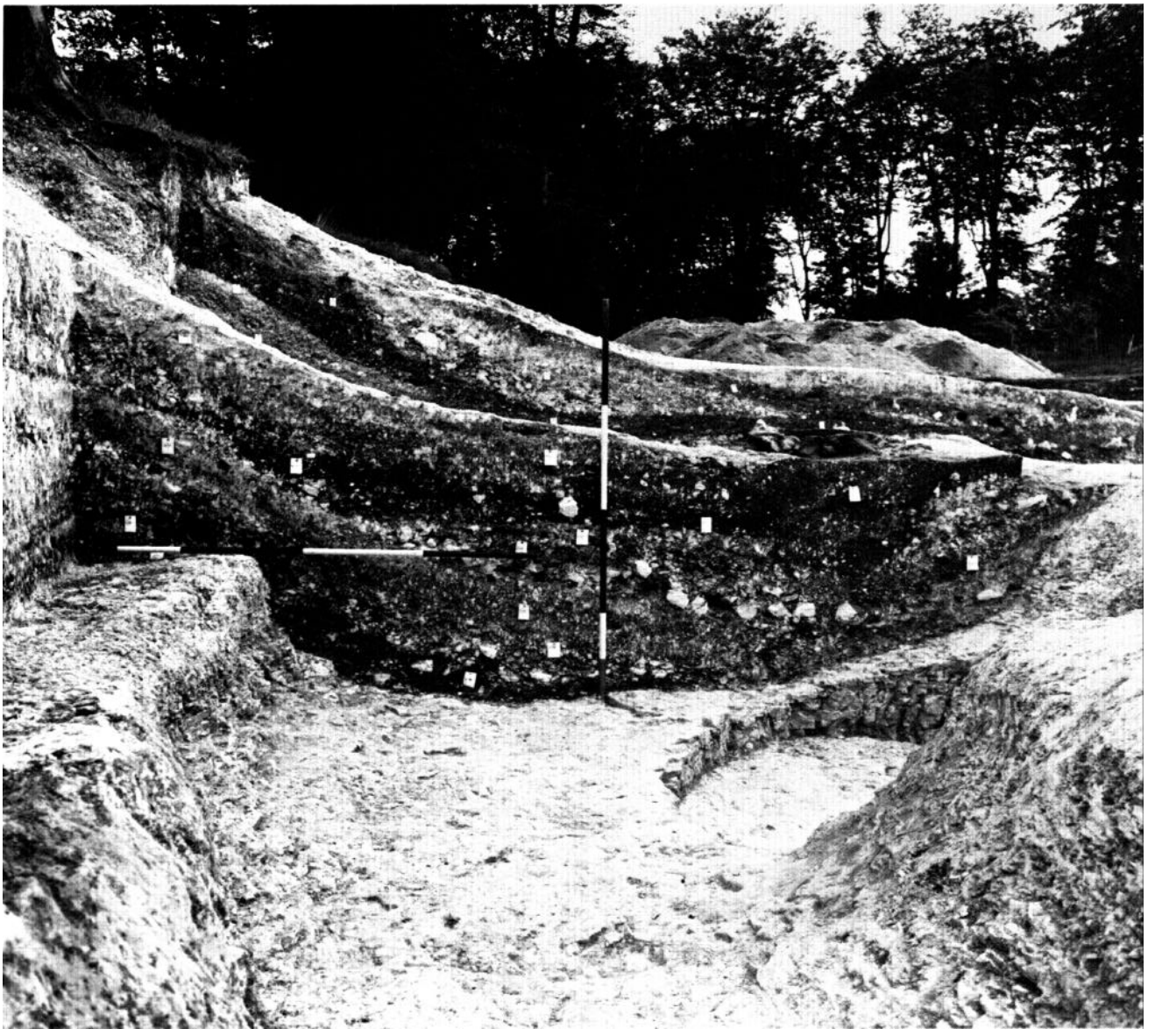

Plate 13 Tail of Rampart period 1 exposed in 1988. It fills a shallow quarry feature dug at the beginning of the process of rampart construction

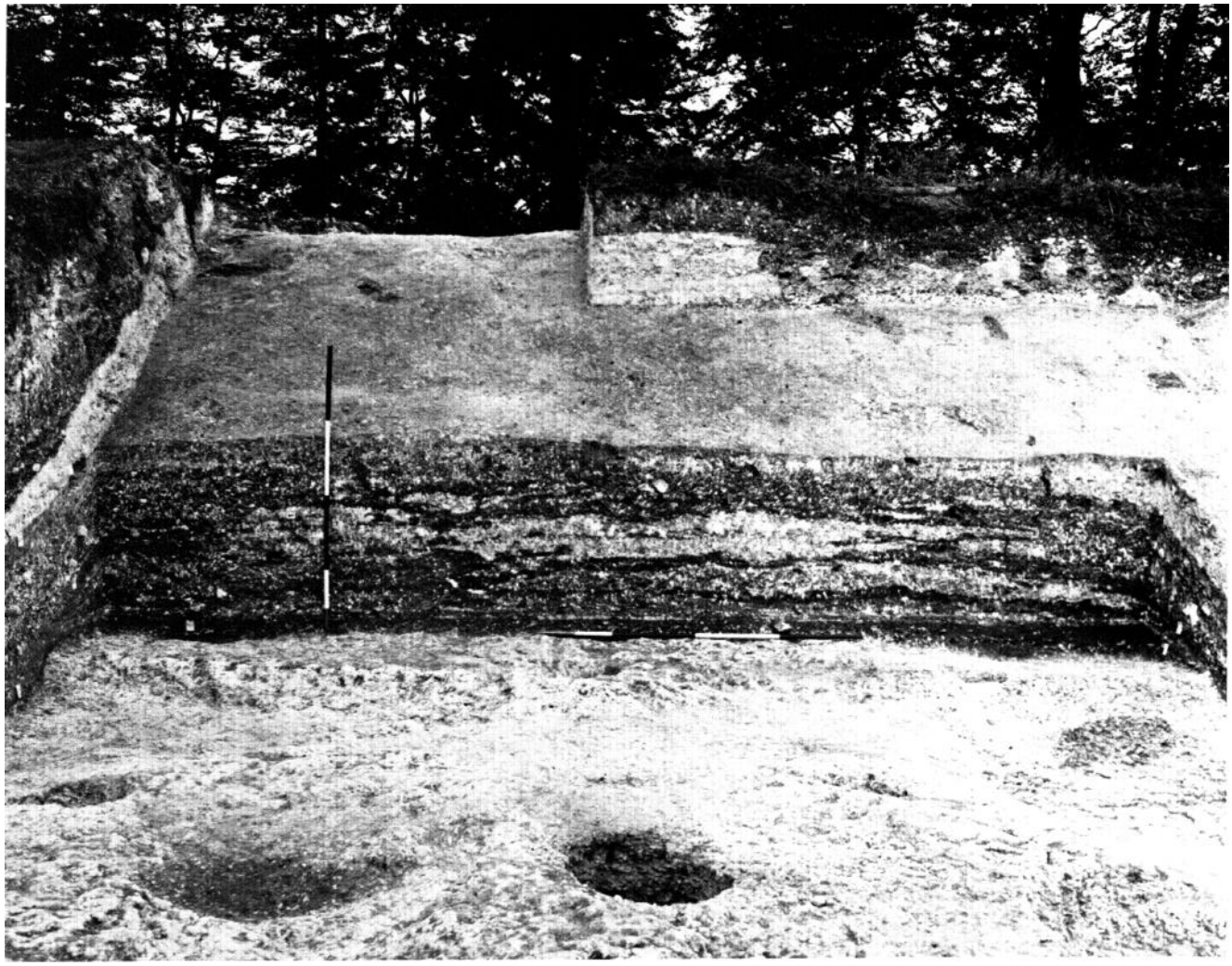

Plate 14 Tail of Rampart period 1 exposed in 1988 showing the original turf line and lateral variation in the rampart's body

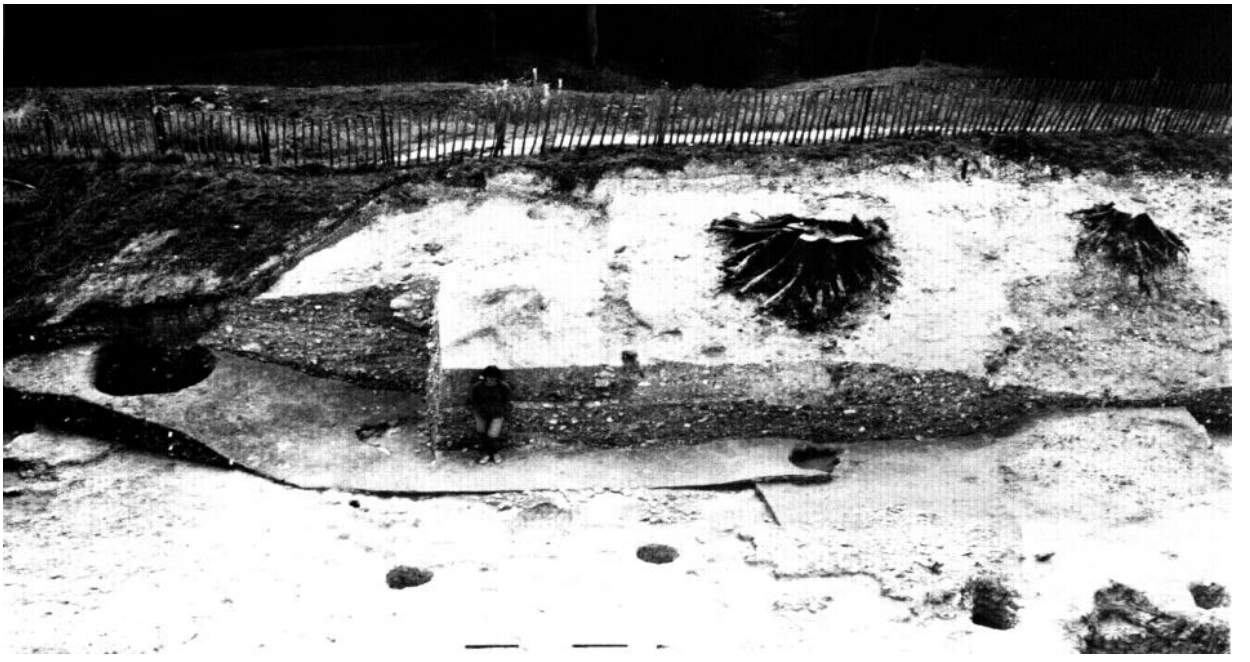

Plate 15 The blocked south-west entrance: the blocking partially removed 1983

Plate 16 The blocked south-west entrance: the early road surface exposed between the two in-turns

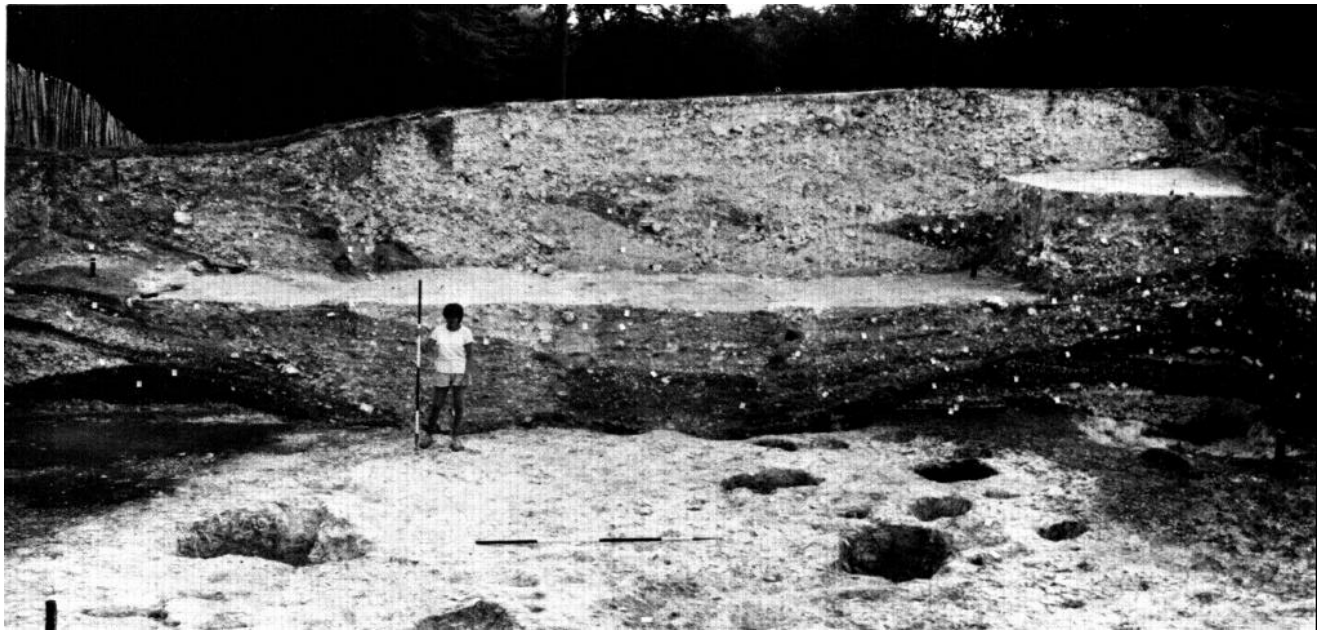

Plate 17 The blocked south-west entrance: at completion, the in-turns removed

Plate 18 The surface of the last road at the south-west entrance

Plate 19 Excavation in progress 1983

Plate 20 Excavation in the final stages 1983

Plate 21 Excavation in progress on GC22 in 1984

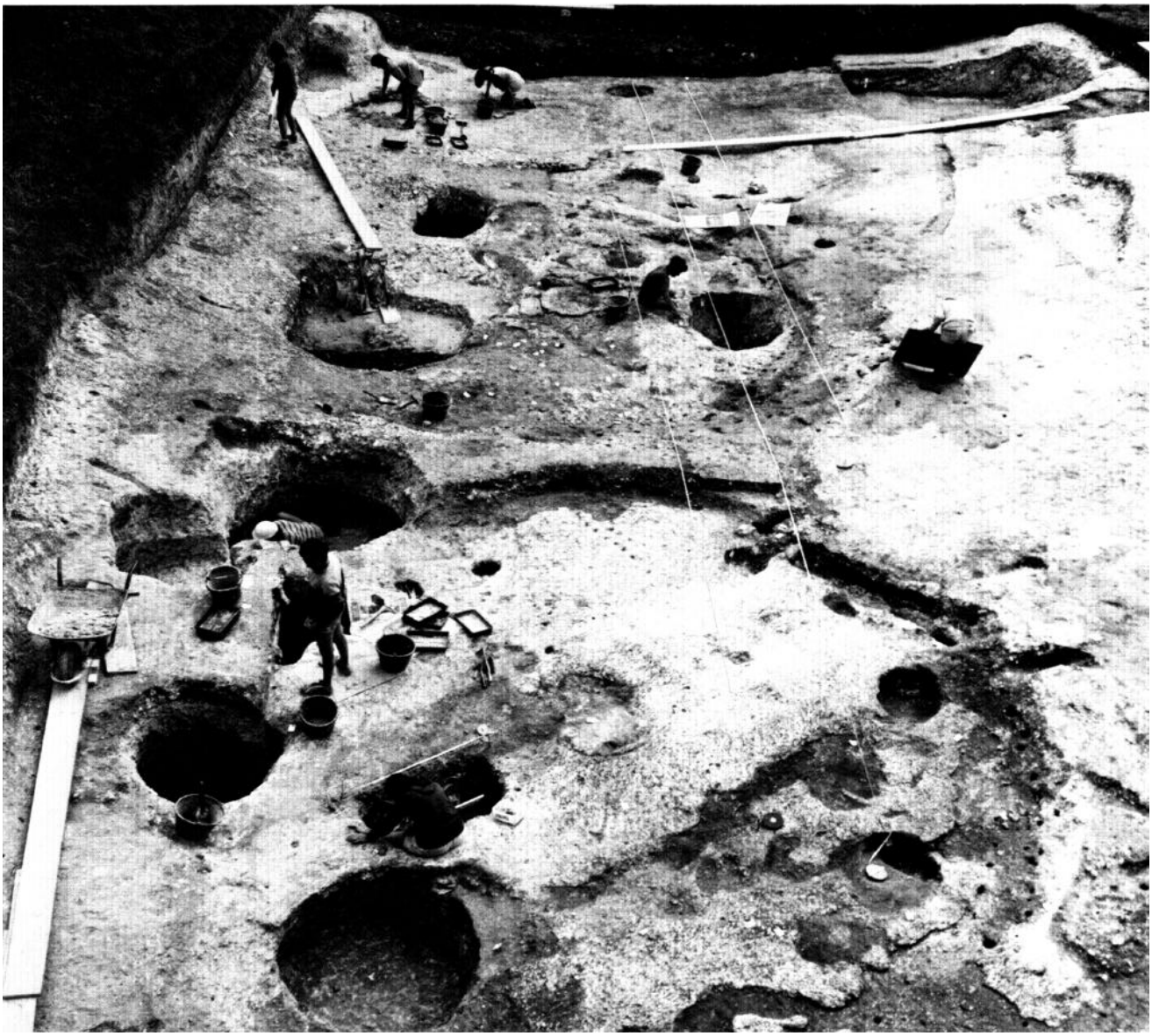

Plate 22 Excavation in progress 1986 with CS57 in the foreground

Plate 23 Excavation in progress 1987

Plate 24 Excavation in progress 1988

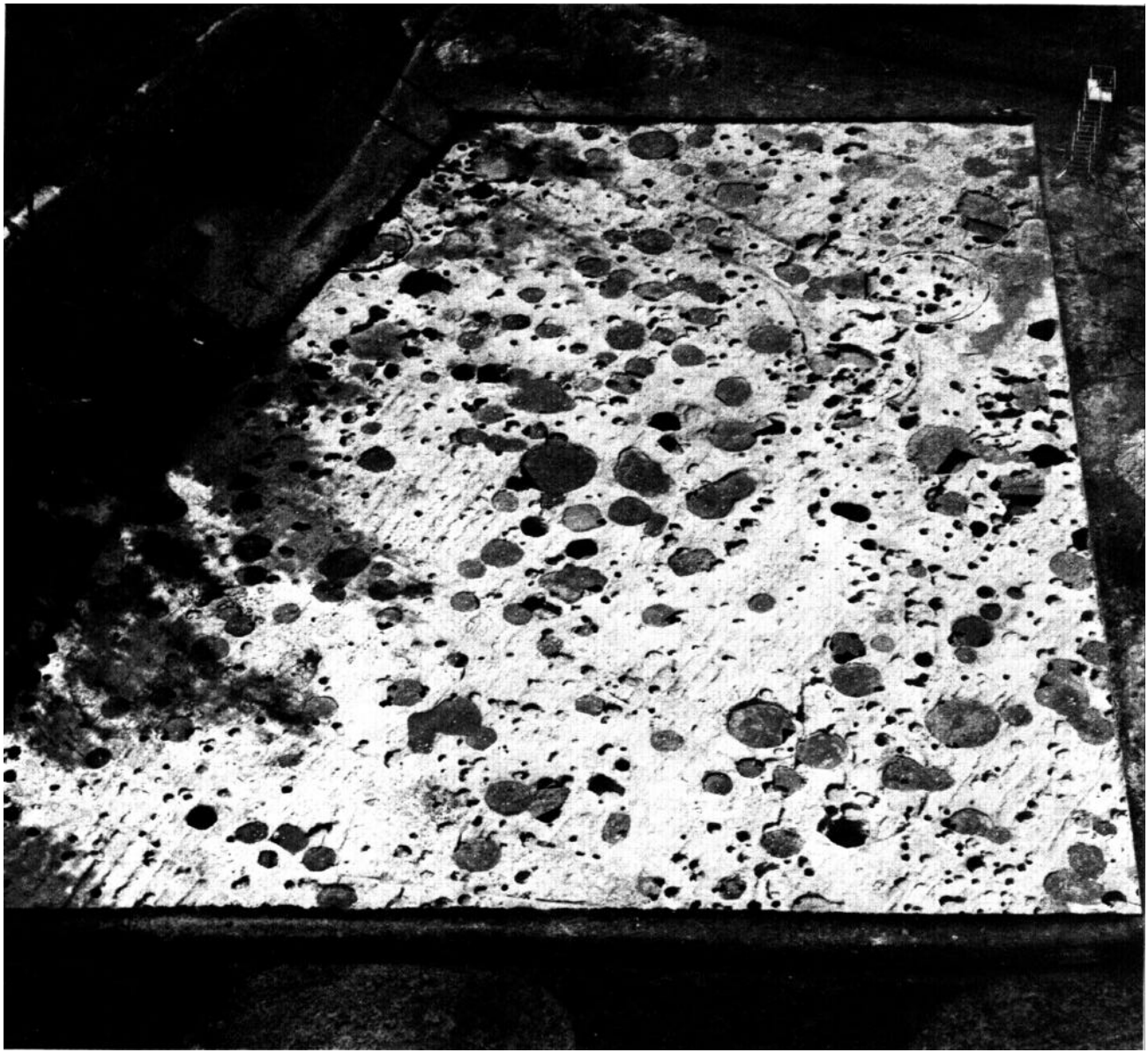

Plate 25 Aerial view of the area excavation in 1979

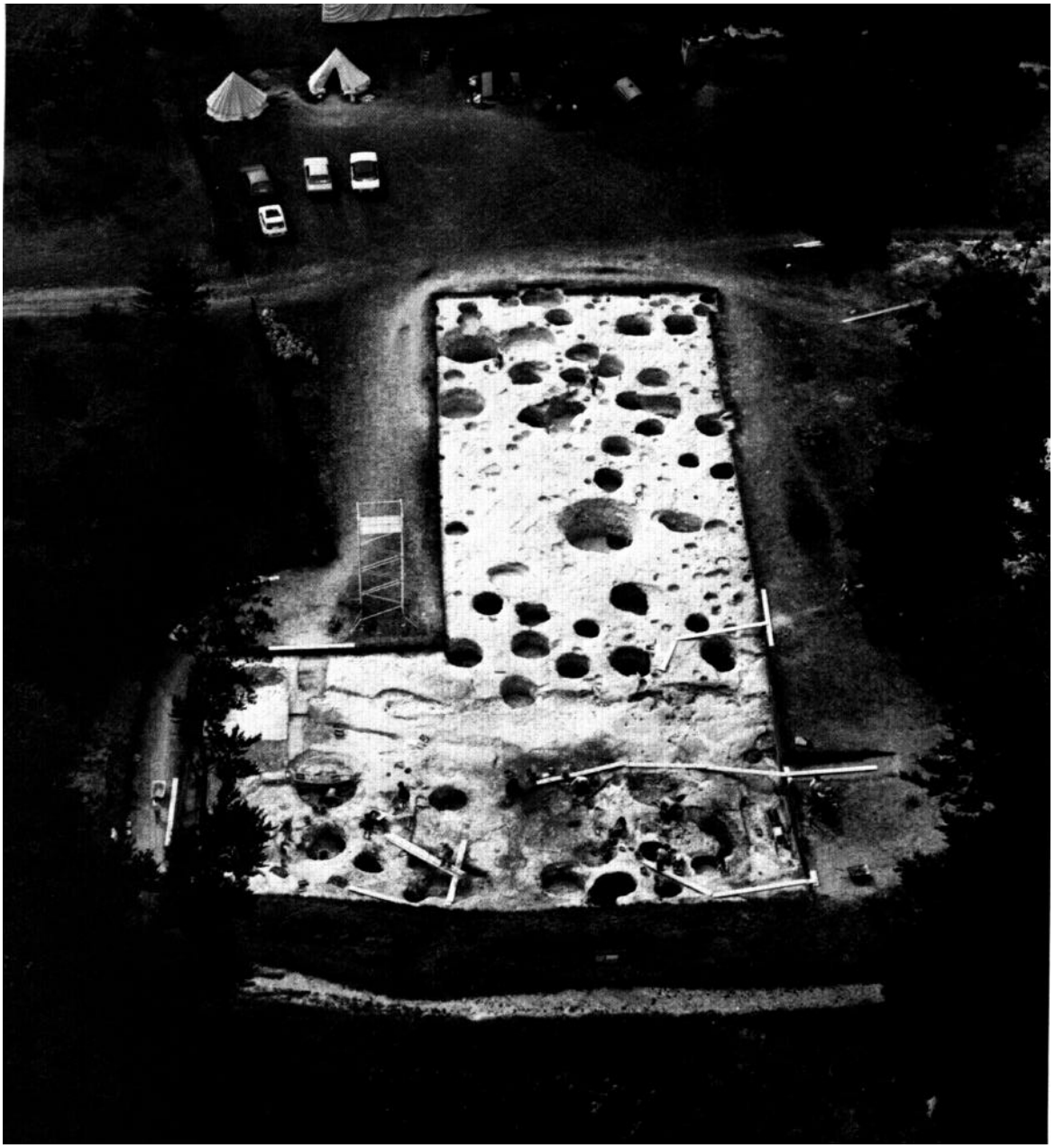

Plate 26 Aerial view of the area excavation in 1986

Plate 27 The excavation of 1986 looking from the rampart across the quarry hollow

Plate 28 The excavation of 1986 looking from the interior of the fort towards the quarry hollow and rampart

Plate 29 The excavation of 1987 showing the quarry hollow completely excavated and the partial rampart cutting

Plate 30 The excavation of 1987 showing the quarry hollow looking from the rampart into the fort

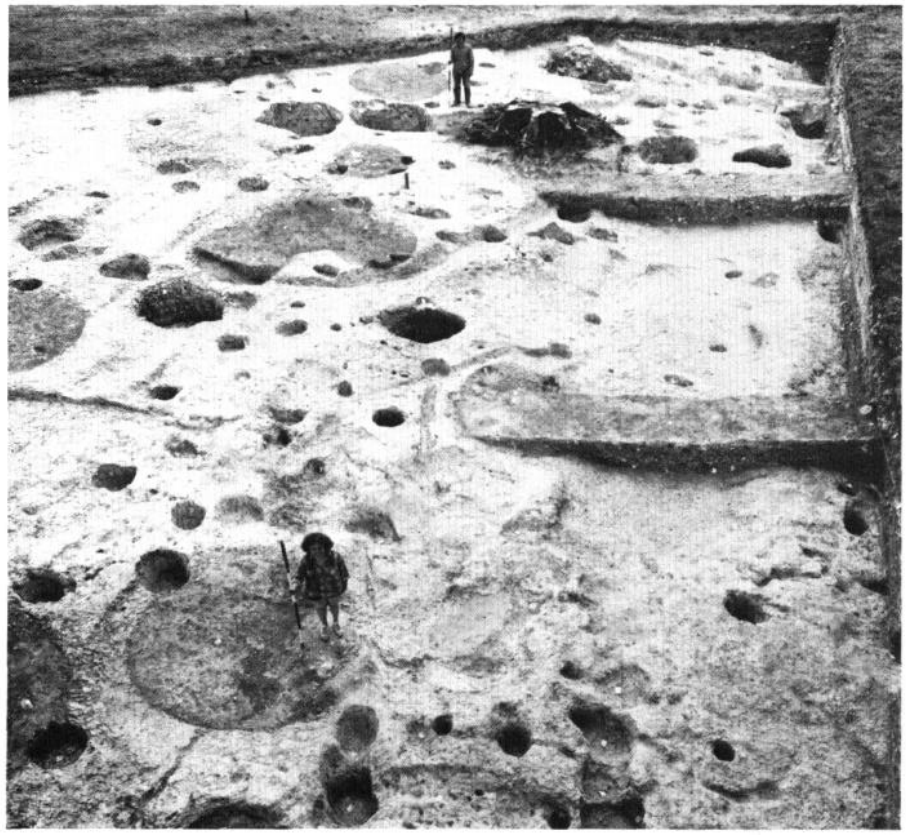

Plate 31 the excavation of 1982 showing the quarry hollows behind the rampart

Plate 32 The area excavation of 1981 in the centre of the fort

Plate 33 Gully complex 8 excavated in 1980

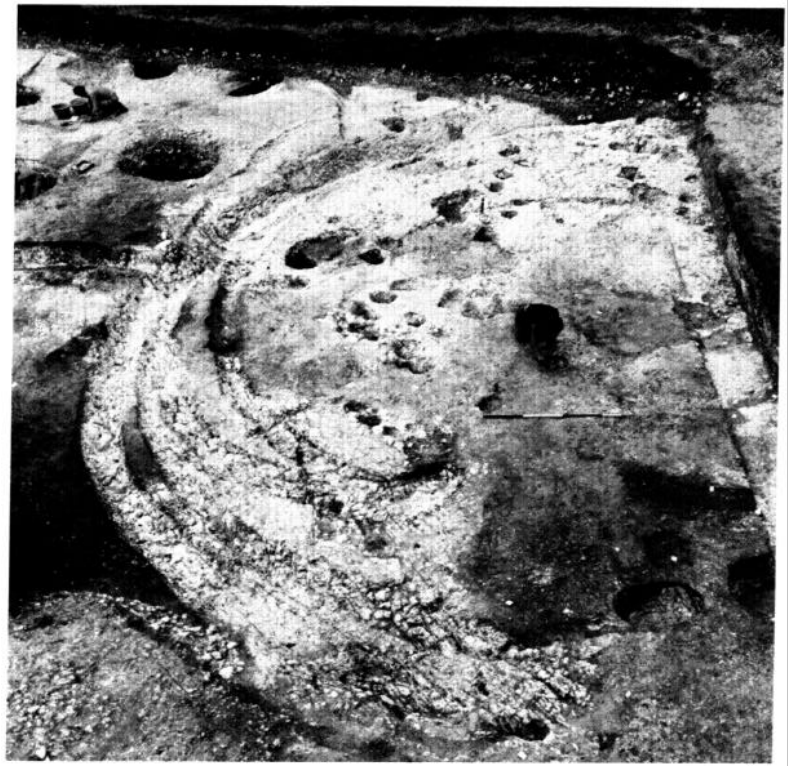

Plate 34 Gully complexes 23, 24 and 25 excavated in 1985

Plate 35 Road 2 with houses along the south side: 1979

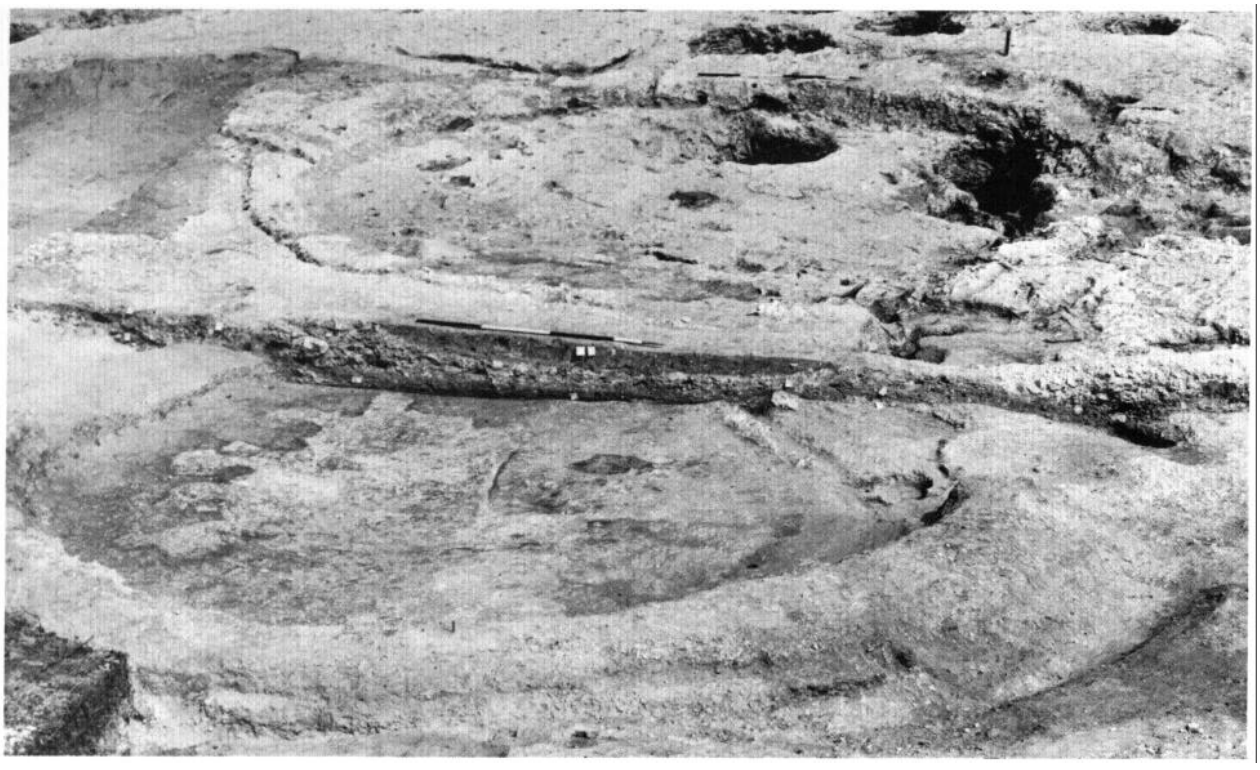

Plate 36 CS31 overlying CS27 in the excavation of 1983

Plate 37 CS36 cut by the gullies of GC22 and GC23

Plate 38 Part of the wall of CS33 cut into the tail of the rampart

Plate 39 Section of the stake wall of CS33

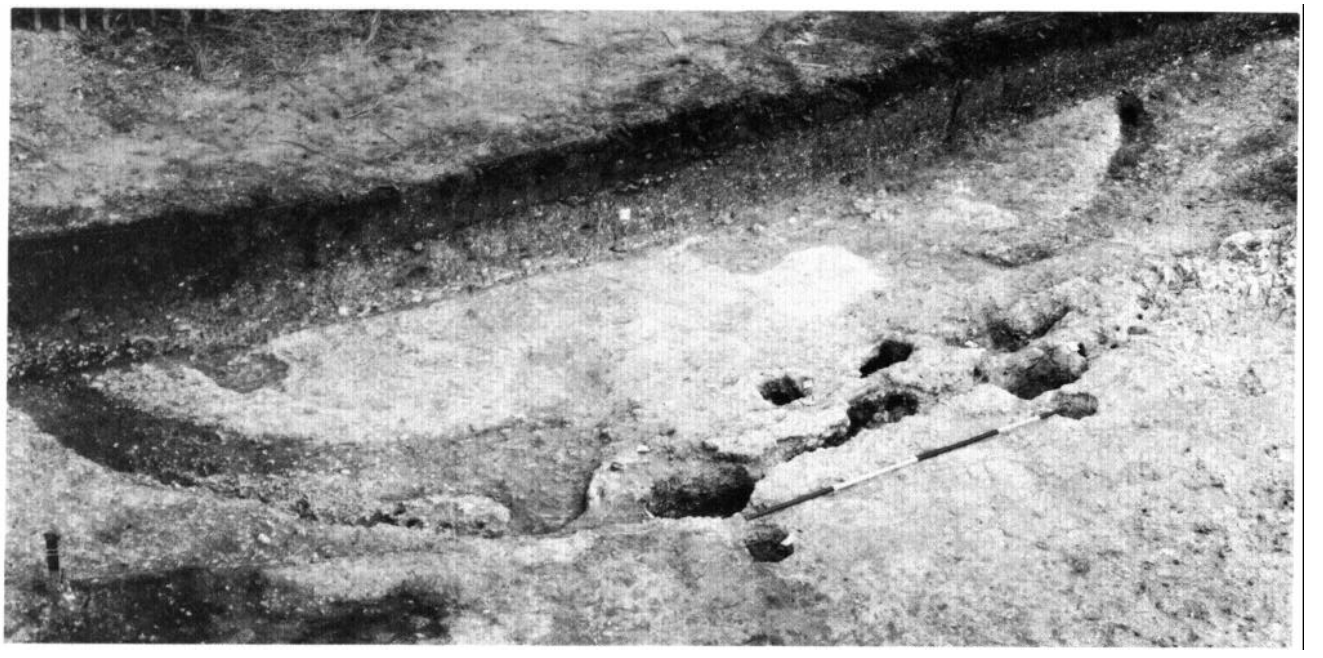

Plate 40 CS29 showing two phases of door structure: excavated 1983

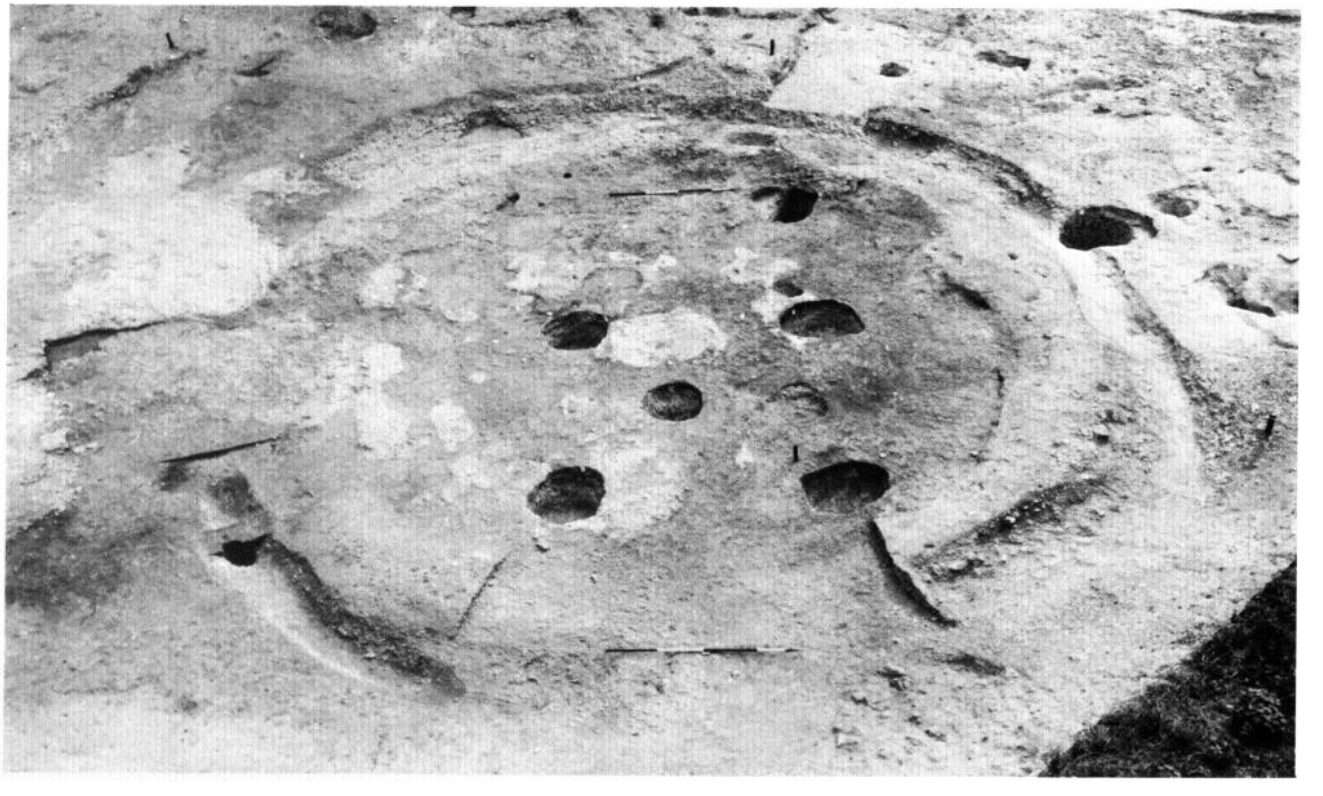

Plate 41 GC22 with PS335 in the centre: 1984

Plate 42 CS51 in the quarry excavated in 1984–5

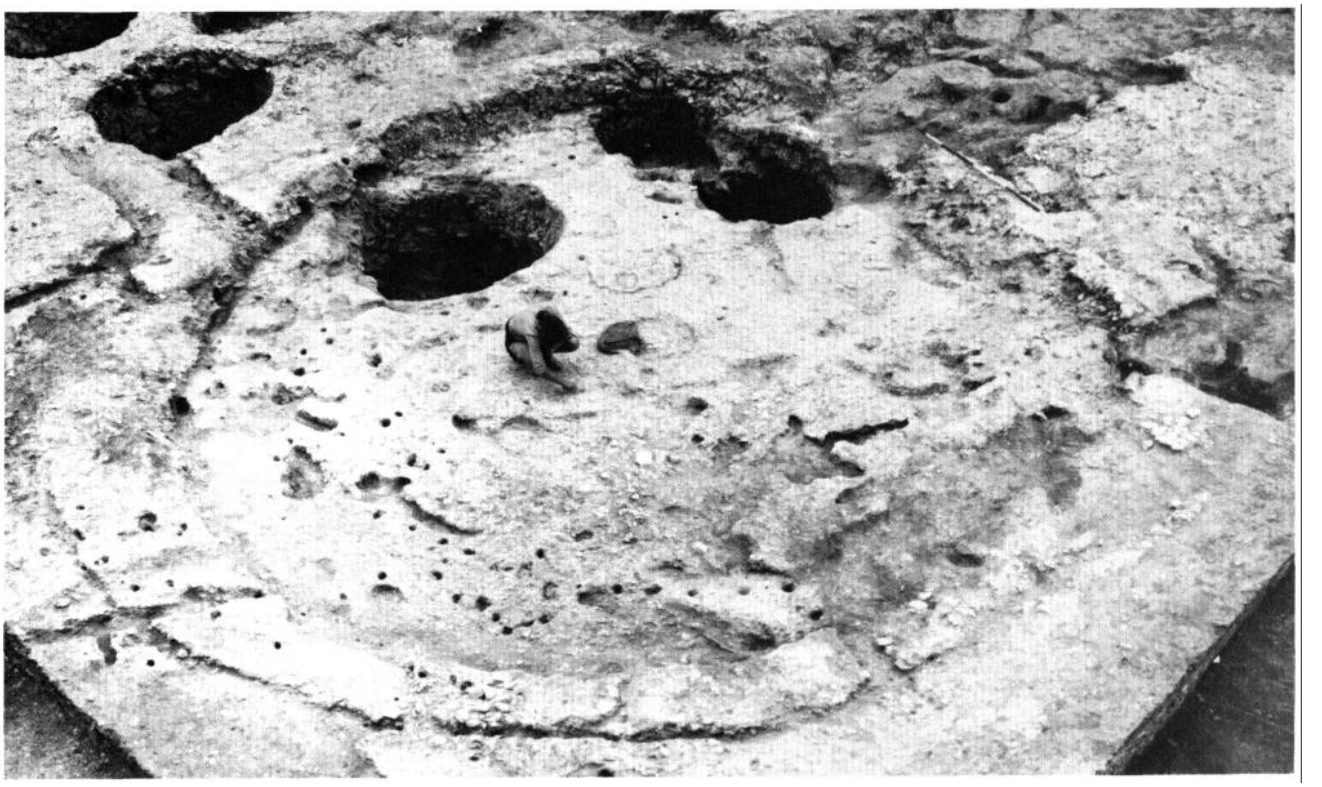

Plate 43 CS31 excavated in 1983; the entrance area was badly disturbed by rabbits

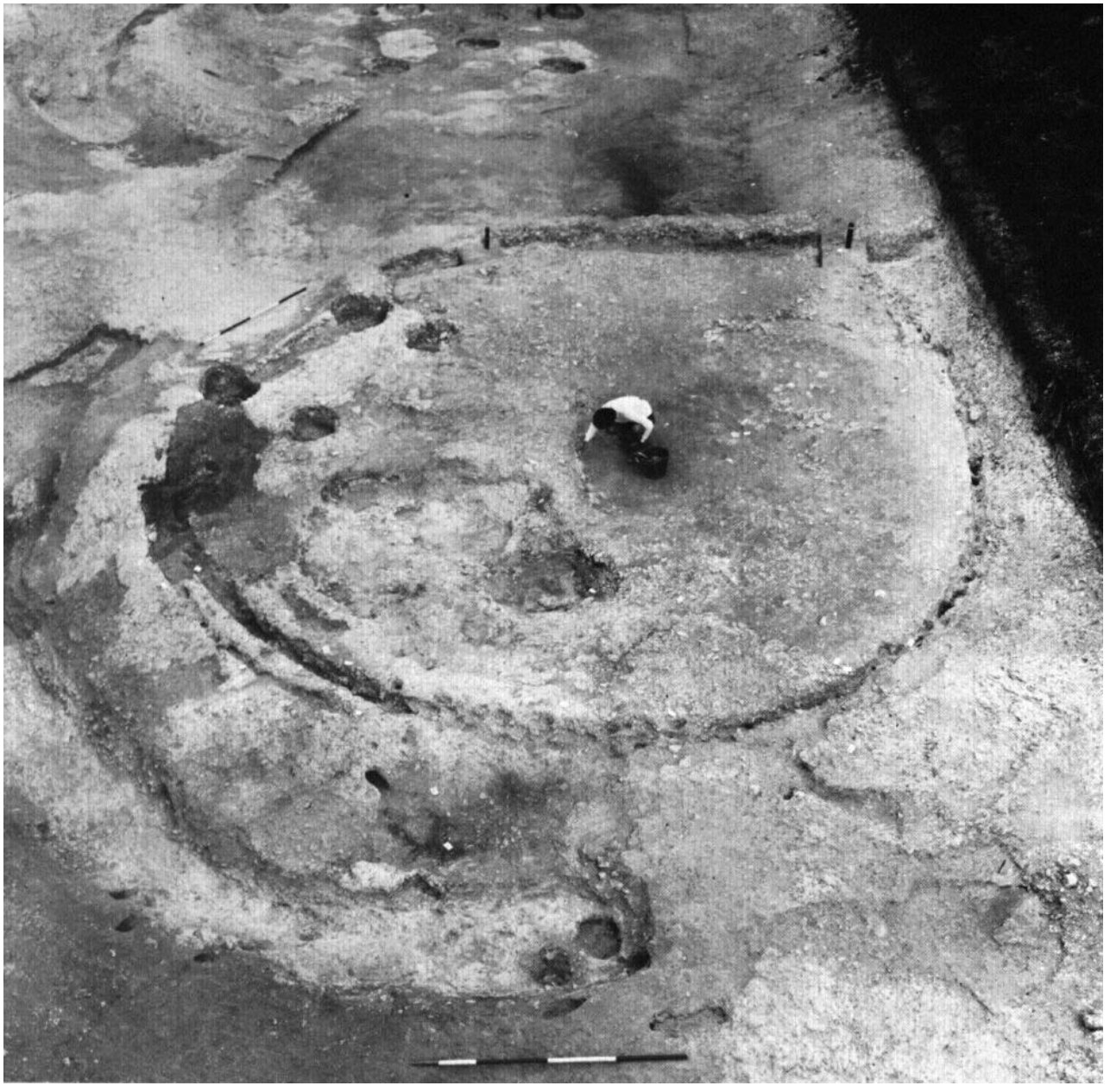

Plate 44 CS38 excavated in 1984

Plate 45 CS27 excavated in 1983

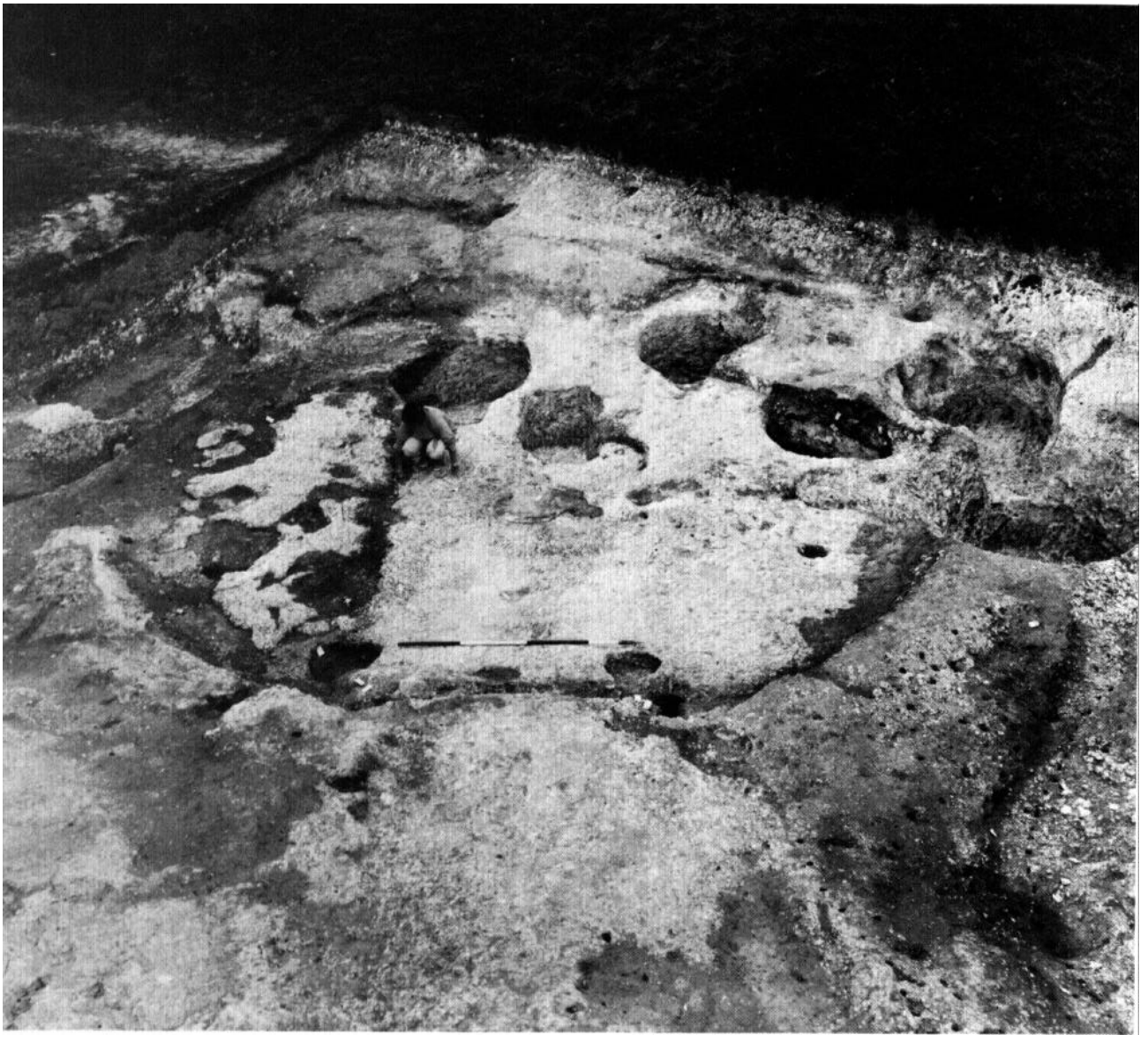

Plate 46 CS57 excavated in 1986

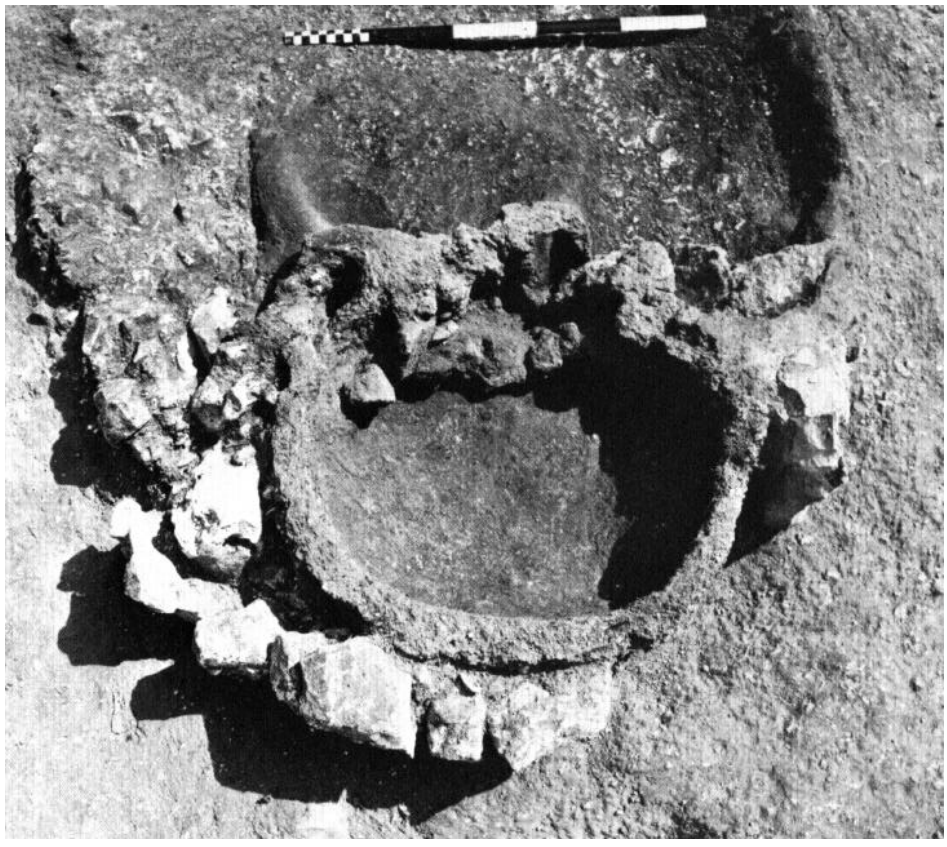

Plate 47 Oven (F356) partially excavated, leaving some collapsed daub in position

Plate 48 Oven (F356) totally excavated (after very heavy rain)

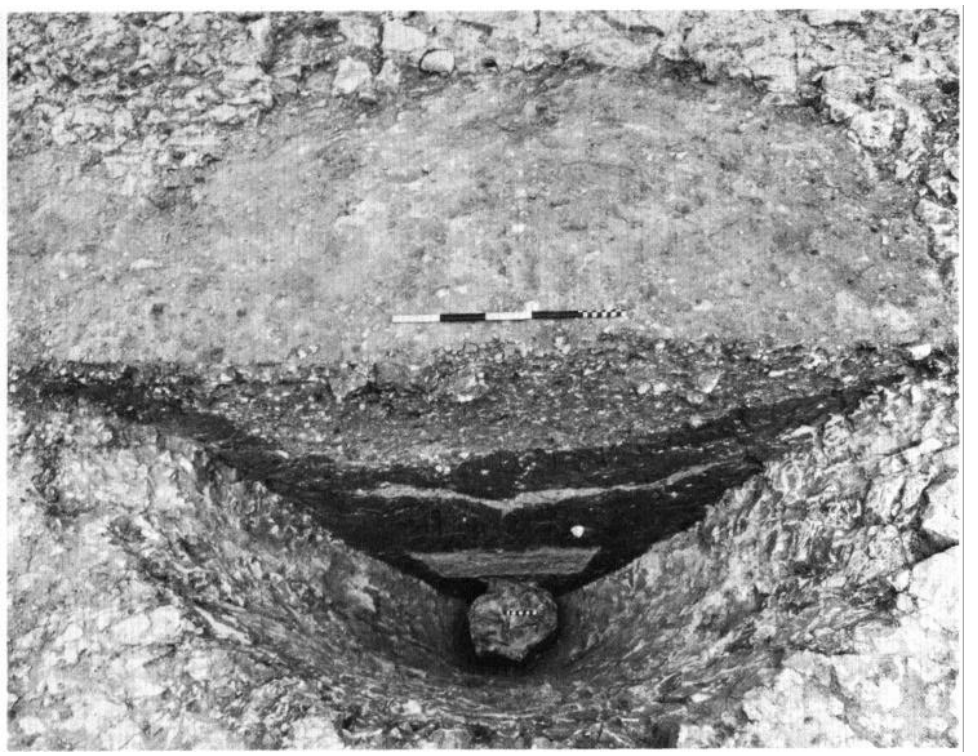

Plate 49 Pit 1892. Clay mixing pit with large stone in the base

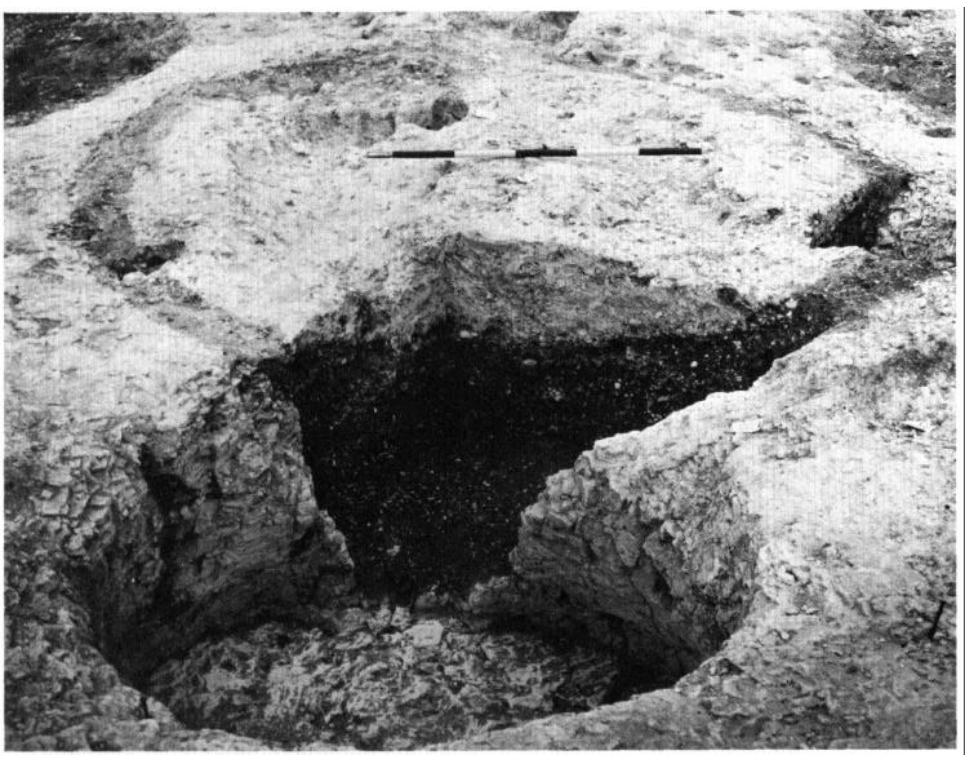

Plate 50 Pit 1849: showing chalk packing in the top

Plate 51 Pit 1285: showing partial chalk block walling

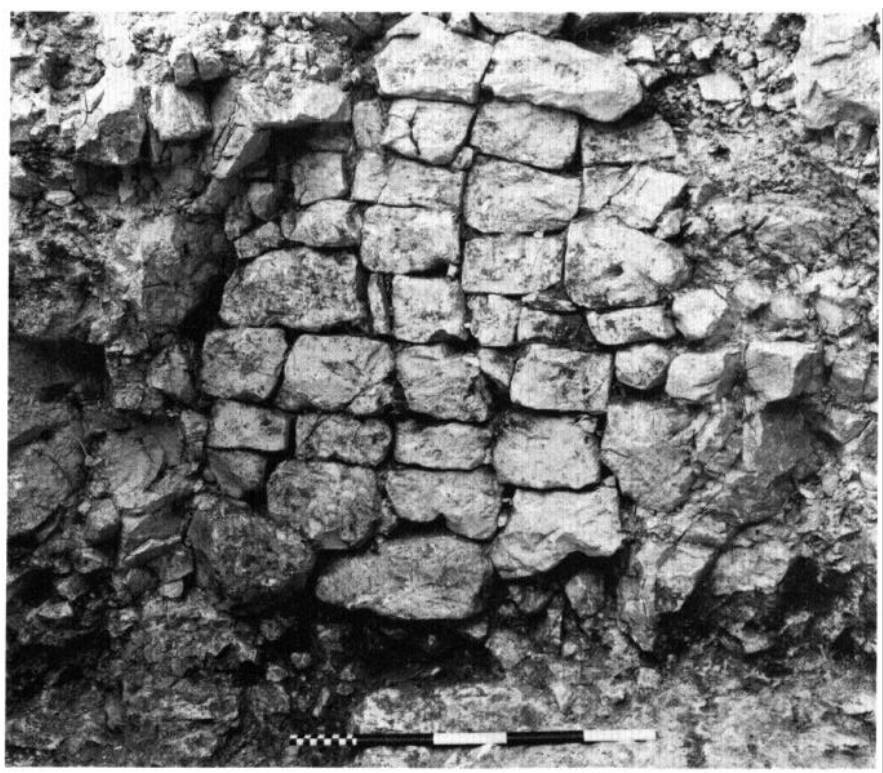

Plate 52 Pit 1285: showing partial chalk block walling

Plate 53 Pit 2248: showing partial chalk block walling

Plate 54 Pit 1832: showing adze marks on the wall

DANEBURY
EARLY PERIOD 550-350

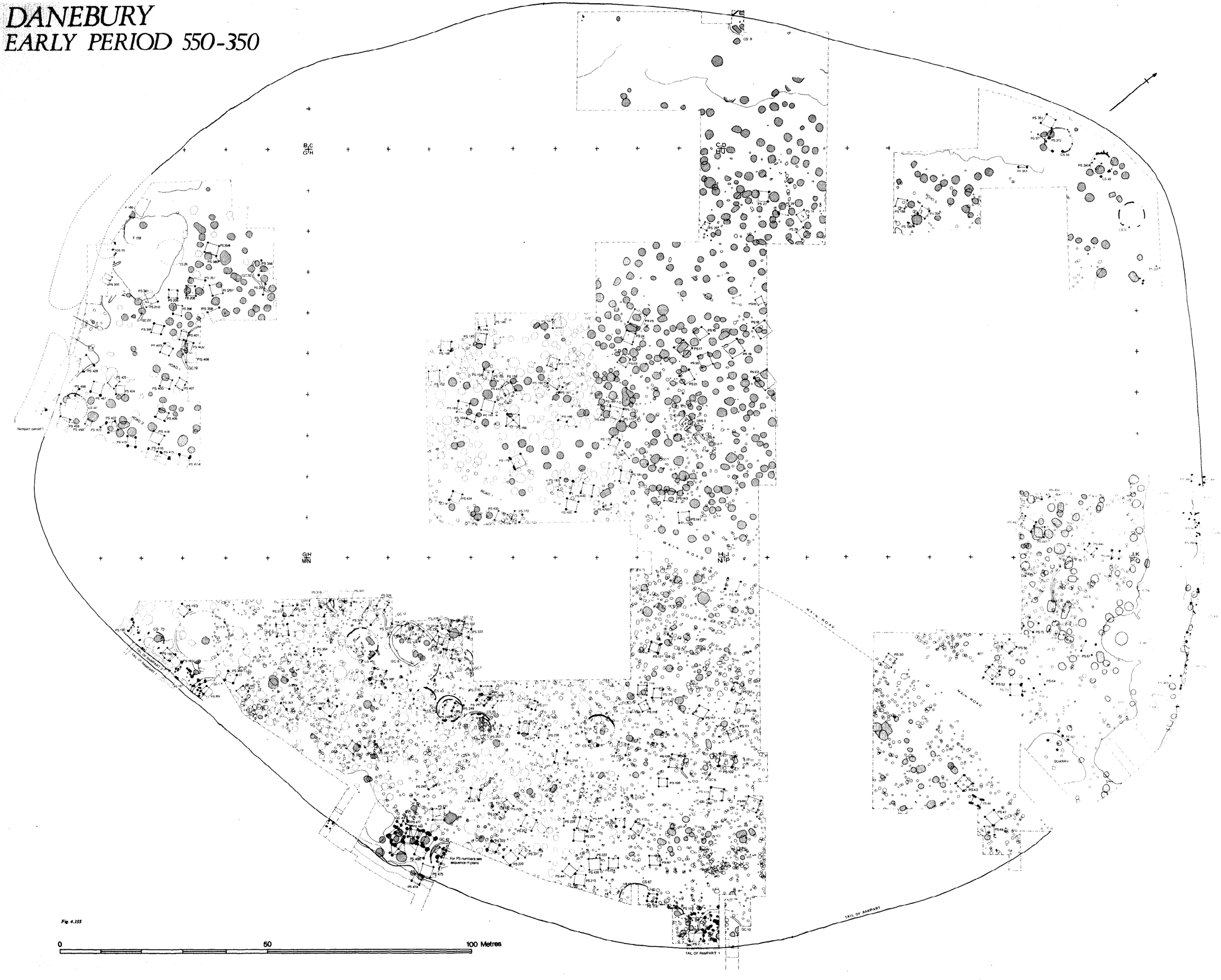

Fig. 4.155

0 50 100 Metres

DANEBURY
LATE PERIOD 350-50

Fig. 4.156