

5. LAND DIVISIONS AND ASSOCIATED FEATURES

An extensive area to the east of the fort was stripped mechanically over two seasons (1976–7) in search of remains of the postulated civil settlement. The work focused on two main areas (Illus 1.2). The largest (excavation Areas D, G and H) extended for some 115m east/west and uncovered approximately 2,050m² across the top of a ridge of more level ground. The subsoil was very stony boulder clay and it immediately became apparent that the area had a long history of agricultural activity. This was evidenced by regular plough marks cutting into the exposed subsoil and the scouring of larger protruding stones, with consequent detrimental impact on archaeological preservation. Apart from the line of the bypass road (see 4.2, above), the main features recorded were land divisions interspersed with occasional remains of industrial activity. Some 40m downslope, on a slight terrace on the south side of the bypass road, a further 630m² was exposed in an area with slightly greater soil cover (excavation Areas E and M). Further land divisions were recorded here, along with a single cremation burial.

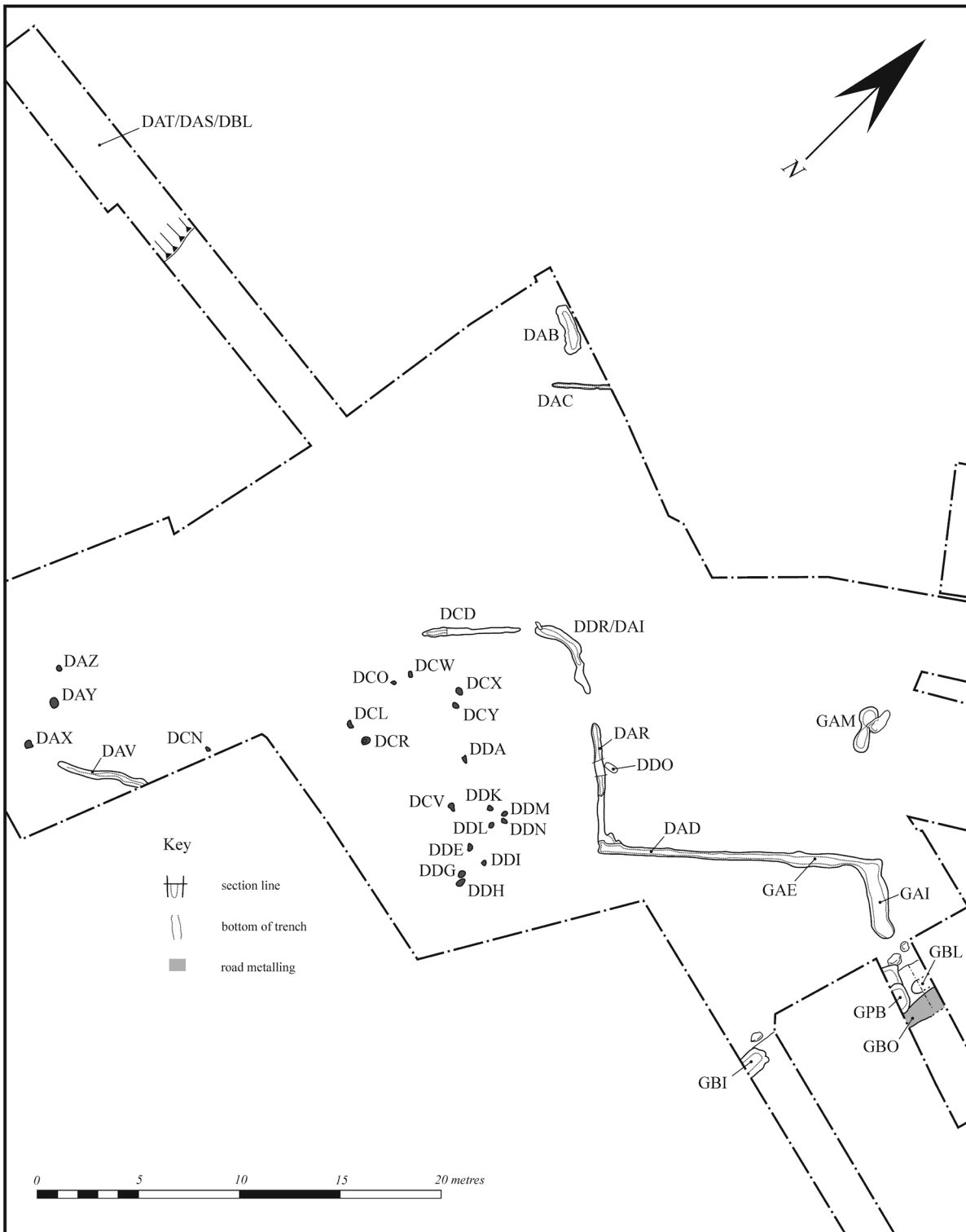
5.1 Land divisions

North of the bypass road at the western end of the excavated area the land divisions consisted of a series of linear features broadly aligned with the layout of the fort, but at an oblique angle to the bypass road (Illus 5.1). The various segments were discontinuous, but created a reasonably coherent pattern aligned broadly at right angles to each other. A 4.5m length of shallow gully some 0.25–0.4m wide and 0.16m deep (DAV) got progressively wider and deeper as it approached the edge of the excavated area (Illus 5.2 and 5.4). Some 9m north and 13.5m further east was a similar gully (DCD) running approximately parallel for 5m, while 12m further north was a third (DAC), slightly narrower (0.2m–0.3m), again on a similar alignment, which ran for 2.8m before disappearing into the side of the trench. Of the latter only the basal 20mm had survived. After a break of 0.7m, the central element of this parallel gully system (DCD), which was 0.35–0.65m wide and 0.05–0.65m deep, curved

through 90 degrees south (DAI/DDR) (Illus 5.1, 5.3 and 5.4). After a 1.5m gap, it continued for a further 6.5m (DAR), surviving to a depth of only 0.1–0.15m. Approximately one third of the way along DAR a sub-rectangular (0.74m by 0.32m) post hole (DDO) cut its eastern edge. The latter was straight-sided and flat-bottomed but only 0.24m deep with two large stones at one end. The gully then turned sharply eastwards through 90 degrees (DAD/GAE), on broadly the same alignment as the most westerly gully (DAV) (Illus 5.1 and 5.3). Though narrow (0.3–0.35m) and shallow (0.12m) at its western end, it got progressively wider (up to 0.8m) towards the east (GAE) (Illus 5.4), before again turning sharply through 90 degrees to the south after a length of some 14m. This final 4m-long segment (GAI) was of very different character, 1m wide and 0.4–0.5m deep, coming to a butt end immediately to the north of the bypass road (GBO) (Illus 5.1 and 5.4). The intersection with DAD/GAE had been badly damaged by burrowing animals, but gave the impression that GAI was structurally later.

With the exception of this last 4m immediately adjacent to the bypass road, the gullies were consistently narrow and shallow, and filled with silty sand. With their generally right-angled changes of direction, they were more reminiscent of construction trenches than drainage features. The overall impression created was of a structured layout of fences running parallel or at right angles to each other on the north side of the bypass road, though the survival of remains was insufficient to ascertain the size of the plots.

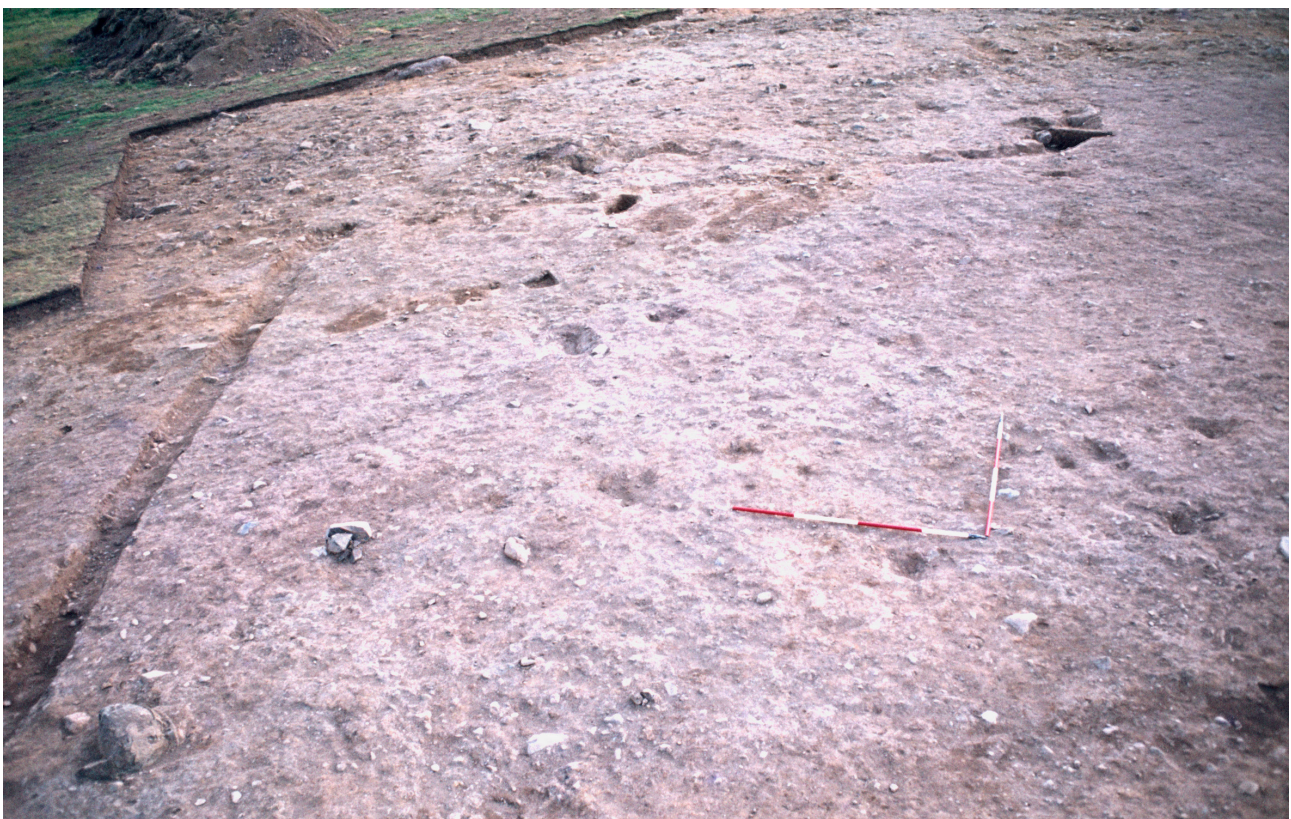
After a gap of *c* 26m, which contained a large pit (HAR) and adjacent post holes (see 5.3, below), and through which it is suggested the bypass road probably passed (see 4.4, above), the land divisions continued (Illus 5.5), though here the preservation was better and the pattern of plots clearer. The main east/west alignment was maintained for 27m by a gully (GAL/HAK) following a slightly irregular line through outcropping rocks (Illus 5.6 and 5.7) before turning at right angles to head north (see HAG, below). It was 0.5–0.7m wide, but only 0.05–0.23m deep, with a very stony fill in places (Illus 5.4). One possible post hole (GBC) was noted, revealed as a rectangular 0.1m-deep depression measuring 0.3 by 0.2m in the bottom of Gully GAL near its western end (Illus 5.1 and 5.6). The 11.5m-long western



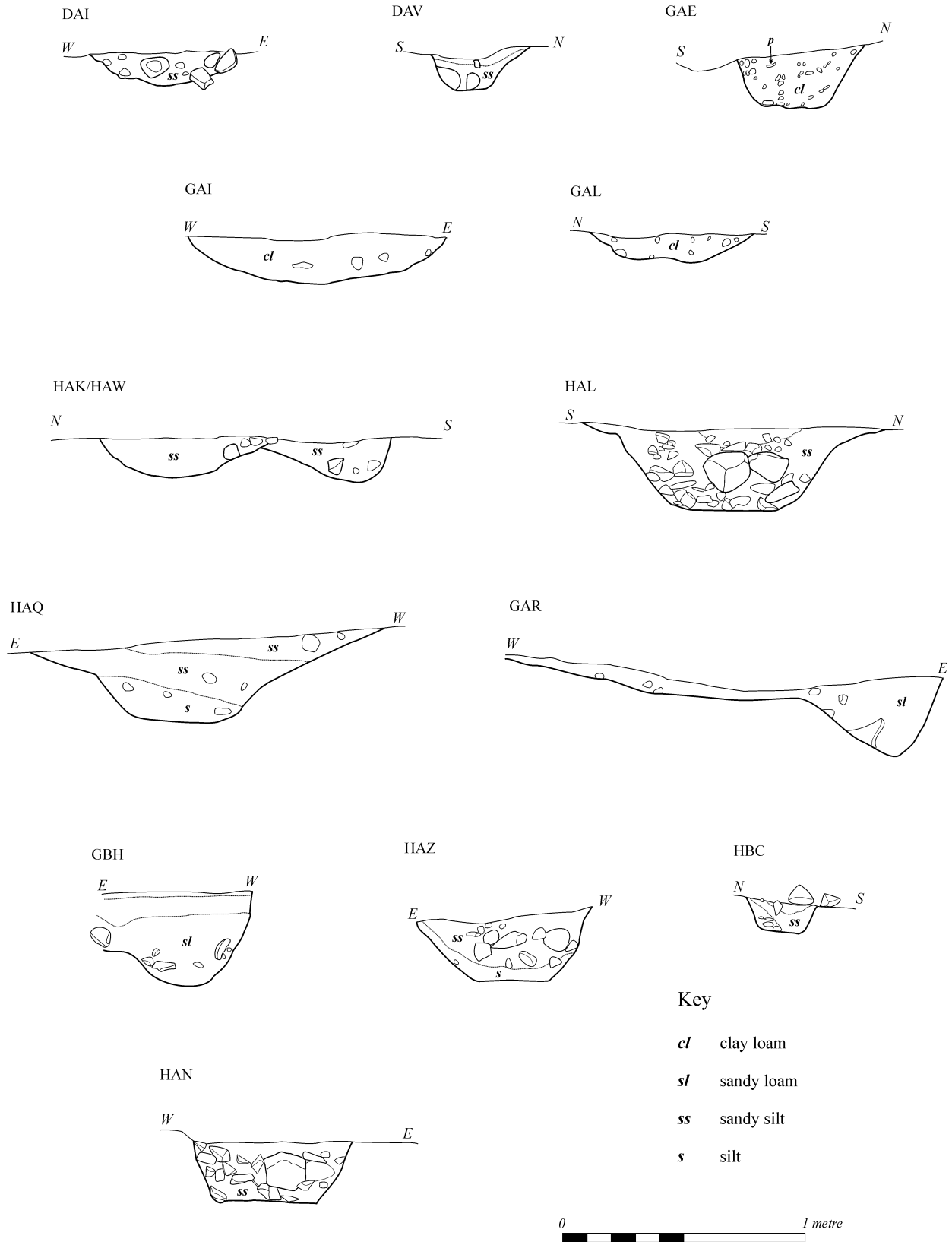
Illus 5.1 Overall plan of Area D/G east of the fort



Illus 5.2 Gully DAV and Post holes DAX/DAY/DAZ after excavation from the east



Illus 5.3 Line of Gully DDR/DAR/DAD/GAE after excavation from north-east



Illus 5.4 Sections through gullies in Area D/G/H

sector (HAK) was duplicated by an immediately adjacent parallel gully (HAW) to the south, which was similar both in its dimensions and sandy silt fill. It is possible that one line replaced the other, as in one section the northerly alignment (HAK) cut the southerly (HAW) (Illus 5.4), but their close spatial association indicated that they were part of the same broadly contemporary system. At its western end HAW turned at right angles to head south (see HBC, below) and came to a butt end to the east at the point where HAK turned north. After a gap of *c* 1m another gully (HAL) with more regular dimensions, 0.7–1m wide and up to 0.4m deep (Illus 5.4, 5.5 and 5.7), continued the main east/west alignment for a further 10.5m before it too came to a butt end.

A further series of gullies running at right angles to this alignment divided up the area on the north side into plots of varying size (Illus 5.5). Dealing with these linear features from west to east, the first (HAQ) was 0.3–0.4m deep and *c* 0.4m wide at its base, widening to 1.4m at the surface (Illus 5.4). It ran for 5.5m, narrowing and finally disappearing to the south. It was probably continued by a very similar feature (GAR) on the south side of the baulk, which came to a butt end 1.2m north of the west end of east/west Gully GAL (Illus 5.6). Though considerably larger than other gullies described below in terms of surface dimensions, it did not have the characteristics of a pit, while both its location and alignment fitted the layout of the land divisions across the area.

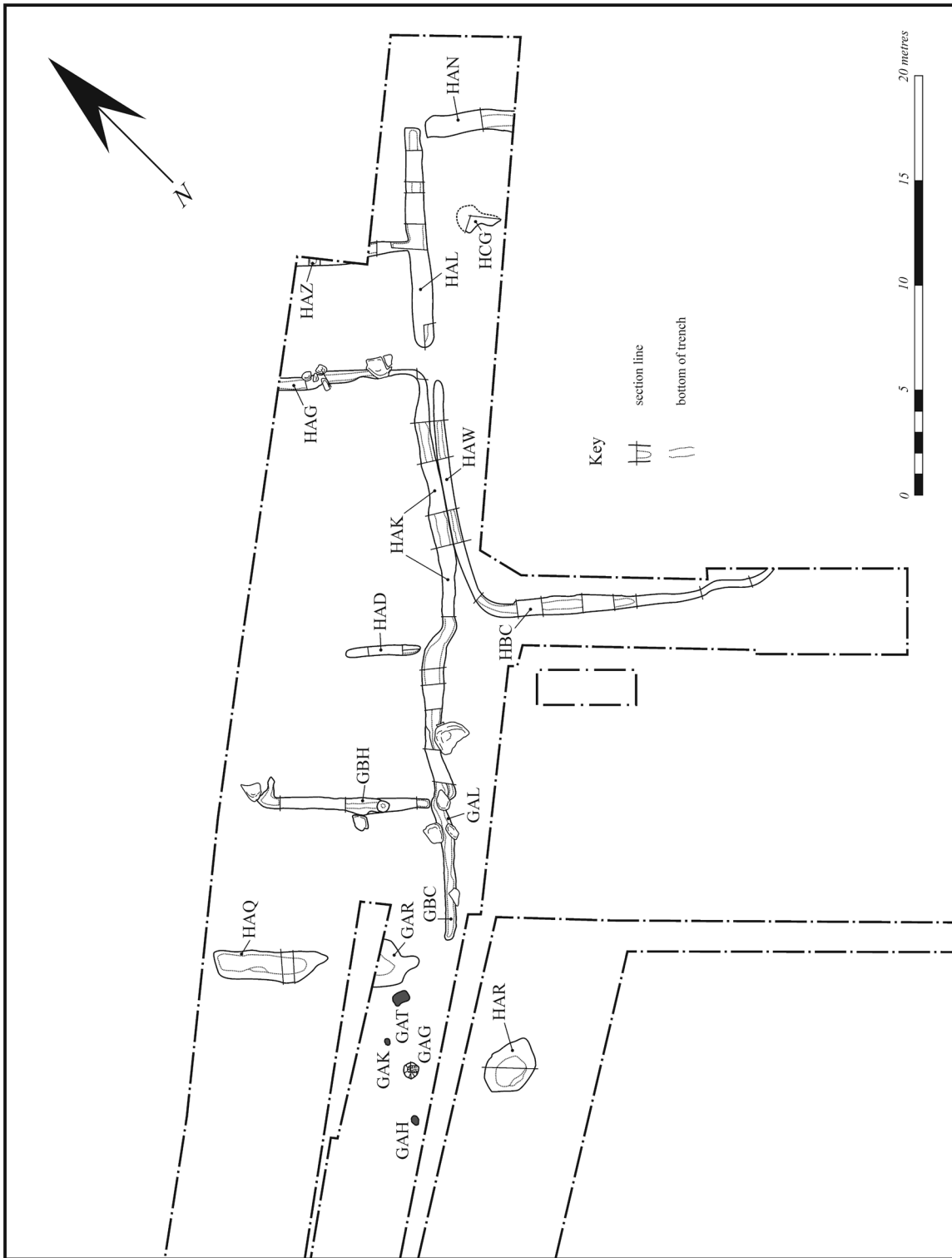
Almost 7m to the east a further gully (GBH) abutted GAL running north for 8m before turning east, parallel with GAL, and coming to an almost immediate butt end. It was 0.35–0.7m wide and 0.2–0.25m deep, mainly flat-bottomed, and contained large numbers of stones in its fill (Illus 5.4 and 5.6). Parallel to it *c* 7.5m to the east was a short stretch of gully (HAD) only 3.5m long, which also abutted GAL. It was 0.4–0.45m wide, but survived to a depth of not more than 0.1m. After a slightly wider gap of *c* 12.5m another north/south gully (HAG) was contiguous with HAK, running for *c* 6.5m before disappearing beyond the limit of the excavation. Its dimensions varied somewhat as it navigated a line between larger rocks, but was generally 0.5–0.8m wide and rather shallow, only 0.06–0.25m deep. The last of the north/south gullies

(HAZ) on the north side lay a further 5.5m to the east. It was contiguous with HAL and ran for *c* 5.5m before disappearing into the side of the trench. It was generally 0.5–0.6m wide and 0.17–0.25m deep, with a flat bottom and very stony fill (Illus 5.4).

Similar, but much less frequently occurring, gullies running at right angles to the main east/west alignment (HAW/HAL) were also recorded on its south side (Illus 5.5). As noted above, one (HBC) was a southerly continuation of the east/west line of HAW. It followed a slightly irregular course for *c* 14m and may have been starting to turn eastwards as it disappeared into the side of the excavation trench. It varied considerably in its dimensions (0.3–0.8m wide), but was generally shallow, only 0.1m deep, with a slightly stony fill, though with traces of silt at the bottom (Illus 5.4). A second gully (HAN) was located 22.5m to the east. At its northern end it abutted HAL at the east end of the main east/west alignment, but was recorded for a length of only 4m within the excavated area (Illus 5.7). Its remains were more regular and slightly more substantial than many of the other gullies. It had steep sides and a flat bottom, with dimensions 0.65–0.8m wide and 0.24–0.4m deep, and was filled with stony rubble (Illus 5.4).

Though generally slightly wider than the examples located closer to the fort (Area D), the gullies in the eastern half of the excavated trench (Areas G and H) were generally flat-bottomed and their sandy silt fills often contained a high proportion of stones. Once again the layout is more suggestive of construction trenches than drainage features, with right-angled corners and north/south gullies frequently abutting rather than connecting into the main east/west line. This is further reinforced by the occasional hints of possible post locations (eg GBC). Accordingly, the gullies are interpreted as fence lines defining a series of rectangular plots of various sizes adjacent to the bypass road.

Two areas (E and M) were opened south of the fort bypass road, where the land divisions were seen to continue (Illus 5.8 and 5.9). A shallow ditch (EAB/EAJ) ran south down the slope for *c* 12m. It was 1.1–1.3m wide and up to 0.2–0.4m deep, with an almost flat bottom (Illus 5.10). Its fill of silt and clay-silt with numbers of stones suggested that it may have served a drainage function and remained open for some time. The line of EAB was



Illus 5.5 Overall plan of Area G/H east of the fort



Illus 5.6 Intersection of Gullies GAL and GBH from the north-east, with post-impresion GBC. The southern end of Gully GAR is visible in the background

interrupted by a large boulder, beyond which it continued for 1.5m before its character changed to a narrow gully (EBR) 0.2–0.5m wide, but not more than 0.27m deep, with similar fill. This continued south for 11.5m before turning through a right angle to run east/west (EAK/EBI) for 4.5m. The dimensions and character of the latter gully (Illus 5.10), narrow with steep sides, a flat bottom and a high stone content, suggests that it was structural rather than for drainage, forming a fence line similar to those north of the bypass road (above). This

interpretation is given some support by the recovery of one nail fragment and some daub in one section. After a further interruption by two large boulders, the line of the gully continued east (EAI) for 5m disappearing into the side of the trench, coming to a butt end in the adjacent trench (Area M). However, its character and dimensions, 1.00–1.15m wide and up to 0.46m deep (Illus 5.10), were more consistent with a return to a drainage function. A 2.5m stretch of similar ditch (MAD) 0.8–0.95m wide on the same alignment \approx 9m to the south was identified

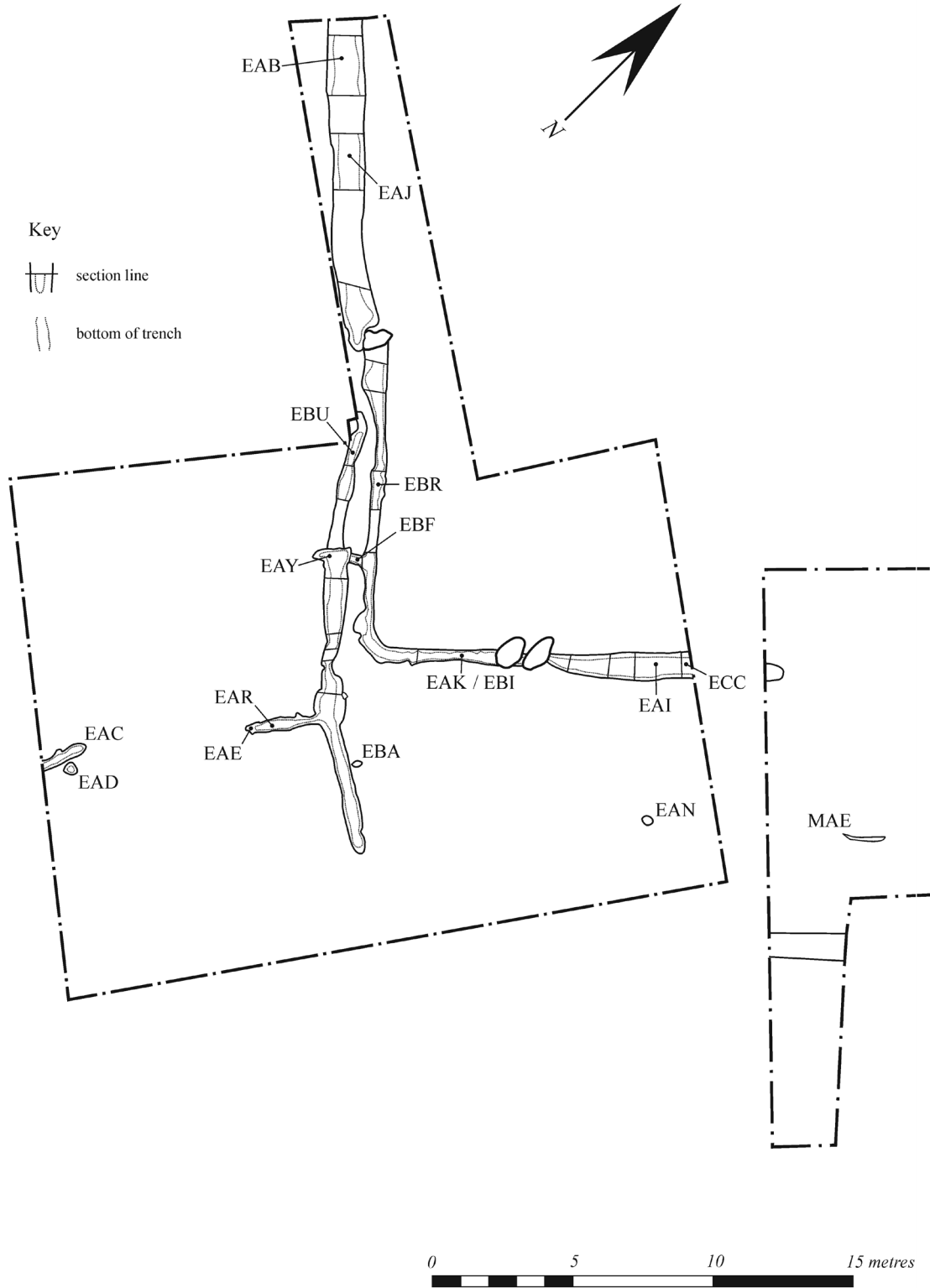


Illus 5.7 The right-angled junction of Gullies HAL and HAN prior to excavation from the north-east. The continuation of the line of Gully HAW/HAK is visible beyond the post-medieval field drain that cuts across the trench

in the adjacent trench (M) (Illus 5.8), but did not continue sufficiently far west to appear at the south end of Area E.

At the point where the north/south ditch EAB/EAJ changed to a narrow gully (EBR), the same alignment was continued by a second gully (EBU) broadly parallel to, and 0.6–0.9m to the west of EBR (Illus 5.8 and 5.9). This was 0.4–0.55m wide, up to 0.38m deep and ran for 4.8m before reaching a short, very shallow, cross gully (EBF) that linked

it to EBR. The steep sides of Gully EBU (Illus 5.10) and presence of a possible post hole (measuring 0.2 by 0.15m) within it towards its northern end suggests that this may again be a fence line, but the fill was very silty. The short cross gully (EBF) continued beyond the line of EBU for 0.4m, as if starting another east/west alignment, but no trace of it was identified further to the west. Both north/south gullies appeared to cut EBF, implying that they had been recut. Indeed, the more westerly gully



Illus 5.8 Overall plan of Area E and west side of M



Illus 5.9 Ditch and gullies in Area E from south after excavation

seemed to widen at this point (EAY), maintaining surface dimensions of between 0.4m and 0.9m for the most part, with occasional irregularities, and a depth of 0.2–0.35m (Illus 5.10). The line of Gully EBU/EAY continued south for a further 11m before coming to a butt end (Illus 5.8). Some 5m before that end point, it widened to 1.3m and deviated slightly from its line where a further, slightly narrower (0.4–0.6m-wide) gully (EAR) branched off at right angles. This ran east/west for only 2.6m before ending at a possible post hole (EAE) cut into its base. A further independent post hole (EBA) was located immediately adjacent to the most southerly section of EAY. After a gap of 5.7m, the east/west alignment of EAR was continued by a further gully (EAC), which ran for 1.7m before disappearing into the side of the trench. It was 0.45–0.7m wide, 0.22m deep, with a flat bottom (Illus 5.10). A shallow (0.08m-deep) post hole (EAD), 0.45m in diameter, abutted it on its southern side.

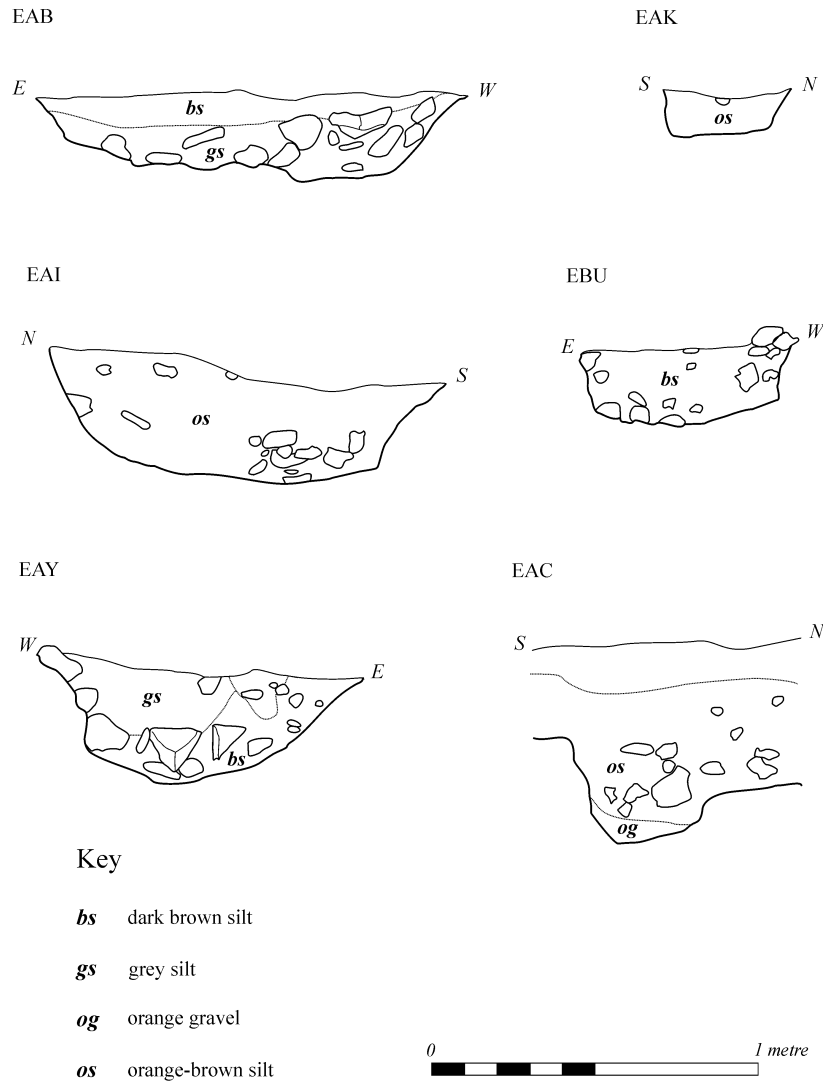
It proved consistently difficult to determine whether these linear features were drains or fence lines, but where they displayed right-angled turns, steep-sided profiles with flat bottoms and occasional

associated post holes, the latter has been assumed. In essence, however, the various features were performing a similar function as a means of dividing up the area into smaller plots.

5.2 Possible structural remains

Given the character of the boulder clay subsoil across much of the area and the truncation of the surface by ploughing, differentiating possible small post holes from stone holes was extremely difficult. However, three clusters of probable post holes were identified within the areas subdivided by the land divisions discussed above: one at the extreme west end of the excavated area closest to the fort; one much larger cluster some 15m to the east, both in Area D to the north of the bypass road; and a third just to the north of the large pit HAR (see below) in Area H, immediately to the east of the probable bypass road line.

At the far west end of the excavated area three small post holes (DAZ, DAX, DAY) formed an approximately straight line *c* 4m in length to the north-west of Gully DAV (Illus 5.1 and 5.2).



Illus 5.10 Ditch and gully sections in Area E

However, on the basis of the limited evidence recovered they seem more likely to have formed a continuation of the fence line at right angles to DAV rather than an independent structure. All were shallow with varying dimensions (Table 5.1) and uneven spacing. In addition, some 3.5m to the north-east of Gully DAV was a single post hole (DCN).

A line of seven posts holes (from north to south: DCX, DCY, DDA, DCV, DDE, DDG, DDH), the last two almost contiguous and the first two only 0.4m apart, formed an approximately straight line 9.5m long running parallel to, and 6.5m to the west of, Gully DAR, suggesting they formed a subdivision of the plot defined on two sides by Gullies DCD, DDR and DAR (Illus 5.1 and 5.11).

All the post holes were small and shallow where the dimensions were adequately recorded (Table 5.1). Two (DDH and DDE) had traces of daub in their fill. A small group of four (DDK, DDL, DDM, DDN), located 1.6m to the east of the subdividing line of post holes, defined an almost trapezoidal shape narrowing in width from 1m to 0.45m and 0.8–1m long, which may represent a temporary structure. A fragment of window glass was recovered from one of the post holes (DDM). Two pairs of post holes (DCL/DCR and DCO/DCW) of uncertain function, located 1.3m and 0.8m apart respectively, were also identified *c* 4.5m and 2.5m west of the subdividing line of post holes.

Some 4m north of the large pit (HAR) (see 5.3, below) were three post holes (GAG, GAH, GAT)

Table 5.1 Post hole dimensions, Areas D and G

Context	Shape	Length (m)	Width (m)	Depth
DAZ	circular	0.26 diameter	–	
DAX	sub-rectangular	0.36	0.42	
DAY	sub-rectangular	0.34	0.4	
DCN	sub-rectangular	0.22	0.18	
DCX	oval	0.32	0.28	0.16
DCY	circular	0.24 diameter	–	0.13
DDA	sub-rectangular	0.46	0.24	
DCV	pear-shaped	0.48	0.24/0.2	
DDE	sub-rectangular	0.44	0.3	
DDG	oval	0.2	0.18	
DDH	sub-rectangular	0.48	0.26	
DDK	oval	0.34	0.26	
DDL	circular	0.28 diameter	–	
DDM	circular	0.2 diameter	–	
DDN	oval	0.38	0.18	
DCL	oval	0.4	0.14	0.13
DCR	circular	0.3 diameter	–	
DCO	oval	0.44	0.24	
DCW	sub-rectangular	0.4	0.24	
GAG	circular	0.8 diameter	–	0.5
GAH	sub-circular	0.44	0.34	0.15
GAK	oval	0.5	0.4	0.28
GAT	sub-rectangular	0.8	0.5	0.1

2.4m and 3.5m apart from centre to centre, forming a line at right angles to Gully GAR (Illus 5.5 and Table 5.1). Accordingly, they seem more likely to be linked to the land divisions in the area than to form an independent structure. A fourth possible post hole (GAK) was offset 1m to the north of this line. The central post hole (GAG) contained a disturbed post-impresion (0.54m by 0.3m) (Illus 5.12), whose fill contained traces of charcoal, while the offset example (GAK) contained what appeared to be stone chocking at the bottom (Illus 5.13).

5.3 Industrial features

Scattered traces of industrial activity were identified across much of the area examined to the east of the fort. Most significantly, situated within the

middle of one of the fenced enclosures, some 5m north of the east end of Gully GAE and 13m from the bypass road (Illus 5.1), was a figure-of-eight-shaped pit 2.46m in overall length which had clearly functioned as a kiln or furnace (GAM). Its Roman date was readily confirmed by the recovery of pieces of broken architectural sandstone (see below and 9.4, S2–3) in its upper fill (Illus 5.14).

The furnace bowl, located at the northern end, had a maximum diameter of 1.0m, but was slightly irregular in shape as one side was set against, and marginally undercut, a large and slightly crumbling natural boulder. The bowl was steep-sided and had been sunk into the ground to a depth of 0.45m. Its sides had been reddened by fairly intensive burning, particularly in the vicinity of the flue, and its lower



Illus 5.11 Cluster of possible post holes after excavation in Area D from the south-west. Gullies DAD and DDR/DAI are visible top centre and top left respectively

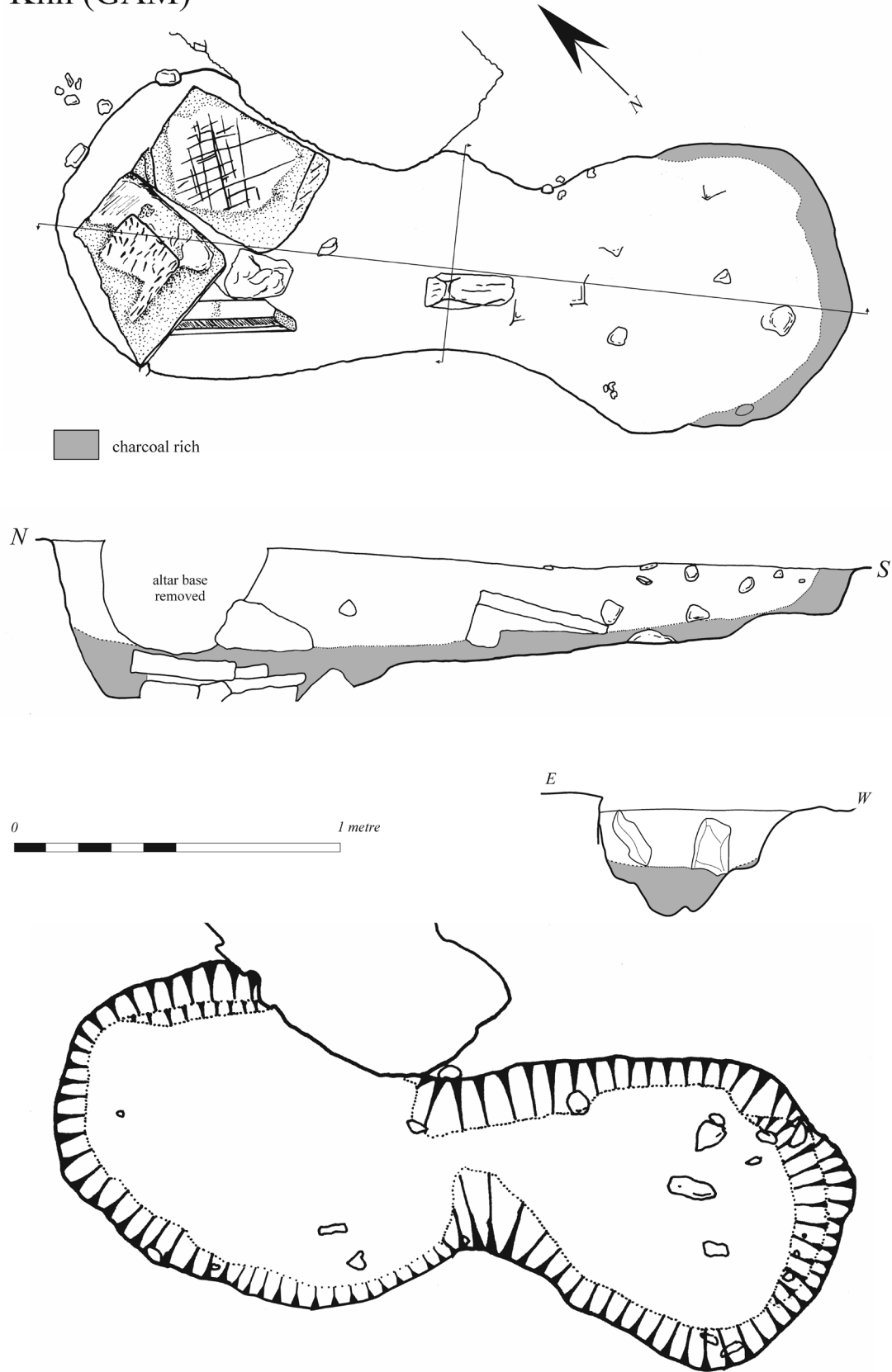


Illus 5.12 Post hole GAG showing disturbed post-impression



Illus 5.13 Post hole GAK showing stone chocking

Kiln (GAM)



Illus 5.14 Detailed plans and sections of pottery kiln (GAM)



Illus 5.15 Pottery kiln GAM during excavation showing basal sandstone slabs

fill contained a high percentage of charcoal with some burnt clay (Illus 5.14 and 5.15). The centre of its flat base had been covered with several small sandstone slabs, two courses deep in places (Illus 5.16). The floor rose slightly through the flue, which splayed out from a width of *c* 0.2m at the bottom. Beyond that the floor continued to rise gently along the length of a rake-out pit, which was also 0.95m in diameter, to a minimum depth of 0.14m at the south end. Again the lower fill contained a high percentage of charcoal, which spread slightly up the sides, reaching the surface only at the south end of the rake-out pit (Illus 5.14). The upper filling of the latter contained much lower concentrations of charcoal and occasional larger stones. The placing of the broken architectural fragments of stone in the upper filling of the furnace bowl was clearly deliberate and indicated that it had gone out of use in the Roman period.

There was no direct evidence for the function of the furnace. However, its structural features are not really reminiscent of a military oven, so an industrial function seems more likely. There was no associated slag and the burning of the inside did not seem sufficiently intensive to be linked to metalworking. The best structural parallels are provided by pottery kilns, and the Croy Hill example was accepted as such by Dr Vivien Swan in her gazetteer of Roman pottery kilns (1984: 151 and fiche 6.723).⁶ Such kilns are not infrequently set into the subsoil and in such circumstances are not necessarily clay-lined, while the layers of stone slabs at the bottom of the furnace bowl may have provided the equivalent of the prefabricated clay kiln furniture commonly attested in pottery kilns. Some support for this interpretation is provided by the examination of the coarse ware and mortaria fabrics and mortaria forms, which strongly suggests that local pottery manufacture was taking place at Croy Hill (see 12.2–12.4; 13.2; 14.7, below).

Some 20m to the east of the probable pottery kiln (GAM) was a large pit (HAR) cut into the natural clay (Illus 5.5). It was an irregular oval in plan, measuring 3m by 2.15m, with almost vertical sides and a flat base at a depth of 1.45m (Illus 5.17 and 5.18).⁷ The backfill can be characterised in three broad zones: a fairly homogeneous lower fill of grey or orange silty sand with gravel and some charcoal flecks, which appeared to have been deliberately

deposited when the pit had ceased to serve its primary function; a central fill of fairly thin layers of grey/brown silty clay mixed with gravel, suggestive of more gradual infilling from natural weathering; and an upper fill of loamy soil and larger stones accumulated from later agricultural infilling of the surviving hollow.

Apart from the upturned sandstone column base visible on the surface, the very few finds recovered came from the bottom fill. The paucity of finds, given that the pit was completely excavated, and the character of the infilling, indicates that it had not served as a rubbish pit. There were no associated features to indicate that it had any industrial function, so given its location adjacent to a probable pottery kiln it may have been dug to extract clay and/or used to store clay while it was weathering.⁸

No further features were identified in this central area. However, near the eastern limit of the excavation in Area H, 2m south of the intersection between Gullies HAL and HAZ, several patches of soil containing traces of charcoal coalesced into an amorphous spread (HCG) (Illus 5.5). This was up to 0.17m deep, but its limits were difficult to define and its significance uncertain.

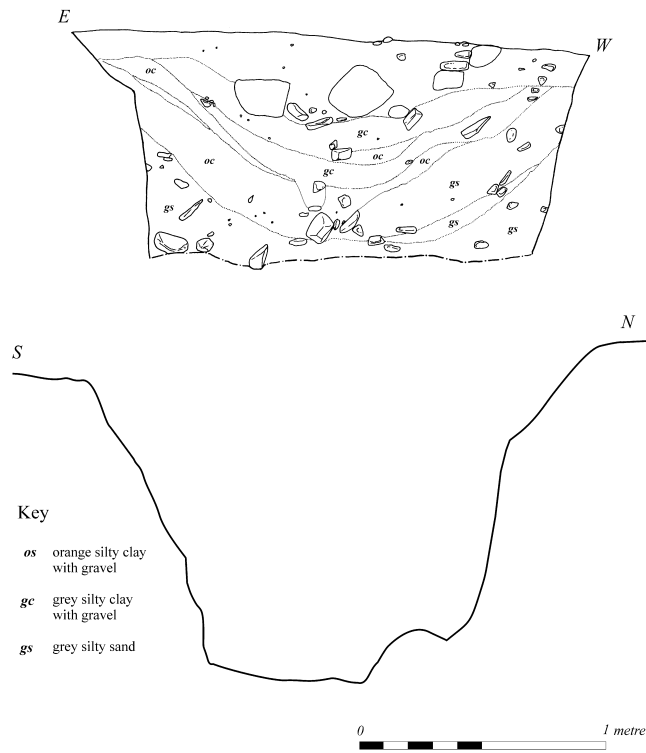
Towards the northern limit of excavation in Area D (Illus 5.1) a further possible elongated pit (DAB) was located. It measured 2.50m by 0.81m and was 0.30m deep, with steep sides and a flat bottom (Illus 5.19). It was filled with sandy silt, with signs of root disturbance, but provided no clues as to its function or antiquity, other than a piece of coal at the bottom.

Finally, a narrow, largely hand-dug trial trench which extended the excavation downslope towards the northern limit of the area threatened (Illus 1.2 and 5.1), revealed a range of occupation debris, including patches of burning, with burnt brick and slag-like material (DAS), suggestive of rakings from a furnace. This material spread across the whole of the northern end of the trench (DAS, DAT, DBL) and into the adjacent extension (DBO). The failure to identify discrete limits to the deposits and their location in an area of damper, lower-lying ground suggests that the area may have served as a midden. It lay almost exactly equidistant (some 60m) from known sources of furnace rakings, the probable pottery kiln and the site of the fort bathhouse.



Illus 5.16 Pottery kiln GAM after excavation

HAR

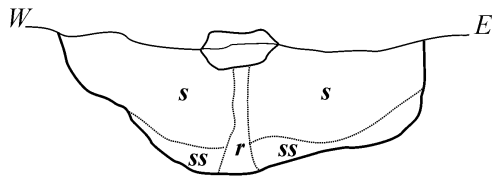


Illus 5.17 Section and profile of large pit (HAR)



Illus 5.18 Pit HAR during excavation. The large stone in the upper fill of the unexcavated section is a damaged altar plinth

DAB



Key

- s orange brown silt
- SS grey brown sandy silt
- r root disturbance

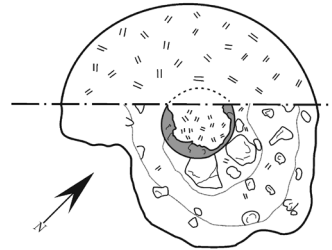


Illus 5.19 Section of elongated pit (DAB)

5.4 Cremation

A single cremation pit (EAN) was found within the land divisions investigated on the south side of the bypass road in the south-east corner of the trench (Area E) (Illus 5.8). It was roughly circular, measuring 0.4–0.45m in diameter, and survived to a depth of 0.19m (Illus 5.20 and 5.21). Centrally

located within the pit was a single upright, grey-ware jar filled with cremated bones (see 19.1, below). The top of the jar had been truncated by ploughing, but the greater part remained intact. Flat, burnt stones supported the base of the pot at the bottom of the



Key

- c charcoal
- SC orange silty clay
- sc contour lines at 0.5m intervals



Illus 5.20 Detailed plan and section of cremation pit (EAN)



Illus 5.21 Cremation pit (EAN) during excavation

pit, which was filled with charcoal mixed with dark brown loam and a few smaller stones. The density of the charcoal content decreased towards the top of the pit. Twenty-three hobnails were recovered from its fill.

No other cremations were identified. However, *c* 5.5m to the east a narrow curvilinear feature (MAE) may have been associated in some way with the cremation process as it contained much charcoal, a sherd of burnt coarse ware, a hobnail and other unidentified fragments of iron. It was 1.5m long, up to 0.3m wide and 0.15m deep (Illus 5.8).

5.5 Associated finds

DAD/DAR/GAD/GAE/GAO, shallow linear gully/fence line: 4 sherds of decorated samian from the same vessel; 113 sherds of coarse ware, including large quantities of amphora and half of a BB1 cooking pot; 36 sherds of mortarium, constituting almost a complete stamped vessel (Illus 12.1, no. 3 and 12.2) (12.3.2, below)

DAI/DDR, shallow curving gully: 16 sherds of coarse ware

DAV, shallow linear gully: 2 sherds of coarse ware

DAS/DAT/DBL/DBO/DBR, occupation debris/midden material in northern extension of Area D: hobnail; scrap of samian; sherd of mortarium; 108 sherds of coarse ware, including quantities of amphora; glass counter (Illus 15.1, no. 13); fragment of glass bottle; burnt clay/daub; several fragments of animal bone, some burnt

DDM, post hole: fragments of animal bone; fragment of window glass

EAB/EAJ, shallow north/south ditch: scrap of samian; hobnail

EAN, cremation pit: complete body of grey-ware jar; 23 hobnails

EAR, narrow east/west gully: sherd of coarse ware

EAY/EBY, north/south drainage gully: 2 sherds of coarse ware; hobnail

EBI, narrow east/west gully: nail; piece of daub

GAI, short stretch of drainage gully between Gully DAD and Road GBO: sherd of decorated samian (probably part of the same vessel in GAE, above)

GAM, furnace/kiln: broken sandstone altar plinth (Illus 9.2); unfinished sandstone architectural block (Illus 9.4, S3; Illus 9.3)

HAR, large oval pit: damaged sandstone altar plinth (Illus 9.4, S1; Illus 9.1); sherd of coarse ware; shale counter (Illus 9.4, S22); fragment of glass bottle

HBA, section of deep north/south gully, HAN: sherd of coarse ware

HBD, section of east/west gully, HAK: sherd of coarse ware

HBN, butt end of shallow, east/west linear gully, HAL: 2 sherds of coarse ware

HCX, section of shallow, north/south linear gully, HAZ: sherd of coarse ware

MAE, shallow strip of burning: charcoal; burnt sherd of coarse ware; hobnail

5.6 Interpretation and analogies

Extensive investigation of the area to the east of the fort revealed a combination of fences and ditches on both sides of the bypass road. Occasional sherds of Roman pottery recovered from their fills (5.5, above) were consistent with an Antonine date for the use of the system. These fence lines and occasional short stretches of ditch followed a consistent north/south or east/west orientation and respected, but were not aligned with, the bypass road. They served to divide up the area into small rectangular plots of varying size, though none of the plots were sufficiently defined to provide complete dimensions. These enclosures may reasonably be interpreted as for agricultural or industrial purposes, the former an assumption based on the potential need to house livestock near the fort, the latter attested by a range of evidence (see below).

Field systems are attested outside four other forts on or directly associated with the Antonine Wall: at Auchendavy, Westerwood, Rough Castle and Carriden. Excavation some 200m north of the fort at Auchendavy revealed elements of a rectilinear arrangement of fields defined by a main ditch and two smaller linear 'ditches' at right angles. At least one of the latter is more likely to have been structural as it stopped short of the main ditch, was of much smaller dimensions (only *c* 0.3m wide) and had been rapidly infilled (Dunwell et al 2002: 274–9). Two of these features contained quantities

of Roman coarse ware of Antonine date and two contained non-ferrous metallurgical ceramics. Excavation to the west of the fort at Westerwood located a few short sections of ditch and gully overlain by burning associated with quantities of Roman material (Keppie 1995: 90–1 and 97–8), while at Rough Castle a group of some 12 small, conjoined sub-rectangular enclosures, defined by extant slight banks and ditches, are located between 60m and 100m to the south-east of the Roman fort. Sample excavation recovered no associated Roman material, so the excavators offered only a cautious endorsement of a possible Roman date, though the system is aligned on what is identified as a probable Roman road, suggesting the enclosures may have been used as garden plots (Máté 1995). Finally, at Carriden a system of ditch-defined rectilinear fields or plots aligned on the Roman road leading east from the fort has been recorded from the air and confirmed by geophysical survey (Keppie et al 1995: 602–6; Hanson et al forthcoming).

Similar field systems are attested at other Antonine forts in Scotland. At Castledykes the ditches of a temporary camp immediately to the north of the fort seem to have been enhanced to create a system of small rectangular fields, though when this occurred is unclear and may have post-dated the Roman period (Jones 2011: 93 and 168–9); while at Inveresk extensive rectilinear field systems have been recorded over a number of years to the east of the fort (Brown 2002: 12–13 and figs 5–9). Such excavation as has taken place has been very small scale, but has provided confirmation that the fields were ditch-defined and in use in the Roman period (eg Cook 2004: 138–9 and 149–50; Leslie 2002).

The closest structural and functional parallels for the enclosures at Croy Hill are provided by the features excavated at Auchendavy, as the enclosures there seem to have been defined by both ditches and fences, and industrial activity is also attested in the vicinity. The other sites confirm that that contemporary agricultural activity in the immediate vicinity of forts in Scotland in the Antonine period was not unusual.

Scatters of post holes at the western end of the system of land divisions nearest to the fort at Croy Hill indicated the presence of what were probably rather ephemeral structures. However, the remains were not sufficiently clear or well preserved to

allow confident identification of the character of any buildings, apart from a single piece of window glass that hints at some level of sophistication. None of the other field systems along the Antonine Wall have been examined in sufficient detail to confirm whether similar structures were associated, though scattered post holes of probable Roman date were recorded at Westerwood (Keppie 1995: 87–8). A spread of occupation debris was identified less than 20m to the north of the land divisions, but was not examined sufficiently extensively to determine its full extent or character. Indeed, given its location on the edge of a more low-lying area (Illus 1.2 and 1.4) and the absence of any defined features, it probably served as a midden.

At least two different forms of industrial activity can be shown to have taken place within the enclosed plots of land. Firstly, within one to the north of the bypass road was a small figure-of-eight-shaped furnace, probably a pottery kiln (GAM), which had clearly gone out of use in the Roman period as its furnace bowl had been backfilled with broken stone architectural fragments. Very few finds were recovered from the gullies that defined the plots, but the greatest concentration by far came from those immediately to the west and south of the kiln, indicating considerable activity taking place in the vicinity. These finds included five sherds of a decorated samian bowl (11.1, GAE/GAI, below), an almost complete Colchester mortarium (12.3.2, no. 1, below) and half of a BB1 cooking pot/jar. The fact that substantial parts of individual vessels were recovered together suggests that they were probably found close to where they were originally broken. However, no wasters were recorded from either the furnace itself or the gullies. A large pit (HAR) nearby may also have been associated with the production of pottery.

Evidence for the local manufacture of pottery in Roman Scotland has been accruing for some time, based on a combination of fabric analysis, restricted distribution of particular products, the recognition of wasters and, least commonly, the identification of kilns (eg Hartley 1976; 2016; Breeze 1986). Detailed examination of the character and fabrics of the mortaria from the site indicates that several vessels are of local manufacture, most probably made at Croy Hill itself (12.2, below). Similarly, examination of both the oxidised and grey wares

is strongly suggestive of quite a high proportion of local production (13.5.3, below). In addition, though unable to identify a single, distinctive local ware group, chemical and petrographic analysis of a number of samples of coarse ware and daub from the site did indicate a core group of samples that were distinct from wares produced at other sites in the Wall zone with a chemical overlap with local clays (14.7, below).

There are at least five other kilns identified along the Antonine Wall, one from the adjacent fort at Bar Hill and at least four from Duntocher. At the former the kiln was built into the north side of the *prae-furnium* of the internal bathhouse, taking advantage of the existing stoke hole (Keppie 1985: 59–60 and 76–8; Swan 1999: 426–7 and 456–7). It was formed from the same small sandstone blocks as the bathhouse, of which four layers survived, and was *c.* 0.82m in internal diameter with a splayed mouth or flue 0.12m–0.18m wide.⁹ Its function was confirmed by the recovery from its backfill of kiln bars and of over 900 sherds of pottery in the same fabric from the immediate vicinity. At Duntocher, a series of kilns was located in 1977 during house building to the south-west of the fort, of which four were excavated (Newall 1998: 25–8). They provide better parallels for the Croy Hill example as they consisted of shallow, clay-lined pits, oval or circular in shape and of varying internal diameter (*c.* 0.75–1.85m), with adjacent, shallow flues. One was apparently double, with a central stone pad, and two were provided with central clay pillars. Associated pottery included both oxidised and reduced wares, the latter not dissimilar to BB1 (Swan 1999: 460–1).

The presence of broken or damaged architectural stonework in the backfill of both the kiln (GAM) and the adjacent large pit (HAR) (see 9.4, S1–3, below) indicates the activities of a stonemason in the immediate vicinity, since they are clearly pieces that were not completed and/or had broken during manufacture. This is the first time that evidence of a possible mason's yard has been identified from excavations along the Wall, though a mason's pick was recovered from excavations in the fort in the 1930s (see 9. 1, below) and probable stonemasons' tools have been identified from various sites along Hadrian's Wall (Manning 1976: 25–7).

Down the slope at the southern limit of the excavation, but apparently still within the system of

land divisions, was a single cremation in a grey-ware jar, hinting at the presence of a cemetery nearby. Indeed, one of the most memorable antiquarian discoveries from the site is the tombstone of three legionaries (*CSIR*: 90; Coulston 1988), presumably found as a result of agricultural activity on the hill, though the location of its original discovery is unrecorded. However, an extension of the excavation to the east (Area M) failed to uncover any further burials. There have been no cemeteries identified along the line of the Wall to provide parallels, though a cluster of tombstones, both military (*RIB* I: 2179; 2181) and civilian (*RIB* I: 2182; 2183), along with funerary sculpture (Keppie 1998: 113–18), has been recorded at or near Auchendavy. This ought to suggest the location of a cemetery, probably to the east of that fort.¹⁰ Cemeteries were usually located beyond any civil settlement associated with the fort, and so could be some slight distance away. Thus, at Birdoswald on Hadrian's Wall the cemetery is some 400m west of the fort. Indeed, Sommer has argued that the location of cemeteries was planned *de novo* to be sufficiently far away from the fort to allow adequate space for the construction of the *vicus*, with recorded examples in Germany as much as 650m away (1989: 472).

Some other religious activity is located to the south of the fort with the discovery in 1913 of an altar to Mars and a separate altar base (Keppie 1998: 98–9) near the northern limit of Nethercroy Quarry, while in the early 19th century an altar to the nymphs was recorded from the foot of the hill (*RIB* I: 2160). The potential presence of a shrine linked to a natural spring was considered during the excavation and some time was devoted to the examination of a waterlogged area on the slope to the east of the old quarry. Though fed by groundwater, this proved to be a stone-lined water tank of no great antiquity, probably linked to the working of the quarry or possibly to post-medieval farming activity on the hill. Nonetheless, the recovery of altars in apparently primary contexts some slight distance removed from forts, as recorded at Westerwood, Castlecary, Bar Hill, Castle Hill and Duntocher (*RIB* I:II 3504; *RIB* I: 2149; 2167; 2195; and 2201), suggests that the location of small shrines in the immediate vicinity of forts on the Wall was not uncommon (Hanson 2020b: 341).