Chapter 6: The Hillfort

by Gary Lock, David Miles, Simon Palmer and Anne Marie Cromarty

Yes, it's a magnificent camp and no mistake, with gates, and ditch and mounds, all as complete as it was twenty years after the strong old rogues left it

Thomas Hughes (1889)

INTRODUCTION

Understanding hillforts

Anyone walking along the ramparts of Uffington Castle would probably agree that hillforts are not only the most obvious and spectacular legacy of the Iron Age but also the most enigmatic. To visit a hillfort is to provoke questions such as why here, why such an expenditure of time and effort, how many people lived here, how was it used, was it defensive, and how did it fit with activities going on around it in the wider landscape? Early concerns with hillforts were centred on their dating within a developing Iron Age chronology. The emphasis was on hillforts as military structures designed as places of defence and refuge within a hostile warrior society experiencing stress and conflict, as Uffington Castle had been portrayed in *Tom Brown*'s *Schooldays* (Hughes 1857, 9).

By the late 1960s different questions were beginning to be asked about hillforts, questions that derived from changing interests within wider archaeological thought. The details of dating and chronology were integrated into wider explanations of economic systems. These questions required more and different data, specifically information about the activities within hillforts, and several large-scale excavations were started at this time. Cunliffe (1995) was influential in establishing the view of hillforts as economic centres operating within individual territories.

The early 1980s saw another major shift in archaeological thinking and for prehistory in particular this introduced an emphasis on ritual behaviour. Hill (1989) was amongst the first to question artefact assemblages within Iron Age pit and ditch fills as being simply discarded domestic rubbish and to suggest the alternative of patterned ritual deposition. Bowden and McOmish (1987) questioned the functionalist interpretation of hillforts as being defensive based on strategic locations and offered alternative explanations involving ideas of status, power and symbolism. Equally the economic importance of hillforts was questioned and with it the assumption that they formed central places at the top of a settlement hierarchy serving a social elite.

Interpretations involving social practices, including ritual, are embedded within a growing literature of Iron Age studies and maturing theoretical frameworks drawing from a range of other social disciplines (Gwilt and Haselgrove 1997). Ancestral connections are part of an evolving discussion concerning prehistoric concepts of history and how history can be structured within the landscape (Gosden and Lock 1998; Barrett 1999). This chapter, and discussion in other parts of this volume, attempt to further this debate.

UFFINGTON CASTLE

Uffington Castle is a D-shaped hillfort with a single circuit of rampart and ditch enclosing an area of around 3 ha. It is situated at SU 299 863, on the northern edge of the Wessex chalk massif, overlooking the Vale of the White Horse in south-west Oxfordshire (Fig. 6.1). The earthwork lies at just above 250 m OD near the highest point of the escarpment. The land falls away sharply to the north into the dry valley known as the Manger, and slightly less steeply to the west and south-west. To the north-east the land slopes fairly steeply, along the cusp of the Manger, past the White Horse chalk figure to the small, steep sided Dragon Hill.

The underlying geology of the area is Cretaceous chalk that varies across the site. The western half of the fort lies on Middle Chalk, while the eastern part was built on the overlying Chalk Rock, and Upper Chalk above this in the easternmost parts (Fig. 1.2). A slight ridge of this Chalk Rock runs off down the dip slope of the escarpment to the south. A linear ditch is aligned along this ridge running south away from the Ridgeway at the south-east corner of the hillfort.

Knowledge of the hillfort was relatively limited prior to the beginning of this project despite the fact that the site is part of an important historic landscape of interest to, and enjoyed by, many people. The hillfort was consequently suffering erosion from both recreational and agricultural use. English Heritage and The National Trust regarded the conservation and enhancement of the whole area as a priority and a programme of survey and archaeological investigation was developed. It was hoped to provide a better understanding of the area as a basis for all future research work and for the management of the site. The results would then enhance the presentation of the site to the public. Of particular concern were the breaches on the north-east and south-east sides, which were being further eroded by vehicular access into the fort. Prior to publication of Hooke's study (1987) the general feeling was that these two breaches were of recent origin and if this could be established, consideration would be given to their infilling.

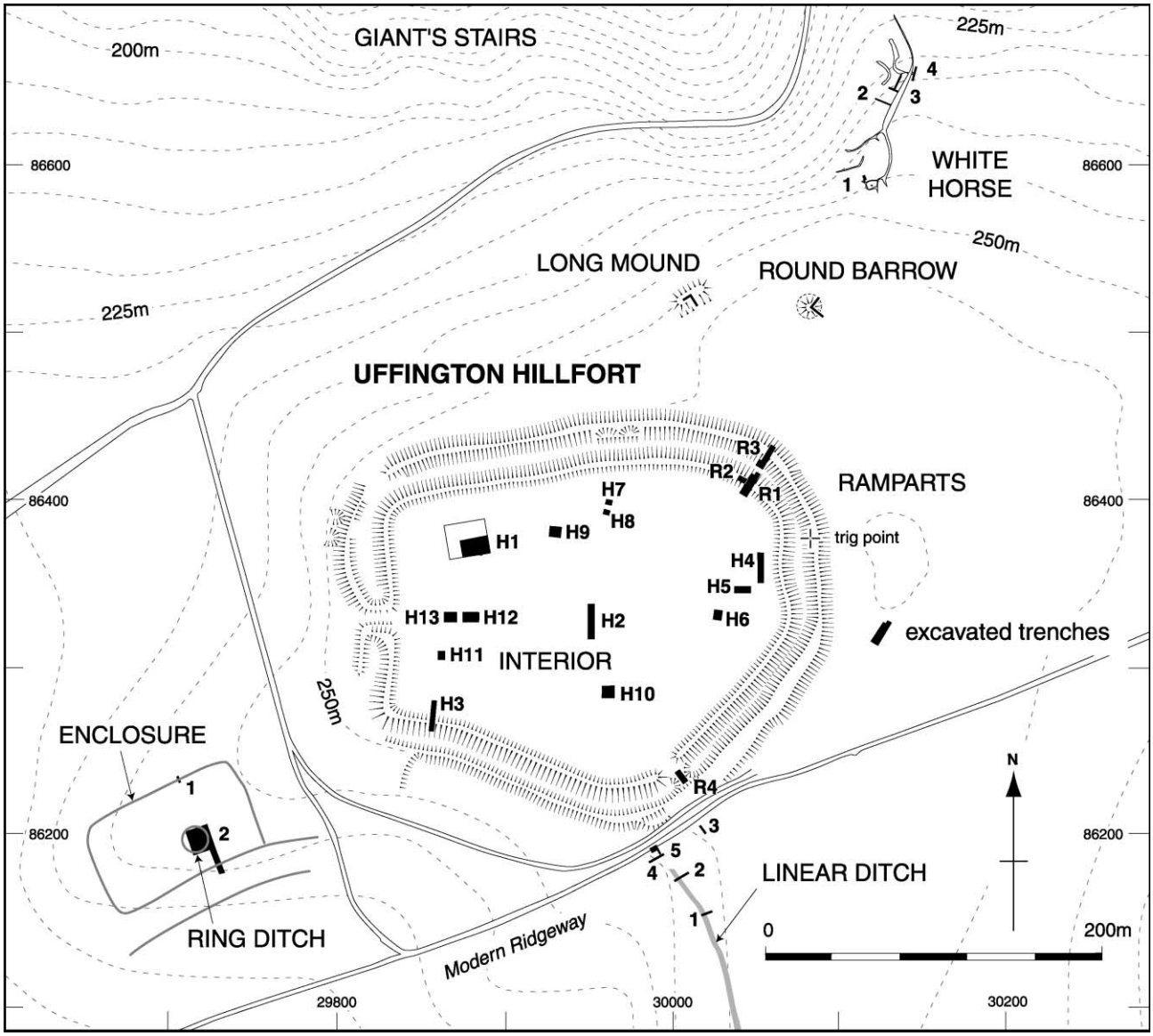


Figure 6.1 Location of Uffington Hillfort in relation to other sites on the Hill, and also showing the location of the trenches excavated on the ramparts, R1 to R4, and in the hillfort interior, H1 to H13.

Previous work

Antiquarians and archaeologists have commented on the hillfort, and even poked in it with their walking sticks, but the only archaeological investigation known of this monument was carried out in the 19th century by Edwin Martin-Atkins. His work on the hillfort was undertaken around 1853–8, but was not published before he died in 1859.

Martin-Atkins' daughter Alice reproduced his account of at least some of the work retrospectively in a volume printed in 1904. This work *Kingston Lisle: A fragmentary history of an old Berkshire seat and its associations*, was a privately printed pamphlet produced for the family and is mainly concerned with the family's history and the estate of Kingston Lisle, as understood and remembered by Alice Martin-Atkins as an elderly lady. Though originally produced when she was in her late fifties, she continued to add to it in note form over the next 30 years. These notes were added in her own hand with red ink in the copy of this rare volume held by the Reference Library of Reading Borough Council. The account of the work on the ramparts of the hillfort is reproduced from her father's notes without any alteration or addition, and appears to be the only portion of Martin-Atkins' records of the site to survive. Searches of the Bodleian, Ashmolean and British Museums failed to find any other records and it is thought that they were destroyed during the Second World War. On the basis of this small sample, his findings are well recorded and relate closely to what was found during the present investigations, so the most significant points are

worth summarising. The report is reproduced in full as a footnote in Avery (1993, vol. 2, 353).

Martin-Atkins describes a section cut in the north-west rampart, but it is unclear if he dug other sections round the circuit, such as the exploratory pit found during the present investigations at the north-east breach. The findings described by Martin-Atkins for the north-west section are very similar to those found in the north-east section so he may not have thought it worth while to record it separately.

At the base of the rampart Martin-Atkins found a row of postholes along the scarp of the ditch. The dimensions and spacing of these are comparable to those found in the north-east section at 0.3 m (one foot) in diameter, by 0.5 to 0.75 m (1.5 to 2.5 feet) deep and varying in distance from each other from 0.5 to 0.75 m (1.5 to 2.5 feet) from centre to centre. From 1.52 to 1.83 m (five to six feet) behind this row, a second parallel row of postholes was found. A postpipe survived as a void to within 0.3 m (one foot) of the top of the rampart. The chalk around this cavity was a hardened mass, 'as if it had been rammed in when wet'. Similar cavities are now known from other sites where puddled chalk was used in the construction, such as Blewburton Hill (Harding 1972, 47), Segsbury Camp (Lock and Gosden 1998), and from the modern excavations at Uffington.

The old ground surface preserved beneath the rampart and the fills of some of the postholes yielded finds of pottery, animal bone, and charcoal, with the teeth of mice. The pottery is described as 'coarse, unbaked and ornamented with the well known zigzag pattern'. This led him to conclude that 'the date of this fine specimen of an ancient encampment is, probably, prior to, or at least as early as, the time of the Roman invasion, and that the Romans themselves had no hand in its formation, although they might have occupied it in succession'. This date was earlier than he envisaged for the construction of the hillfort and the accuracy of this observation remained to be seen with the latest excavations.

It was recorded by O G S Crawford (1922) on a visit to Uffington Castle that he had noticed a sarsen boulder exposed in the outer face of the rampart about midway between the top of the rampart and the bottom of the ditch. Further probing with his walking stick revealed other sarsens on each side, leading him to suggest that this represented parts of a stone-built outer retaining wall as part of the rampart. He also suggested that excavations would reveal the presence of a similar retaining wall on the inner side of the rampart, analogous to the walls revealed by his excavations at Pen Dinas, between Barmouth and Harlech in Merionethshire. Therefore, before the present excavations all discussion of the hillfort was based on these fairly limited findings.

EXCAVATIONS THROUGH THE RAMPARTS (1989–90)

The ramparts were trenched at the breaches in the north-east and south-east quarters and inside the ramparts where it was thought that a blocked entrance might be located (O'Connor and Startin 1975, 325). The initial season of excavation in 1989 cut back the breach on the north-east side to reveal a section through the original rampart (trench R[ampart]1, Fig. 6.1), and this was partly extended into the ditch. Excavations in 1990 extended this section across the rest of the ditch and across the counterscarp bank (trenches R2 and R3). The south-eastern breach was also sampled in a similar way in 1990 (trench R4) but excavations were restricted to the central and outer part of the rampart and the inner portion of the ditch. Trench H[illfort interior]3 cut into the tail of the rampart in the south-west, as did the trench H4 to the east. The breaches were trenched to determine their likely date, but these excavations also provided some understanding of the sequence of construction. All the trenches cutting the ramparts revealed a similar sequence to that recorded by Martin-Atkins, suggesting that this was very likely representative of the ramparts as a whole.

The ramparts and pre-construction ground surface

The pre-construction ground surface was preserved beneath the first phase rampart and the counterscarp bank outside the ditch in all four trenches excavated. A single asymmetrical pit or tree-throw hole, with no finds, was the only pre-rampart feature discovered during the course of these excavations. It was overlain by the old ground surface, which was found to be broadly similar in all trenches, though with a slightly higher proportion of clay under the south-eastern rampart (trench R4). The natural chalk was overlain in the north-eastern trenches (R1 and R2), by a sub-soil layer of grey silty loam and a topsoil horizon of brown silt loam. This layer was thin, about 0.2 m thick, and similar to the modern topsoil of the area. The decalcified nature of the ancient soil probably indicates a grassland landscape at the time of the fort's construction, though it is suggested that the sub-soil horizon may indicate plough disturbance at some time. This is very similar to the current landuse of the area as maintained by the National Trust. Ploughing is known to have occurred in this area of the Downs during the late 2nd and early 1st millennium BC from excavation evidence at Wayland's Smithy (Atkinson 1965, 132) to the west and Rams Hill (Bradley and Ellison 1975) to the east. Further east at Segsbury Camp a ploughsoil with ard marks was preserved beneath the Iron Age rampart (Lock and Gosden 1998).

Flint, pottery and animal bone were all recovered from this layer (trench R1, context 30 and trench R3, 520), but as the flint is mainly debitage, the pottery is the most datable material recovered from this horizon. Five of the sherds are Beaker pottery, and a single sherd of a similar date was recovered from the first dumps of the rampart (trench R4, 726).

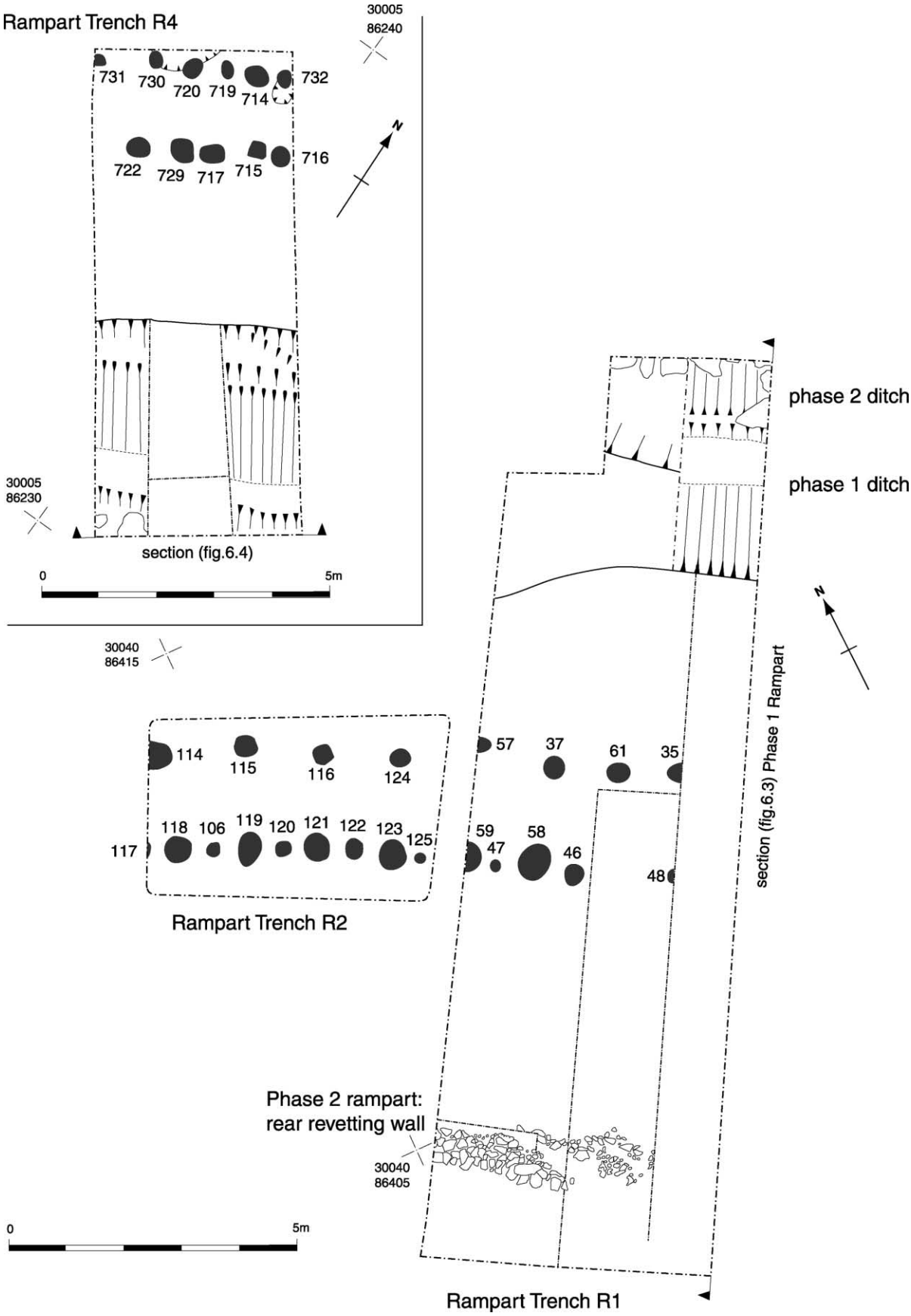


Figure 6.2 Plan showing excavated features within trenches R1, R2 and R4.

These finds were concentrated in the area of the north-eastern rampart and counterscarp bank, suggesting the activity represented by this material was focused in this area. The long mound and round barrow lie 10 m north, so this may indicate the periodic occupation of the hilltop is connected with the use of these monuments. There was no evidence of further activity on the hilltop until the construction of the hillfort.

Phase 1

Wall-and-fill rampart

The first phase of construction of the hillfort was shown to have consisted of a timber walled rampart with a double row of timber uprights, remaining as postholes, and occasionally as postpipes within the bank material. No decayed wood was found, but in several cases the postpipes survived as voids only, indicating that the posts decayed *in situ* (Fig. 6.2). The dimensions of the postholes, with estimated widths of the contained posts is provided in Tables 6.1 and 6.2, and it is apparent that the pattern of posts varied between these two areas of the rampart. Table 6.3 sets out the average distances (centre to centre) between the postholes in each section. Martin-Atkins recorded the outer row of postholes as between 0.45 to 0.75 m (1.5 to 2.5 feet) apart with the inner row 1.5 to 1.8 m (5 to 6 feet) behind and parallel to them (1904, 32), suggesting that the even pattern found in the south-east breach may have been more typical.

The inner row of timber uprights was encased in successive dumps of chalk rubble in a silt loam matrix, distinguished by variable proportions of rubble and the inclusion of sarsen chips. The similarities in these fills make it likely they were deposited during the same phase of rampart construction. These deposits are relatively clean and are likely to have come from the excavation of the ditch. There are indications on the section (Fig. 6.3a, trench R1, contexts 55, 27 & 68) that the material within the wall was tipped in from behind, suggesting it was deposited before the inner row of posts was in place. Spoil from the ditch may have been stockpiled inside the fort for this purpose. The area between the two rows of postholes seems to have been filled separately to the backing bank of the rampart. This tail of the rampart may have had a fairly shallow slope allowing access to the top from the interior. However, as trench R1 was the only one to be excavated all through the rampart, it is not known whether this was the case throughout the fort. Trench R1 shows two dumps of material forming the main body of the original tail (Fig. 6.3a, 27 & 17) with a fairly steep angle at the inner edge. No finds were recovered from any of the structural postholes or from the dumps forming the original rampart structure.

Succeeding these layers stratigraphically is a layer of dark loam with little chalk rubble which may represent the remains of a turf backing to this slope. Two small pieces of animal bone and two sherds of early Iron Age pottery were recovered from this layer (trench R1, 43). This is overlain by successive thin layers (Fig. 6.3a, 38, 29, 36 & 35) relating to activity inside the defences and the decay of the rampart. These layers include material collapsed or washed down from the tail slope interspersed with loam lenses representing turf, before the final collapse of the whole rampart structure and the development of a turf horizon (26) over the whole of the back of the rampart. Several fragments of animal bone and small sherds of early Iron Age pottery were found in these layers (including 26) relating to the period during which the fort ramparts were falling into disrepair.

This rampart was found to remain to a height of 1.2 m above the old ground surface, but there had obviously been collapse within the structure when the timber uprights and the retaining walls had decayed. Its original height remains unclear, although postpipes were recorded within the bank material to heights of 0.64 m and 0.92 m respectively. Both the inner row uprights set in the smaller shallower postholes, and the larger deeper postholes of the outer row have inevitably collapsed and eroded, thus infilling the ditch and obscuring the original shape of the rampart.

Very little material which can be attributed to the construction of the phase 1 rampart was found beyond the outer row of uprights, but the fill of the first phase ditch did not include significant quantities of stone, suggesting that stone did not fill the spaces between the outer posts. It may be that this retaining wall was composed of some material that was not preserved, with the most likely being turf and timber (Avery 1993), or wattle, as suggested by Martin-Atkins (1904, 32–3) on the basis of his 19th-century excavations, although there was no evidence of either.

Counterscarp bank

Beyond the line of the rampart ditch a lesser bank was thrown up (trench R3). The primary phase of this counterscarp bank survived to a height of 0.5 m above the old ground surface and to a width of 3.2 m. This bank was formed by a dump of loose chalk rubble and blocks, and chalk rubble mixed with loam (Fig. 6.3b, 517–19 & 521), very similar to the main rampart and may have been dumped when the ditch was excavated. The bank was sealed by a layer of light brown chalky loam (Fig. 6.3b, 515), representing a turf line, which separated this bank from the later dumps of material. There were no finds from any of these deposits but it is very likely that this bank would have been constructed at the same time as the phase 1 rampart and ditch.

Rampart ditch

A large ditch, 7 m wide and 3.5 m deep, ran round the hillfort beyond the line of the ramparts. This was heavily truncated by the phase 2 recut, and although little of the ditch remained in the south-east breach, over half of the ditch remained at the north-east breach (Fig. 6.3a and b). A small piece of animal bone was the only find to be retrieved from this phase of the ditch around the hillfort (trench R1, 62).

The ditch was steep-sided with a U-shaped profile which cut into the chalk bedrock of the hillside, although originally the sides are likely to have been steeper but weathering may have reduced the angle. The bottom of the ditch, as dug, was around 3.5 m below the old ground

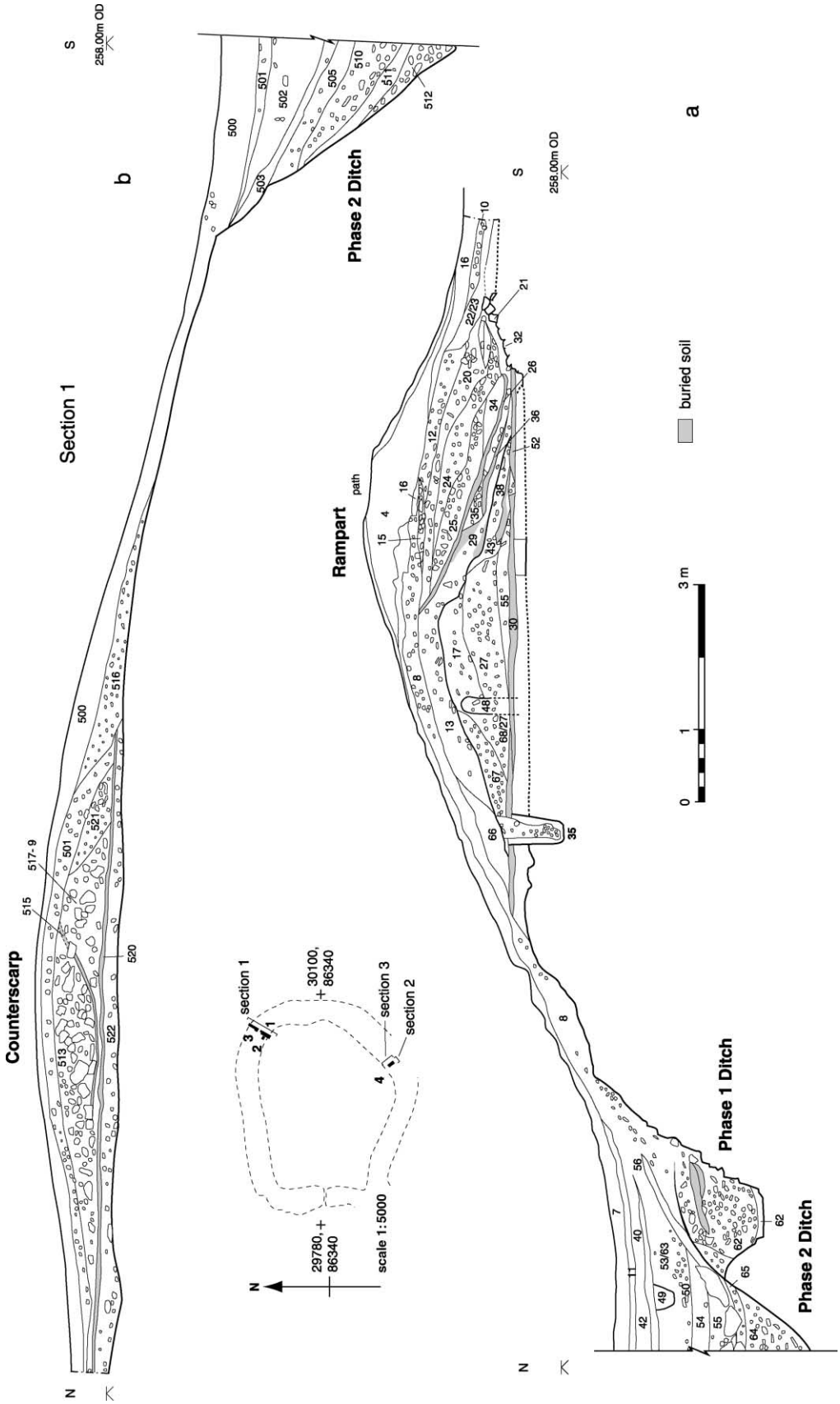


Figure 6.3 Section 1 through rampart at north-east breach, trenches R1 and R3.

surface, on which the phase 1 ramparts were constructed, and the inner side would have been a continuous slope up to the 1–1.4 m berm of old ground surface in front of the ramparts. Erosion of this slope is likely to have created the irregularities observed on excavation. Much of the outer side of this ditch was truncated by the cutting of the phase 2 ditch, which occurred after the phase 1 ditch had been partially infilled. The primary fill of this ditch consisted of silting and small chalk fragments from weathering of the ditch sides. The main body of the fill was made up of very loose rubble probably derived from the rampart, and from landslides of the ditch sides. Within this deposit is a block of turf likely to have been dislodged from the top of the inner slope of the ditch feature. This infill could have occurred quite quickly, particularly during a few severe winters, as is evident from the experimental work done at Overton Down (Jewell and Dimbleby 1966).

Phase 2

Dump rampart

Sometime after the infill of the phase 1 ditch and the collapse and stabilisation of the associated rampart, the site was remodelled using dump ramparts, which involved adding dumps of material to the top and the back of the existing rampart (Fig. 6.3a, trench R1, 8, 12, 15, 22–5 & 34: Fig. 6.13, trench H3, 7014–16).

These dumps were more varied in composition than those making up the earlier rampart possibly reflecting the source of the material. The dumps included loams, dense chalk rubble and mixed chalk and sarsen rubble. Dumping on the inner side of the early rampart may not come from the excavation of the phase 2 ditch. It may have been transported from there to form the new rampart or it may have been quarried from inside or around the hillfort. A few sherds of undiagnostic but probably early Iron Age pottery, several fragments of animal bone and two iron nails came from these deposits. The chalk dumps on the outer edge of the rampart may have come from the excavation of the phase 2 ditch. No finds were recovered from these dumps.

The inner edge of the dump rampart was initially contained by a low, but substantial, chalk wall (trench R1, 32) and later as the rampart was built higher was probably edged by larger chalk rubble in a gravel mix (trench R1, 21). This edging on the inner side of the dump was also visible in the southern end of trench H3 (7016), that also contains some sarsen, available locally on the surface of the chalk. This kerb was succeeded by further dumping in the area of trench R1, and a compacted gravel surface (23) overlying the kerb might have performed the same function of retaining this new dump.

This phase 2 rampart remains to a height of 1.48 m above the old ground surface in the northern breach, although the original height and form of these ramparts is not clear. The maximum width of the rampart from the edge of the ditch to the retaining wall and kerb is 8.3 m. This fits in well with the dimensions Avery (1993, 59) gives for low asymmetrical dump ramparts, and this is the most likely form for the Uffington phase 2 rampart. Whatever the exact dimensions, a significant part of it has been eroded through time and this is the most likely source for the majority of the phase 2 ditch fill.

Succeeding the rampart stratigraphically on the inner edge are deposits of dark grey chalky soil representing accumulations of material eroded down from the rampart inside the hillfort during its disuse and decay. These deposits (Fig. 6.3a, trench R1, 10: Fig. 6.13, trench H3, 7008, 7003/4 and 7002: Fig. 6.6, trench H4, 7502) yielded more finds consisting of animal bone, Romano-British and post-medieval pottery, and coins dating to the late 3rd and early 4th centuries AD. Two pieces of worked stone were also recovered from these contexts; half a spindle-whorl and a possible support for a bow drill.

Counterscarp bank

Overlying and to the east of the primary counterscarp bank, as observed in trench R3 at the north-east breach, were successive dumps of material relating to a renewed phase of construction of this lesser bank outside the ditch. This bank survived to a height of 0.62 m above the old ground surface and enlarged the phase 1 counterscarp bank to a width of *c* 6 m. Some animal bone and several sherds of Iron Age and Romano-British pottery were recovered from the upper layers of this bank (Fig. 6.3b, trench R3, 516), probably relating to erosion of the bank during the Romano-British period.

The material used in this phase of the building of the bank was very similar to that of the primary phase, consisting of a mixture of chalk rubble, chalk blocks and loam. Some of the blocks carried tool marks caused by quarrying with a lever, possibly indicating the method employed to excavate the ditch. The material used in the construction of this phase of the bank is likely to have come from the digging of the large phase 2 ditch.

Rampart ditch

The hillfort ditch was recut at the time of the second phase of rampart construction. This recut was deeper and probably wider than the original ditch, at 6.2 m wide and roughly 4.2 m deep. The central part of this ditch was not fully excavated with a baulk left between the 1989 and 1990 excavations at the north-eastern breach, and only half of the width of the ditch was excavated at the south-eastern breach. The ditch appears to have been fairly symmetrical with steeply sloping sides and probably a narrow concave base (see composite section Fig. 6.5).

The primary fill of this ditch consisted of a fairly deep layer of loose chalk rubble extending to a depth of 1.04 m in the north-east trenches, though only 0.48 m in the south-east trench. This layer was not entirely homogenous, with variations in the degree of compaction observed, but can be classed as one phase of infill (Fig. 6.3a, trench R1, 64: Fig. 6.3b, trench R3, 510–12: Fig. 6.4, trench R4, 710–12). The material may be derived from the outer face of the phase 2 rampart and contained three blocks of sarsen. There were no finds from this primary fill.

THE BLOCKED ENTRANCE

The excavations

The eastern rampart where it thickens and changes direction was thought to suggest that an early

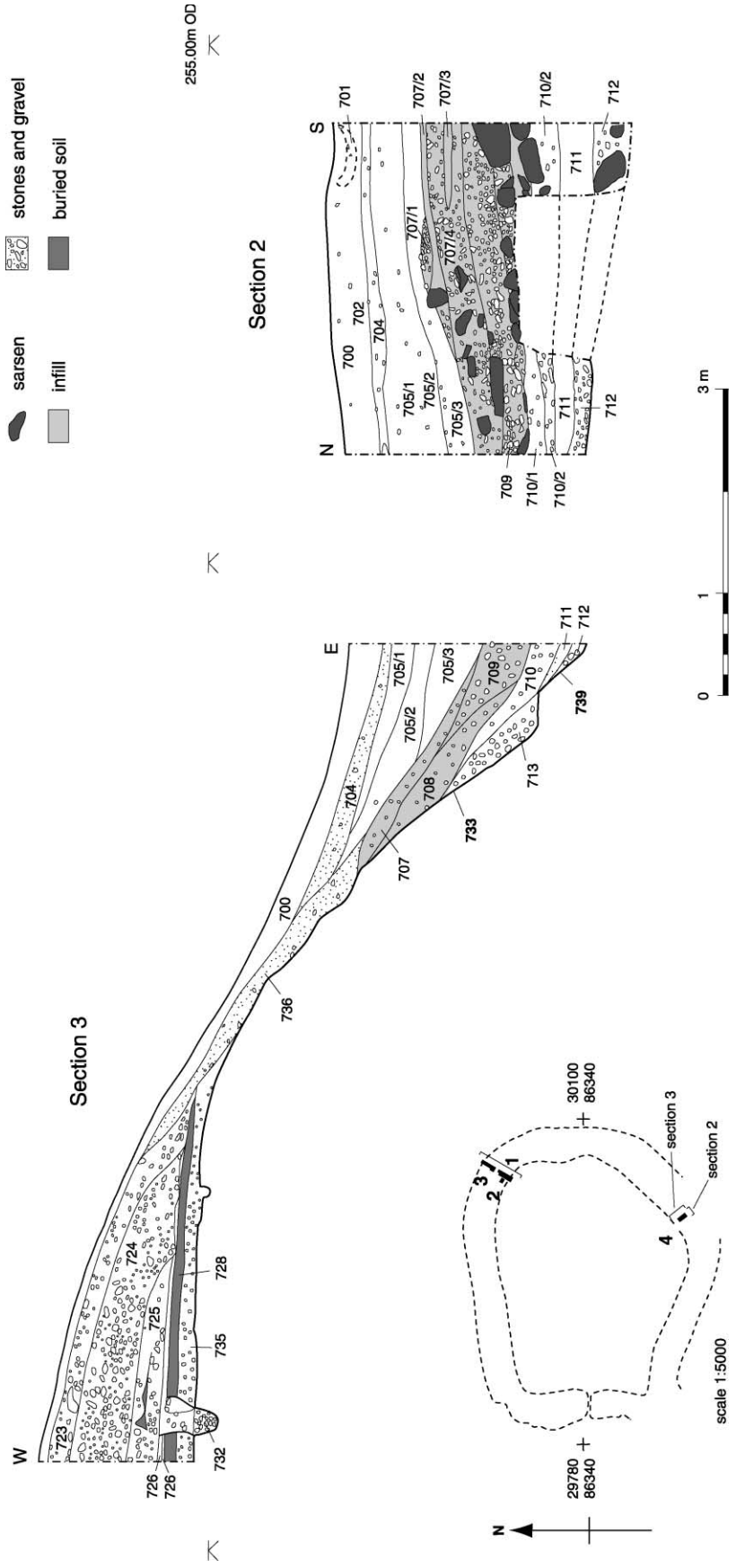


Figure 6.4 Sections 2 and 3 through rampart at south-east breach, trench R4.

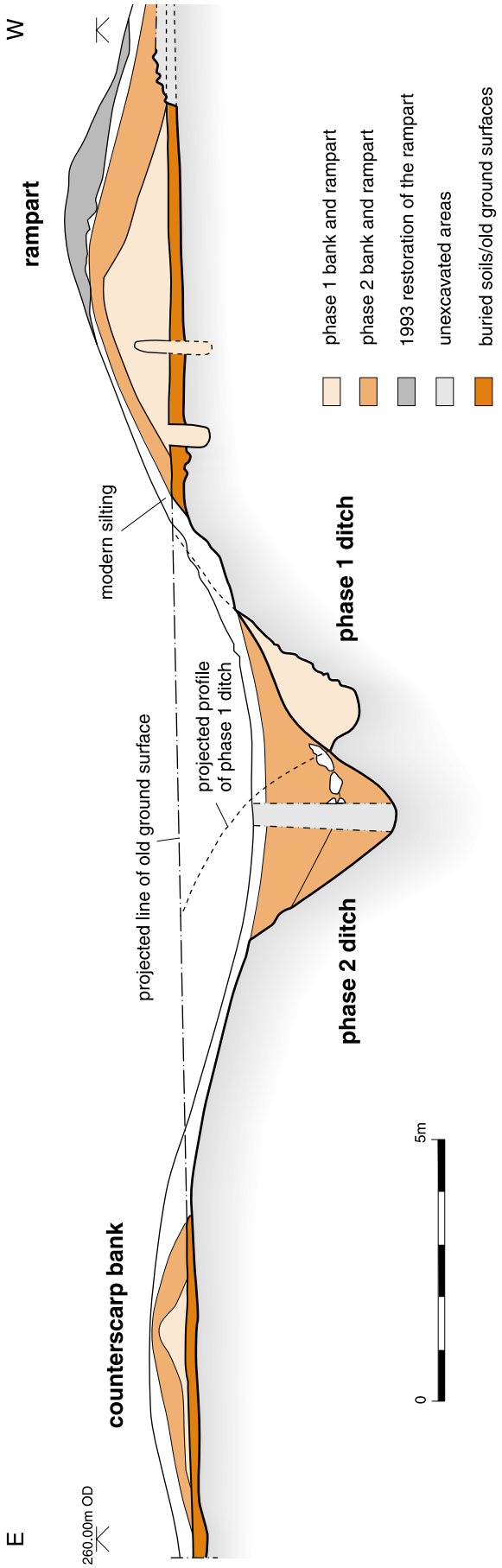


Figure 6.5 Schematic composite section through rampart, ditch and counterscarp bank in north-east breach showing projected old ground surface and the phase 1 ditch cut.

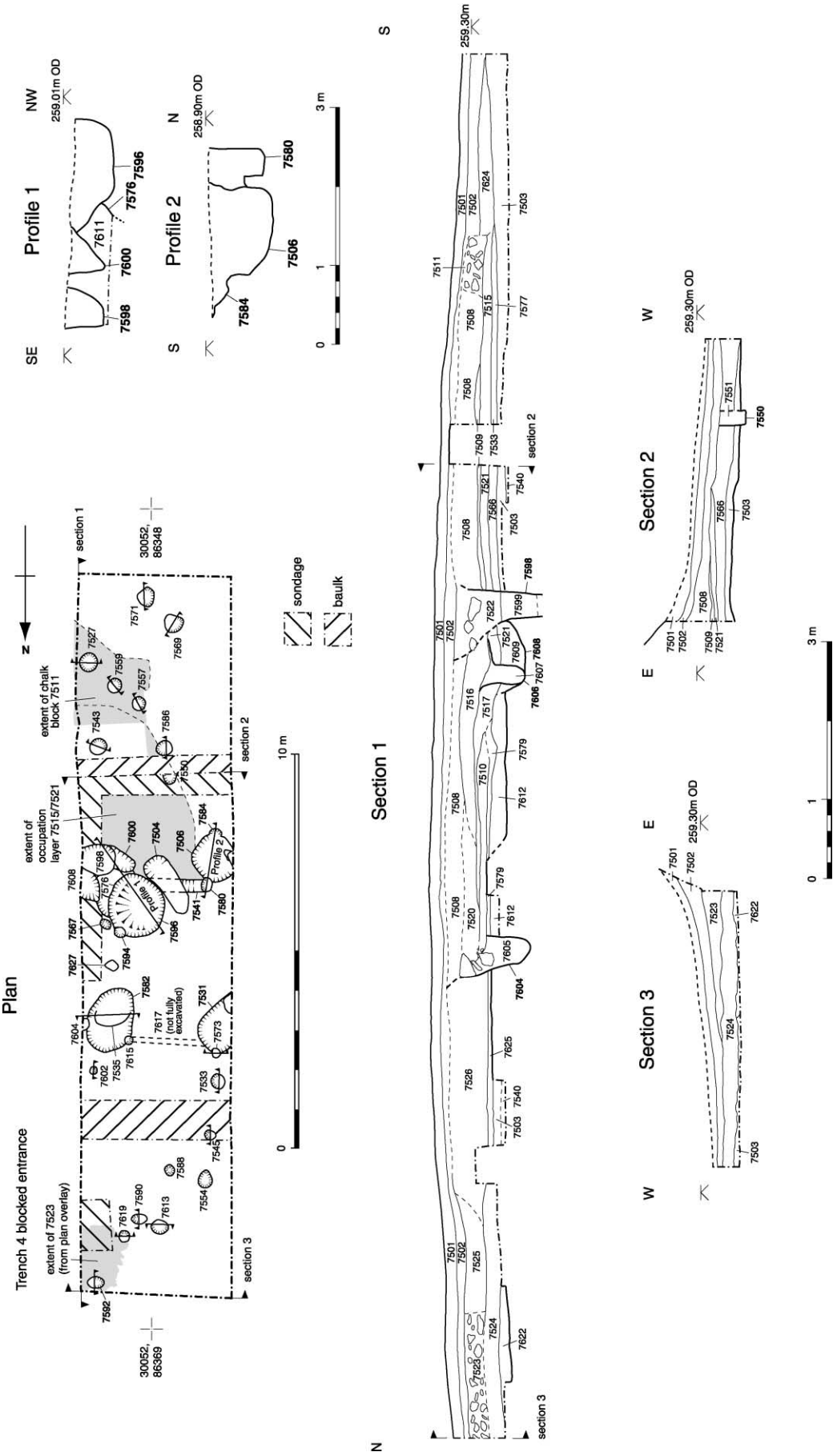


Figure 6.6 Plan and section of blocked entrance of ramparts in trench H4.

entrance to the hillfort had been blocked (O'Connor and Startin 1975, 325), and trench H[illfort interior]4 investigated this hypothesis and the associated structures. For the location of the trenches H1 to H13 in the hillfort interior see Figure 6.11. The bedrock in this area was very shattered thus making interpretation difficult of both the geophysical and excavated results.

The turf and topsoil layer (Fig. 6.6, 7501) was removed by hand to a depth of approximately 0.15 m, and revealed deposits (7502) which were manually removed in spits to a level at which features could be discerned. This layer was between 0.05 m and 0.15 m thick consisting of greyish white loam with evenly distributed chalk fragments and probably represents erosion of the rampart. Finds included Iron Age and Romano-British pottery, a Romano-British copper alloy coin, and iron tacks and animal bone.

The reliability of the stratigraphy as a basis for phasing across most of trench H4 is difficult due to a variety of problems. Firstly, while the definition and visual clarity of superimposed layers could be traced with reasonable confidence in the eastern baulk section (Fig. 6.6), the stratified sequence was very difficult to follow in plan. Layers faded out at dissimilar points and merged with others as followed east to west across the trench. Secondly, whilst soil-filled postpipes showed clearly in plan in chalk-rich layers, those features in the north of the trench cut into a silty soil-rich layer (7524) only became visible in plan when much of the layer had been removed. Only where a posthole could be seen in both plan and section (Fig. 6.6, 7550, section 2) could its stratigraphic relationship be confidently established.

Thirdly, using pottery for a more detailed sequence of the blocked entrance features was not possible due to the very mixed nature of the assemblage and its relatively short chronological range. All the pottery within trench H4 was in the range of 8th to 7th centuries BC. Much of the pottery evidence came from material within the rampart, including many diagnostic sherds of *All Cannings Cross* (ACC) type which are early in the sequence, a point discussed further below and in the pottery report.

The results

The details of the excavations in trench H4 are illustrated in Figure 6.6. It was clear from these excavations that there had been an entrance which had subsequently been blocked, and that there had been a gateway. In the discussion which follows, therefore, the central area of the trench is generally referred to as the gateway 'corridor', with areas to the north and south. All the dimensions of the postholes within the excavated area are listed in Table 6.4.

Pre-rampart ground surface

Across most of the trench the natural chalk bedrock (7540) was exposed. This merged into an upper shattered layer containing clay lenses with a particularly thick one in the north-eastern corner of the trench consisting of sterile dark orange-brown silty clay (7622). Elsewhere the natural was overlain by a variable layer of crushed chalk containing a modest percentage of soil (7503/7612), probably a pre-rampart subsoil. This was up to 0.2 m deep in the southern part of the trench, but less deep elsewhere and contained early Iron Age pottery, animal bone and some small fragments of daub. A variable layer of chalky silt (7524/7625/7579), possibly representing the disturbed prerampart ground surface, was recorded as overlaying layer 7503 over the northern and central part of the trench, although it was barely distinguishable in the gateway corridor away from the east section. In the southern part of the trench the corresponding layers (7566/7577) were predominantly crushed chalk in composition. Despite the disparity in the character of these layers they do seem to represent a single pre-rampart phase containing early Iron Age pottery.

The structures

Given the uncertainty over the perceived stratigraphic relationships between the majority of the smaller cut features and the layers representing the contemporary ground surface, as outlined above, it is proposed to describe the archaeological features exposed in plan as a single phase of activity, subsequent to the deposits just described above. The discussion will focus on the interpretation of the features considered in relationship with the sequence of deposits in the north-south section.

The gateway

The principal elements comprised four large postpits, two on each side of the entrance corridor aligned east-west, plus subsidiary postholes and beam slots alongside the larger elements (Fig. 6.6, Plate 6.1). The two western postpits, 7506 (Plate 6.2) and 7531, were found.

Pit 7531 was an irregular shape although not fully excavated, and measured approximately 1.25 m at its widest point, 1.16 m deep with steep sides and a flat bottom. There were three fills within it, two of which contained Iron Age pottery. Postpit 7506 (profile 2, Fig. 6.6), was approximately circular with a diameter of 1.2 m, 0.8 m deep with vertical sides and a flat bottom. Two of the fills contained ACC type pottery. The fills of both features consisted of loose silty clay with inclusions of large pieces of sarsen stone and small pieces of chalk, probably representing the backfilling and consolidation of the postpit after removal of the posts.

The corresponding eastern pair is represented by 7582 and 7576. Postpit 7582 was approximately 1.25 m in diameter and 1.16 m deep with near-vertical sides and a flat bottom and contained a well-defined postpipe (7535). This suggested an original post of at least 0.80 m diameter. Pieces of bone and sherds of ACC type pottery were recovered from the fill, and the surrounding post-packing was predominantly compacted chalk rubble and silt. About 2 m to the south, postpit 7576 lay within an area of complex stratigraphy where interpretation was difficult, but it was at least 0.55 m deep and 1.25 m in diameter.

Plate 6.1 Trench H4 in the hillfort interior looking south, revealing the postholes of the blocked entrance (Copyright: Gary Lock).

Its lower fill consisted of rammed chalk with no finds, while its upper fill was replaced by the cutting and filling of posthole 7598 (profile 1, Fig. 6.6).

Two slots (7541, south & 7617, north) were identified cutting across between 7582 and 7531 in the north, and 7506 and 7576 in the south, apparently defining the entrance corridor. The northern slot was only barely visible, and it was not fully excavated but was at least 0.2 m wide and 0.2 m deep. The southern slot was fully excavated, and averaged 0.35 m wide and 0.25 m deep and contained pieces of daub and animal bone. At the eastern end of 7617 and the western end of 7541 the slots deepened to form postholes 7615 and 7580 respectively, the former containing Iron Age pottery. These small postholes appeared to be cut into the post-packing material of the larger postpits. Other postholes (7573, 7584, and possibly 7594 and 7567) were identified, cutting or very close to the edges of the postpits.

Within the gateway corridor, layer 7579, described above as part of the pre-phase 1 soil was compacted and could have been a trodden surface within the gateway. Projecting through this surface was a sizeable piece of sarsen stone (7626), tightly embedded in a small pit (7627). This was not excavated, and its possible significance is considered below.

The posthole arcs

In the north of the trench, a slightly curving line of six postholes was revealed (7533, 7545, 7588, 7590, 7619, 7592) extending from postpit 7531. Their dimensions were fairly consistent (Table 6.4) and their fills tended

Plate 6.2 Trench H4 showing western postpit 7506 with sarsen stone packing (Copyright: Gary Lock).

to be dark brown silt with small fractions of chalk, although, in the north-east corner, the fills were almost indistinguishable from the very silty surrounding layer (7524). Packing stones were only found in posthole 7592, and the posts appeared to have rotted *in situ* in this feature and 7545, whereas the rest of the posts appear to have been intentionally removed and the postholes backfilled. Slightly outside the arc of postholes were two others (7613 & 7554, Table 6.4). Both were less clearly defined and shallower than those described above, and their fills were lighter in colour and more compact. This could suggest that they represent a different episode of construction. A sherd of Iron Age pottery was found in the fill of 7619. A small isolated posthole (7602) was also found, but there were few finds when compared with the assemblage from the equivalent area to the south of the gateway corridor.

In the south of the trench, a similar arc of five postholes was revealed (7550, 7586, 7557, 7559, 7527) extending south-eastwards from postpit 7506. As with the northern arc, two shallower, less well defined postholes (7569 & 7571) with more compact clay fills, were revealed outside the arc. A further posthole (7543) was located close to the eastern baulk. The dimensions of the postholes and the finds within them are listed in Table 6.4. Within the arc of postholes, and extending north to the large postpits, was a layer of silty clay with crushed chalk inclusions (7515/7521), up to 0.10 m deep. This layer contained a considerable quantity of early Iron Age pottery including much of ACC type and burnt bone fragments (7515, 240 sherds & 7521, 169 sherds). A thin layer of silt (7509) overlay most of this deposit, and may represent buried topsoil.

The chalk block structures

Extending from the east baulk immediately north of the southern arc was feature 7511 composed of chalk blocks in a soil matrix and set onto the layer 7515 (Plate 6.3). The feature was difficult to define as its northern edge appeared to be disturbed by later activity, but there appeared to be a definite southern edge with some blocks appearing to be coursed, respecting the line of the posthole arc. In the east baulk section the profile of the feature was much clearer, suggesting a small platform or wall a maximum of 0.35 m thick. Early Iron Age pottery with much ACC type wares was found in the matrix between the blocks. A similar, though less well defined feature 7523 was identified in the northern part of the trench, in a similar position relative to the northern posthole arc. This also consisted of chalk blocks although with no obvious patterning and containing no finds.

The gateway evidence revealed in the section

Within the east baulk section the northern side of the gateway corridor was represented by the posthole (7604, Fig. 6.6, section 1) which in plan was seen to

Plate 6.3 Trench H4, showing the chalk blocks of feature 7511 (Copyright: Gary Lock).

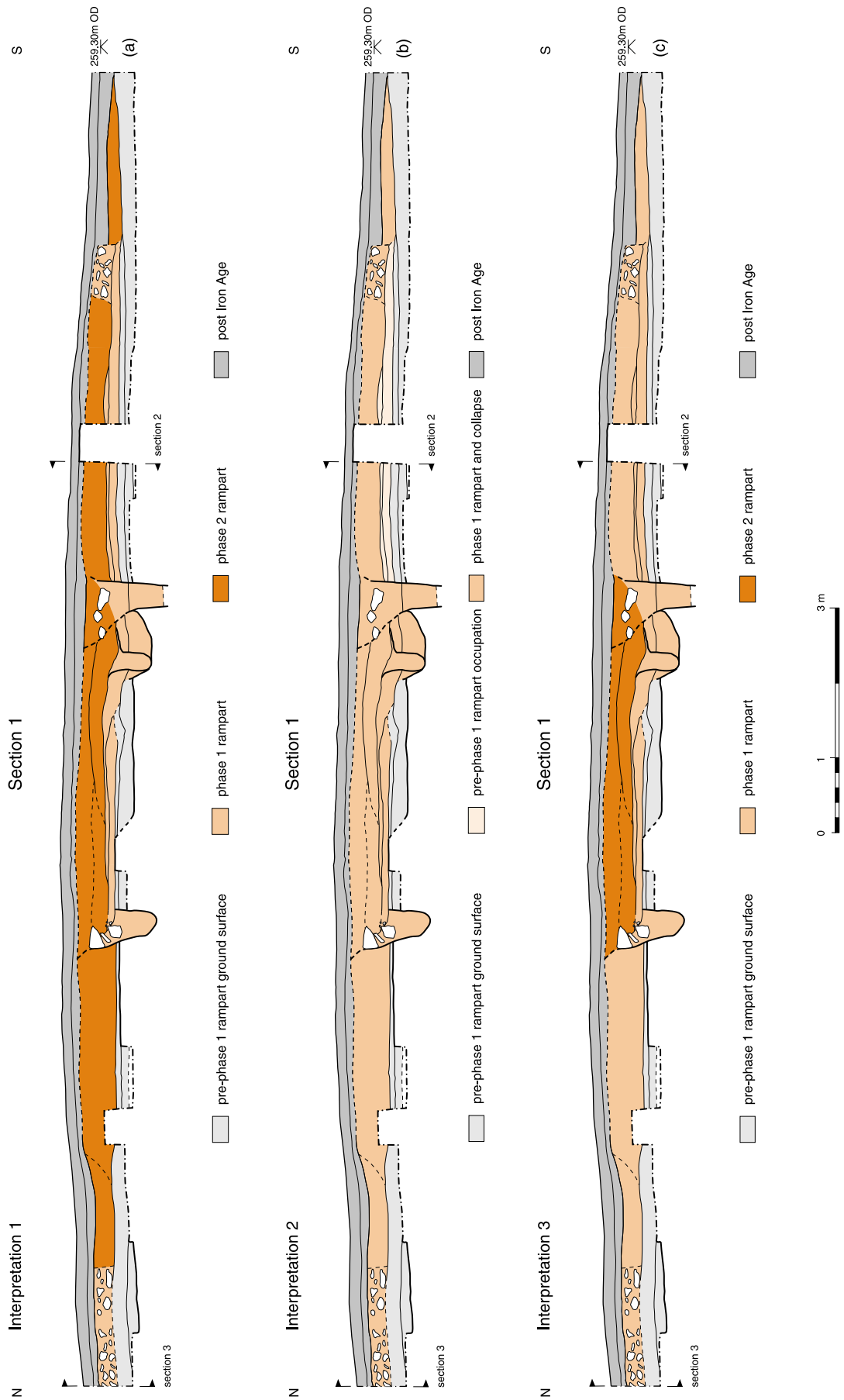


Figure 6.7 Three interpretations of the blocked entrance in trench H4.

cut into the eastern side of postpit 7582. The northern edge of the posthole was traced to the sarsen stone packing (fill 7605) and possibly further to the underside of layer 7508/7526. The southern edge of the posthole was overlain by 7510, a thin layer of compacted dark brown loam with flecks of charcoal which extended south across the corridor, and appeared to represent an accumulation of topsoil over the rubble surface 7579. This contained transitional late Bronze Age/early Iron Age ACC type of pottery and animal bone.

The southern side of the corridor was represented by the partially revealed large posthole (7608), containing, within a packing of chalk rubble and soil, a soil and chalk filled postpipe (7606). Sealing the packing, but respecting the postpipe, was a layer of crushed chalk and soil (7517). The replacement for the original post was represented by the posthole 7598, which in section cut the southern edge of posthole 7608. This was dimensionally similar to 7604, and also contained sarsen packing stones within the upper soil fill 7522. As with 7604, the definition of the upper part of the cut was uncertain.

Later features recorded on the plan

Postpit 7576 was heavily truncated by a series of cut features, beginning with 7608 which was also partly revealed in the eastern baulk. This feature was backfilled with chalk rubble. Next came the large sub-circular pit 7596 on the north side, and two small pits, 7600 and 7598, on the south side. Pit 7596 was approximately 0.5m deep with a vertical north side, flat bottom and badly disturbed south side. It contained a single fill with no finds. Posthole 7598 had a lower fill of silty clay with chalk rubble and no finds, and a poorly defined upper fill containing early Iron Age pottery, animal bones and large pieces of sarsen. Pit 7600 contained no finds. The southern slot 7541 was partly truncated by an irregular shallow pit (7504) which contained a quantity of daub, early Iron Age pottery, animal bone and charcoal. This feature must post-date the demolition of the gateway.

Later deposits revealed in the baulk section

At the southern end of the section, a layer of silty loam with chalk fragments (7624) abutted the south side of the chalk feature (7511). This could represent accumulated topsoil, broadly contemporaneous with the phase 1 gateway, it contained no finds. A series of deposits overlay the features in the east section (7525, 7526, 7516, 7520, 7508). All were variable mixes of soil and chalk with occasional inclusions of small pieces of sarsen. Layers 7525, 7516, and 7520 contained no finds, and 7508 and 7526 had pottery of the early Iron Age with many ACC type sherds in the latter. The character of these two latter deposits was varied and it is possible that they each represent a series of dumps, either in a single operation, or following each other before a turf line could develop.

Discussion

The excavations established that this was the location of a blocked entrance. However, it was not possible to establish with certainty the position of the phase 1 rampart in relation to the gateway structures revealed in trench H4. The evidence suggested that there was an entrance at this point which was subsequently infilled when the phase 2 dump rampart was built. As a result, it is not clear whether the deposits revealed in the eastern baulk section are the remnants of the phase 1 rampart, or the material used to build up the phase 2 dump. In the light of this uncertainty it is suggested that there could be three possible interpretations of the evidence, presented below in order of preference. In summary it is possible that:

(1) phase 2 rampart overlay the phase 1 entrance (Fig. 6.7a),
(2) phase 1 rampart collapsed to fill the entrance corridor (Fig. 6.7b),
(3) phase 2 rampart material infilled the phase 1 corridor, with the phase 1 rampart *in situ* either side (Fig. 6.7c).

Phase plans are not shown with the three interpretative section drawings because the main cut features shown in plan in Figure 6.6 are all associated with the entrance through the phase 1 rampart, and this discussion only concerns deposits which overlay them. It seems clear however, that the symmetry seen in the plan to lie to either side of an east-west line through the stone feature 7627, is a meaningful one. The three interpretations are discussed more fully below.

Interpretation one

This is the preferred interpretation and is largely determined by the fact that the phase 1 rampart is situated further to the east, and therefore was not revealed by the excavation. This fits with the evidence from trench R1 through the north-eastern rampart breach where it can be seen that the wall-and-fill rampart is at the front of the phase 2 dump (also the modern) bank (Fig. 6.2). It is possible, however, that because trench H4 is located at an entrance the positioning is different.

The gateway structure appeared to consist of a series of paired large posts, possibly up to 0.80 m in diameter, forming a corridor 2.0 m to 3.0 m wide, which began well inside the line of the rampart and continued to the east, cutting through the box rampart beyond the trench. Each pair of posts was perhaps 2.0 m apart, the gap being filled by smaller posts supporting a timber screen. The roadway consisted of compacted chalk rubble. It is possible that the projecting sarsen in the centre of the otherwise fairly even roadway surface was not an accident, but served as a doorstop. The arcs of postholes to the north and south of the corridor could represent timber structures, perhaps supporting some sort of raised platforms either side of the gateway. These could have been part of a walkway over the gate, possibly incorporating guard chambers as suggested at other sites, for example Rainsborough Camp, Northants (Avery *et al.* 1968). The argument for the structures being raised above ground level is strongest on the southern side where the area within the posthole arc was intensively occupied judging by the finds, whereas the area within the northern arc does not have an equivalent

occupation surface, although this could have been removed. The two chalk block features (7511 and 7523) appear to have formed an integral part of the phase 1 rampart structure on either side of the gateway. Feature 7511 could be a wall connected with the rampart to the east and may have defined the southern limit of the occupation floor.

One of the large gateway posts was removed and replaced, along with the smaller post immediately to the east. The large pit 7596 might represent attempts to dig out the original gateway post. The replacement gateway post may have been inserted in the south side of 7596, and the smaller post in posthole 7598. Pit 7596 was backfilled with rammed chalk rubble, to consolidate the roadway surface. The two small postholes 7567 and 7594 could be associated with the reconstruction of the gateway superstructure.

The entrance went out of use, and a thin layer of topsoil (7510 & 7509) accumulated over the road surface and over the occupation layer 7521. Ultimately, the gateway structure was dismantled, the entrance blocked and the rampart rebuilt in the new dump style, possibly in the 4th century BC, although the pottery evidence is not clear. Some timbers from the large and small postholes were removed and the holes backfilled, the large holes 7531, 7506 and 7582 had large sarsens incorporated into their top fills possibly to stabilise the ground surface. Where the posts would be incorporated into the mass of the new rampart they appear to have been left in place, especially 7604 and 7598. Material was dumped in the gateway corridor and to either side (7508, 7520, 7516, 7525 & 7526), engulfing the remaining posts and the remains of the chalk block features. The dump material could have been dug from the recutting of the rampart ditch as the phase 1 ditch was partly filled by this time and much of it contained redeposited pottery and the domestic debris from the earlier occupation. In this interpretation the considerable amounts of early pottery in the phase 2 rampart material are explained by the redeposition of material initially deposited by relatively intense activity around the phase 1 gateway.

Interpretation two

The key aspect here is that the phase 1 rampart thickens and turns inwards at the entrance so that all of the material excavated in trench H4 belongs to this phase. Central to this interpretation is the complete lack of dating evidence, especially pottery, to support a phase 2 date for any of the excavated rampart. The principal elements of the gateway structure (the large and small posts, the replacement posts, the roadway surface and the topsoil accumulation over it) are as in interpretation one. However, the posthole arcs define the original rear revetting of the box rampart curving inwards from the north and the south to meet the gateway corridor structure. There are no guardchambers and the occupation layer to the south of the gateway (7515) represents activity predating the phase 1 rampart. With the exception of the modern topsoil and layer 7502, all the material seen in the east baulk section is phase 1 rampart material representing the collapse of the structure into the interior of the hillfort and across the entrance corridor. The building of the phase 2 rampart entailed the levelling of the interior, smoothing the collapsed material from the phase 1 rampart especially within the thickened ends. This work could also have involved the shifting of phase 1 material into the entrance corridor to block it. It is possible that the real answer could be some combination of the first two interpretations.

Interpretation three

The third possible interpretation presents a compromise between the two described above. All deposits to the north and south of the entrance corridor are phase 1 rampart material *in situ*, including 7525, 7526, and 7508 to the south of posthole 7598. The deposits within the entrance corridor (7516, 7520 and 7508 north of posthole 7598) are phase 2 dumped material. In this version, the phase 1 entrance structures are as in interpretation one and the phase 1 pottery became incorporated within the ramparts during their original building as in interpretation two.

LATER DEVELOPMENT OF THE DITCH AND RAMPART

Stability and sarsen dump

Overlying primary infill of the phase 2 ditch were layers of loamy soils containing much lower percentages of chalk debris, suggesting a period of relative stability in the rampart and ditch slopes. However, these layers (trench R1, 55, trench R3 505 & 503, Fig. 6.3: and trench R4, 708, 709 & 707, Fig. 6.4) contained sarsen blocks, some tabular, of varying size from 0.15 to 0.6 m across, of which the origin is unclear. Crawford (1922) recorded sarsen boulders exposed on the slope of the rampart suggesting that these could have formed part of the phase 2 ramparts, and as these blocks were encountered in different areas of the hillfort circumference it seems that they were probably a feature common along the length of the rampart.

Most of the area may already have been cleared for cultivation (Bradley and Ellison 1975, 3), but sarsen boulders would have been present on the surface of the chalk in uncleared areas. Excavation at nearby sites also demonstrates the availability of large sarsens. For example, the ramparts at Alfred's Castle were constructed of several rows of stones, each several courses high surrounded by compacted chalk (Gosden and Lock 1999; 2000; Lock and Gosden 2001), and the ramparts at Segsbury Camp contained large sarsens, many of which had tumbled into the ditch during its decay, and a well built revetting wall of sarsens at the back of the final phase dump rampart (Lock and Gosden 1998).

Crawford interpreted these stones as forming part of an outer retaining wall built to support the chalk rubble core of the rampart, but it is clear from these excavations no such retaining wall existed in these ramparts. It seems more likely that the stones were used to form a stone capping on the crest of the rampart or a kerb at the toe. Capping or pitching of this type is known from other hillfort ramparts. Avery (1993, 58) cites four such examples and two others which have produced stone from the ditch which may have come from a crest wall or kerb at the toe of the rampart slope. This latter explanation

seems to be likely for the Uffington sarsen blocks. A longitudinal section (Fig. 6.4) through the ditch fill at the south-east breach suggested deliberate infill of the ditch using material from the phase 2 rampart. The sarsens were thus dislodged and pushed into the ditch, followed by soil and rubble from the rampart.

Several finds of pottery and animal bone were recovered from these loam and sarsen layers which may help to relate this phase to other activity around the hillfort. The pottery from these contexts includes wares of early Iron Age and Romano-British date indicating that this infill may have occurred during the Romano-British period or later.

The breaches

The north-east and south-east breaches are deep U-shaped breaks through the hillfort ramparts which have come to be used as entrances into the interior of the hillfort (Plate 6.4). No original cut was identified for either of these entrances now present, so it remains unclear when or to what depth they were originally cut, or how much erosion has since occurred. It is likely that if there were original entrance cuts, these have been so deepened by wear and erosion that no trace survives. There were indications in trench 4 in the south-east breach that some of the later fills of the ditch at this point become thicker towards the line of the breach. These layers (trench R1, 56 & 55, Fig. 6.3a: trench R3, 505 & 503, Fig. 6.3b: trench R4 708, 709 & 707, Fig. 6.4) contained Romano-British pottery, possibly indicating when this breach was opened, but this can only be regarded as a tentative *terminus post quem* as the material is likely to have been taken from the rampart and pottery of this date is known from the later disuse phases of the rampart itself. On the evidence of the Anglo-Saxon charters it is evident that the breaches were in existence prior to the granting of the Uffington estate in the 10th century.

In the north-east breach a layer of compacted chalk and flint was apparent, from which flint and animal bone were recovered (trench 2, 108), and this may have been an early surface of the path through the breach. This is likely to be of post-medieval or modern date, and finds included post-medieval pottery, daub, animal bone, charcoal and three miscellaneous pieces of iron.

Subsequent fills of the ditch

The phase of ditch infill associated with the cutting of the breaches was followed by the deposition of a number of deposits that can be grouped together reflecting another phase in the infill of the phase 2 ditch at these two points. Together these deposits formed a layer up to 0.69 m thick in the north-eastern trenches and 0.88 m in the south-eastern trench, almost completely filling the ditch cut though thinning to the outer edge of the ditch. These deposits consisted of pale, clay loams with only around 5% small chalk fragments, and were similar to the later

Plate 6.4 Aerial photograph of Uffington Hillfort looking north-east, showing the breaches in the hillfort ramparts apparent in the 1990s (Copyright: English Heritage).

rampart material and may have derived from the ramparts, possibly as deliberate infill to level the ditch at these points. Several fragments of animal bone and sherds of Romano-British pottery were recovered from these layers (trench R1, 53 & 54, trench R3, 501 & 502, trench R4, 704 & 705). This is overlain by layers (trench R1, 42 & 40, trench R4, 702) of dark loam with small gravel in all trenches containing a variety of finds including clay pipes and an 1865 penny. In the north-east breach this is covered by the metalling of the path, and in the south-east breach the turf is cut by a modern cart track (trench R4, 701).

Modern alterations to the rampart

The National Trust restored the profile of the rampart around 1983 with a substantial dump of very loose mixed loam soil with flint and chalk. Various modern finds were found embedded in this dump and some sarsen stones lay on top, reflecting the sarsen revetment put in by the National Trust. The dump sealed the turf horizon that had formed over the secondary rampart, and was sealed in turn by the modern turf.

CONSTRUCTION AND RESOURCES FOR THE RAMPARTS AND DITCHES

The first phase of the hillfort consisted of a single line of timber-framed wall-and-fill rampart with an outer U-shaped ditch and low counterscarp bank encircling the top of the hill at about 258 m OD. Remodelling of the hillfort followed a period of abandonment during which the ramparts were not maintained. The hillfort was re-established on almost the same alignment as the earlier enclosure and incorporated the blocking of the western entrance. The early rampart remained as a fairly substantial bank though the ditch was partially infilled by landslides from its sides and the collapsing outer face of the rampart and this formed the basis of the second phase structure. Reuse would have reduced the effort of rebuilding but also fitted with the community's sense of continuity and history. The second phase consisted of a low dump rampart, the recut ditch and an enlarged counterscarp bank.

The timber frame

The approximate number of timber uprights, transverse and longitudinal timbers needed to build the phase 1 timber frame for the rampart were calculated from the number of postholes recorded. These calculations could only be very approximate due to the small sample of the ramparts excavated, and the fact that no traces of internal transverse timbers were recorded though these were assumed to have existed. The transverse timbers were assumed on the basis of the evidence recovered from excavations of a similar hillfort at Blewburton Hill (Harding 1976) further east along the chalk scarp. At that site there was no evidence of longitudinal timbers either, but at least temporary shuttering was assumed to have been necessary to hold the soil back during construction. This provides one possible method which may have been employed in the construction of the wall-and-fill rampart at Uffington (Table 6.5).

A second idea involves the use of wattling to hold back the soil as suggested by Martin-Atkins (1904) on the basis that this material would have decomposed completely leaving no visible trace. If this wattling was of the same height as the rampart, assumed to be 1.3 m at least, 917.8 m^2 would have been required to complete the 706 m length of the rampart. Using the rate for making hazel wattling inclusive of cutting and cleaning of the wood of 0.8 m^2 per hour (Coles and Darrah 1977), it would have taken 1147.25 working hours to produce the worked wood, without the extra labour involved in securing each hurdle to the timber frame. This estimate does not include bringing the wood for the hurdles to the site.

Considerable labour would also have been involved in bringing the necessary quantity of timber to the site, although the source of the timber is not known. The wood used is likely to have been oak for the structural timbers and hazel for the wattling if used. The chalk downland of southern and eastern England seems to have been cleared by the Iron Age and the old ground surface beneath the phase 1 ramparts was suggestive of grassland, such timber would still have been fairly readily available in the vicinity of the hillfort. Areas on the crest of the Downs to the west and east of the site are known to have reverted to scrub and woodland several times during the Bronze Age and the area of Rams Hill was not finally cleared until about 900–800 BC (Robinson 1984, 5). There would have been localised hazel woodland, probably cropped as coppice, on the edges of the higher terraces in the valley at this time. Some woods may have been managed as oak/hazel coppice for building materials, tools and fuel during the Iron Age (Miles 1986).

Some indication of the labour involved in cutting the timbers could be obtained using the rate quoted by Griffiths (1975, 225) for cutting posts. This suggests that both ends of three 0.15 m stakes could be cut in an hour using a bronze axe. The Uffington upright timbers seem to have been slightly larger than this averaging about 0.2 m and the transverse timbers were probably smaller at about 0.05–0.1 m in diameter. Griffiths' rate was used for all to give an indication of the labour involved in cutting these timbers though this is something of an underestimate for the larger timbers and an overestimate for the smaller ones.

The number of trees used to obtain sufficient suitable timbers is difficult to calculate. If the work of Startin (1978) is used as a rough guide, around 700 trees would have been required for the uprights of the timber frame of the rampart. This assumes that the rampart was 2 m high, or 263 trees would be needed if the rampart is just over 1 m high, and also assumes that the posts were of roundwood. It is not certain that the uprights used at Uffington were, as one of the postpipes was recorded as circular and another as sub-circular but in most cases they were

not clearly defined. Recent excavations at Segsbury Camp have indicated that half timbers were used, set with the flat face towards the front of the rampart (Lock and Gosden 1998, 62), and similar timber may have been used at Uffington.

These estimates do not include any timber used in the construction of the entrance or in structures built within the hillfort. The initial eastern gateway utilised gateposts of approximately 0.8 m diameter indicating that mature trees were available. The excavations in trench H4 show at least four posts of this size in use at once, although originally more probably formed an elongated entrance through the subsequently blocked rampart. There is no evidence for the structure of the western gate although a similar number of equally large timbers were probably used. The limited excavations in the interior also indicate a substantial use of large timbers, both as apparently massive free-standing posts and as parts of structures as in trench H10.

The calculations show that significant quantities of timber would have been required in the construction of the hillfort, and that a fairly substantial area of woodland would have been needed to supply it, including mature trees; and the collection and preparation of this timber would in itself have added significantly to the labour required to build the monument. The actual construction of the timber frame and the bedding of the loose chalk from the ditch around it would have added to this further.

Ditches and ramparts

An approximate calculation of the materials and work involved in the construction of each phase of the hillfort rampart, excluding the entrance, has also been made. The original height of the ramparts and counterscarp bank in each phase is unknown. Only part of the section of the phase 1 ditch was studied and one almost complete section was dug through the phase 2 ditch, but it is not known if the ditch was uniform for the whole 757 m of its length. Similarly, due to the programme restrictions, only one section was excavated right through the rampart and it is not known how typical this might have been.

Attempts were made to calculate the volume of the material removed from each phase of the ditch. This was multiplied by an expansion ratio of 40% to give an indication of how much material would be available from this source for the construction of the rampart. The volume of the rampart and counterscarp bank was also estimated using minimum heights for the original banks based on the surviving heights as recorded during these excavations. It was possible from this to give an estimate of the labour involved in the digging of the ditch for each phase using the figure of 0.68 m^3 per hour for a team including one picker, one shoveller and an appropriate number of carriers using prehistoric tools (Startin 1982, 153). The figure is only a very rough estimate, and the results of these calculations are presented in the Table 6.6.

For ease of calculation the ditches and ramparts are assumed to be straight, rather than curved. This overestimates their volume, but as this is consistent this was taken as allowable for the comparison of the volume of the ditches to that of the banks. The section area given for the phase 1 ditch assumes it to have been symmetrical, with a truncated V-shaped section (Fig. 6.5). This inferred original profile is based on the evidence of erosion of the ditch at Overton Down experimental earthwork (Jewell and Dimbleby 1966).

It is even more difficult to calculate the maximum height of the rampart on the basis of the quantity of material produced from the ditch. A proportion of the material from the ditch was used to construct a rampart of unknown area probably including a box section of only partially known dimensions. The dimensions known for this rampart are the width of the box section in two small sections of the whole and the remaining height and width of the rampart in one of those sections. During the interval between initial construction and the modern investigations settling and erosion of the ramparts will have occurred, but to what degree is difficult to estimate.

The calculations represented in the table are based on the rampart as it survived at excavation. However, due to the sheer size of the monument, a 0.1 m increase in the height of the phase 1 rampart increases the volume of that rampart by 225.92 m^3 to 3162.88 m^3 (*c* 7.5%). However, even at a height of 2 m, at the highest end of Avery's (1993) range for this type of rampart, there would still be sufficient material from the ditch to construct the rampart.

Similarly, the size of the original phase 2 rampart is difficult to calculate as the original shape and height is unknown. The section of the rampart was calculated as an isosceles triangle of height 1.6 m (the remaining height of the rampart as excavated) and base 8.4 m (the width between the edge of the ditch and the retaining wall and kerb). The original section is likely to have been larger, if, as suggested by Avery (1993), the rampart was originally asymmetrical with a shallow rear slope and a steeper forward slope. The angle of the forward slope is unknown though it would have been restricted by soil mechanics, but the rear slope could not have been less than as observed during excavation. If the rampart had been 3 m high its volume is likely to have been in the order of 8895.6 m^3, or 5958.64 m^3 when the volume of the remaining phase 1 rampart is subtracted. The ditch would have supplied ample material to build such a rampart.

Despite the fact that these calculations are approximate, it is highly likely that the excavation of the ditches would have provided more than sufficient material to build ramparts to these very conservative specifications without the need to quarry extra material from elsewhere. An attempt has been made to calculate the amount of labour required to dig the ditches, attempts to estimate how many people would have been needed in total or how long it took

to complete are more difficult. The phase 1 ditch could have been dug by one team over several years or ten teams working eight hours a day seven days a week for less than four months (Table 6.7). Even with the largest labour force of 100 teams the excavation of the ditch would have taken almost two weeks during which this large number of people would have had to be fed and housed near the site if delays due to travelling to the site were to be avoided.

It is impossible to know how the labour would have been organised within the society of the hillfort builders or the size of the community involved. An imminent threat, even of bad weather at this exposed site, might have prompted the whole community to work on the construction of the fort, but this could not have been sustained for the weeks and months that would have been required to complete it. Agricultural and social tasks could not have been postponed indefinitely without the society suffering. It is more likely that work on the construction of the fort was carried out over a longer period of time, probably with a variable workforce according to how it could be fitted in with other necessary work.

The building of such a structure created cohesion by reinforcing social relationships, through the rituals and ceremonies involved and also by creating a social calendar, as it would need to be specified where people should be at a certain time of the year. The massive commitment of time and effort required to build and maintain the Uffington ramparts, gates and interior structures, could have been mobilised through the medium of traditional and ceremonial activities.

HILLFORT INTERIOR

The interior of Uffington Castle appears largely devoid of surface indications of any past occupation, and it is known that the site was ploughed in fairly recent times. The only feature apparent prior to excavation were the remnants of north-south ridge and furrow to the west of the old estate boundary which ran between the breaches in the ramparts. Aerial photography had been of limited value on the site beyond revealing these traces of ploughing, but it seemed possible that other archaeological features might still exist within the hillfort, and it was hoped that geophysical survey would succeed in mapping their density and layout. It was intended that the archaeological excavations would be small in scale in order to disturb as little of the interior as possible, and therefore the wider use of geophysical survey was an important additional component of the project.

Geophysical survey
by Andrew Payne

A magnetometer survey was initially carried out at Uffington Castle in 1989 by the CfA (formerly AML). The survey provided near total coverage of the hillfort interior with the exception of a narrow strip bordering the south-east section of ramparts. Based on earlier experience at Maiden Castle in the mid 1980s, it was expected that a fluxgate magnetometer survey would provide an effective method for characterising the nature of any internal activity present inside the hillfort. The technique is particularly effective on chalk geology, where anomalies from archaeological features such as pits intruding into the subsoil, stand out clearly against the relatively much lower magnetic background from the natural substrates. The earlier magnetometer survey at Maiden Castle had already demonstrated that the technique was effective for mapping the distribution of pits and hearths, road corridors and the layout of small ditched enclosures within a hillfort in a chalkland environment (Payne 1996).

During 1994–5 the Oxford University Department for Continuing Education (OUDCE) undertook two seasons of archaeological excavation to explore the character of the occupation inside the hillfort indicated by the 1989 magnetometer survey. As part of this process the CfA carried out further magnetometer surveys over selected areas of the hillfort. This time closer spaced reading intervals were used in the hope of gaining a higher definition image of the buried archaeology and enhancing the ability of the magnetometer to detect features smaller than 1.0 m in cross-section. These additional surveys also played an important role in enabling the precise targeting of limited excavation areas in order to avoid excavating blank areas and reducing unnecessary ground disturbance under the terms of the Scheduled Monument Consent. The excavation of geophysical anomalies provided the opportunity to test the results against the archaeological ground-truth. This proved to be a valuable exercise for recognising some of the current limitations of magnetic surveying using fluxgate gradiometer-type instruments.

The 1989 and 1995 surveys at Uffington Castle both employed Geoscan FM36 Fluxgate Gradiometer instruments with built-in data-logging facilities enabling digital data capture at a rate of 16,000 readings in a two hour survey session. The survey procedure employed for the first survey involved collecting the magnetic measurements on a 30 m grid at 0.25 m intervals along successive parallel traverses spaced 1.0 m apart and aligned approximately north to south. Readings were recorded at the most sensitive instrument setting to the nearest tenth of a nanotesla (0.1 nT). The same basic procedure was observed during the additional surveys carried out in 1995 except that the traverse separation was halved to 0.5 m, doubling the reading density in the east to west direction and the number of readings within a single 30 m grid square from 3600 to 7200. The horizontal or ground resolution of archaeological anomalies detected by the magnetometer would be expected to be considerably enhanced by this method. Processing of both the 1989 and 1995 datasets involved the initial elimination of the effects of thermally induced instrument drift, showing as

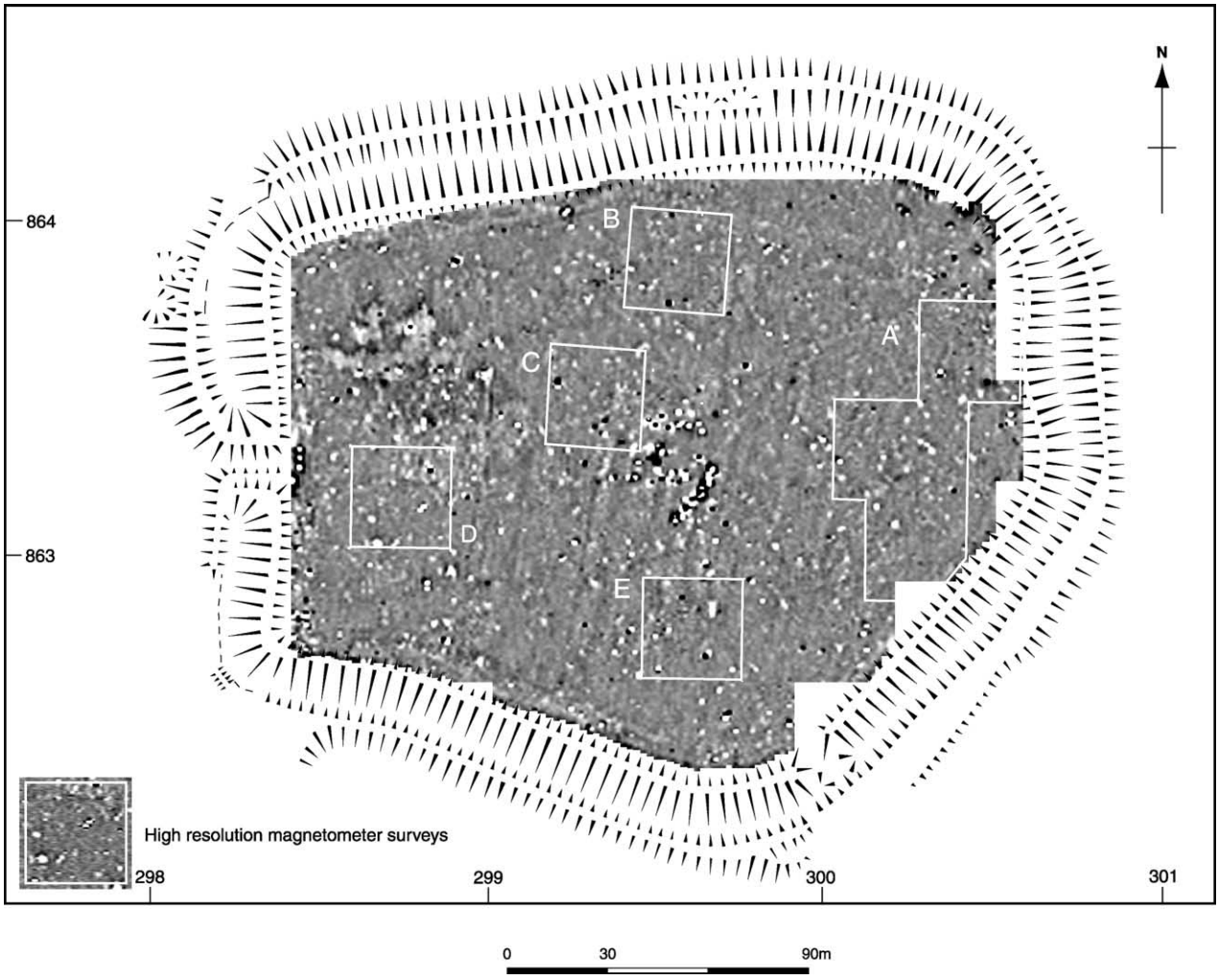


Figure 6.8 Standard magnetometry survey of 1989 showing location of sample high-resolution magnetometer survey areas A to E of 1995.

bunching or striping of alternate lines of data, corrected by equalising the mean of each line of data. The 1989 survey is presented as a greyscale plot with a range of values between –1.25 and +1.8 nT superimposed on a plan of the hillfort (Fig. 6.8). Positive anomalies produced by in-filled archaeological features intruding into the subsoil are represented by paler spots and lines against the mid-grey tones which represent the natural background magnetic signal from the site signifying undisturbed ground.

The 1995 high-resolution survey covered five separate areas (A–E) spaced evenly across the hillfort interior (Fig. 6.8). These were positioned to coincide with a series of small trenches (trenches H1–13) which were to be excavated later the same year. Survey areas B to E consisted of single 30 m squares, with a larger area against the inside of the eastern section of the rampart. The results from Areas D and E are presented as greyscale plots (Fig. 6.9) showing the character of the magnetic results in greater detail than the overall 1989 survey.

Results

The pattern of discrete magnetic anomalies mapped by the 1989 survey inside the hillfort suggests that the site contains a moderately sparse but fairly even distribution of buried pit-type features (Fig. 6.10). A sample of the magnetic anomalies was excavated in 1995; ten were shown to represent pits with fills containing Iron Age and Romano-British material and a further one (trench H13) was found to be an oven of Romano-British date. The pit anomalies exhibit considerable variation in signal strength (approximately 4 to 15 nT) and the magnitude of the anomaly from the oven (Fig. 6.9) also lay within the same range (11 nT). It is therefore not possible to easily separate out the responses to the two different types of feature, particularly in the original magnetometer survey (carried out with standard measurement intervals) where the form of individual anomalies is only coarsely recorded.

The higher resolution magnetometer data did permit a more detailed analysis of anomaly form

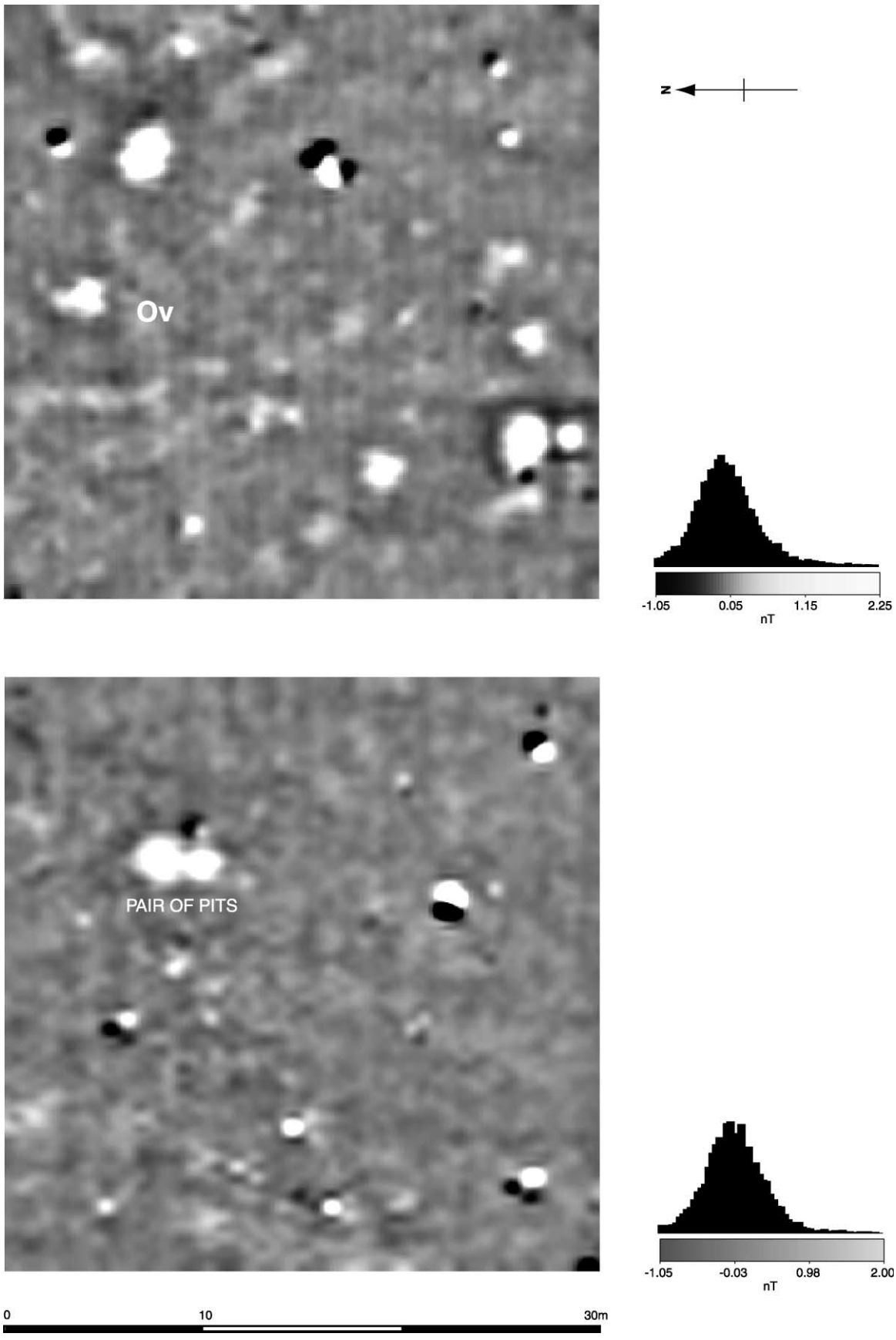


Figure 6.9 High-resolution magnetometry survey results in the hillfort: top, Area D, and bottom, Area E.

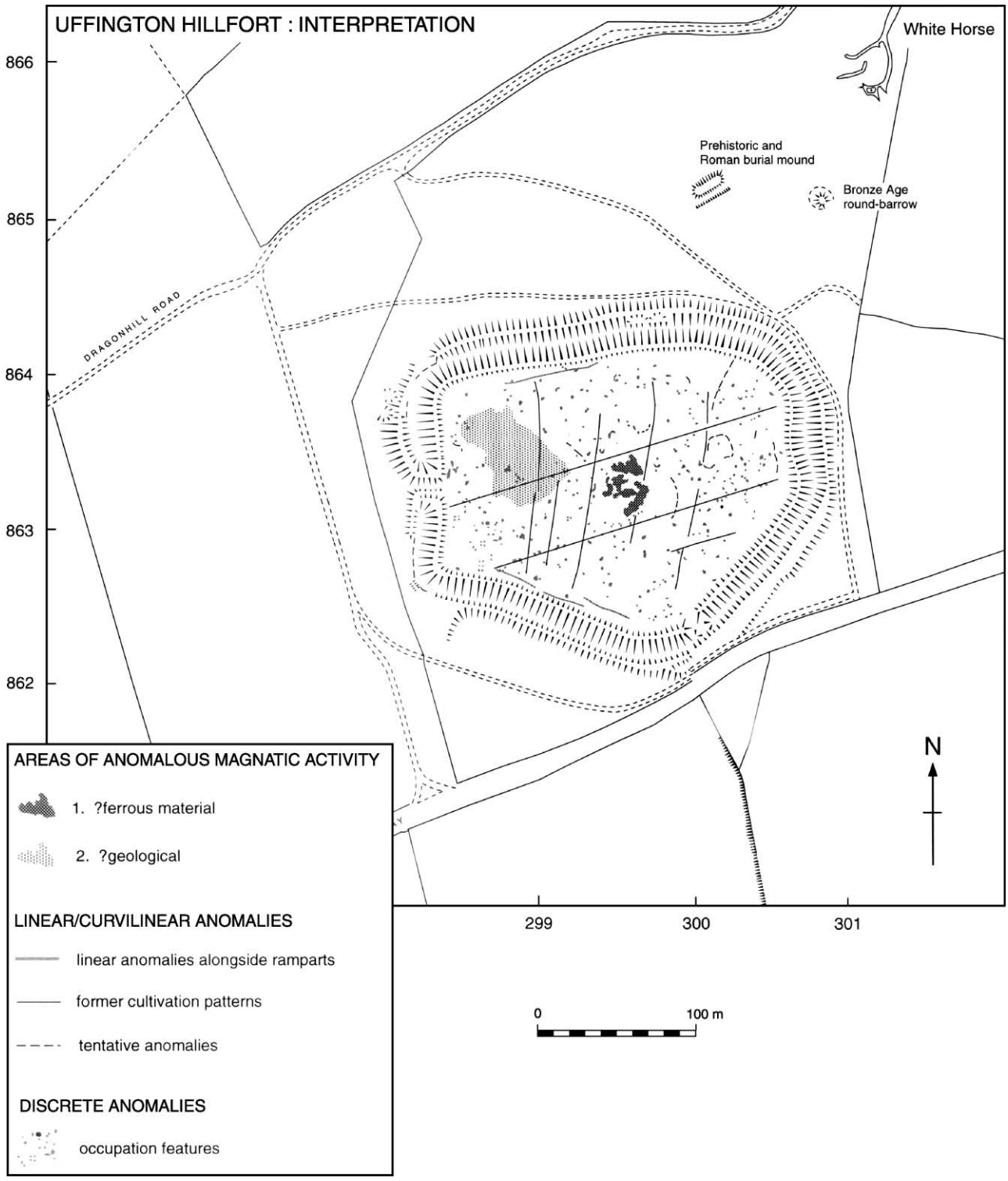


Figure 6.10 Uffington Hillfort, interpretation of 1989 magnetometry survey.

and it is apparent that the oven exhibits a double-peaked profile, which is often indicative of fired features, reflecting differential heating. A stronger peak in the readings occurs over the wider and deeper and more heavily burnt oven chamber and a second smaller subsidiary peak occurs over the narrower stokehole. The shape of the oven anomaly in plan form also replicates the distinctive keyhole-shaped plan of the oven recorded during excavation. In comparison anomalies produced by the pits appear more rounded in plan (Fig. 6.9). There is insufficient detail of individual anomalies in the standard survey data collected in 1989, and it is only really possible to analyse the high resolution data for differences

between ovens and pits. In the five areas surveyed in 1995, no other obvious oven-type anomalies can be identified, suggesting that these structures are much less prevalent in the hillfort than the pits.

Detailed examination of the anomaly distribution in the hillfort (Fig. 6.10) shows particular clusters in the middle eastern end and south-west corner of the hillfort with a further more localised grouping located near the bow in the rampart on the south side of the fort. These areas of more intense activity are interspersed with emptier areas containing far fewer pit-type anomalies. Similar concentrations of occupation features in discrete areas of hillforts have also been mapped by magnetometry at two of the nearest neighbouring hillforts to Uffington, Segsbury Camp (NGR SU 385 845) in 1993–4 and Liddington Castle (NGR SU 209 797) in 1996. Liddington is similar in size and form to Uffington and may have a blocked entrance and an adjoining linear earthwork. However, in the case of Segsbury (Payne 1996) and Liddington (Payne 1997; Payne and Trow 1998) the pit clusters are closely associated with circular gullies possibly defining the positions of round standing structures of Iron Age or Roman date. At Segsbury and Liddington, these were clearly detected by magnetometer survey using the same standard measurement intervals employed at Uffington, but similar circular gullies are noticeably absent at Uffington.

In addition to the loose clusters of pits mapped by the magnetometer, there are also some examples of closely paired pits. Larger pits with a smaller pit immediately adjacent occur in Areas B and E of the 1995 magnetometer survey (eg features 12019 and 12003 in trench H10, Fig. 6.9) and a line of three closely spaced pits was mapped in area A. These closely grouped features were resolved much more clearly in the high resolution data. The pair of pits (12019/12003) in area E (trench H10) appeared as a single elongated pit-type anomaly in the earlier standard resolution survey.

The presence of some very faint linear and curvilinear trends in the 1989 magnetic data, shown by broken lines (Fig. 6.10) hints at the presence of short curvilinear and linear ditches or gullies, perhaps representing smaller enclosures within the hillfort. However, similarly tentative features identified at Segsbury were found to have no substance when excavated. Vague or spurious anomalies may reflect changes in the subsoil overlying the chalk bedrock, which at Uffington is very variable in both depth and character, possibly as a result of cultivation.

Since the excavations in 1994–5, a number of other structures have been tentatively identified from the 1989 survey, defined by regular groupings of anomalies. These may represent square and rectangular settings of three, four and six postholes of substantial size. There are up to five of these possible structures, confined to the south-west quarter of the hillfort, but their existence has yet to be verified by excavation.

Also, within the hillfort linear anomalies running along the inner edge of the rampart on the southern and northern sides were noted. These are probably derived from layers of redeposited eroded rampart material built up against the base of the internal face of the hillfort rampart. During the 1994 excavations, these layers were recorded in trench H3 immediately to the north of the linear anomalies parallel to the ramparts on the south side of the fort. Similar anomalies related to soil deposition against ramparts occur at the hillfort of Bury Hill in Hampshire (Payne 2000). Two possible patterns of former strip cultivation or ridge and furrow were also noted within the fort, the first orientated approximately north-south and the second aligned north-east to south-west. In addition a group of intense anomalies indicating the presence of very strongly magnetic material was detected near the centre of the hillfort. It is possible that these anomalies are linked to the post-medieval fairs which took place inside the hillfort, and could represent iron or steel posts. A further area of anomalous magnetic disturbance extending across most of north-west quarter of the hillfort, is considered to be of geological origin. Excavation within this zone in 1994 recorded the presence of a layer of clay drift deposits embedded into the surface of the underlying solid chalk. Such layers of clay drift are usually found to be more magnetic than the chalk they overlie explaining the resulting anomalous signal.

It has to be kept in mind that the detection of archaeological features by magnetometer survey is very selective. Certain important categories of features, which can indicate the presence or absence of settlement, for example traces of domestic structures surviving only in ephemeral form as collections of post sockets, can be missed entirely. Given that posthole and gully type structures not resolved by the magnetometer were uncovered in trench H12 in 1995, some doubt on the wider presence of such structures throughout the hillfort must still remain. With the exception of the area in the south-western corner of the hillfort, containing possible 4-post structures, there is no evidence for careful planning or zoning of particular activities at Uffington as known at some hillforts such as Chalbury, Dorset, Conderton Camp, Worcs and Knollbury, Oxfordshire. The interiors of these sites are clearly divided into separate zones reserved for domestic dwellings and storage of agricultural produce, but over the majority of the hillfort interior at Uffington the areas of higher and lower pit density appear to be arranged fairly randomly. This may be an indicator of a relatively simple sequence of occupation.

Excavations in 1994–5

The hillfort interior was known to have been ploughed in modern times, but it seemed likely that some archaeological features would survive, and the results of the geophysical survey seemed to bear this out, although excavation was needed to provide conclusive evidence. A total of 13 trenches,

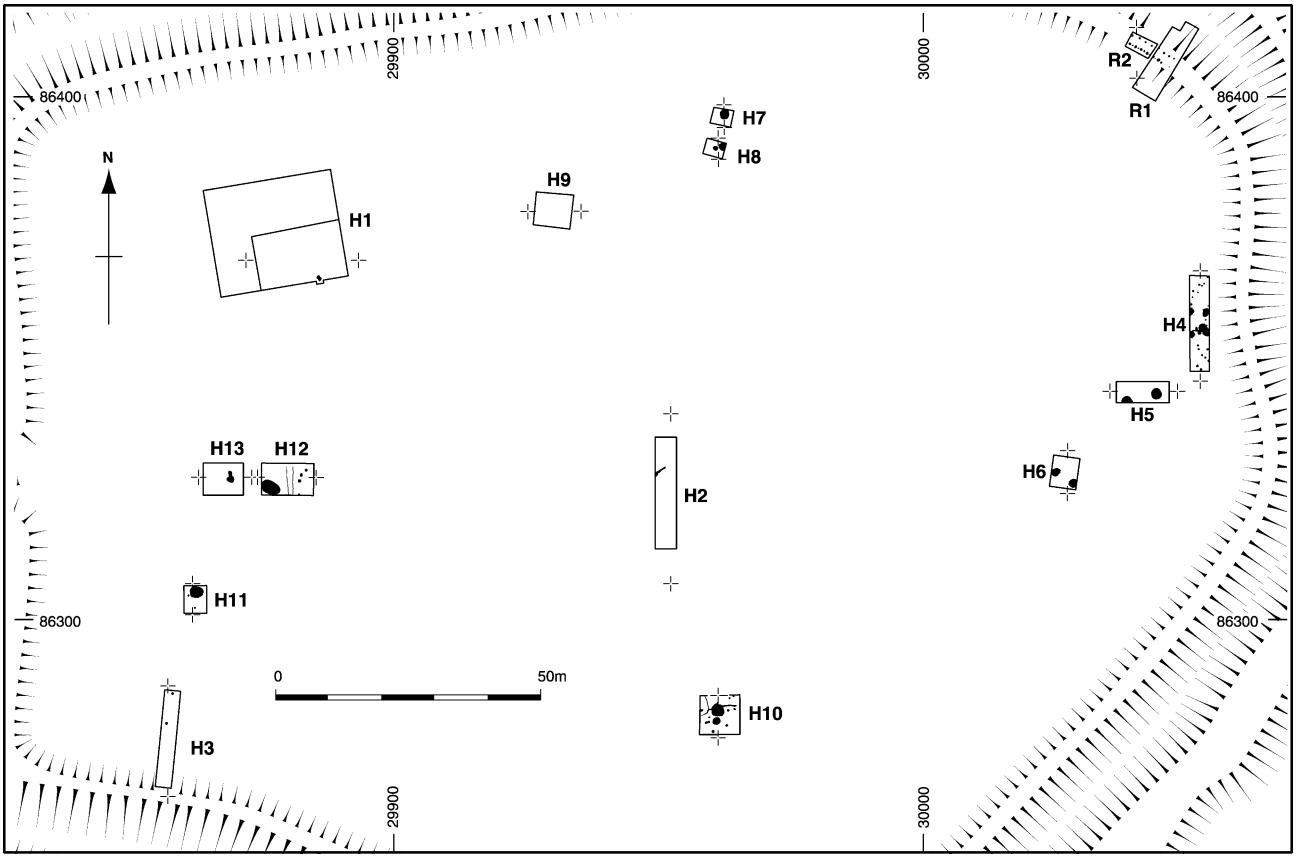


Figure 6.11 Interior of hillfort, showing location of excavated trenches H1 to H13.

H1 to H13, were excavated within the interior of the hillfort, including the blocked entrance trench H4 discussed earlier, thus providing approximately a 2% sample of the 3.4 ha interior. Figure 6.11 shows the locations of the remaining 12 trenches within the interior of the hillfort, the location of which were decided in consultation with CfA, based on the results of the two geophysical surveys. Trenches H1 to H3 investigated anomalies shown by the 1989 survey and trenches H5–H13 by the 1995 survey. The intention was to ground-proof a range of anomalies with differing characteristics to elucidate the predictive capabilities of magnetic signatures.

These excavations revealed a range of features cut into the bedrock and truncated by later ploughing, leaving little vertical stratigraphy. The dating of these features, therefore, had to depend largely on material contained within them. Dating of the pottery suggests that the fills of most features in the hillfort interior date to the early Iron Age (7th century BC) with a small amount of possibly late Bronze Age activity (8th century BC) and some middle Iron Age use (4th century BC), and there is also evidence of Romano-British activity. Due to the similarity in date of all the early Iron Age pottery recovered and the very small size of the middle Iron Age assemblage it was very difficult to relate internal features to either of the two phases of the ramparts. Consequently, all are discussed together as Iron Age although they may not be exactly contemporaneous.

Iron Age activity

Features dating to this period were identified throughout the hillfort interior though at a low density. The groupings described below relate to the excavated areas and not necessarily to the areas of activity during the early Iron Age.

Cut features inside the eastern entrance

Four cut features were identified in the two small trenches (H5 and H6) located towards the eastern end of the hillfort interior inside the eastern entrance (Figs 6.14 and 6.15, 8004, 8006, 8504 & 8506). Feature 8006 was half-sectioned by the southern baulk (trench H5) and measured approximately 2 m in diameter and 0.86 m deep (Fig. 6.14, Plate 6.5).

This could be interpreted as a pit showing initial erosion around the sides (8014/15), followed by a deliberate centrally placed dump of clay and loam containing late Bronze Age pottery (8011) and subsequent filling by a sequence of fairly horizontal deposits (8013, 8009 & 8007).

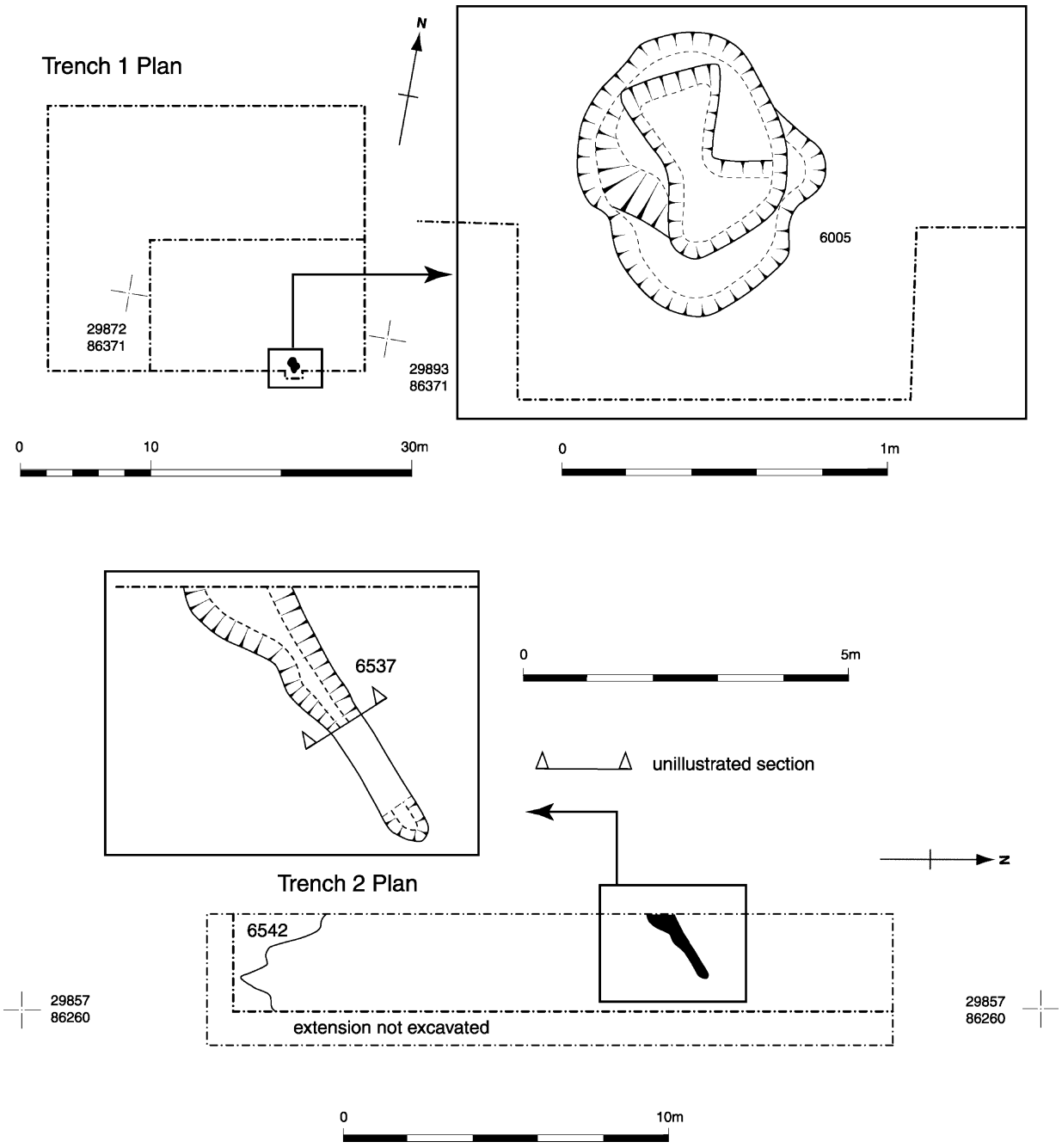


Figure 6.12 Plan of trenches H1 and H2.

Such a sequence is unusual, when compared with the many pits excavated at Danebury (Cunliffe 1984; Cunliffe and Poole 1991). Discussions of pit-filling sequences (Hill 1995) seem to suggest that such deposits were not produced by natural filling (Shackley 1976). Pit 8004 (Fig. 6.14) was circular, 2 m in diameter, and 0.7 m deep with sloping sides, had a flat bottom and simpler stratigraphy. All of the three main fills (8012, 8010 & 8008) appear to be deliberate and consist of brown loam with varying amounts of chalk pieces. The lowest two fills (8012 & 8010) contained an articulated dog skeleton, some early Iron Age pottery and parts of a burnished globular jar of middle Iron Age date. The top layer (8005) was compact dark brown loam containing four late 4th-century Romano-British copper alloy coins, pottery and miscellaneous iron objects of a similar date together with residual Iron Age sherds.

Pit 8504 (trench H6) was approximately 1.6 m in diameter and 1.18 m deep with steep sides curving to a rounded bottom (Fig. 6.15). A ledge on the west and north sides, 0.3 m from the top and 0.1 m wide, could have been part of the original design. This pit appeared to have been deliberately backfilled in the Iron Age though Romano-British material subsequently accumulated in the remaining depression. The lowest fill (8514) of dark loamy clay contained a large group of early Iron Age sherds. The

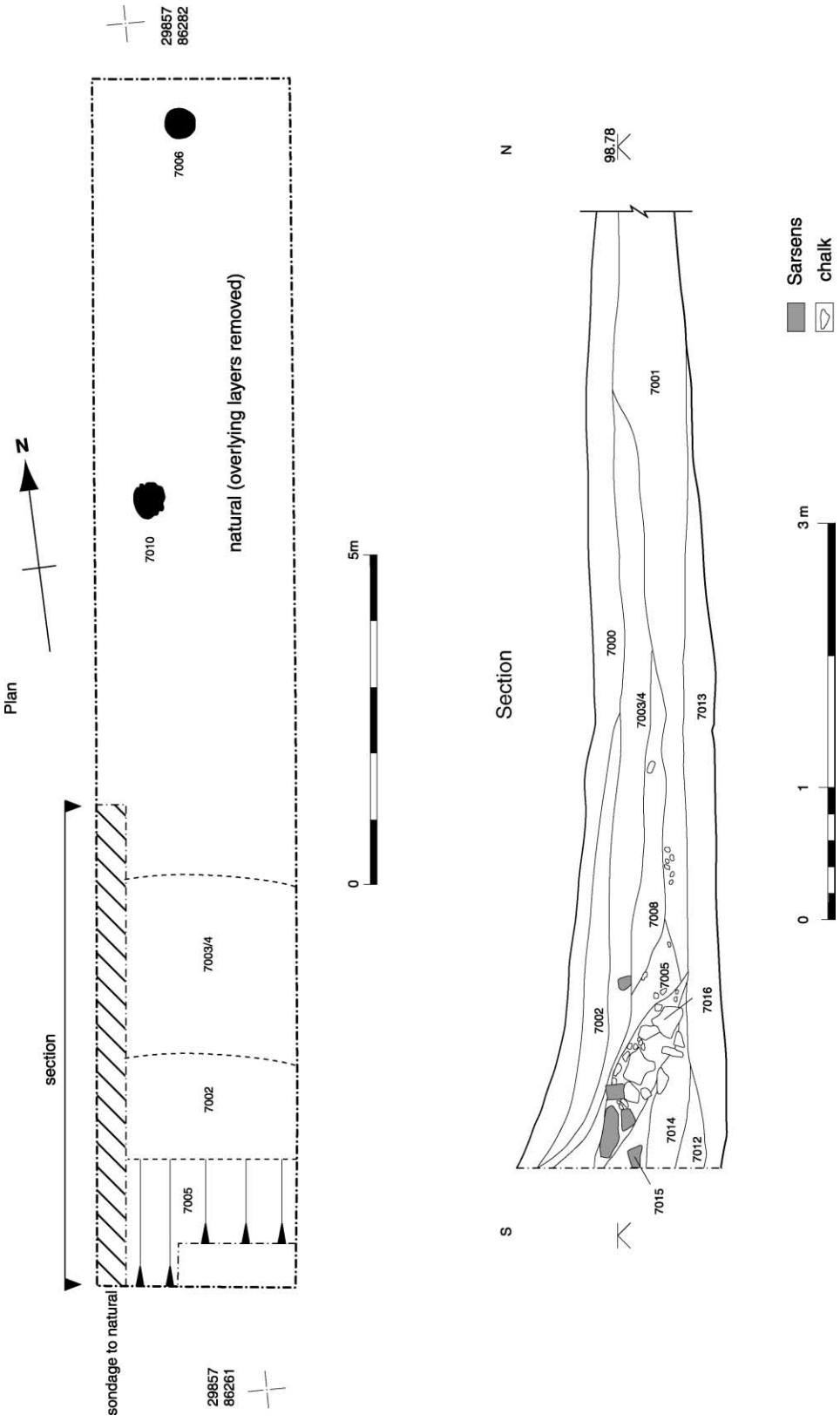


Figure 6.13 Plan and section of trench H3.

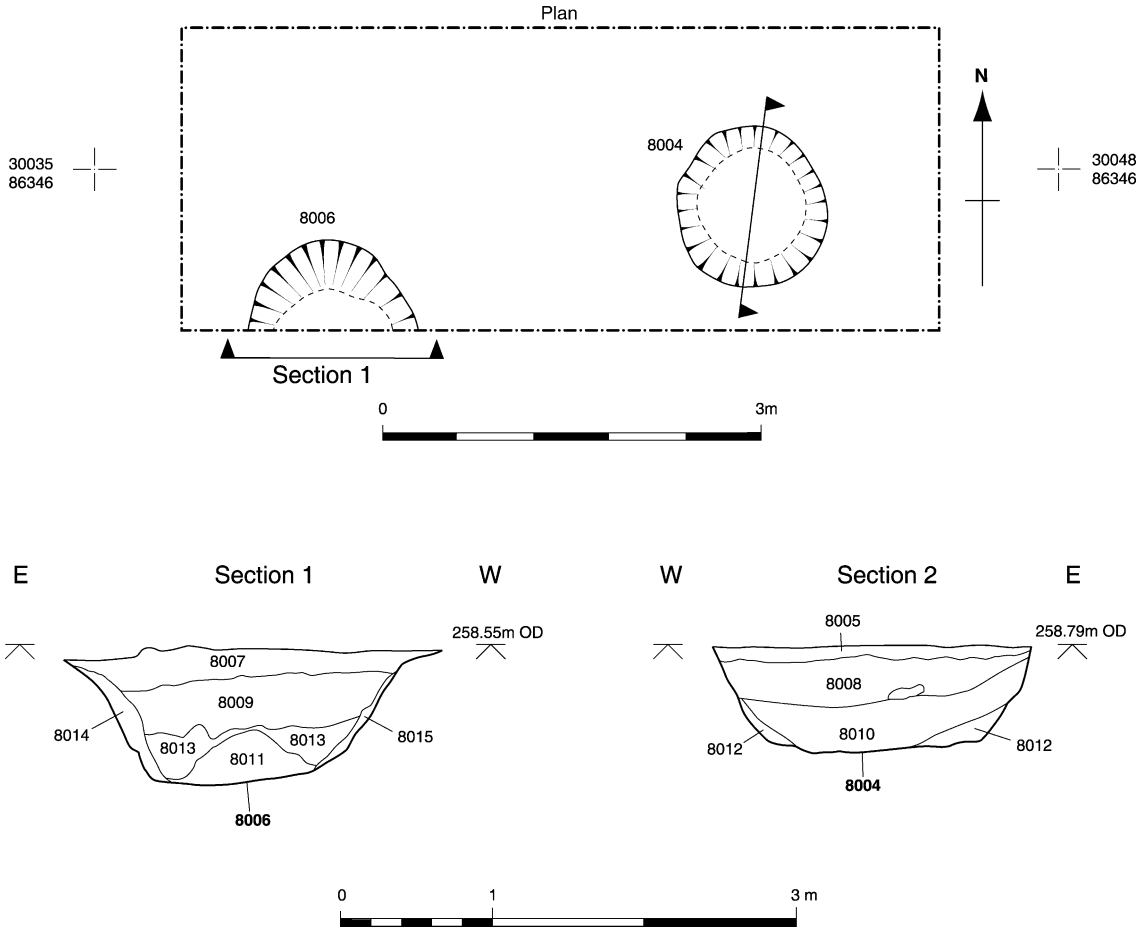


Figure 6.14 Plan and sections of pits 8004 and 8006 in trench H5.

Plate 6.5 Trench H5 in the hillfort interior, showing excavated pit 8006 (Copyright: Gary Lock).

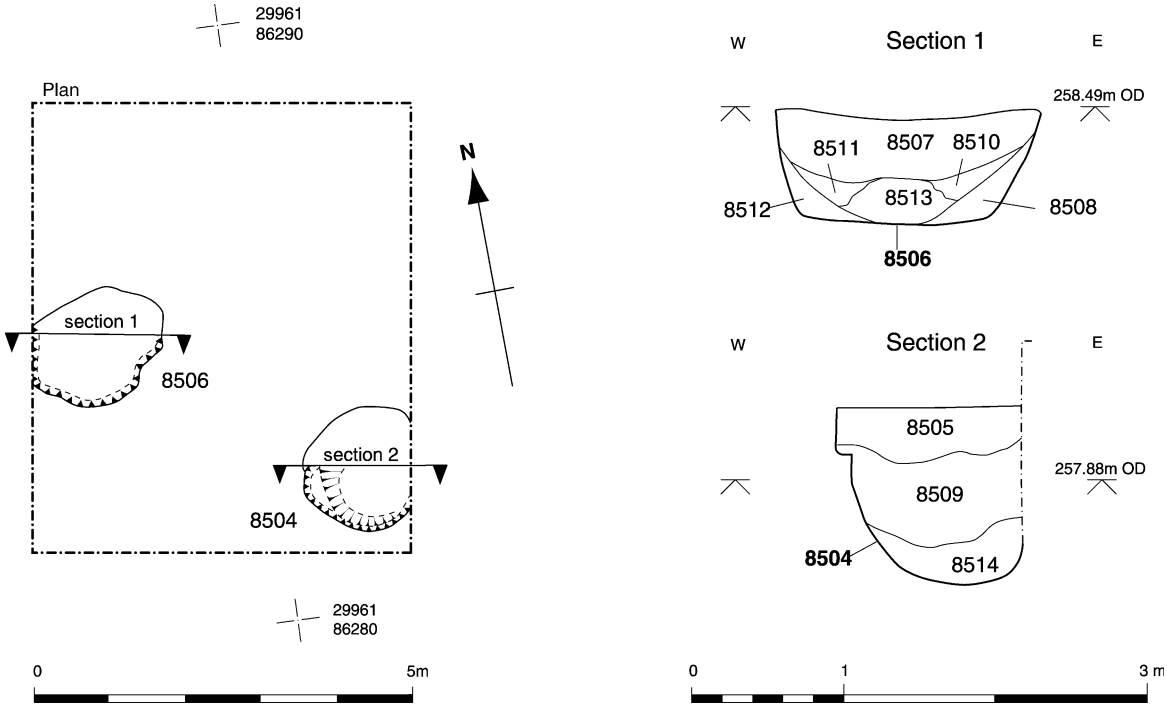


Figure 6.15 Plan of trench H6 and sections of pits 8504 and 8506.

middle fill (8509) consisted of chalk rubble with a silty matrix containing late Bronze Age and early Iron Age pottery and a group of 22 flints, which could be Neolithic/ early Bronze Age. The top fill (8505) was dark brown loam containing a late 4th-century Romano-British coin, a mixture of early Iron Age and Romano-British pottery and iron nails.

The other cut feature in this trench (8506) was very different in profile being *c* 1.5–1.7 m in diameter, 0.55 m deep with steep sides and a flat bottom (Fig. 6.15). This pit was also interpreted as having been deliberately backfilled producing stratigraphy not dissimilar to 8006 described above. The bottom fills were compact deposits of chalk rubble (8508, 8512) containing early Iron Age pottery and several fragments of chalk loomweight. The next deposit was a dump of chalk rubble (8513) which appeared to have been deliberately heaped over five sherds of early Iron Age pottery and then nearly covered by loamy material (8510/11). The top fill (8507) was a thick layer of dark brown loam containing a mixture of pottery from late Bronze Age to Romano-British together with animal bone.

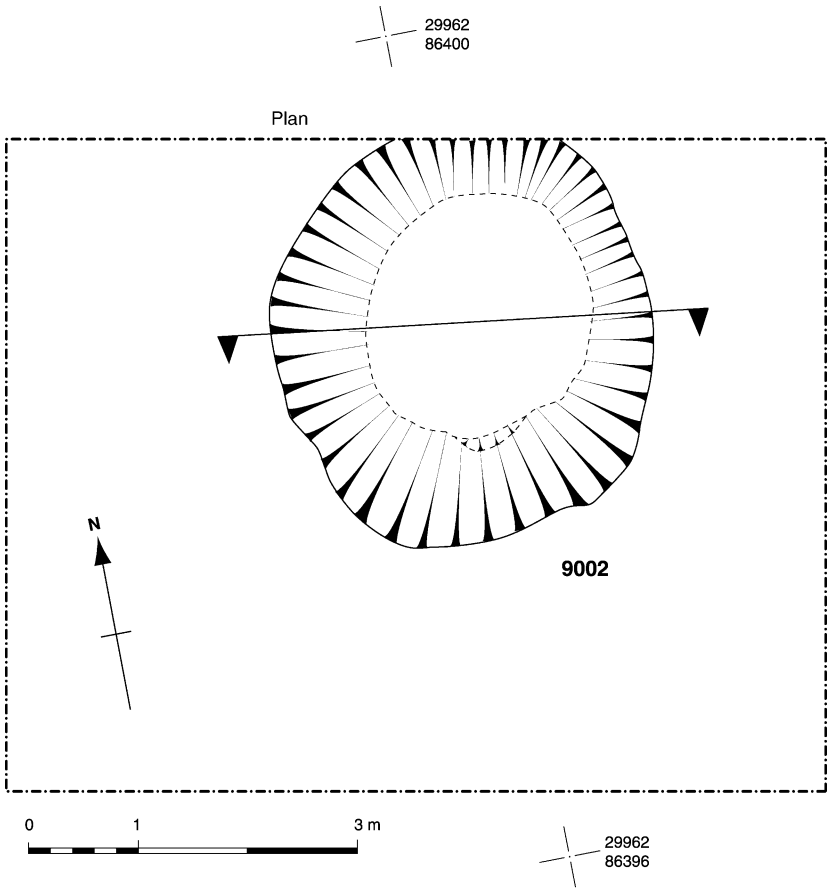
Cut features towards the northern side

Three trenches (H7, H8 and H9) were excavated towards the northern side of the hillfort enclosure producing three features (9002, 9503 & 9505) in trenches H7 and H8. No features were found within trench H9, despite the presence of a discrete circular geophysical anomaly.

Cutting the bedrock in trench H7 was feature 9002 (Fig. 6.16). It was roughly circular measuring about 1.8–1.9 m in diameter, 0.85 m deep with steeply sloping sides and an approximately flat bottom. The stratigraphy is once more unusual and could suggest that this pit was being used as a large posthole, which was not necessarily its primary function. The lowest two fills (9010 & 9009) were deposited in the bottom of the pit before the post was positioned, and both contained early Iron Age pottery with a chalk loomweight positioned on the pit bottom. Deposits 9006/9007 and 9005 could have been post packing with chalk and flint fragments containing early Iron Age pottery and animal bone. The postpipe fill 9008 contained early and possibly middle Iron Age pottery and suggests a post of about 0.45 m diameter stood above 9009 and was eventually removed. The top fill (9003) consisted of dark brown loam containing pottery of late Bronze Age, early Iron Age and late Romano-British date together with iron cleats, nails and tacks. Deposits 9003, 9008 and 9009 contained sherds of possible middle Iron Age date.

In trench H8, feature 9505 extended beyond the edge of excavation, but was at least 1.5 m diameter at its widest point and 0.68 m deep, with a flat bottom (Fig. 6.17). Its western side was revealed to be steep and irregular with a thin bottom deposit (9515) of brown loam containing early Iron Age pottery, animal bone and charcoal. This represents soil that was either placed or fell in when the pit was first dug. Around the lower edges of the pit was a deposit of chalk rubble with larger chalk blocks containing a single sherd of early Iron Age pottery (9512/9513). The upper levels (9507/9510) had similar pottery within them while the top layer of brown loam (9506), which was confined to the centre of the pit to a maximum of 0.07 m depth, contained early Iron Age sherds and a Romano-British nail.

The other cut feature in this trench (9503), is a shallow pit, oval in shape, 0.6 m by 0.52 m, and 0.26 m deep with vertical sides and a near flat bottom (Fig. 6.17). It contained two horizontal fills, the lower of dark brown clayey loam (9509) and the upper of a more friable loam (9504) with chalk fragments. Both fills had small amounts of early Iron Age pottery and animal bone within them.



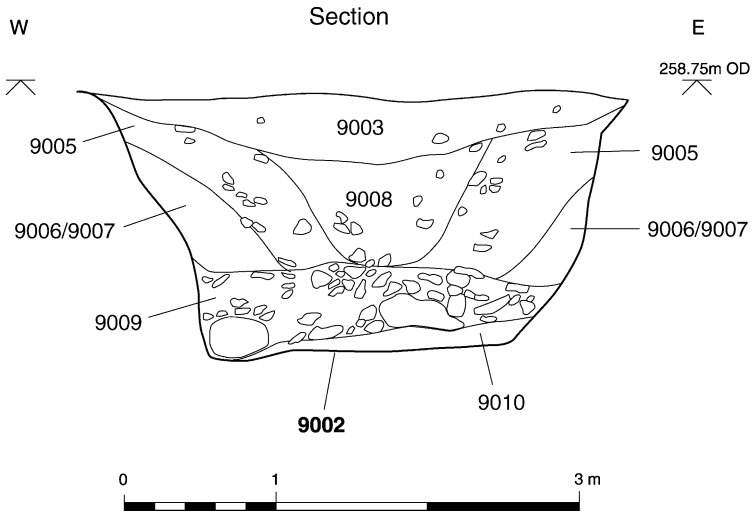


Figure 6.16 Plan of trench H7 and section of pit 9002.

The centre of the hillfort

The initial geophysical survey identified a group of discrete anomalies. These were not clarified when trench H2 was excavated through them (Fig. 6.12). Evidence from this trench was difficult to interpret due to the heavily eroded and fragmented nature of the chalk bedrock, probably resulting from plough

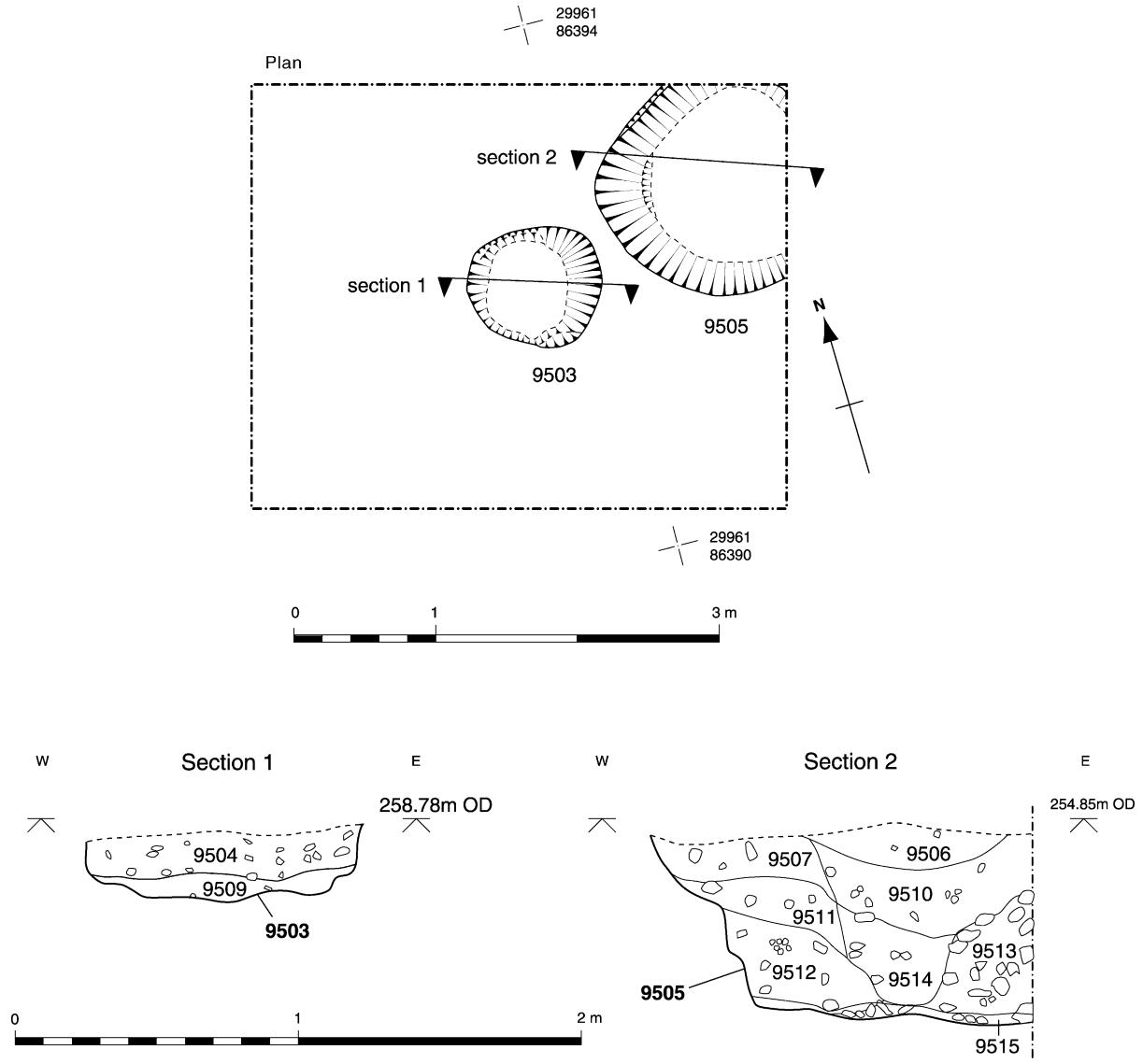


Figure 6.17 Plan of trench H8 and sections of pits 9503 and 9505.

damage. Several cut features could have been severely truncated postholes or, more likely, natural hollows filled with clay and silt. No finds were recovered from any of these features.

At the very southern end of the trench a possible surface or trackway (6542) was found running east to west. This consisted of compacted chalk rubble, including limestone pieces, within a matrix of silty clay forming an uneven surface. Bedrock was closer to the modern surface at this end of the trench, however, and this feature could be a product of differential weathering and plough damage. Stratigraphically earlier than 6542, was a cut feature similar to those mentioned above which could equally be a truncated posthole or natural hollow. Again, there were no finds from either of these features.

Cut features towards the southern side

Trench H10 was the only trench to be dug in the southern side of the hillfort interior (Fig. 6.18). The geophysical survey had identified only two discrete circular anomalies, but numerous cut features were located within this trench (Plate 6.6). Many of these features yielded no finds making phasing uncertain.

Cutting into the natural were a series of narrow gullies (12012/12023/12025) forming an arc in the north-west of the trench with a branch towards the east, probably representing a single feature (Fig. 6.18). Within the arc the gully varied between 0.1 m and 0.24 m wide and 0.04 m and 0.12 m deep while the branch was about 0.24 m wide along its extent and varied in depth from 0.01 m in the west to 0.16 m in the east. Towards the west the fill was yellow/brown loam changing to grey/brown loam and then clay loam to the east. There were no finds within the fills. The increasing clay content of the fills towards the east, together with the increasing depth in that direction, suggest that these are likely to represent the truncated bottoms of a drainage gully which drained towards the east. It seems that when the gullies were cut there was a depth of topsoil and subsoil.

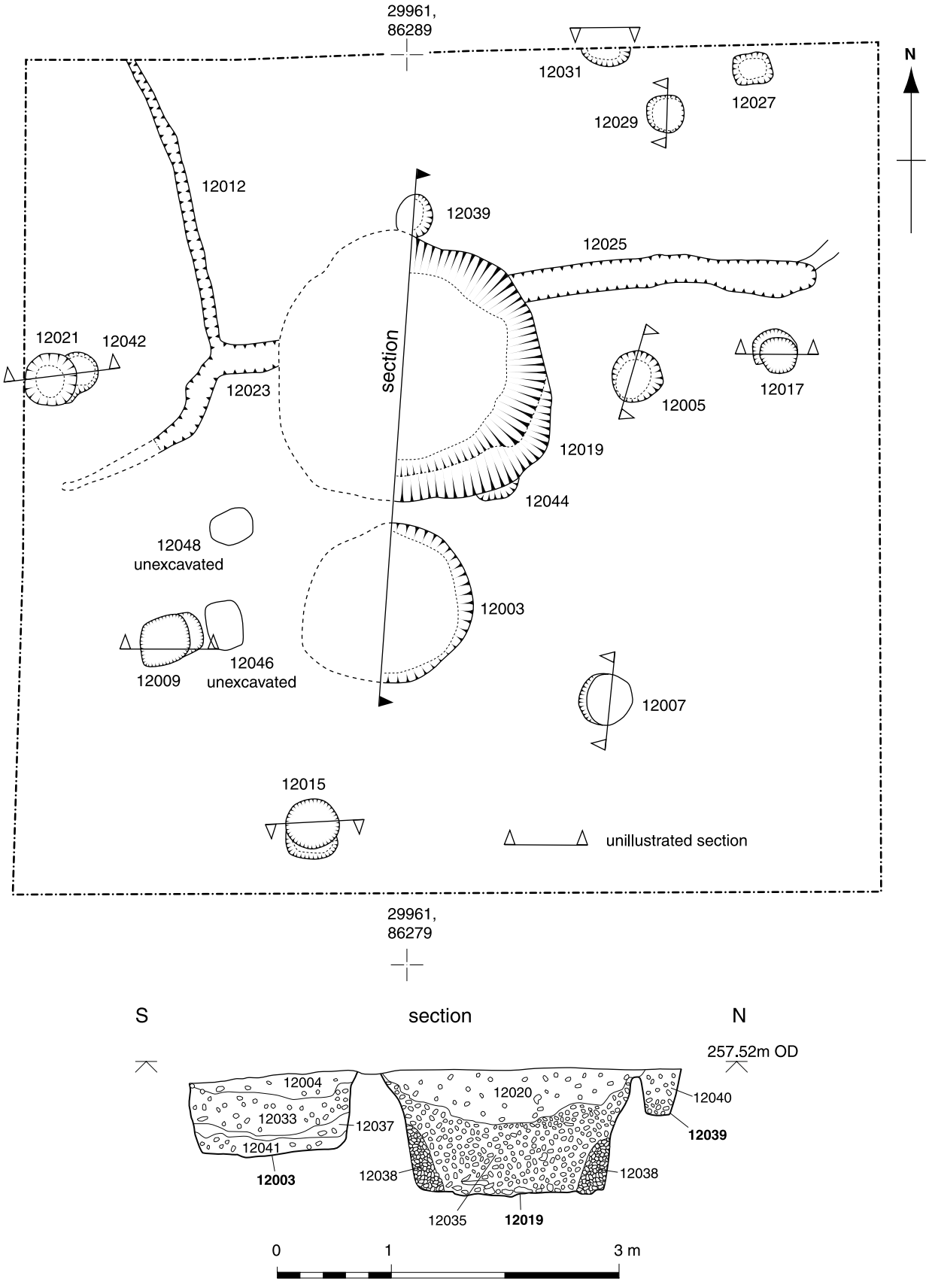


Figure 6.18 Plan of features in trench H10 showing gullies, postholes and pits.

Plate 6.6 Trench H10 before excavation showing features in chalk; gullies, pits and postholes of possible 4- or 6-post structure (Copyright: Gary Lock).

The remaining features within the trench are a series of postholes and two pits, some of which offer evidence for sequencing. The two rows of postholes (12015, 12009, 12021, & 12007, 12044, 12039) appear to be paired and equally spaced, possibly forming a large timber 6-post structure of early Iron Age date but unknown function. This structure measured approximately 3 × 4.5 m and had a minimum of two phases as indicated by the recutting of 12015 and 12009 and most obviously, the replacement of 12042 by 12021. At the hillfort of Danebury 44 of the 499 recognised post-built rectangular structures were 6-post structures (Cunliffe and Poole 1991, 104). The Uffington example is at the upper end of the Danebury size range although the posthole diameters average less than 0.5 m, which is small compared to the Danebury mean of 0.67 m. Looking at the Uffington example more closely, posthole 12039 is considerably smaller than the others and is slightly out of line suggesting the possibility of the southern four postholes being a 4-post structure. If this is the case it is interesting that pit 12003 is positioned within the 4-post structure although there is no evidence for their contemporaneity. At Danebury there are 36 pits lying within 4-post, possibly roofed, structures (ibid., 116).

Rectangular post-built structures are notoriously difficult to assign a function. The traditional interpretation of a raised granary began when Pitt-Rivers found grain in a posthole while excavating the Iron Age settlement at Rotherley (1888). Numerous possibilities for alternative interpretations have been suggested (Ellison and Drewett 1971; Knight 1984, 154f) that could leave similar remains. There is no evidence for the function of this 4- or 6-post structure. A further group of postholes in the north-east of the trench cannot be phased. Details of all these postholes are given in Table 6.8.

Pit 12003 might be associated with the timber structure (Fig. 6.18). This was roughly circular, 1.4 m in diameter, 0.7 m deep with steep sides and a flat bottom. It would seem that when this feature, was filled no topsoil was allowed to fall back into it and the base was sealed with a horizontal layer of loamy clay (12041), 0.18 m thick, containing late Bronze Age and early Iron Age pottery. Sealing this was a layer of dark organic material, up to 0.02 m thick, containing charcoal, burnt clay, animal bone and sherds of early Iron Age pottery (12037). These two primary deposits could represent the original use of the pit, the latter being the burnt remains of an organic lining on top of an initial clay sealing of the bedrock. The remaining two layers within the pit are secondary deliberate fills of loam with chalk fragments containing late Bronze Age and early Iron Age pottery (12033, 12004).

A larger pit (12019) cut gullies 12023/12025 and postholes 12044 and 12039 of the probable timber structure after the postholes were backfilled. This pit was roughly circular in plan, 2.4 m in diameter, 1.1 m deep with steep sides and a flat bottom (Fig. 6.18). The sides sloped gradually for the top 0.5 m perhaps showing a period of erosion when the pit stood empty, or at least partly so. The first deposit within the pit was a ring of dense chalk fragments (12038), containing early Iron Age pottery, a copper alloy strip, and animal bone. This could represent the deposition of material soon after the initial digging of the pit. Most of the pit was filled with a single deposit (12035) of loam with chalk fragments containing early Iron Age pottery and animal bone. The top layer was dark brown crumbly loam, up to 0.48 m thick, containing a mixture of pottery including sherds of ACC type and 3rd- to 4th-century AD Romano-British wares, animal bone and three Romano-British nails.

Cut features in the western end

Several trenches were dug in the western end of the hillfort interior (Fig. 6.11). This included trench H1 in the north-west corner, trenches H12 and H13 inside the western entrance, and trenches H3 and H11 in the south-west corner. Only trenches H3, H11 and H12 were found to contain features that could be dated to the early Iron Age and therefore associated with the primary use of the hillfort. The other features found in these trenches related to the reuse of the hillfort during the Romano-British period and are described below.

Trench H3 partially cut into the rear of the phase 2 dump rampart (Figs 6.11 and 6.13). Preserved beneath the tail and overlying subsoil (7013) derived from natural weathering of the chalk bedrock was an old ground surface with buried soil 7012 consisting of mid-brown silty loam and containing finds of early Iron Age pottery, flint flakes and bone. The trench did not penetrate the rampart far enough to provide any evidence for the phase 1 post and fill rampart, but this relic soil layer is one of the few deposits in the interior that can be stratigraphically related to the phase 1 use of the hillfort.

Deposits 7014, 7015 and 7016 were all part of the phase 2 rampart structure, the first two being separate dumps of material presumably against the inner face of the eroded phase 1 rampart as described in trenches through the north-east breach. These consisted of brown loam with chalk fragments, while 7016 contained blocks of chalk and sarsen, some of which appear to have been set as a low retaining wall for 7014 and 7015. Again this is similar to the evidence from rampart trench R1. Towards the northern end of trench H3 two postholes (7006 & 7010) were sealed by layer 7001, both containing Iron Age pottery within single unstratified fills of clay with chalk fragments. Details of these features can be found in Table 6.9.

Deposit 7001 comprised chalk fragments in a loam matrix up to 0.55 m thick across the entire trench from its northern end to the eroded rampart. It contained residual Iron Age pottery together with late 4th-century Romano-British coins and pottery. This deposit could have been a layer dumped behind the eroding ramparts during the late Romano-British period, or be evidence for cultivation or occupation at that time.

Deposits 7005, 7008, 7003/4 and 7002 represent various phases of erosion of the rampart. The first two contain Romano-British pottery including some 1st- to 3rd-century samian ware in 7008. The later two deposits contained residual Romano-British pottery, 3rd- and 4th-century coins and post-medieval pottery and glass and consisted of friable loams with few chalk fragments.

To the north, in line with the western entrance to the hillfort, pit 11003 was located in trench H12 together with several more enigmatic features (Fig. 6.20, Plate 6.7).

Spread over the eastern part of the trench, sealing the bedrock and beneath the ploughsoil, was a deposit of brown loam (11007) up to 0.12 m thick, which could represent a buried topsoil formed over the chalk (Fig. 6.20). There were no finds within it and this deposit was not encountered anywhere else in the hillfort interior. Approximately marking the western edge of deposit 11007 was a poorly defined gully (11016), most obvious to the north where it was 1.2 m wide but fading away to the south. To the east of the gully, and perhaps associated with it, were four cut features which are difficult to interpret, three of which (11014, 11005 and 11012) cut through buried soil 11007. Details of these cut features and three postholes from nearby trench 11 dating to the Iron Age can be found in Table 6.9).

Pit 11003 in the west of trench H12 was oval in plan measuring 3 m maximum, 0.86 m deep with steep sides and a flat bottom, which was sealed by a grey powdery deposit about 0.3 m deep (11018) containing early Iron Age pottery, animal bone, charcoal, a bone gouge and five stone sling shots. Overlying this in one side of the pit was a black humic deposit containing pottery of a similar date range, animal bone daub and charcoal (11017). These two layers appear to represent burning *in situ*, or at least the dumping of burnt material from nearby. The majority of the pit was then filled with a dump of brown loam with chalk rubble (11013) with a few sherds of early Iron Age pottery. The final fill was a bowl-shaped deposit of crumbly dark loam 0.2 m thick in the centre and containing many finds including early Iron Age and Romano-British pottery, two late 4th-century Romano-British copper alloy coins, two Romano-British iron nails and animal bone (11004).

Romano-British reuse of the hillfort

In addition to the dump or ploughsoil 7001 in trench H3 and the Romano-British deposits in the upper fills of many of the earlier features, a few features of this date were also found within the hillfort. This group comprised a posthole in trench H1, a pit in trench H11 (possibly a reused Iron Age pit) and an oven in trench H13. These were all located towards the western end, nearest to the Romano-British enclosure outside the hillfort (Fig. 6.11).

Trench H1 was located in the north-west of the hillfort interior to investigate an area of large amorphous geophysical anomalies, which turned out to be deposits of clay with flint. Several possible features were excavated although the only non-natural one was a posthole (6005), oval in plan although complicated by possible recutting (approximately 0.5 m by 1 m), and just over 1 m deep (Fig. 6.12). Stratigraphy suggests a post of 0.24 m diameter was inserted 0.6 m into the hole containing clay, which was then packed with more clay. The post rotted *in situ* despite an apparent attempt to prevent it from doing so by packing clay around it. The only finds associated with this feature were a single seed husk and three sherds of Romano-British pottery in the postpipe.

Cut feature 10504 in trench H11 was a pit roughly oval in plan, 2.18 m north to south and 2.7 m east to west, 1.4 m deep with steep sides and a flat bottom (Fig. 6.19). The bottom fill was chalk rubble with lenses of dark clay (10513), laid horizontally about 0.4 m thick containing early Iron Age pottery. Sealing this was a thick layer of less chalky loam (10510), up to 0.58 m thick, with a disturbed upper surface containing similar pottery to the layer below. The pit and these two layers are probably early Iron Age the same as all of the other pits within the hillfort although the remaining stratigraphy suggests reuse of this pit as part of the Romano-British activity on the hilltop. The disturbed and unusual nature of the stratigraphy in the upper half of the pit suggests the possibility of it operating as a large posthole with layers 10509 and 10508 acting as post-packing. The former contained early Iron Age pottery including ACC type sherds and three Romano-British nails. The post

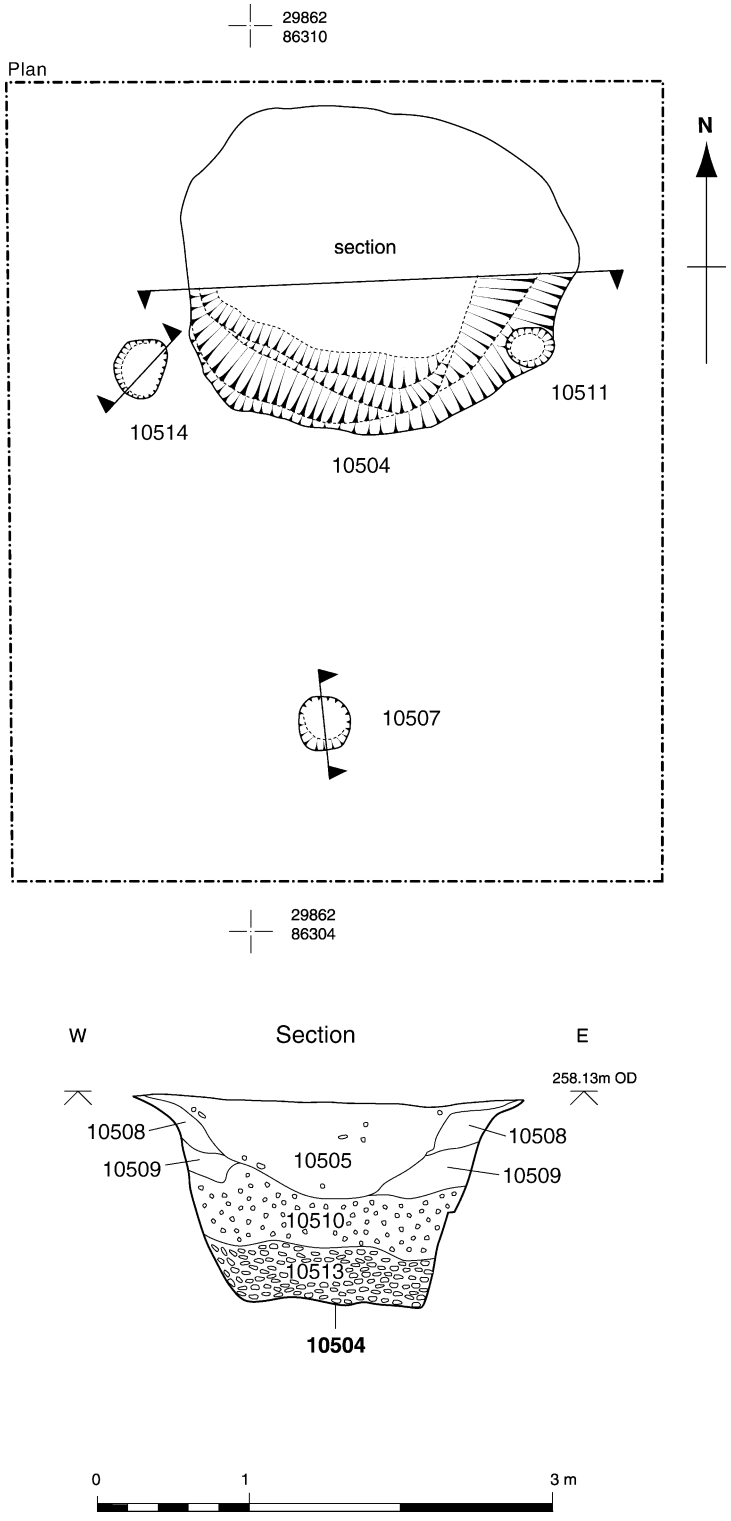


Figure 6.19 Plan of trench H11 and section of pit 10504 and postholes.

could have been up to 0.8 m in diameter, which was removed and the void filled with brown loam (10505) with few chalk fragments incorporating a range of finds including late Bronze Age, early Iron Age pottery, animal bone, a Romano-British nail and part of a chalk loomweight.

Cut feature 11504/11507 in trench H13 is interpreted as a small Romano-British oven (or corndrier) with a circular stoke-hole to the south and an elongated flue to the north (Fig. 6.21). The flue, 11507, was approximately 0.4 m deep and irregular in section but with a ledge surviving around most of its outer edge. The bottom fill, 11508,

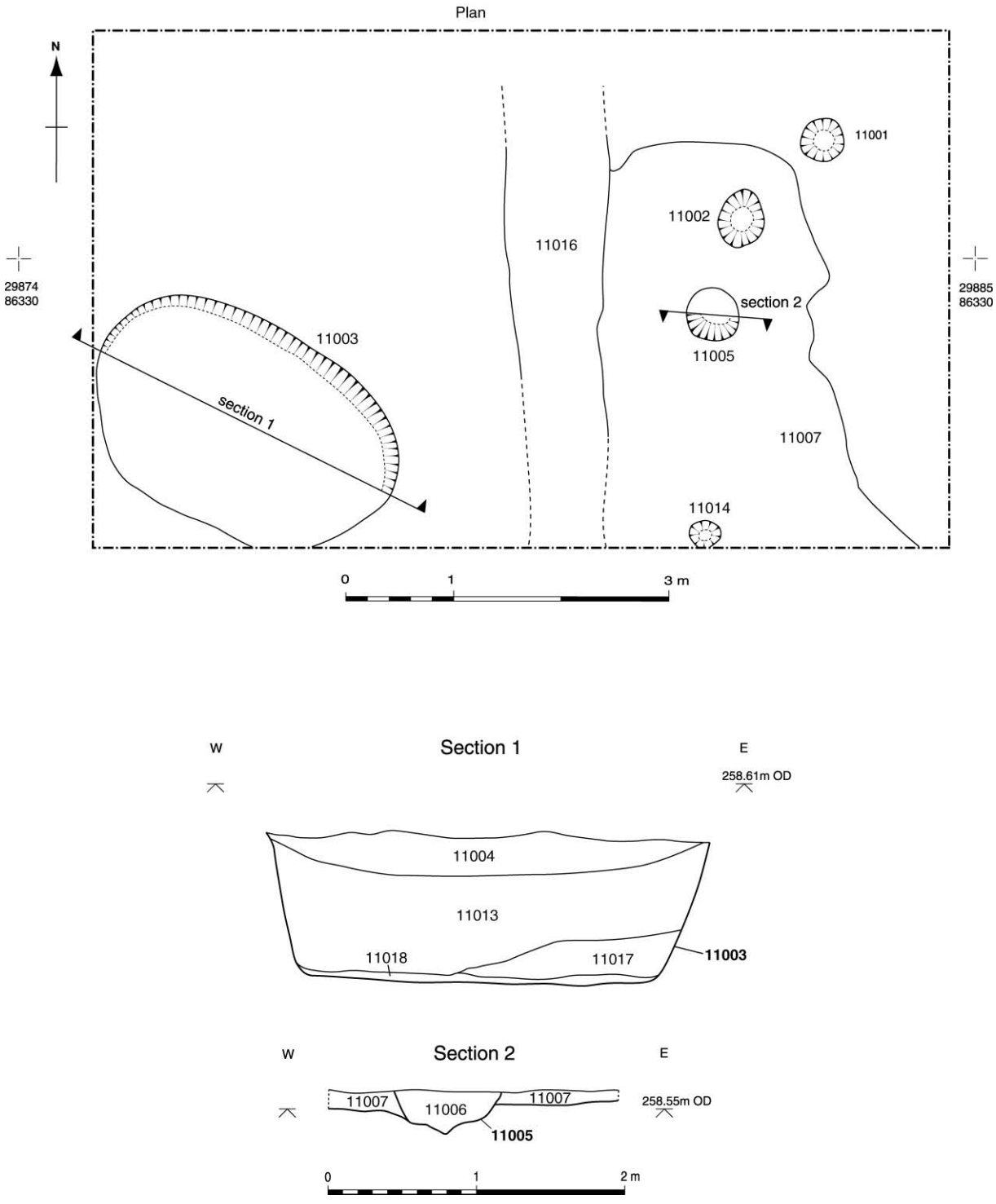


Figure 6.20 Plan of trench H12 and sections of pits 11003 and 11005.

consisted of a fine powdery brown deposit up to 0.2 m deep containing Romano-British pottery, iron nails and animal bones. Within this layer was a thin lens of black material (11509), 0.04 m maximum thickness, containing Romano-British pottery and animal bone. The top fill, 11506, was yellowish clayey loam containing many finds including pottery of mid 3rd- to 4th-century date AD, Romano-British nails and glass and animal bone. The stoke-hole, 11504, contained a single fill of brown loam with some chalk rubble (11505), sealing 11506, and a large number of Romano-British artefacts including 20 late 4th-century AD copper alloy coins, iron cleats and nails, an unidentified iron object, pottery, glass, and carbonised cereal grains. The tops of fills 11505 and especially 11506 contained many pieces of burnt sarsen stone.

Plate 6.7 Trench H12, showing pit 11003 with layers and burning (Copyright: Gary Lock).

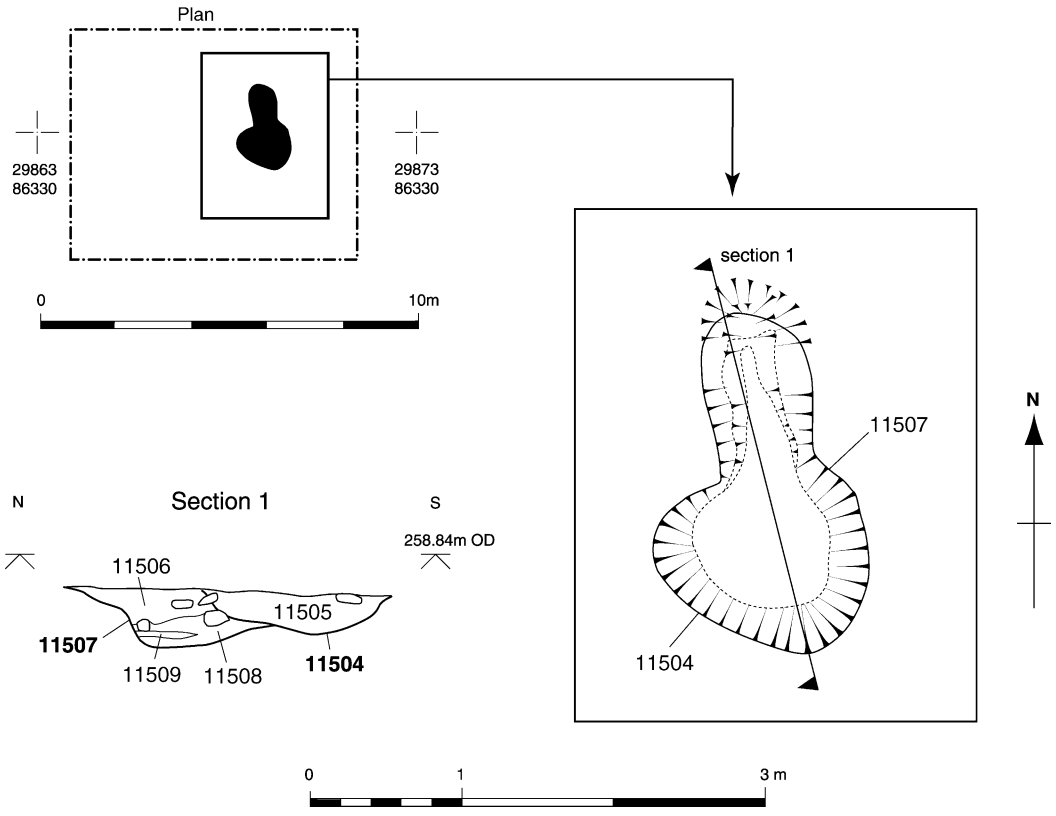


Figure 6.21 Plan of trench H13 and section of Romano-British oven or corndrier.

Later activity in the hillfort interior

The cut features in all trenches were sealed with a layer of ploughsoil overlain by topsoil. Both these layers contained Romano-British coins and other miscellaneous pieces of metal objects; a mixture of pottery including late Bronze Age, Iron Age, Romano-British, medieval and post-medieval wares, including glass, clay pipes, and worked stone.

The known ridge and furrow in the interior of the hillfort testifies to later medieval or post-medieval use at least in the part of the hillfort interior belonging to the Woolstone estate, but this is unlikely to have accounted for all the plough truncation and disturbance observed. The interior of the hillfort was ploughed as recently as 1956 by the tenant farmer who was cultivating the site and sowing rape and turnips. This was done without the knowledge of the Ministry of Works, who subsequently caused the site to be shallow ploughed and grassland re-established. This accounts for the 20th-century finds in the ploughsoil.

DISCUSSION

The origins of the hillfort

There is evidence for Neolithic and early Bronze Age activity on the hilltop, but there is no evidence for the Uffington hillfort developing out of Bronze Age occupation of the site. The origins of Uffington Castle must be sought through parallels and contacts with other local sites, including hillforts, and its setting within the landscape context. This area of the Downs has seen a series of relevant excavations over the last three decades, including hillforts, of which there are a number within a 20 km radius of Uffington. These include Rams Hill (Bradley and Ellison 1975; Needham and Ambers 1994), and Segsbury Camp to the east (Lock and Gosden 1997; 1998), Alfred's Castle to the south (Gosden and Lock 1999; 2000; Lock and Gosden 2001), and Liddington Castle to the south-west (Hirst and Rahtz 1996). There is also the unexcavated, and comparatively unknown, site of Hardwell Camp just to the west of White Horse Hill. This group should also include contemporary and earlier settlements such as Tower Hill (this volume) and Weathercock Hill (Bowden *et al.* 1991–3b), as well as Romano-British occupation represented by the excavated villas at Maddle Farm (Gaffney and Tingle 1989) and Starveall Farm (Phillips 1979–80). The chronology of this later prehistoric and Romano-British landscape is shown in Figure 14.6, and is considered in the discussion of these monuments in the wider landscape in Chapter 14.

Early occupation of the hilltop

A number of finds were recovered during these excavations from the old ground surface where it is preserved beneath the ramparts and counterscarp bank and residually within later contexts which attest to earlier activity on the site of the hillfort. These include flints and sherds of pottery. The flint recovered from this ground surface was generally only undated flakes, but if the residual flints found within later features from the area as a whole are considered, there is sufficient evidence to suggest, possibly sporadic, domestic occupation during the Neolithic and possibly into the early Bronze Age. The early pottery is datable to the Beaker period, and the transitional period from true Biconical Urns to middle Bronze Age Deverel-Rimbury. No features were recorded from the area of the hillfort which could be related to this activity, but this together with the material from the barrows discussed earlier in the volume and the barrows themselves, provide clear evidence for the hilltop having been in use at this time.

There is no evidence for the use of the hilltop through most of the late Bronze Age period, although the OSL dates for the White Horse suggest that it is possible that it may have been constructed during that time (Chapter 5). Use of the hilltop fort begins at the very end of the period with the transition to the early Iron Age (8th to 7th centuries BC). The linear ditch to the south of the hillfort (see Chapter 7), and the earliest features within the hillfort and the ramparts themselves are likely to have been built then. A more refined chronology is not possible which inevitably leaves details of sequence unresolved, for example, the relationship between the linear ditch and the hillfort. There is considerable evidence from elsewhere on the chalk downlands for linear ditches predating hillforts (Bradley and Ellison 1975), and for these being an influencing factor in their location. Closer to hand, the first phase ramparts at Segsbury Camp were preceded by a late Bronze Age ditched enclosure which could be situated at the northern end of a linear ditch running from the south (Lock and Gosden 1997; 1998). The presence of a small number of late Bronze Age sherds from features within the hillfort, suggest there could have been limited activity at the site before the construction of the first phase ramparts.

The Iron Age enclosure

Defining the enclosure – the ramparts

Only a fairly small proportion of the hillfort ramparts were investigated as part of this project, the sequence revealed in all trenches was consistent and matched well with the findings of Martin-Atkins' work in the 1850s. Given that these investigations together sampled all quarters of the circuit, it can be assumed that the sequence of timber-framed post and fill rampart followed by low dump rampart with sarsen facing was typical of the whole circuit. This sequence is also supported by the excavations into the blocked eastern entrance where the timber gateway through the wall-and-fill rampart was eventually dismantled and the gap filled by the dump

rampart. A reconstruction drawing showing the hillfort ramparts, the ditches and the counterscarp bank in each phase is shown in Figure 6.22.

This sequence is not an unusual one. Avery (1993, vol. 1, 106) shows that in general wall-and-fill ramparts predate dump ramparts. The former was usually abandoned for a considerable time before a new wave of hillfort construction began using the latter style of rampart. These new enclosures were often on new sites, a pronounced change in the location of hillforts having occurred possibly reflecting a change in the focus of activity during the interval, but this was not always the case as there are many examples known where older hillforts were reused and remodelled several times. From his study of most of the British hillfort sites published to that time, Avery concluded that the wall-and-fill style ramparts date broadly to 800–500 BC, though some may have been constructed earlier or still occupied later. This was followed by a period of about a century in which hillforts were abandoned and no new ones were built. Hillforts with dump ramparts were then built during the period from around 400 BC to the Roman conquest, most reaching their floruit about 200 BC. Of the three groups of forts with dump ramparts defined by Avery, Uffington would appear to fit in the second group of short lived low dumps, often reusing abandoned wall-and-fill sites.

Phase 1: Timber-framed wall-and-fill rampart

This type of rampart is known from a number of other British hillforts, frequently as the primary phase of enclosure on the site. According to Avery (ibid., 28) this style of rampart characteristically had two rows of upright timbers, set in individual postholes, as at Uffington. The front uprights are usually, at least roughly, paired with the rear uprights. This is true of the postholes from the south-east section at Uffington, but not so of those in the north-east section where the front row is only paired with every second one of the uprights in the rear row. The smaller shallower postholes in the rear row are unpaired with any in the front row. There is considerable variation in the detail of construction of this type of rampart between sites, but it is unusual for this sort of variation within a single phase of construction to be observed.

Of the 17 examples of this type of rampart identified by Avery, pairing of the front and rear timbers, however roughly, was found to be the rule. Whether pairing existed or not was unclear in four cases from the excavation records and only in two cases were irregularities comparable to those at Uffington found. These were Wandlebury, Cambridgeshire (Hartley 1957) and Ivinghoe Beacon, Buckinghamshire (Cotton and Frere 1968).

The hillfort at Wandlebury is multivallate in its final form, and the first phase apparently consisted of a single circuit of timber-framed wall-and-fill rampart as at Uffington. However, when the construction is examined in more detail, it is clear that it is quite different. There is no evidence of pairing of the front and rear uprights at Wandlebury, in contrast to every second rear upright being paired with a front row one at Uffington suggesting the two rows to be supported by the transverse timbers. At Wandlebury occasional intermediate timbers had to be inserted to provide support. There is no evidence of comparable timbers at Uffington.

Ivinghoe Beacon may be the closest parallel for the variable construction within a single circuit of rampart found at Uffington, and may also hint at the practical considerations and construction methods that would have contributed to its final shape. The ramparts at Ivinghoe Beacon were badly damaged but the postholes of the timber-framed rampart remained. The surviving postpipes suggested the use of timbers similar in size to those used at Uffington, but the pattern of postholes varied within and between the two excavated sections. In the main excavated area of Ivinghoe Beacon the posts were roughly paired, but most irregularly spaced, at roughly 2.1 m apart longitudinally with a transverse distance of 1.8–2.1 m between the rows. At the western extent of the excavated area this narrowed to 0.9 m with 3.9–4.8 m between the slightly offset pairs. The excavators explained this irregularity by the rampart having been built to accommodate some pre-existing structure. Avery (1993, vol. 2, 198) questioned this and suggested that a backing bank for the timber frame existed at this point, and that the structure predated the rampart and was not an obstacle to its construction.

In the small trench excavated through the south-eastern part of the rampart at Ivinghoe, postholes were again found to indicate a timber frame. The transverse distance at the western side of the trench was around 3.6 m, much greater than the widest part of the northern rampart. The longitudinal spacing of the rear row was around 2 m in this part of the rampart, but only one posthole could be found in the front row despite extensive searching. This is clearly analogous to the situation in the north-east breach at Uffington, where despite careful excavation the rear postholes did not always pair with one in the front row, even roughly.

It is clear from Ivinghoe that there could be a large variation in the structure of hillfort ramparts even within one phase and that Uffington is not unusual in this respect. The pattern at Ivinghoe Beacon was attributed to inefficiency on the part of the builders, but it may be more a reflection of the manner in which some hillforts were built. It seems likely that the ramparts were built over a period of time with some sections being completed before another was begun, as suggested by the interpretation of gang construction at the unfinished hillfort at Ladle Hill, Hants (Piggott 1931b). The projects were so massive and time consuming that a hillfort could not be built

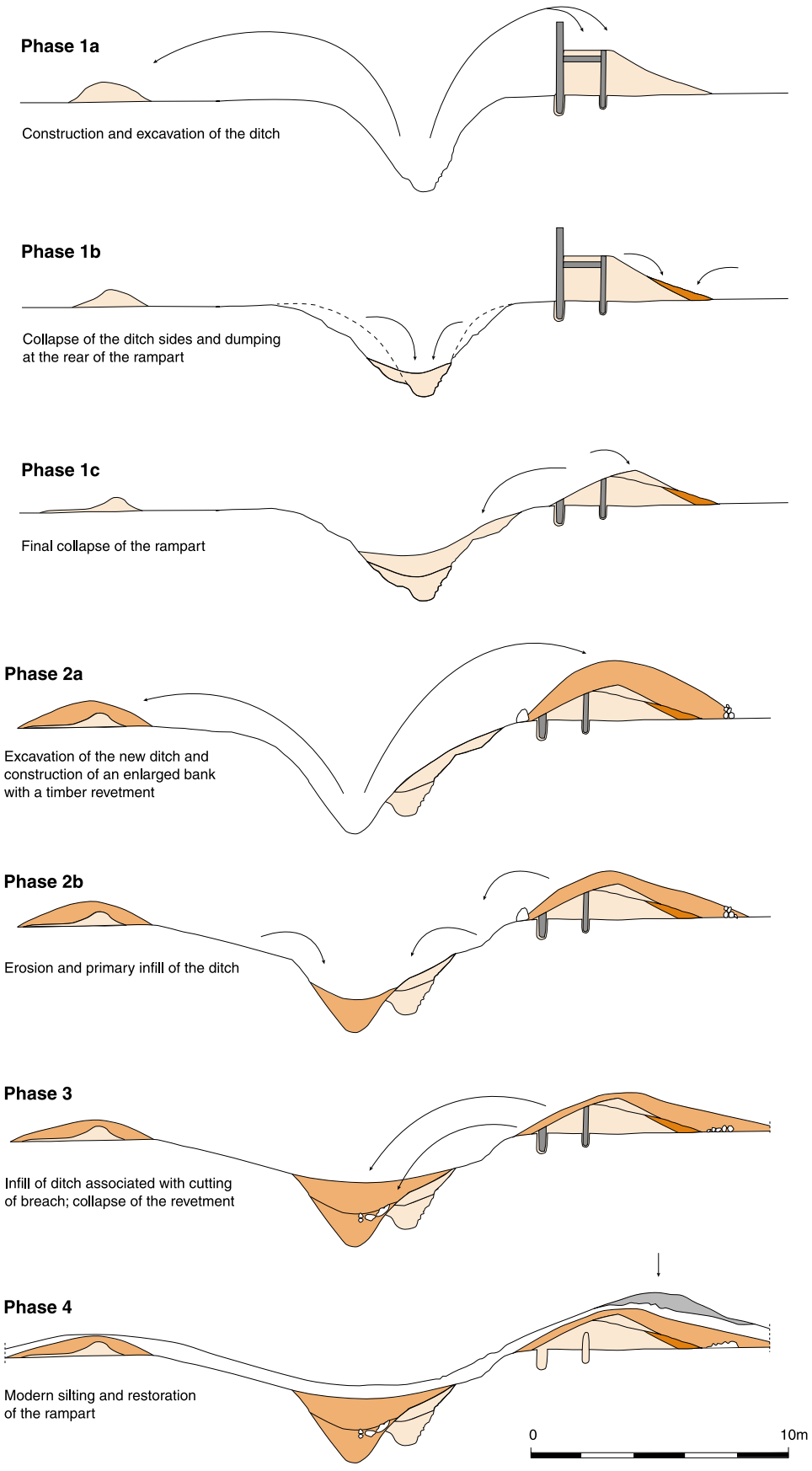


Figure 6.22 Reconstruction drawing of the hillfort ramparts, ditches and counterscarp bank for each phase of construction.

in a single season of work. Winter conditions on these exposed sites would have halted construction and it would have made sense to complete as much of one section as possible during one season rather than leaving the whole part unfinished when winter set in. Other factors may have seen varying techniques being employed during different seasons of work depending on the materials and the work-force available at the time. So there would have been evolution of ideas of the best construction methods within the original concept, and different techniques being used in response to particular topographic features.

It is unclear how the timber frame would have worked in either case. Theoretically timber-framed ramparts would have horizontal timbering at several levels, with anchors joining paired front and rear uprights, and the rear uprights buried in the bank material. The horizontal timbers joined to them would take the stress thrown on the front timbers by the backfill. This could not have been how unpaired rear uprights functioned, unless in some way they were paired with forward longitudinal timbers or uprights not set in postholes. Evidence of horizontal timbering has been reported from very few excavated sections of hillfort rampart, though they must have existed. It is only in rare cases such as at Blewburton Hill (Harding 1976, 138), where the chalk had set solidly about the timbers before they had decayed, leaving cavities in the bank material in the shape of the timbers. These timbers suggested a use other than purely as anchors between paired uprights. It is possible that they also functioned as anchors between longitudinal timbers attached to the uprights, as suggested above. Avery (1993, 32) suggested the Blewburton horizontal timbers may have functioned to merely inhibit the development of failure surfaces within the bank material, but if this was the sole function of the horizontal timbers it is unclear why such solidly set rear upright timbers were required. Given the material and effort which had obviously gone into the construction of the rear row of timber uprights it seems likely that they were considered an essential part of the structure and are likely to have been connected to other timbers of the frame.

Phase 2: Dump rampart with retaining kerbs

The timber-framed rampart was followed by remodelling with a dump rampart. This was contained front and rear by a chalk and sarsen block kerb to prevent spreading of the rampart into the ditch or the interior of the fort. The kerbing distinguishes this dump rampart from some other similar dumps, and it can be paralleled. St Catherine's Hill, Winchester (Hawkes *et al.* 1930; Hawkes 1976) is an example, together with the closer ones of Alfred's Castle and Segsbury Camp. Piggott visited the small hillfort known as Alfred's Castle in 1929 and found that the rampart was originally faced with sarsen boulders like those at Uffington. Several of these were still *in situ* with many others in the ditch, though it is known from historical references that sarsen stones were removed from the enclosure for use in the construction of Lord Craven's house in nearby Ashdown Park (Cotton 1960, 44). Elias Ashmole writing in *Antiquities of Berkshire* in 1719 notes that 'the camp at Ashbury Park [Alfred's Castle] had almost been destroyed by digging of Sarsden stones'. Excavations there in 1998, 1999 and 2000 as part of the Hillforts of the Ridgeway Project by the University of Oxford, have shown that the rampart structure is quite different to Uffington (Gosden and Lock 1999; 2000; Lock and Gosden 2001). Rows of sarsen stones several courses high form the core of the rampart, rather than simply facing as suggested by Piggott. As part of the same project, excavations at Segsbury Camp in 1997 have recorded sarsen blocks in the ditch fill, and also evidence for them being incorporated within the construction of the rampart. The rampart sequence at Segsbury was more complex than the proposed two phase solution at Uffington. It probably did not include a wall-and-fill rampart but a series of minor rebuilds and extensions starting with two phases of timber front faces with revetted chalk banks behind. The final phase was a massive dump rampart with a rear revetting wall of sarsens stacked two to three courses high (Lock and Gosden 1998).

The danger of relying on parallels as the basis of claiming cultural norms is that differences often seem to be more usual. This is certainly the case in this area as already suggested by the evidence from Alfred's Castle and Segsbury and is reinforced further by the well known site of Rams Hill (Bradley and Ellison 1975) which lies between Segsbury Camp and Uffington Castle, though it is closer to the latter (Fig. 1.1).

The situation is much more complex at Rams Hill, with three succeeding enclosures separated by periods of abandonment, and dating to the later Bronze Age, Iron Age and Romano-British periods. The nature of the final enclosure is not well understood, but it is rectilinear and clearly not a hillfort. The first phase of the inner enclosure is an early example of a single circuit of timber-framed wall-and-fill rampart. Recent revision of the original radiocarbon dates has placed this phase of enclosure at Rams Hill in the 12th century BC (Needham and Ambers 1994). The enclosure was made with a stone-faced dump rampart with an outer flat bottomed, steep sided ditch. This was succeeded by another phase involving the cutting back of the eroded earlier stone faced dump rampart to let in a timber frame, similar to that used in the first phase of the hillfort at Uffington but considerably earlier (Fig. 14.1). Partial scrub regeneration and erosion or levelling of this rampart occurred before the enclosure was renewed with a double palisade sited in the ditch fill and refurbishment of the entrances. Another period of abandonment of the enclosure for settlement and partial scrub regeneration followed before a larger area of the hilltop was enclosed with a new rampart in the 7th century BC, possibly contemporary with

the hillfort at Uffington. Pottery recovered from the outer ditch of this enclosure in an earlier excavation (Piggott and Piggott 1940), has been shown to be contemporaneous with All Cannings Cross pottery, though possibly a little later (Bradley and Ellison 1975, 112). This is comparable to pottery recovered from the third phase of the earlier enclosure at Rams Hill and to that from the phase 1 activity at Uffington.

Located to the west of Uffington, Liddington Castle is of considerable interest, not least because of a series of poorly understood and dated linear features within close proximity to the site. Liddington was the scene of limited excavations in 1976 (Hirst and Rahtz 1996) and although the rampart and ditch were not completely sectioned, the early phase rampart seems to be timber revetted, and dated to the late Bronze Age and Iron Age transition by small amounts of All Cannings Cross type pottery. This was replaced by a dump rampart together with the blocking of the original western entrance. The associated pottery for this phase is not as distinctive as the earlier material although it suggests this took place during the 5th century BC and the site could have been abandoned not long afterwards.

The original aim of trench H4 at Uffington was to establish the existence of an eastern entrance rather than to gain a complete plan. Even so, it was shown to have been a timber gateway passage through the phase 1 wall-and-fill rampart rather than a simple blocking of the entrance gap. The Uffington eastern gateway was eventually dismantled and replaced by the dump rampart. A full interpretation is impossible without an overall plan although some points can be made.

The main components of the gateway were large paired posts, at least 0.8 m in diameter, set into postpits averaging 1.25 m in diameter and 1 m deep. The south-eastern postpit of the four excavated appears to have caused structural problems and was recut at least once with an earlier one being packed with chalk and then recut. The gateway corridor continues beneath the dump rampart and probably formed a passage extending at least to the front face of the wall-and-fill rampart, which could have been a minimum of another 6 m based on the plan shown in Figure 6.2. Assuming equal spacing, this would give another set of postpits before the set in the rampart front face. The gateposts creating the entrance corridor were accompanied by slots and small postholes for timber revetting of the passageway connecting the gateposts. Several other small postholes were part of this construction whose function is not clear but could have been stabilising support posts for the main gateposts. Two timber structures represented by arcs of postholes connected the inner part of the gateway corridor with the box rampart forming raised platforms. The areas beneath the platforms were some kind of room, perhaps a guard chamber with a view into the entrance corridor to monitor access. The platforms could have been part of a bridge over the entrance that connected with a walkway around the top of the rampart circuit. Plate 6.8 is a reconstruction

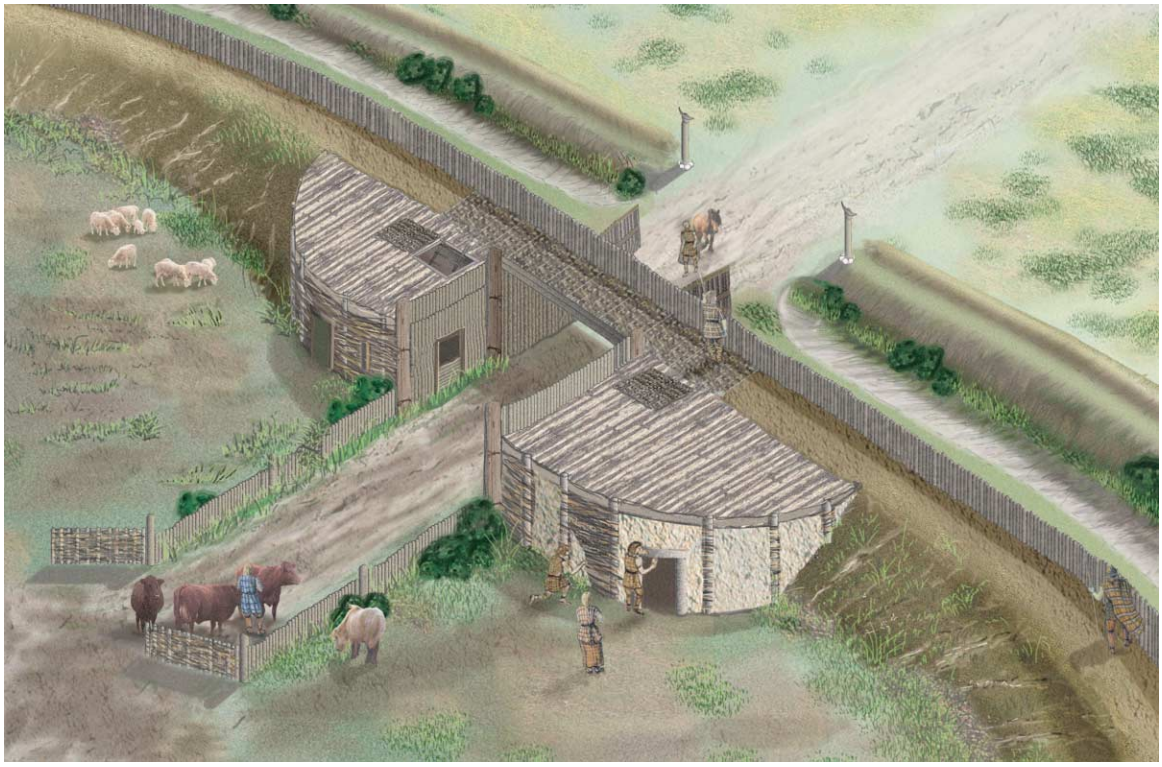


Plate 6.8 Image of the phase 1 entrance before blocking, presenting a possible reconstruction of the gatehouses and ramparts in the earlier Iron Age (Drawn by Mel Costello).

drawing of the suggested construction of the phase 1 gateway, encompassing the results and interpretations discussed.

According to Forde-Johnston (1976) simple gap entrances with passages have been overshadowed by discussion of more complex later entrances with inturns, out-turns and outworks. Based on earthwork evidence at least, simple gap entrances are, in fact, typical of univallate hillforts and account for 85–90% of them in his survey. Upon excavation, unsurprisingly, variations on the passage theme become apparent and only two need be cited here to demonstrate general similarity but difference of detail. The eastern entrance at Danebury in period 1 had inner and outer gateposts creating a passage about 4 m wide and 13–14 m long through the rampart (Cunliffe 1984, 30). Revetting slots ran between the posts although there were no intermediary pairs of postholes between the inner and outer ones. The passage is long because the outer gateposts are positioned on the outer edge of the ditch so that the revetting wall also seems to have blocked off the ends of the ditches. The outer gateposts show at least three rebuilds and are dated to the 6th century BC. Eastwards along the Ridgeway and closer to Uffington both in distance and gate design, the western entrance at Blewburton Hill has a very similar plan in its second phase (Harding 1976, fig. 5). At that site, four pairs of large postholes, although not equally spaced, form a passage through the rampart gap about 4 m wide and 10 m long, and as at Uffington several of the postholes have been recut suggesting replacement of the posts. At both Blewburton and Uffington, and almost all other entrance excavations, there is no evidence of the actual gates other than postholes and it is assumed that they stood either at both ends of the passage or, perhaps, just at one end. The iron pivot ring found at Hembury in Devon (Liddell 1935) is one of the few known examples of evidence for gate fixing, although the lack of such evidence at Uffington is not surprising as the posts were removed and the gate dismantled.

Evidence for the dismantling of the phase 1 gate shows some of the gateposts being removed and the pits deliberately filled with chalk rubble. Large sarsen stones were incorporated into the top fill possibly to stabilise the ground surface before the building of the dump rampart. The phase 2 rampart dumps consisted of a variety of materials probably dug from different areas around the entrance. Fresh chalk, perhaps from the digging of the enlarged phase 2 ditch, and the removal of the phase 1 entrance causeway, was dumped together with loams containing little chalk rubble and pottery presumably dug from the surface nearby. Incorporated within the dumps were some remaining posts, or at least their stumps, from the phase 1 rampart.

The detailed phasing of the sequence represented in trench H4 based on pottery raises interesting issues. A considerable amount of pottery came from these contexts, a large proportion being ACC style, and none later than the early Iron Age, probably 7th century BC. Some is not problematic being in secure phase 1 contexts dating the construction of the wall-and-fill rampart. A large number of sherds, however, are redeposited within phase 2 dump rampart material. As there is no other dating evidence for the phase 2 rampart this provides an unhelpful *terminus post quem* of the 7th century. It is generally accepted that dump ramparts started around the 4th century (Avery 1993; Cunliffe 1991), and it could be significant that three or four of the interior pits contain sherds possibly of this early middle Iron Age date. As detailed in the pottery report, evidence suggests initial heavy use of the site in the 8th and 7th centuries BC, no use during the 6th and 5th, small-scale reuse in the 4th and then no further use through the rest of the Iron Age. This offers few alternative interpretations of the rampart sequence. Either the second phase dump rampart could be much earlier than the generally accepted 4th-century beginnings, or the massive constructional works involved in the remodelling of the ramparts could be of the 4th century but little contemporaneous cultural material was deposited and none was found during these excavations. It also seems that minimal activity within the interior was associated with these works, although it could be argued that the possible reuse of three from ten earlier pits, the excavated sample, is significant.

The redeposited pottery also prompts questions of interpretation. One view would suggest that the sherds were unintentionally redeposited from their context of initial deposition, possibly from the fill of the first phase ditch which had accumulated to a considerable depth by the time of the building of the second rampart. Alternatively, it is possible that Uffington was not occupied as a settlement but provided a ritual focus for ceremonies linking back to ancestors and to the past (Barrett 1999). This would infer that the redeposited pottery was not just arbitrarily dug up with dump material somewhere near the blocked entrance as a product of earlier occupation. Rather, it was intentionally kept over a period of time, perhaps within Uffington Castle or elsewhere, and then deposited because it was significantly older material. Much of it was All Cannings Cross type pottery which supports this argument because of its distinctive decoration compared to contemporary and later wares, and because it may have been several centuries old by the time of building the phase 2 rampart. These points are reinforced in the pottery report where the possible ritual connections of ACC pottery are discussed together with its recently recognised connections with middens and the presence of some refired sherds in the blocked entrance area. This phenomenon of older pottery being incorporated into rampart construction has been recognised elsewhere. At Danebury pottery of the 8th to 7th centuries BC was found within a rampart built in the 5th century (Cunliffe and Poole 1991, vol. 2, 318).

Nothing is known of the western entrance other than the earthwork evidence. It is probable, however, that the outworks visible today are an enhancement added with the building of the phase 2 dump rampart. It can be seen on the earthwork plan that the outworks are the enhanced counterscarp bank which loops around the end of the large phase 2 ditch to connect with the dump rampart and create an entrance passage about 37 m long. The phase 1 western gateway is completely unknown but could have mirrored the eastern entrance on the line of the elongated passageway still visible today. Again using Forde-Johnson's survey (1976), the final design is an unusual one for univallate hillforts and is much more common as an element within the complex entrances of multivallate designs. The site fits only with difficulty into Cunliffe's concept of 'developed' hillforts (Cunliffe 1991, 352), which began from the 4th century. While Uffington has the required blocked entrance, an enhanced surviving entrance and remodelled ramparts, on the present evidence the interior occupation does not appear to have reached the required density to fit the model.

The phenomenon of blocked entrances is one that appears to be widespread in Wessex hillforts (ibid.) although it has received little discussion. As is the case at Uffington, many hillforts in their first phase had two entrances, often opposing, one of which became blocked as part of a later re-design of the ramparts. Discussing this area of the Downs as part of the Rams Hill landscape, it has been noted (Bradley and Ellison 1975, fig. 6.6) that both Uffington Castle and Liddington Camp may sit astride linear ditches. Bradley suggested that by the late Bronze and early Iron Age transition, of the 8th and 7th centuries, linear ditches demarcated economic and social units of land. The hillforts commanded this system by being placed on the boundaries with an entrance facing out into two different units thus being able to monitor movement from one to another. Consequently, when the economic and social system changed so one entrance was blocked. The 1995 excavations of the linear ditch south of Uffington (Chapter 7) suggest that it predates the Ridgeway at that point and remained as a partially open ditch until into the Romano-British period. This raises the possibility that a pre-Romano-British trackway ran through the two entrances of the hillfort. Possible evidence for this is the surface excavated at the southern end of trench H2. Such a trackway need not have been associated with movement controlled by economic interests but with movement in and out of the enclosure organised to gain maximum impact from the features within and elsewhere on the hilltop. As a ceremonial and ritual complex the impression gained from approaching it and moving through it would have been an important part of the experience, and a part of the social structuring of space (Chapman 2000).

With the blocking of the eastern entrance, possibly in the 4th century BC, the spatial dynamics of the hilltop changed. The Ridgeway must have changed direction, not being able to go south of the hillfort along its current route because of the still open linear ditch, it probably went northwards between the hillfort and the White Horse. This route has also been suggested by computer simulation studies to model east-west movement over the Downs (discussed more fully in Chapter 7: Bell and Lock 2000). The way space was negotiated by individuals within the enclosure would also have undergone change as a result of the blocking of the eastern entrance. Again, there has been little discussion of the implications of blocking an entrance, although Cunliffe (1995, 3.2.2) suggested an interpretation of the changes in the early and late phases of Danebury based on a left and right storage and occupation split on either side of the main road through the site. This was dependant upon the functional interpretation of features such as pits, post-built structures and houses and their dating to the early and late phases, a situation peculiar to the size of the excavated sample at Danebury.

In contrast to Danebury, at Uffington although some of the internal features may be contemporary with the remodelling of the ramparts, none of them continued in use after this event. The ramparts appear to have been rebuilt, and the eastern entrance blocked, in order to enclose an area which on present evidence does not appear to have contained much in terms of structures. At nearby Rams Hill, Bradley contrasts the low-key occupation within the enclosure with the labour intensive refurbishment of the ramparts (Bradley and Ellison, 1975) and this seems to have been taken to an extreme in phase 2 at Uffington. Similar attention to ramparts has been noticed at Maiden Castle, where Sharples (1991, 260) suggested that their construction was an almost continual process over 300 years. The rampart at Segsbury (Lock and Gosden 1998) also shows evidence for a long sequence of frequent small changes with only occasional major redesigning. This all suggests that ramparts, and working on their appearance, may have held a significance beyond the purely pragmatic, perhaps tied in with social identity and statements of social status.

Phases 3 and 4: Remodelling of the ramparts

The breaches in the ramparts and infilling of the ditches may be of Romano-British date as discussed below, and the phase 4 reconstruction shown on Figure 6.22, reflects the modern silting and restoration of the ramparts.

Using the enclosure – the interior

Any discussion of the activities carried out within Uffington Castle during the Iron Age must be based upon the very small sample of interior excavation and the geophysical survey results. It has to be stressed that the excavated evidence covered only 2% of the interior of the hillfort and that the geophysical survey may not have revealed all

features within the area. It is possible too that some more ephemeral features have been destroyed by centuries of ploughing, leaving only the evidence of the deeper pits and post settings. The excavated evidence, however, does infer that social practices being carried out within the hillfort during the Iron Age have left relatively few traces in the archaeological record. The dating evidence suggests the majority of activity in the interior belong to a single and perhaps fairly short-lived phase, during the 7th and possible 8th centuries BC associated with the building of the phase 1 box rampart. There is a small amount of pottery from within the upper levels of three or four early pits dating to the 4th century BC which is presumably associated with the building of the phase 2 rampart although there is no direct evidence for this.

As shown (*cf* Figs 6.10 and 6.11), the excavated sample does not suggest a densely occupied interior, although the estimate of the overall density of cut features was based on the geophysics, as the majority of excavation trenches were located on specific geophysical anomalies. The results of the geophysics indicated a sparse distribution of pits across most of the interior with possible concentrations. Due to the early date of this activity, structural evidence of occupation would not necessarily be expected and it would not be valid to compare occupation densities with developed middle Iron Age hillforts, although in terms of a local sequence comparison with nearby hillforts is illuminating. Of particular interest is the identification of roundhouses at both Segsbury and Liddington, the former in association with dense areas of intercutting pits mostly of middle Iron Age date. The differences in density are reinforced by the 1994 excavation results at Uffington, based on the first geophysical survey, where trenches H1, H2 and H3, an excavated area of 330.5 m^2, contained very few Iron Age cut features, that is, only two postholes between them. However, the geophysical results do retain a bias towards larger features, especially pits. At both Segsbury and Uffington, excavation revealed postholes that were not seen by the geophysical survey, for example the 4- or 6-post structure in trench H10 discussed above. Conversely it can be seen (Fig. 6.8, area D and Fig. 6.10), that the Uffington geophysics was able to identify some postholes with the suggestion of at least three possible 4- or 6-post structures in the south-western corner.

The evidence for the use of the ten Uffington pits excavated, fits the general pattern of a variety of material culture being incorporated into their final fills with very little, if any, direct evidence for their primary use. This is a small sample and therefore it is not possible to extract large-scale patterns of use, and consequently interpretation could range from simple disposal of domestic refuse to ritual deposition (Hill 1995) although the two should not be seen as mutually exclusive. Pits 8006 and 8506 both contained heaped material with pottery on their bases, 9002 a loomweight on its base and 8004 a dog burial. Whilst these may represent domestic rubbish placed in pits, they could equally well be votive offerings placed on the bases of pits before their final filling as suggested by Cunliffe (1992).

There are at least 16 postholes within the interior excavated areas, excluding the blocked entrance trench, and this is again a small sample, but non-functional interpretations may be appropriate. Most of the postholes show evidence for the intentional removal of the posts and the recut postholes of the 4- or 6-post structure suggest at least one rebuild. Considering that the total period of early use may only be about 150 years this suggests a relatively short period *in situ* for each post, a constant and regular reworking of the structures within the enclosure.

In his discussion of Maiden Castle, Dorset, Sharples (1991, 257) identified the defining characteristics of Wessex hillforts as, firstly defences, secondly enhanced grain storage capacity, thirdly density of settlement, and fourthly organisation of occupation into functionally specific areas. On the first, a more neutral term ramparts seem preferable to defences due to the lack of evidence to support this interpretation. The second, third and fourth features are perhaps more appropriate for middle Iron Age hillforts although in Cunliffe's chronological scheme (1991) earliest hilltop sites do show internal occupation and layout. It is difficult to equate the evidence from Uffington with grain storage as this is based on 4-post structures and with the apparent discrepancies with the geophysics and the small size of the excavated sample it is not possible to comment accurately on the organisation within areas. On the third point and it could be argued that the density of pits at Uffington is comparable with very early hilltop sites elsewhere, although Uffington is on the very periphery of the Wessex area and interpretation might be more appropriately related to the immediate landscape context.

An alternative explanation for Uffington Castle argues for it being a ceremonial centre, and a focus for ritual activities. As suggested by Barrett (1999), such rituals need not be separate from ordinary daily practices such as pot making and weaving, but the practices become part of the rituals themselves. This could account for many of the artefacts found within the fills of the pits which, although only small in number, do represent domestic activities. Fragments of quernstones, loomweights, a bone tool and a spindlewhorl account for most of the finds other than pottery. However, it is apparent that the pottery assemblages are small compared to the contents of pits at Wessex hillforts. It is significant to also note the lack of evidence for metalworking, and evidence for crop processing within the hillfort is small although not absent.

Central to this interpretation is the presence of the White Horse itself and although the OSL dating is relatively imprecise due to the possible range of the date (1380 to 550 BC), there is the possibility that it was constructed either just before or at about

the same time as the building of the phase 1 hillfort. Whichever came first, the White Horse or the hillfort, they would have influenced each other by their proximity contributing to mutual meaning and significance. This would have extended into the wider social arena and White Horse Hill can be seen as a focal point in the period spanning the end of the late Bronze Age into the early Iron Age. Recent aerial photographic work on the Downs to the south and in the Vale to the north has identified a series of farmstead enclosures that could be contemporary with the activity on the hilltop. Unenclosed settlements are less easy to identify but also exist within the area, for example as at Tower Hill. It has been suggested (Sharples 1991, 260) that Maiden Castle in its early phase operated as an expression of community status that was visited annually by large numbers of people who worked on the ramparts rather than lived permanently within them. The pits and occupation evidence within the enclosed area were the product of these periodic activities and of short but intense occupation.

It is possible, therefore, to conclude that Uffington Castle may not have been a domestic settlement occupied for extended periods of time but rather a location frequently revisited (Barrett 1999; Sharples 1991). It could have been a sacred place visited, perhaps, seasonally for social activities based on ceremony and ritual that incorporated the past into the present through the continual reuse and refurbishment of monuments. The status of the group was expressed within the social landscape through the physicality of the hillfort's ramparts and its proximity to the White Horse.

Different time scales could also have been part of the wider landscape picture. While the annual revisiting fits the Uffington pottery evidence for the 7th century BC it also suggests a hiatus during the 6th and 5th centuries and then smaller scale renewed interest in the site in the 4th century. It is possible that hillforts in this area display separate, different and discontinuous histories, that link to suggest a wider network of changing social contacts and actions. This behaviour incorporated and then re-incorporated hillforts as changing foci for the wider community.

Romano-British use

There is no evidence for activity within or around the hillfort from the early middle Iron Age, the 4th century BC, until the Romano-British period. There are isolated artefacts which are earlier in this period, but the majority of the evidence is for reuse late in the period, probably late 4th and early 5th centuries AD. The only structures belonging to this period are a single posthole, a reused pit and the small corndrier or oven located towards the centre of the hillfort. This latter showed considerable evidence of burning and contained charred grain, although it was considered quite small for a corndrier. Other than this the Romano-British evidence within the hillfort is mainly artefactual and covers a range of material including 63 copper alloy coins, a bronze armlet and brooch fragment, 96 iron nails, 39 hobnails and 5 boot cleats, a glass bead, 5 sherds of glass drinking vessels and an assemblage of pottery that represents a minimum of 338 vessels.

These artefacts are well spread across the interior of the site with no evidence of concentrations of activity. The majority of them come from topsoil and ploughsoil although a significant number do come from secure contexts including several layers of material eroded from the rampart in trench R3. Most of the excavated pits contained an upper concave layer of dark brown loam which included Romano-British artefacts and can be interpreted as a topsoil, or ploughsoil, filling earlier pits which may have existed as hollows. The only other context to contain Romano-British artefacts was the fill of the oven after its abandonment. This contained a high concentration of material including 20 coins, all of the glass sherds and an iron artefact of unknown function (Fig. 9.2.1).

The Romano-British evidence within the hillfort is limited but some interpretation is possible, especially when combined with the evidence for activity elsewhere on the hilltop. As with the Iron Age material, that of Romano-British date is ambiguous although it does suggest that the enclosure was not a settlement. Artefacts within the Romano-British topsoil on the upper parts of pits and within the eroding rampart material suggest either casual loss or intentional deposition over the entire interior of the enclosure, not necessarily within specific contexts but on the ground surface or in the topsoil. There is also the possibility that these deposits represent a Romano-British ploughsoil, which need not suggest occupation within the enclosure but, perhaps, limited occasional agricultural use as suggested by colluviation in the Manger. If this is the case, some of the material could have been deposited as manure.

It is uncertain whether the coins were a votive deposition or a dispersed hoard. Twenty coins came from the fill of the oven and several from the Romano-British topsoil capping pits, thus if dispersed from a hoard this must have occurred very soon after deposition. Given that there are difficulties interpreting the composition of the coin list, these could be either a casual or votive deposition. The Romano-British pottery assemblage is also unusual as there is very little earlier material, no fine wares and no amphorae. The assemblage consists almost entirely of local coarse wares, which could have been used for the transportation and consumption of food.

Elsewhere on the hilltop the evidence for Romano-British activity is equally intriguing and is discussed in a wider context later (Chapter 14) and is presented only in outline here. Both space and movement around the hilltop were completely restructured

compared to the early Iron Age monument although the evidence could suggest that the site was again used as a ritual focus despite the apparent gap of approximately 700 years. Such a hiatus in activity is difficult to understand, as presumably the Horse would have undergone regular scouring thus maintaining an importance which was never formalised by distinct ritual buildings or votive assemblages such as at Lowbury, Uley and Frilford. The enclosure outside the western entrance was constructed (see Chapter 7) and it is possible that the two breaches through the ramparts (phase 3, Fig. 6.22) are of this date also. This makes the whole hilltop more accessible by linking the hillfort interior to the Ridgeway through the south-eastern breach and to the White Horse via the north-eastern breach. The former giving long distance access as the linear ditch was filled by this time and the Ridgeway established on its present route, and the latter connecting the hillfort and White Horse as part of the complex imbued with significance based on its antiquity. Both the hillfort and the White Horse could have been as much as 1,000 years old by the late Romano-British period, and were already ancient monuments by that time. Burial also seems to form an important element within this complex with the long mound cemetery possibly being representative of many more burials on the hilltop. As noted the only unusual aspect of this cemetery compared to other local rural Romano-British cemeteries is the fact that it may have been placed within a prehistoric burial mound, and this could be a point of some significance.

It seems that after a gap of 700 years the hilltop regained its local importance as a sacred place, which may have been acted out through the socialisation of Scouring the Horse. The context of those activities had changed, however, as in the early Iron Age it may have been focused on the hillfort enclosure, the ramparts themselves and activities within that defined space which happened regularly as part of a social calendar. Romano-British activity was centred on burial and involved people moving around the hilltop, possibly also visiting the White Horse and the new enclosure to the west. The deposition of artefacts within the disused hillfort could be associated with the consumption of food and drink, whether intentional and votive or accidental breakage and loss, whether as part of formal ceremonies associated with the burial practices or as informal gatherings at any time of the year. Evidence for both the early Iron Age and Romano-British activity suggests it took place within busy agricultural landscapes where people were living and working nearby. Spanning these periods and connecting the two is the ever present past, changing perceptions of history and the understanding that the past and all that it represented was structured within the cultural and topographic components of the hilltop (Gosden and Lock 1998).

Plate 6.9 Earlier 20th-century visitors to the hillfort at the north-east breach through the ramparts (Copyright: Oxfordshire County Council).

Medieval and later use

The hillfort largely ceased to be a centre of activity after the late 4th century AD. Despite the view of many antiquarians that Uffington Castle may have been used by the Danes and subsequently taken by the Saxons during the Battle of Ashdown, there is no archaeological evidence for its use other than as a boundary marker during the Anglo-Saxon period. The boundary between the Anglo-Saxon estates of Uffington and Woolstone ran in through the south-east breach and out through the north-east one. The almost ploughed out remains of ridge-and-furrow cultivation in the interior of the hillfort can be seen to adhere to this boundary, which remained up to the 18th century, and it is likely that the ridge and furrow dates to a much later period than the original establishment of the boundary.

The hillfort came to be the scene of the periodic festivities associated with the scouring of the White Horse known as the 'Pastime', but it is not known when these began. This use of the hillfort is not recorded before 1755, but it is likely that it was being used before this date. Some of the undated features located within the interior may relate to this use of the area. However, the presence of exclusively early finds in most features suggest that most of these activities of the Pastimes, such as that described during 1857 (Hughes 1889), are likely to have been removed by late 20th-century ploughing.

During the early 20th century the hillfort was subjected to more frequent, though less intensive use, for various leisure activities (Plate 6.9). This use as a leisure resource continues up to the present day and has become more intensive as society has become increasingly affluent and mobile. This has resulted in some necessary restoration of features of the hillfort (phase 4, Fig. 6.22). The area of the Hill has also become increasingly formalised in recent decades as the whole hilltop is recognised as an important part of the country's heritage. The site has been taken into the Guardianship of English Heritage, and is managed by agreement between English Heritage and the National Trust.

The relationships between Uffington hillfort and the other monuments on the Hill, to the linear ditch and the nearby Romano-British enclosure are considered in the following chapter.