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The Lands of Ancient Lothian

Interpreting the Archaeology of the A1

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Chapter 3

Tracing time: Excavations at Knowes and Eweford East (3370–3190 BC)

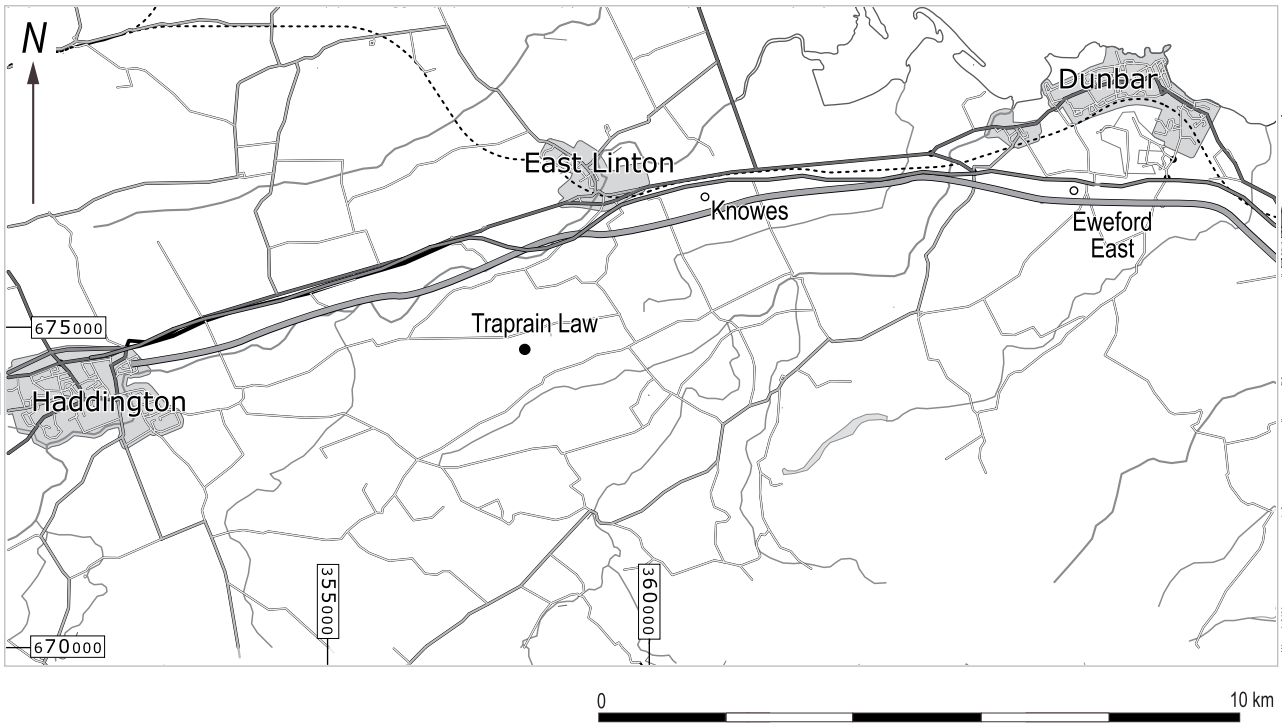
INGRID SHEARER and KIRSTEEN McLELLAN

Introduction

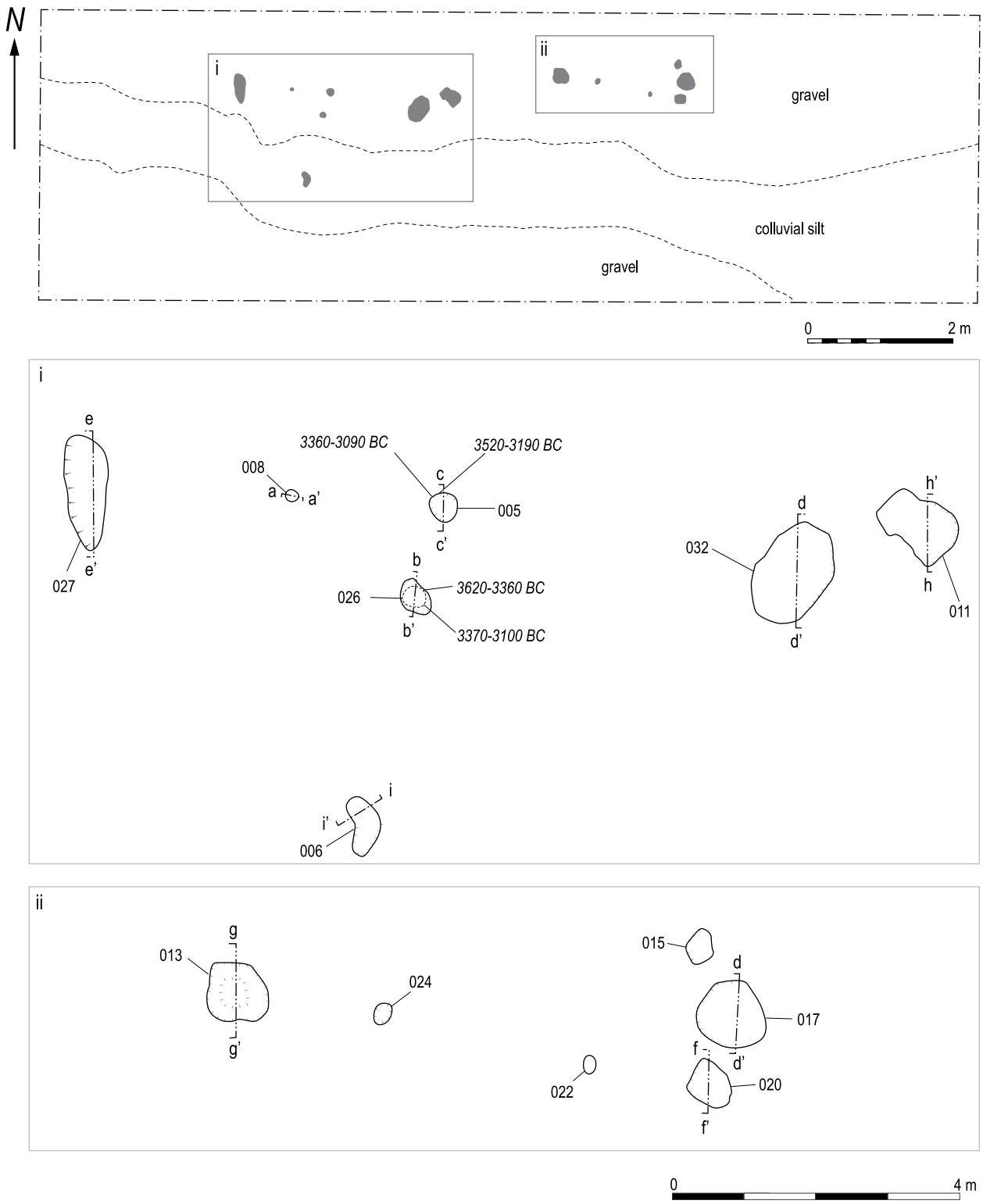
At Knowes, an alignment of pits was excavated that dated to the late fourth millennium BC, and at Eweford East, two pit alignments and a timber enclosure were discovered that dated to the third millennium BC (Figure 3.1). At both places, people's activities focused on defining and dividing space, in both linear and circular arrangements, for ceremonial or symbolic purposes. We argue that the acts that created these boundaries were as important as the spaces that they defined. These acts involved drawing in and deliberately incorporating material culture and structural materials into the fabric of the boundaries. We will examine the construction and use of these monuments and suggest what they might have represented to those who built and used them.

Knowes alignment of pits

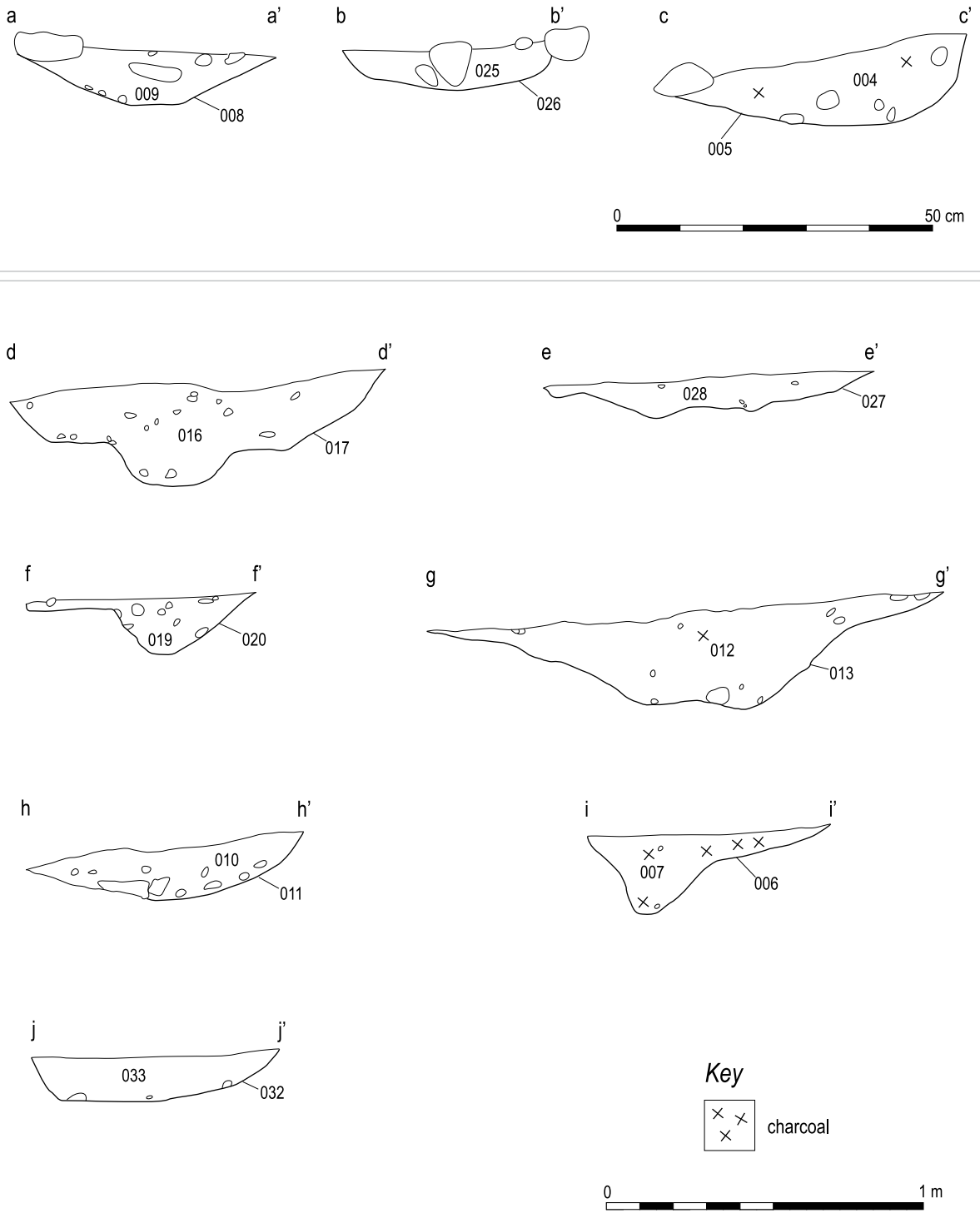
At Knowes Farm, a community or person living in the mid to late fourth millennium BC dug a rough line of 12 pits over a distance of 12m along level ground. At either end of the line, they grouped together several pits to form two small clusters (Figures 3.2 and 3.3). At the western end, they created three small, shallow pits (005), (026) and (008). They packed sherds from three heavily incised Impressed Ware vessels (Vessels 1–3; Sheridan, see Chapter 12 and Archive) into the pits, selecting sherds from one vessel (3) to place in all three pits (Figure 3.4). Not all of the sherds from the broken pots were put in the pits; the remainder may have been left where they were broken, or deposited elsewhere. The pot-packed pits were then filled them with deposits rich in charcoal. Two of the pits



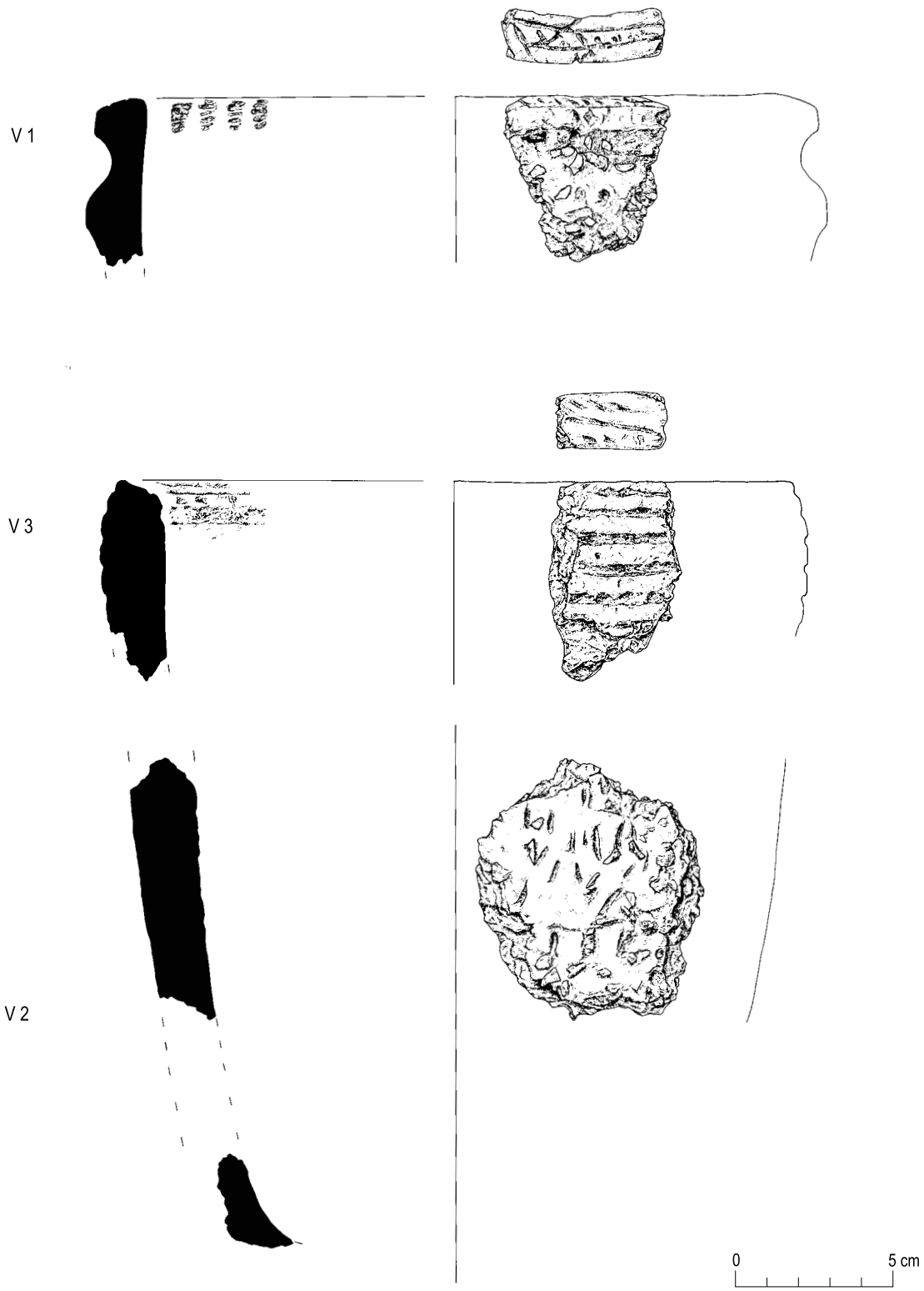
3.1 Map showing the locations of Knowes and Eweford East.



3.2 Plan of the excavated features at Knowes, showing radiocarbon dates obtained.



3.3 Sections through the pot-bearing features (upper panel) and other pits (lower panel) at Knowes.

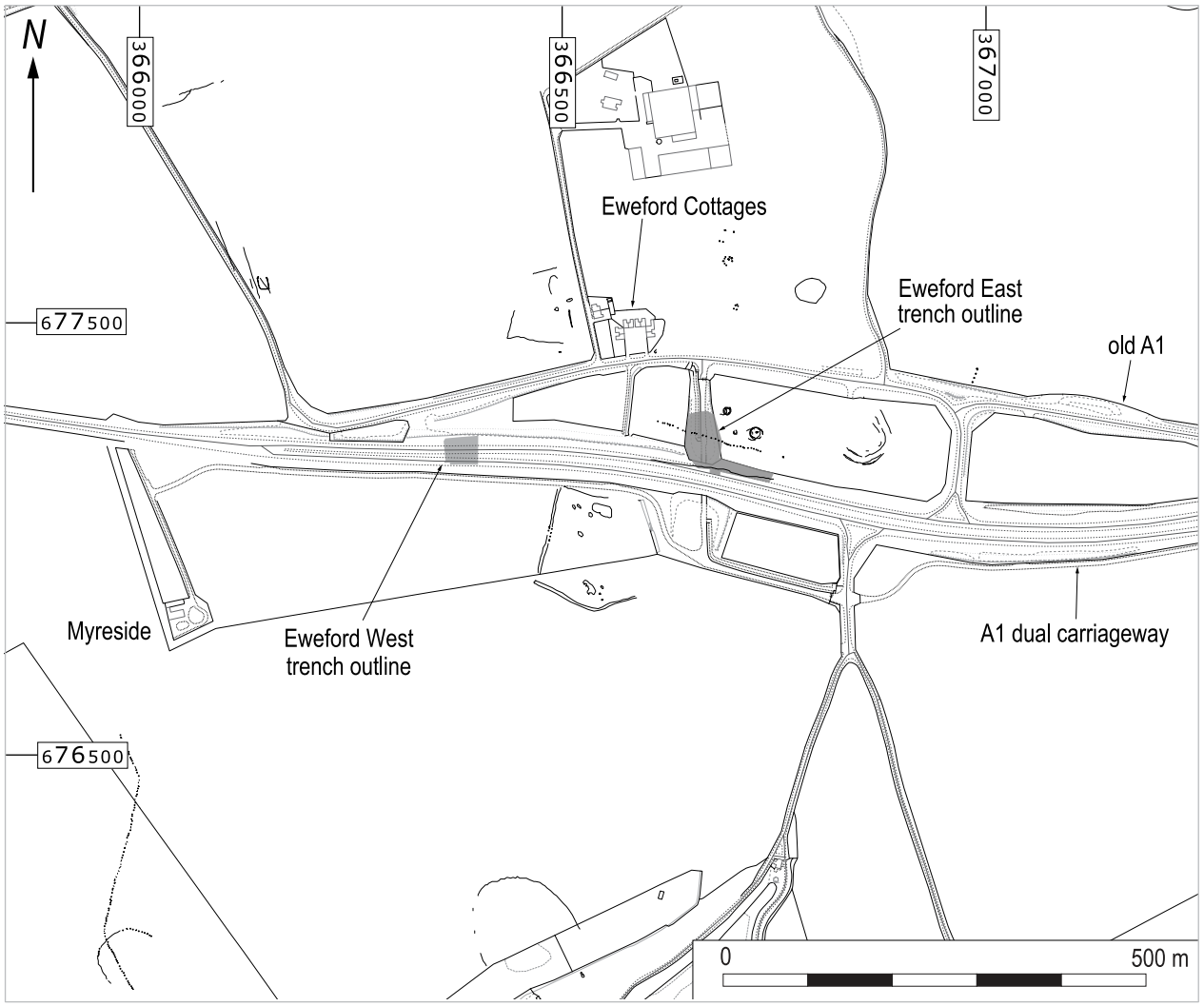


3.4 The pottery from Knowes.

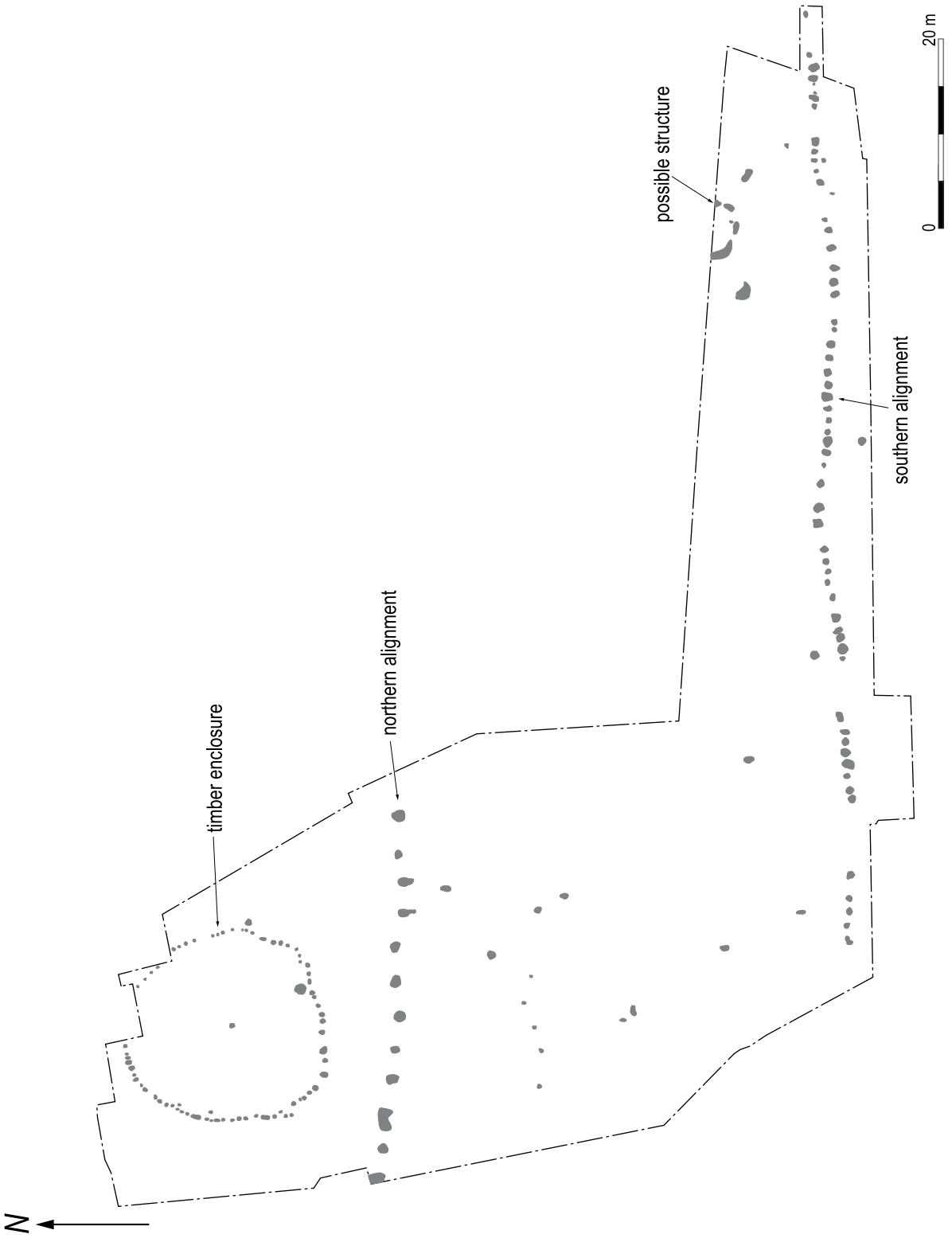
(005 and 026) contained charcoal from alder, birch, hazel, blackthorn, rose, cherry, willow and hazelnut shell, as well as oak (Miller and Ramsay, see Chapter 12 and Archive). In contrast, the third pit (008) contained mostly oak charcoal. Charcoal from two of the pits (005 and 026) produced a suite of radiocarbon dates ranging from 3620 BC to 3090 BC. Willow (*Salix*) and alder (*Alnus*) charcoal from the fill (025) of one pit dated to 3370–3100 BC and 3620–3360 BC respectively (SUERC-7524; SUERC-7525). Birch (*Betula*) and willow (*Salix*) from the fill (004) of another dated to 3360–3090 BC and 3520–3190 BC respectively (SUERC-7522; SUERC-7523) (see Figure 3.2 for the locations of the submitted samples). The range in the calibrated dates might suggest that wood of different ages was burnt in the hearths from which the fills derived.

At the opposite, eastern end of the alignment, another three pits (015), (017) and (020) formed a second small cluster. In contrast to the group of pits at the western end, the pits of the eastern cluster were filled with light brown, loose sandy silt, which may represent either deliberate backfilling of the features or sediment that washed into them when they were open. Palaeobotanical analysis identified tiny amounts of oak charcoal in them, but no other identifiable burnt material.

The remaining pits, which in effect linked the two clusters, were dug at fairly regular intervals along the alignment. Like the three pits forming the eastern cluster, these contained fairly clean, silty fills, all but one of which (024) contained small quantities of oak charcoal.



3.5 Map of the area around Eweford East, showing cropmarks based on aerial photograph transcriptions by the RCAHMS.



3.6 Plan of the excavated pit alignments and enclosure at Eweford East.

Whether any of the pits held posts is debatable. It is conceivable that the oak charcoal could have derived from the charred bases of posts, and was all that survived after the posts rotted and the holes silted up. However, the pits all had shallow, open profiles, with no evidence of packing or post-pipes. While plough truncation may have distorted the evidence, on balance it seems unlikely that they had ever held posts. The small amounts of charcoal in most of the pits may have floated or washed in along with the silty fills.

The three pits (005, 026 and 008) at the western end were treated in a strikingly different way from the others. Their contents – carefully distributed, freshly broken sherds of pottery along with a diverse range of charcoal – appear to have been carefully selected and deposited. While again it is possible that these pits held posts – the pot sherds could have served as packing material – it is more probable that the different kinds of charcoal they held came from a hearth or several burning events. The three pits were filled with material that came from other contexts: from pots that might have been used to serve and share food or drink, and from wood collected and burnt in fires. Both the pots and the wood may have been used at special social gatherings such as ceremonial events, or from everyday domestic contexts. Their careful selection and deposition in the pits at Knowes might have been a way of transferring those other contexts and other meanings to the alignment.

Eweford East pit alignments and enclosure

Excavations at Eweford East revealed three major groups of archaeological features – two parallel lines of post-holes, and a post-defined circular enclosure – in an area that had long been a focus for ceremony (Figure 3.5). Radiocarbon dates indicate that the site was a focus for activity over three phases, spanning perhaps several hundred years during the second half of the third millennium BC. The forms of the structures evoke a complex sequence of events that led to their creation. The features lay on a natural terrace, which sloped down gently to the east and south. To the west, the ground dropped away sharply to meet a canalised burn. The fourth millennium BC funerary monument at Eweford West, which saw intermittent ceremonial activity during the following three millennia, lay about 250m to the west (see Chapters 2, 4, 5 and 6).

Of the features that made up the two alignments and the enclosure, most of them contained convincing evidence (in the form of packing stones, post-pipes and ramps) for having held posts, although some did not. However, based on the consistency in form and depth of the features and their obvious coherence in plan, we are assuming for the purposes of this argument that all of them held posts, and that truncation had removed some of the evidence for this.

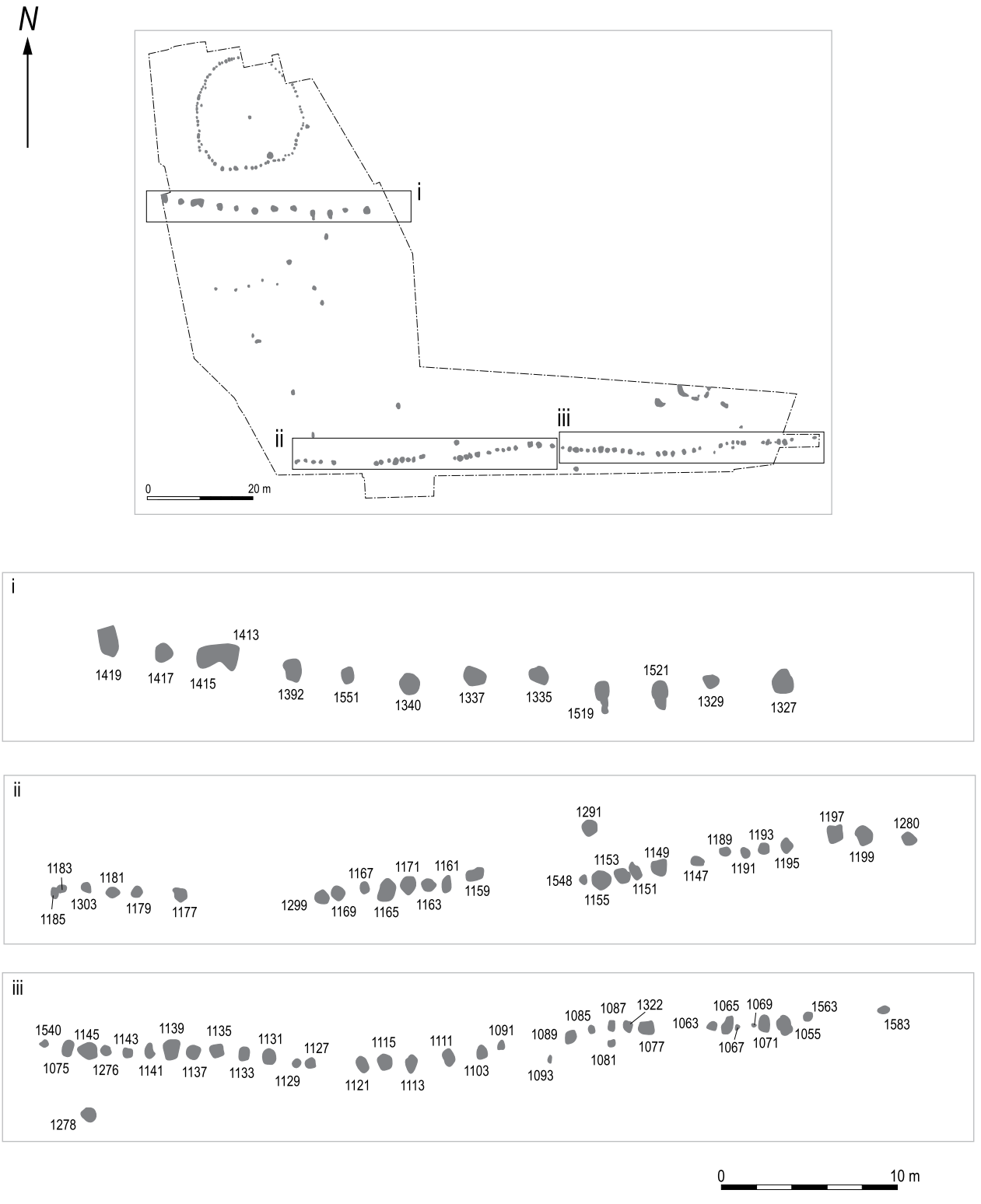
All of the post-holes contained charcoal, predominantly oak and hazel, and some of the charcoal from both pit alignments had been burnt long or intensively enough to turn to cinder (Miller and Ramsay, see Chapter 12 and Archive). The almost total absence of cereal grains and hazelnut shell has been taken to indicate that the charcoal derives from burnt structural remains. The relatively small amount of charcoal in each of the post-holes does not suggest that the bases of the posts charred *in situ*. Rather, we have interpreted the charcoal as indicating that the above-ground portions of the posts burnt where they stood; as the bases rotted and post-pipes formed, some of the charcoal from their burning washed into the post-holes.

Phase 1: Beginning the southern alignment

The excavation at Eweford East revealed a sinuous line of 62 pits, each up to 1.05m in diameter and 1.04m in depth, running approximately east/west (Figures 3.6 and 3.7). Samples from two features provided radiocarbon dates: at the eastern end of the alignment, willow (*Salix*) charcoal from the fill (1114) of one pit (1115) was dated to 2880–2580 BC (SUERC-5340); at the western end, hazel (*Corylus*) charcoal and willow (*Salix*) charcoal from the fill (1166) of another (1165) returned dates of 2470–2200 BC (SUERC-5344) and 2470–2230 BC (SUERC-5345) (see Figure 3.8). These dates, spanning a period of around 600 years, turned out to be the earliest and latest dates from all of the features forming the alignments and enclosure. The southern alignment, therefore, may have developed over many generations.

The first phase of activity created the southern alignment's eastern portion. A series of circular pits was dug, with the individual pits lying between 0.5m and 2m apart, to form short segments, each on a slightly different alignment from the others. Immediately, or at least within a matter of days, someone inserted upright timbers in the pits, set packing stones around them and backfilled the holes with the subsoil they had excavated. One pit (1087) contained silt at its base, suggesting that it had been left open to the elements for a longer period. Palaeobotanical analysis of the pit fills indicates that the posts were cut from oak.

Six of the pits contained post-pipes; the largest, in pit (1111), measured 0.60m in diameter, while the deepest (1120) in pit (1121) was 1.04m deep. The post-pipe fills were generally dark reddish- or greyish-brown in colour, with a higher silt component than the surrounding back-filled deposit. All the post-pipes were set against the northern side of the cut. The pits ranged from steep-sided cuts to shallow scoops, with both rounded and flattened



3.7 Plan of the northern and southern pit alignments.

bases (Figure 3.9 shows a selection of sections through the features).

The posts could potentially have reached up to two metres above the ground surface in height, based on the premise that a post would fall over if it stood more than three times the depth of the pit in which it was set (Speak and Burgess 1999, 106–7) (see text box 3.1). There was no evidence that the monument builders altered or re-cut the holes after setting the timbers. If oak posts survive for about 15 years for every 50 mm of their diameter (Wainwright 1971, 224–5), then the largest of the posts in the southern alignment may have stood for a *maximum* of 180 years.

When they backfilled the pits, the monument builders placed objects of stone, flint, chert and pottery into some of them (see Figure 3.10). Into pit (1077), they put 12 sherds and two fragments of finely made Grooved Ware pottery (SF 585), pieces that may have derived from the same vessel (Sheridan, see Chapter 12 and Archive). They distributed other abraded sherds, possibly also Grooved Ware, into around a quarter of the pits making up the eastern half of the southern alignment. Charred residues adhering to some of the sherds probably derive from food or liquid. Most of the pottery was found in the pits making up the eastern end of the alignment, but one segment (1127–1141) contained no artefacts at all (Figure 3.8).

Worked pieces of chert, flint and quartz were also found in some of the pits. Some of these may accidentally have slipped into holes as the pits' diggers penetrated the existing ground surfaces, including that surface associated with a scatter of Mesolithic material to the north of the enclosure (see Chapter 2); these ground surfaces were subsequently removed by ploughing.

Other objects in the southern alignment of pits included a late Neolithic 'chisel-type' grey flint arrowhead (Figure 3.10: SF 524) in the fill of pit (1171) (Saville, see Chapter 12 and Archive) and a flake from a broken, polished stone axe in the fill of pit (1276) (Figure 3.10: SF 774) (Saville, see Chapter 12 and Archive). The monument builders at Eweford East also placed cup-marked stones (McLaren,

3.1

How high were the posts at Eweford East?

Based on the size of the post-pipes at Eweford East, it seems likely that the timber posts were fairly substantial, reaching up to around 0.5m in diameter (see Figure 3.17). Oak is difficult to cut across the grain, and it takes considerable effort even to fell a large oak. The timber needs to be worked almost immediately after felling, as the seasoning process hardens the wood to the point where it is almost impossible to split or carve.

It is generally assumed that a post could have stood up to three times the height of its posthole depth, but this does not take into account the effects of earthen or stone-built external support. Material banked around the bases of posts (like that at Blackshouse Burn; see Lelong and Pollard 1998) could have significantly increased the height of the monument. Neither does the formula take into consideration the possible truncation of features by ploughing or other processes, which is likely to decrease the estimated height of the uprights. The 3:1 ratio can provide an indication of potential *minimum* supportable height, but it should be used with caution.

The best preserved post-holes at Eweford West lay in the southern alignment, measuring up to 1.04m deep. Using the 3:1 ratio, this would suggest that the posts stood to around three metres high. If even some of the posts in the southern alignment stood to this height, it would have been a substantial, visually imposing structure. Similarly, post-holes in the northern alignment reached depths of between 0.7 and 0.94m, again suggesting the potential for considerable height. The post-holes of the enclosure were much smaller and shallower than those comprising the alignments, suggesting that this structure was composed of shorter uprights that stood to 0.75m or perhaps higher, taking into account truncation. However, the posts were spaced much closer together and this may have helped give strength and rigidity to the structure, especially if hurdling linked the posts.

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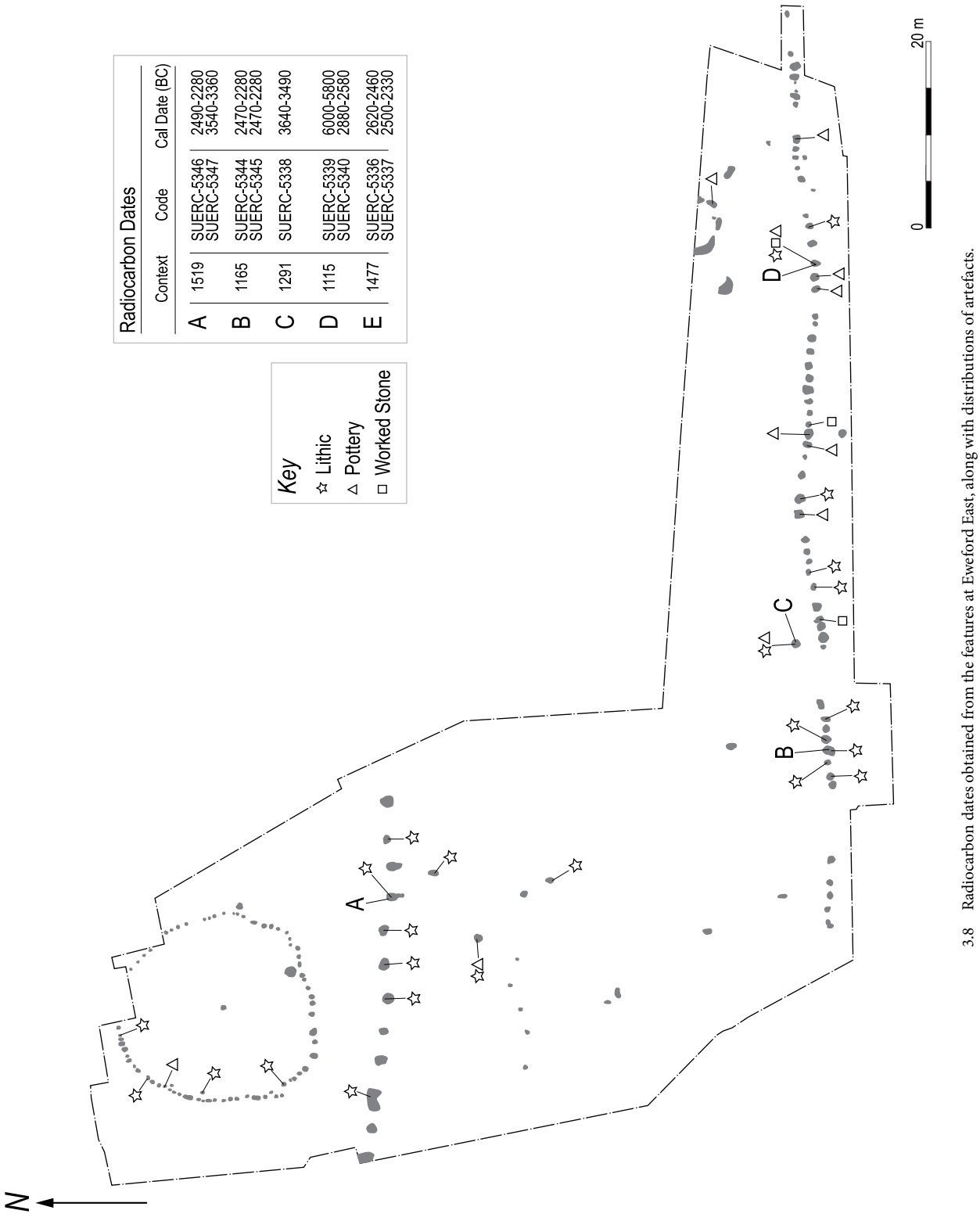
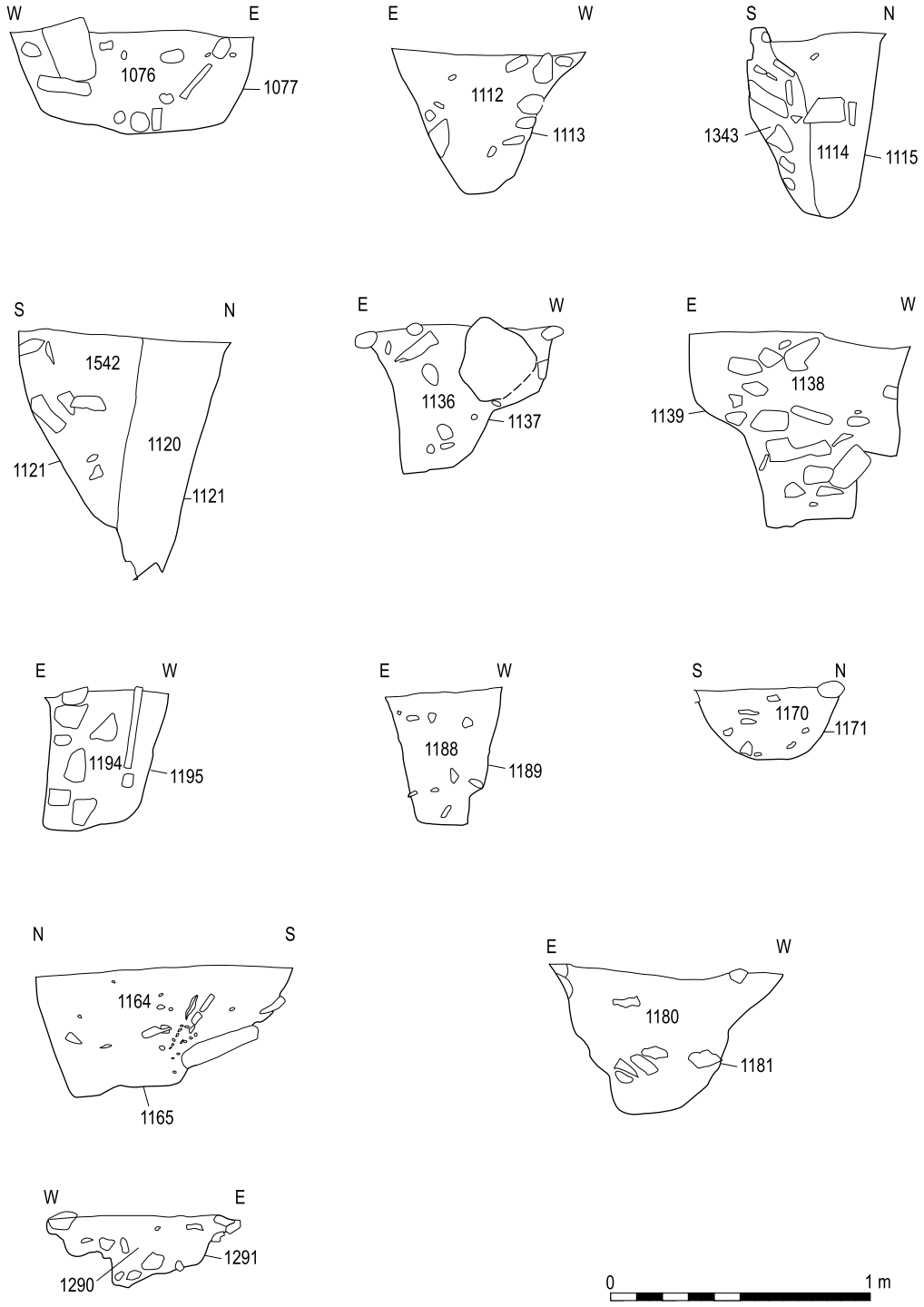


3.8 Radiocarbon dates obtained from the features at Eweford East, along with distributions of artefacts.



3.9 Sections through a selection of the pits in the southern alignment.

see Chapter 12 and Archive) into two pits – (1151)/(SF 583) and (1113)/(SF 584) – in the eastern half of the alignment (Figure 3.11). Both cup-marked stones lay in the upper parts of the fills and one (SF 583) was visible on the surface of the (albeit truncated) fill (1112), with the decorated side facing downwards.

The charcoal assemblage from the southern alignment comprised mainly oak, as well as hazel, willow and members of the rose family (blackthorn, cherry, rose and apple) (Figures 3.12 and 3.13). If, as we argue above, the charcoal derived from burning of the above-ground structural features, these may have consisted of oak posts linked with screens woven of hazel and willow. Charcoal from blackthorn and cherry species was particularly abundant in samples taken from the eastern half of the alignment. These plants may have been woven into the hurdling, integrated into the fabric of the monument to create a striking visual and tactile effect. The spiny branches and thorns would have formed a hostile physical barrier to animals or humans, perhaps discouraging access into, out of or around the monument. Alternatively, brushwood was set around the bases of the posts as kindling when they were fired.

The posts and putative wicker screens of the southern alignment were, we would argue, eventually destroyed by fire. If all were burnt, as the charcoal assemblage indicates, then they may have been deliberately set alight (see text box 3.2). If the branches of willow, hazel and rose family were used as kindling rather than forming structural screens, it does not necessarily mean that the symbolic associations of these species were less potent. Indeed, we might expect the builders to have shown a preference for other species such as birch or pine if their only consideration had been flammability.

It is possible that these burning events took place at night, and that they were intended to be dramatic, highly visible actions. The spectacle could have been prolonged, and even if a fire were started during daylight hours, it is likely to have extended into the night. Lighting the scrubby willow and hazel would not have been difficult,

3.2

Big smoke from small acorns

Estimating the size and age (at felling) of timbers used in oak structures is complicated by the way this species burns; charred material tends to flake off in thin plates along the grain, making it difficult to assess the curvature and density of the tree rings.

Of all the tree types native to Britain, oak is one of the hardest to set alight, and it needs particular attention to keep it aflame. Modern house fires, with all their attendant accelerants, can reach temperatures in excess of 1100 degrees Fahrenheit. Even in such circumstances, oak rafters will retain their integrity; the timbers will be charred and brittle but are rarely reduced to a pile of ash.

To set fire to a line of oak timbers in the open air would have required determination and dedication on the part of several people. Hazel and willow hurdling would have caught quickly, but would have burned out much faster than the oak which, once alight, burns slowly but intensely. The hazel and oak charcoal may derive from kindling rather than hurdling, which was perhaps built up around the bases of the posts. We have no evidence at Eweford East for the deliberate removal or destruction of the posts after they were burnt, so we can assume that they stood for a while as lines of charred, blackened uprights.

At both Eweford East and West, palaeo-environmental evidence suggests that people were relying heavily on oak and deliberately avoiding other tall tree types (there is virtually no birch, alder or pine wood charocal from the sites), which would have been readily available and significantly easier to fell, work and burn. The fact that people chose to use a timber that resisted felling and burning in so many ceremonial monuments that were eventually set alight suggests that they considered oak a significant component of these monuments for other, less prosaic reasons.

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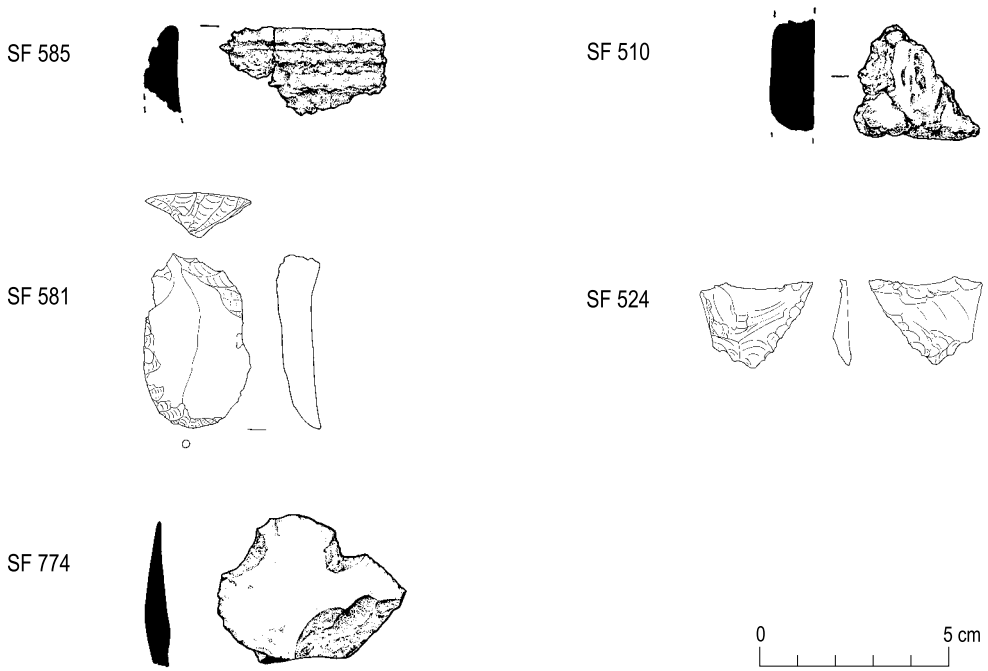


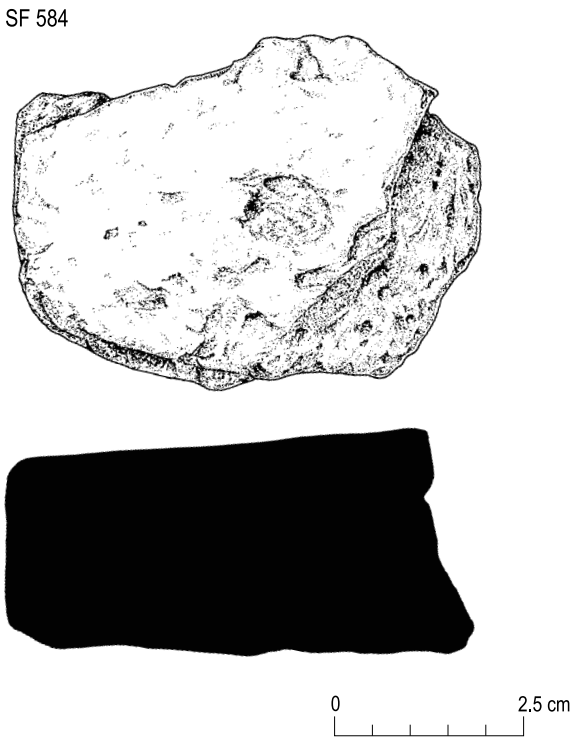
3.10 Grooved Ware sherds and stone tools from Eweford East.

and once the fire took hold the oak timbers would have begun to smoulder and eventually flame. The oak would have burnt slowly but intensely, and it may even still have been glowing the following day. Once the embers had died, the charred, blackened stumps were left to slowly rot away, but the memories of their location and significance would have been fixed in the collective consciousness by the fiery spectacle.

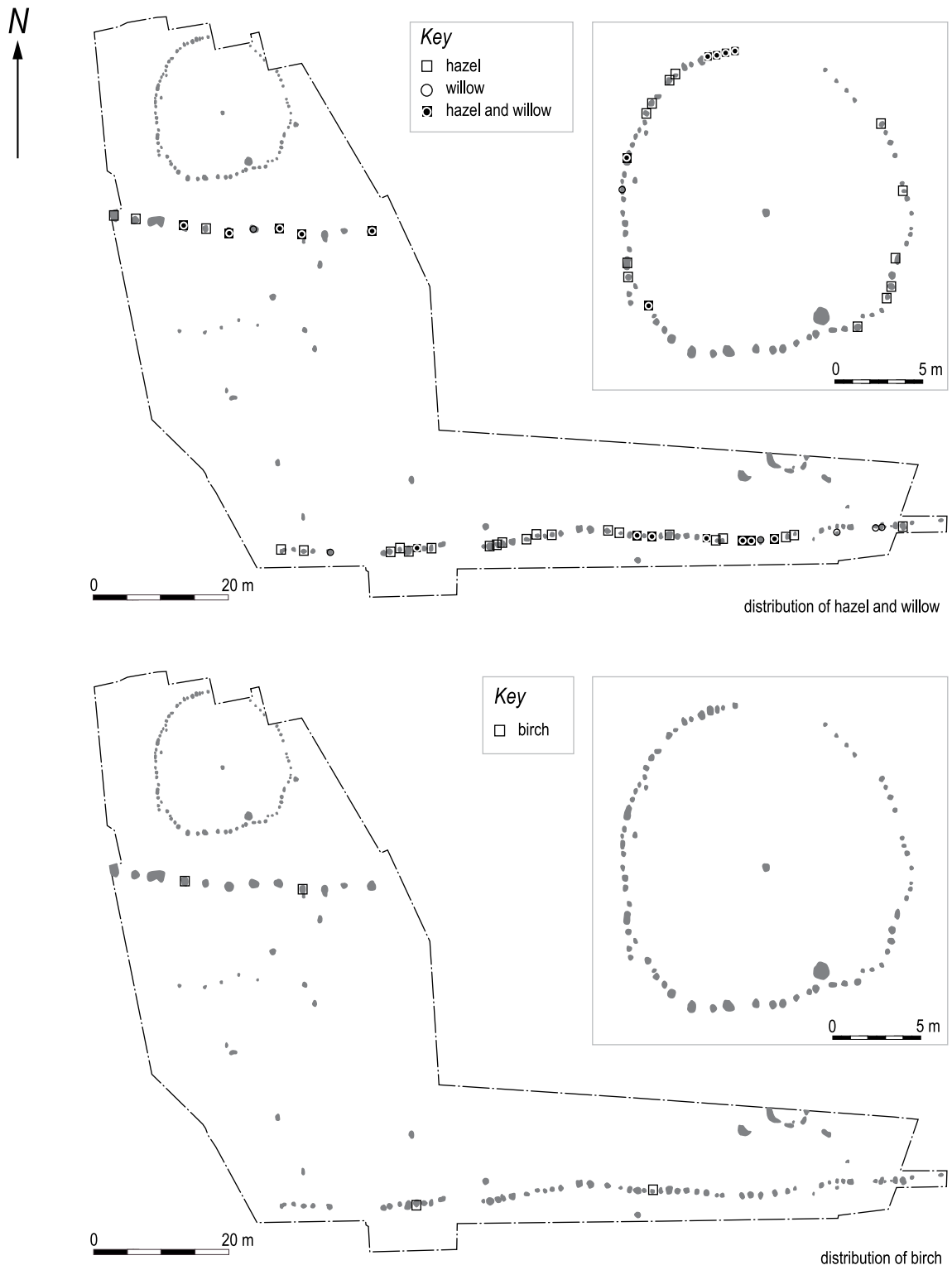
Phase 2: The timber enclosure

To the north of the southern alignment, 70 small pits were dug at Eweford East, enclosing an oval space up to 20m in diameter, with a possible entrance on the east. Although many of these pits were shallow and extremely truncated, enough post-pipes were identified to suggest that this enclosure comprised a ring of closely set upright timbers. The builders probably constructed this ring in segments, as is evident from the fact that it comprised 10 distinct linear or curvilinear groups of posts (see Figure 3.14 for plan, Figure 3.15 for section drawings).

Those who built the Eweford East timber enclosure probably belonged to a later generation than those who began building the southern alignment. Radiocarbon dates suggest that construction of the enclosure happened several hundred years after the willow was cut for use in pit (1115) in the southern alignment (2880–2580 BC (SUERC-5340)). Samples of hazel (*Corylus*) and



3.11 Cup-marked stone from the southern alignment.



3.12 The distribution of hazel, willow and birch charcoal in the Eweford East pits.

willow (*Salix*) charcoal from the fill (1478) of post-hole (1477) in the enclosure provided radiocarbon dates of 2570–2300 BC (SUERC-5337) and 2620–2460 BC (SUERC-5336) (see Figure 3.8). While there could have been a hiatus in construction across the site during this period, there is a brief overlap in the latest and earliest dates in the radiometric spectrum for the pit (1115) from the alignment and that from the enclosure (1447). The dating evidence for the southern alignment suggests that its various segments were constructed in a sequence progressing from east to west over several hundred years. The minimal overlap in date ranges means it is unlikely that the posts at the eastern end of the southern alignment still stood while the timber circle was being built; however, it is possible that those along the centre and western end of the alignment were standing at that time.

Those who built the enclosure did express a certain awareness of the building traditions evident in the eastern half of the southern alignment. They continued to build in segments, using lines and curving sections of smaller and more closely spaced post-holes to create the circular shape. The palaeoenvironmental evidence suggests that they favoured oak timbers for the uprights, perhaps also using hazel and willow to create hurdling (Miller and Ramsay, see Chapter 12 and Archive; Figures 3.12 and 3.13). A single sherd of abraded Grooved Ware (SF 258) (Sheridan, see Chapter 12 and Archive) from one post-hole (1577) also suggests that they continued some of their predecessors' depositional practices.

Truncation had removed any traces of activities that took place inside the enclosure. Four pits (1443, 1591, 1601, 1637) were dug inside it, but it is not clear why, or even whether they were contemporary with the enclosure. The enclosure's proximity to the broadly contemporary pit alignments and the similarly segmented forms of their construction suggest that its use was in some way related to that of the pit alignments.

Phase 2/3: The northern pit alignment

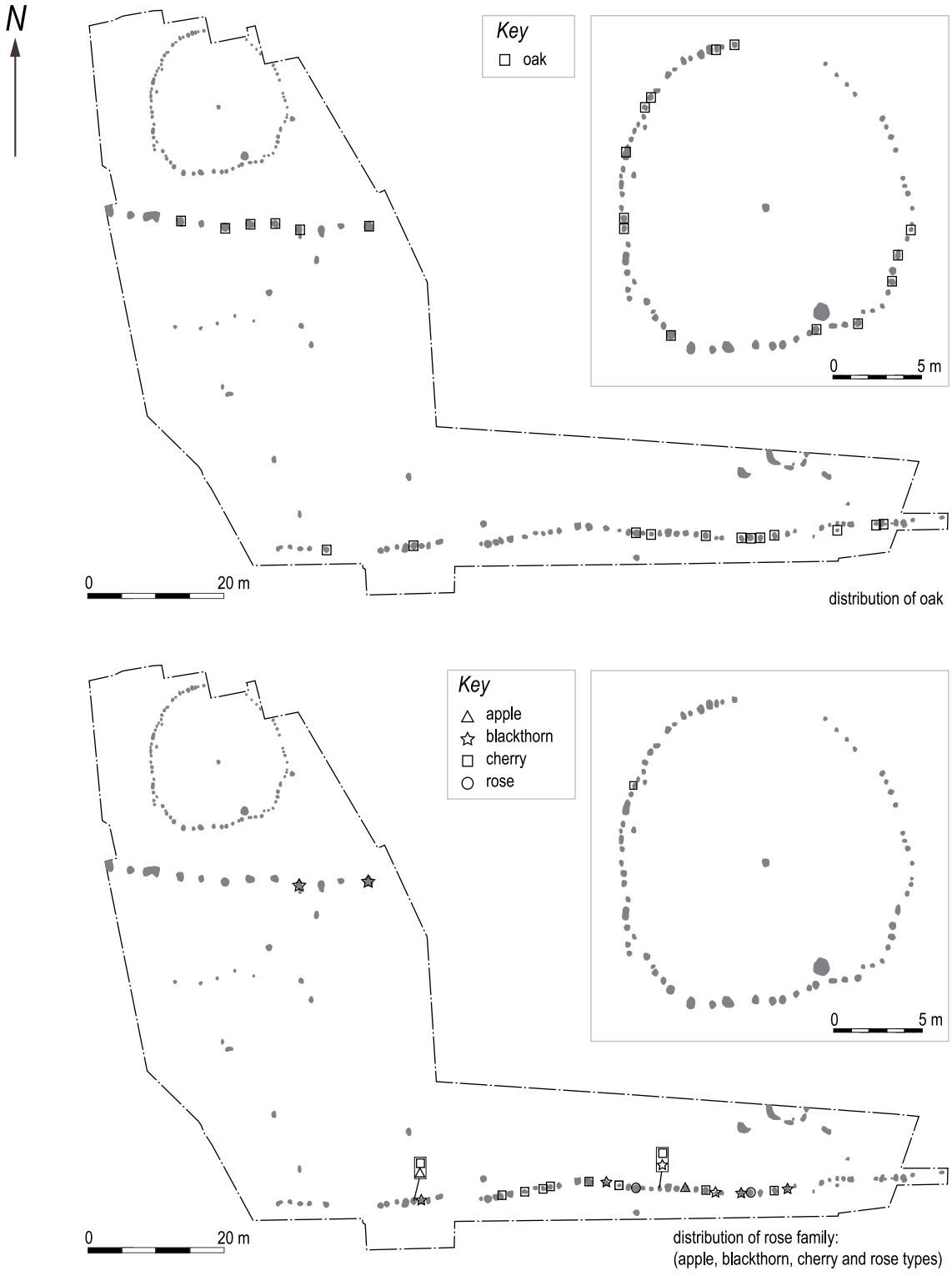
At around 2400 BC, the northern pit alignment and the western sections of the southern alignment were built. The excavated portion of the northern alignment comprised 13 large, widely spaced, oval pits, extending over 38m (Figures 3.6 and 3.7); aerial photographs show that it extends for at least another 60m to the east and another 40m to the west beyond the excavation area (Figure 3.5). In this case, the builders dug large pits, up to 1.3m in diameter and 0.90m in depth, into the glacial till. Having dug them, they erected timbers in at least six of them, as was evident from their post-packing and post-pipes (Figure 3.15). The builders set all of the posts near the northern sides of the post-holes, and again they chose oak for the timber uprights. They used hazel and willow in some way but, as with the enclosure, they appear at first to have shunned the rose family species that were so prevalent in the eastern half of the southern alignment (Figure 3.13; see Miller and Ramsay, see Chapter 12 and Archive). They placed a double-ended scraper (SF 581; Figure 3.10), struck from flint imported from further south (Saville, see Chapter 12 and Archive), into the fill of one post-hole (1340), and a broken whetstone (SF 208) (Sheridan, see Chapter 12 and Archive) into another (1519).

The pits they dug for the northern alignment were larger and more regularly and widely spaced than those making up the southern alignment. There was no clear indication that the builders copied the segmental approach used by their predecessors in the southern alignment and enclosure. However, these variations must be interpreted with care, as only about 30 per cent of the northern alignment was investigated, a much smaller sample than the excavated portion of the southern alignment.

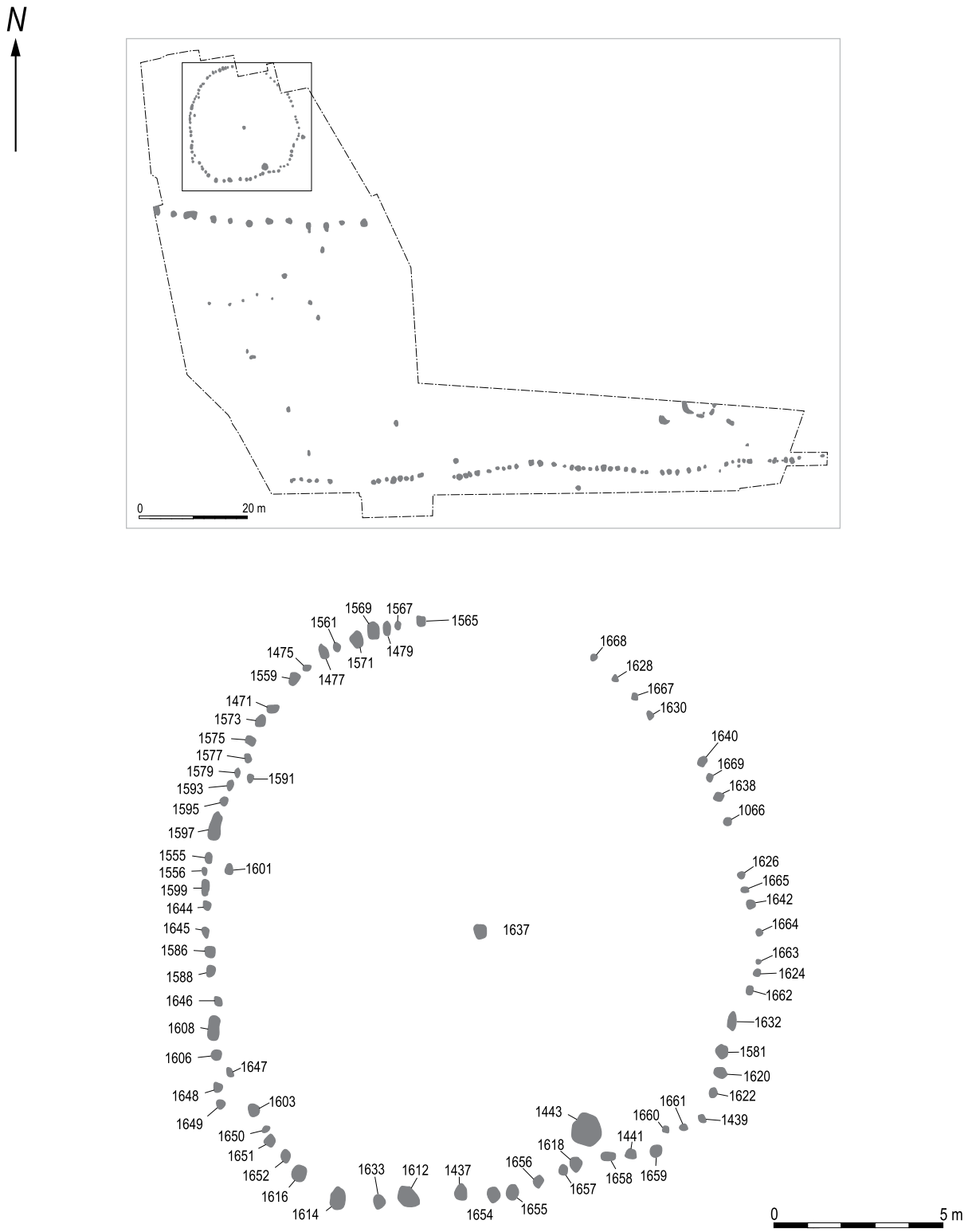
A sample of hazel (*Corylus*) charcoal from the lower fill (1549) of a post-hole (1519) in the northern alignment gave a date of 2490–2280 BC (SUERC-5346), while samples of hazel *(Corylus)* and willow *(Salix)* from a pit (1165) at the western end of the southern alignment yielded dates of 2470–2200 BC (SUERC-5344) and 2470–2230 BC (SUERC-5345) respectively (see Figure 3.8). Assuming that the rest of the pits in the northern alignment are contemporary, the similarity in these dates suggests it was built over a relatively short period.

The radiocarbon dates also suggest that, around the same time that the northern alignment was being built, the last sections of the southern alignment were being constructed. The builders continued to work in segments, a style first employed many generations before at the eastern end of the alignment. On the south, the builders separated the groups of pits even more markedly, leaving gaps of up to seven metres between the last two segments. In contrast to the northern alignment, the builders did continue to use wood from rose family species at this end of the monument, a defining characteristic of the southern alignment as a whole (Figure 3.13).

Several isolated features lay between the two alignments, but they produced no dating evidence. By comparing them to the dated features, we can suggest where they might fit into the overall chronology for the site. To the north of the eastern end of the southern alignment, a group of pits and slots were dug to support what may have been a curving structure that ran beneath the trench edge to the north. The structure incorporated oak, willow, hazel and blackthorn, as charcoal from these species was found in some of the features (1201, 1203, 1271, 1219, 1332) (see Miller and Ramsay, see Chapter 12 and Archive), along with a single sherd of heavily abraded, possible Grooved



3.13 The distribution of oak and rose family charcoal in the Eweford East pits.



3.14 Plan of the timber enclosure.

Ware pottery (SF 132) (see Sheridan, see Chapter 12 and Archive) from the fill of a shallow pit (1333). Both the use of blackthorn and the habit of putting pottery into pits appear to coincide with when the eastern end of the southern alignment and the enclosure were built. Another two pits (1545) and (1367), dug to the south of the northern alignment, may also date to this phase of activity. One pit (1545) yielded several sherds of Grooved Ware (Figure 3.10: SF 510) (Sheridan, see Chapter 12 and Archive), while the other (1367) contained a small quantity (0.2 g) of burnt human bone (Duffy, see Chapter 12 and Archive). (However, this could have been residual from earlier activity in the vicinity; see Chapter 2.)

Discussion

The features at Knowes and Eweford East share at least two characteristics: both involved digging pits that formed lines, and depositing objects into some of them. However, there were also significant differences between them. At Knowes, pits that were dug to form a short line in the mid to late fourth millennium BC seem to have been left open, or were backfilled with clean sediment, except for a cluster of three that were filled with pot sherds and charcoal brought from other places or events. At Eweford East, the pits held posts and a short line gradually developed into a much longer one, a second line and circular enclosure over about 600 years, from the early to late third millennium BC. Pot sherds and worked stone were put into some of these pits.

Both sites fall into the archaeological category of 'pit alignments'. What is it possible to say about what motivated the creation of these sites? Did the practices in evidence at each share common meanings or reference points?

Making lines in the landscape

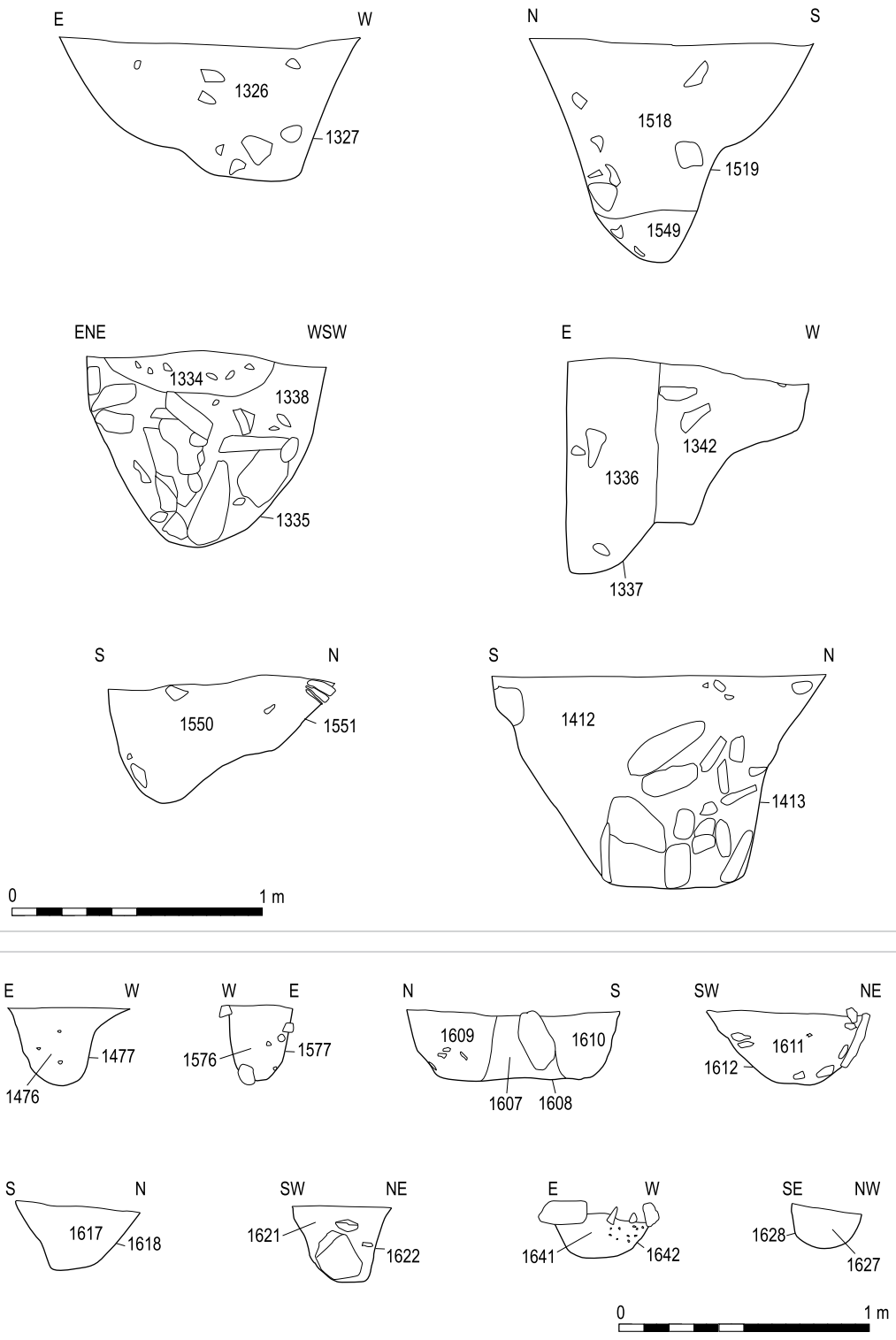
At its simplest, the creation of a line of pits at Knowes amounted to simple demarcation – marking out the space on one side of the line as different from the space on the other, or marking the line itself as the most important thing. In this most basic sense, the creation of a line in the earth at Knowes could be as an embryonic form of the more complicated practices at Eweford East. There we witness architectural efforts (and, by implication, the activities the monuments framed) that became more complex through time, while still preserving essential elements of the first phase. This practice involved the digging of lines of pits, the deposition of broken pottery and other artefacts, the erection of timber posts and their destruction by fire. Because Eweford East was a larger, more complex and better preserved monument, it offers more scope for interpretation.

In interpreting what it meant to create these lines of pits, it is important to remember that the digging of each pit or post-hole was a discrete event, although at both sites each one ultimately worked as part of a group or an overall alignment. The probable time span for the construction of the pit-defined features at Eweford East suggests that these individual digging events extended over several generations to form complete structures. Thus, the concept of memory is fundamental to how we interpret that site: it represented a fixed point to which people returned, perhaps over generations or several hundred years, to add another pit or another segment of pits. It is unclear how long the pits at Knowes remained visible, but the line they marked or the spaces it defined may have been remembered over a long period. It is important to remember, however, that modern Western notions of memory are closely linked to linear conceptions of time (Yates 1992; Gell 1992). Ideas about the passage of time and its relationship to memory may have been very different in early prehistoric Lothian, perhaps linked to agricultural or other seasonal cycles, or to relationships with ancestors (cf Lucas 2005, 61–2).

The clusters of features at the east and west ends of Knowes suggest slightly more complex meanings than a simple linear arrangement. It must be significant that all three pits in the western cluster contained fragments from the same pot (Vessel 3), along with hearth waste – in contrast to the relatively clean fills of the other pits. In contrast to Knowes, only one feature at Eweford East – pit 1087 – showed signs of having been left open following its excavation and, even here, only a small amount of primary silt was found lining the base of the cut. It may be that, at Eweford East, people perceived this initial penetration and exposure of the earth as a ritually hazardous endeavour, and therefore deliberately accelerated this phase of the construction process (see Davies and Robb 2004).

In common with those who created Knowes, the builders of the Eweford East alignments also placed objects into some of the pits and post-holes. Those who created the eastern end of the southern alignment, the curvilinear structure and the first arcs of the enclosure put sherds of Grooved Ware pottery into them, but later builders abandoned this practice. With the exception of one sherd (SF 585) from a pit (1077), all the sherds had been in circulation for some time; they were heavily abraded. In placing pot sherds into the pits at both sites, the builders may have been creating and maintaining memories: of particular pots and how they were made and used, or of events or people connected with the pots themselves, such as feasts or other social occasions.

Both earlier and later builders at Eweford East put stone tools into the pits and post-holes they dug, such as



3.15 Sections through pits in the northern alignment (upper panel) and timber enclosure (lower panel).

the two cup-marked stones from the eastern half of the southern alignment and the broken whetstone from the northern one. Two of the stone tools from the southern alignment (the double-ended scraper (SF 581) and the arrowhead (SF 524) from post-hole (1340) and pit (1171) respectively) are imported types (Saville, see Chapter 12 and Archive), and they may have been seen as special for that reason. Great care was taken in the selection of building materials for the timber uprights, and we see a similar level of concern for the kinds of objects deemed appropriate for depositing in the pits. The rejection of pottery sherds as suitable objects in some cases may have expressed different views of objects, perhaps based on their material properties or associations with other contexts of use. Several cup-marked stones were also recovered from the cairn at Eweford West, a few hundred metres to the west (see Chapter 4).

It may be that the builders of the earlier phases of the Eweford East alignments connected them with the domain of the living. As time went on, perhaps this connection weakened, coinciding with a marked decline in the use of the flowering, fruit bearing rose family species. The construction of the timber circle also marked a change in emphasis, with the builders achieving an entirely different form of monument.

Rhythms in lines

When we consider the chronology of events at Eweford East, the most significant contrast may have been the move from a linear monument, where straight lines defined spaces, to the building of a circular enclosure that still employed post-holes in its architecture. The builders at Eweford East created their linear alignments using a segmental style of construction (Figure 3.16). These short linear and curvilinear stretches of features formed the southern alignment and the timber enclosure, although not the northern alignment. While the ultimate form of these monuments and the spaces were important, the repetition and sense of rhythm created through sequences of action – pit by pit, or segment by segment – seem fundamental to understanding how the monuments were made and used.

The ultimate form of the enclosure differed fundamentally from those of the alignments, and this must have expressed essential differences in its purpose, meaning and use. While the alignments were potentially infinite projects that could be extended indefinitely across the land, the enclosure had a finite, closed form. Along the northern curve of the enclosure there was a break in the arc of post-holes, observed when the baulk (see Figure 3.14) was removed under archaeological monitoring. This may be simply a result of truncation, as the neighbouring post-holes were relatively shallow, particularly those along the north-western arc. Alternatively, the builders may have chosen to site an entrance on the north side, an aspect that never receives direct sunlight. This possible shift in cardinal referencing was reinforced by their choice of its location – due north of the two alignments. Furthermore, none of the enclosure post-holes produced charcoal from rose family members, with their fruit-bearing, life-giving associations.

3.16 One of the segments in the southern alignment.

The southern portion of the enclosure appears decidedly flattened in plan, perhaps echoing the northern alignment running alongside it to the south. Although the date range returned from the enclosure post-hole (1477) pre-dates the construction of the northern alignment, if the latter were constructed in episodic fashion like the southern alignment, then the temporal relationship between it and the enclosure may have been closer than the radiocarbon dates indicate. Alternatively, perhaps the northern alignment was indeed built later, but along a

pre-existing conceptual boundary which the enclosure respected.

This sense of rhythm, repetition and progression suggests that those who built and used the various structures were expressing complex notions of time (cf Gell 1992; Lucas 2005). The postulated east-to-west evolution of the southern alignment would have reflected the movement of the sun through the sky, suggesting associations with daytime and the world of the living. The inclusion of rose family species in the southern alignment suggests that seasonal cycles of blossoming and fruiting may have been important to its meaning (cf Hayman 2003). These associations with birth, death and regeneration may have extended beyond the monuments to the individuals or groups that created them. If each segment was identified with a generational group, or each pit with an individual, the posts that they held may have metaphorically died along with those associated with them. In firing the posts, the community may have been evoking the death of an old generation and the birth of new ones, with the promise of the group's regeneration. These events would also have helped to fix the memory of these people and the structures they built in the collective consciousness (Van Dyke and Alcock 2003, 4; Connerton 1989).

These short segments of post-holes also appear to have been related to the creation, definition and use of space. Each segment displayed the builders' memory of and respect for previous segments; alignments continued on the same orientation, and the southern arc of the enclosure may have echoed the linear nature of the alignments.

Common threads

Clearly, the pit alignments created at Knowes and Eweford East differed vastly in scale, complexity and appearance, with the monument at Eweford East marked out by standing posts and that at Knowes marked by holes in the ground, either left open for a time or deliberately filled in. What links them is the act of marking lines in the landscape to define different categories of space.

At Knowes, we may be seeing traces of earlier notions about space and the symbolism of dividing it; these notions were developed over the centuries and millennia that followed, finding evolving and sophisticated expression at Eweford East. The pot sherds, charcoal and (at Eweford East) worked stone put into some of the pits may have given them meanings that transferred from other social contexts.

Previous interpretations have often stressed a pragmatic function for pit alignments, either as stock enclosures or territorial boundary markers (for example, Halliday 1982). Different physical uses might have been linked to or based on more abstract meanings or histories; for

3.17 Reconstruction of the southern alignment being built.

example, one space might have been considered suitable for growing crops while another was thought to be spiritually polluted. The lines of pits may have proscribed movement in and around the monuments, and at Eweford East we might imagine the upright timbers channelling complex processions of people or animals. We consider the uses and architecture of these monuments further in Chapter 9.