ART. XI – *Two early medieval settlement sites in eastern Cumbria?*
BY RICHARD HEAWOOD AND CHRISTINE HOWARD-DAVIS

THIS article has been written to disseminate the results of two small but significant excavations conducted by the former Lancaster University Archaeological Unit (LUAU; now Oxford Archaeology North), at Shap and Brougham, in 2000 and 1996 respectively. Both projects were commissioned by developers, in response to briefs issued by the Cumbria County Archaeology Service as part of the planning process. Excavation at Shap took place immediately west of the present village, at NY 5621 1513, in advance of a small housing development, whilst the fieldwork in Brougham was conducted at NY 5654 2762, on the line of a sewer constructed to the north of the Oasis Holiday Village at Whinfell Forest (Figs. 1 and 4). Both excavations produced relatively large numbers of small pits, considered to be postholes indicative of the former presence of timber structures, but very few finds.

Parker's Croft, Shap by Richard Heawood

Introduction

When a planning application was submitted for a residential housing development on the western edge of the village of Shap, the County Archaeology Service recommended that an archaeological evaluation of the site be undertaken. The evaluation, conducted by Carlisle Archaeology Ltd, identified a series of pits and postholes concentrated towards the eastern edge of the site, apparently on a curving alignment; although no artefactual dating evidence was recovered, it was assumed that part of a prehistoric settlement had been found. In view of these results, the County Archaeology Service advised that an open area excavation was required, to mitigate the effects of the development through preservation by record. The excavation proceeded in June 2000, being conducted for the developer, BW Cox Properties Ltd, by the former Lancaster University Archaeological Unit.

Shap stands at a height of some 254 m OD, in the upper reaches of the valley of the River Lowther, between Crosby Ravensworth Fell to the east and the Shap Fells to the west. Despite the altitude, the landscape is relatively flat; the underlying geology consists of glacial drift deposits of silty clay with inclusions of large pebbles, overlying occasional outcrops of limestone, the latter not penetrating the topsoil (Moseley, 1978). The site lies to the west of ribbon development along the A6, and to the south of the existing Parker's Croft housing development (Fig. 1); prior to excavation, the land was used as pasture.

Archaeological background

The area investigated lies immediately to the east of the Shap stone alignment, which is oriented roughly north/south (Ferguson, 1899, 33-34). Such monuments

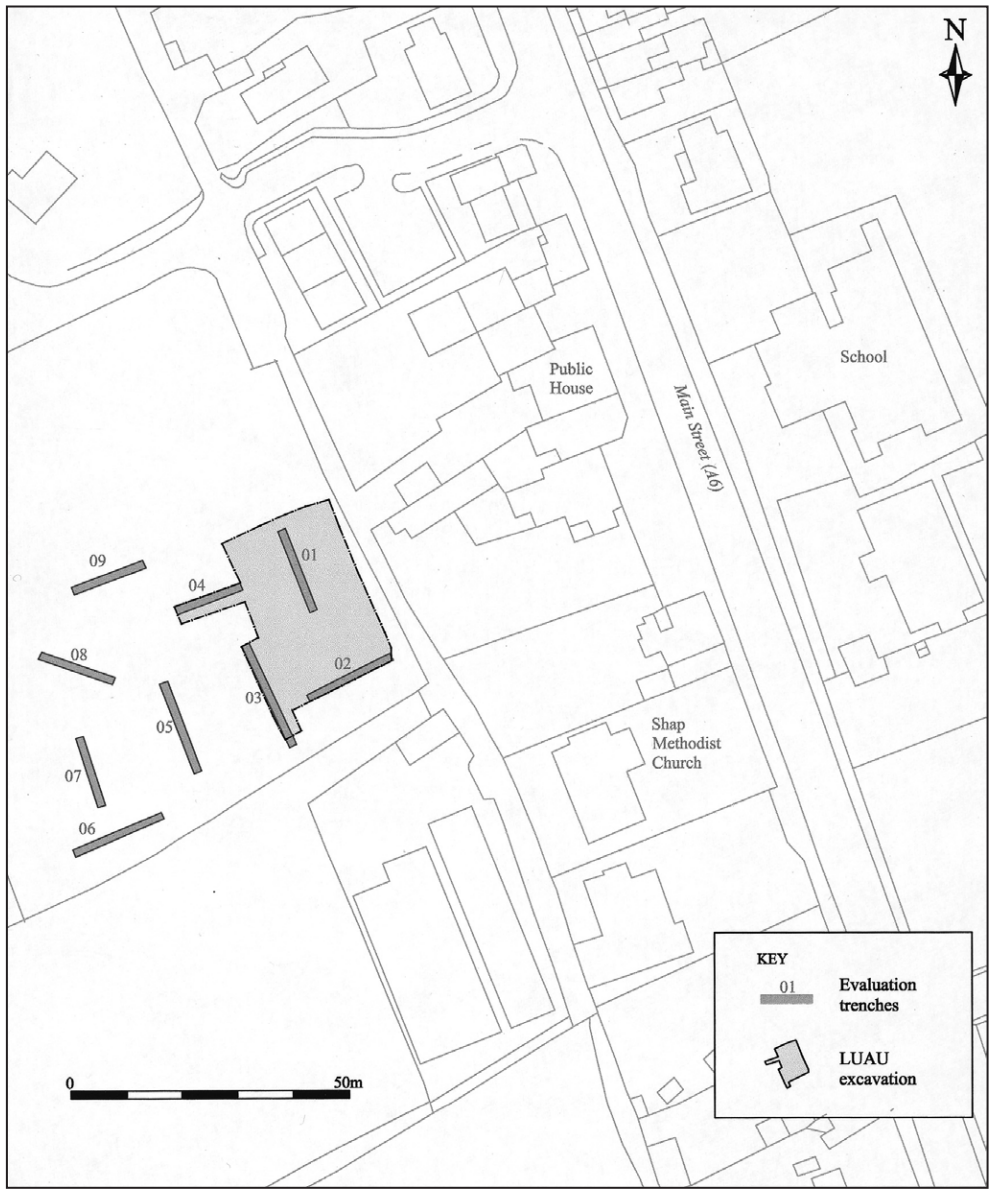

FIG. 1. Location map, Parker's Croft, Shap.

typically date to the Neolithic or Bronze Age, and are considered to have been associated with ritual practices; several of the individual stones within the Shap alignment are statutorily protected as Scheduled Monuments. It seems probable that a further avenue of standing stones, and a stone circle, formerly stood about a mile to the south of the village, this avenue being largely destroyed by the construction of the railway in 1844 (Ferguson, 1899, 31). A round barrow and a number of cairns have also been recorded in fields close to the development area, and several cairns have been excavated on the fells just to the east of Shap in recent years (Williams and Howard-Davis, forthcoming). The presence of Neolithic to Bronze Age monuments, both on the fells to the east and on the gently undulating land close to the present village, suggests that the area was a focus for prehistoric activity in these periods. In contrast, Iron Age activity is extremely poorly represented in the area, as in the North West generally (Oliver *et al.*, 1996, 150).

The recognised Roman occupation of the Penrith area has been characterised as largely military in nature, with the routeway across Stainmore from the east being viewed as one of the first means of entry into the North West (Shotter, 1996, 28). The route was marked by a series of strategically placed forts, including those at Brough, Kirkby Thore and Brougham. Although extramural "civilian" settlements developed outside a number of these forts, the density of Romano-British settlement in the surrounding hinterland is still far from clear.

The archaeological evidence for the post-Roman centuries is sparse, particularly when compared to that from many other parts of England. Until recently, evidence for the period was largely confined to a very small number of high status or urban sites, at Birdoswald (Wilmott, 1997), Carlisle (McCarthy, 1990), Dacre, near Pooley Bridge (Newman and Leech forthcoming), and Penrith (Newman *et al.*, 2000). The presence of a putative monastic site at Dacre, and of proto-urban centres, suggests well-established agricultural hinterlands, but features investigated at Fremington (Oliver *et al.*, 1996) represent the only concrete archaeological evidence for early medieval rural settlement in north-east Cumbria; four sunken-feature buildings (Grübenhäuser) of a type now common on early Saxon sites in southern and eastern England, as well as a probable post-built structure, and assemblages of artefacts considered to date to the seventh to eighth centuries A.D., were found. The isolated stone-built structure at Bryant's Gill in Kentmere, dated to the eighth century (Dickinson, 1985), is the only other rural site of the period firmly identified in the county.

Results and interpretation

The excavation took the form of an open area measuring *c.*32 m x 24 m, with two additional arms extending to the south and west. The total area investigated was 740 m^2, and incorporated Evaluation Trenches 1-4 (Fig. 1). A 360° tracked excavator was used to remove topsoil down to the surface of the natural subsoil, and all potential archaeological features were marked. The site was then left for two weeks to allow features to weather, improving the visibility of the archaeological remains. When excavation resumed, areas totalling 462 m^2 were cleaned by hand where the stripping revealed the potential for archaeology. It should be noted that a small number of features recorded during the evaluation phase, but lying outside the areas

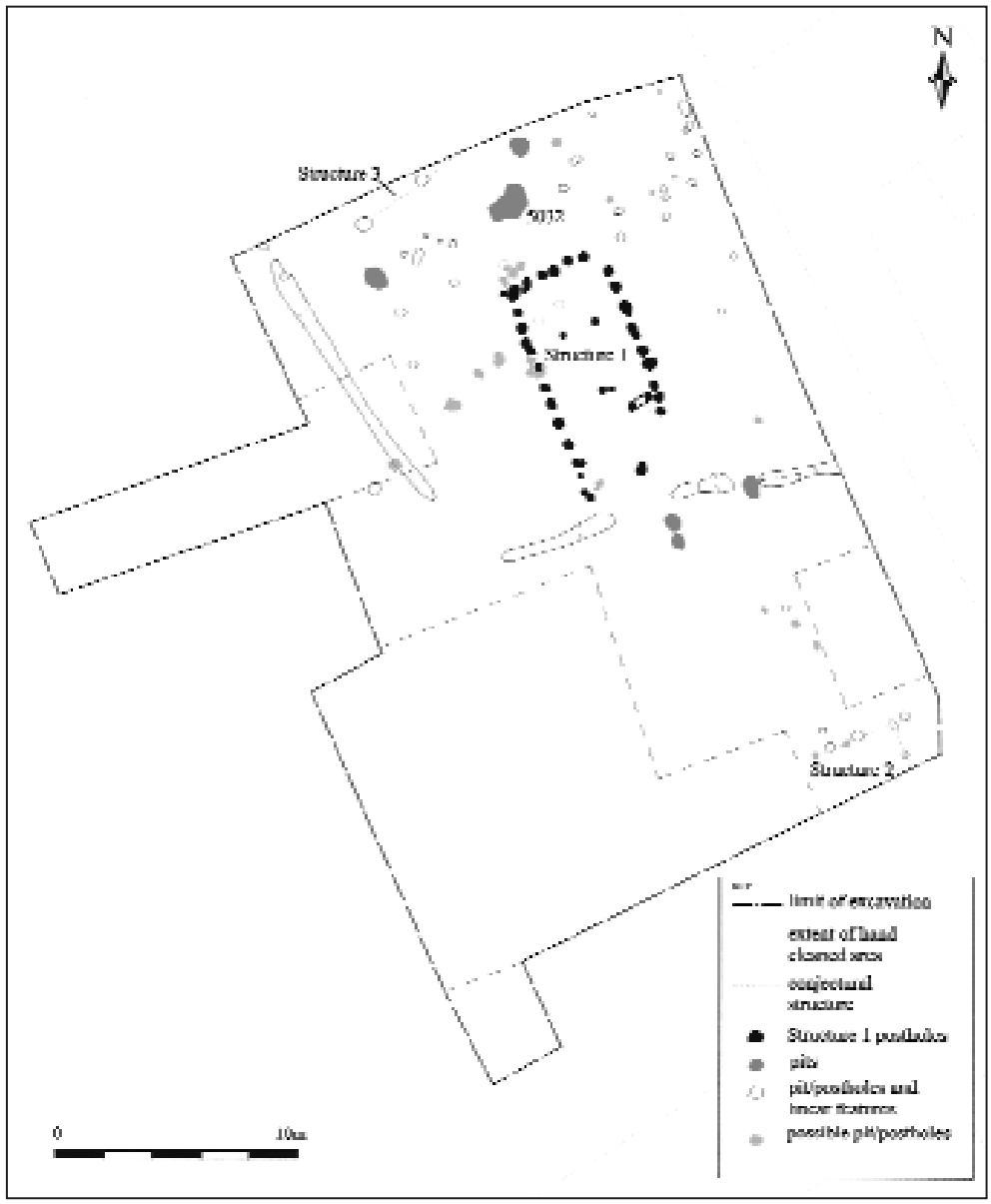

FIG. 2. Site plan, Parker's Croft, Shap.

cleaned during the excavation, do not appear on Fig. 2, because of difficulties gaining access to the evaluation archive.

The excavation revealed five shallow pits, a total of 84 small pit/postholes, and two linear features. Additionally, many patches of darker soil were, on excavation, found to be clearly the result of bioturbation, but 20 "possible pit/postholes" were recorded; in these instances there were suggestions of root disturbance, but a man-made origin could not be ruled out (Fig. 2). Almost all of the pit/postholes, and many of the bioturbation features, had very similar dark yellowish brown clay silt fills. In view of this, the only way to separate archaeological from naturally formed features was by excavation and examination of a feature's plan form and profile. The similarity of so many of the fills also precluded the use of fill colour and texture in attempting to assemble groups of features that might form structures. The structures described below have been identified on the basis of dimensions, and in particular, alignment of features although the limitations of this approach are well-recognised, and no attempt was made to allocate pits/postholes to structures without clear justification. The almost complete absence of artefactual dating evidence allied to the homogeneity of the fills means that it has not been possible to attribute features to different phases of activity.

The archaeological remains present consisted entirely of cut features. A homogeneous deposit of topsoil varying between 0.2 m and 0.6 m thick had formed directly on top of the natural subsoil, and no other layers were present.

Structure 1

Overview: Structure 1 was identified on the basis of its clear plan form (Fig. 2). Its postholes indicate the former presence of a rectangular timber-framed building with earth-fast posts, measuring some 4.8 m wide by 9.5 m long. The structure appears to have had two internal partitions, one at each end set 2.5 m from the gable. Two further closely spaced posts may have supported the ridge purlin. Evidence was recovered for two probable opposed doorways in the long walls, north of centre, and the long walls themselves appeared to be very slightly bowed. The length to width ratio of the building was almost exactly 2:1. The postholes were closely spaced, the interval between posthole centres varying from only 0.4 m to 1.0 m; in addition, in six instances, it appeared either that a posthole had been recut, or that two posts had been placed in one hole. The structure was oriented north-north-west/south-south-east, an alignment shared by the adjacent modern field boundary and trackway.

The shallowness of the postholes (less than 0.4 m) suggested that all had been subject to heavy horizontal truncation, and no occupation surfaces had survived within the building. Nevertheless, the surviving postholes gave a largely complete representation of the plan form of Structure 1, with the exception of the south-east corner. There, a concentration of boulders was found in the natural subsoil, but there was no clear evidence for any disturbance which might have occurred since the construction of the building; it seems probable that the postholes in this part of the building were shallower than elsewhere.

Posthole dimensions: the building's postholes varied in size (Fig. 3); they ranged in plan from 0.24 m x 0.24 m to 0.65 m x 0.47 m, and in depth from 0.09 m to

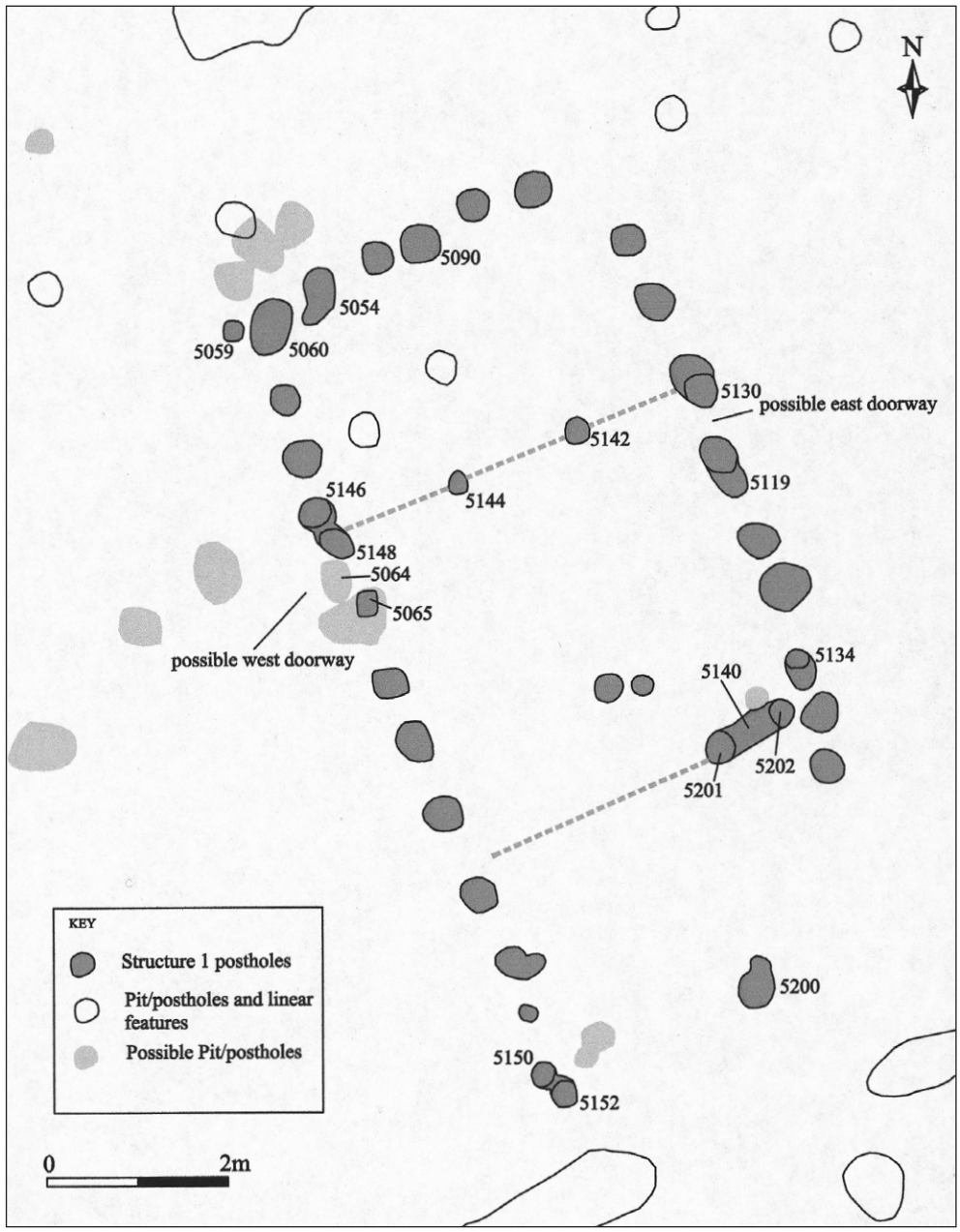

FIG. 3. Structure 1, Parker's Croft, Shap.

0.40 m. Thirteen of the postholes contained probable packing stones, these stones being relatively small in size; a single convincing post pipe was also recorded. In posthole 5148, that immediately north of the putative west doorway, the disposition of packing stones suggested the former presence of a vertical timber 0.18 m wide. A post pipe was also found in the corresponding posthole in the eastern wall, 5130; this suggested a rather larger vertical timber with a diameter of 0.36 m, although it is possible that bioturbation had enlarged the post pipe.

External walls: both the long walls and the north gable were represented by closely spaced postholes. The positions of the holes suggest that the walls were formed of vertical posts, most set with their centres between 0.7 m and 1.0 m apart. It seems probable that the intervening gaps were occupied by panels of infill, possibly wattle and daub. Two closely spaced postholes were found at the north-west and south-west corners of the building; the two to the north-west, 5059 and 5060, appeared to be aligned with the north gable, whereas the pair at the south-west corner, 5150 and 5152, which were contiguous, were set almost diagonally. No postholes were found at the north-east and south-east corners; the absence of posts in the north-east corner may be explained by evidence for extensive bioturbation in this area, but no ready explanation was found for the lack of post-holes towards the south-east of the building. As it seems unlikely that it could have been supported without vertical posts here, it can only be assumed that, for an unknown reason, the postholes were less deep to the south-east than elsewhere, and have not survived. Whilst it seems certain that the building must have had some posts sited towards the south-east corner, the southern gable may never have been a continuous load-bearing wall, and closely spaced postholes may never have existed there. However, the central postholes in each gable, 5090 and 5200, may have helped to support the ridge pole of the roof.

Partition walls: two postholes, 5144 and 5142, suggested the presence of a partition wall, closing off just over a quarter of the length of the building at the northern end. The postholes were evenly spaced; they had been set 1.4 m apart but, in addition, the western posthole was 1.4 m inside the west wall of the building, and the eastern hole 1.4 m inside the east wall. The postholes were small, and, with depths of only 0.14 m and 0.15 m, were amongst the shallowest excavated, providing a further indication that they had not contained load-bearing timbers. The room created by the partition would have measured 4.8 m x 2.5 m.

A shallow gully, 5140, suggested that a second partition wall had stood in a corresponding position towards the southern end of the building. Although of rounded profile, the gully may have functioned as a foundation trench or beam slot. It was 1.11 m long, 0.30 m wide, and 0.16 m deep, and did not extend across the full width of the building; it had been filled with redeposited silty clay, and possible postholes, 5201 and 5202, were identified at either end in the longitudinal section. It was impossible to be certain whether these represented the positions of posts set within a foundation trench, or secondary postholes recut to replace an earlier trench-built partition. The southern partition would have defined a room with the same dimensions as that to the north, leaving a central room with dimensions of 4.8 m x 3.9 m.

Evidence for doorways and a possible cruck: most of Structure 1's constituent postholes were subcircular in shape, and did not appear to have contained more than one timber. However, two pairs of possible double postholes were found, sited opposite each other within the long walls of the building, the northern posthole of each pair being aligned with the northern internal partition (Fig. 3). These were identified as possible doorways.

On the eastern wall line, the southern posthole of the putative doorway, 5119, could be reliably interpreted as a double posthole. It had an elongated oval shape in plan, and in profile the base was stepped, with the northern end of the feature being the deeper. A single fill was identified. Whilst it is possible that the shape of the feature is the product of re-cutting and post replacement, its position relative to the other likely double postholes suggests it may have housed two contemporary timbers. The northern posthole of the pair, 5130, was nearly as elongated, and the base was again stepped, being deeper to the south. A possible post pipe 0.36 m wide was recorded at this southern end, but its presence is not thought to demonstrate conclusively that an adjacent timber could not have stood to the north.

On the west side of the building, a clear double posthole, 5146/5148, was found in line with the partition, and forms the north side of the putative doorway. The profile of the base appeared to demonstrate that the feature had held two timbers, and a single fill was present from one end of the feature to the other, suggesting that the timbers might have been contemporary. As with the corresponding feature on the east wall, the deeper part of the posthole was to the south. The southern feature of the pair, 5065, must be considered uncertain. The northern part of the feature was deep and vertical-sided and had certainly housed a post, again mirroring the arrangement on the east wall, but it was uncertain whether the southern end was in part the product of root disturbance.

The "inner" element of each possible double posthole was in each case the deepest part of the feature; in fact the northern ends of the two southern postholes, 5119 and 5065, were the deepest of any of the postholes forming the building. It is possible that the "inner" part of each double posthole held a door post, and the outer part a wall post; however, an alternative explanation reflecting the depth of the "inner" postholes to the south of the putative doorways is that they were dug to support a cruck. The interpretation of these doorways remains open to question, and the putative western doorway is made more uncertain by a possible archaeological feature, 5064, lying between the two potential double postholes. Yet no other doorway positions are apparent, and although the postulated doorways can have been no more than 0.6m wide, this does not appear prohibitively narrow.

Maintenance of the building: with the exception of the oval-shaped postholes flanking possible doorways, only two other postholes may have been intercutting, potentially suggesting post replacement. These lay at the south-west corner of the building (5150 and 5152), and in the east wall, immediately north of the line of the southern partition (5134). The absence of more evidence for recut postholes might be thought to indicate that occupation of the building was short, and that it was not maintained and repaired. However, it is possible for post pads to be inserted over postholes as the original posts of a building decay, and this kind of maintenance cannot be ruled out.

Finds: the only finds from the postholes of Structure 1 were a small and badly abraded pottery sherd from 5119, possibly in a Romano-British oxidised fabric, and several fragments of extremely coarse burnt or fired clay from 5134, considered to derive from the structure of a hearth or kiln.

Structure 2

A line of postholes oriented west-south-west/east-north-east was found in the south-east corner of the excavated area, with single outlying postholes located to the north and south (Fig. 2). The features appear to have formed either a fence, or another post-built building, measuring at least 4 m x 2 m, on the same alignment pattern as Structure 1. The structure may have continued beyond the limit of excavation to the south or east; it probably did not extend further west into the uncleaned area as, after weathering of the site, these postholes were visible before hand cleaning.

The postholes ranged between 0.08 m and 0.28 m in depth, being of comparable dimensions to those of Structure 1. Consideration of their spacing is complicated by the presence of two uncertain features within the alignment but, if these are included, the posthole centres were between 0.6 m and 1.5 m apart. No finds were recovered, with the exception of 19 small fragments of a single poorly-preserved bone, found in the most easterly posthole.

Structure 3

Two adjacent pit/postholes were identified close to the northern limit of excavation (Fig. 2); they have been assigned a structure number on the basis of their distinctive shape and dimensions, but clearly there are limits to what can be inferred from only two features.

The pit/postholes were larger and more rounded than most of the other such features recorded, suggesting an association; both were *c*.0.6 m in diameter. They were spaced 3 m apart, and their profiles suggest that they were dug as postholes. It can be suggested that they represent part of a fence line or the corner of a building, which probably continued beyond the northern limit of excavation. No finds were recovered.

Other structures

Some 32 other pit/postholes and nearly 20 possible features were excavated in addition to those forming Structures 1-3. They were concentrated towards the northern edge of the excavation, and probably represent further structures, be they fences or small buildings. Because the features were of a similar size, had near identical fills, and were devoid of finds, they cannot be assigned to individual structures with any certainty, and no further buildings or fences have been shown on Fig. 2. However, one possibility is that a fence line may have crossed the site from south-west to north-east, including the two pit/postholes within the footprint of Structure 1 north of the northern partition, and thus indicating more than one phase of activity. It might also be suggested that a fenced enclosure may have fanned out from the northern end of Structure 1, with fences leading from the north-east and north-west corners of the building. A further possibility is that a subcircular structure, be it a pen or building, stood north-east of Structure 1.

Pits

Six pits were different in form to the small pit/postholes described above. Five were subcircular, ranging in diameter from 0.6 m to 1.0 m, and the sixth was irregular, measuring 1.8 m x 1.1 m. The features ranged from 0.1 m to 0.26 m in depth, being relatively shallow in comparison to their size in plan; this may suggest that all had been subject to considerable horizontal truncation. No evidence for function was recovered.

The largest of the pits, 5032, was found 2.5 m to the north of Structure 1 (Fig. 2). Its irregularity, and the presence of root disturbance to the base and sides, meant that an origin as a tree bole seemed quite possible. Although similar in colour to the other excavated features, the fill contained slightly more sand and bore some resemblance to the topsoil. Relatively large fragments of three clay loomweights, considered to date to the seventh to eight centuries A.D., were recovered from the fill (see below, *The Finds*). Other finds included fragments of a single cow tooth, one mid-shaft bone fragment of unknown species, a small sherd of medieval green-glazed pottery of possible fourteenth century date, and fragments of a human mandible with five very worn teeth. The medieval pottery was found relatively close to the upper interface of the fill, and may have been intrusive but, equally, it is quite possible that the loomweights were residual to the context, and that the fill formed in the fourteenth century or later. Even if this was the case, however, it can be suggested that the clay loomweight fragments are unlikely to have moved far in the landscape, and were probably originally used in the vicinity of the pit.

The other pit fills were devoid of finds, with the exception of two small joining fragments of sheep/goat tibia.

Linear Features

Two linear features were recorded. One lay to the south of Structure 1, and was found to be very shallow, with a maximum depth of only 0.2 m. The feature had probably been heavily truncated, and it survived in three discontinuous segments, with a combined length of 14.25 m. Its sides and base showed extensive evidence of root activity, and it is suggested that the feature is best interpreted as a hedge line. Despite its proximity to the southern end of Structure 1, this linear feature may be of comparatively recent origin; a section recorded where it reached the east balk of the excavation showed that the fill was indistinguishable from the overlying topsoil. Two large fragments of black smithing hearth-bottom slag were recovered, but cannot be dated.

A further very shallow linear feature was recorded to the west of Structure 1, petering out to the south. It was 11.75 m long, but only *c*.0.15 m deep, and it is uncertain whether the southern end represents a genuine terminal, or the effects of horizontal truncation. The feature may represent the base of a shallow ditch, but no dating evidence was recovered. Its alignment was slightly divergent to that of both Structure 1, and present day field boundaries.

The Finds by Christine Howard-Davis

In total, 111 fragments of artefacts and ecofacts were recovered in the course of the

excavation, more than half of the material from a single context, fill 5031 of shallow pit/tree hole 5032. Much of the material was highly fragmentary and abraded, suggesting an element of disturbance.

In all, 28 poorly preserved animal bones were recovered, showing a high degree of fragmentation and surface erosion. They probably represent the remains of domestic animals, although only sheep/goat was positively identified. A further five fragments of a single human lower mandible were also recognised within the group of finds from 5031. The badly worn teeth suggest an adult, but no further analysis was undertaken.

Only two fragments of ceramic vessel were recovered: a small and very badly abraded fragment of what might be a Romano-British oxidised fabric from posthole 5119 (fill 5118) of Structure 1, and an equally small, but less badly damaged, fragment of incompletely reduced green-glazed ware from pit 5032 (fill 5031). The latter is probably fourteenth century in date.

Several fragments of extremely coarse material from Structure 1 posthole 5134 (fill 5133) were at first thought to be crudely-made coarse pottery, but are now considered to derive from the fabric of some fired structure, such as a hearth or kiln. The material is extremely friable, with large inclusions of water-worn laminar slate up to 10 mm in maximum dimension. It appears to have been burnt rather than fired, being a dark brown colour with what might be soot in the interstices of the fabric. Careful cleaning failed to reveal any obvious surface or form to the fragments recovered.

Relatively large fragments of three crudely-made clay loomweights were also recovered from 5031; all three were of different form. One of them, iii, resembled examples from Fremington (Oliver *et al.*, 1996, fig. 6: 19) in both fabric and form, but examples i and ii differ significantly. Example i is almost discoid, and appears to have been formed by squeezing wet clay around a central cylindrical object (possibly a stick); its extremely poorly sorted fabric, breaking into tiny curving, laminated fragments, suggests a very poorly (if at all) prepared clay and gives a strong impression of *ad hoc* production. Example ii is in contrast almost spherical, although made in a very similar fabric. Although two of the three are somewhat idiosyncratic in form, all three, however, could be regarded as forms intermediate between annular and bun-shaped loomweights, and best dated to within the seventh to eighth centuries, perhaps tending towards the later part of that period (*op. cit.*, 152).

A stone hone from posthole 5054 (fill 5053), of Structure 1, although damaged and incomplete, is also a type not out of place in the early medieval period, and can again be loosely paralleled at Fremington (*op. cit.*, fig. 6: 25 no 2) and Dacre (Howard-Davis forthcoming). It must, however, be borne in mind that hones are a long-lived type and persisted, little changed, well into the medieval period.

Discussion

The most striking result of the excavation has been the discovery of the remains of Structure 1, an earth-fast timber building which measured 9.5 m long by 4.8 m wide. The paucity of finds and the loss of occupation surfaces make it impossible to attribute a function to the building: it may have been a dwelling house, communal building, workshop, or barn. However, its size, and the presence of numerous other

features nearby, suggest that this was not an isolated agricultural structure. In addition to Structure 1, evidence was found for at least two fences or other buildings. The presence of a large number of additional pit/postholes suggested further structures, but their ground plans could not be adequately reconstructed on the basis of the surviving remains. It seems very likely that these would have included stock management features, whether for the purpose of penning stock in, or of keeping animals away from garden areas. Given the lack of explicit evidence for multi-phase occupation of the site, many of the features recorded in addition to Structure 1 may date to the same period. Hand-cleaning of much of the excavation area, coupled with the evidence of the evaluation trenches, suggested a rapid decrease in activity towards the western side of the field. However, it seems probable that the surviving structures may represent part of a more extensive settlement, which may have extended to the north, east, and south of the excavated area.

The direct artefactual dating evidence for the structure was relatively poor, finds being recovered from only three of the constituent postholes. These comprised a single abraded sherd of pottery in what appeared to be a Romano-British oxidised fabric, fragments of clay, possibly burnt rather than fired, which may have been derived from the structure of a hearth or kiln, and a stone hone of long-lived form. The pottery appears to provide a Roman *terminus post quem* for the structure, although the sherd was small, and the possibility that it might be intrusive is difficult to rule out completely; the remaining finds give no close indication of date. The presence of a single abraded Roman pot sherd does not seem in itself to be an adequate indicator of a Roman date, and, at Fremington, some 12 km to the north,

PLATE 1. Structure 1, Parker's Croft, Shap, looking south.

the seventh to eighth century sunken featured buildings contained large quantities of residual Roman period finds (Oliver *et al.*, 1996, 127-169). Romano-British settlements in the North West typically produce larger quantities of pottery (Shotter, 1993, 82); it could be argued that a site whose occupants were of low status, little Romanised, and geographically isolated might produce few Roman artefacts, but a dearth of finds would normally be considered more typical of an early medieval settlement (Millett, 1983, 197).

In view of the lack of clear dating evidence from the fills of the postholes themselves, the three relatively large loomweight fragments found in pit/tree hole 5032, 2.5 m to the north of Structure 1, assume considerable importance. They have been attributed on stylistic grounds to the seventh or eighth centuries A.D., and one resembled an example from Fremington. Although there is no stratigraphic association with the building, their proximity suggests early medieval occupation of the area, indeed the existence of an established settlement where craft production was carried out. It seems very probable that the weights would have remained very close to where they had been used, given their bulk, poor quality, and the evidence that at least one of them represented *ad hoc* production (see above, *The Finds*). Their presence may therefore be taken as significant evidence for the date of Structure 1.

Leaving aside the artefactual evidence, the rectangular building plan and use of earth-fast timber posts would appear consistent with an origin in the Neolithic, Roman, early-medieval, or medieval periods. Several examples of small Neolithic "houses" of up to 15 m in length are known from the British Isles, including structures both of post-in-trench construction (for example Balleygalley, in Northern Ireland; Bewley, 1994, 61), and of post-in-pit construction (Lismore Fields, near Buxton, Derbyshire; Garton, 1987, 250-3). Other Neolithic timber structures were larger, including examples at Fengate, near Peterborough (post-in-trench; Bewley, 1994, 60), Balbridie, in north-east Scotland (post-in-trench; *op. cit.*, 62), and Yarnton, in Oxfordshire (post-in-pit; G. Hey *pers. comm.*). Overall, buildings of post-in-trench construction appear to have predominated, whilst the ratio of length to width was sometimes 2:1 (Yarnton), but varied widely. Other typical characteristics include the presence of large numbers of internal gullies or postholes, suggestive of internal structural supports, and partitions which tended to be centrally placed. The closely-spaced postholes and disposition of partitions seen at Shap are not readily paralleled in structures of known Neolithic date. Whilst the five fragments of an isolated human mandible, recovered from pit/tree hole 5032, might not be out of place in a Neolithic context, there is no reason to argue that either the bones or associated features therefore derive from this period; human remains are often encountered in a variety of feature types on sites of widely differing date.

A later prehistoric rectangular timber structure would be extremely unusual in the North West; rectilinear buildings are usually considered to be the product of advancing Romanisation, and, in Cumbria, a change from circular to rectangular buildings is considered to have occurred on rural sites in the third century A.D. (Higham and Jones, 1985, 97). Vernacular Romano-British styles of building included earth-fast rectangular timber structures of post-in-pit construction, and these varied greatly. A slightly tapering building excavated at Ochre Brook, Tarbock, to the east of Liverpool, showed widely-spaced postholes, typically at intervals of *c.*3 m (Cowell and Philpott, 2000, 72), whereas Structure B254 at the probable

third century Romano-British farmstead at Dunston's Clump, in Nottinghamshire (Welch, 1992, 39), showed a similar arrangement of closely-spaced postholes to Structure 1 at Shap, and was exactly the same size. However, the similarity of Dunston's Clump B254 and Shap Structure 1 does not necessarily suggest a Roman date for the latter; Welch has drawn attention to similarities between buildings at Dunston's Clump and those at Catholme, a settlement in Staffordshire whose dating perhaps centres on the seventh to eighth centuries (*ibid.*). The similarity may derive from the persistence of traditional Romano-British styles into the early medieval period, rather than implying a Romano-British date.

Romano-British practices were certainly one influence on early medieval timber structures; indeed, a broad tradition of rectangular timber-framed buildings has been identified which spans the Roman and early medieval periods in much of England and southern Scotland (James *et al.*, 1984). The features of this building style include earth-fast posts, opposed doors in the long walls, and use of a double square planning module, and it has been suggested that combinations of crucks and end gable posts were used to support the roof. Structure 1 at Shap shows some similarity to Building A20 at Chalton in Hampshire, a timber hall that was part of an extensive seventh century Anglo-Saxon settlement (Welch, 1992, 20). A20 was a slightly larger structure, but shows the same close spacing of postholes in the external walls. As already suggested (see above *Results*), the deep postholes immediately south of Structure 1's possible opposed doorways may represent the base of a cruck, and the pair of closely spaced internal postholes to the south may have been further internal supports for the ridge pole of the roof. Both the use of a cruck, placed just over a third of the way along the length of the building, and of additional internal paired roof supports, are characteristics shared by Chalton A20, and indeed by the rather different trench-built structure C8, at Cowdery's Down, also in Hampshire (Welch, 1992, 20). Although not as large as the biggest halls at Chalton, Structure 1 was nevertheless larger than the many "medium-sized" buildings recorded there (*op. cit.*, 17*)*.

Other close parallels can be found rather nearer to eastern Cumbria. At least one of the "kiln-barns" built around the periphery of the Anglian monastic enclosure at Hoddom (Dumfriesshire), north-west of Carlisle, from the seventh to eighth centuries, shows a similar close spacing of postholes and the same 2:1 ratio of length to width as were found at Shap (Lowe, 1999, 56). Further east, post-built structures in the same tradition, though perhaps less similar, are known from several sites: Sprouston (Roxburghshire), Yeavering, Milfield, and Thirlings (Northumberland) (summarised in Wilmott, 1997, 222). Much more locally, elements of up to five timber buildings have been excavated at Fremington and Whinfell Forest, in Brougham parish, but these buildings had much more widely spaced wall posts (Oliver *et al.*, 1996, and below *Whinfell Forest, Brougham*).

Most of the early-medieval examples cited here as parallels for the structure found at Shap are from seventh to eighth century settlements which are regarded as "Anglian" or "Anglo-Saxon". However, in an area such as Cumbria, which formed the interface between several different peoples over many centuries, one should be cautious about associating a timber building with people of a particular ethnicity. This is reinforced by the similarity between Shap Structure 1 and buildings at Dunston's Clump and Catholme (Welch, 1992, 39). In addition to similarities of

size and posthole spacing, Dunston's Clump B254, Catholme 62, and Shap Structure 1 all have at least one long wall doorway, placed off-centre along the longitudinal axis of the building. This asymmetrical placement of doorways distinguishes the structures from many of the Anglo-Saxon buildings referred to above; it also resembles the later idealised medieval open hall plan, with cross passage sited at the lower end of the hall, adjacent to a partition closing off the service area (Grenville, 1997, 90). In the North, British rectangular timber buildings have been identified at Doon Hill (Lothian) and Carlisle (summarised in Wilmott, 1997, 222), though both of these examples are substantially larger than Structure 1 at Shap, and do not closely parallel the arrangement of postholes.

In summary, buildings apparently very similar to Structure 1 have been identified at one Romano-British settlement, and at several settlements dated to the seventh to eighth centuries A.D., and deemed to be "Anglo-Saxon". There are fewer similarities to excavated Neolithic buildings, and indeed to later medieval structures. This accords with the artefactual dating evidence reviewed above. The presence nearby of loomweights of seventh to eighth century type, and the groundplan of Structure 1 itself, strongly suggest an early medieval date for the building, and it seems quite probable that it was constructed in the seventh to eighth centuries A.D.

Whinfell, Brougham by Christine Howard-Davis and Richard Heawood

In 1996, LUAU conducted an archaeological evaluation in advance of the construction of a sewer leading from the Oasis holiday village at Whinfell Forest to a water treatment works some 3.5 km to the north-west. The evaluation identified two areas of archaeological potential: Site A, close to the water treatment works at the north-west end of the sewer, and Site B, immediately north of Whinfell Forest (the latter termed "Whinfell excavation" on Fig. 4). Further investigation of both sites proceeded in August 1996, funded by North West Water Ltd; the Whinfell excavation forms the subject of this report, although the three ditches found at Site A are described in the archaeological background (*below*).

The Whinfell site lies at *c.*150 m OD, adjacent to a small stream which runs from south-east to north-west, towards the valley of the River Eamont. The ground rises to either side of the stream, being occupied by open agricultural land to the north-east, and a conifer plantation to the south-west. Glacial drift of sand and stones covers solid geology of Permian Penrith Sandstone (Moseley, 1978).

Archaeological background

Whinfell lies close to the confluence of the rivers Eden and Eamont, within an area of fertile agricultural land showing one of the greatest clusters of archaeological sites in Cumbria. The presence of a concentration of henge monuments there demonstrates some density of population in the vicinity in the late Neolithic, with the ability to construct large communal monuments (Harding and Lee, 1987), whilst two burial cists found in the nineteenth century at Moorhouse Farm, and attributed to findspots *c.*2 km west-north-west of Whinfell, demonstrate Bronze Age activity in the area (Oliver *et al.*, 1996, 127).

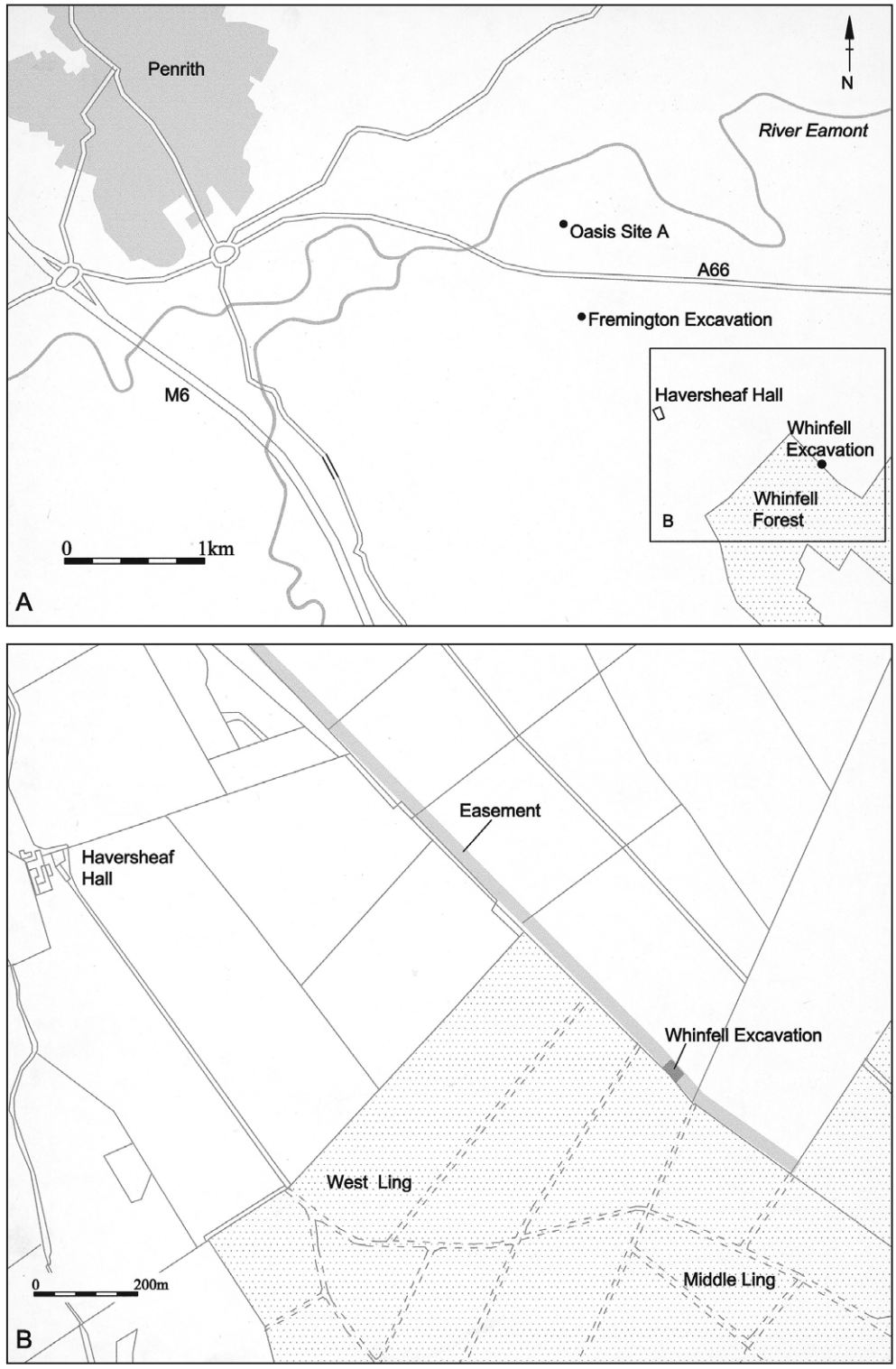

FIG. 4. Location map, Whinfell Forest, Brougham.

A fort was established by the Romans at Brougham, where the main north/south road from Carlisle intersected with the road along the Eden Valley. A cemetery has been located to the east of the fort, and aerial photography suggests the former presence of a widely dispersed civilian extramural settlement (Higham and Jones, 1975, 27). An Iron Age or Romano-British settlement lies at Sceugh Farm, across the Eamont valley *c.*3 km to the north-west of Whinfell, and cropmarks indicative of field systems are also known on the south bank *c.*2 km to the north-west (Oliver *et al.*, 1996, fig. 6:2).

Four ditches were sample excavated at Site A during the programme of archaeological investigation of which the Whinfell excavation formed a part (Fig. 4; LUAU, 1996). Two of the ditches were aligned south-east/north-west, and a third south-west/north-east; no finds were recovered from these features, and they were interpreted as later prehistoric or early Roman field ditches, pertaining to a system of land division which predated the construction of the Roman road. Fragments of a co-axial field system laid out on a similar pattern of alignments have been perceived in the extant field boundaries of the immediate vicinity (LUAU, 1996, 14). The fourth ditch was aligned roughly north/south, perpendicular to the line of the east/west Roman Road, which lay 300 m to the south; 11 fragments of abraded Roman pottery of third century date were recovered from this feature, which was probably cut after the establishment of the Roman road.

The evidence for early medieval activity in north-east Cumbria has already been reviewed (*see above Parker's Croft, Shap – Archaeological background*). The existence of the monastery at Dacre and proto-urban focus at Penrith, together with the recently discovered rural settlement at Fremington, only 2 km north-west of Whinfell, suggest the continued exploitation of the rural landscape during the post-Roman centuries.

Results

The Whinfell excavation area measured 45 m x 21 m; a depth of *c.*0.25 m of greyish brown sandy loam topsoil was removed by machine, exposing a deposit of yellowish brown sand of natural origin. The area was cleaned by hand, revealing at least 60 archaeological features cut into the surface of the sand; most were interpreted as postholes or stakeholes, but four larger pits and a few modern features were also present. Many of the features appeared to have been heavily truncated, and the very limited stratigraphy meant that few statigraphic relationships between features could be recovered. The phasing of features was also hampered by an almost complete lack of artefactual evidence, but the spatial arrangement of the postholes has allowed at least four conjectural earth-fast (post-built) timber buildings to be tentatively identified.

Structure A1

A possible rectangular post-built structure, 14 m long and at least 6.5 m wide, was identified, aligned roughly north-west/south-east (Fig. 5). The south-western long wall was represented by four postholes of similar shape and size, 0.44 m-0.58 m long, and 0.12 m-0.16 m deep (1090, 1080, 1082, and 1068). They were grouped

as pairs approximately 2.0 m apart at each end of the wall, leaving a central 9.0 m length without postholes; this raises the possibility that the central part of the wall line may have been left open, although this was not necessarily the case.

The north-western gable end appears to be represented by posthole 1104, with shallow beam slot 1088 perhaps representing the base of a panel of infill between 1104 and corner post 1090. Although there were no other postholes on the line of the gable, a second shallow slot, 1100, may represent the continuation of the wall. A gap of approximately 2 m separated posthole 1104 and slot 1100, and might perhaps indicate a gable entrance, especially as the south-western end of slot 1100 turned at right angles into the structure. Beyond the gable wall, posthole 1173 might relate either to this putative entrance, or represent replacement or reinforcement of the gable, in the same way that posthole 1169 appears to represent replacement of the corner post. Most of the features attributed to this gable wall were very insubstantial; posthole 1173 was 0.23 m deep, but the remaining postholes and slots were less than 0.09 m in depth.

No trace remained of any south-eastern gable wall, although it is possible that two modern field drains which crossed this area disturbed earlier features. The north-east long wall is considered to have stood outside the limit of excavation.

Structure A2

A second possible rectangular post-built structure was identified, measuring 12.4 m long and at least 6.1 m wide; although oriented north-west/south-east, its alignment was very slightly divergent to that of Structure A1 and, as the two structures have overlapping ground plans, they cannot have been in contemporary use. The south-western long wall was represented by four postholes, between 0.1 m and 0.2 m deep, set between 2.2 m and 6.1 m apart (1180, 1108, 1076, and 1060). Postholes 1180 and 1108 were very similar, both showing roughly the same shape and profile, with lower fills of brown sand lining the bases and sides of the cuts; it was also observed that the fills of 1180, 1076, and 1056 contained fragments of clay (posthole 1056 was slightly remote from the main structural alignment, but may also have related to this structure). None of the postholes of Structure A1 contained clay, reinforcing the likelihood that two distinct structures formerly stood here; the presence of the clay also suggests separate depositional processes, and it may be that some of the timbers of Structure A2 were removed rather than left to rot *in situ*.

The putative north-eastern long wall was represented by five irregularly spaced postholes, between 1.1 m and 3.5 m apart, grouped together because they formed an alignment, rather than because of any similarity in shape and character (1050, 1048, 1118, 1096, and 1098). A single posthole, 1054, represented the south-east gable wall, whilst nothing remained of any north-west gable wall. Postholes 1078 and 1086 suggest that the structure was partitioned into two roughly equal parts.

The postholes in this area have been attributed to two superimposed structures, A1 and A2. It is acknowledged that other interpretations are possible; for example, it might be thought that they represent a single building some 17.5 m long. However, the interpretation presented here is considered to give the most complete explanation for the anomalies in alignment and character displayed by the features.

Structure B

A rectangular post-built structure or structures stood some 6 m south-east of Structure A1, on the same alignment. Two alternative interpretations can be placed on this group of postholes: a single long, narrow building 14.0 m long and around 4.0 m wide, or two smaller structures each 6.0 m long by 4.0 m wide, perhaps built end to end, some 1.6 m apart. If a single large building was present, it may have had an entrance midway along the north-east long wall, represented by postholes 1167 and 1161; if the postholes were derived from two structures, they must have been separated by a narrow passage, assuming that their identical alignment indicates contemporaneity.

Five postholes indicated the probable position of the north-east long wall or long walls (1178, 1171, 1167, 1161, and 1141). All were oval, but they varied in size, ranging from 0.35 m to 0.7 m long, and from 0.04 m to >0.18 m deep; all were filled with greyish brown sandy loam. The interval between identified postholes varied from 2.2 m to 5.3 m, discounting the interval of *c*.1.1 m between the postholes which marked the position of the entrance/passage. The deepest posthole, 1161, lay immediately south-east of the entrance/passage.

Four postholes, spaced at intervals ranging from 2.0 m to 3.3 m, suggested the line of the south-west long wall or walls (1183, 116, 120, and 1191). All the postholes were roughly circular, varying in diameter from 0.35 m to 0.60 m, and three were between 0.16 m and 0.25 m deep; all had different fills. Evidence for a possible rotted post was found in posthole 120, but there was no clear evidence for any doorway opposed to the putative entrance in the north-east wall.

If a single long structure was present, no evidence survived for its gable walls, with the exception of the corner posts at the ends of the long walls; three internal postholes (1156, 1159, and 1163), roughly half way along the length of the structure, must be seen as problematic, lying immediately inside the putative entrance. If two adjacent structures set end to end are represented, these three postholes might be thought to relate to the two facing gable walls.

Structure C

The more complete remains of a fourth structure were found to the south of Structure B, partially overlapping it. Structure C was aligned north-north-west/south-south-east, an orientation not dissimilar to that of Structure A2, and measured 8.0 m long by 3.5 m wide. There was no consistency in the sizes of the postholes, but those to the east were the largest, perhaps having suffered less erosion and plough damage; the spacing of the postholes was also erratic.

The north-eastern wall was represented by five postholes (112, 114, 118, 148, and 1131), which varied in length from 0.23 m to 0.6 m. The most substantial were 114 and 118, towards the north end of the wall. Posthole 114 was only 0.35 m from corner posthole 112, this arrangement being mirrored at the north end of the south-west long wall; the maximum interval between postholes was 3.3 m. Corner posts 112 and 1131 were both small, being no deeper than 0.08 m.

A further five postholes, showing a similar range of dimensions, were attributed to the south-west wall (1189, 1187, 1137, 1149, and 1145). As was noted above, the second posthole from the north end of the wall appeared to be paired with a

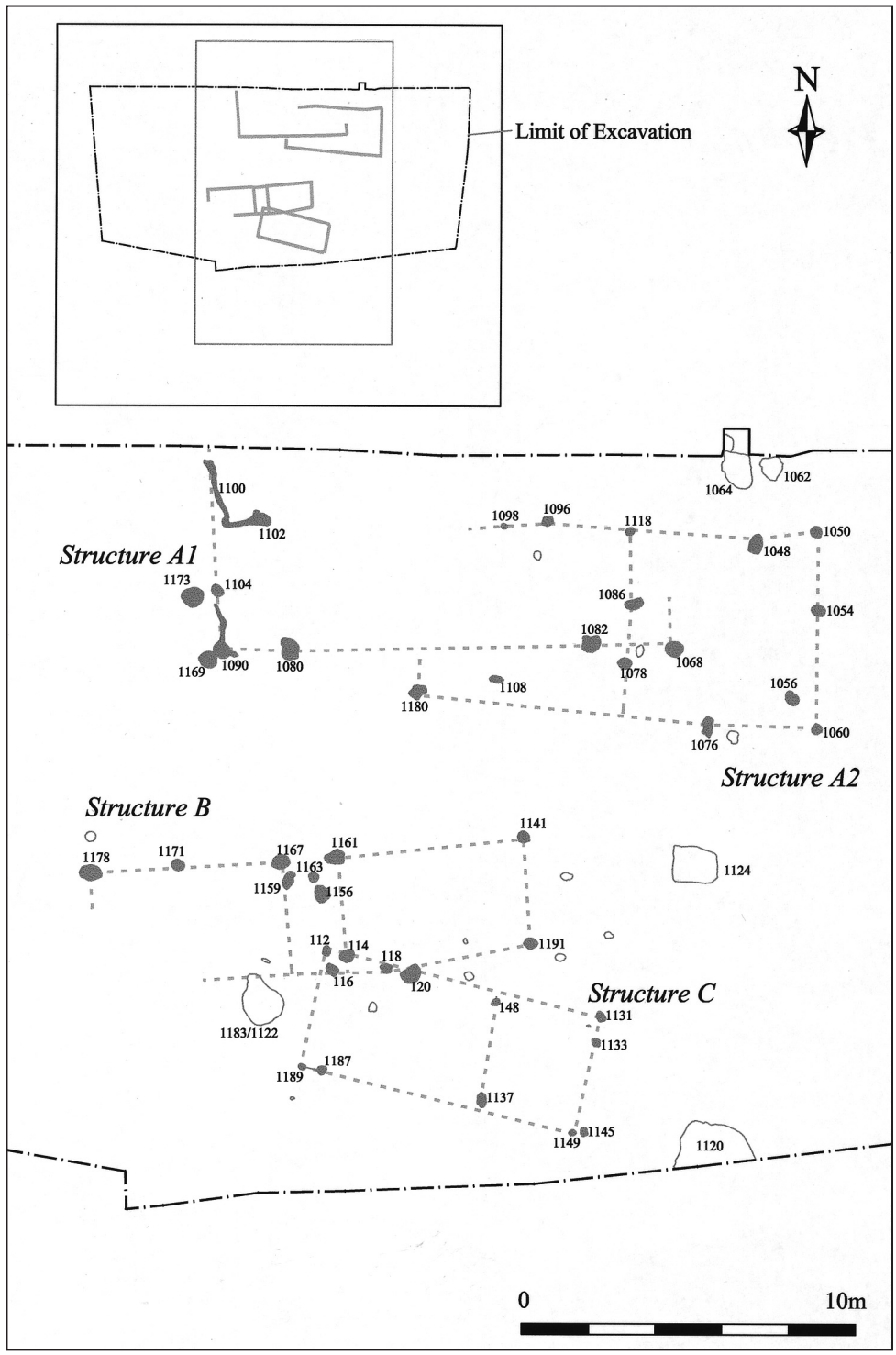

FIG. 5. Site plan, Whinfell Forest, Brougham.

posthole in the opposing wall and, further south, posthole 1137 was roughly opposed to 148, raising the possibility that the structure may have been partitioned at this point.

No features were found on the supposed lines of the gable walls, with the exception of posthole 1133, on the south-east side of the structure; 1133, and 1145 to the south-west, might be regarded as representing the replacement of corner posts, but 1133 was perhaps too far from the corner, whilst 1145 might instead be regarded as one of a pair of closely-spaced but contemporary postholes, analogous to the pairs of postholes at the north ends of the long walls.

Other features

Four large pits measuring at least 1 m in diameter were found, varying in depth from 0.09 m to 0.42 m. Three of the pits (1122, 1124, and 1064) formed a rough alignment, oriented north-east/south-west, whilst two (1122 and 1064) were close to structures, although this latter association may be fortuitous. No clear function could be attributed to any of these features, although pit 1064, 0.25 m deep and somewhat egg-shaped in plan, bore some resemblance to a hearth.

Nine further postholes/stakeholes were identified, but could not be attributed to particular structures. Nevertheless, their presence suggests that further structures, perhaps fence lines, formerly existed here.

Finds

A single small unworked fragment of white, flint-like stone was recovered from posthole 116, attributed to Structure B, and two small unworked fragments of possibly burnt flint were recovered from posthole 114, attributed to Structure C.

Discussion

The paucity of finds, rudimentary stratigraphy, and widespread variation in the form and fills of the postholes has meant that, with a few exceptions, structural features could only be grouped together on the basis of their spatial distribution. Nevertheless, there is good evidence that rectangular timber structures once stood on the site, and either four or five such structures have been tentatively identified. Insufficient evidence remained to allow an examination of the constructional techniques employed and, in particular, there was no indication of how any roofs had been supported. However, the apparent irregularity in the arrangement of the postholes suggests the loss of some structural features through horizontal truncation of the site and, if this is accepted, it certainly appears possible the structures could have been roofed buildings, with infilled walls. Nevertheless, there was no evidence for the closely spaced wall posts which characterised the probable early medieval building at Shap, despite the fact that at least two of these structures were larger than the Shap building, and the suspicion remains that the Whinfell structures were less substantial. The size and proportions of the structures clearly suggest buildings rather than merely fence lines or stock pens, but it remains uncertain whether these were dwelling houses, or ancillary structures with an agricultural, craft, or storage function.

The pattern of alignments suggests that Structures A1 and B were contemporary, being separated by an area of open ground *c*.6 m wide; although Structures A2 and C diverge slightly in orientation, their putative north-west gable walls were almost aligned, perhaps suggesting that they formed a second contemporary group of structures. Thus, although the sequence of building remains unknown, it can be suggested that at least two phases of activity are represented, with perhaps two structures in use in each phase. Although evaluation work found no evidence of further structural features to the north-west or south-east, the extent of the settlement to the north-east and south-west has not been established.

The almost complete absence of artefactual evidence has hampered the dating of the site; the two fragments of flint and one of whitish stone which were recovered were all unworked, and provide little indication of the potential age of the structures. The style of the structures themselves is thus important in assessing date, but, as has been noted above (see *Parker's Croft, Shap – Discussion*), rectilinear timber buildings might potentially derive from the Neolithic, Roman, early-medieval, or medieval periods. Structure B bears some resemblance to the Neolithic structure or structures excavated at Lismore Fields, near Buxton, Derbyshire (Garton, 1987, 250-3); both sites produced clusters of postholes indicative either of two buildings with adjoining gables, or of long, single structures. If treated as the latter, the dimensions and thus proportions are closely comparable (14 m x 4 m at Whinfell; 15 m x 5 m at Lismore Fields). However, this comparison is certainly not conclusive, and the Whinfell structure contained fewer, more widely-spaced postholes than the Lismore Fields example.

The remaining Whinfell structures show affinities with later periods; A1, A2, and C show some resemblance to Structure 1 at Ochre Brook, Tarbock, particularly with regard to size and the relatively wide spacing of the postholes. The latter building measured 11.2 m x 6.9 m tapering to 5.85 m, and has been attributed to the later second century A.D. (Cowell and Philpot, 2000, 72, 108), but does not provide a perfect parallel, as the published groundplan suggests prominent postholes in the centre of the gable walls, presumably to support a ridge purlin, as well as possible evidence for longitudinal partitioning. The form of the Whinfell structures, with walls of relatively widely spaced posts, resembles that of buildings found in southern England in an Anglo-Saxon context, for example at Mucking (Hamerow, 1993), but also closely resembles Structure 5 at Fremington, the postholes of which were mostly at 1 m-1.5 m intervals (Oliver *et al.*, 1996, 140-143). The latter was attributed to the seventh to eighth centuries A.D., and was associated, both spatially and chronologically, with four sunken featured buildings, of a type hitherto almost exclusively restricted to Anglo-Saxon settlements in southern, eastern, and north-eastern England. It is interesting to note that Structure A2, measuring some 12.4 m x 6.1 m, showed the 2:1 ratio of length to width typical of many Roman and early medieval buildings (James *et al.*, 1984), though the putative central partition is not typical of the early medieval period. The proportions of each end of Structure B were also approximately 2:1, but Structure C was of rather different proportions, having a length of at least twice its width, whilst the proportions of Structure A1 remain unknown, as it appeared to continue beyond the limit of excavation.

The form of the structures excavated at Whinfell does not conclusively demonstrate their date, and we must turn to other considerations. Although it is

certainly possible that the structures are Neolithic, there is as yet no reason to believe that Neolithic people in Cumbria erected structures of this type, and the rarity, throughout southern Britain, of Neolithic structures which can be identified as permanent dwellings has been stressed by some writers, e.g. Thomas (1999, 9-10). This alone is not a conclusive line of argument, and it would be rash to argue away potential Neolithic evidence merely on this basis. However, it is known that there were Romano-British and early medieval populations in the immediate vicinity of Whinfell, and both are likely to have erected rectangular structures as dwellings, workshops, or agricultural buildings. Whinfell lies less than 3 km south-east of the civilian settlement which probably lay adjacent to the Roman fort at Brougham (Higham and Jones, 1975, 27), and a similar distance from the Iron Age or Romano-British settlement at Sceugh Farm (Lambert, 1996, 17). Likewise, it is only 2 km from the early medieval site at Fremington, which produced a similar structure (Structure 5; Oliver *et al.*, 1996, 140-143); given that many early medieval settlements were widely dispersed, migrating around a resource area (Hamerow, 1993), it is quite possible that the structural remains from Fremington and Whinfell were part of the same loose settlement.

If a Roman, early medieval, or indeed later medieval origin is accepted as the most probable, the lack of finds becomes a significant factor. The structures at Whinfell might not seem out of place in a Roman context, but as the site lies in an accessible position, within 1.5 km of the Roman road now followed by the A66, and less than 3 km from the Roman fort at Brougham, the lack of finds argues against a Roman presence; in the North West, it is usually considered that artefactual evidence will permit relatively easy recognition of Roman period occupation (Shotter, 1993, 82). More artefactual material might again be expected if a site were occupied in the later medieval period. In contrast, the paucity of surviving cultural material from rural Anglo-Saxon settlements in southern England is widely understood (Millett, 1983, 117). Thus, whilst the structures might possibly be Neolithic, Roman, or early-medieval in origin, an early medieval date is suggested.

Conclusion

The close spacing of the postholes of Structure 1 at Shap makes the building quite different to any of the nine structures excavated at Fremington and Whinfell. The building is closely paralleled by examples on several sites which have been regarded primarily as Anglo-Saxon settlements, yet the close spacing of wall posts and asymmetrical positioning of probable entrances also reflects possible Romano-British influence. However, despite the variation in constructional technique between Structure 1 at Shap, and the only hall-type structure at Fremington, one of the three probable seventh to eighth century loomweights found close to Shap Structure 1 closely resembled examples from Fremington, suggesting that the occupants of the sites shared at least one common tradition. In view of this, it would be premature to infer that the inhabitants of the Shap, Fremington, and possibly Whinfell, differed either in ethnicity or social status, simply because different styles of building have been identified. The excavators of Fremington were right to stress the probability that, here in eastern Cumbria, close to a long-established Pennine crossing, we are likely to see the mingling of longstanding indigenous traditions with more recently

imported practices (Oliver *et al*., 1996, 169); certainly different building styles need not signify settlement by different peoples. Differences in social status, in agricultural regime, and in exposure to new fashions may all explain variation between buildings, not to mention the possibility that we may be looking at zones within settlements that may not be directly comparable.

Leaving aside such considerations, the discovery of these two sites, together with that at Fremington, has provided significant evidence to suggest a settled rural hinterland around the foci at Dacre and Penrith in the early medieval period. It has been argued that the inhabitants of Fremington practised mixed agriculture, growing crops in the easily worked sandy soils, and raising animals (Oliver *et al*., 1996). At Shap, the domestic economy must have been very different. The altitude and less favourable soils might suggest a more pastoral way of life, yet recent study of pollen evidence from Littlewater, a short distance to the west, suggests that this was a time when some upland areas were being exploited for flax and hemp (Elizabeth Huckerby *pers. comm.*; LUAU, 2000). Although we are far from being able to reconstruct the early medieval settlement pattern of eastern Cumbria, the lack of evidence gives each new site considerable importance. The discoveries of the last decade mean that a considerable density of rural settlement in the Penrith area can now be suggested in the seventh to eighth centuries, and more early medieval sites can be expected where there are opportunities for appropriate evaluation and excavation. However, it should be noted that structures of the type recorded at Shap and Brougham are likely to be visible only when the careful hand-cleaning of excavation sites can be conducted.

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