

**Bronze Age cremations, Iron Age and Roman settlement and early  
medieval inhumations at the Langed Receiving Facilities, Easington,  
East Riding of Yorkshire**

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*Summary*

Excavations to the north of the village of Easington in the East Riding of Yorkshire identified a funerary landscape of Late Bronze Age, Later Iron Age and Roman cremations, as well as Roman and early medieval inhumations. The four early medieval burials (in three graves) included a spearhead, knives, buckles and beads. Occupation activity associated with the Bronze Age and early medieval burials was not identified, but a 'ladder-style' settlement of trackways and enclosures was established by the 1st century BC. This settlement underwent at least two episodes of restructuring before its abandonment, probably in the 3rd century AD. Given a dearth of imported objects and the preservation of pre-conquest-style building traditions, the inhabitants of the final settlement chose not to adopt the trappings of a 'Romanised' lifestyle.

## INTRODUCTION

An open-area excavation, covering approximately 1 ha and centred on grid reference TA 396198, was undertaken on an Iron Age and Roman rural settlement situated on farmland to the west of Dimlington Road and less than 1km to the north of Easington village (Fig. 1). Situated towards the top of a south-facing slope, the settlement ranged from 15.5m above Ordnance Datum to the north to 12.90m above Ordnance Datum to the south-west. The site was covered by a glacial till, that gave rise to slowly permeable, seasonally waterlogged fine loamy soils, and overlay Upper Cretaceous Chalk (British Geological Survey 1979; Soil Survey of England and Wales 1983). The glacial deposits make the Holderness coastline one of the most rapidly eroding coastlines in the world (Ellis 1995, 16). Although situated about 500m from sea today, the Iron Age and Roman inhabitants may have been as far as 6km from the coast (cf. Van de Noort *et al.* 1999, 131).

The presence of archaeological remains was first identified by geophysical (gradiometer) surveys (GSB Prospection 2003a, 2003b). The surveys identified the likely presence of archaeological remains consistent with settlement activity, including possible intersecting trackways, ring ditches, enclosures and larger field systems (Fig. 2). Subsequent evaluation by trial trenching confirmed the presence of human activity and dated the remains to the Late Iron Age/Roman period (Rose 2005). Given the findings of these preliminary archaeological investigations, open-area excavation was required by the East Riding of Yorkshire Council in advance of the construction of a natural gas receiving facility. In addition to the Iron Age and Roman settlement observed during the evaluation stage, Bronze Age cremations and early medieval inhumations were exposed during the

excavation and subsequently confirmed by small finds analysis and a radiocarbon dating programme.

## **ARCHAEOLOGICAL BACKGROUND**

In order to present the excavation in its regional and wider setting, evidence for funerary and settlement activity dating from the Neolithic to early medieval period was sought. In addition to published material, the Sites and Monuments Record held by Humber Archaeology Partnership was consulted.

### **Neolithic and Bronze Age Activity**

Evidence for Neolithic occupation of the southern limits of Holderness was identified beneath a Bronze Age barrow during excavations at Easington beach in the 1960s. The barrow itself was dated to around 2000 cal BC and was one of a small group of monuments. More recently, hearths, pits, post-holes, pottery and flints have been encountered at the site and a radiocarbon sample has dated this Neolithic activity to 3915-3650 cal BC (Mackey 1998, 5; Evans and Steedman 2001, 69). Approximately 200-250m NNE of the barrow, investigations in 1998 revealed a 'hengi-form' monument which probably pre-dates 2000 BC and a second Bronze Age barrow which contained an adult inhumation (Evans and Steedman 2001, 70-73).

In contrast to the relatively sparse evidence for Neolithic activity, the extent to which the landscape was used during the Bronze Age is reflected in the number of barrows

identified from aerial photographs of the area. At least eleven possible barrows, in addition to those investigated at Easington beach, are known within a few miles' radius, including a cluster at Kilnsea Grange (Mackey 2006, 527). Further barrows have been lost to coastal erosion (Sheppard 1912, 120; Evans and Steedman 2001, 69) and with erosion currently at 1 to 2m per year, the prehistoric coastline of Holderness may have been up to 3 to 6km further east (Van de Noort *et al.* 1999, 131). In addition to this prehistoric funerary landscape, a looped socketed axe, bronze leaf-shaped spearhead and wooden spearhead of possible Bronze Age form have been found within a one mile radius of the excavations. About four miles to the SSE, a sewn plank boat, radiocarbon dated to 1870-1670 cal BC, raises the possibility of a seafaring Bronze Age population (Van de Noort *et al.* 1999, 131 and 134).

### **Iron Age and Roman Activity**

Prior to these excavations, evidence for Iron Age and Roman occupation of the area around Easington was almost entirely limited to the recovery and identification of isolated finds such as coins and pottery (e.g. Transactions of the East Riding Antiquarian Society 1907, 59-60). These were often found as they eroded from the cliff edge and were divorced from any archaeological context. Indeed in the Holderness area generally there was an apparent dearth of Iron Age and Roman sites when compared to the Yorkshire Wolds and beyond (Mackey 2003, fig. 34; Ottaway 2003, fig. 35). This was probably a reflection of the focus of early excavators and the more difficult subsoils of Holderness (Mackey 2003, 117; Fenton-Thomas 2005, 71), rather than a failure to adequately utilise its largely fertile agricultural land (Ellis 1995, 15). This apparent dearth of Iron Age and

Roman sites is now known to be illusory with excavations of Late Iron Age and Roman rural settlements at Leven (Evans and Steedman 1997, 121 and 125) and Aldbrough (Evans and Steedman, forthcoming), and more recent fieldwork in advance of gas pipelines in southern Holderness encountering numerous sites of this period (Evans pers. comm.; Moore 2008, 35). The presence of Iron Age and/or Roman settlements is also intimated by aerial photographic evidence of at least seven enclosures to the north-west and west of Easington, including a possible sub-rectangular enclosure with a double ditch or trackway approximately three miles north-west of the site.

### **Early Medieval Activity**

Place-name evidence suggests that Easington or 'Esa's farm' existed at least from the early medieval period (Allison 1984, 21). Otherwise settlement and burial activity within the immediate vicinity of Easington is scarce, although again coastal erosion has undoubtedly reduced the scope of the available evidence. An archaeological evaluation undertaken in 1998 on the cliff tops adjacent to the gas terminal identified a single pit containing Middle Saxon pottery and animal bone. This feature probably represents the final remains of what was once an early medieval settlement (Atkinson 1999, 24). Further afield, but still within East Yorkshire, there is a tendency for early medieval remains to come from casual finds, place-name evidence, and cemeteries such as Hornsea, Swine and Ganstead, rather than from settlements (Loveluck 1999, 228; 2003, fig. 40). Certainly the *grubenhäuser* and rectangular post-built structures found in such large numbers at West Heslerton in the Vale of Pickering (Powlesland 2003, fig. 91) are rare or absent from East Yorkshire.

## EXCAVATION METHODOLOGY

The 1-hectare excavation targeted an area identified from geophysical survey and trial trenching as the likely core of the settlement. The open area was mechanically stripped of topsoil under direct archaeological supervision and then cleaned by hand. Archaeological features were subject to truncation due to medieval and post-medieval ridge and furrow as well as the later installation of field drains. As a result, some probable ring gullies had been reduced to a depth of only 0.1m, a field drain had removed the lower half of Skeleton 4 and no floor surfaces had survived. Investigations, running from 11th October to 17th December 2004, were further hampered by poor weather conditions, which resulted in persistently waterlogged loamy soils (Fig. 3).

An excavation strategy agreed with the Humber Archaeology Partnership (archaeological advisors to the East Riding of Yorkshire Council) required that a minimum 10% sample of each linear feature was investigated and at least 50% of each ring gully and discrete feature was excavated. Features containing inhumations or possible cremations were excavated in their entirety. Bulk soil samples were routinely taken to provide a representative sample across the site as a whole. The aim was to retrieve biological remains in order to assess ecological and economic indicators, as well as identifying carbonised plant material for radiocarbon dating. All processed samples were checked for artefacts and scanned for the presence of hammerscale.

A watching brief subsequently undertaken around the excavated area confirmed the continuation of Ditch 7 and the presence of a previously unknown gully (Brown *et al.* 2006), but additional watching briefs beyond the immediate area failed to identify further archaeological activity.

## EXCAVATION RESULTS

The excavations have identified a sequence of six phases of activity based on stratigraphic relationships, radiocarbon dates and datable artefacts (Fig. 4). The Late Bronze Age (Phase 1) is represented by two cremations; the Iron Age (Phase 2) by a cremation and pit; the Late Iron Age (Phase 3) by the first evidence for settlement activity, land divisions and a trackway; and the Late Iron Age/early Roman period (Phase 4) is represented by further occupation, an additional trackway and the maintenance of earlier boundaries. Occupation continued into the Roman period (Phase 5), followed by the inhumation of three individuals during the sixth or seventh centuries (Phase 6).

### **Phase 1: Late Bronze Age (Fig. 5)**

Prior to the radiocarbon dating programme, Late Bronze Age features were not anticipated and the flint tools, indicative of a concentration of activity in the Late Neolithic and Early Bronze Age, were believed to be largely residual (Brooks, p.75). Subsequent to the excavation, radiocarbon dating of all cremations and inhumations was attempted, in addition to the submission of charred plant material and animal bone to

facilitate the phasing of the site. Interestingly, two cremated bone samples (1127 and 1148) retrieved from pits 1126 and 1147 provided radiocarbon dates in the range 1030-840 cal BC and 1100-900 cal BC (Beta-217180 and 217183, Table 1) respectively.

Pit 1147, measuring 0.70m in length, 0.55m in width and 0.11m in depth, was steep-sided and flat-bottomed and contained significant quantities of charcoal and some burnt bone in a dark bluish-grey clayey silt (Fig. 6, S.163). It also contained pottery not inconsistent with a Late Bronze Age date (Didsbury, p.34) and evidence for salt production in the form of briquetage (Morris, p.95). Situated approximately 6m to the north-east, pit 1126 was U-shaped in profile, 0.62m in diameter and 0.14m in depth and contained a mottled brown-grey silt clay with tiny fragments of charcoal and burnt bone. Pit 1126, however, was clearly seen to cut the Iron Age Ditch 1 (Fig. 6, S.152) and consequently belongs to Phase 3 or later. The quantity of cremated bone was so low from this pit (0.01g) that the bone is now believed to be intrusive in a later feature. Nevertheless, the recovery of cremated material of Bronze Age date indicates the use of the landscape for the internment of human remains at a much earlier date than was previously anticipated.

### **Phase 2: Iron Age (Fig. 7)**

The earlier Iron Age is represented by a single cremation pit (1141), which measured 1.05m in length, 0.36m in width and 0.15m in depth, and contained a brown, grey-black sandy clay (1140) with burnt bone and charcoal inclusions. The bone, from an adult, provided a radiocarbon date in the ranges 360-290 cal BC and 230-50 cal BC (Beta-217182, Table 1), and the pit was later cut by the Late Iron Age Ditch 5. A small pottery



assemblage might include Late Bronze Age wares in addition to types that belong to the regional Iron Age tradition.

A second feature has been assigned to Phase 2 purely on stratigraphic grounds. Pit 1094, which contained probable daub, but no datable artefacts, was cut by Late Iron Age Ditch 2 (Fig. 8, S.178), and as a result is tentatively assigned to this phase. The pit measured 1.28m in length, 1m in width and 0.30m in depth and was U-shaped in profile.

### **Phase 3: Late Iron Age (Fig. 9)**

It is only in the Late Iron Age that the landscape was sub-divided into fields and a trackway created for access. Ditch 1, a stratigraphically early feature, apparently defined an area to the north-west, perhaps in conjunction with gully 1467 to the north. The east-west trackway was also in use by this time, based on a radiocarbon date in the range 360-80 cal BC (Beta-217176, Table 1). Given the presence of the trackway, it is likely that Ditch 5 was established by the Late Iron Age and provided a southern boundary for this route, although it is possible that the trackway reflected the pre-existence of the fields. The field boundaries represented by Ditches 2 and 3 may also have been in use by the Late Iron Age and are described here, but equally these ditches may not have been constructed until Phase 4 (Late Iron Age/early Roman). Given the non-viability of some of the radiocarbon dating samples, Ditches 2 and 3 can be dated only to a broad Late Iron Age to Roman phase. In the absence of Roman pottery, the ring gullies and other discrete features within Enclosure A could be associated with either Phase 3 or Phase 4. Here it has been determined (based on radiocarbon dates and/or stratigraphic relationships) that

the ring gullies in Enclosure A represent earlier habitation (Phase 3), while the roundhouses to the east of Ditch 7 indicate both Phase 4 and Phase 5 occupation. It is possible, however, that the roundhouses in Enclosure A co-existed with some of those to the north-east, and in doing so belong to a later phase of settlement.

The trackway crossed the area on an approximate east-west alignment and during this phase was flanked by Ditch 1 to the north and Ditch 5 to the south. The broad U-shaped holloway, flanked by ditches, was exposed over 86m of its length and was a maximum of 4m in width and 0.62m in depth (Fig. 10, S.115). A primary fill of red-brown silty clay and frequent cobbles, was apparently used to provide a track surface and this was still visible towards the eastern limits of the holloway where the feature became very shallow. This deposit contained fragments of hand-made vessels of uncertain date but also provided material for a radiocarbon date (see above). Up to two subsequent fills, which represent silting deposits, contained Scored Ware of possible 1st-century AD date and a few sherds of Roman pottery. Consequently, while the trackway is believed to have had its inception in the Iron Age, its use continued into the Roman period.

Ditch 1, which formed the northern boundary of the trackway, ran for a distance of 60m on a south-west to north-east alignment before turning in a north-westerly direction and running for a further 56m before terminating. The terminus of the ditch at the western limit of the excavation is questionable due to the very truncated nature of the ditch in this area. Typically the ditch ranged in depth from 0.25-0.41m, but at its western extent was only 0.05m in depth. Ranging in width from 0.75-1.35m, Ditch 1 was typically U-shaped

in profile (Fig. 10, S.219). With the exception of one section, where two fills were observed, only a single fill of yellow-brown silty clay was present. Consequently, slumping of possible banked material was not identified. Pottery was recovered along the length of the ditch and was exclusively from hand-made vessels of Late Iron Age/early Roman date. Ditch 1 was later replaced by Ditch 6, which may have enclosed or defined a similar area. At the northerly terminus of Ditch 1 a short length of gully (1467) was observed. As this feature was later cut by Ditch 7, it has been included in Phase 3 and with Ditch 1 may have provided a 5m access way from east to west. The U-shaped gully was identified over an approximate distance of 7m, although the feature was truncated and survived to a depth of only 0.10m. Unfortunately, a single fill of reddish-brown silty clay contained no datable artefacts to confirm its attribution to Phase 3.

Ditch 5 is included in Phase 3 as it formed the southern boundary to the trackway and, like the trackway, it continued in use during the Roman period. Appended to it were field boundaries (Ditches 2 and 3) and somewhat later, an enclosure ditch (Ditch 4), although their phases of origin are harder to establish. The relationship between Ditches 2 and 3 and Ditch 5 was not firmly established, but it is assumed that Ditch 5 was laid out first and that Ditches 2 and 3 were appended to it either as part of the same event or during subsequent land division. Evidence for re-cutting was noted in Ditch 5 from its intersection with Ditch 2 eastwards, indicating its continued maintenance. In contrast, no evidence for re-cutting was observed in the north-south aligned sections of Ditches 2 and 3.

Ditch 5 was exposed over a distance of 87m and varied in width and depth from 1.28m and 0.55m respectively at its western limits to 5.1m and 1.19m in the most easterly section (Fig. 10, S.176 and S.33). At the western end, the U-shaped ditch contained a single red-brown silty clay, but beyond Ditch 2 to the east, episodes of re-cutting and multiple fills were observed (Fig. 11, S.190). Slumping of material into the ditch from the north was noted (Fig. 10, S.33) but rather than indicate the presence of a bank, this infilling may simply reflect erosion due to the movement of traffic along the track. Certainly, the re-cutting relates to the maintenance of Ditch 5 as the boundary between the trackway to the north and the fields and enclosures to the south. In section, it was noted that Ditch 2 may have been truncated by Ditch 5, implying that Enclosure A existed before a continuous southern boundary for the trackway was formed (Fig. 8, S.178). While this is possible, the pre-existence of Ditch 5 is the preferred hypothesis (see above) and assumes the removal of an earlier phase of Ditch 5 when the boundaries of Enclosure A were defined. The disturbance caused by inter-cutting and re-cutting ditches is reflected in the degree of brokenness and dispersal of pottery. From Ditch 5 and its re-cuts, coarse hand-made pottery of Late Iron Age/early Roman date was commonly recorded, but finer fabrics typically of 2nd-century date were also identified. A late radiocarbon date in the range cal AD 120-340 (Beta-217178, Table 1), determined from a sheep's tooth, attests the continued use of this boundary into the Roman period.

Ditch 2 formed the most westerly boundary of Enclosure A and was exposed for a distance of 30m on an approximate north-south alignment. It had a broad U-shaped profile leading to much steeper sides and a rounded base. In one section, its profile and

fills suggest that a fence or palisade may have been an integral part of this boundary (Fig. 11, S.101 and Fig. 12), although the other ditches that defined Enclosure A did not display the same distinct profile. This western boundary, with no obvious re-cuts, measured a maximum of 1.78m in width and 0.68m in depth and contained between one and three fills. The primary fill included coarse hand-made pottery of Late Iron Age/early Roman date, but also a Dalesware jar rim dated between AD 190 and 350. Where Ditch 2 intersected with Ditch 5, a stratigraphic relationship was not clearly defined (Fig. 8, S.178), but on the basis of profiles and fills, the inter-cutting ditches seen further to the east were interpreted as an earlier Ditch 2 being cut by a later Ditch 5 (Fig. 11, S.186).

Ditch 3 formed the eastern boundary of Enclosure A and was exposed over a distance of 37m. It measured a maximum of 1.63m in width and 0.50m in depth and varied in profile from U to V-shaped (Fig. 11, S.100 and S.104). Between one and three fills were observed, with the primary fill containing both coarse hand-made Late Iron Age/early Roman pottery and Roman greyware, no later than mid-3rd century in date. At its intersection with Ditch 5, a clear stratigraphic relationship between the two ditches could not be determined, but as with Ditch 2 to the west, episodes of re-cutting were observed where Ditch 3 met Ditch 5.

Within Enclosure A, two possible roundhouses were identified (A1 and A2), both with estimated diameters of 7m (Fig. 13). These are likely to represent Phase 3 occupation activity before the focus of the settlement shifted to the north-east during Phases 4 and 5. Roundhouse A1 survived as two short curvilinear arcs of U-shaped gully approximately

0.55m in width and between 0.05 and 0.13m in depth, which had been bisected by a plough furrow. Roundhouse A2 was also U-shaped in profile and ranged in depth from 0.14-0.27m and in width from 0.18-0.31m. At its western limits, a shallow post-hole was observed (1129 - not shown in plan), although truncation due to ploughing had disturbed this area. Both gullies and the post-hole contained single fills of grey-brown silty clay. These fills included hand-made pottery sherds typically of Late Iron Age/early Roman date, although a rim from a barrel-shaped jar associated with roundhouse A1 is a later Iron Age form. The fills associated with roundhouse A2 and post-hole 1129 also revealed debris from iron smithing; hearth bottoms, tuyere fragments and smithing slag, and also a sherd of crucible that had been used to melt copper alloy (Cowgill, p.94).

To the north of roundhouse A1 the remains of a linear gully (1160), which was initially identified as a geophysical anomaly, were observed. Although the feature was traced by the geophysical survey over a distance of approximately 17m, only a length of 8m was exposed during excavation. This was due to truncation (it survived to a maximum depth of 0.21m) and adverse weather conditions, which led to the presence of standing water. A single fill of dark grey silty clay (1159) yielded vitrified and fired clay and a few fragments of Late Iron Age/early Roman hand-made pottery. The function of the linear gully is unknown, although the soil conditions suggest that drainage was always an issue.

Two pits to the east of gully 1160 were identified as a 'fire pit' (191) and a cremation pit (1109). Pit 191, measuring 1.8m in length, 1.4m in width and 0.4m in depth, was steep-sided and flat-bottomed. It contained two silty clay fills, a primary yellow-brown deposit

(193) and a secondary brown-black fill (192), and both contained numerous sherds of hand-made pottery including a jar form common in the regional Late Iron Age but otherwise not closely datable. The large amount of ash and burnt material present in the secondary fill probably derived from burning peat as a fuel (Alldritt, p.126). Pit 1109, with a U-shaped profile, was a much smaller feature at 1.35m in length, 0.64m in width and 0.19m in depth. It contained a primary fill (1122) of grey-brown sandy clay, numerous pottery fragments and some burnt bone, and a similar secondary fill (1139/1108) from which cremated remains of an adult were identified (Holst, p.110). Sherds from this fill indicate that a single hand-made pot was probably present and it is likely that this was used to contain the cremation.

The remaining features within Enclosure A were four sub-circular features (1115, 1117, 1118 and 1120) that were small in size and irregular in shape. They may represent truncated post-holes but the surviving remains were too ephemeral to be certain. The grey-black fills of features 1118 and 1120 (1119 and 1121 respectively) contained numerous charcoal fragments and 1121 also included a single sherd of Late Iron Age/early Roman pottery.

#### **Phase 4: Late Iron Age/early Roman (Fig. 14)**

During Phase 4, Ditch 5, which marked the southern boundary of the east-west trackway, was redefined and by virtue of two new ditches (Ditches 6 and 7), a second trackway was created. This new route, forming a T-junction with the original trackway, orientated north-west to south-east, seems to have provided access to associated fields. No

entranceway from it to the settlement to the east was observed. While a bridge may have been used to ford the boundary ditch, no evidence for such a structure was identified. Instead it is likely that the approach to the settlement lay to the east, beyond the excavated area. The settlement consisted of at least six roundhouses, as well as an additional structure, which curiously was sited at the junction of the trackways. The continued use of the space defined by Ditches 2 and 3 is assumed, but insufficient evidence is available to determine whether this was for agricultural use or the continuation of settlement and/or industrial activity. The land to the west of Ditch 6 and the remaining areas to the south of Ditch 5 are likely to have been used for farming purposes.

The northern and western boundary of the trackways (Ditch 6) was steep-sided with a flat base and measured a maximum of 1.13m in width and 0.67m in depth. It was exposed for approximately 60m east-west and 75m north-west to south-east. Towards its western limits, Ditch 6 contained a single grey-red brown silty clay, but further to the east, a series of fills suggested that a palisade might have been present (Fig. 15, S.29). The primary fill was typically a dark grey silty clay overlain by backfill deposits of yellow clay. No evidence for the presence of a bank was noted. Whilst the primary fill usually contained artefacts, the clay by contrast was sterile and presumably represents natural silting or deliberate packing while the fence was still extant. The primary fill contained coarse hand-made Late Iron Age/early Roman pottery and residual animal bone, which provided an unexpectedly early radiocarbon date in the range of 370-110 cal BC (Beta-217173, Table 1). Subsequent fills included Roman greyware, a sherd of Dressel 20



amphora and fragment of a glass bangle dated to the third and fourth quarter of the 1st century AD (Cool, no. 1). The presence of later pottery and the bangle fragment attest the continued use of this boundary into the Roman period and this is supported by evidence for re-cutting, which was particularly noticeable in the bend of the ditch.

Ditch 7 ran parallel to Ditch 6 for a distance of *c.*90m and in so doing formed the eastern boundary to the trackway orientated north-west to south-east. It then turned eastwards, flanked the east-west track, and was exposed for a distance of 20m. Here the ditch was at its widest at over 4m and reached a maximum depth of 1.3m. Its profile was irregular and at least one re-cut was noted (Fig. 15, S.35). Further to the north-west, the ditch was reduced to less than 2m in width and 0.68m in depth and no redefinition of the boundary was observed. Away from the settlement core, the ditch had a V-shaped profile and contained a single red-grey silty clay. Only coarse hand-made Late Iron Age/early Roman pottery was found in its primary fill, but Roman oxidised wares and greywares were identified in subsequent fills. Where multiple fills were observed, banked material to the east of Ditch 7 was hypothesised. If a bank was present, the roundhouse represented by B9 and B10 would have been constructed up against this earthwork.

The trackway bounded by Ditches 6 and 7 was of similar width to the earlier track, at an average width of 6m. The depression caused by traffic moving along the east-west route was absent and the cobbled surface of this pre-existing route was also lacking. The phasing suggests that the second track was in use over a shorter time frame, but perhaps even when both routes were in use, the later track was travelled less frequently.

At the intersection of the trackways, a partial ring gully (1161) was investigated. It was assigned to this phase as it cut Ditch 1 and contained coarse hand-made pottery within its only fill. The gully was a broad, shallow U shape in profile and measured a maximum of 0.56m in width and 0.18m in depth. It is likely to have been a ring gully with a diameter of approximately 3.5m, although its southern limits had been removed by ploughing (Fig. 16). Two steep-sided post-holes were associated with the gully, post-hole 1163 situated within the gully itself and post-hole 1201, 2m to the north-east. Neither contained datable artefacts.

The settlement core to the east of Ditch 7 consisted of at least five roundhouses in Phase 4 based primarily on radiocarbon dates and stratigraphic relationships. Roundhouse B1 was a sub-circular structure (a maximum of 4.3m in length and 3.5m in width) represented by a steep-sided, flat-bottomed gully up to 0.5m in width and 0.31m in depth. It typically contained a single fill of grey-brown silty clay, but in certain sections natural silting of yellow-orange clay had occurred. From a tertiary fill (1552) a near-complete jar was recovered of probable 1st-century AD date (nos 30/31). A steep-sided post-hole (1521) was observed cutting the ring gully but it contained no datable artefacts (Fig. 15, S. 362). The ring gully of B2 was typically U-shaped in profile, had a diameter of 7m and was up to 0.55m in width and 0.34m in depth. It contained a single fill of dark grey silty clay, which included hand-made pottery consistent with a Late Iron Age or early Roman date and carbonised grain with a radiocarbon date in the range 60 cal BC-cal AD 90 (Beta-217191, Table 1). The ring gully was cut by a short length of gully (1483) of

unknown function and without datable artefacts. Roundhouses B1 and B2 were later disturbed by the construction of the gully that defined Enclosure B (Fig. 15, e.g. S.362).

Ring gullies B3 and B5 are assigned to Phase 4 as they were disturbed by a subsequent ring gully (B4). A radiocarbon date for roundhouse B4 in the ranges 360-290 cal BC and 230-50 cal BC (Beta-217192, Table 1), however, is believed to be a rogue date presumably due to the presence of residual animal bone. The gully of B3 was steep-sided and flat-bottomed in profile and measured a maximum of 0.65m in width, 0.17m in depth and encompassed an area 7m in diameter (Fig. 13). A single fill contained coarse hand-made pottery of Late Iron Age/early Roman date. The ring gully of B5 had a U-shaped profile, measured up to 0.45m in width and 0.22m in depth and would have had a diameter of 10m (Fig. 17). A single fill of grey-brown silty clay included vesicular hand-made pottery. Associated with this ring gully were two possible post-holes (1498 and 1500 – not shown in plan) and two shallow features of indeterminate function (1452 and 1494 – not shown in plan). Only post-hole 1500 contained pottery, coarse hand-made pottery of Late Iron Age/early Roman date, within its single fill (1499).

The association between roundhouse B5 and ring gullies B6 and B7 is unknown, although none is likely to have co-existed with roundhouse B8 in Phase 5. The ring gully of B6 was heavily truncated and survived only to a depth of 0.04m. No datable artefacts were found within its single fill. Ring gully B7, at 0.08m in depth, was also damaged by later ploughing but did contain coarse hand-made Late Iron Age/early Roman pottery. Connected to gully B7 was a possible pit (1435), containing a fragment of a hand-made

jar, and a short length of gully that may represent another roundhouse as it survived to a much greater depth (0.24m) than B7. Ring gullies B6 and B7 may represent roundhouses with diameters of 8m and 9m respectively.

Within the area defined by ring gullies B5 and B7, three discrete pits were identified (1421, 1339 and 1463). Pit 1421, 1.05m in length and 0.50m in width, was very shallow at 0.04m in depth and its grey-brown clayey silt contained no finds. Pit 1339 was a much more substantial structure at 0.68m in depth and may have been a storage pit. It had near-vertical sides, although the sides sloped outwards towards the bottom to provide a larger surface as its base. Overlying a thin primary fill (1342) of orange-red sandy clay, which contained a body sherd of Late Iron Age to early Roman hand-made pottery, was the main fill (1341) of decayed organic material. Unfortunately, samples from this fill failed to identify the material being stored. The pit was finally sealed with a layer of re-deposited natural clay (1340). Approximately 3.5m to the east of the storage pit was a straight-sided post-hole (1463), 0.39m in diameter and 0.19m in depth. A fill of red-grey clayey silt (1462) included possible packing stones, a rubbing stone and numerous sherds of typical Iron Age hand-made pottery.

Ring gullies B9 and B10 may represent a single roundhouse of 9m diameter, although B10 was more heavily truncated than B9 (a maximum of 0.5m in width and 0.15m in depth compared to 1.36m and 0.68m respectively). Roundhouse B9 displayed an irregular profile and unusually up to four fills were noted compared to only a single fill in B10. Coarse hand-made pottery was found in the primary/single fill of both B9 and B10, while

subsequent fills of B9 contained finer hand-made pottery of possible post-Conquest date. Linear features assigned to Phase 5 subsequently disturbed both sections of ring gully.

The remaining features assigned to Phase 4 were the three features identified beyond Gully 8 (Phase 5) and hence assumed to belong to the earlier unenclosed phase, and a group of four pits to the west of Ditch 6 and containing hand-made pottery of Late Iron Age/early Roman date. Those features beyond Gully 8 included a ring gully (B11) that indicated a structure an estimated 9m in diameter. Where it survived to some depth (0.33m), the gully was V-shaped in profile (Fig. 17, S.271) and contained up to two fills that included coarse hand-made pottery but also fabrics that may have been post-Conquest in date. A linear gully (1350) and two pits (1348 and 1408) investigated within the same area were typically U-shaped in profile, shallow in nature and filled by a single deposit. The two pits also contained pottery, coarse hand-made pottery from pit 1408 and hand-made pottery of possible post-Conquest date from pit 1348. The pits to the west of Ditch 6 included three inter-cutting features (135, 133 and 120) and a discrete U-shaped pit (147), all of unknown function.

### **Phase 5: Roman (Fig. 18)**

During the Roman period, Enclosure B was constructed with the cutting of Gully 8 and occupation seems to have been confined to this area. Activities, perhaps of an industrial nature, were undertaken within Enclosure C, although the origin of this enclosure remains contentious given the presence of hand-made Late Iron Age/early Roman pottery in some of its fills. In contrast to the neighbouring ditches, however, Roman pottery is more

common from the Enclosure C ditch and some of the features it encloses were clearly Roman in date. So while Enclosure C may have its origins in an earlier phase, the inclusion of Roman greywares, mortaria and possible Daleswares of 2nd-century date onwards in early, if not primary, fills attest its use in Phase 5. A re-cut of Ditch 4 indicates that this enclosure was also redefined during the Roman period and, as a result, will be described here. Interestingly, a horse was buried in a pit located at the junction of the two trackways and may be indicative of a ‘threshold’ or ‘foundation’ ritual.

Gully 8 defined an estimated area of 0.9ha, although the eastern corner of Enclosure B lay beyond the limits of the excavation. A north-east-facing entrance, 3.6m wide was situated where roundhouse B2 had stood previously. The gully had a steep-sided, U-shaped profile and measured a maximum of 0.52m in width and 0.23m in depth, although truncation was evident. It contained a single dark grey silty clay that included hand-made pottery of peri-Conquest date and possible coarse Roman greywares. The construction of this enclosure disturbed Ditch 7 and gullies B1 and B2, and hence a radiocarbon date in the range 60 cal BC-cal AD 90 (Beta-217191, Table 1) from B2 provides a *terminus post quem* for Gully 8.

Enclosure B accommodated two possible roundhouses (B4 and B8) based on stratigraphic relationships and a radiocarbon date. An animal bone from the gully of B8 provided a radiocarbon date in the range cal AD 10-150 (Beta-217189, Table 1) but date ranges of 360-290 cal BC and 230-50 cal BC (Beta-217192, Table 1) for animal bone from B4 are believed to reflect residual material. Ring gully B8 represents the largest

roundhouse identified from any phase with an estimated diameter of 12m. Its gully was V-shaped in profile, up to 0.9m in width and 0.31m in depth (Fig. 17, S.289). A single dark grey fill contained predominantly vesicular hand-made pottery. Roundhouse B8 was subsequently cut by gullies 1321 and 188, of unknown function. Both contained vesicular hand-made pottery and gully 188 also included samian dated to AD 90-110 and a headstud brooch dating to the later 1st to mid-2nd century AD (Cool, no. 5). A number of inter-cutting gullies were also noted to the south of B8, again of unknown purpose. While a relationship with Ditch 7 was not established, two of the gullies (1264 and 1279) were observed to cut ring gully B10 from Phase 4. A sub-circular ring gully (B4) was approximately 5m in diameter and disturbed earlier gullies B3 and B5. It was up to 0.71m in width and 0.31m in depth, with a steep-side, flat-bottomed profile. It typically contained a single fill, but in the terminus to the east, four fills were observed (Fig. 16, S.351; Fig. 19). The primary fill of grey to grey-brown silty clay contained hand-made pottery of Late Iron Age/early Roman date and a possible sherd of Roman greyware, but a straight-sided post-hole (1560) associated with the ring gully contained no datable artefacts.

Cutting the inner edge of Ditch 7 and situated immediately to the west of roundhouse B8, was a grave (1345) containing an adult inhumation (Fig. 20, SK4). The grave was 1.3m in length, 0.9m in width and shallow at only 0.36m in depth. The unsexed skeleton was poorly preserved, but a radiocarbon date in the range cal AD 40-230 (Beta-217188, Table 1) was obtained. Unlike the later early medieval burials, this body was not accompanied by any grave goods, although greyware of possible 2nd-century date was included in the

backfill. Given the position of this grave and gullies 1264, 1279 and 1321, it is likely that the internal bank apparent in Phase 4 was absent by Phase 5.

Only the western limits of Enclosure C were exposed during the excavation and although its continuation eastwards was identified by geophysical survey, its full extent was not established due to magnetic disturbance caused by modern pipes (Fig. 2). The part of the enclosure exposed was bounded by Ditch 5 to the north and Ditch 4 to the west and south. An entranceway presumably lay beyond the excavation limits.

Ditch 5 was a pre-existing feature (see above), which from Ditch 2 eastwards had undergone at least one episode of re-cutting. From its intersection with Ditch 4, and perhaps even from Ditch 3, Ditch 5 was demonstrably wider. In section, it is clear that the wider ditch represents an earlier feature, followed by a narrower re-cut (Fig. 21, S.275). The stratigraphic relationship between Ditches 4 and 5 was not identified definitively, but the secondary fill of Ditch 4 (1372) and the fill of the earlier, wider Ditch 5 were common and contained possible post-Conquest hand-made pottery and Roman greywares perhaps of 2nd-century date. Along the length of Ditch 4 a possible re-cut was noted that may have corresponded with the narrower Ditch 5 (Fig. 21, S.169). If correct, pottery in the primary fill of the Ditch 4 re-cut suggests a 2nd-century date for the redefinition of Enclosure C. Cutting the primary fill (1022) of this possible re-cut was a U-shaped pit (1018) containing cremated human remains. A radiocarbon date in the range cal AD 40-230 (Beta-217174, Table 1) for this burnt material does not vary the proposed 2nd-century date. Ditch 4 was exposed for an approximate length of 30m north-south and



10m east-west and measured up to 4.22m in width and 1.15m in depth. Multiple fills were observed containing pottery of Late Iron Age/early Roman date, Romanised forms and fully Roman material. Infilling suggests the presence of a bank within Enclosure C.

Contained within Enclosure C were four pits and two linear features that may have been associated with a possible structure. Pit 235 to the north of the enclosure was steep-sided and flat-bottomed and measured 0.83m in length, 0.61m in width and 0.15m in depth. From a single fill (234), 52 sherds of pottery were recovered, predominantly very worn vesicular hand-made pottery, but also greywares and coarse greywares. Unfortunately no chronologically diagnostic sherds were present, but a medieval jug fragment is believed to be intrusive. A second pit (101) contained a much larger pottery component within its single fill (100) with 613 sherds, in addition to 270 fragments of fired clay which represent a rudimentary kiln (Morris, p.100). The pottery suggests a date range from the mid-1st-century AD to *c.* the mid-2nd century AD. Pit 101 had an irregular-shaped profile, 1.49m in length, 0.8m in width and 0.16m in depth (Fig. 21, S.3).

Pit 1184 was identified during excavation as a possible kiln structure, although no *in-situ* burning was noted. The feature was broadly U-shaped in profile, but a field drain, perhaps destroying the flue and any evidence of a heat source, had removed the eastern limits of the feature. It was approximately 3.2m in length, 2m in width and 0.65m in depth and contained a single dark red-brown silty clay (1185). Pottery sherds, totalling 226, included a fully Roman component perhaps later 1st to early 3rd-century. A radiocarbon date in the range of cal AD 40-230 (Beta-217184, Table 1), a silver denarius

struck *c.* AD 103-111 (Barclay, p.82), a fragment of glass bangle dated to the second half of the 1st century AD and a bridle cheek piece which continued in use into the early 2nd century AD (Cool, nos 4 and 8) all confirm a Roman, most likely early 2nd-century, date. The final pit (1008) was steep-sided and flat-bottomed and measured 1.02m in length, 0.5m in width and 0.13m in depth. Its fill (1007) contained only two pottery sherds either Iron Age in date or post-conquest but in the indigenous tradition.

Two lengths of gully and an associated post-hole were observed towards the southern limits of Enclosure C. While they may represent a linear structure, their function remains unknown given the scant evidence. Gully 1084 was 3.3m in length, 0.51m in width and 0.29m in depth, with a U-shaped profile. Its second and final fill (1082) contained pottery of a late 1st or 2nd-century date. Gully 1025 and its re-cut 1081 were also U-shaped in profile and reached a maximum width of 0.74m and a depth of 0.25m. The full length of this feature was not determined but it exceeded 3m. The gully was later cut by a post-hole, 0.5m in diameter and 0.29m in depth. Coarse hand-made pottery was recovered from the only fill (1024) of gully 1025.

Two pits, 1347 and 1285 (containing a horse burial), situated at the junction of the trackways, have been assigned to Phase 5 based on a radiocarbon date of the horse in the range of cal AD 70-240 (Beta-220457, Table 1). Pit 1347 was exposed for a length of 2.3m and measured 1.55m in width and 0.2m in depth. With a broad U-shaped profile, it contained two fills, a primary sterile deposit (1391) and a secondary disuse deposit containing pottery (including samian), bone and flint. This feature was disturbed by the

cutting of a large pit (1285), 2.08m in length, 1.6m in width and 0.4m in depth, in order to bury a horse (Fig. 22). Finds of pottery, flint, shell and slag from the fill (1284) of this second pit were probably intrusive in the material used to backfill the pit once the horse had been deposited. Although the relationship was not clearly identified in section, pit 1285 was believed to have cut Ditch 7. A ritual act may be indicated by the atypical deposit of a complete male horse in this feature.

#### **Phase 4-5 features (Fig. 18)**

Excluding the ring gullies and features with stratigraphic or spatial relationships, the remaining discrete features in Enclosure B are unphased. The location and the presence of probable Late Iron Age and Roman pottery, however, indicates their association with Phase 4 or 5.

Towards the north-west boundary of Enclosure B, a T-shaped gully (1384) of unknown function was investigated. This gully, with a U-shaped profile, was up to 0.30m in width and 0.09m in depth and contained a dark grey clayey silt with a single sherd of hand-made pottery of Late Iron Age to early Roman date. Just to the east of gully 1384 was pit 1442, 0.87m in length, 0.64m in width and 0.20m in depth. Its fill included charcoal, cremated human bone and scraps of Late Iron Age/early Roman hand-made pottery (1443) and the remains of possible *in-situ* burning (1455). Unfortunately the cremated bone provided insufficient collagen to make it viable for radiocarbon dating. Another short section of gully (1416) was observed to the south-east of B10. This possible ring gully was heavily truncated and survived to a depth of only 0.05m. A single fill of grey-

brown silty clay (1415) contained a body sherd of hand-made pottery of Late Iron Age to early Roman date.

### **Phase 6: early medieval period (Fig. 23)**

Four inhumations buried with grave goods have been dated to the 6th century AD. Graves 1105 and 1107 were positioned side by side towards the south-eastern limits of the site and appear to have respected the position of the earlier field and enclosure boundaries. Grave 1105 contained the poorly-preserved skeleton (SK1) of a male aged between 36 and 45 years, who was positioned with his head to the east and accompanied by a small iron knife (Figs 20 and 24). Grave 1107 (SK2) contained the scant remains of two individuals, a juvenile between 6 and 10 years (who was not identified during the excavations) and a young adult between 20 and 25 years, again positioned with the head to the east. An iron knife and spearhead and two copper alloy buckles and plates accompanied these skeletons. Although the graves were of the same length (1.67m) and similar widths (0.63 and 0.73m), the grave containing the adult male (1105) was almost twice as deep at 0.35m when compared to the double inhumation in 1107. The buckles associated with SK2 have been dated to the 6th to 7th centuries, while the form of knife from this grave had fallen from favour by the end of the 6th century. Given the spatial relationship between the two inhumations, SK1 is believed to be of early medieval date also.

The third early medieval inhumation (SK3) was a juvenile between 9 and 10 years who had been buried at the junction of Ditches 2 and 5. This suggests that, as with SK1 and

SK2, positioning of the graves had taken account of still extant relict boundaries from previous phases of activity. The body was orientated with its head to the north and was accompanied by six beads probably strung together, four of glass, one of amber and one of frit or clay. The beads are typical of the early medieval period, with the amber bead indicative of a 6th-century date. Stratigraphically the grave (1205) cut into a fill of Ditch 2, before being truncated by two phases of plough furrows. The grave measured 1.15m in length, 0.85m in width and 0.35m in depth.

Unfortunately, bone samples from all three graves, which were submitted for radiocarbon dating, were amongst those that failed to yield a separable collagen fraction. The beads and one of the knives, however, indicated a 6th-century date, while crumbs of hand-made Late Iron Age/early Roman pottery associated with the three grave fills are considered to be residual. Finally, isotope analysis on teeth and bones from the skeletons indicated that these individuals are likely to have originated in eastern Yorkshire or central eastern England (Evans and Chemery, p.118).

### **RADIOCARBON DATING RESULTS**

Initially, 21 samples were submitted to Beta Analytic Inc. for AMS dating. Unfortunately many of the bone samples proved to be problematic as they either failed to yield a separable collagen fraction or the collagen that was extracted yielded a 'depleted' C13/12 ratio, indicative of a poor degree of preservation and the possible presence of 'exogenous carbon components'. Of the fourteen bone samples submitted, eight failed to provide any

separable collagen, although a second bone sample from the horse skeleton deposited in pit 1285 eventually provided a Roman date. Six further bone samples produced a depleted C13/12 ratio (*italicised* in Table 1) and these dates, therefore, must be used cautiously. For bone samples such as these, the error would almost always be in the more recent direction (due to mobilised humic acids from the surrounding soil), meaning that the ages should be considered ‘minimum ages’. How much error has been introduced is impossible to calculate directly and can be inferred only by considering any associated data, for example stratigraphic information and datable artefacts. A radiocarbon date of cal AD 1440-1640 (Beta-217186) from Ditch 1 (Phase 3) is easily discounted, for example, on both stratigraphic and artefactual grounds.

Table 1. Results of the radiocarbon dating programme

### **SPECIALIST REPORTS**

Catalogues provided by the specialists have been standardised. At the end of each catalogue entry the italicised text details the feature, fill number, small find number if given and phase. The catalogues are ordered according to phase and then by context number. Entries marked with an asterisk are illustrated. Material recovered both from the trial trenching and subsequent open-area excavation is included. Unabridged versions of all specialist reports are held with the site archive.

**The Pottery by P. Didsbury with contributions by K. Hartley, T. Manby, F. C. Wild and D. Williams**

Introduction

A total of 4932 pieces of ceramic, weighing 57515g, and having an average sherd weight (ASW) of 11.7g, was recovered from the excavations. This was primarily pottery, though fired clay, briquetage and ceramic building material (CBM) were also recovered. Crumbs and amorphous lumps of fired clay, some of them clearly daub, were widely distributed across the site, as might be expected. The majority of the fired clay, however, was structural and came from a single feature (Morris, p.100). The briquetage is also treated separately (Morris, p.95). An Access database constitutes the basic ceramic archive.

The general composition of the site assemblage

As the low ASW value given above suggests, much of the ceramic was of limited evidential value. Categorisation of sherd size and condition was undertaken by giving a 'depositional code' to each context assemblage, using the method established by Rigby for the assemblages from Heslerton (Rigby 1986, 141-44). This showed that only twenty pottery-bearing contexts contained material of Rigby's Grade C, *i.e.* consisting of several sherds from the same vessel. The remainder of the contexts contained material graded D-F, *i.e.* body sherds of progressively diminishing size. There are few groups which suggest primary disposal of rubbish, and the material in general appears to have undergone a fairly high degree of brokenness and dispersal.

The pottery is overwhelmingly from hand-made vessels in the two main regional Late Iron Age to early Romano-British tempering traditions. The limited amount of evidence from rim forms in these fabrics suggests a peri-Conquest date for much of the material, perhaps from the late 1st century BC through to the 2nd century AD, though it has not always been possible to suggest a closer dating in respect of individual context assemblages. The material employs predominantly non-soluble tempering agents (fabric code H2), though a small amount of calcareously tempered or vesicular material (codes H1, H4) also occurs. Where calcareous temper is still extant it is uniformly shell, and the shape of the vesicles in the H4 group indicates similar original tempering. Smaller amounts of fully Roman wheel-thrown and other wares also occur, and there are medieval and post-medieval components in some features, particularly the plough furrows (Table 2).

Table 2. Simplified fabric distribution (whole site assemblage)

The earliest fully Romanised material recognised was Rusticated Ware (*c.* AD 70-130/150) and, with the possible exception of small amounts of Dalesware, the latest would appear to be of late 2nd to earlier 3rd-century date. Only a single unstratified greyware might possibly have been deposited after the mid-3rd century.



## Fabric and depositional codes

Alphabetic fabric codes were employed in the database, and are used for convenience to some extent in this report, particularly in the illustration catalogue. The principal Iron Age and Roman codes employed are as follows:

|       |  |
|-------|--|
| H0    | hand-made wares in the Iron Age tradition, without significant tempering |
| H1    | calcareously tempered wares in the Iron Age tradition                    |
| H2    | stone and sand-tempered wares in the Iron Age tradition                  |
| H3    | wares with mixed calcareous/stone tempering in the Iron Age tradition    |
| H4    | vesicular wares in the Iron age tradition                                |
| RA    | amphorae   |
| RCC   | colour-coated wares  |
| RDT   | Dales-type ware  |
| RDW   | Dalesware  |
| RG    | greyware   |
| RGRUS | rusticated ware  |
| RM    | mortaria   |
| RO    | oxidised wares   |
| RS    | samian   |
| RSHEL | shell-tempered other than Dalesware                                      |
| RW    | whitewares   |

The proportional distribution of types within the Roman assemblage is as follows (Table 3):

Table 3. Proportional distribution of Roman fabrics (whole site assemblage)

#### Discussion by Phase

##### *Phase 1*

The only ceramic material attributed to this phase came from fill 1148 of pit 1147, cremated bone from which produced a radiocarbon date in the range 1100-900 cal BC (Beta-217183, Table 1). The principal component in the assemblage consisted of *briquettage*. This material is fully described and discussed by Morris (p.95). The remaining material from the pit comprised two sherds of reduced stone-tempered ware (H2), and up to seventeen fragments of fired clay, weighing 20g. A further 95g of oxidised crumbs and powder, retrieved from soil sampling, is also probably to be regarded as deriving from fired clay. The two pottery sherds (ASW 3.5g) were examined by T. G. Manby, in whose opinion (pers. comm.) the fabrics were not inconsistent with a Late Bronze Age date. The fabrics are described as sandy and medium hard, with a hackly fracture; they can be paralleled at Yorkshire sites such as Thwing and Scarborough Castle.

##### *Phase 2*

A small amount of ceramic came from cremation pit 1141 and from pit 1094. Bone from 1141 yielded radiocarbon dates between the mid-4th and mid-3rd centuries BC. The

phase assemblage amounted to 128 crumbs and fragments of fired clay, totalling 58g, and thirteen small body sherds of pottery weighing 71g, all of the latter from the cremation pit. The fired clay in each feature included probable daub fragments showing roundwood (wattle) impressions. The earliest pottery from 1141 is probably a one-gram fragment of flint-tempered ware (FTW). This is often of Late Bronze Age date in the Wolds area (Rigby 1986, 146), though its significance as a fabric type typical of this period should not be over-emphasised (Rigby 2004, 25). The rest are stone-tempered (H2) body sherds from an uncertain number of vessels. One sherd, a fairly soft sandy light brown ware containing occasional angular dark-coloured erratics up to *c.*7mm, might just support a Late Bronze Age date (Rigby 2004, 25) but the rest belong to the regional Iron Age tradition. The fabrics are mainly reduced and can be either relatively fine or quite coarse, with temper up to *c.* 5mm. They include hard-fired reduced fabrics of types which occur increasingly in the Late Iron Age, and which were certainly being made by the 4th century BC, as attested by the radiocarbon dating of material from Brompton Bridge, North Yorkshire (Manby 1996, 35-6). Tempering agents include sandstones, quartz and quartz dolerite. Similarly tempered hand-made material occurs throughout the Iron Age and early Romano-British ceramic sequence on site.

*Phase 3 (illus. nos 1-22)*

The phase produced 1225 sherds of pottery, weighing 11103g (ASW 9.1g). In addition, there were 93 fragments of fired clay (310g), including at least one piece of daub with roundwood (wattle) impressions.

Pottery was recovered from Ditches 1, 2, 3 and 5; the east-west trackway; the gullies of roundhouses A1 and A2; pits 191, 1122 and 1126; irregular feature 1120; and gully 1160.

The phase fabric profile is presented in Table 4. Handmade material dominates the assemblage, most of it H2 stone-tempered wares, which have a more than 90% share. Roman pottery accounts for 3.7% of the total by number of sherds, or 5.4% by weight. Although only a small proportion of the whole, the Roman pottery is widely distributed, occurring in all the ditches and the trackway. Its absence from the roundhouse gullies and other features is noted, but has little significance, given the very small assemblages involved. The date and significance of the Roman pottery is discussed further below.

Table 4. Phase 3 fabric distribution

The chronological parameters of the phase are established by animal bone from primary fill 1038 of the trackway, which provided a radiocarbon determination of 360-80 cal BC (Beta-217176, Table 1), and by the presence of Roman pottery in several features.

There are some difficulties in establishing close dates for the handmade component in this phase, in particular in deciding whether any of it might be contemporary with the radiocarbon-dated bone. The hard-fired reduced fabrics which are typical of the H2 wares would suggest a date in the Late Iron Age, possibly post *c.* 400 BC (see above). Having said this, the assemblages are of rather poor quality, and there is a dearth of chronologically diagnostic forms.

### Pottery from the east-west trackway

The pottery accompanying the radiocarbon-dated bone in primary fill 1038 of section 1037 of the trackway consisted of six small base and body sherds from at least three jars, and it is only in intermediate fill 1039 and upper fill 1040 that the material allows any discussion of form.

The principal component in fill 1039 was a bowl form with externally thickened rim, in a very hard, dense, reduced, sand-tempered fabric (Fig. 25, 1). Such open forms are atypical in the regional Late Iron Age, though they do occur. A vessel from Thorpe Thewles (Swain 1987, fig. 45, no. 64) is not totally dissimilar, though the thermoluminescence 'date' of 485 BC +/-190 for the phase in which it occurs should perhaps now be treated with caution. The profile finds a much closer parallel in a vessel from Catcote, Co. Durham (Challis and Harding 1975, fig. 47, no. 8). The vessel was unstratified, but pottery from the site was held by Challis and Harding (1975, 97-8) to include forms which were common in their 'Late La Tène'. Finally, it is not out of the question that such a form could have been produced under the influence of Roman greyware bowl forms. The only other rim from this context (Fig. 25, 2) is here drawn as a lid, though it could perhaps equally well be oriented as a barrel jar with internally bevelled rim. The dating discussion is not furthered by a large jar base (Fig. 25, 3). For a single possible sherd of Scored Ware, probably belonging to a vessel from upper fill 1040, see below.

Upper fill 1040 of this section across the trackway produced a large assemblage (165 sherds, 1126g) of H2, condition C-F. There were also several small fragments of fired clay. At least 83 of the H2 sherds are from a Scored Ware vessel (*sensu* Elsdon 1993, 2-3). Small sherd size and worn fractures made rebuilding difficult, and it proved impossible to reconstruct the vessel profile below the rim. The rim and a representative length of wall are therefore illustrated separately (Fig. 25, 4 and 5). Scored Ware appears to have been in production from the 4th century BC and has a clear East Midlands distribution, most of it occurring in an area bounded by the Rivers Trent and Nene (Elsdon *op. cit.*, fig. 3). North of this area, only a scattering of finds is known, though the type appears to last longer in the north, overlapping with the advent of wheel-made pottery, Gallo-Belgic imports and Roman greywares (Elsdon 1993, *loc. cit.*). Late dates are certainly the case at the two East Riding sites at which it has hitherto been found, *i.e.* Faxfleet 'A' on the north bank of the Humber and Saltshouse School in Hull, the latter site conventionally attributed to the 1st century AD, before the Roman entry into Yorkshire in AD 71 (Challis and Harding 1975, 80; fig. 39, no. 7; fig. 41, nos 12, 14). The remainder of the H2 material from this deposit consists of hard-fired reduced wares, most of them tempered with coarse sand or small rock fragments < 2mm in size. The only vessel warranting illustration (Fig. 25, 6) is a large round-shouldered jar with upright, externally expanded rim. Although the basic rim and shoulder profile can be paralleled throughout much of the Late Iron Age, the hard reduced fabric invites comparison with another late vessel from Saltshouse School, Hull (Challis and Harding 1975, fig. 41, no. 6).

The hand-made pottery from other sections across the trackway cannot be distinguished in general terms from that described above, though there are no further occurrences of Scored Ware. Two illustrated jar rims (Fig. 25, 7 and 8) can quite easily be accommodated in the later stages of the pre-Roman Iron Age.

Roman pottery was found only in sections 1220 and 1069 of the trackway, in the west and centre of its length, respectively. The former produced a jar rim fragment in a blue-grey sandy fabric, almost certainly of late 1st to early 3rd-century date, while the latter had a sherd of sandy wheel-thrown oxidised ware, undatable, in its upper fill.

#### Pottery from roundhouses A1 and A2 and linear gully 1160

Small amounts of pottery were recovered from gullies 1002 and 1131 of roundhouses A1 and A2, respectively, and from post-hole 1129 associated with A2. The combined assemblage amounted to 26 sherds of H2, weighing 172g (ASW 6.6g). With the exception of one coarsely tempered sherd, the fabrics are at the finer end of the H2 spectrum, though there is no evidence of wheel manufacture. A small barrel-shaped jar with slightly 'beaded' rim (Fig. 25, 9) is not closely datable, on form grounds, within the Later Iron Age. A small crucible used to melt copper alloy (Fig. 26, 10) is discussed by Cowgill (p.94).

Gully 1160, to the north of A1, produced only three body sherds of coarsely tempered H2 (10g).

#### Pottery from Ditches 1, 2, 3 and 5

These features produced a combined assemblage of 479 sherds, weighing 4866g (ASW 10.2g). Fired clay totalling 29 fragments (190g) was also present, all of it from Ditch 5. The quantities of pottery from each ditch are shown in Table 5, and fabric distribution in Table 6.

#### Table 5. Pottery from the ditch groups: spatial distribution

It will be apparent from Table 5 that the great majority of the pottery from the ditch groups comes from east-west Ditches 5 and 1, flanking the trackway; the contribution of north-south field Ditches 2 and 3 is much smaller.

#### Table 6. Pottery from the ditch groups: simplified fabric distribution

Table 6 shows that the H2 stone-tempered fabrics dominate the Iron Age assemblage, with small contributions from calcareously tempered wares (H1 and H4). (The H3 is a small crumb with apparently mixed temper). Roman fabrics occur in all the ditches except Ditch 1. Ditches 1 and 5 both produced single sherds of intrusive medieval pottery: the first not closely datable, the second a worn sherd of 14th or 15th-century German stoneware.



As the low ASWs noted might lead one to expect, there is a dearth of illustratable material in these groups, in either the Iron Age or Roman components of the assemblage. Such as there is, tends to point to the peri-Conquest period as being appropriate for the onset of depositional activity. A hand-made, sparsely tempered open form with externally expanded rim (Fig. 26, 11) is best seen as a Romanising form. Two jars (Fig. 26, 14 and 17) find close parallels at Saltshouse School, Hull, a site which Challis and Harding (1975, 141) dated to the 1st century AD on pottery grounds. Two further handmade jars, in an identical sandy reduced fabric, are neatly fashioned and have well-smoothed exteriors (Fig. 26, 12 and 15). Of these, no. 15 can be paralleled by a jar from a Ceramic Phase 9 assemblage at Dragonby, broadly Claudio-Neronian (May 1996b, fig. 19.45, no. 458). There is a strong possibility that these two vessels come from south of the Humber. A southern source for a shell-tempered and possibly wheel-thrown vessel with heavy bead rim (Fig. 26, 16) is virtually certain. Such large jars are common in the Late Pre-Roman Iron Age in North Lincolnshire, and continue some way into the Roman period. An example from Ceramic Phase 8 at Dragonby (May 1996b, fig. 19.49, no. 556) affords a close parallel and might suggest a date in the early 1st century AD for the Easington vessel.

Turning to the Roman pottery from these features, it is unfortunate that the assemblage consists almost entirely of small greyware body sherds. Broadly speaking, these are all in the kinds of sand-tempered fabric which suggest a Lincolnshire origin before the early to mid-3rd century AD. It is perhaps not always sufficiently recognised that greyware

supply to south-east Yorkshire was dominated by North Lincolnshire products of this type until Holme upon Spalding Moor and other 'East Yorkshire greywares' became available in the earlier 3rd century. An unillustrated jar body sherd from Ditch 3 has complex linear burnishing which first appears in the early 3rd century in North Lincolnshire (cf. Rigby and Stead 1976, fig. 84, no. 103), from Winterton Villa. Also with parallels at Winterton is a jar with long everted rim in Roman shell-tempered ware (Fig. 26, 18); the form is simple, but it may recall similar jars occurring in Antonine groups at Winterton Villa (for example, *op. cit.* fig. 79, no. 8; fig. 81, no. 47). The most clearly diagnostic Roman vessel, however, is a Dalesware jar from a secondary fill of Ditch 2 (Fig. 26, 20). The form appears shortly before AD 200 at Winterton Villa and is in production until *c.* AD 350. Given the apparent emphasis of the other Roman material, an earlier 3rd-century date is perhaps the most likely for this vessel.

#### Pottery from pits 191, 1109 and 1126; and irregular feature 1120

Pit 191 had 105 sherds of H2 (ASW 9.6g) scattered throughout its primary and upper fills, together with 14 crumbs of fired clay (ASW 0.9g). The material was almost entirely condition E-F and is of little diagnostic value. A flat-topped jar rim fragment and two base sherds are not closely datable.

Primary fill 1122 of pit 1109 contained a large number of lower body and base sherds from a single H2 vessel (Fig. 27, 21). There were 111 sherds (1320g), supplemented by numerous crumbs, scrap and fragments, of both pottery and fired clay, from sampling. A

considerable proportion of the vessel, though probably less than 50%, is extant. The vessel is interpreted as the container for the cremation found in this pit.

Pit 1126 contained intrusive cremated bone of the Late Bronze Age (see Phase 1 results). The ceramic content of the feature consisted of six sherds of H2 (ASW 5.5 grams, condition E-F), as well as three crumbs of fired clay, amounting to less than 1g, from sampling. The pottery included a jar with short upright flat-topped rim (Fig. 27, 22). Feature 1120, one of a group of irregular features which were perhaps truncated post-holes, contained a single body sherd of H2 (13g).

*Phase 4 (illus. nos 23-35)*

A total of 858 sherds, weighing 7523g and having an ASW of 8.8g, was recorded from this phase. In addition, there were 80 fragments of fired clay (436g) and two possible fragments of ceramic building material (32g).

Pottery occurred in: Ditches 6 and 7; ring gully 1161; ring gullies and other features associated with structures B1-B3, B5, B7 and B9-B11; and assorted other features.

A simplified pottery fabric distribution is shown in Table 7.

In general terms, it is difficult to differentiate the hand-made pottery from that in Phase 3, though a higher proportion of vesicular material, derived from calcareously tempered wares, may be noted. Diagnostic material as does occur suggests a very late Pre-Roman Iron Age or early Romano-British date, with some vessels finding parallels at the 1st-century AD site at Saltshouse School, Hull (below, and illustration catalogue). A glass bangle of the second half of the 1st century AD, from a fill of Ditch 6, and a radiocarbon date of 60 cal BC-AD 90, from carbonised grain in B2, are supportive of this dating. A further radiocarbon determination from the phase is more difficult to accommodate, a date of 370-110 cal BC obtained from animal bone in the primary fill of Ditch 6 being described above as 'unexpectedly early'. As far as Roman pottery is concerned, the most diagnostic material occurs in the upper fill of Ditch 7, where rusticated ware and Hadrianic to Antonine samian may be broadly contemporary in the first half of the 2nd century AD.

Table 7. Phase 4 fabric distribution

#### Pottery from Ditches 6 and 7 and ring gully 1161

The ditches flanking the north-west to south-east trackway contained 281 sherds, weighing 1569g, representing 32.8% of the phase assemblage by number of sherds, or 20.9% by weight. The ASW value for these assemblages, at 5.6g, is rather lower than that for the phase assemblage as a whole, and the features do not seem to have functioned in any significant way as appropriate places for domestic rubbish disposal.

Hand-made material is dominated by H2 sherds (with 223 sherds, against eleven for H4). A small number of rim fragments offers little of diagnostic value. The thinned rim of Fig. 27, 23, from Ditch 6, can perhaps be paralleled in peri-Conquest groups at Wharram Percy North Manor (*e.g.* Didsbury 2004, fig. 104, no. 98). No. 27, from Ditch 7, bears some similarity to a vessel from Saltshouse School, Hull (Challis and Harding 1975, fig. 41, no. 3). Heavy flat-topped upright rims such as no.28, from Ditch 7, are widespread in the later regional Iron Age. Perhaps the most interesting and informative vessel from the ditches is no. 29, a necked jar or bowl in a fine, slightly sandy reduced ware with smoothed or burnished exterior. The vessel finds its best parallels south of the Humber, *e.g.* at Dragonby (May 1996b, fig. 19.52, no. 611). Such forms are part of a suite of very late Iron Age forms at Dragonby, and occur in the 1st century AD until the Flavian period (see also discussion of pottery from the roundhouses, below).

Roman material is represented by up to two sherds from Ditch 6 and a maximum of ten from Ditch 7. The only definite Roman material in Ditch 6 is a small body sherd from a Dressel 20 amphora, a type which has a long production period, from Claudian times through to the 3rd century. (Williams pers. comm.). A small undiagnostic rim fragment from an upper fill might also qualify as wheel-thrown greyware. The Roman material from Ditch 7 is more informative. Two sherds of rusticated ware, conventionally dated *c.* AD 70-130/150, and the abraded rim of a Hadrianic or Antonine Central Gaulish form 18/31 or 31 have already been alluded to. Both come from an upper fill, as does a handle from a small loop-handled jar, while an oxidised rim might be from a 2nd-century campanulate bowl (Fig. 27, 26).

Ring gully 1161 unfortunately produced only 3 small fragments of H2, with an ASW of 2.3g.

#### Pottery from the roundhouses

The circular structures listed above produced a combined pottery assemblage of 539 sherds, weighing 5225g (ASW 9.7g). There were also 51 fragments of fired clay, weighing 394 grams, and a tabular fragment of Roman ceramic building material (14g). The latter, from ring gully B2, is insufficiently diagnostic to be datable. The majority of the pottery comes from the ring gullies, though it was also present in post-hole 1500, associated with B2; and in pit 1435, associated with ring gully B7. The relative distribution of the material from these structures is shown in Table 8.

Table 8. Distribution of pottery from the Phase 4 roundhouses

It will be seen that almost half the pottery from these structures is associated with ring gully B5. It is not easy to account for this bias. If taken at face value, as reflecting an original situation, it may indicate a greater degree of pottery use, and hence disposal, at this location; equally, it could reflect the suitability of an abandoned structure for the disposal of rubbish generated elsewhere.

Once again, the assemblage is dominated by H2 fabrics (Table 9). No wheelthrown Roman material occurs, though the presence of a fragment of Roman tile in the B2 gully will be remembered.

The illustrated vessels from the roundhouses (Figs 27 and 28, nos 30-36) are strongly suggestive of the very end of the pre-Roman Iron Age, possibly in the 1st century AD. In ring gully B1, a small rounded jar with thinned everted rim (no. 30) is closely paralleled at Saltshouse Road, Hull (Challis and Harding 1975, fig. 49, no. 9). The same site also provides a convincing parallel for no. 36, from ring gully B5 (cf. Challis and Harding 1975, fig. 41, no. 1). In the B2 ring gully, no. 33 almost certainly originated south of the Humber and may be compared to the small necked bowls of Type Group 4 at Dragonby (May 1996b, 413-14). These vessels in fine sandy fabrics are present almost from the beginning of the ceramic sequence at Dragonby and continue into the early Romano-British period. The earlier forms are hand-made while the latest, which occur alongside Gallo-Belgic pottery, are wheel-thrown or wheel-finished, something which may also be the case here.

Table 9. Phase 4 roundhouses. Fabric profile

#### Pottery from other features

Pottery assemblages of little evidential value, in that they contained only body sherds of coarse H2 pottery, were recovered from pits 1339, 1348 and 1408 and post-hole 1463.

With the exception of post-hole 1463, which contained 46 sherds from several vessels, all assemblages were small with five to ten sherds each.

*Phase 5 (illus. nos 33-73)*

#### Pottery from Enclosure B

The pottery considered here comes from Gully 8, the ring gullies from roundhouses B4 and B8, gullies 1264 and 1279, and adjacent grave 1345. These produced a fairly small combined assemblage of 210 sherds of pottery, weighing 1641g (ASW 7.8g). There were also sixteen crumbs of fired clay, weighing 41g. Pottery fabric distribution is shown in Table 10.

Table 10. Phase 5 Enclosure B. Fabric profile

Chronological parameters for the enclosure are established by radiocarbon dates, samian, and a datable artefact. Gully 8 has a *terminus post quem* in the period 60 cal BC-AD 90 (Beta-217191, Table 1), provided by a radiocarbon date from ring gully B2, which is cut by the Gully 8. Animal bone from the gully of B8 gives a radiocarbon date in the range cal AD 10-150. Gully 188, which cuts B8, contained a worn sherd from a South Gaulish samian form 37, dated *c.* AD 90-110 (Wild, no. 6), and a headstud brooch of the late 1st to mid-2nd century (Cool, no. 4). The coarse pottery can all be easily accommodated within this late 1st century BC to mid-2nd-century AD date-range.



The hand-made pottery is roughly equally divided between rock-tempered and vesicular material, the voids in the latter being in general suggestive of original shell temper. There is a dearth of diagnostic forms in both fabrics. Gully 8 contains a jar shoulder (Fig. 28, 37) which invites comparison with a range of cordoned vessels from Late Pre-Roman Iron Age Dragonby. The vessel is smoothed externally, and probably wheel-finished, if not wheel thrown. While not closely datable, it is unlikely to be later than the mid-1st century AD. Of the remaining illustrated vessels, all from roundhouse B8, nos 38 and 40 can be loosely paralleled by late 1st and early 2nd-century vessels at Hawling Road, Market Weighton; Rudston Villa and Costa Beck (see catalogue). Number 39, with its upright flat-topped rim, is of a widely distributed general later Iron Age type.

It may be noted that only a single sherd of wheel-thrown Roman greyware was present, a worn fragment in a fabric of Flavian to Antonine complexion. This is from the backfill of grave 1345, the only other contents of which were eleven crumbs of unattributed ceramic with the very low ASW value of 0.4g.

#### Pottery from Enclosure C

Enclosure C was defined by Ditch 5 on the north, and Ditch 4 on the west and south. These will be discussed first, after which a number of features in the interior of the enclosure will be considered.

Ditch 5 appears to have been re-cut on a narrower line at least once in its history, but difficulties in fully distinguishing these episodes made it sensible to accord the entire

ditch to Phase 3 and it is accordingly discussed in that place, above. It must be borne in mind, however, that some of the latest material from the easterly sectors of the ditch may be contemporary with the Phase 5 activity in Enclosure C.

Ditch 4 contained 259 sherds of pottery weighing 3190g (ASW 12.3g). There were also 75 fragments of fired clay, weighing 43g. The fabric distribution is shown in Table 11.

#### Table 11. Phase 5 Ditch 4. Fabric profile

The stratigraphic relationship between Ditches 4 and 5 was not decidedly established. Secondary fill 1372 of Ditch 4 was shared with the earlier, wider Ditch 5, and contained hand-made pottery with local parallels in the 1st century AD (Fig. 26, 14) as well as fragments of wheel-thrown Roman greyware of Flavian to Antonine appearance. Like Ditch 5, Ditch 4 might have been recut on a narrower line. Hand-made pottery from the ditch includes forms which suggest a date in the 1st century AD, *e.g.* Fig. 28, 44, which comes from fill 1023, apparently a fill of the 'original' ditch, before re-cutting. Immediately above this, primary fill 1022 of the recut ditch contained a mortarium imported from France *c.* AD 65-110 (no. 45; Hartley, p.74); Hadrianic or Antonine samian (Wild, no. 3); and Antonine to Severan wheel-thrown greyware open forms (nos 46, 47). It may be noted that fill 1022 is cut by pit 1018, which contained cremated bone giving a radiocarbon date of cal AD 40-230 (Beta-217174, Table 1). The possible presence of late 2nd to early 3rd-century pottery in 1022 suggests that the 'true' date of the bone lies towards the end of this radiocarbon date range. Other Roman pottery from

the ditch may be alluded to briefly (see catalogue for further details). A narrow-mouthed greyware jar with small integral, though not fully countersunk, loop handles (no. 49) is of a type available in North Lincolnshire possibly from as early as the Flavian-Trajanic period, *e.g.* at Dragonby Kiln 3 (Rigby and Stead 1976, 136-137; Swan 1996, 574-75); the vessel occurs in three different fills of the ditch. Wide-mouthed jars with outbent rims and grooved shoulders, like no. 43, are common at Dragonby throughout the 2nd, and into the earlier 3rd, century. Two further sherds of samian from the ditch are dated 'Hadrianic or Antonine' and 'Trajanic-Antonine' (Wild, nos. 4-5). A sherd of colour-coated ware from upper fill 1047 cannot be attributed to a production centre, but is from a non-beaker form. Body sherds of Roman shell-tempered ware from fill 1054 are either from a 2nd-century pre or proto-Dalesware jar, or from a Dalesware jar *sensu stricto*.

In the interior of the enclosure, Pit 235 contained a small assemblage of 52 fragments of pottery (300g) and 36 fragments of fired clay (54g). The majority consisted of vesicular fragments closely similar to the material from Pit 101, see below, though rock-tempered wares and the base of a small wheel-thrown coarse greyware jar were also present. The latest material was medieval, represented by a worn sherd of unattributed green-glazed ware and a fragment of 14th or 15th-century Langerwehe stoneware. These are presumably intrusive.

Pit 101 contained one of the largest, and most interesting, assemblages on the site. There was a marked paucity of soil in the feature, most of its volume being taken up by mixed ceramic material. In addition to the pottery discussed below, there was a considerable

amount (over 12kg) of structural fired clay. The clay ring or rings have been interpreted as deriving from ‘the dome of a pit-firing structure .... intermediate between an open firing clamp or bonfire and a true kiln with firebox and a separate chamber’ (Morris, p.102).

The pottery component in the fill amounted to 613 sherds, weighing 11283g. It will be noted that the weight of pottery was approximately equivalent to that of the fired clay. It will also be apparent that its ASW value, at 18.4g, is considerably higher than that displayed by the Iron Age and Roman assemblage from the site as a whole (10.7g). Questions of taphonomy, and the relationship of the pottery to the fired clay, will be considered further below.

The fabric distribution of the material is given in Table 12. It should be noted that the ‘sand-tempered’ component has all been designated H2 although it probably incorporates some wheel-thrown or wheel-finished material (see further below).

Table 12. Phase 5 Pit 101. Fabric profile

The vesicular (H4) material amounted to 217 sherds, weighing 2101g (ASW 9.7g). The sherds are very worn and abraded, though the shape of the vesicles, and the occasional presence of extant shell fragments, reveal the nature of the original tempering. The voids are abundant and mainly in the size-range 2-5mm, though they can be much larger on

weathered external surfaces. The fabric is relatively soft, with a soapy texture. It frequently has a reduced core with variably oxidised surfaces, commonly reddish-brown.

At least 37 sherds (227g) had whitish, salt-affected, exterior surfaces. This is unusual in south-east Yorkshire, and it may be noted that the sand-tempered wares from the context include none with similar characteristics. There would seem to be two possible reasons for the effect: either the pottery was manufactured using salt water, or the vessel(s) concerned had been used for containing or transporting salt. No absolutely clear answer is apparent in the present case. The salt-affected sherds (ASW 6.3g) represent only 11-17% of the total H4 component, depending on the measure of quantification adopted; to judge by the colour of internal surfaces they may, indeed, come from a single vessel. If so, this was not one of the four vessels represented by rims (Fig. 29, 50-53). It is virtually certain that this vesicular pottery originated south of the Humber. Shell-tempered Iron Age pottery is known to have been produced on the western slope of the Yorkshire Wolds (Didsbury, forthcoming) but the fabrics have a very different appearance and the vessel forms here are best paralleled in northern Lincolnshire. Salt or brackish water may well have been employed in pottery manufacture in the coastal areas of northern Lincolnshire; alternatively, salt from Lincolnshire salterns may have come across the river in such vessels. It might, perhaps, be thought marginally more likely that a small proportion of vessels of a similar type might be used in association with salt, than that both salt and fresh water were used in the manufacture of a single type; however, the vessels need not have been from the same production batch.

The H4 assemblage contained 24 rim sherds, deriving from an estimated four jars, and these are best compared to the ‘stubby rim jars’ of Type Groups 19 and 20 at Dragonby (May 1996b, 416). Similar vessels appear throughout most of the ceramic sequence at that site, but seem particularly common in the later Ceramic Stages, perhaps the late 1st century BC and 1st century AD. They appear to have been produced into the Roman period, appearing in site Horizons 1 and 2, of Claudian to early 2nd-century date (cf. May 1996b, figures 20.1, 20.3, 20.4).

Also probably from south of the Humber is a small number of sherds in Dragonby-type fine wares. Six sherds (137g) come from an estimated three vessels, of which two are illustrated (Fig. 30, 55 and 56). The fabric, which has a slightly soapy feel, usually contains fairly abundant sub-angular to sub-rounded clear quartz sand, mainly < 0.5mm, though occasional grains up to *c.* 1.0mm may also occur. Vessel walls can be very dark grey throughout, or light brown with variably dark-grey exteriors. Surfaces are well smoothed to burnished and it is possible that the vessels were wheel-thrown or wheel-finished. Number 55 is a flake with no extant interior surface. It comes from a small carinated form, comparable to those in Type Group 4 at Dragonby (May 1996b, 413-14). Such vessels constituted the commonest form type at that site, and throughout almost the whole of the ceramic sequence. The later examples were wheel-made, and the forms ‘merge almost imperceptibly’ (*loc. cit.*) into similar Roman forms, cf. the common Flavian and later carinated jar/bowl. Unfortunately, there are insufficient diagnostic characteristics to allow more precise dating of this vessel. Number 56 is a pedestal base. These are associated with a number of form types at Dragonby, particularly the pedestal

urns of Type Group 3 (May 1996b, 413). They occur from the beginning of the Dragonby sequence down to Ceramic Stages 8-9, probably immediately pre-Conquest to Claudio-Neronian.

The 'sand-tempered' wares (357 sherds, 9044g) come from an unknown number of vessels. An estimated twelve vessels were represented by rim sherds, of which ten are illustrated (Figs 30 and 31, nos 57-66). The majority come from fairly thick-walled vessels (*c.* 8-18mm). Most vessels are clearly hand-built, though many are neatly formed. Wheel-throwing or finishing may be suspected in some cases, and vessels which might qualify as Roman greyware are possibly present. As noted above, however, all the material has been categorised as H2. This approach was adopted in the light of difficulties experienced in grouping the sherds into meaningful 'families'; while not entirely satisfactory, it has the advantage that, for example, a wheel-thrown rim and a hand-built body which might be from the same vessel are not codified differently, as well as avoiding some of the chronological implications of 'Roman greyware'.

There is a fairly wide variety of 'fabrics' present within the overall category. Most vessels have a fairly fine, sandy background matrix, but moderately abundant large stone inclusions are frequently present, for example dark flint pebbles up to 10mm. These can often be extrusive through external and/or internal surfaces. Fabric fineness does not appear to correlate closely with vessel size. A relatively thin-walled vessel like no. 65 can have quartz and other inclusions up to *c.* 5mm, while a large vessel like no. 57 is largely inclusion free.

The fabrics are hard-fired and display very variable colouration. They can be very dark grey or orange throughout, or, perhaps more commonly, have a dark body with patchily oxidised surfaces. Dark patches on the exterior of some sherds could be fire-clouds associated with clamp firing, but in other cases the dark colouration extends across the sherd fracture and is clearly a sign of re-firing. It has not been possible sensibly to quantify these characteristics, and whether or not the evidence of re-firing suggests that these sherds derive from 'waster' vessels broken during a firing event (rather than simply pottery burned post breakage) cannot be decided satisfactorily. A degree of support for such an interpretation might come from the general, though not total, absence of sooting and other 'use' residues, but it is difficult to go further than this. The density of pottery and fired clay in the pit suggests a deliberate back-filling event, but there is no way of demonstrating that the different components in the fill are intimately connected, either with each other or with the feature in which they were found. Unlike the sand-tempered wares, the fired-clay structure shows no signs of burning, and it will be remembered that *c.* 35% of the pottery is probably imported from Lincolnshire, so that at least two sources must be envisaged for the fill. The extent to which the pottery can be considered as chronologically discrete is also pertinent.

Dating the vessel forms poses a number of difficulties, though in general they suggest an overall possible date-range from the mid-1st century AD to *c.* the mid-2nd as most appropriate. If this is so, then some of it is rather later than the vesicular and fine wares discussed above. Hand-made everted rim jars like no. 64 can be paralleled in a mid-1st-



century context at Hawling Road, Market Weighton (cf. Evans with Creighton 1999, illus. 7.17, G96-J01). Number 58 may be compared to another vessel from Hawling Road, in a context spot-dated to the early 2nd century AD (Evans with Creighton 1999, illus. 7.18, G32-J01). The distinct profile of no. 63 is closely paralleled on a Late Iron Age or early Roman hand-made sand-tempered jar from Lincoln, though the latter is lattice-decorated (Darling 1988, fig. 9, no. 3). A similarly shaped vessel, undecorated, also occurs in the Lincoln upper defences (Darling 1984, fig. 14, no. 15). The layer from which it comes may belong to the Neronian-early Flavian period, or contain material as late as the early to mid-2nd century. The usefulness of the parallel is unfortunately limited by the fact that the vessel is in a white-firing fabric. Number 57 resembles a vessel from Winterton Villa, which occurs alongside both handmade and rusticated jars in a group described as Antonine (Rigby and Stead 1976, fig. 81, no 50). Number 59 may be thought to be of the same generic nature. Among what may be the latest material present are two lug handles from jars (not illustrated). The handle attachment is integral, if not fully countersunk, in each case, which might suggest a date some way into the 2nd century.

Pit 1184, radiocarbon dated in the range cal AD 40-230 (Beta-217184, Table 1), was identified during excavation as a possible kiln structure. The pottery from its fill does not lend any support to this interpretation, though equally it does not gainsay it. The fill of the pit contained 226 sherds of pottery, weighing 3303g (ASW 14.6g). There were also twelve fragments of fired clay, weighing 186g (ASW 15.5g). Most of the latter were

small amorphous lumps, though they did include fragments which appeared generically similar to the material from Pit 101. The fabric profile of the pottery is given in Table 13.

Table 13. Phase 5 Pit 1184. Fabric profile

The majority H2 component consists predominantly of material similar to the sand-tempered element in Pit 101. There are, however, significant differences. Occasional sherds have been burned post-fracture, though sherds from up to five different vessels display clear signs of use, in that they have extant dark internal residues. In addition, there are sub-fabrics present which do not occur in Pit 101. Body sherds in a coarse sandy fabric containing abundant mixed quartz, rounded and polished greensand quartz, and fine white flint, account for *c.* 12-13 % of the H2 component by both sherd count and weight, and a single vessel tempered only by white flint (Fig. 31, 69) also occurs. The vessel finds several parallels at Rudston Villa, in contexts of Flavian/Trajanic through to Antonine date (Rigby 1980, illus. nos 28, 58, 86, 128 *et al.*). The remaining illustrated H2 vessels (Fig. 31, 70-73), all of them sand-tempered, are mainly of types which could occur either side of the Roman conquest, though the neat bead rim of no. 73 might suggest a Roman date proper.

Three sherds from an everted rim jar (not illustrated) have been designated H3, as having mixed quartz and calcareous temper. Such vessels are common in the region throughout the later 1st and 2nd centuries (cf. Rigby 1980, nos 95, 125 *et al.*).

The H4 component is particularly worn and abraded, and may be among the earliest material present (none illustrated). It includes a fragment from a heavily beaded jar similar to Fig. 26, 16, from a Phase 3 context. A date late in the 1st century AD was considered appropriate for that vessel, though the type had Iron Age antecedents.

The fully Roman element in the assemblage consists of wheel-thrown greywares, together with two fragments from different redware flagons. The earliest recognisable material, Flavian to early Antonine, is a greyware sherd with nodular rustication. The remaining greywares are all in sand-tempered fabrics of types current in East Yorkshire up to *c.* the mid-3rd century. They include jar rim fragments in dark-faced greywares, broadly comparable to 2nd or early 3rd-century types in Black-Burnished ware (cf. Gillam Types 132, 139), as well as a possible fragment from the rim of an Antonine to Severan carinated jar form. The flagon fragments are not closely datable.

Pit 1008 contained only two sherds of H2, either of Late Iron Age or early Roman date.

Gully 1084 contained a small amount of pottery in its upper fill (17 sherds, 189g, ASW 11.1g). These were sand-tempered fabrics of the kind found elsewhere in the enclosure and included an everted rim jar similar in shape to Fig. 31, 69, alluded to above. Once again, a late 1st or 2nd-century date is indicated.

Gully 1025 contained a small amount of coarsely tempered H2 of Late Iron Age or early Roman date (8 sherds, 26g, ASW 3.3g).

Small amounts of ceramic were also recovered from pits 1285 and 1347, all of condition E-F. The former feature, containing a horse burial radiocarbon dated in the range of AD 70-240 (Beta-220457, Table 1), had sixteen fragments of coarse H2 weighing 110g (ASW 6.9g), and five crumbs of fired clay (ASW 0.2 grams) recovered from sampling. In the case of 1347, there were twelve fragments, weighing 33g (ASW 2.8g). The majority was coarse Iron Age or early Roman H2, the only closely diagnostic material being three scraps of South Gaulish samian of Flavian-Trajanic date (Wild, no. 7).

#### *Phase 6*

Residual Iron Age or early Roman ceramic was found in extremely small amounts in this early medieval phase. It came only from the fills of graves 1105, 1107 and 1205. The phase assemblage amounted to 18 sherds, weighing 13g (ASW 0.7g). The majority (10 sherds, 11g) was probably H2 ware, but there were also eight crumbs (2g) too small to categorise. A single crumb of possible fired clay (1g) was also present. The poor quality of the ceramic will be evident from the very low ASW values indicated above. Accurate dating of such fragmentary material is clearly extremely difficult; the possibility was noted that one fragment, from the fill of grave 1107, might even be of Bronze Age date.

#### *Unstratified pottery*

The only sherd that need be mentioned here is a medallion from an English (?) stoneware bottle of probable 17th-century date. It comes from the topsoil, and bears representations of a pair of scissors, a crown, stars and unrecognised motifs. The sherd is currently

undergoing further research, and it is the intention to publish it separately in an appropriate journal.

### Conclusions

Ceramic evidence for Late Bronze Age activity is slight but significant, comprising *briquettage* and two sherds of associated pottery from Phase 1, and a further two possible sherds residual in Phase 2.

The chronology of the Iron Age assemblages is not always clear-cut and is often constrained by the poor quality of the material. All that can be said about Phase 2, in this regard, is that the fabrics of the small amount of pottery present do not contradict the mid-4th to mid-3rd-century BC radiocarbon date provided by bone from pit 1141.

A similarly early radiocarbon date was obtained from animal bone in the primary fill of the Phase 3 east-west trackway, though it has to be said that nothing in the pottery assemblage from that phase would necessarily have invited such an early date; there is, admittedly, a dearth of chronologically diagnostic jar 'forms' in the later regional Iron Age, but the complexion of the assemblages from Phases 3 and 4 is overwhelmingly suggestive of site activity in the 1st centuries BC and AD, as the cited vessel parallels clearly demonstrate. Roman pottery accorded to Phase 3 is undoubtedly reflective of Phase 5 recutting of some of the ditches. Phase 4 activity is best placed in the 1st century AD. The Roman share of the Phase 4 assemblage amounts only to *c.* 2% and suggests little more than that some of the ditches were receiving small amounts of material into the

early 2nd century AD. There was a total absence of Roman pottery from the roundhouses of this phase, though the presence of a fragment of Roman CBM in the ring-gully of B2 has to be noticed. In Phase 5, the combined evidence of pottery, radiocarbon dates and small finds, suggests the late 1st century BC to the early 2nd century AD as the maximum period for Enclosure B activity. Roman material in that enclosure amounts to less than 1% of the assemblage, though it is much more visible in Enclosure C, where it accounts for approximately half of the assemblage in Ditch 4 and is significantly present in pit 1184.

The overall chronology of the Roman site assemblage is fairly straightforward. The evidence of both the samian and the mortarium suggests the Flavian-Trajanic period for the earliest reception of Roman pottery. The earliest diagnostic greyware is Flavian-Antonine Rusticated Ware, and the rest of the greyware is, on both fabric and form grounds, of broadly Antonine to Severan complexion. Small amounts of Dalesware, and a single unstratified straight-sided flanged bowl in greyware, could conceivably be later, but, given Easington's location, it is not difficult to envisage Dalesware being received in from Lincolnshire in the early part of its production period.

The present author has suggested elsewhere (Didsbury 1990, *cap.* 3, *passim*) that the most southerly parts of south-east Yorkshire, perhaps extending up to a dozen miles north of the Humber, can be considered as having constituted a zone of material acculturation in the Late Pre-Roman Iron Age, subject to influences from Corieltauavian territory. This was suggested by the distribution of Corieltauavian silver coinage in East Yorkshire and

by the small numbers of cordoned and other ‘Dragonby-type’ vessels then known. This kind of pottery has become increasingly visible north of the Humber in recent years (cf. Didsbury, forthcoming) and the presence of a number of vessels of this type from Phase 3 onwards at Easington valuably augments the corpus, and thus the body of evidence for socio-economic contact between the two regions in the peri-Conquest period. The addition of a Scored Ware vessel to the small number already known from Yorkshire may also properly be alluded to here, since, as indicated above, a late date is to be preferred for this vessel.

It is unfortunate that the size and quality of the Roman assemblage from the site permit so little interpretation. As it stands, a single mortarium, single sherds of amphora and colour-coated ware, with twelve sherds of samian, do not suggest that the settlement was acquiring much in the way of Roman artefactual culture in the century after the Conquest, or that it had any aspirations to a Romanised lifestyle. In this regard, it would appear to resemble many other rural sites in East Yorkshire, where hand-made vessels in the Iron Age tradition continued to dominate the ceramic repertoire well into the 2nd century AD.

Illustration catalogue by phase (Figs 25-31) (published parallels cited in the discussion are not repeated here).

- 1.\* H2. The vessel is drawn here as a bowl, though orientation is uncertain. Hard, sandy fabric with moderate sub-angular clear quartz to *c.* 1mm. Very dark grey, with patchy orange interior surface. *Trackway 103, 1039, Phase 3*

- 2.\* H2. Lid. Hard, with common, ill-sorted, sharp angular clear quartz in the range 1-5mm. Very dark grey with light brown margins and patchy brown surfaces. *Trackway 103, 1039, Phase 3*
- 3.\* H2. Jar. Hard, with moderate mixed, ill-sorted, angular stone temper, mainly 1-3mm but up to 5mm. Includes clear quartz and coarse sandstones. Very dark grey with brown and reddish-brown exterior. Distinct impressions of the potter's fingers above the exterior basal angle. *Trackway 103, 1039, Phase 3*
- 4-5.\* H2 (Scored Ware). Jar, non-joining rim and body sherds. Hard, fine paste with abundant, well sorted, mainly sub-rounded clear quartz grains *c.* 1-2mm. These include well polished greensand grains, and other small rounded pebbles also occur. Temper is visible in the exterior surface. Uniform dark grey throughout. Fairly shallow, essentially vertical scoring. The body is constructed of straps *c.* 50mm deep, with diagonal bonds (Gibson and Woods 1997, 39, fig. 11.1). *Trackway 1037, 1040, Phase 3*
- 6.\* H2. Jar. Hard, with abundant quartz sand to *c.* 1mm, and occasional larger stone inclusions to *c.* 3mm, perhaps including quartz dolerite. Very dark grey throughout. Thick carbonised deposits in the rim/neck angle. *Trackway 1037, 1040, Phase 3*
- 7.\* H2. Jar. Hard, with moderate very ill-sorted angular stone inclusions, including quartz and heavily micaceous igneous (?) rocks. The largest inclusion is *c.* 9mm, and much temper extrudes through the vessel surfaces, especially on the interior. Very dark grey with patchy brown exterior. Cf. Challis and Harding 1975, fig. 41, no. 6 (from Saltshouse School, Hull). *Trackway 1041, 1042, Phase 3*



- 8.\* H2. Jar. Moderate mixed angular and sub-angular to sub-rounded stone temper, mainly 2-7mm, including quartz, fine sandstones, and possibly igneous fragments. Lumpy surface texture. Very dark grey with browner interior and brown patches on the upper exterior. Cf. Didsbury 2004, fig. 105, no. 107 (from Wharram Percy North Manor); Challis and Harding 1975, fig. 41, no. 2 (from Saltshouse School, Hull). *Trackway 162, 169, Phase 3*
- 9.\* H2. Jar. Hard fine matrix with common mixed sub-angular stone temper c. 1-5mm, perhaps mainly quartz dolerite. Temper is extrusive through the interior surface. Reddish-brown with very dark grey exterior. *Roundhouse A1, 1003, Phase 3*
- 10.\* H2. Triangular crucible (Cowgill, no. 5). Hard, sandy, mid-grey fabric. Shiny olive green and deep red surfaces, with light-coloured metallurgical accretions on the interior. *Roundhouse A2, 1128, Phase 3*
- 11.\* H2. Bowl. Sand-tempered with sparse larger angular quartz grains c. 1mm. Very dark grey with patchy red and buff exterior and pale buff interior. *Ditch 5, 1367, Phase 3*
- 12.\* H2. Jar. Fine sand-tempered ware with very sparse slightly larger grits, <1mm. Mid-grey, with black exterior with red patches. The exterior is well smoothed, and the rim, at least, may be wheel-turned. Possibly burned post fracture. *Ditch 5, 1364, Phase 3*
- 13.\* H2. Jar with upright slightly everted rim? Hard, sandy with occasional larger grits <2mm. Very dark grey throughout. Well masked temper on exterior, except where worn. Extensive carbonised deposits on interior. *Ditch 5, 1364, Phase 3*

- 14.\* H2. Jar. Hard, fabric like nos 12, 13. Very dark grey with light brown patches on both surfaces. Rim slightly expanded on exterior, and dished on the interior. Cf. Challis and Harding 1975, fig. 41, no. 6 (from Saltshouse School, Hull). *Ditch 5, 1372, Phase 3*
- 15.\* H2. Jar. Fabric, colouration and finish exactly similar to no. 12, and undoubtedly from the same source. See discussion. *Ditch 5, 1377, Phase 3*
- 16.\* H1. Wide-mouthed jar. Fairly hard. Moderate ill-sorted shell voids to *c.* 7mm. Occasional non-soluble fragments and extant shell. Very dark grey with red margins and upper rim surface. *Ditch 5, 196, Phase 3*
- 17.\* H2. Jar. Hard, sand-tempered mid-grey with reddish-brown interior and external margin, and dark grey exterior surface. Perhaps loosely cf. Challis and Harding 1975, fig. 41, no. 8 (from Saltshouse School, Hull). *Ditch 5, 196, Phase 3*
- 18.\* RSHEL. Jar. Fairly hard, soapy, vesicular fabric with abundant shell voids, mainly *c.* 1-3mm. Patchy reddish-brown to very dark greyish-brown. Occasional extant shell. The rim may show wheel influence, but the whole is very abraded. Traces of carbonised deposits on the interior of the rim. *Ditch 5, 195, Phase 3*
- 19.\* H2. Fabric, colouration and finish as nos 12, 15. The form of the base is Roman or Romanising. *Ditch 5, 195, Phase 3*
- 20.\* DW. Jar. Fairly hard, soapy. Very dark grey with reddish-brown interior margin. Extant shell *c.* 5-10mm, and abundant similar voids. *Ditch 2, 1177, Phase 3*
- 21.\* H2. Jar. Hard, with moderate, angular, light grey, fine-grained sandstone fragments. These are well-sorted, mainly 4-5mm. temper is extrusive on the

- interior, and the exterior has a lumpy texture. Very dark grey with patchy brown to light red exterior. *Pit 1109, 1122, Phase 3*
- 22.\* H2. Jar. Hard, coarse sandy matrix with sparse angular dark stone fragments *c.* 7mm, all extrusive through the interior surface. Very dark grey core and exterior, with light reddish-brown core margins and patches on the interior. Perhaps cf. Challis and Harding 1975, fig. 38, no. 2 (from Driffield Aerodrome). *Pit 1126, 1127, Phase 3*
- 23.\* H2. Jar. Hard, sand-tempered. Very dark grey with dark reddish-brown exterior. *Ditch 6, 1289, Phase 4*
- 24.\* H2. fairly hard. Sandy matrix with sparse larger stone inclusions *c.* 3mm. Very dark grey with mainly orange surfaces. *Ditch 7, 151, Phase 4*
- 25.\* H2. Jar. Hard, sand-tempered. Patchy dark grey and brown throughout. *Ditch 7, 166, Phase 4*
- 26.\* RO. Campanulate bowl rim (or lid?). Fine sandy ware with light brown core and thick light red margins and surfaces. *Ditch 7, 166, Phase 4*
- 27.\* H2. Hard, coarse sandy matrix with common larger stone inclusions, angular and mainly *c.* 5mm. Very dark grey with brown exterior patches. Slight sooting traces on exterior of rim. *Ditch 7, 122, Phase 4*
- 28.\* H2. Hard, with common light-coloured angular sandstone fragments *c.* 3-5mm. Very dark grey with reddish-brown interior. *Ditch 7, 1395, Phase 4*
- 29.\* H2. Necked bowl. Hard, very dark grey sand-tempered ware, similar to fabric of nos 12, 15. Well smoothed/burnished in neck. *Ditch 7, 1395, Phase 4*

- 30.\* H2. Jar. Hard, coarse sandy ware, very dark grey throughout. *Roundhouse B1, 1552, Phase 4*
- 31.\* H2. Jar. Fabric similar to that of no. 30, with common angular quartz fragments *c.* 1-2mm. Very dark grey with mid-brown exterior. *Roundhouse B1, 1552, Phase 4*
- 32.\* H2. Jar. Sand-tempered. Light reddish-brown with very dark grey core and interior surface patches in places. *Roundhouse B2, 1549, Phase 4*
- 33.\* H2. Necked bowl. Sandy ware with occasional larger angular quartz fragments, *c.* 3mm. Well-smoothed exterior. Wheel-finished or wheel-thrown. *Roundhouse B2, 1549, Phase 4*
- 34.\* H2. Jar. Hard fabric, identical to that of no. 21. Flat-topped, externally expanded rim. Cf. Challis and Harding 1975, fig. 48, no. 5 (from Normanby, Yorkshire) for a close parallel. *Roundhouse B2, 1551, Phase 4*
- 35.\* H2. Jar. Hard, fabric and colouration almost identical to that of no. 17. *Roundhouse B2, 1551, Phase 4*
- 36.\* H4. Jar. fairly hard, soapy vesicular ware, with shell-shaped voids to *c.* 7mm. Mid-grey with light brown interior, and some exterior surfaces patches. *Roundhouse B5, 1544, Phase 4*
- 37.\* *H2. Jar/bowl. Fabric as that of no. 39. Gully 8, 1411, Phase 5*
- 38.\* H2. Jar. Hard, sandy fabric with common large dark angular inclusions *c.* 3-5mm. These are extrusive through the interior surface. Very dark grey with light red interior, and exterior patches. Cf. Evans with Creighton 1999, illus. 7.18, fabric-form type G32-J02, from a group dated to the late 1st century AD at Hawling

- Road, Market Weighton; Rigby 1980, illus. no. 21, from Rudston Villa.  
*Roundhouse B8, 1448, Phase 5*
- 39.\* H2. Jar. Hard, with abundant fine sand. Very dark grey with light brown interior.  
*Roundhouse B8, 1393, Phase 5*
- 40.\* H2. Jar. Hard, sand-tempered. Mid-grey with reddish interior and patchy red and dark brownish-grey exterior. Cf. Challis and Harding 1975, fig. 52, no. 4, from Costa Beck, probably 1st century AD; Evans with Creighton 1999, illus. 7.18, fabric-form type G41-J01, from a late 1st- to early 2nd-century AD group at Hawling Road, Market Weighton; Rigby 1980, illus. no.117, from Rudston Villa.  
*Roundhouse B8, 1393, Phase 5*
- 41.\* H2. Jar. Hard, sandy matrix with common ill-sorted quartz and other stone inclusions, both rounded and angular, up to *c.* 2mm. Very dark grey with red exterior margin. Cf. Challis and Harding 1975, fig. 41, no. 7, from Saltshouse School, Hull. *Ditch 4, 1054, Phase 5*
- 42.\* H2. Jar. Hard, fabric and colouration as nos 17 and 35, above. The vessel is in the same form range as Challis and Harding fig. 36, no. 4; fig. 40, no. 2; and fig. 41, no. 1 (from South Cave, Faxfleet 'A' and Saltshouse School, Hull, respectively).  
*Ditch 4, 1047, Phase 5*
- 43.\* RG. Wide-mouthed jar. Fine sandy fabric, very dark grey with light brown core margins. A zone of acute-angled lattice below the lower groove. *Ditch 4, 1047, Phase 5*
- 44.\* H2. Jar. Hard, sandy matrix with occasional 'blocky' fragments of quartz (?) *c.* 3mm, and common silvery mica platelets to *c.* 4mm. The latter are visible in both

- surfaces, and the glittering effect so produced may have been intentional. Very dark grey with light buff interior and patchy dark grey and light red exterior. Carbonised deposits on exterior shoulder. *Ditch 4, 1023, Phase 5*
- 45.\* RM. Mortarium. Hartley, p.74. *Ditch 4, 1022, Phase 5*
- 46.\* RG. Lipped dish/bowl. Fabric and colouration as no. 43. The top edge of a zone of linear decoration, perhaps intersecting arcs or running scrolls, is just visible. Perhaps cf. May 1996b, fig. 20.10, no. 926, from a late 2nd- to 3rd-century group at Dragonby. *Ditch 4, 1022, Phase 5*
- 47.\* RG. Lipped dish/bowl. Sandy mid-grey ware, perhaps originally with darker surfaces. Cf. Rigby and Stead 1976, fig. 86, no. 136, from a Severan group at Winterton Villa. *Ditch 4, 1022, Phase 5*
- 48.\* RG. Wide-mouthed jar. Fabric and colouration as nos 43, 46. Cf. Rigby and Stead 1976, fig. 86, no. 55, from an Antonine group at Winterton Villa, though not in Roxby fabric. A wide variety of vessels of this general form, in similar fabrics, occurs in late 2nd-and 3rd-century groups at Dragonby (May 1996b, figures. 20.13-20.20). *Ditch 4, 1153, Phase 5*
- 49.\* RG. Loop-handled jar. Slightly sandy mid-grey fabric. *Ditch 4, 1154, Phase 5*
- 50.\* H4. Jar. Very worn. Very dark grey with reddish-brown interior. *Pit 101, 100, Phase 5*
- 51.\* H4. Jar. Very dark grey with reddish-brown surfaces. *Pit 101, 100, Phase 5*
- 52.\* H4. Jar. Very dark grey with reddish-brown surfaces. *Pit 101, 100, Phase 5*
- 53.\* H4. Jar. Very dark grey throughout. *Pit 101, 100, Phase 5*
- 54.\* H4. Jar base. Very dark grey with reddish-brown surfaces. *Pit 101, 100, Phase 5*

- 55.\* H2 fineware. Necked jar/bowl. Fine, relatively soft fabric with occasional fine sand. Light reddish-brown with burnished very dark grey exterior. The two joining sherds are flakes, without interior surface. *Pit 101, 100, Phase 5*
- 56.\* H2 fineware. Pedestal jar base. Fabric as that of no. 55, but with more visible sand and sand vesicles. Brown with patchy dark grey surface areas, and dark grey core in places. *Pit 101, 100, Phase 5*
- 57.\* H2. Wide-mouthed jar/bowl. Fine sand tempering with larger quartz and other inclusions 1-3mm. Variable red and dark grey surfaces and core. Traces of sooting residues on parts of the exterior. *Pit 101, 100, Phase 5*
- 58.\* H2. Jar. Sand-tempered. Very dark grey core, light brown surfaces with dark grey patches. *Pit 101, 100, Phase 5*
- 59.\* H2. Jar. Sand-tempered. Very dark grey core, variable dark grey and light brown surfaces. *Pit 101, 100, Phase 5*
- 60.\* H2. Jar. Sand-tempered, with common ferrous (?) inclusions *c.* 1mm. Pinkish to light red core, dark grey exterior. Interior variable dark grey and pinkish. Burned post fracture. *Pit 101, 100, Phase 5*
- 61.\* H2. Jar? Sand-tempered. Very dark grey with patchy light red surfaces. *Pit 101, 100, Phase 5*
- 62.\* H2. Jar. Sand-tempered. Very dark grey core, pale brown surfaces. *Pit 101, 100, Phase 5*
- 63.\* H2. Jar. Abundant coarse, with quartz grains to *c.* 3mm. Ferrous inclusions. Very dark grey core with light red to brown exterior, and interior patches. *Pit 101, 100, Phase 5*

- 64.\* H2. Jar. Fairly coarse sand-tempered fabric. Red with grey core in places. Common ferrous inclusions to *c.* 5mm, and a sandstone pebble *c.* 6mm. *Pit 101, 100, Phase 5*
- 65.\* H2. Jar. Very worn, very coarse sand-tempered fabric. Common large ferrous and occasional stone inclusions to *c.* 5mm, extrusive through both surfaces. Variably red or very dark grey core and surfaces. Despite its Romanising appearance, the body, at least, is clearly hand formed. *Pit 101, 100, Phase 5*
- 66.\* H2. Small jar. Sandy, with occasional extrusive angular quartz grits to *c.* 3mm. Red throughout. *Pit 101, 100, Phase 5*
- 67.\* H2. Jar/bowl body. Fabric similar to that of no. 63, but with red exterior. *Pit 101, 100, Phase 5*
- 68.\* H2. Jar base/lower body. Sandy matrix with common large angular mixed stone inclusions, particularly flint. These are extrusive through both surfaces and are mainly less than 7mm, though the largest is 15mm. Variably red or very dark grey core and surfaces. *Pit 101, 100, Phase 5*
- 69.\* H2. Jar. Reddish core and burnished black surfaces. Common small white angular flint *c.* 1mm and some similarly sized quartz. The rim is possibly wheel-formed. *Pit 1184, 1185, Phase 5*
- 70.\* H2. Jar. Hard, sandy matrix with common large mixed stone inclusions to *c.* 7mm. Very dark grey with reddish-brown exterior. *Pit 1184, 1185, Phase 5*
- 71.\* H2. Jar. Hard, coarse sand tempering, very dark grey throughout. *Pit 1184, 1185, Phase 5*
- 72.\* H2. Jar. Fabric as 71, but with reddish interior. *Pit 1184, 1185, Phase 5*



73.\* H2. Jar. Fabric and colouration as no. 58. Burned post-fracture? *Pit 1184, 1185, Phase 5*

### **The samian ware by F. C. Wild**

The site produced eleven small fragments of samian ware, mostly badly abraded. In few cases was the form identifiable with certainty and identification had to be made on fabric alone. Two vessels, form 37 and form 18/31 or 18/31R were South Gaulish and of Flavian-Trajanic date; the others were Central Gaulish, with one fragment possibly in the fabric of Les Martres-de-Veyre. An unstratified footring fragment in an orangey fabric, not listed below, may possibly have been East Gaulish. The assemblage as a whole gave the impression of early to mid-2nd-century date.

1. Form 18/31 or 31. Central Gaulish. A badly abraded rim sherd in light-coloured fabric. Hadrianic or Antonine. *Ditch 7, 151, Phase 4*
2. Form 33. Central Gaulish. Abraded base fragment, Antonine. *Ditch 4, 1021, Phase 5*
3. Fragment of uncertain form, possibly a bowl, Central Gaulish, in similar light-coloured fabric to (151). Hadrianic or Antonine. *Ditch 4, 1022, Phase 5*
4. Dish or bowl fragment, Central Gaulish, possibly in the fabric of Les Martres-de-Veyre and Trajanic-early Antonine. *Ditch 4, 1153, Phase 5*
5. Scrap of uncertain form, Central Gaulish, Hadrianic or Antonine. *Ditch 4, 1047, Phase 5*

6. Form 37, South Gaulish. The decoration on the body sherd, badly abraded, appears to show panels, one of which contains a column supporting an arcade. A line (a spindle?) also projects vertically from the top of the column. The style seems closest to that of the late Flavian-Trajanic potters, who rarely signed their work. Similar decoration occurs on bowls in the Bregenz Cellar deposit of c. AD 90 (Jacobs 1913, Taf. 1, 8; 3, 18). Mees (1995, Taf. 248, 2) illustrates a similar decorative scheme on a bowl with uncertain stamp attributed to Montans, but the fabric of the present sherd is that of La Graufesenque. The details are too indistinct to be identified with any precision. c. AD 90-110. *Gully 188, 190, Phase 5*
7. Probably form 18/31 or 18/31R, South Gaulish. Two joining fragments of dish with flattened bead rim, together with two other tiny scraps, probably from the same. Flavian-Trajanic. (1346). *Pit 1347, 1346, Phase 5*

### **The mortarium by K. Hartley**

Superficially one rim and one body sherd from a mortarium closely resemble a type Gillam 238 mortarium with a wide, shallow flat rim, but the chemical weathering which these sherds have suffered means that no identification can be regarded as completely reliable (Fig. 29, 45). Type Gillam 238 mortaria were made in the north of France in the Oise/Somme *départements* and perhaps in neighbouring areas in the period AD 65-110 (Hartley 1998, 200-204; Hartley *et al.* 2007). It is probably one of these, but the trituration grit should include flint, which is not apparent. If it is not a type Gillam 238 mortarium, it would be unlikely to be any later than the early 2nd century.

- 1.\* One rim and one body sherd from a mortarium which is discoloured and has cracks developing on all surfaces. The fabric is fine-textured, pale yellow-brown with drab brown surfaces. Inclusions: fairly frequent, tiny, mostly quartz with some black and red-brown material, probably iron oxides. The small quartz fragments which can be seen on the inner surface may be trituration grit. Wt: 100g. Diam: 270mm. 13%. *Ditch 4, 1022, Phase 5*

### **Flint Artefacts by I. P. Brooks**

A total of 432 flint artefacts were recovered during the course of the archaeological investigations. The vast majority of these were small fragments or spalls with only 121 artefacts of any size being found, indeed eight of these artefacts were burnt fragments with little sign of further work. They were recovered from 76 deposits, with only two deposits containing more than ten artefacts of any size. The majority, if not all, of the assemblage can be regarded as residual with only one artefact of any size being recovered from Late Bronze Age features.

The raw materials used for the assemblage varied from an opaque light grey (N7, Goddard *et al.* 1948) to a highly translucent dusky yellowish-brown (10 YR 2/2) flint. All flint types used, however, are similar to those found within the till underlying the site and it is not expected that any lithic resources were imported from outside the local region. The opaque grey flint, of the region, is traditionally assumed to have come from the chalk of the Yorkshire or Lincolnshire Wolds, although the tills of the region also have similar

flint types recycled into their suit of erratics (Henson 1985, 5-6). The probable till source, for the flint, is further suggested by the eroded nature of the cortex, where it survives.

### Knapping Debris

Only forty complete flakes were found together with a further fifteen broken flakes. Little evidence is shown for the primary reduction of raw materials on site with only four primary flakes (flakes with a completely corticated dorsal surface) being recovered. The other complete flakes consist of eighteen secondary (partly corticated dorsal surfaces) and eighteen tertiary (uncorticated dorsal surfaces) flakes. The complete flakes range from 14 to 49mm in length and 9 to 60mm in width which is probably a reflection of the size of nodules available within the underlying till deposits. Only one flake had a length: width ratio of greater than 5:2 and can therefore be regarded as a blade. The only other sign of deliberate blade production was a single secondary flake which appears to have come from a bladelet core. No complete cores were recovered, indeed only one fragment of a flake core was found. Forty-eight randomly worked lumps were found, however, suggesting a fairly unstructured approach to the knapping of lithic material. One of the worked lumps had been re-used with marked pitting and scarring suggesting it had been used as a hammerstone or pounder.

There were, however, a large number of spalls and fragments recovered. A total of 302 spalls, nine fragments and eight burnt fragments were found forming the majority (72%) of the collection. This would tend to suggest that at least the maintenance of tools was

taking place on site, although some of these items may be the result of more recent damage to flint within the underlying till or topsoil.

## Tools

Only ten formal tools (2.31% of the assemblage) were found which represents a very restricted tool assemblage from the site (Fig. 32). One barbed-and-tanged arrowhead, a backed flake, a heavily utilised flake, three scrapers and four piercers form the total tool assemblage.

- 1.\* A barbed-and-tanged arrowhead. 29 x 18 x 3.5mm. Weight 1.4g. *Ditch 5, 1113, Phase 3*
- 2.\* Utilised flake. *Ditch 5, 1245, Phase 3*
- 3.\* A lightweight artefact with retouched points on flake fragment. *Gully 1350, 1351, Phase 4*
- 4.\* An end scraper of mid to late Neolithic form. *Ditch 7, 1406, Phase 4*
- 5.\* A long secondary flake with use edge damage on ventral right side. *Pit 1184, 1185, Phase 5*
- 6.\* A crude end scraper on a worked lump. *Roundhouse B8, 1448, Phase 5*
- 7.\* Utilised flake. *Gully 8, 1482, Phase 5*
- 8.\* A lightweight artefact with retouched points on flake fragment. *Roundhouse B4, 1546, Phase 5*
- 9.\* A long flake with heavy use on both sides. *Deposit 214, not phased*

10.\* Utilised flake. *Unstratified*

The barbed-and-tanged arrowhead (no. 1) has a broken barb and probable impact damage on its point suggesting it had been lost in use. The remaining barb and the tang have rounded terminal ends. Its small size would suggest that it falls into Green's "Sutton b" type (Green 1984, 23). These are a long-lasting arrowhead type with a potential date range of between 2500 BC and 1500 BC (Green, 1984, 19, table 1).

Two heavily utilised flakes (nos 5 and 9) were found, one of which also had been backed on its left side (no. 9). Both of these items were on long flakes with the potential evidence for blade production on their dorsal surfaces. The level of utilisation on both these artefacts is considerable, with invasive flaking and chipping along the edges. The origin of this damage is unknown, although processes involving some significant downward pressure would be required in order to initiate the level of flaking.

The three scrapers consist of two end scrapers (nos 4 and 6) and a side scraper (no. 10). Whilst being relatively well made, they demonstrate a fairly casual approach to the selection of raw materials. Probably the best made scraper (no. 4) is made on an opaque grey flint with many pale inclusions, which has much poorer knapping characteristics, than the more translucent flint types freely available in the underlying till and making the majority of the flint raw material used for the assemblage itself. The other end scraper (no. 6), whilst being made on a translucent flint, has been knapped on a chunk of flint which retains its cortex on the ventral surface.

Four piercers were recovered, which can be divided into two classes based on style of production and probable function. Two very lightweight tools (nos 3 and 8) were made by minimal retouch along broken distal ends to produce a fine point. These tools are on relatively thin flakes and could not have been used for any high impact task. It is more likely that they may have been used for light engraving of relatively soft materials, although this remains to be tested. The other two piercers (nos 2 and 7), are on chunkier fragments of flint, and have been produced by the reduction of one side of the tool blank. Both tools exhibit significant rounding on their points, suggesting considerable use, possibly on relatively hard or abrasive materials.

#### Discussion

The flint assemblage would appear to be largely confined by the flint resources available and the underlying geology to the site. A very high number of spalls and fragments were recovered and this is partly a reflection of the level of environmental sampling which took place as part of the excavation, although it would also indicate a level of flint knapping was taking place on the site. It would seem unlikely that this was the primary reduction of raw materials as very few cores or cortical flakes were recovered and the size of the worked lumps found was relatively small. It is more likely, therefore, that the number of spalls is the result of the maintenance of tools, together with the possible secondary working of flakes and worked lumps brought to the site. It is also possible that some of the spalls are the result of the movement of flint nodules within the soil as a result of such activities as digging or ploughing.

There was no need to import flint onto the site, as the latter is underlain by Devensian till deposits which contain considerable flint resources including flint types similar to those used for this assemblage. The easiest form of extraction, in this area, is beach-combing, the erosion of the cliffs along this part of the coast provides a constantly renewable resource and tends to concentrate the flint on the beach making more complex extraction methods unnecessary. The range of flint types within the till is considerable, with flint types ranging from flints with very poor knapping characteristics to those with excellent characteristics. It is likely, therefore, that the primary reduction would also have taken place on the beach, where the quality of the flint could be tested, and the resultant products could then be brought to the site for use.

The date range of the assemblage would appear to be relatively restricted. The lack of blade or bladelet debris within the assemblage would suggest the main focus of knapping activity was within the Late Neolithic or Early Bronze Age. Few typologically distinctive artefacts were found, but the barbed-and-tanged arrowhead would suggest a Bronze Age date (Green 1984, 19) for part of the activity on the site, although this artefact could be the result of a casual loss on a hunting trip. Unfortunately very few artefacts and no tools were found in the features associated with the Phase 1 (Late Bronze Age) activity on the site. It is possible that some of the assemblage may be associated with this phase of activity, but no clear evidence is available. The lack of tools types, the low number of tools and the presence of piercers as a significant tool type could be taken as an indication of a possible Late Bronze Age assemblage on the site (Butler, 2005, 187-89) with



possible similarities to the larger flint assemblage recovered from Micheldever Wood, Hampshire (Fasham *et al.* 1978).

It is clear, however, that a limited range of activities were being carried out with a limited range of tool types being represented. Heavy cutting is demonstrated by two artefacts together with the scoring or boring of relatively hard materials. There is also the evidence for finer, lighter work, possibly engraving being carried out with the two lightweight piercers. It is possible, therefore, that industrial, rather than domestic tasks form the bulk of the activities on the site.

#### **Worked Stone by D. Heslop with geological identifications by G. Gaunt**

Only one worked stone was recovered, a possible rubbing stone, although a number of heat-reddened and/or heat-cracked stones were noted from the area of Phase 4 occupation and Phase 5 Enclosure C.

1. Possible rubbing stone. Water-rounded pebble with shaped ends. The more pointed ends have been worked by grinding to form axial ridges, which have sharp arrises, and do not bear the percussion marks to suggest the object was used as a hammer stone. The size (97mm x 56mm x 78mm max diameter) fits snugly into the adult hand. Orthoquartzite (i.e. sandstone consisting entirely of quartz), fine grained, fairly well sorted, highly compacted, with siliceous matrix. Almost certainly pre-Carboniferous. Shape and lithology imply erratic. *Post-hole 1463, 1462, Phase 4*

### **The Coin by C. Barclay**

A single coin was recovered from the only fill (1185) of the possible kiln 1184. This coin is a silver denarius issued during the reign of the emperor Trajan. The coin was struck *c.* AD 103-111. Coins of this type circulated well into the 3rd century AD. This specimen is moderately worn and was probably deposited before *c.* AD 150.

### **The Small Finds by H. E. M. Cool**

The excavations produced a small assemblage of small finds associated with the Phase 4 and 5 settlements which, where independently datable, belong to the 1st to 2nd centuries AD. Three graves assigned to Phase 6 were accompanied by grave goods of typical early medieval material. The finds are discussed below according to the period of occupation to which they belong.

#### The finds from the Late Iron Age and Roman settlement

As is frequently the case, the assemblage is dominated by personal ornaments, the commonest of which are fragments from glass bangles. Examples of the variety with a twisted central trail (Kilbride-Jones 1937-38, Type 2) came from a Phase 4 deposit (Fig. 33, 1) and from an unstratified context (Fig. 33, 14). Both of these belong to the type with a single central trail with or without spiral eyes at intervals, which is by far the commonest type known from East Yorkshire (Price 1988, 342 Group Ai). The third (Fig. 33, 5) is deep blue with opaque white marvered trails (Kilbride-Jones 1937-38, Type 3I).

These are less commonly found (see Price 1988, 352 for other East Yorkshire examples). The type 2 bangles are known from Neronian contexts in southern Britain, but as yet there is no evidence that they were in use in northern Britain prior to the military advance during the Flavian period (Price 1988, 347); though it has to be pointed out that where they are found on native sites as here, the dating evidence available is frequently not capable of making the fine distinction between the third and fourth quarters of the 1st century AD. Dating evidence for the Type 3I bangles is much scarcer than it is for the Type 2 bangles so the recovery of no. 5 from a stratified context is a welcome addition to the corpus. A date in the second half of the 1st century would be most likely for their manufacture as supplies of deep blue cullet would have been rare by the end of the century. Certainly where deep blue bangles have been found in closely stratified contexts such as at Castleford, it was noticeable that they were found in contexts belonging to the occupation in the 70s (Cool and Price 1998, table 33 Type I/J).

The headstud brooch (no. 4) would have been in use contemporaneously with the bangle fragments during the later 1st to mid-2nd century. Closer dating within that period depends on how the front of the bow is decorated (Cool and Philo 1998, 30) which is not possible here as that part is not preserved.

The two stone bead-like objects are unusual finds. Number 6 appears to be part of a fossil that has been re-used. The precise material no. 7 is made out of is uncertain but seems most likely to be stone and is possibly part of another fossil. The deposit it came from included artefacts that had clearly been burnt (nos 8 and 9), so the unusual appearance of

this fragment may have been caused by exposure to heat. It is possible that neither of these items were actually used as beads and were instead casually acquired curios.

A fragment from a bridle cheek piece was recovered from the fill (1185) of the possible kiln 1184 (Fig. 33, 8). Although the piece is small, the herringbone pattern and the edge of the slot make the identification a secure one. These were a Late Iron Age form that appears to have continued in use into the early 2nd century (Crummy 1992, 223 no. 202). The identification of the function has sometimes been challenged, with some authors preferring to describe them as toggles of unknown function (see Greep 1998, 283), but if they were items of horse furniture, then the burnt bone ring (9) found in the same context might also have been a bridle fitting.

A number of iron items were also recovered (nos 2-3 and 10-13), most of which were undiagnostic. With so small an assemblage it would be unwise to draw any major conclusions from the difference in the nature of the items from the different phases, but it may be noted that there is a slight tendency to move from the use of iron for a decorative item in Phase 4 (the stud no. 2) to more utilitarian items in Phase 5 (the possible blade no. 10 and the nails nos 11-12). This possibly reflects the increasing availability of iron in the Roman period compared with its availability in the later Iron Age. The presence of the nails indicates changes in building practice.

Other than the possible changing role of iron, the items recovered from the two phases

are very similar both in the profile of the functions represented and the date range, as there are items that can be dated to the later 1st to mid-2nd century in both phases. The range of items recovered is typical for rural sites of this period in this area, and does not reveal any great interest in acquiring the trappings of a 'Romanised' lifestyle, other than perhaps a change in joinery techniques.

#### The early medieval burials

Three inhumation burials were accompanied by grave goods that identify them as being of early medieval date. Though it was impossible to date the skeletons by radiocarbon analysis, the dating is certain as it based on both the typological dates that can be assigned to some of the items and on the types of grave goods which are typical of the early medieval period rather than of the Romano-British one. The evidence of two of the items would suggest the burials were being made in the 6th century.

The small copper alloy buckles (Fig. 33, 16 and 17) accompanying SK2 are very similar to those found in a number of burials in the early medieval cemetery at West Heslerton. Buckles like no. 16, for example, were found in Graves 59, 109 and 126 there (Haughton and Powlesland 1999b, 90 no. 42EE, 178 no. 897AB; 214 no. 673AC). In the last two mentioned graves the buckles were found associated with the lower two vertebrae and at waist level respectively suggesting they functioned as belt buckles. The slightly smaller and more fragmentary buckle (Fig. 33, 17) was probably very similar to one from Grave 28 (*ibid.* 44 no. 104AS). Other than being assigned to the early medieval period these

buckle types are not closely datable. A similar problem besets the small knives found with SK1 and SK2. The spearhead found with SK2, however, is an example of small leaf-shaped type (Swanton 1974, 9 type CA), which had fallen from favour by the end of the sixth century when larger bladed forms were preferred (*ibid.* 8).

The beads, which accompanied SK3 (Fig. 34, 20-22), are also typical of the early medieval period. The relevant Guido (1999) form references are given with the catalogue entries. Beads made of opaque yellow glass, opaque red glass and glass that appears black such as nos 20a, b and d and no. 22 are very common in the 6th and 7th centuries (Guido 1999), whereas they are extremely rare from Romano-British contexts. The presence of an amber bead (Fig. 34, 21) is also diagnostic. These too are very rare in Romano-British contexts, but extremely common in early medieval ones. At West Heslerton over two-thirds of the 2133 beads recovered were of amber (Haughton and Powlesland 1999a, 107). Number 21 is an example of the form described there as a barrel bead, which was by far the commonest shape recovered at West Heslerton (*ibid.* 112 Type D3). The associations of the many amber beads recovered at that site supported the idea that amber beads were in use mainly in the 6th century. The sixth bead recovered with SK 3 (20c) was of particular interest as the ground of the bead does not appear to be made of glass, but might instead be a frit-like substance. The trailed glass wave pattern it is decorated with, though, is a typical decorative motif on beads of this date.

Numbers 20a-d were recovered strung in that order, and it is to be supposed that nos 21 and 22 were part of the same bead string. The evidence of the 64 bead strings from West

Heslerton indicates that many of them were worn across the upper chest supported by brooches. These strings frequently had only a few beads as here, with more than a third consisting of less than ten beads (Haughton and Powlesland 1999a, 107). Skeleton SK3 did not have any brooches, but it might be suspected that the string was being worn in a similar way.

The presence of the beads with SK3 makes it very likely that this was the burial of a female. Table 14 shows the incidence of beads with adults independently sexed by osteological analysis at West Heslerton. A table like this can be subjected to a significance test to see whether there is any association between the sex of the individual and the presence of beads (Cool and Baxter 2005). When this is done here, it can be shown that there is a very strong association between wearing beads and being female.

Table 14. The incidence of beads with independently sexed adults at West Heslerton (data from Haughton and Powlesland 1999b)

It might be thought that the presence of a spear with SK2 might suggest that this was the burial of a male. Here the data from West Heslerton (Table 15) would argue against the assumption, as a similar test carried out on this table shows that there is no significant association between having a spear and being male.

Table 15. The incidence of spearheads with independently sexed adults at West Heslerton

(data from Haughton and Powlesland 1999b)

- 1.\* Bangle. D-sectioned. Translucent blue/green with central unmarvered twisted trail of deep blue with narrow opaque white trail, right-hand twist. Fragment retains expanded junction of trail end. Small translucent deep blue eye with opaque white eye. Section 10.5 x 6.5mm, external diameter 60mm, 20% extant. *Ditch 1, 1289, SF21, Phase 4*
2. Stud. Iron. Domed head and small fragment of shank. Present length 21mm. *Ditch 7, 151, Phase 4.*
3. Rod. Iron. C. 8 short fragments of slender iron rod of shaft. Now much fragmented with virtually no iron core remaining. Length (longest extant fragment 16mm, current section 3mm. *Roundhouse B5, 1495, SF22, Phase 4*
4. Headstud brooch. Copper alloy. Short stepped wings with cylindrical hinge cover retaining hinge bar, one wing broken. Top of bow hollow-backed and slightly angular, stump of crest on head with part of raised ring and solid dot cell. Pin and majority of bow missing. Present length 18mm, original width of wings 20mm. *Linear 188, 190, SF1, Phase 5*
- 5.\* Bangle. D-sectioned. Translucent deep blue with opaque white marginal trails, one complete and two fragmentary spiral trails. All trails marvered. Section 14 x 8mm, external diameter 80mm, approximately 20% extant. *Pit 1184, 1185, SF16, Phase 5*
6. Bead. Chalk, possibly a fragment of a fossil, ? crinoid. Short cylindrical appearing



- as two segments. Length 1.5mm, diameter 2.5mm, perforation diameter 1.5mm.  
*Grave 1345 (SK4), 1344, Phase 5*
- 7.\* Bead. Stone, cream-coloured and granular. Cylinder with narrow perforation; one end flat, other broken. Divided into five segments by very light grooves. Present length 15mm, section 7mm, perforation diameter 1.5mm. *Pit 1184, 1185, SF23, Phase 5*
- 8.\* Bridle cheek piece. Bone. Fragment retaining herringbone decoration and part of slot. Burnt. Dimensions 25 x 12mm. *Pit 1184, 1185, SF11, Phase 5*
9. Ring. Bone. Segment. Present length 22mm, diameter 30mm, section 3 x 2mm. *Pit 1184, 1185, SF12, Phase 5*
10. Blade ? Iron. Fragment from tip. Present length c. 25mm. *Pit 1184, 1185, Phase 5*
11. Nail. Iron. Head and shank fragment. Length c. 40mm. *Pit 1184, 1185, Phase 5*
12. Nail shank or length of rod. Iron. Length 49mm. *Pit 1184, 1185, Phase 5*
13. Strip. Iron. Rectangular-sectioned, tapering and bent under at one end; other end probably broken. Present length 28mm, maximum width 8mm. *Pit 1184, 1185, SF13, Phase 5*
- 14.\* Bangle. Triangle-sectioned. Translucent blue/green with central unmarvered twisted trail of deep blue and opaque white canes, right-hand twist. Section 8mm by 6mm, external diameter 55mm, 20% extant. *Unstratified, SF10*
- 15.\* Knife. Iron. Central tang, slightly curved back with edge sloping up to point. Length c.135mm, length of tang 50mm, maximum width 20mm. *Grave 1105*

*(SK1), 1104, SF15, Phase 6*

- 16.\* Buckle and plate. Copper alloy. D-shaped frame, sheet bent around cross-bar to form square plate; three dome-headed rivets; pin with curved face at tip. Dimensions of frame, total length 26mm. *Grave 1107 (SK2), 1132, SF24, Phase 6*
- 17.\* Buckle and plate. Copper alloy. Oval buckle frame; fragment of sheet from plate wrapped around arm; stump of pin. Dimensions of frame 19mm by 10mm. *Grave 1107 (SK2), 1132, SF3, Phase 6*
- 18.\* Knife. Iron. Centrally placed tang, edge and back parallel with back curving down to tip at end. Edge and tip damaged. Present length 138mm, length of tang 45mm, maximum width of blade 21mm. *Grave 1107 (SK2), 1132, SF4, Phase 6*
- 19.\* Socketed spearhead. Iron. Slender leaf-shaped blade with central thickening on both faces; broken socket. Present length 152mm, maximum width blade 31mm. *Grave 1107 (SK2), 1132, SF2, Phase 6*
- 20a.\* Segmented bead. Opaque yellow glass. Cylindrical wound bead, three segments, one now detached. Length c. 5mm. (Guido 1999, 223 Schedule 4iv). *Grave 1205 (SK3), 1204, SF19, Phase 6*
- 20b.\* Short cylindrical bead. Opaque red glass. Length 3.5, diameter 5mm, perforation diameter 3mm. (Guido 1999, 292 Schedule 8iv). *Grave 1205 (SK3), 1204, SF19, Phase 6*
- 20c.\* Short cylindrical. Pale brown frit or clay with zig-zag in opaque turquoise glass. Length 7mm, diameter 8mm, perforation diameter 4mm. *Grave 1205 (SK3), 1204, SF19, Phase 6*

- 20d.\* Segmented bead. Opaque yellow glass. Cylindrical wound bead, five segments in groups of two and three, Length c. 11.5mm. (Guido 1999, 223 Schedule 4iv).  
*Grave 1205 (SK3), 1204, SF19, Phase 6*
- 21.\* Bead. Amber. Ovoid with faceted faces to give approximately triangular cross-section. Length 15mm. *Grave 1205 (SK3), 1204, SF17, Phase 6*
- 22.\* Spherical. Glass appearing black. Diameter 4mm. (Guido 1999, 170 Schedule 2i).  
*Grave 1205 (SK3), 1204, SF18, Phase 6*

### **The Metalworking Debris by J. Cowgill**

The finds were identified solely on morphological grounds by visual examination, sometimes with the aid of a x10 binocular microscope. A note of probable fuel type has been recorded when fragments were incorporated within the slag. The magnetic element of the sample retents was examined for hammerscale but none was found, they are composed exclusively of magnetised-natural minerals.

1. Eight fragments of fired clay. Oxidised; partially vitrified; no surfaces. 14g. *Ditch 3, 1034, Phase 3*
2. Hearth bottom. Coal fuel; 35 x 60 x 45mm; cindery; substantial quantities of oxidised hearth lining on back. 48g. *Roundhouse A2, 1128, Phase 3*
3. Three fragments of tuyere. Reduced back; abraded. 19g. *Roundhouse A2, 1128, Phase 3*

4. Two smithing slag lumps. Coal fuel; hearth lining; very abraded. 25g. *Roundhouse A2, 1128, Phase 3*
- 5.\* Crucible (Didsbury, no. 10). Rim of triangular crucible; red and some green glaze on interior and exterior surface. No metal visible. 13g. *Roundhouse A2, 1128, Phase 3*
6. Tuyere. Original square? Rim to hole only 25mm; hole diameter <20mm. 25g. *Roundhouse A2, 1130, Phase 3*
7. Two fragments of tuyere. Possibly fragments of above. 4g. *Roundhouse A2, 1130, Phase 3*
8. Vitrified clay. 1g. *Roundhouse A2, 1130, Phase 3*
9. Two pieces of iron-rich cinder. One piece very glassy. 7g. *Roundhouse A2, 1130, Phase 3*
10. Vitrified clay. Very vitrified; tuyere? Reduced back. 8g. *Linear 1160, 1159, Phase 3*
11. Fired clay. Oxidised; no surfaces. 2g. *Linear 1160, 1159, Phase 3*
12. Slag. Abraded hearth bottom? 15g. *Ditch 7, 151, Phase 4*
13. Smithing slag lump. Abraded. 11g. *Ditch 7, 151, Phase 4*
14. Hearth bottom. Coal fuel; 90mm by 80mm by 40mm; hearth lining on back; abraded? 316g. *Ditch 4, 1022, Phase 5*
15. Hearth bottom. Coal fuel; fragment; abraded? 86g. *Ditch 4, 1022, Phase 5*
16. Hearth bottom. Coal fuel; 60mm by 80mm by 50mm; abraded. 256g. *Ditch 4, 1047, Phase 5*
17. Five smithing slag lumps. Cindery; abraded. 26g. *Ditch 4, 1047, Phase 5*

18. Four fragments of tuyere. Sample 81. Fragments of one; part of air-hole; slagged - but not necessarily iron slag. 17g. *Ditch 4, 1047, Phase 5*
19. Two fragments of Iron Age Grey. 34g. *Pit 1184, 1185, Phase 5*
20. Proto-hearth bottom. Coal fuel; 30mm by 40mm by 15mm; abraded. 29g. *Pit 1184, 1185, Phase 5*
21. Tuyere. Sample 197. Abraded. No rim or air-hole; interior fired orange; slagged but not necessarily iron slag. 18g. *Roundhouse B8, 1456, Phase 5*
22. Smithing slag lump. Could be vitrified clay; abraded. 9g. *Gully 1461, 1460, Phase 5*
23. Tuyere. Thick slag layer. 7g. *Pit 1285, 1284, Phase 6*

## Discussion

Most of the small assemblage of slag recovered from the site is a by-product of iron smithing - the manufacture, repair or recycling of iron objects. All the slag is abraded to some degree suggesting that it has either been redeposited or has suffered from weathering on the ground surface before burial. The waterlogged nature of the soil has also affected the slag, several pieces being very matt and appear almost leached. Most of the pieces of tuyere are very fragmentary, but enough of one (no. 6) survives to suggest it may have had a square-shaped face, which is unusual, most being round or oval. It measures only 25mm from air-hole to rim and the hole is also small being less than 20mm in diameter. Coal was the sole fuel recorded as being incorporated within the slag. The iron-smithing slags were concentrated in the south-east corner of the site in ring gully A2 (Phase 3), Ditch 4 and the possible kiln 1184 (both Phase 5). Due to the lack of

hammerscale from the soil samples processed from these features, it is suggested that any smithy associated with the site may have been located further to the east, perhaps under the gas terminal.

A rim sherd from a triangular crucible was also found in the ring gully of roundhouse A2. The red glaze covering both the internal and external surface indicate that copper alloy was melted within it and that at least one cast object (or ingot) was made at the site.

The only other type of slag recovered from the site was two pieces of Iron Age Grey, found redeposited in the fill of the possible Phase 5 kiln. This slag is a cream to a light grey colour with a mid-grey very vesicular frothy core. They have evidently been molten and flowed, and have a glassy-grainy structure and compositionally are high in silica and alumina. This type of slag has so far been exclusively found on Late Iron Age sites, regardless of underlying geology or site type/status, and is commonly found in association with domestic rubbish.

Experiments conducted at Bradford University (Cowgill *et al.* 2001; Swiss and McDonnell 2001) have shown that the slag melts at approximately 1150-1250°C in both oxidising and reducing conditions, and it is proposed that the slag would have formed somewhere above this temperature. To attain these temperatures implies a forced-draught technology, suggesting that a pair of bellows would have been needed. It is almost certain that they derive from a high-temperature pyrotechnical process, but metalworking, inorganic (e.g. lime burning and glass working) and organic (e.g. corn drying and

cremation) processes have all been ruled out. Relatively high temperatures may arise during the accidental or deliberate burning of house structures. Temperatures of 1200°C may be reached with the necessary minerals present in walling and flooring to produce this slag. These slags, however, are not usually found in particularly charcoal-rich contexts, and the finds found associated with them are not burnt, but usually ordinary domestic rubbish. It is difficult to tally this line of enquiry with the consistency of the Late Iron Age dates, when similar types of building materials (wattle, mud and stud, various types of thatching materials etc) were used in earlier and later periods. Unfortunately the results of these analyses still do not allow a suggestion of the processes involved or give an indication of how or why. The reason for the limited date range for the Iron Age Grey slag has still to be resolved.

### **The Briquetage by E. Morris**

A total of 31 pieces (140g) of ceramic material associated with the evaporation of salt from brine, known as *briquetage*, was recovered from the fill (1148) of the Phase 2 pit 1147. The material in this case consists of two of the four known classes of briquetage (Morris 2001a, 41-50; 2001b, 356-76): several sherds from one or more drying *containers* and part of the base of a pedestal *support*. The pieces are in a fragile condition as is evidenced by a very small mean piece weight of 4.5g for the assemblage. Nevertheless, two rims, a base and the pedestal fragment provide a significant amount of evidence about the nature of salt production at the site, slight though it may be.

## Fabric

All of the pieces are made from the same organic-tempered sandy fabric (V1) consisting of a moderate amount (7-10%) of linear vesicles, which once contained plant matter that has been burnt out during firing, measuring  $\leq 5$ mm long, in a clay matrix with a common to very common amount (25-30%) of moderately-sorted, subrounded to subangular quartz grains, measuring  $\leq 1$ mm across (PCRG 1995, appendices). This is not the same clay matrix as identified in the fired clay material fabric (Morris, p.100).

Organic-tempered briquetage is known from other Late Bronze Age salt production sites along the east coast of Britain, as at Tetney in north Lincolnshire (Palmer Brown 1993; Van de Noort 2004) and at Crouch Site 2 (Barford 1995), Mucking North Ring (Barford 1988) and Corringham (Barford 1984-5), all in Essex. Briquetage made from shell-gritted fabrics was recovered at Late Bronze Age sites in the Lincolnshire Fens (cf. Morris 2001c, table 98), as at Fengate (Pryor 1980), Northey (Gurney 1980), Welland Band Quarry (Pryor 1999) and Pode Hole Quarry (Morris, in prep.). It is most likely that an interplay balancing the natural resources available and their suitability to make briquetage, coupled with practical experiences of making porous ceramics and the knowledge that organic-tempering was a suitable agent, determined whether organic temper was to be used, as in East Yorkshire, the Lincolnshire Marsh and Essex, or whether naturally-occurring shell-bearing clays were to be used as along the Lincolnshire Fen edge. In the Easington case, organic matter was chosen, as the tempering agent and added to a naturally sandy clay matrix. The important question to ask is whether this briquetage was actually made here at Easington using locally available clays or not.



Future research should focus on understanding the range of clays in the immediate area and whether this sandy clay derives from the local vicinity.

#### Classes and Form Types

The types of briquetage present in the container class are simple rounded rims from straight-sided profile containers and a spurred, flat base from a container (Fig. 35, 1-3). One of the rims appears to be from a small, circular, slighted expanded or flared-wall profile ceramic vessel, while the other is too small to determine the likely shape of the original vessel, but is at least similar in rim type (R1), being simple, unelaborated and rounded. The base sherd, which is flat, has a frilly or spurred exterior edge (B1), and derives from a large vessel which apparently has no curvature in plan. It appears, therefore, that there are at least two if not three different vessels represented amongst these 30 container sherds: a small, circular vessel with a diameter of 120mm, a large vessel which does not appear to be rounded or curvilinear in plan, and a third possible container of uncertain profile or plan. The body sherds are all quite small in size and therefore cannot contribute to the discussion of vessel form type. Nevertheless, the rims, base and body sherds all provide information about the vessel wall thickness of these containers; the sherd walls consistently range between either less than 7mm thick (six sherds) or 7-9.9mm thick (thirteen sherds including the rims and base), with eleven being split sherds. These containers are very similar to examples of Late Bronze Age containers from Corringham (Barford 1984-5, fig. 1, 6), Crouch Site 2 (Barford 1995, fig. 103) and Mucking North Ring (Barford 1988, fig. 36). Detailed publication of the Late Bronze Age Tetney briquetage is not yet available.

The fragment from the base of a pedestal support (Fig. 35, 4) is unfortunately too small to determine the exact type of pedestal it represents. It is most likely that it was a type of pedestal with base, circular stem and top piece similar to those from Corringham (Barford 1984-5, fig. 1, 1-3) and Mucking North Ring (Barford 1988, fig. 27, 15-22 and fig. 37), although the horned pyramidal pedestals recovered at Crouch Site 2 (Barford 1995, fig. 102) are another possibility.

The other classes of briquetage production debris which are not present in this small assemblage are any evidence of structures (structural material) such as from an oven, and miscellaneous pieces with clear evidence of association with brine, such as from a destroyed or damaged hearth (Morris 2001b, 372-73). The small assemblage of briquetage from Easington is distinctive because it does not include evidence of a heating facility, which would have been a simple hearth using the direct heating method, as would be expected for this early form of salt production (Morris 2001b, 373-74). There appears to be no evidence for this stage in the production system within the excavated area.

## Discussion

From pit 1147, the pottery, the radiocarbon date for the cremation and the fabric and forms of the briquetage all support a Late Bronze Age date. The very small quantity of briquetage from this single feature from a large open-area excavation, however, is curious. So, too, is the contrast between the clay matrix used to make a Roman fired-clay

structure at the site (Morris, p.100) and the clay matrix used to make the briquetage. It might have been expected that if both were made from local clay, then they would have been similar in naturally-occurring inclusions; but instead they are significantly different. There is some uncertainty, therefore, as to whether the salt production actually took place here or nearby, and was then brought to the site for a special event which included the cremation deposit.

Nevertheless, this should not detract from the value of this material as the first evidence for the production of salt in the East Yorkshire area during the Late Bronze Age. Easington's location on the Holderness coast, currently 0.5km from the present, eroding North Sea shoreline (Van de Noort 2004, fig. 2) and 2.5km from the River Humber to the south-west, was undoubtedly further 'inland' from the later prehistoric coastline. Salt production 'inland' from the sea, however, is not unusual and is true for several Late Bronze Age salt production sites, such as at Tetney on the north Lincolnshire coast and both Crouch Site 2 and Mucking North Ring in Essex (Morris 2000c, table 98), as well as at Welland Bank Quarry (Pryor 1999) and Pode Hole Quarry (Morris, in prep.) which are located along the fen edge near Peterborough in Lincolnshire. Later Iron Age and Roman salt production sites in Lincolnshire were located further into the Fens and away from the Fen edge (Lane and Morris 2001). There is currently only one other later prehistoric and Roman location of salt production in East Yorkshire and this was discovered at Faxfleet A on the north bank of the River Humber, west of Hull (Willis, forthcoming).

- 1.\* Container rim, R1; fabric type V1 (organic-tempered fabric-type 1); Briquetage Record Number (BRN) 3005. *Pit 1147, 1148, Phase 1*

- 2.\* Container rim, rim-type 1 (R1); BRN 3006. *Pit 1147, 1148, Phase 1*
- 3.\* Container base, base-type 1 (B1); BRN 3007. *Pit 1147, 1148, Phase 1*
- 4.\* Pedestal base, PD1; BRN 3008. *Pit 1147, 1148, Phase 1*

### **The Fired Clay Material by E. Morris**

A total of 270 pieces (12kg) of fired clay material was recovered from the only fill (100) of pit 101 located in Enclosure C. At least 90% of the fragments display one or more finished or smoothed surfaces, and all had been made from the same fabric. Several fragments are quite large in size, measuring between 70 and 150mm across and 95 and 730g in weight each, which appear to have derived from one or two circular rings. These are irregular but generally triangular in cross-section (Fig. 36). Although the pit was fully emptied after half-sectioning, it is clear that this deposit retained only small lengths or parts of ceramic ring rather than a full circumference, and therefore, it is possible only to speculate that a ring had originally measured approximately 0.5m in diameter. At the most, a total of 50% of a diameter could be identified for one ring and 10% for a possible second ring. These estimates, however, derive from primarily non-joining fragments of ring; only eight fragments re-fit and amongst these the largest sequence is made of four pieces.

### **Fabric**

The fabric is an un-tempered clay matrix, comprising a very common to abundant amount (30-40%) of translucent, subrounded to rounded quartz grains measuring mainly  $\leq 0.5\text{mm}$

across, with rare grains up to 1mm across, rare to sparse (2-3%), rounded to subangular pieces of quartzite, flint, iron ore and unidentified rock measuring 2-8mm across, and rare (1-2%) linear vesicles up to 12mm long in a micaceous clay matrix. This range of inclusions in sandy clay would not be inconsistent with a source from the local boulder clay covering this region of East Yorkshire (Wilson 1948). The large inclusions, quartz sand grains and organic matter are all naturally-occurring in the clay matrix, which fires in an oxidising atmosphere from buff to light orange in colour.

#### Method of Construction and Firing

The method of manufacturing used to construct the ring or rings was conducted simply by taking the untempered clay and plastering it or slabbing it in lumps onto the earth sides of an excavated pit, as revealed by the rough imprint on one of the triangular sides. Clay was then added to create an overhanging extension which usually resulted in a rounded apex extension, often no more than 20-30mm thick, curving into the centre of the pit for a length of about 60mm. It was finished by smoothing up the wall of the pit for a total 'height' of approximately 100-110mm for the fired clay structural ring. The curve of the apex extension lies flat in a horizontal plane, if the exterior wall side of the ring is leaning inwards slightly as indicated in this reconstruction. The firing of this 'ring-shaped object' may have taken place after *in situ* drying of the clay, which would have shrunken the overall object slightly and allowed oxygen to reach the back or wall side of the ring during firing. Certainly the atmospheric condition is oxidised or variably oxidised (irregularly fired) on all surfaces with a dark grey, unoxidised core to the thick part of the triangular profile. Iron bars, as a scaffolding support, may have been used during this

drying and firing to prevent the ring falling into the pit. There are two and possibly three fragments of rounded, incurving apex which have squared, pre-firing cuts or perforations through them, and these may have received a square-sectioned bar as temporary support during firing, and possibly even during use of the structure. A second interpretation of these squared slots or rectangular cut-outs is that they once held ceramic firebars, but no examples of firebars were recovered during the excavation.

### Form and Function

In reviewing the literature on Romano-British kilns (Swan 1984) and salt-ovens (Bestwick 1975, Lane and Morris 2001), as well as Iron Age ovens (Poole 1984) and several ethnographic examples (Rye 1981), this ring-like structure fits best as the dome of a pit-firing structure, which is intermediate between an open firing clamp or bonfire, and a true kiln with firebox and a separate chamber. None of the examples illustrated is an exact match; rather it is most likely that this 1st-century AD structure was an attempt to make a controlled atmospheric environment for the moderate firing of a material. A number of irregularly-fired, sandy fabric sherds were found in association with this fired clay material (Didsbury, p.52). These may represent 'wasters', or simply potsherds incorporated into the firing process for whatever reason. Other associated sherds, made of vesicular (formerly shell-bearing) fabrics, were not 'refired', which suggests that the firing of sandy fabric vessels was the function of this structure. If this is the correct interpretation, then the ceramic ring may represent the only evidence of a rudimentary kiln.

It is highly unlikely that this fired-clay structure was a salt oven as there is no evidence for any of the ‘salt colours’ of pink and lavender often found with the ceramic material associated with salt ovens (Morris 2001a), nor any evidence of white, ‘salt bleaching’ as has been found amongst the ceramic briquetage associated with salt production in the Fenland region of Lincolnshire during the later Iron Age and early Roman periods (Morris 2007).

### **The Human Remains by M. Holst**

In total, four inhumed skeletons (Fig. 20) and six cremation burials were excavated. These range in date from the Late Bronze Age (cremation), Iron Age (cremation), Roman (inhumation and cremation) and early medieval periods (inhumations). A summary of these burials are provided in Tables 16 and 17. Interestingly, the grave for SK2 contained the dental remains of two individuals, but apparently only the fragmentary remains of one skeleton, suggesting that the burial had either contained two individuals, or the full skeleton of one and the skull of another individual.

Table 16. Summary of osteological and palaeopathological results of inhumations

Table 17. Summary of the cremated assemblage preservation

## Osteological Analysis

### *Preservation*

All four inhumed skeletons were in a very poor condition, i.e. the complete or almost complete loss of the bone surface due to erosion and severe fragmentation (Table 16). In fact, the majority of bone fragments were less than 10mm in size. The teeth were better preserved, although the roots were often eroded. Due to poor preservation, fragmentation and intercutting, none of the skeletons was complete. Truncation of SK4 by a land drain and medieval ridge and furrow resulted in the loss of the lower half of the skeleton.

Preservation varied between the cremated bone assemblages (Table 17). The bone from the smaller assemblages was poorly preserved, showing considerable bone surface erosion. The largest assemblage (1019) was less fragmented and displayed little erosion.

Little warping and bone cracking, which occurs commonly during the cremation process, was evident. It is probable that cracks were originally present and the bone fragmented along these weaker fissures. The fragment size of cremated bone is frequently attributed to post-cremation processes, although it is believed that post-depositional, rather than post-burning disturbance of the bone caused the fragmentation and erosion of the human remains from this site. In the majority of burials, most of the bone was derived from the 2mm sieve and was too small to be identified.

The quantity of cremated bone recovered per burial varied from 0.01g to 35.2g (Table 17). The amount of bone retrieved from these burials weighed significantly less than that



produced by modern crematoria, which tends to range from 1000.5g to 2422.5g with an average of 1625.9g (McKinley 1993). Wahl (1982, 25) found that archaeologically recovered remains of cremated adults tend to weigh less (between 250g and 2500g), as a result of the commonly practised custom of selecting only some of the cremated bone from the pyre for inclusion in the burial, thereby representing a symbolic, or token, interment.

The cremated bone in the different assemblages had been burnt to different degrees. In some of the assemblages, the complete loss of the organic portion of the bone had been achieved, producing a white colour (1108/1122 and 1127). In other assemblages (1019 and 1040), the bone was partially white and dark grey, suggesting that some parts of the bone had not lost their organic proportion completely.

Due to the small quantity of bone retrieved from each burial, it was only possible to identify skeletal elements from two graves. Between 36% and 74% of the bone could be identified in these cases. In both burials, most of the identifiable bones were long bone shaft fragments.

#### *Minimum number of individuals (MNI)*

It was not possible to count the number of joints of the inhumed skeletons, as none of these was preserved. It was possible, however, to carry out a tooth count to establish an MNI of five for the inhumation burials. Notably, it was found that two almost full sets of teeth had been recovered from SK2 – one set belonging to a juvenile, while the other

belonged to a young adult, both of which were so poorly preserved that it was impossible to distinguish these *in situ*. These are termed SK2a and SK2b below.

It is not possible to calculate the MNI for the cremation burials, because only a token selection of bone from the pyre tends to be buried. Double cremation burials can be identified only if skeletal elements are duplicated, or if skeletons of different ages are represented in the burial. In this instance, no double burials were identified.

#### *Assessment of age*

Age was determined using standard ageing techniques, as specified in Scheuer and Black (2000a, 2000b) and Cox (2000). Age is split into a number of categories, from foetus (up to 40 weeks in *utero*), neonate (around the time of birth), infant (newborn to one year), juvenile (1-12 years), adolescent (13-17 years), young adult (ya; 18-25 years), young middle adult (yma; 26-35 years), old middle adult (oma; 36-45 years), mature adult (ma; 46+) to adult (an individual whose age could not be determined more accurately as over the age of seventeen).

Despite the poor preservation, it was possible to determine age in all of the inhumed skeletons: two juveniles, aged six to ten years (SK2a) and nine to ten years (SK3), and three adults, aged 20 to 25 (SK2b), 26 to 35 (SK4) and 36 to 45 (SK1).

As the criteria normally used for age determination were not represented in the cremation burials, age determination was based on less reliable criteria. The bone robusticity in

Burials 1019 (Phase 5) and 1140 (Phase 2) suggested that the individuals were at least sixteen years of age, but may have been considerably older. Dental development of the individual from Burial 1443 (Phase 4-5) suggested that this individual was aged between ten and sixteen years.

#### *Sex determination*

Sex determination was carried out using standard osteological techniques, such as those described by Mays and Cox (2000). Due to the poor preservation, it was possible only to determine the sex of one inhumed individual, SK1. This was a male, according to both the cranial and pelvic sexing characteristics.

#### *Metric and non-metric analyses*

Stature can only be established in skeletons if at least one complete and fully fused long bone is present. In this instance, the lack of complete long bones meant that it was not possible to assess stature. Although it was not possible to measure any of the fragmented bones, the male old middle adult (SK1) appeared to be of a large and robust build. Cremated bone shrinks at an inconsistent rate (up to 15%) during the cremation process, and as a result it was not possible to measure any of the bones from these burials.

Non-metric traits are additional sutures, facets, bony processes, canals and foramina, which occur in a minority of skeletons and are believed to suggest hereditary affiliation between skeletons (Saunders 1989). A total of thirty cranial and thirty post-cranial non-metric traits were selected from the osteological literature (Buikstra and Ubelaker 1994,

Finnegan 1978, Berry and Berry 1967). The latter include *hypotrochanteric fossae*, which are depressed areas at the back of the femora at the attachments of the *gluteus maximus*. The depressions are thought to reflect strain on the muscle and were noted on both femora of juvenile SK3.

#### Pathological Analysis and Dental Health

The paucity of the bone and incompleteness of the skeletons meant that little evidence for pathology could be observed. As discussed above, the backs of the femora of a ten year old juvenile (SK3) displayed evidence for moderate trauma to the *gluteus maximus* muscle. This muscle is responsible for movement of the hip and it is possible that this child participated in daily activities, which placed strain on this muscle. Evidence for trauma to this muscle is frequently observed in archaeological populations, though more commonly in adults than children. None of the cremated bone assemblages displayed evidence of pathology.

A total of ten deciduous (milk) teeth and 106 permanent teeth were recovered. The teeth were in a poor condition, causing the majority of roots to deteriorate entirely. None of the permanent teeth showed evidence for dental disease, which may be due to the poor preservation. The surviving lower jaw bone of SK1, however, showed evidence for severe periodontitis (receding gums). This condition is usually triggered by calculus (tartar) deposits on the teeth, although in this case, such deposits could not be observed.

The dentition of SK3, a nine to ten year old juvenile, was well-preserved and exhibited calculus deposits on twelve of thirty teeth. The deposits were slight to medium in severity. It is unusual for such a young child to suffer from any calculus, suggesting that this individual was practising poor oral hygiene. At West Heslerton, for example, none of the children showed evidence for calculus deposits (Cox 1999, 181). The same child also showed evidence for dental enamel *hypoplasia* (DEH). DEH is the manifestation of lines, grooves or pits on the crown surface of the teeth, which represent the cessation of crown formation. The defects are caused by periods of severe stress during the first to seventh year of childhood, including malnutrition or disease. DEH was observed in six teeth, four anterior and two premolars. Such enamel defects were noted in 8.9% of a sample of early medieval cemeteries studied by Roberts and Cox (2003, 185), which represents an increase from the Roman period (8.1%). At West Heslerton, fourteen early medieval individuals had DEH (Cox 1999, 182).

## Mortuary Ritual

### *Bronze Age cremation burials*

Two Late Bronze Age cremation burials (1127 and 1148) were identified in close proximity to one another. The burials contained minute quantities of bone, which means that little could be inferred about the cremation techniques used. According to McKinley (1997, 139) widely varying quantities of human bone have been recovered from cremation burials dating to the Bronze Age and no associations as to the quantity of bone and the age and sex of the individual buried have been ascertained.

Numerous Bronze Age inhumation and cremation burials are known from north-east England. They can be found as single burials, in small numbers as at Nosterfield, North Yorkshire (Holst 2003), or as larger cemeteries, such as the barrows found in north-east Yorkshire, particularly on the Wolds (Smith 1994, 3), but also in the Holderness area (Van de Noort 2001, 167; Loughlin and Miller 1979, 52). Of the excavated burial mounds from north-east Yorkshire, the majority contained cremation burials (Smith 1994, 11). Late Bronze Age burials from the period spanning 1000 to 550 BC, however, are relatively rare (Brück 1995). According to Spratt (1993, 121), burial in flat graves (as opposed to internment under barrows) became more common during the late Bronze Age and the Easington graves appear to be consistent with this trend.

#### *Iron Age cremation burials*

An Iron Age adult cremation burial (1140) was radiocarbon dated in the ranges 360-290 cal BC and 230-50 cal BC (Beta-217182, Table 1). A further adult cremation burial (1108/1122), although not radiocarbon dated, was probably also Iron Age in date. These represent rare evidence of Iron Age cremations in East Yorkshire, where cremation is more often observed before the 6th century BC and after that is concentrated in south-eastern England (Cunliffe 1991, 511). An Iron Age site at Out Newton, only a couple of kilometres north of Easington, however, has recently revealed further evidence of cremations and together these may indicate a later Iron Age burial rite peculiar to this part of south-east Holderness. (Evans pers. comm.).

### *Roman burials*

Two Roman burials found at Easington have been radiocarbon dated in the range cal AD 40-230 (Beta-217174 and Beta-217188, Table 1): a cremation burial (1019) and the inhumation of a young middle adult (SK4), flexed on the left side and orientated with the head to the south-east and the feet to the north-west. A second cremation (1443) of a juvenile could not be radiocarbon dated but is likely to belong to Phase 4 or 5.

Numerous excavations in East Yorkshire have produced comparable Romano-British burials to those found at Easington. A similar Romano-British mortuary assemblage was excavated at Sewerby Cottage Farm, Bridlington. Four cremation burials, which contained charcoal as well as grave goods, have been dated to the later 2nd and the mid-3rd century AD (Fenton-Thomas 2009, 240). A crouched inhumation of an old middle adult male was thought to date to the 1st or 2nd century AD (Fenton-Thomas 2009, 238-40). All five burials were located beside main boundary ditches. Other comparable examples include a probable Romano-British cremation burial from Dragonby, North Lincolnshire, where ten inhumations and a single cremation burial were found (May 1996a, 125). At Welton Road, Brough, two unaccompanied cremation deposits were found that probably date to the late 2nd or 3rd century AD (Hunter-Mann 2000).

### *Early medieval burials*

Sancton, near Market Weighon, is probably the first large early medieval cemetery in East Yorkshire. Probably founded before the 5th century AD, it was unusual compared to the majority of later burials, as it included cremation burials (Loveluck 1999, 230; Lucy

2000a, 13). It is probable that Sancton was contemporary with another two cemetery sites to the south of the Humber, at Cleatham and Elsham Wold (Loveluck 1996, 29; Leahy 2007). During the late 5th and 6th sixth century, a large number of early medieval cemeteries were established in East Yorkshire, probably within a short time frame. These cemeteries contained largely inhumations (Loveluck 1999, 231). Typically, the burial grounds were in use from the late 5th to the early 7th centuries AD and were often located near Roman roads and settlements (*ibid*). According to Hirst (1985, 5), there were approximately 44 known early medieval cemeteries in East Yorkshire, although unsurprisingly the number of burial sites in the region continues to rise (Lucy 1998, 76). These include a cemetery at Swine, and burials at Burton Pidsea, both in the Holderness area, but most of these were concentrated in the Driffield area and around the Gypsey Race valley (Hirst 1985, 5; Lucy 1998, fig. 7.40).

Three early medieval burials were recovered from Easington. SK1, an old middle adult male buried with a knife, was apparently buried in an extended supine position, although the legs were slightly twisted to the left. Beside him, a six to ten year old child, buried with a young adult (SK2a-b), an iron knife, a spear and copper alloy buckles, were interred. SK2 (either the young adult or child) was probably buried in a flexed position on the right side. The third burial (SK3) contained a nine to ten year old child buried with beads, also buried in a flexed position on the right side. During the early Anglo-Saxon period, skeletons could be arranged in a variety of positions, whether supine, prone or flexed on one side, though extended supine burial was most common in East Yorkshire (Lucy 2000a, 13). At local cemeteries, including West Heselton, Norton and Sewerby,



extended, flexed, crouched and prone burials were found (Haughton and Powlesland 1999a, 90). Notably, at Sewerby, it was found that individuals with few grave goods were often buried in flexed positions (Hirst 1985, 102).

The quantity of grave goods in the excavated cemeteries varied, as did the quantity of type of grave goods per grave in the different cemeteries (Loveluck 1996). According to Crawford (1999, 30), over half the children aged between ten and fifteen and the majority of adults who were buried with only one grave good were accompanied by a knife. Children could be buried with smaller knives, indicative of personal possessions (*ibid*, 71-2). At Castledyke South, Barton-on-Humber many graves only contained a knife (Leahy 1998, 361). At West Heslerton, knives were spread evenly between males and female, with the majority of the knives found by the right hip of the individual (Haughton and Powlesland 1999a, 119). At Easington, the knife buried with SK1 was laid next to the right upper arm, while the knife with SK2 was positioned close to the left hip.

Beads were also common grave goods, particularly with children who were younger than ten years (Crawford 1999, 30). Glass beads were the most common bead type in Anglo-Saxon burials and could take a large variety of shapes, sizes and colours (Lucy 2000b, 41-2). Amber beads were also comparatively widespread in early medieval burials, particularly those dating to the mid-6th and late 6th century (Lucy 2000b, 42). Beads were among the most common grave goods at Catterick (Moloney *et al.* 2003, 24) and at Sewerby, where they were found in three child graves (Hirst 1985, 62). Buckles were

also frequently found in early medieval burials (Lucy 2000b, 58), with males and females, as well as one infant at Sewerby (Hirst 1985, 86).

The only weapons found with children were spears, though in this case the spear was found in the double burial, and it is likely that it belonged to the young adult rather than the child. According to Härke (1990, 25), weapons occurred in 18% of all burials he studied, or 47% of male inhumations and the most commonly found weapon was a spear. Spears were not common in all cemeteries, however. At Castledyke South, spears were rarely found (Brenan 1998, 341), only one spearhead and shield boss were recovered from Catterick (Moloney *et al.* 2003, 24) and in fact, weapon burials were generally sparse in the Humber area (Leahy 1998, 361).

Double burials are not uncommon in early medieval cemeteries of the 5th to 7th centuries (Crawford 1999, 79). Though double burials more frequently contained combinations of infants and adults, older children could also be buried with young adults (Crawford 1999, 106), as was the case at Easington. Although usually females were buried with children, this was not always the case (Lucy 2000b, 82).

It is not uncommon to find two graves in close proximity to one another in early medieval cemeteries, as was the case with SK1 and SK2. At West Heselton, a number of apparently associated pairs of graves were found (Haughton and Powlesland 1999a, 86). The majority of these graves contained a male and female, although individuals of the same sex were also buried beside one another (*ibid*).

### *Continuity of mortuary ritual*

The practice of reuse of prehistoric and Roman structures and monuments for early medieval burial is widespread. Bronze Age barrows constitute the most common monument re-used for Anglo-Saxon burial (Williams 1998, 92-4). This association between prehistoric earthworks and Anglo-Saxon cemeteries is also well known in East Yorkshire (Lucy 2000a, 13; Hirst 1985, 5; Loveluck 1996).

The archaeological evidence from Easington suggests that barrows did not exist in the excavated part of the site and that the Bronze Age and Iron Age burials were flat graves. It is likely, therefore, that other landscape features attracted the sepulchral reuse of the site throughout the different periods. It is possible that these features were either lost to the sea, or lay buried beneath the gas terminal immediately to the north and east of the excavation area. Although there is a notable lack of associations of Romano-British burials with prehistoric monuments (Haughton and Powlesland 1999a, 3), burial at Easington continued during the Roman period. The continued use of a landscape for funerary purposes has also been identified at Ferrybridge Henge, West Yorkshire (Holst 2005). It has been suggested that the reuse of monuments could create a link between past and present, and between the living and the dead (Williams 1998, 104).

### Discussion and summary

The excavations produced a small skeletal assemblage that spanned a period from the Late Bronze Age to the mid-6th century AD. The site included four inhumations and six

cremation burials, which were distributed across the excavated area. The evidence indicated that both adults and children were buried at the site. The cremated bone assemblages had been subject to different degrees of burning, suggesting a variety of cremation techniques. It is possible that diverse cremation processes were applied to different individuals or that the cremation procedures changed over time. Three of the inhumation graves included grave goods, which were typical for the mid-6th century AD. One of these burials contained two individuals, a child and a young adult.

All of the interments, including the inhumations, contained very small quantities of poorly preserved bone. This meant that it was possible only to determine sex in a single case and age in eight individuals. Little pathology was observed in this assemblage, and this was largely derived from the teeth. One of the early medieval juveniles, a nine to ten year old, had suffered from arrested dental development between the ages of one and five, probably as a result of malnutrition or disease. The child also suffered from dental plaque.

The evidence suggests that the Bronze Age burials from Easington corresponded well with other contemporary interments at a regional and national level. They conform to the Late Bronze Age trend of flat burial, rather than burial under barrows. A single Iron Age burial contained the cremated remains of an adult, while a second adult cremation was associated with the Late Iron Age settlement. These burials are significant, as no other Iron Age cremation burials had been identified in East Yorkshire, although recent excavations at an Iron Age site at Out Newton have encountered further cremations. The

three Romano-British burials included two cremation burials (from Phase 4-5 and Phase 5) and the inhumation of a young middle adult of undetermined sex (Phase 5). The three early medieval burials from Easington included two children, an old middle adult male and a young adult of undetermined sex, who had been buried with one of the children. The burials shared many similarities with burials of moderate status from larger cemetery sites, such as West Heselton.

### **Stable Isotope Analysis by J. Evans and C. Chernery**

Five teeth and four bone samples, all poorly preserved, were submitted to the NERC Isotope Geosciences Laboratory (NIGL) for isotope analysis. These represent skeletons SK1, SK2a and Sk2b (see Holst p.106), SK3 and SK4. Analytical methods and details of the results, as an unabridged report, are held with the site archive. The results from the five tooth samples are given in Table 18.

The results of two separate stable isotope analyses are summarised here. From tooth enamel, strontium isotopes (which reflect particular geologies) and oxygen isotopes (which vary according to climate and geography) have been measured to identify the individual's place of residence during their formative years. Secondly, measurements of carbon and nitrogen isotopes have been carried out on the post-cranial skeletons with the aim of characterising past diet. For the 6th-century individuals tested here, it is important to establish if they were indigenous to the area or first generation migrants from the continent.

The strontium isotope composition of the individuals is consistent with an origin in eastern Yorkshire and other parts of central eastern England. The oxygen isotope composition is within the current estimate for British individuals, but is higher than expected for this region of England. It is more typical of warmer and more westerly parts of England. Data for comparison are still sparse, but the explanation for this could include 1) coastal effects in the UK that are not fully documented, 2) an origin from an area of 'warmer' less depleted rainwater, but with similar geology to east Yorkshire, or 3) cultural eating and drinking habits that have not yet been understood or documented. Carbon isotope data are compatible with a local terrestrial diet. Significantly, the analyses indicate that the four early medieval individuals were indigenous to eastern Yorkshire or central eastern Britain, and were not first generation migrants.

Table 18. Results from the isotope analyses

### **The Animal Remains by J. Richardson**

In total, 4449 animal bone fragments and 148 oyster shell fragments were recovered from phased deposits. The usefulness of the assemblage, however, is reduced by the poor preservation and highly fragmented nature of the majority of the bones and shells, with many surfaces eroded, porous and/or flaking. The very low proportion of the bones that were identified as diagnostic, non-reproducible zones is a reflection of this degradation, and only 5% of the bones and shells from Iron Age and Roman deposits could be classified thus. Poor surface condition will also have reduced the possibility of

identifying activities such as butchery and gnawing. As a result, too few bones, in too poor a condition, were recovered to facilitate meaningful comparison between phases.

All bone fragments were identified where possible to species, species group (such as sheep/goat), or a lower order category such as 'large mammal' (Table 19). Age data were considered and butchery marks were noted, but due to the fragmentary nature of the assemblage and the quantity of bones modified by burning, no metrical data were recorded. As no goat bones were identified, both sheep and sheep/goat bones are referred to collectively below as sheep.

Almost half of the assemblage came from a horse skeleton that was buried in pit 1285 at the intersection of the two trackways. This animal was male, stood at approximately 12 hands 2 inches and was fourteen years or older on death. It also exhibited pathological changes to two of its vertebrae. Spongy, porous bony growths were adhered to the sides of the centra, but the articular surfaces remained unaffected. The grey and pitted nature of the new bone indicates that the changes, perhaps due to infection, were active when the horse died. This animal probably represents a valued work animal that was afforded the status of burial, rather than dismemberment and consumption by the human occupants, or carcass reduction before feeding to dogs. Incidentally, dog bones were quite rare from the site, as 45 of the 53 fragments came from a single (heavily fragmented) dog skull that was deposited in Ditch 6, close to its bend.

With the exception of a few frog/toad and mouse-sized bones that were recovered during sample processing, the remaining animal bones and shells are likely to represent food debris. A diet of beef and lamb/mutton was available and this was occasionally supplemented by pork and oysters: the latter presumably from the nearby estuarine waters of the Humber. Butchery marks, although extremely rare, were noted on one sheep and three cattle bones and attest carcass reduction. Domestic poultry, typically rare from Iron Age settlements, were absent, although poor preservation may have precluded the survival of their small bones.

Age data, based on epiphyseal fusion and dental eruption and wear, were rarely recorded due to the relatively small size of the assemblage and its fragmented nature. From Iron Age-Roman deposits (Phases 3-5), a few sub-adult (under three years), young adult and old cattle were noted and juvenile (under a year), sub-adult (two to three years) and adult (up to four to six years) sheep were also recorded. These imply that while some animals were raised specifically for their meat, others were maintained into adulthood for breeding, milk, traction or wool. A single juvenile horse tibia was also identified from a fill (1372) of Ditch 5.

Unfortunately too few bones and shells were recovered in sufficiently good condition to facilitate further analysis and interpretation. It was possible only to identify some domestic food waste from prime meat animals, older livestock and from the oysters, and the deposition of non-food deposits such as a horse skeleton and dog skull.



Table 19. Animal bones and shells by phase

### **The Horse Burial by C. Fern**

Inhumed remains of whole horses, though rare, are known from all periods from at least the Late Bronze Age onwards in Britain (Moore-Coleyer 1994, 3). While examples from the late medieval and post-medieval periods, such as those at the Tudor horse-burial site of Elverton Street, London, are typically interpreted as representing the convenient disposal of cumbersome animal carcasses not used for meat, conversely burials from earlier pre-Christian eras are often interpreted as ritual in nature (Cowie *et al.* 1998). In England, horse burials occur particularly between the Iron Age and early Roman eras, and during the early medieval period (Fern 2005; forthcoming). In addition, the middle Iron Age in East Yorkshire is known above all for its high-status burials containing horse-drawn chariots or carts that sometimes incorporated horse remains (Stead 1991). The radiocarbon date of cal AD 70-240 (Beta-220457, Table 1) for the Easington animal places it firmly in the Roman period. In addition, the pit in which the horse was buried truncated pit 1347, which contained a sherd of Samian ware, dated AD 70-120.

The burial comprised the inhumation of a whole animal, interred on its right flank, on a broadly east-west alignment, with its limbs flexed (Fig. 22). The trauma to its forehead may indicate it had been pole-axed, probably immediately adjacent to the burial site, prior to rapid interment. The decision to bury, instead of eat the animal, or use it as dog food, might reasonably suggest a ritual act. The ‘special’ status enjoyed by the horse from prehistory, often in association with prerogatives of high social status, strengthens the

case for a ceremonial explanation (Moore-Coleyer 1994) and certainly Roman cultural norms eschewed the eating of horses (Arbogast *et al.* 2002, 59-61).

A growing number of examples of horse burial are known from Roman Britain, including a 1st or 2nd-century AD triple animal burial from the Eastern Roman Cemetery, London. This comprised a horse, a (headless) red deer and dog buried in a single large pit, arranged on their sides in a processional spiral (Barber and Bowsher 2000, 20, fig. 16). Horse burials are also recorded from the South West Roman Cemetery at York ‘in apparent association with a human corpse’ (RCHM 1962, 79). A variation of rite is represented by the 3rd-century AD horse cremations, some of which accompanied human remains, at the cemetery site of Brougham, Cumbria (Cool 2004, 325). In this instance it has been argued that the burials reflect continental influence from the Danube Basin, possibly resulting from the stationing of an auxiliary unit at the nearby fort. More local parallels are those from Kirkburn, East Riding, and Nosterfield, North Yorkshire. The Nosterfield burial, which was situated near to an Iron Age square barrow, comprised a quadruple interment, with the horses placed in pairs in a double layer configuration, back-to-back and nose-to-tail (Rowland 2004). One skeleton was radiocarbon dated to AD 15-85 (Mike Griffiths and Associates pers. comm.). A slightly later 1st to 2nd-century date was provided by the radiocarbon dates for the two Kirkburn animals, each of which was buried within a ring-ditch on an east-west alignment, and on its right flank (Stead 1991, 27). These burials were also close to a square enclosure of possible Iron Age date (though no human graves were found), which itself was set within a larger Neolithic enclosure. The association of these early Roman period sacrifices with cemeteries and

pre-existing sacred settings supports the identification of such burials with a cult of the horse. Indeed, in the wider context, horse rituals are well attested across much of Europe at this time. These include the sacrificed remains of over 100 horses at Skedemosse, on Öland, Denmark, dated between the 3rd and 6th centuries AD, and the 1st-century AD burial of ten adult male horses beneath the Gallo-Roman temple at Vertault, Côte D'Or, France (Todd 1987, 175; Arbogast *et al.* 2002, 79-81). It is possible that some of these horse rites may be connected with the worship of the Gallo-Roman goddess, Epona, the cult of which is evidenced across much of the Western Roman Empire, being particularly favoured by Roman cavalry units (Oaks 1986; Epona.net).

Not all horse burials of the period have been attributed a ritual identification however. The part-articulated horse remains found backfilling the fort ditch at *Bremetanacum* (Ribchester) have been interpreted as the naturally deceased animals of associated cavalry units, with the large ditch utilised as a convenient dumping ground (Stallibrass 2000). In addition, not all horse burials from Roman cemeteries in Britain have been considered to represent ritual offerings. It is proposed that examples of complete skeletons from Icklingam, Suffolk, and West Tenter Street, London represent the mundane disposal of a horse carcass, despite their proximity to human burials of the period (Levine *et al.* 2002; Whytehead 1986, 31).

With a withers height of just over 12 hands, the Easington horse is small by Roman standards. Although a minority of domesticated animals could be as small as 11 hands at the shoulder, with the largest exceeding 15 hands, outside of military stables an average

height of 13-14 hands was more typical (Hyland 1990, 68; Dixon and Southern 1992, 165ff). For comparison, the Romano-British Kirkburn and Nosterfield animals have a combined withers height range from 1340-49mm (13.1-14.3 hands) (Legge 1991, 144; Rowland 2004).

The radiocarbon-date range for the Easington horse firmly assigns the burial to Phase 5, placing it in the context of the creation of Enclosures B and C, and the probable inception of a new phase of building, represented by the large B8 roundhouse. The position of the burial at the south-west corner of the enclosure, just off the trackway, may suggest its function as a 'threshold' or 'foundation' sacrifice associated with this development. Such burials are known from the Iron Age in Britain, for example the two horses buried beneath the entranceway of the Iron Age Blewburton Hill fort, as well as being attested for the Roman period in France, as at Vertault (Collins 1952/3, 39; Arbogast *et al.* 2002, 79-82). The burial, therefore, may represent a possible Roman foundation sacrifice - comprising the staged killing of a favourite, though perhaps at 14 years old and with some evidence for infection, an expendable draft animal - that was designed to ward off evil spirits or to bless a new dwelling.

### **Environmental Sampling Strategy by Jane Richardson**

A comprehensive sampling strategy was undertaken during the excavations to facilitate the recovery of environmental material, in particular charred plant remains, wood charcoal and land snails. The conditions necessary for the preservation of pollen and insects were not encountered. Of the 143 samples taken, 76 were processed using an

Ankara-style water flotation system (French 1971). The floating remains (the flot) were collected in a 300 $\mu$ m sieve and the heavy fraction (the retent) was collected in a 1mm mesh. Both flots and retents were dried. Not all the samples were processed as it was soon demonstrated that recovery of charred plant remains was low, and land snails were rarely present. Consequently, all burial contexts were targeted to ensure the recovery of bone, and the primary fills from the major features were processed to facilitate a radiocarbon dating programme.

### **Carbonised Plant Macrofossils and Charcoal by D. Alldritt**

Analysis of carbonised plant macrofossils and charcoal was carried out on a total of 76 sample flots together with sorted retent material. The flots varied in size from <5ml to up to 70ml of charred fragments and modern roots. All flot material was sorted with the aid of a low powered binocular microscope at magnifications of x4-45. All charcoal pieces suitable for identification were examined using a high powered Vickers M10 metallurgical microscope. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000). The results are presented below by phase, although only the samples that contained carbonised plant remains are tabulated here.

### Phase 1: Bronze Age

Three samples were taken from the two Bronze Age cremations (1126 and 1147). These produced exclusively oak (*Quercus*) type charcoal, which was most likely the main source of fuel material used on the cremation pyres (Table 20).

### *Phase 2: Iron Age*

Two samples were taken from the Iron Age features, a single piece of oak charcoal was found in cremation 1141: no plant material was recovered from pit 1094.

Table 20. Carbonised plant remains from Phase 1 and Phase 2 features

### *Phase 3: Late Iron Age*

The Late Iron Age samples produced primarily burnt peat, although this was concentrated in a trackway deposit (1040), with very little other material recovered (Table 21). Trace fragments of poorly preserved cereal grain and occasional seeds of the red campion (*Silene dioica*) were also identified, and these probably reflected general farming and agricultural activities occurring around the site during this period.

### *Phase 4: Late Iron Age/early Roman*

The samples associated with this phase were recovered from ditches and gullies. Cereal grain was scarce with only poorly preserved barley (*Hordeum vulgare* sl.) and barley/wheat (*Hordeum/Triticum* sp.) identified (Table 22). A small range of weeds of cultivated and waste places, together with occasional weeds from heath, moors and

grassland, indicated the types of local and perhaps regional environments being exploited. This phase produced both oak and birch charcoal in addition to burnt peat, all of which could have had multi-purpose uses in construction and as fuel for domestic hearths.

#### *Phase 5: Roman*

The Roman period at the site produced the largest amounts of identifiable cereal grain recovered from the samples as a whole, although still only in fairly small quantities. Both cf. wheat (cf. *Triticum* sp.) and barley/wheat (*Hordeum/Triticum* sp.) were identified from this phase, with the majority originating in the possible kiln feature (1184). A small number of weeds of cultivated/waste places and also weeds of grassland or pasture origins were present, indicating arable land and rough grazing probably in the vicinity of the site (Table 23).

Table 21. Carbonised plant remains from Phase 3 features

Table 22. Carbonised plant remains from Phase 4 features

Table 23. Carbonised plant remains from Phase 5 and Phase 4-5 features

#### *Phase 6: early medieval*

Samples from this phase were derived from burials, and consisted mostly of oak charcoal, although very small traces of oat (*Avena* sp.) and cf. wheat (cf. *Triticum* sp.) cereal grain

were also recovered (Table 24). These remains were most likely chance occurrences as a result of bioturbation.

Table 24. Carbonised plant remains from Phase 6 features

### Conclusion

The Bronze Age cremation samples produced only oak charcoal, suggesting that this was the main source of fuel for the cremation pyres. No evidence for other activities such as farming was encountered. In contrast, later deposits from Iron Age and Roman features indicated agricultural activity in the area, but the poorly preserved and degraded nature of the plant remains indicated that this was probably wind-blown or residual material. Three different types of fuel, namely wood charcoal, peat and heathy or grassy turves are proposed from Late Iron Age and/or subsequent deposits.

### **Land Snails by J. Carrott**

#### Summary

Only one soil sample produced a snail assemblage, from the primary fill (200) of Ditch 5 (Phase 3). The range of snail taxa recorded was very restricted but nevertheless included both terrestrial and freshwater forms. Although small, the assemblage clearly indicated that Ditch 5 held freshwater (though probably not permanently – perhaps drying out completely in the summer months) at the time of the formation of this primary fill. Other snails present most likely reflected the environment of the area surrounding the ditch in



the Late Iron Age and suggested only light vegetation in the vicinity, probably no more than short-turfed grassland.

## Methods

The mollusc remains present in the flot were identified as closely as possible, with reference to Ellis 1969, Cameron and Redfern 1976, Macan 1977, Kerney and Cameron 1979 and Cameron 2003. Records were made of minimum numbers of individuals present determined by counts of shell apices. Nomenclature for mollusc taxa follows Kerney (1999).

## Results

There was a very small flot (*c.* 5 ml) from fill 200, sample 11, which was mostly of snail shells. The snail assemblage (Table 25) was very restricted but nevertheless contained both terrestrial and freshwater taxa, and possibly also some snails of waterside vegetation (?*Oxyloma pfeifferi* Rossmässler). Preservation of the remains was rather poor, with most of the shells being broken. There was some variation in that small forms (e.g. *Carychium* species) were generally less fragmented than larger ones.

The assemblage was dominated by freshwater planorbids, of which approximately 10% (representing twenty individuals) could be positively identified as *Anisus leucostoma* (Millet). All of the other planorbid fragments were also of a 'tightly coiled' form and likely to represent further individuals of this same species, however. Three apex

fragments of a pond snail (*Lymnaea* sp.), probably each representing one *Lymnaea truncatula* (Müller), were present and there was also a single somewhat tentative record of another freshwater snail, *Valvata cristata* Müller, again from an apex fragment.

Terrestrial snails included both British species of *Carychium* (*C. minimum* Müller and *C. tridentatum* (Risso)), *Vallonia ?excentrica* Sterki, *Vitrea crystallina* (Müller) and *Pupilla muscorum* (L.)/*Lauria cylindracea* (da Costa). Although the last are fairly easily distinguished from complete shells (the mouths are usually very different, for example) all of the remains recorded from this sample were fragmentary and lacked diagnostic characteristics.

Table 25. Land snails recovered from context 200. Nomenclature and taxonomic order follows Kerney (1999). Key: MNI = minimum number of individuals represented.

## Discussion

Although small, the snail assemblage from fill 200 clearly indicated that Ditch 5 held freshwater (though probably not permanently) at the time of the formation of this primary fill. Remains of planorbid snails dominated the assemblage, with the twenty positively identified (and most likely all of the other more fragmentary remains) being *Anisus leucostoma*. This species is found in a variety of aquatic habitats but is most typical of wet ditches and swampy pools, especially those subject to seasonal drying out. *Lymnaea truncatula* is often associated with *A. leucostoma*; although commonly referred to as the Dwarf pond snail it lives mostly out of water and frequently also indicates temporary bodies of freshwater. The two *Carychium* species are also often found together. *C.*

*minimum* is a species of very wet places and is virtually amphibious being able to survive long periods of flooding, whereas *C. tridentatum* is less frequent in very wet places but may occur in marshes and damp grassland, both of which would also provide suitable habitats for *Vitrea crystallina*. Within this part of Ditch 5, a fluctuating water level, most likely seasonal (perhaps drying out completely in the summer months), would accommodate all of these species.

The records of *Vallonia ?excentrica* and *Pupilla/Lauria* most likely reflect the environment of the area surrounding this part of the ditch in the Late Iron Age and, perhaps, the more exposed habitat of the sides of the ditch itself (except if there were times when the feature was completely filled with water). Taken together, these taxa suggest only light vegetation in the vicinity, probably no more than short-turfed grassland. Clearly Ditch 5 would have received (and sometimes held) water from draining the surrounding area and these taxa were presumably incorporated into the fill as a result of the feature acting as a large pit fall trap.

## DISCUSSION

### **Dating and phasing**

Artefact dating evidence has been used in conjunction with a radiocarbon dating programme and stratigraphic relationships to determine six phases of activity. These begin as early as the Late Neolithic or Early Bronze Age as indicated by a few flint tools, and culminate with the burial of four people in the 6th century AD. Subsequently, the

land was used for agricultural purposes and this continued up to the present day. The dating evidence, however, often provides only a broad framework within which the phases can be placed. Close dating was constrained by the poor quality of many pottery assemblages and by the conservative nature and long lifespan of later Iron Age potting traditions. Hand-made vessels in 'native' fabrics can continue to dominate rural assemblages in East Yorkshire well into the 2nd century AD, and it is not always possible to suggest, in respect of a particular assemblage, on which side of the Roman conquest it should be placed (Didsbury pers. comm.). As a result of this broad framework, the settlement activity associated with two possible roundhouses in Enclosure A for example has only been tentatively assigned to Phase 3. An alternative, is that Enclosure A was used for industrial activity, while contemporary buildings to the north-east were used for habitation. The activity associated with Enclosure A has been assigned to an earlier phase based on the absence of Roman pottery, although the shortcomings in this approach are recognised.

The radiocarbon dating programme also presented limitations due to the quality of the bone samples available for submission. Seven bone samples failed to provide any separable collagen and another six produced depleted C13/C12 ratios and consequently dates of limited value. In addition, for the Iron Age and Roman phases (Phases 2-5) where occupation may have been no more than 300 years duration, the broad radiocarbon date ranges were unhelpful. Nevertheless, using radiocarbon dates in conjunction with datable artefacts made it possible to refine the date of certain features. Pit 1184 within Enclosure C is a good example of how a date range can be narrowed down by the

presence of a number of datable objects. In contrast, radiocarbon dates alone proved to be the only means of categorically identifying Bronze Age cremation activity.

### **The settlement evidence**

The earliest activity revealed by Bronze Age cremations and salt production, followed later by Iron Age cremation, may have been associated with habitation, but this was either ephemeral in nature (most likely unenclosed) or beyond the limits of the excavation. Similarly, the early medieval inhumations, while isolated from any known settlement, are likely to indicate the presence of a local, resident community. Interestingly, the identification of salt production from a Late Bronze Age context is unique from East Yorkshire, although comparable sites are known from North Lincolnshire. Salt, required for activities such as food preservation and leather production, would have been a valued commodity (Thomas and Fletcher 2001, 215). On-site salt production, however, has not been identified definitely. No hearths to provide the heat to drive off the water from the brine were found and Easington's inland location in the Bronze Age was not ideal. Importing salt water from the coast or the Humber would have been labour-intensive, although 'inland' salt production during the Bronze Age is known from other sites (Morris, p.99). Perhaps most telling is the contrast in the clay matrices used to make the briquetage and the Roman fired-clay structure, suggesting that one might not be made from local clay. The possibility remains, therefore, that the briquetage was imported to the site, perhaps for ritual reasons given its association with cremated human remains, rather than representing local salt production.

The first definitive evidence for settlement activity, as indicated by field systems, ditched enclosures and possible roundhouse gullies, however, has been dated to the 1st-century BC, based on radiocarbon dating in association with the pottery assemblage. This settlement consisted of at least two roundhouses within an enclosure that may have been defined by a palisade fence. The enclosure was appended to a ditched trackway that provided access to fields and livestock. The use of boundaries to separate settlement, arable and pasture land is generally acknowledged to be an Iron Age and Romano-British phenomenon (Stoertz 1997, 82) and this style of enclosed settlement associated with long-distance boundaries or trackways are often referred to as 'ladder settlements' and are common in eastern Yorkshire from the later Iron Age onwards (Dent 1982, 453; Stoertz 1997, 67; Loveluck 1999, 229). The use of boundaries is significant as it represents a statement of intent to use a specific area (Dent 1988, 95), precludes straying animals, and may be seen as a territorial demonstration in a society where land was at a premium due to population increase (Dent 1983, 39; Giles 2000, 185).

The Late Iron Age settlement (Phase 3) housed a small rural community with a mixed subsistence economy as indicated by trace fragments of cereal grains and occasional weed seeds, and animal bones from domestic livestock in particular cattle and sheep. Limited land snails from Ditch 5 indicate that short-turfed grassland was present, most likely pasture. In addition to farming activities, slag, tuyere fragments, a hearth bottom and part of a crucible associated with roundhouse A2 indicate that this structure was used for industrial purposes; iron smithing and melting copper alloy. In the absence of hammerscale, structure A2 cannot be labelled a smithy, but certainly metalworking was

occurring somewhere in the vicinity. The foundation gullies or eaves-drip drains of the two structures were so poorly preserved that diameters of 7m are only broad estimates. Unfortunately what remains was also insufficient to determine their method of construction (the function of the only identified post-hole (1129) associated with roundhouse A2 is unknown) or the orientation of entrances.

During the Late Iron Age/early Roman period, most likely during the 1st century AD, the focus of the settlement shifted from Enclosure A to an area to the east of the newly created Ditch 7 and its bank (Phase 4). Here at least six roundhouses were constructed suggesting that the size of the community had increased, although sub-phases, with the replacement of deteriorating properties, are possible. These roundhouses ranged in diameter from 7m to 10m, with the larger examples comparing favourably to the five drip gullies identified from Aldbrough, less than 20 miles to the north-west (Bradley and Steedman 2006). Unfortunately the roundhouses were represented by ring gullies alone, with no discernable internal post rings or other post-hole arrays, while wattle and daub construction is assumed but not demonstrated. Structure B2 may have had a south-west-facing entrance, and while the other ring gullies were more fragmentary, it is clear that north-facing entrances were not constructed. This compares to the standard roundhouse form with an east-facing entrance (Parker Pearson 1996, 119) supposedly orientated towards the rising sun (Parker Pearson 1999, 43). At this time, a second trackway was created while the earlier cobbled track continued in use. At the junction of these two routes, the remains of a ring gully indicated that an additional structure of unknown function was built. Sited as it was, it may have played a role, whether functional or ritual,

in the movement of traffic through the settlement. At a time when landscape use was undergoing significant change (e.g. land enclosure), monitoring and controlling access through a settlement may have been desirable (Giles 2000, 179).

The structural information, in conjunction with the artefacts and ecofacts, indicate the continued use of the landscape for agricultural purposes. One feature of note was a possible storage pit located between the ring gullies of structures B5 and B6. Sealed with clay, the pit contained the remains of what was probably a crop grown by this farming community, although the material itself could not be identified. In general, plant remains were rare, although barley was present and the weed seeds indicated that a range of habitats such as heath, moorland and grassland were close by. Animal resources included beef, lamb/mutton, pork and oysters and although data were limited, no doubt secondary products such as milk, wool, skins and traction were also utilised. Due to severe truncation, features such as hearths were not identified, but a quantity of burnt stones associated with ring gully B9 did indicate one possible means of cooking food. Evidence of industrial activity of the type identified in Enclosure A during Phase 4 was not repeated during this later phase, although the continuation of localised metalworking is likely if a self-sufficient community is assumed. Perhaps metalworking was undertaken beyond the excavation limits at this time. Finally, the pottery and small finds associated with this phase of activity are typical of rural sites of this date and suggest that the influence of Rome was not yet being felt in this part of East Yorkshire.



It was not possible to clearly differentiate Phases 4 and 5 in terms of their datable artefacts. Both phases included small finds, for example, that can be dated to the later 1st to mid-2nd century AD. Stratigraphically, a chronological difference is clearly seen, but the artefacts suggest that no break in occupation occurred, and it is likely that the settlement was occupied by the same community over the Late Iron Age and Roman period. In the absence of any dramatic change in the material culture, including any notable rise in imported goods, it is likely that this native farming community was not unduly influenced by the invasion of the Parisi territory by the Roman military from AD 71 onwards.

During the Roman period, the area previously occupied by six roundhouses was defined by a gully that is likely to represent the remains of a palisade fence that enclosed an area of approximately 0.9ha. The east-facing entrance fits with the majority of settlement enclosures which have their entrance(s) to the east and/or the west (Parker Pearson 1996, 120). Within this enclosure, two roundhouses of very different sizes were established. Ring gully B8 represented the largest structure identified at the site at 12m in diameter, while roundhouse B4 was an ancillary structure with an approximate diameter of 5m. Unusually at this, site B4 appears to have had a north-facing entrance, while the entrance to B8 was roughly south-facing. Roundhouse B4's small diameter is also unusual, but not unique, with other similar-sized examples known from Sykehouse, South Yorkshire (Roberts 2003, 12), Timberland, North Lincolnshire (Richardson 2009) and Rampton, Lincolnshire (Todd 1991, 106). Structures of comparable size to B8 are known from Cottingham, East Yorkshire (Evans and Steedman 2001, 68), Methley, West Yorkshire

(Roberts and Richardson 2002, 39) and again from Timberland, North Lincolnshire. Perhaps related to the construction of this final settlement, was the placement of a horse burial on the curve of Ditch 7. Its position at the intersection of the two trackways has led to suggestions of a ‘threshold’ or ‘foundation’ ritual. A dog skull placed close to the bend of Ditch 6 during Phase 4 may have served a similar purpose, while the earlier ring gully sited at this intersection, may also have had a ritual function.

To the south, Enclosure C was created through the construction of a new ditch (4), an internal bank and the utilisation of a pre-existing feature (Ditch 5). The enclosure ditch was redefined on at least one occasion, probably sometime in the 2nd century AD. The enclosed space was probably used for iron working, as smithing slag, hearth bottoms and tuyere fragments were concentrated in Ditch 4 and the putative kiln 1184. Again, hammerscale was absent, indicating that the smith’s workshop was beyond the limits of the excavated area. In addition to the metalworking debris, ‘kiln’ 1184 and the remains of two fired-clay rings found in pit 101 attest the presence of further industry. The clay rings, indicative of rudimentary kilns, are likely to have been used for a process requiring ‘moderate’ firing such as pottery production, although no evidence of local production, such as wasters, was identified from the pottery assemblage. The function of the so-called kiln also remains ambiguous due to truncation of a possible flue by a field drain and an absence of *in-situ* burning.

The Romano-British settlement, like its predecessor, was home to a rural community that farmed the land, probably growing both barley and wheat, and raising livestock. Self-

sufficiency was further improved by small-scale metalworking. The pottery in use was predominantly locally-produced handmade styles, with the mass-produced Roman pottery contributing relatively little to the assemblages. In the absence of any evidence for other imported items, it is unlikely that the settlement at Easington was seriously affected by the Roman occupation. Its abandonment, probably by the late 3rd century AD is assumed, as only a very small amount of material could theoretically belong to the later 3rd or 4th century, and none of this needs be later than the mid-3rd (Didsbury, p.32).

Another significant aspect of the settlement is that no major change in structure type was noted, indicating that the native population saw no reason to abandon their traditional building techniques. At other settlements of comparable date such as Melton (Bishop 1999, 40), Hayton (Evans and Steedman 2001, 82) and Dragonby (May 1996b, 601) roundhouses were replaced by rectangular timber buildings during the Roman period. It is telling that all of these sites were positioned to the west of Hull and would have been more readily influenced by the Roman roads from York to Brough-on-Humber (Margary 1973, 418-9) and once across the Humber, from Winteringham to Lincoln (Margary 1973, 236-8). Hayton, with Brough-on-Humber, was also occupied by a fort (Millett 1999, 225). This suggests that the inhabitants of Romano-British Easington, occupying a territory that was never heavily militarised, were relatively isolated from the Romanising forces that were at work only 30 or so miles to the west.

### **The funerary evidence: Bronze Age to early medieval**

The presence of Late Bronze Age cremations was unexpected in the absence of other demonstrably Bronze Age features or finds, although post-excavation analyses have raised the possibility that Bronze Age pottery and by association Bronze Age brisquetage were deposited here. Given the wealth of prehistoric activity in this part of Holderness, however, funerary activity of this date is unsurprising. Bronze Age barrows are well known from the area, as well as a possible Bronze Age cemetery at Kilnsea Warren (Manby *et al.* 2003, 79). In contrast, evidence for settlement activity in the vicinity of Easington is unknown, although the presence of flint scatters (Head *et al.* 1995), isolated find spots and a sewn plank boat (Van de Noort *et al.* 1999) attest the use of southern Holderness beyond that of a burial ground. Of the two pits containing the cremated Late Bronze Age bone, however, pit 1126 was clearly Iron Age or later based on an undisputable stratigraphic relationship. Pit 1147, in contrast, appears to be Bronze Age given the radiocarbon date from the cremated bone and the presence of pottery 'not inconsistent with a Bronze Age date' (Manby pers. comm. to Didsbury). Despite their residual nature, the cremated remains in pit 1126 confirm the use of the Easington area for burial during the Bronze Age.

Cremation appears to have continued as a means of burial into the Iron Age (Phase 2) and Late Iron Age (Phase 3) with the identification of two further cremations, both of adults. Again, a mixed deposit containing possible Late Bronze Age wares and regional Iron Age pottery indicates that the cremated bone from Phase 2 (dated in the range 360-290 cal BC and 230-50 cal BC) was associated with residual material. Later, a cremation of an adult

from Phase 3 was probably contained within an Iron Age stone-tempered ware urn of which only base and body sherds survive. As noted by Holst, while numerous Iron Age inhumations have been excavated in the region, no other cremation burials were known until recent excavations at Out Newton. As a result, these Iron Age cremations may represent a burial rite peculiar to this area of south-east Holderness, when the norm was inhumation either in square-ditched barrows as part of the so-called 'Arras Culture', from the late 5th or early 4th century BC until as late as the Roman invasion (Stead 1979; Dent 1982, 437), or in flat graves in a domestic setting from the later Iron Age (Mackey 2003, 118-19).

Cremation, as a burial rite, is more widely recorded for the Roman period and at Easington cremated remains have been radiocarbon dated in the range cal AD 40-230 (Beta-217174, Table 1). Also at this time, inhumation first occurred with the burial of an unadorned adult in a grave, again dated in the range cal AD 40-230 (Beta-217188, Table 1), that cut Ditch 7. This burial can probably be placed towards the later end of the date range given its stratigraphic relationship with Ditch 7, and this finds support from Philpott's (1991, 53) assertion that inhumation gradually replaced cremation from the 2nd century AD. A second cremation may also be associated with the Romano-British phase of habitation, although this event can only be broadly dated to the Late Iron Age or Roman period. A combination of cremation and inhumation rituals has been observed from other Romano-British sites of the region, but as Philpott suggests it is likely that the cremations tend to represent earlier burials, with inhumations indicative of a later funerary rite. The latter remained the usual practice until the end of the Roman period.

Funerary practice at Easington changed again in the early medieval period following an apparent cessation in occupation that lasted over 200 years. During the 6th century AD, four bodies were placed in three graves and each grave included grave goods. Two graves, placed side by side and presumably associated with each other, contained the bodies of a man, young adult and a juvenile. Isotope analysis has indicated that these individuals were indigenous to the area, and it is tempting to see them as a family group. The man, buried alone, was accompanied by a knife, while the young adult and child were interred together with an iron knife and spearhead and two copper alloy buckles and plates. The other body, that of a juvenile, was probably female based on the presence of glass, amber and clay/frit beads. Buried over 40m to the north-east, this burial was probably broadly contemporary with the pair of graves, as the beads and one of the knives have been assigned to the 6th century AD. The dress accessories and grave good sets identified here reflect the personal items commonly found in early medieval burials in eastern Yorkshire. These goods are seen as a consequence of widespread contact around the coastal regions of the North Sea, and in terms of group identity, they reveal communities that tended to look eastwards to northern Europe rather than southwards to France (Loveluck 2003, 159-60).

The funerary rites identified here reflect, in the main, the practices that would be expected of the Bronze Age to early medieval communities occupying what is now East Yorkshire. What is unusual is the identification of Iron Age cremations, which until recently were unparalleled in the region. It seems likely that the funerary rite of

cremation, which was clearly undertaken by the Bronze Age inhabitants of the area, continued to be used into the Iron Age in this part of East Yorkshire.

## CONCLUSIONS

Until very recently, the archaeological attention given to Iron Age and Romano-British activity in East Yorkshire has tended to focus on the Wolds, and in particular on the square barrows and chariot burials of the 'Arras Culture' (Halkon and Millett 1999, 3), although Stoertz's (1997) research on the Wolds landscape amply demonstrated the complexity of settlement patterns in this upland area. Meanwhile the lowland areas of East Yorkshire had been less intensively studied, despite a concentration of settlements in the valleys (Dent 1983, 35). Although Halkon and Millett's study of the valley of the river Foulness was undertaken to address this shortfall, archaeological investigations in the Holderness area have until recently been rare by comparison. This is now changing as a result of major gas infrastructure projects in the last few years, including four gas pipelines and three gas storage facilities. Nevertheless, the excavations at Easington have provided significant new data with which to assess the evolution of settlement and burial in this part of East Yorkshire.

In many aspects, the archaeological features exposed at Easington conform to a picture already identified from other parts of the region. Here unenclosed, prehistoric activity, which included salt production, was replaced in the Late Iron Age by an enclosed settlement associated with a trackway. This small settlement was home to farmers who

grew crops, grazed their livestock and probably engaged in sufficient metal-working for their own needs. Similar sites have already been identified on the Wolds (Dent 1982, 453; Fenton-Thomas 2005, 50), on lowland sites to the west of Hull such as at Melton (Bishop 1999, 40), Cottingham (Evans and Steedman 2001, 67), North Cave (Evans and Steedman 1997, 121) and Hayton (Evans and Steedman 2001, 82) and also on lowland sites to the north-east and east of Hull such as Beeford (Evans and Steedman 1997, fig. 1), Leven (Evans and Steedman 1997, 121) and Aldbrough (Evans and Atkinson, forthcoming).

Typically, as at Easington, these sites continued to be occupied into the Roman period: Cottingham is the one exception (Evans and Steedman 2001, 68). Unlike Easington, however, building forms evolved at places such as Melton (Bishop 1999, 40), Leven (Evans and Steedman 1997, 125) and Hayton (Evans and Steedman 2001, 82-3) with the replacement of roundhouses with rectangular structures, and at Hayton, even a bath house. Either Easington was isolated from an increasingly 'Romanised' lifestyle (and certainly the location of Easington suggests that close proximity to major communication routes or trading ports was lacking), or the inhabitants of this part of Holderness, in essence still a native farming population like their pre-conquest ancestors, were not interested in adopting the social and economic trappings of the Roman regime.

Subsequently, the Romano-British settlement at Easington was abandoned, and apparently the area remained unoccupied for at least 200 years. Similarly, a break in occupation is noted at Melton (Bishop 1999, 40), while at other settlements, such as



Shiptonthorpe and Elmswell (Loveluck 1999, 229; 2003, 163; Millett 2006, 307-08), less formally planned farming units had evolved by the 5th century AD. An early medieval settlement in the vicinity of Easington is not in doubt given the presence of the 6th-century burials and a pit containing Middle Saxon pottery identified on Easington cliffs, but a settlement shift in terms of location, but perhaps also in form, is likely. Given the presence of the solitary pit on what are now sea cliffs, the mostly likely site for the early medieval settlement is to the east of the excavations. At some point during the medieval period, the settlement is assumed to have shifted once again, to the site of the current village of Easington. This is probably the settlement referred to in the Domesday Book as Easington manor (Allison 1984, 24). The area once occupied by the Iron Age and Romano-British settlement was now strip farmed by the occupants of Easington village as demonstrated by the presence of ridge and furrow in association with medieval and post-medieval pottery.

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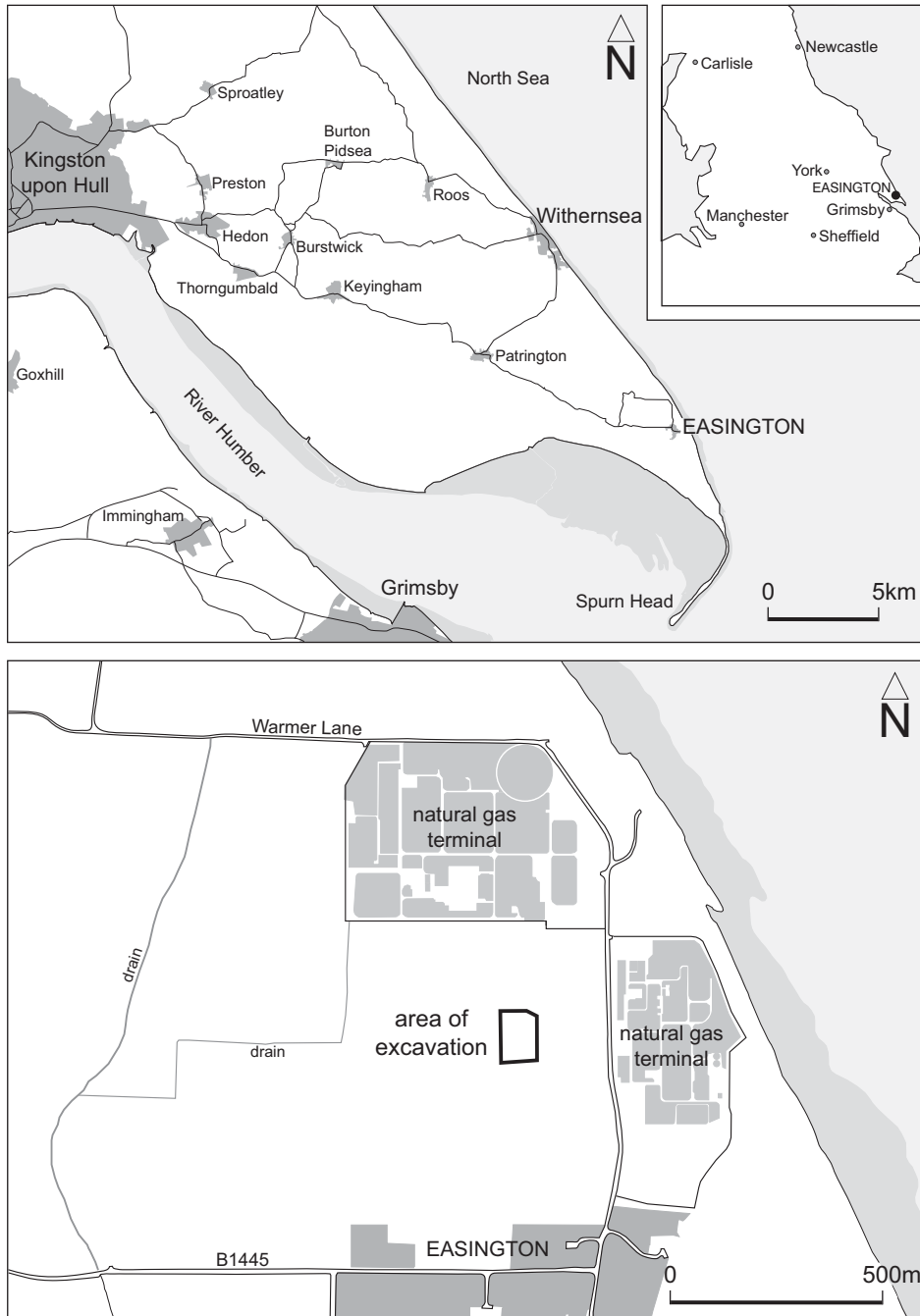


Fig. 1. Site location

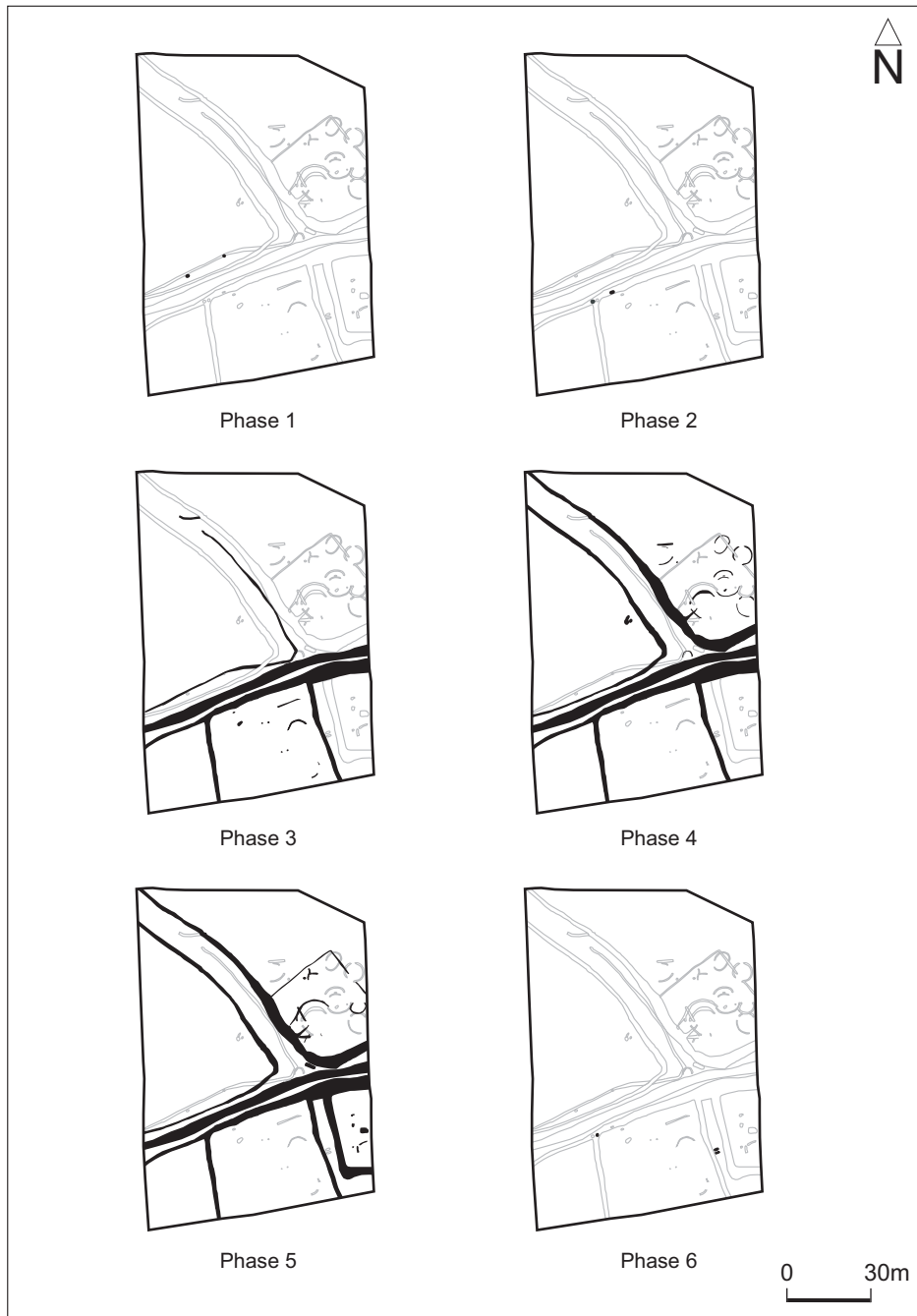


Fig. 2. Interpretation of the geophysical (gradiometer) survey results (after GSB Prospection 2003a, 2003b)

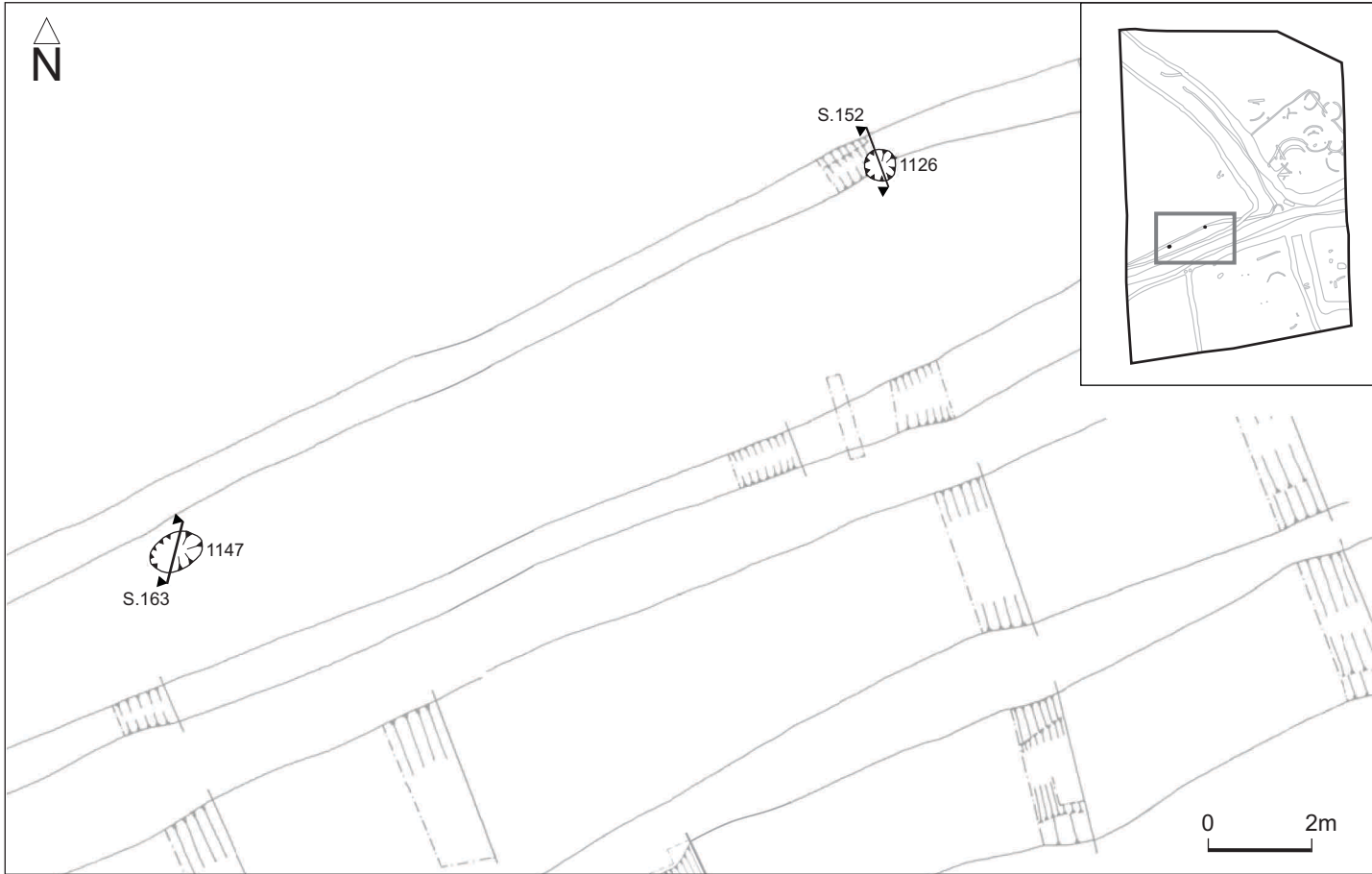


*Fig. 3. View of ring gully B4 and B5 in typical site conditions (looking south)*

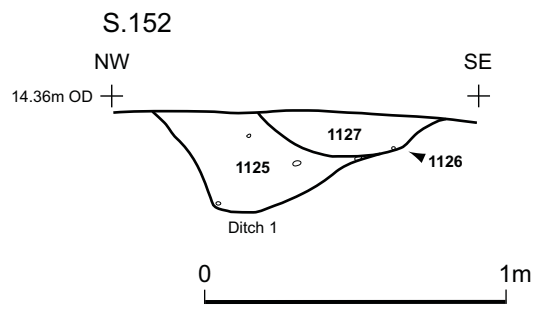
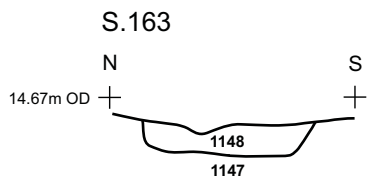




*Fig. 4. Phase plans*



*Fig. 5. Phase 1 features*



*Fig. 6. Phase 1 sections*

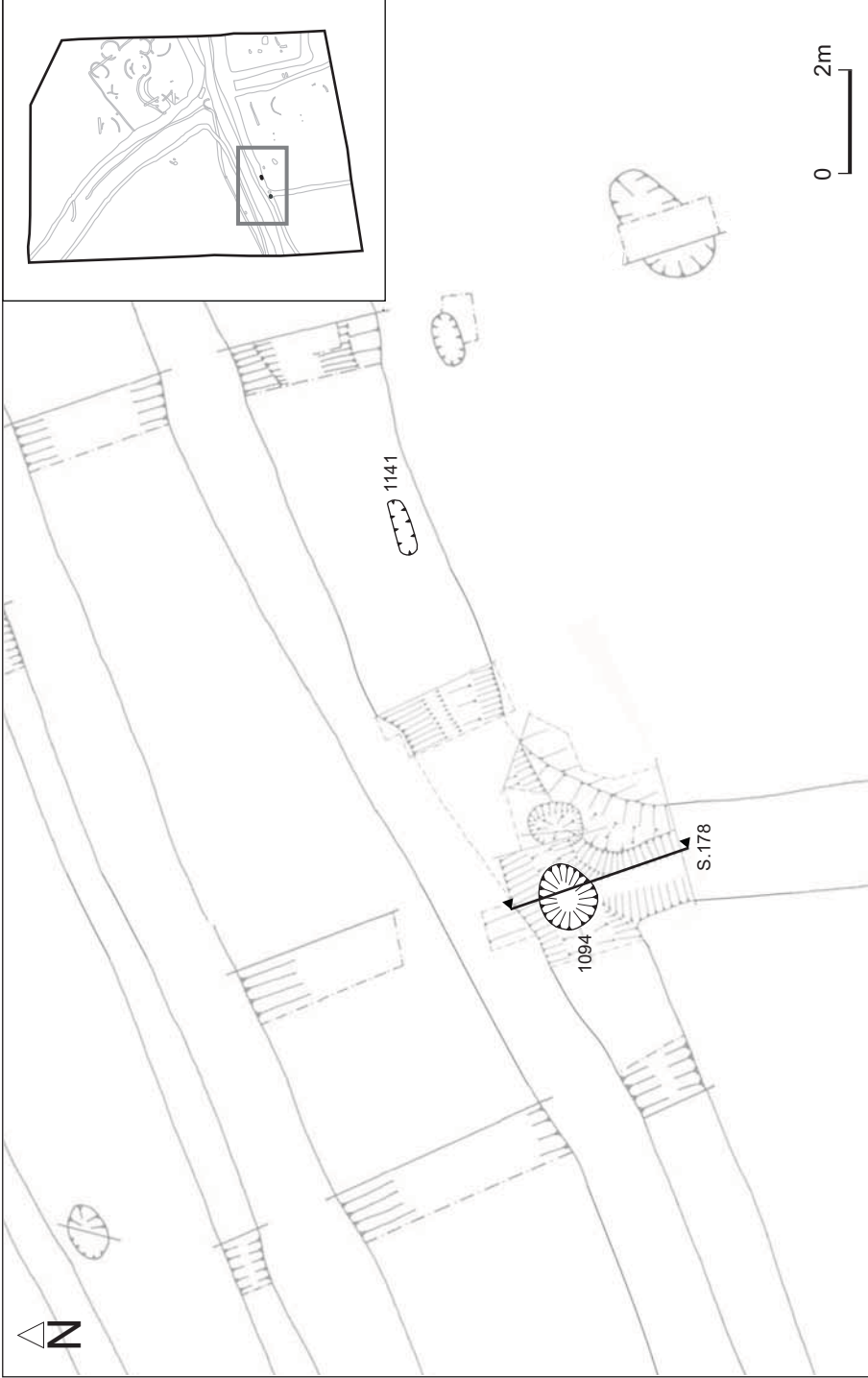
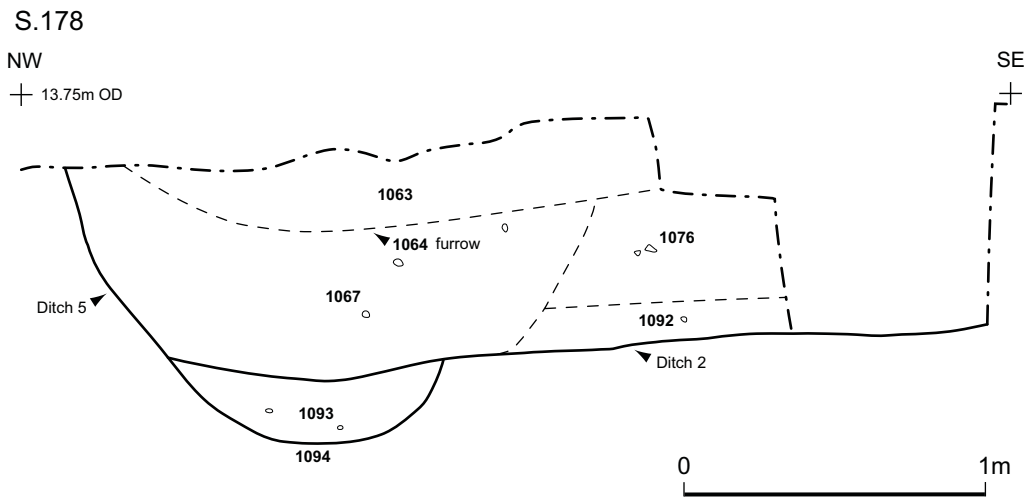


Fig. 7. Phase 2 features



*Fig. 8. Phase 2 and 3 section*

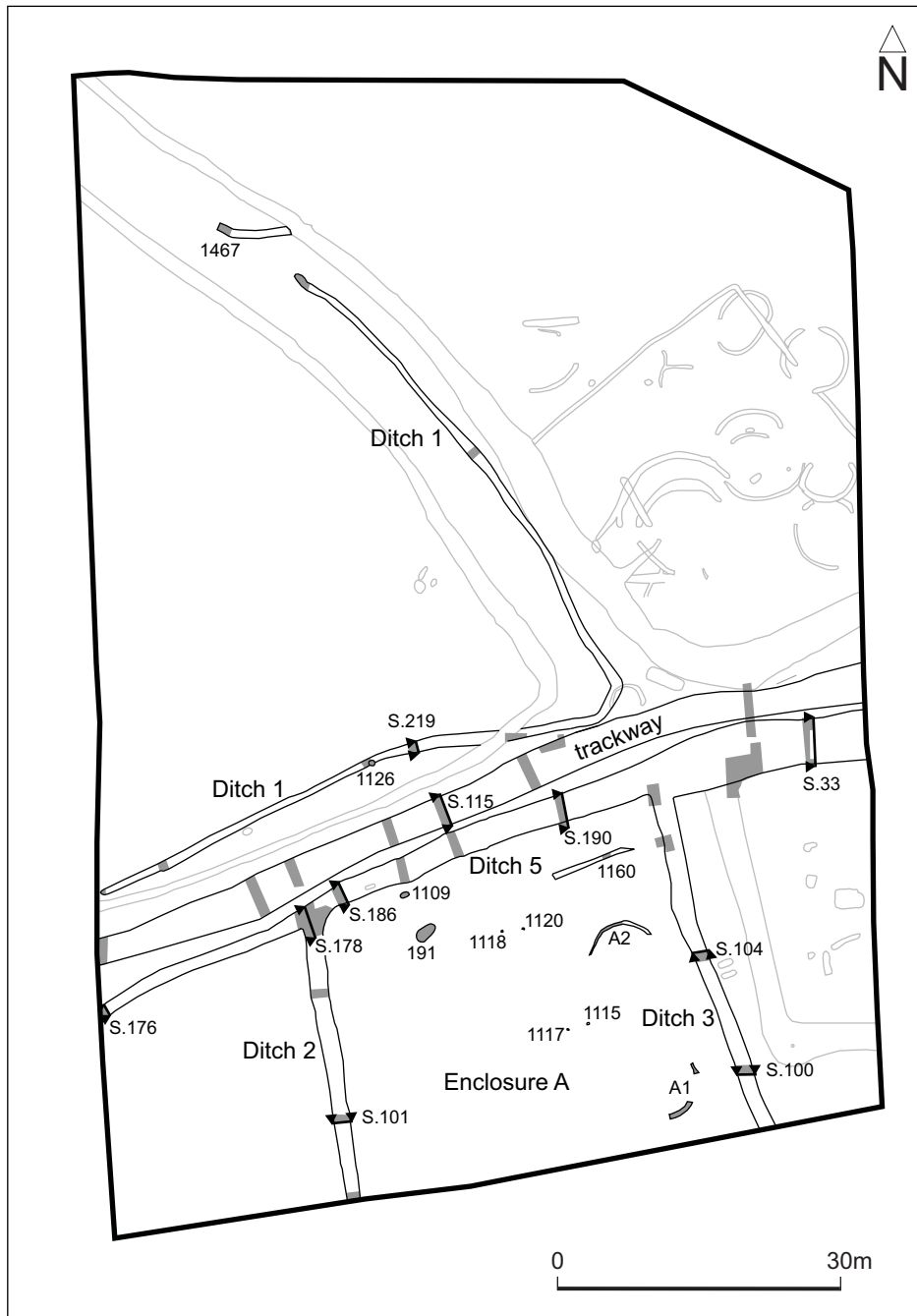


Fig. 9. Phase 3 features

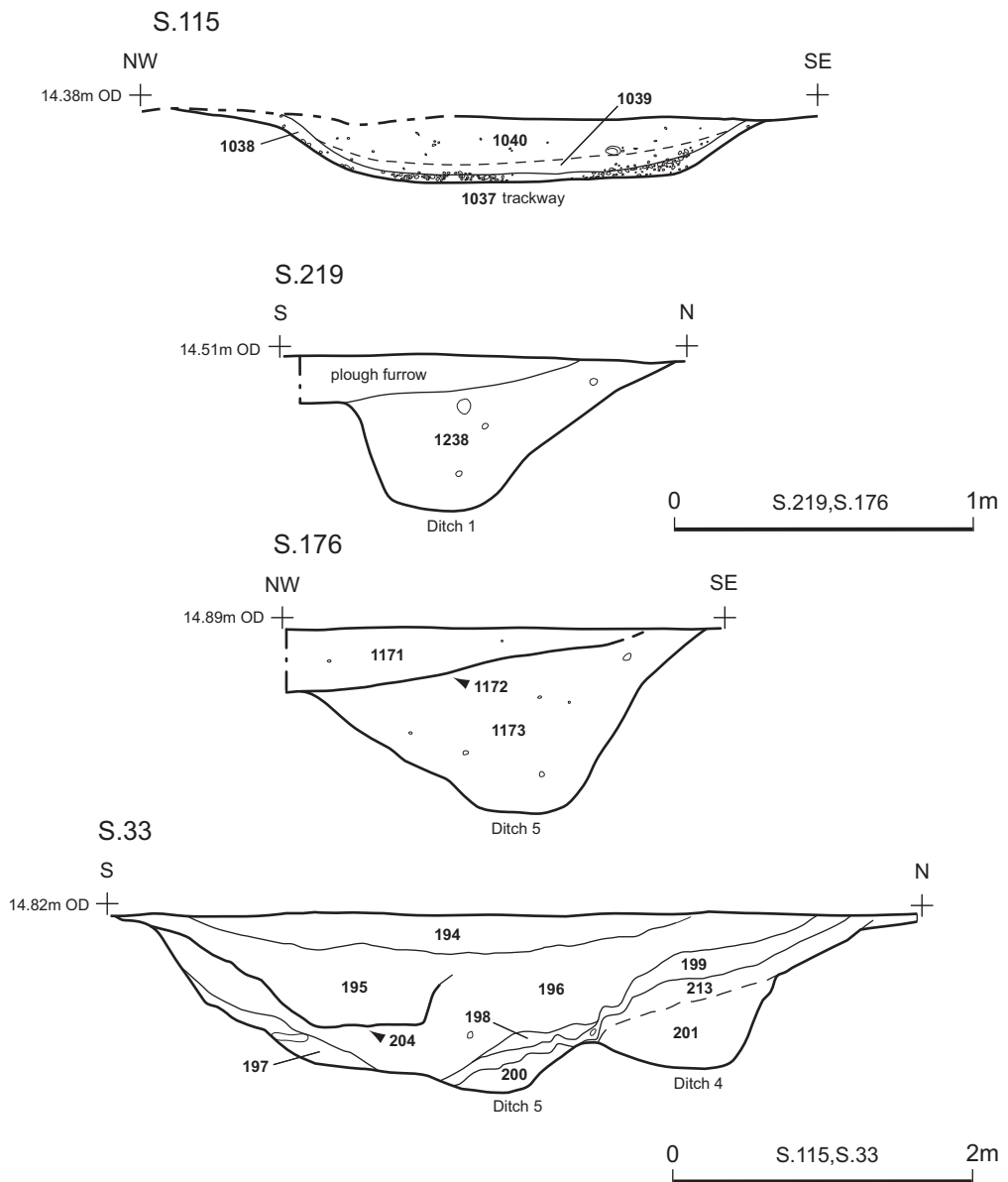


Fig. 10. Phase 3 sections

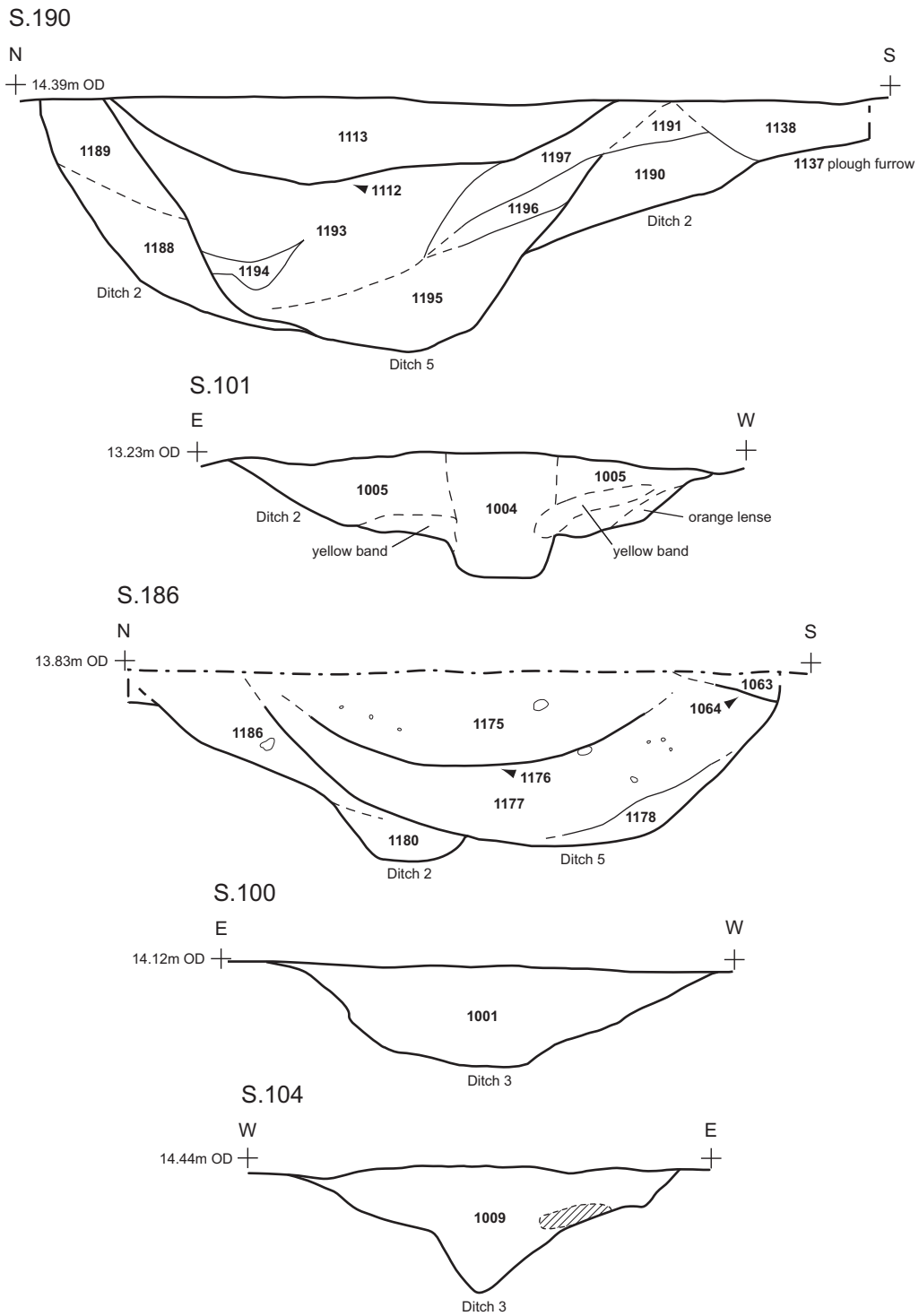


Fig. 11. Phase 3 sections continued







*Fig. 12. North-facing section through Ditch 2*

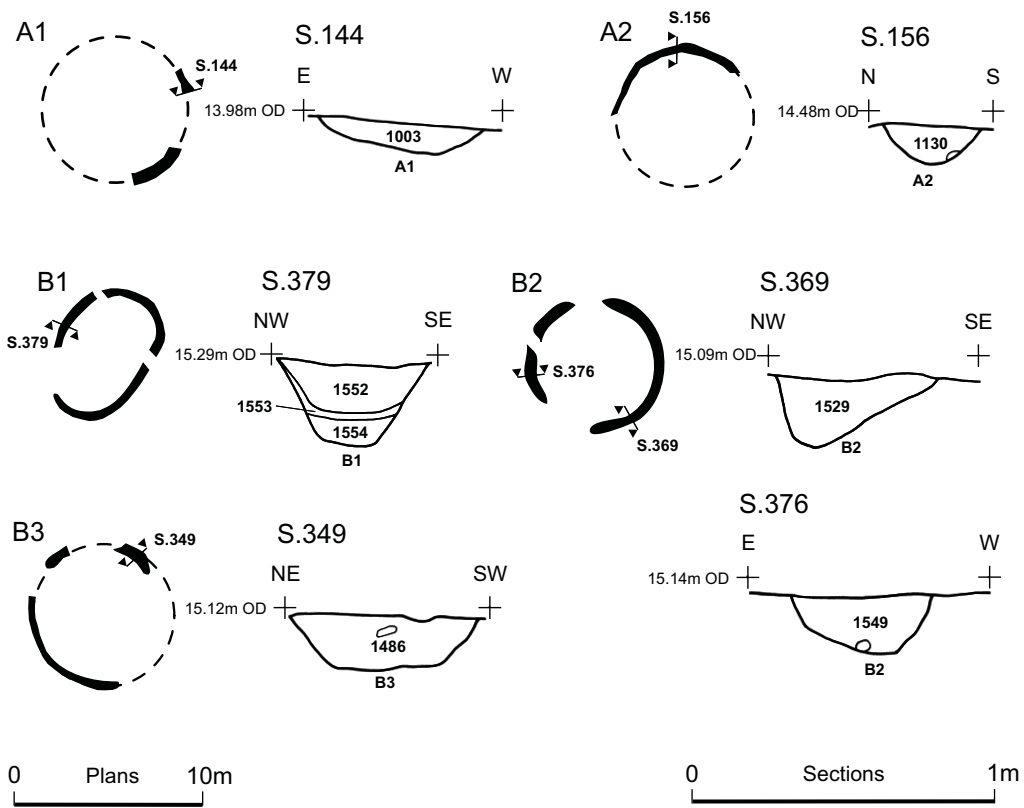


Fig. 13. Plans and representative sections of roundhouses A1-B3

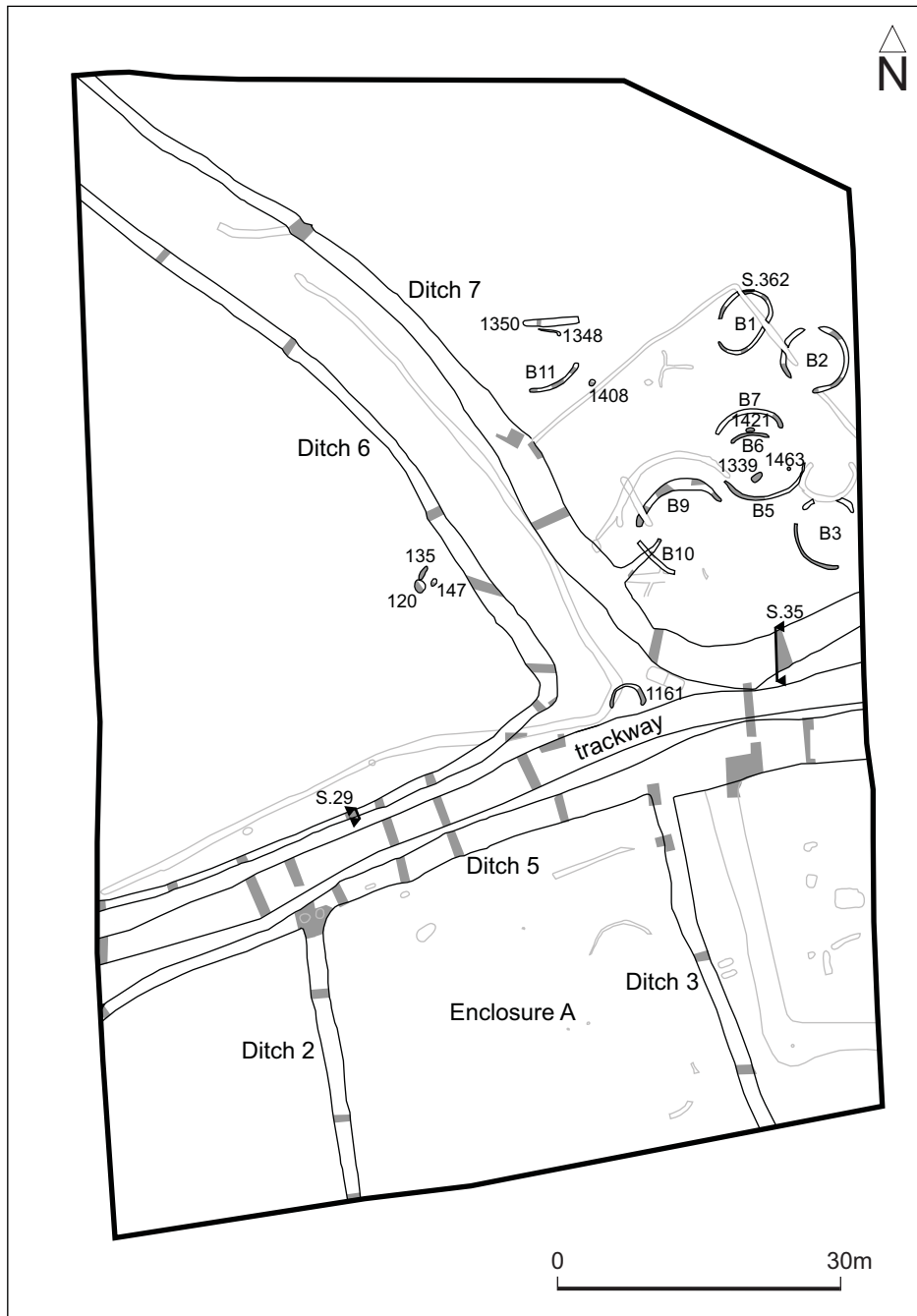


Fig. 14. Phase 4 features

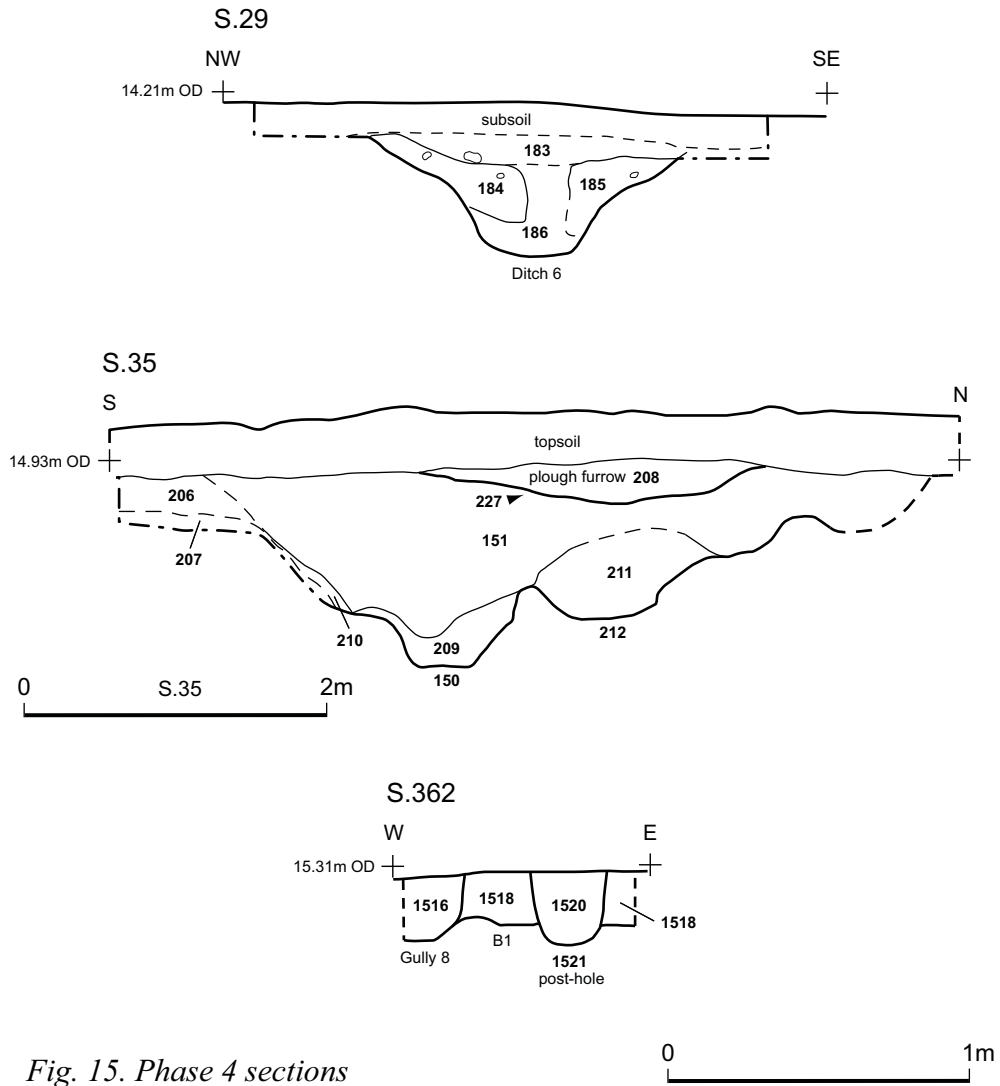


Fig. 15. Phase 4 sections

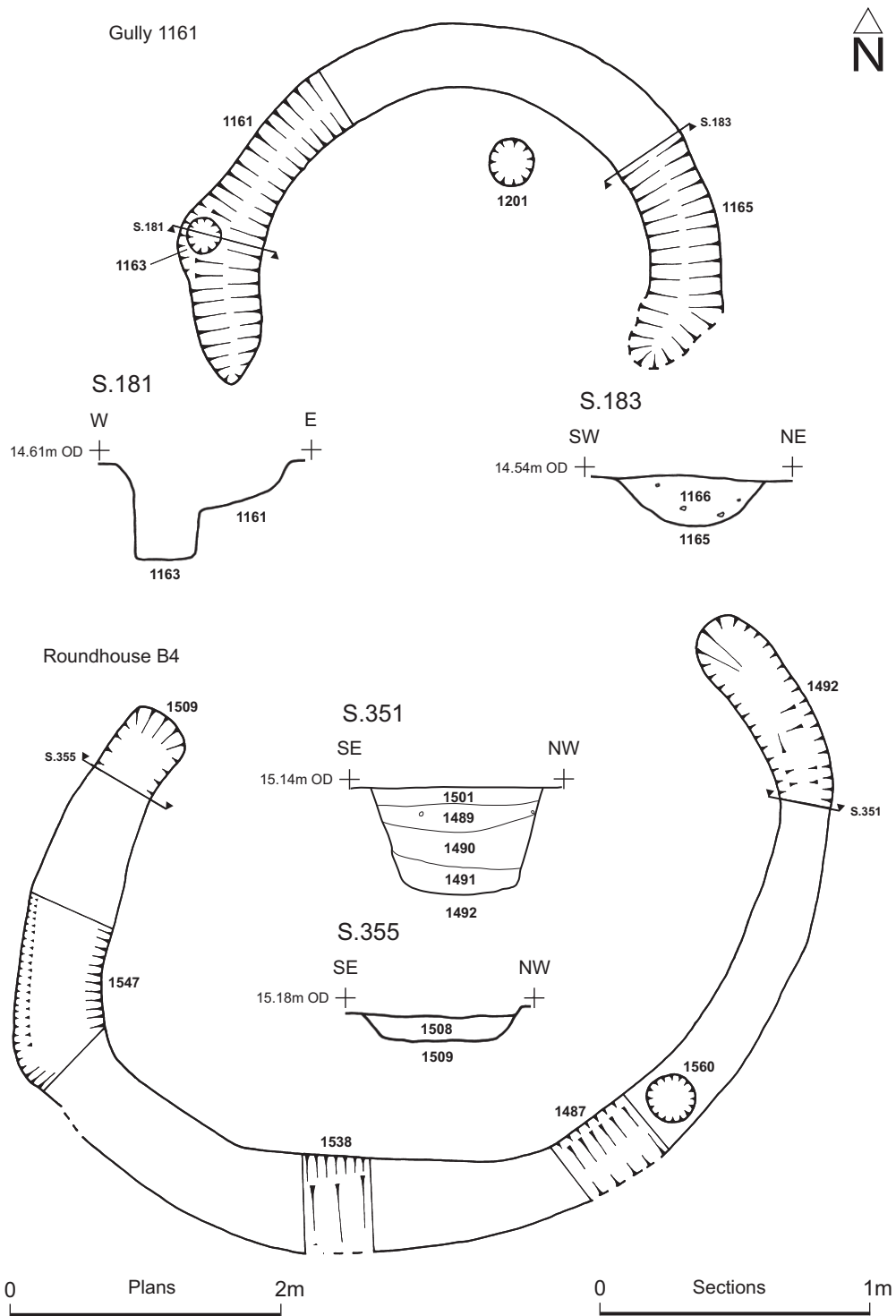


Fig. 16. Plans and representative sections of gully 1161 and roundhouse B4

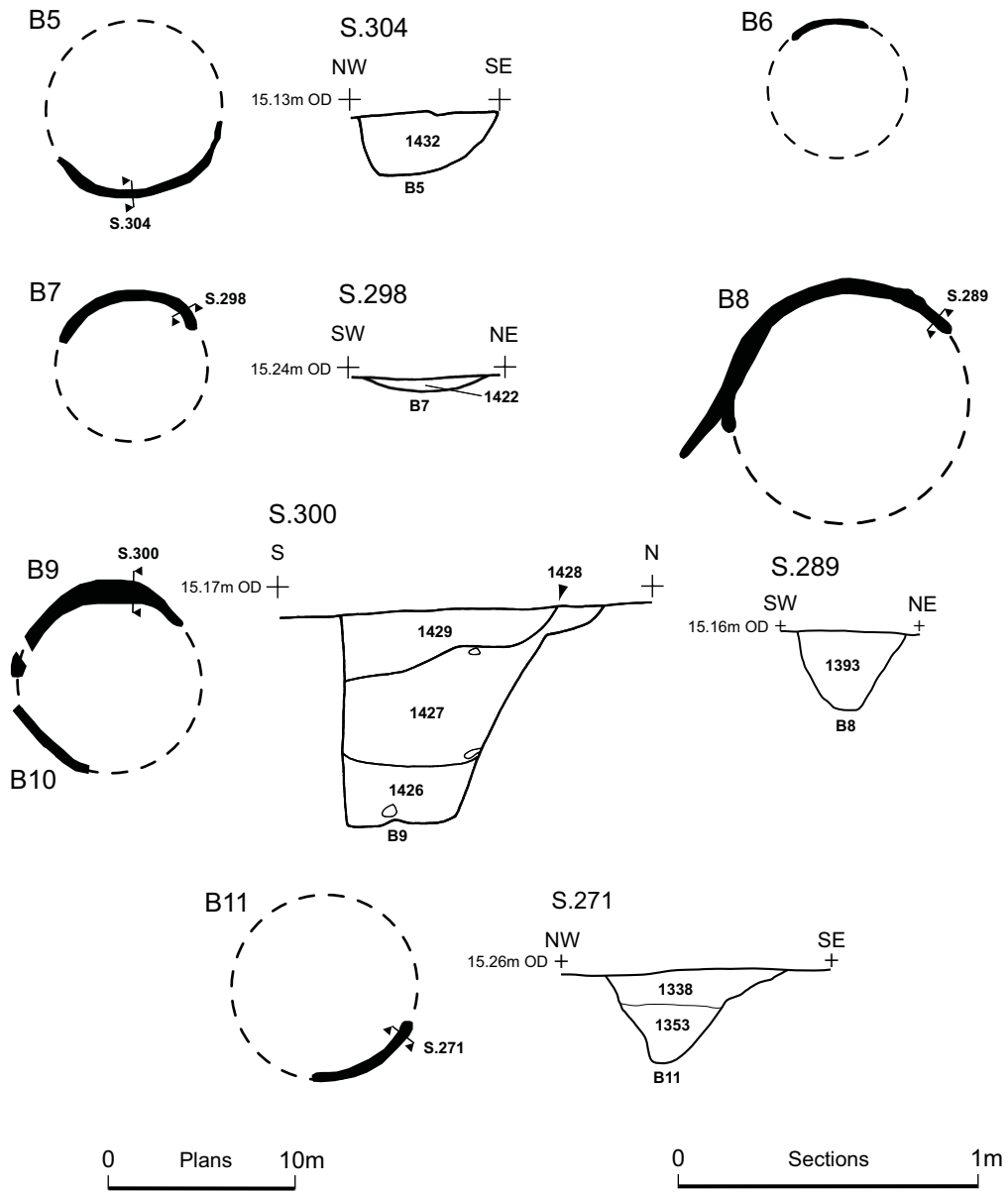


Fig. 17. Plans and representative sections of roundhouses B5-B11

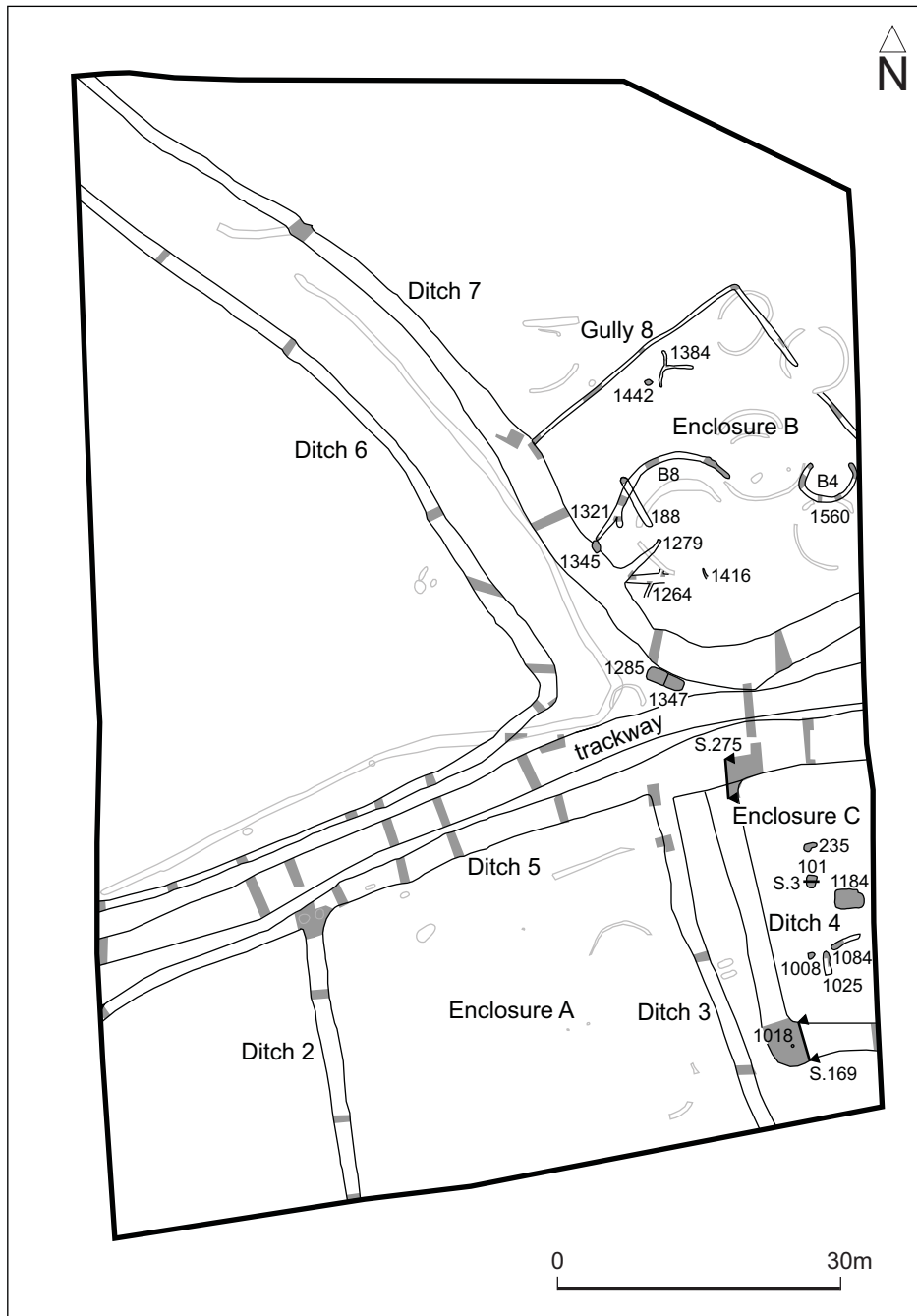
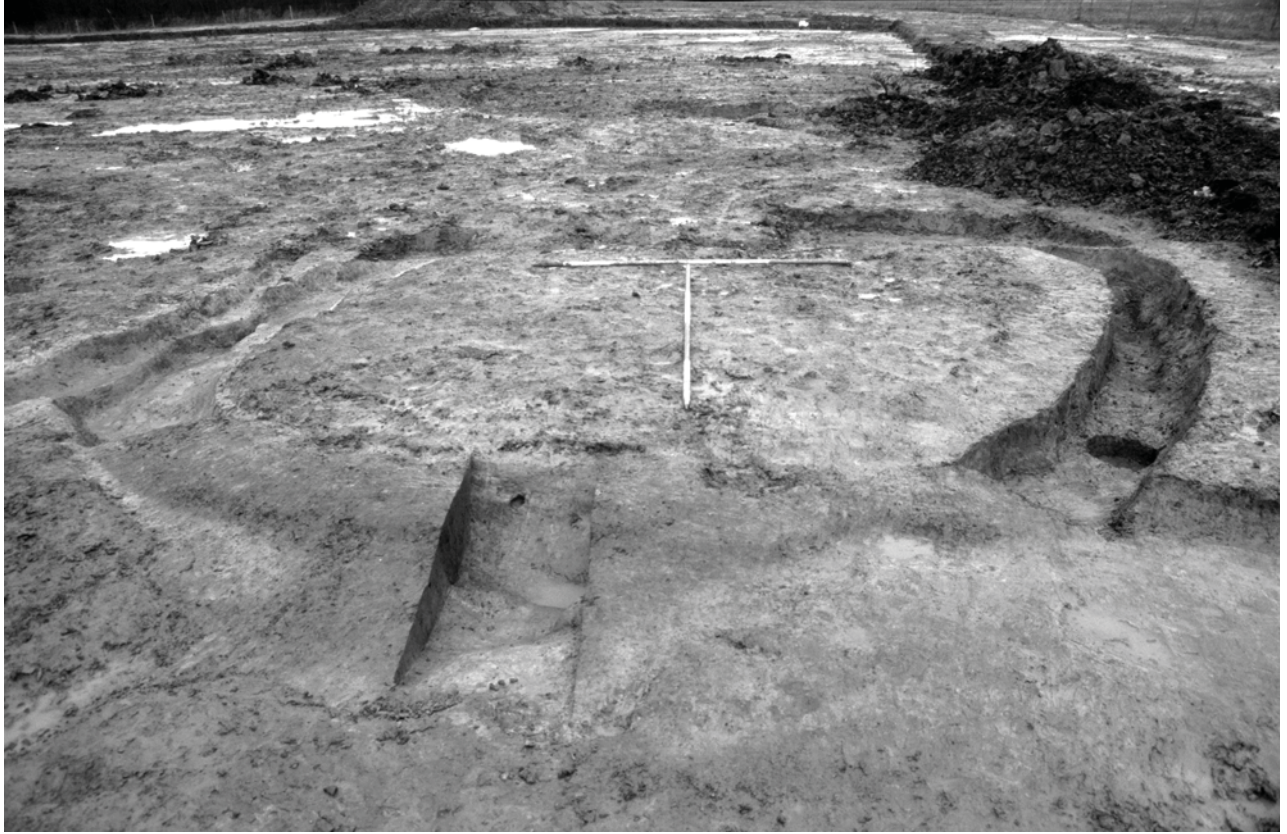


Fig. 18. Phase 5 features (including Phase 4/5 features)



*Fig. 19. View of ring gully B4 (looking west)*



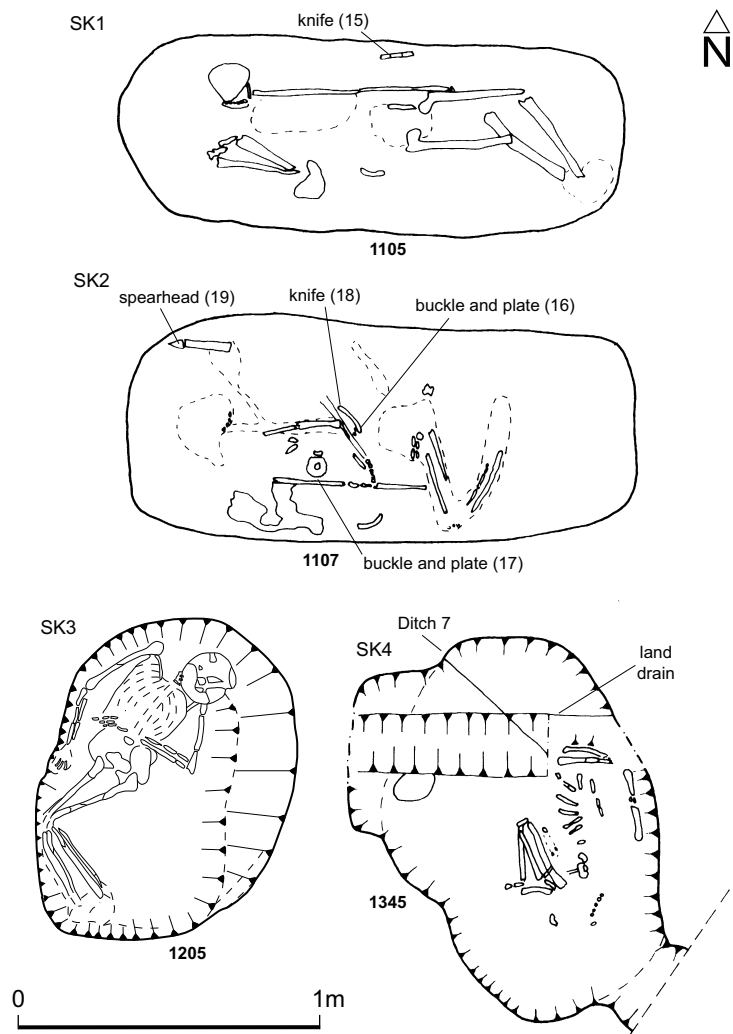


Fig. 20. Plans of the inhumations

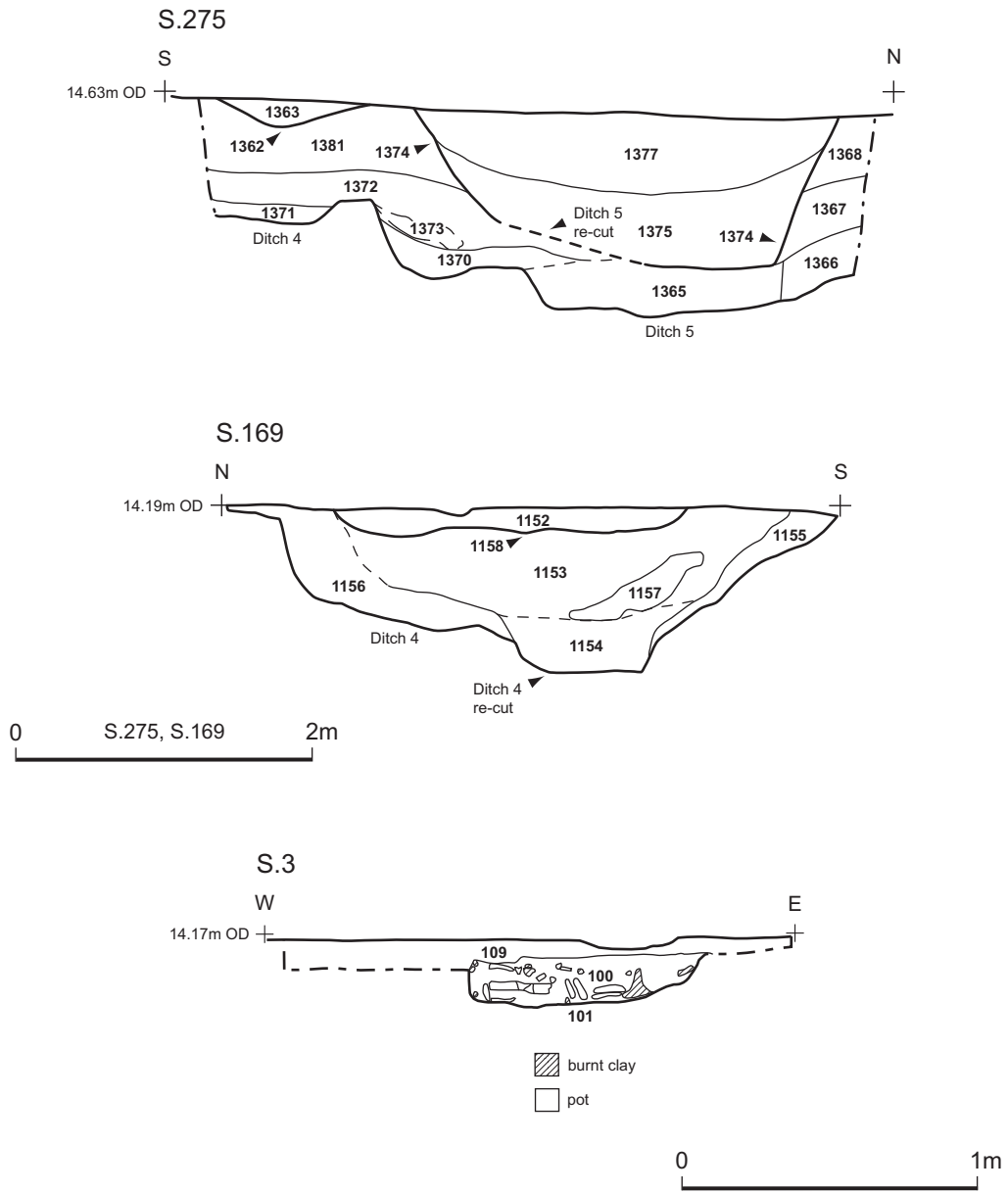
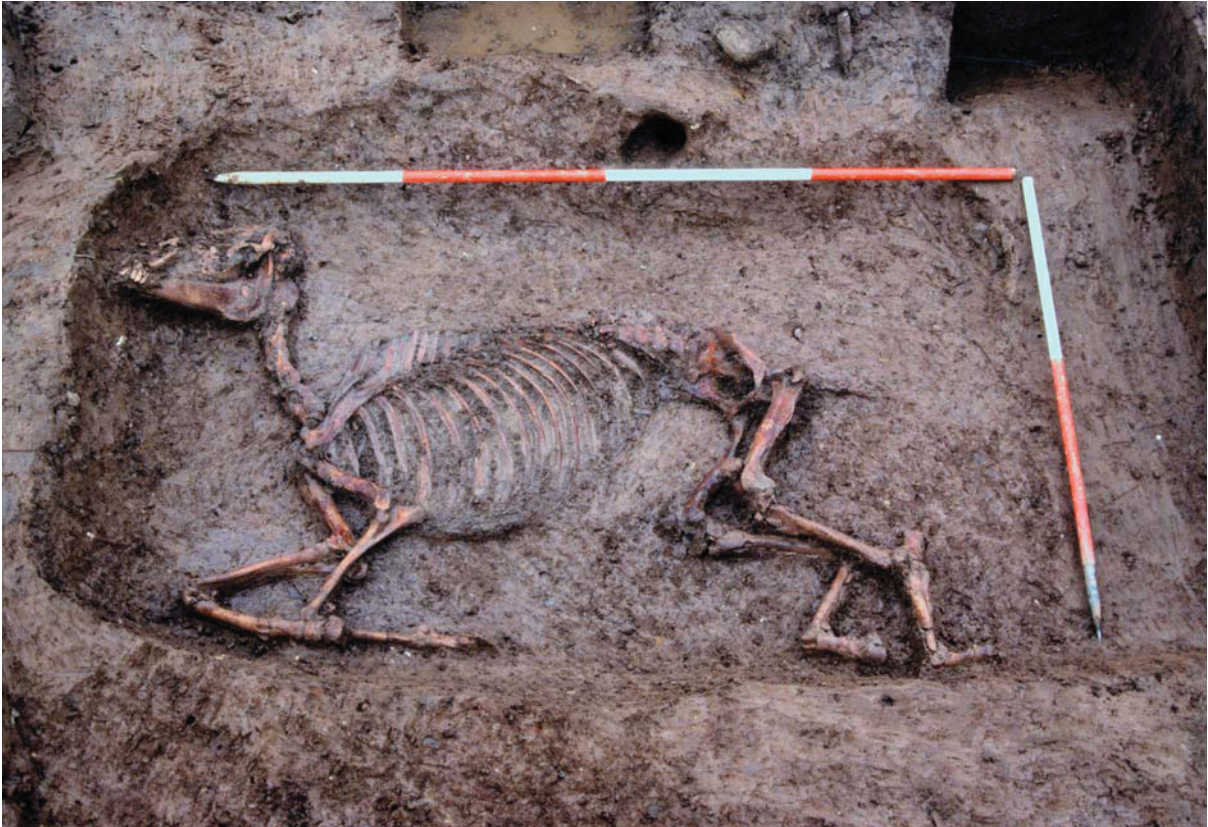


Fig. 21. Phase 5 sections



*Fig. 22. The horse skeleton in pit 1285 (looking north-north-east)*



*Fig. 23. Phase 6 features*



*Fig. 24. Poorly preserved Skeleton 1 (looking north)*

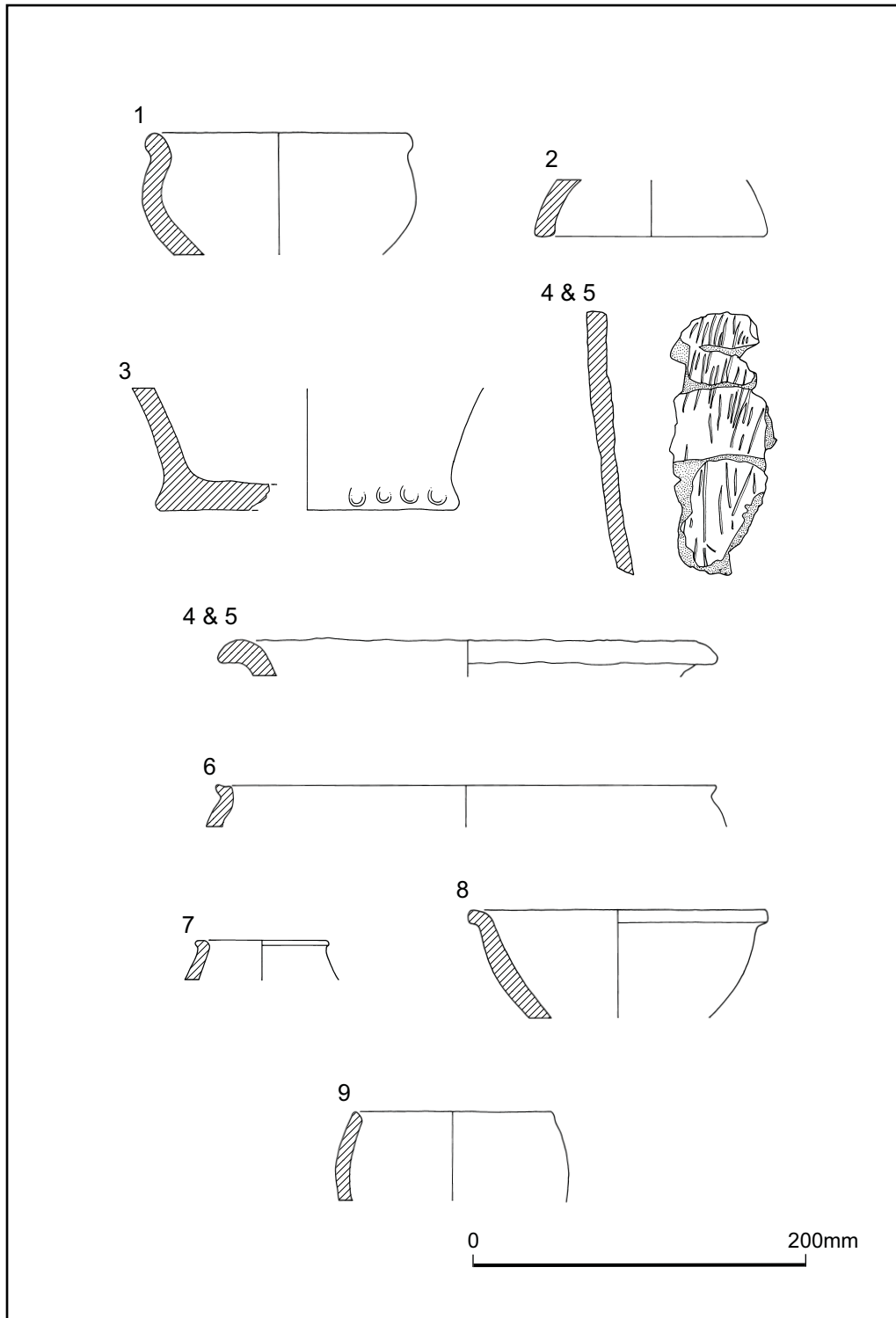


Fig. 25. Pottery illustrations 1-9

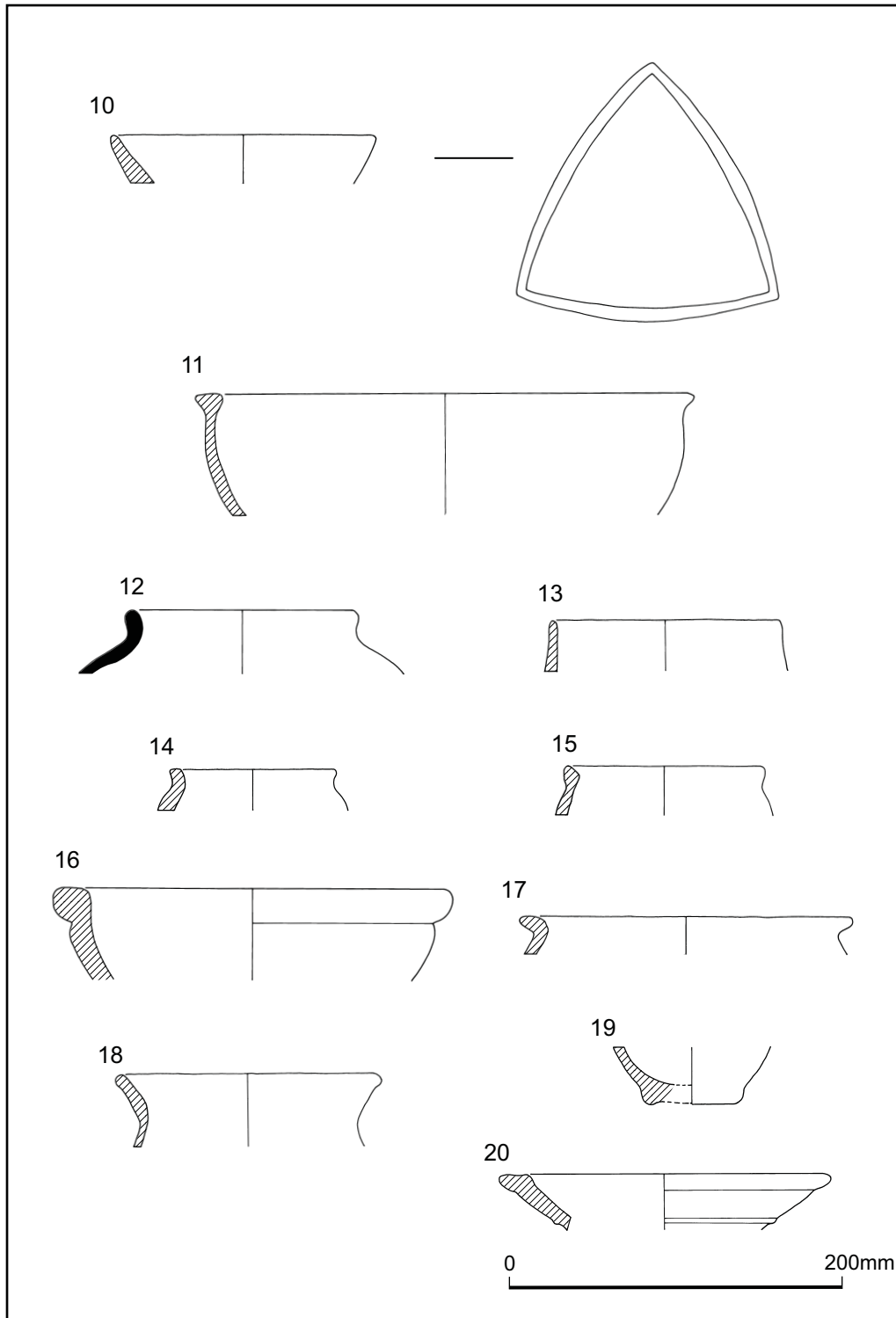


Fig. 26. Pottery illustrations 10-20

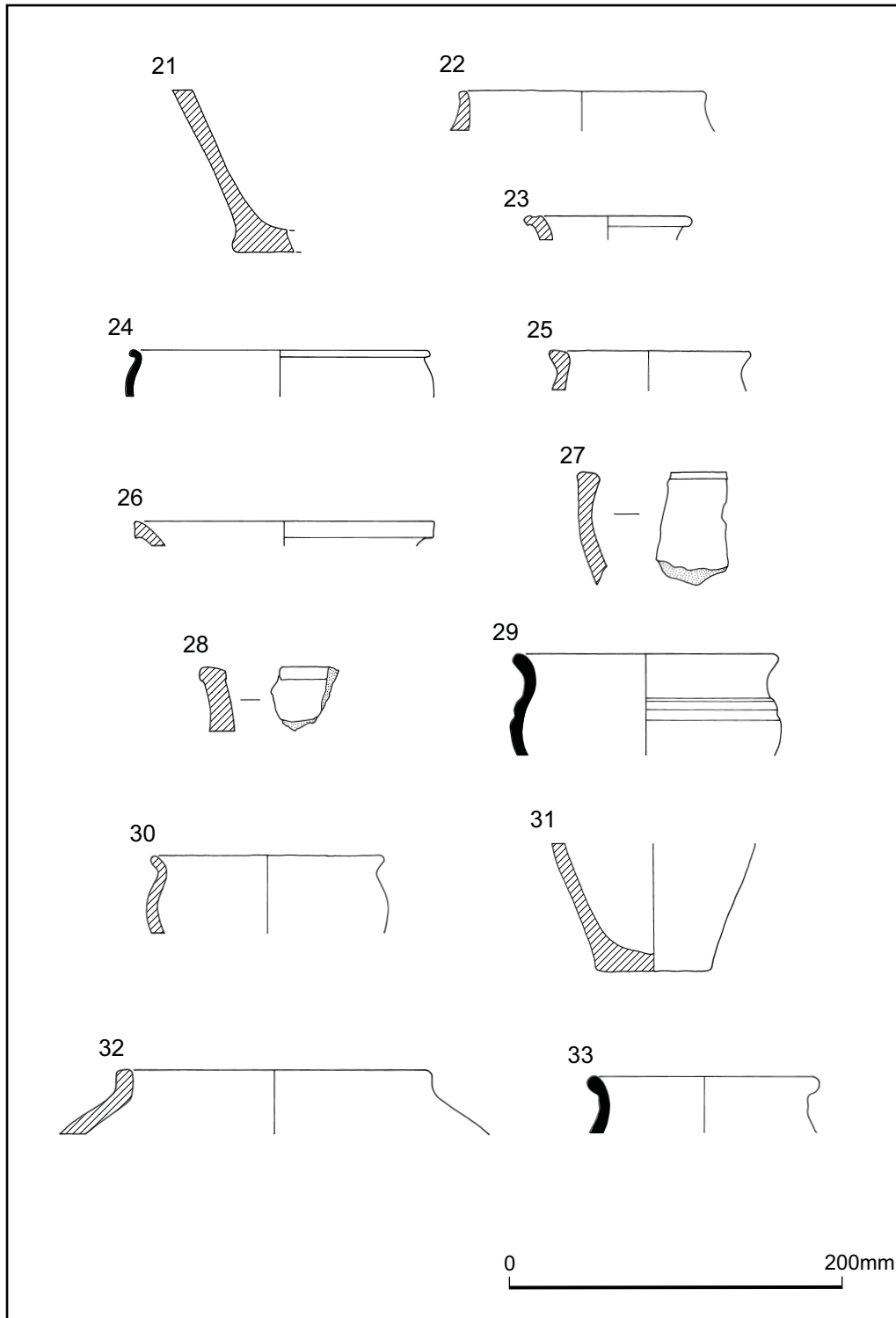


Fig. 27. Pottery illustrations 21-33



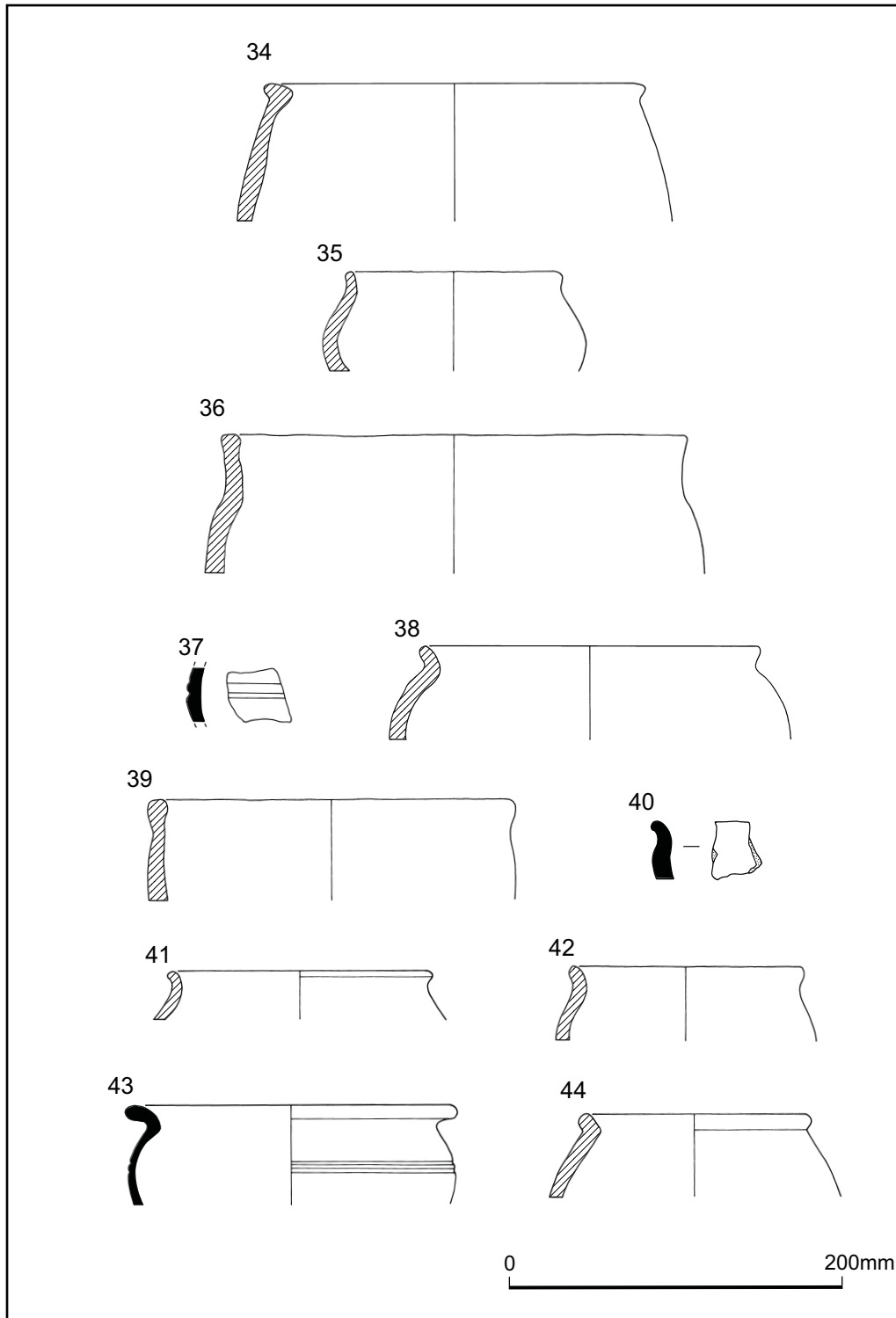


Fig. 28. Pottery illustrations 34-44

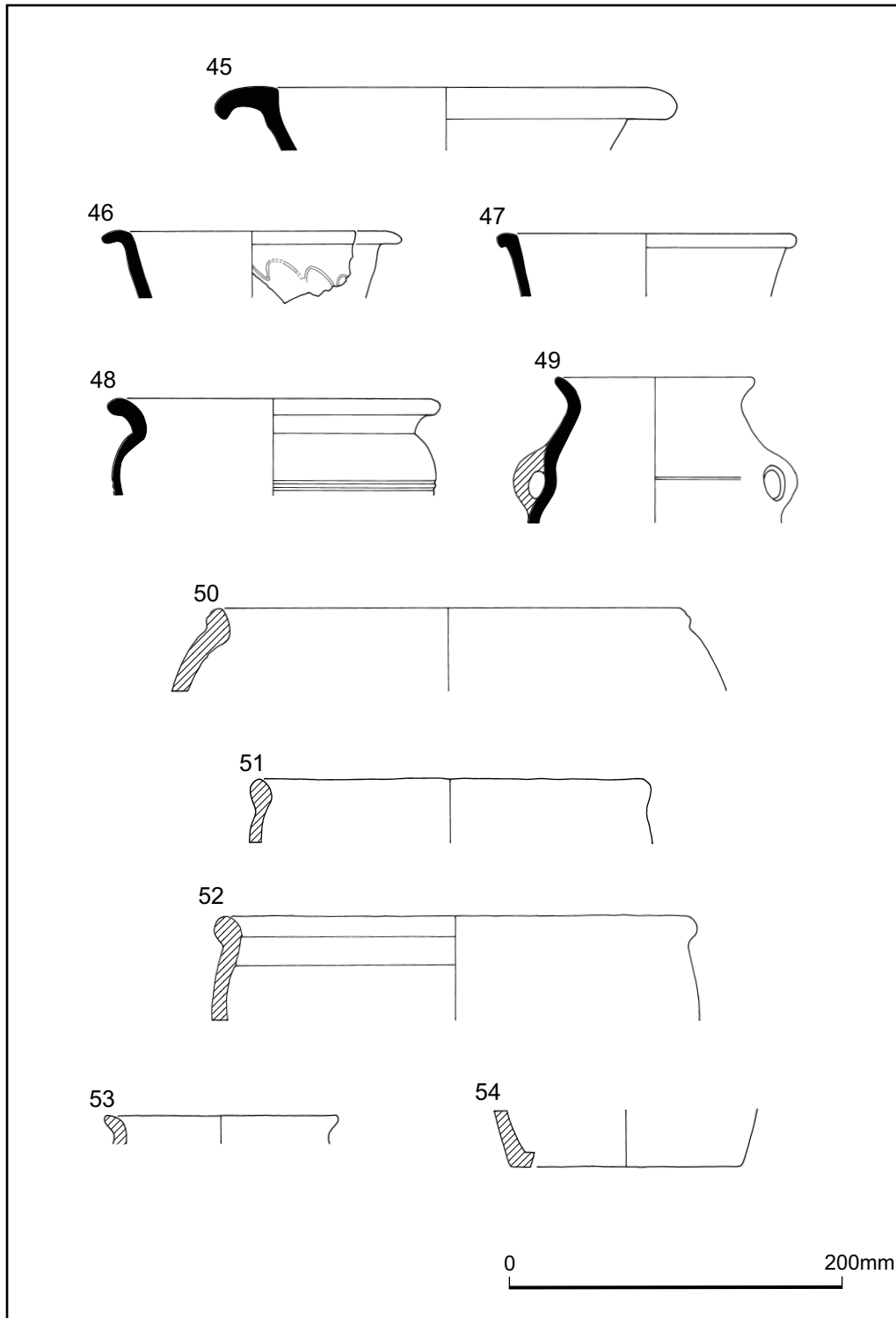


Fig. 29. Pottery illustrations 45-54

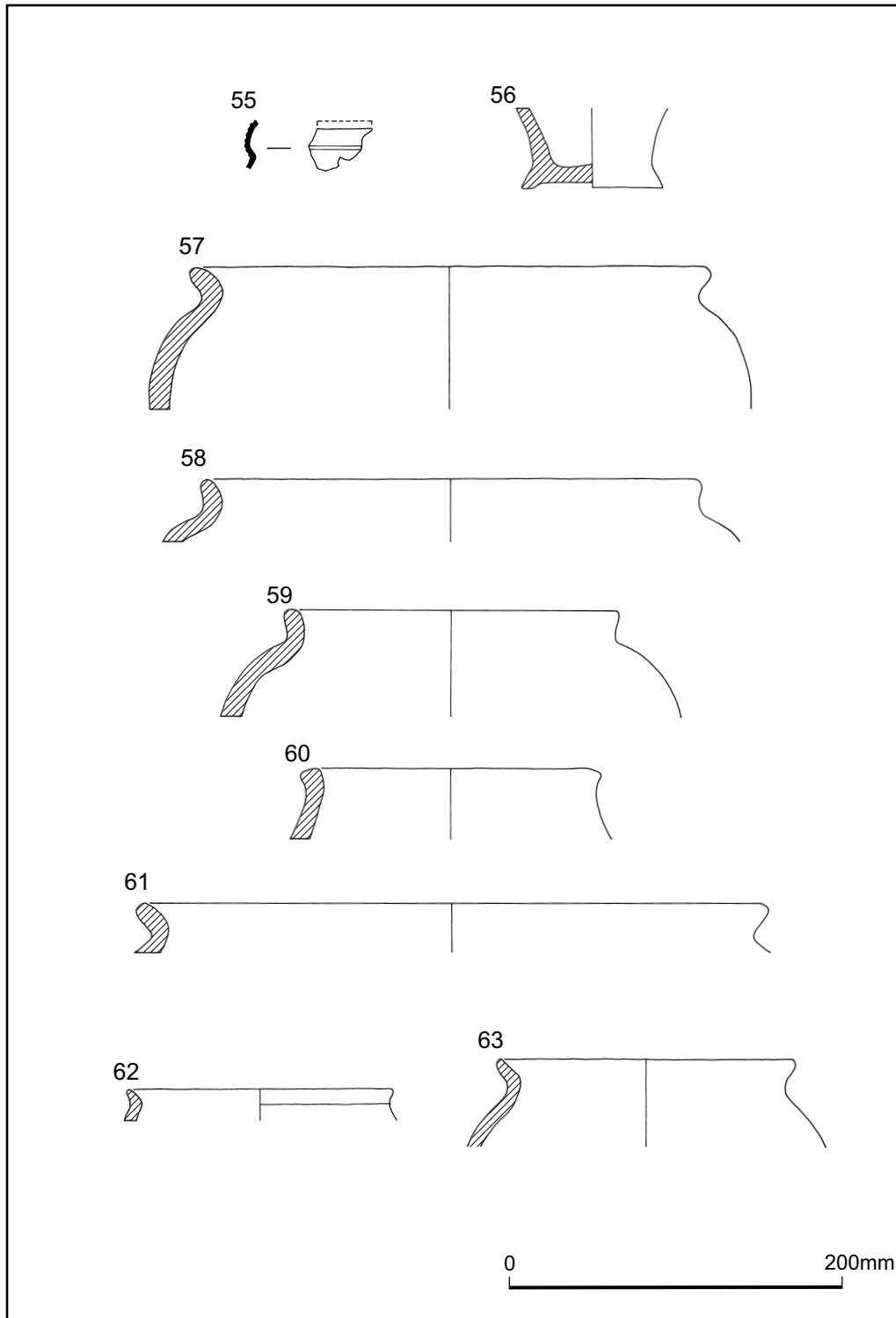


Fig. 30. Pottery illustrations 55-63

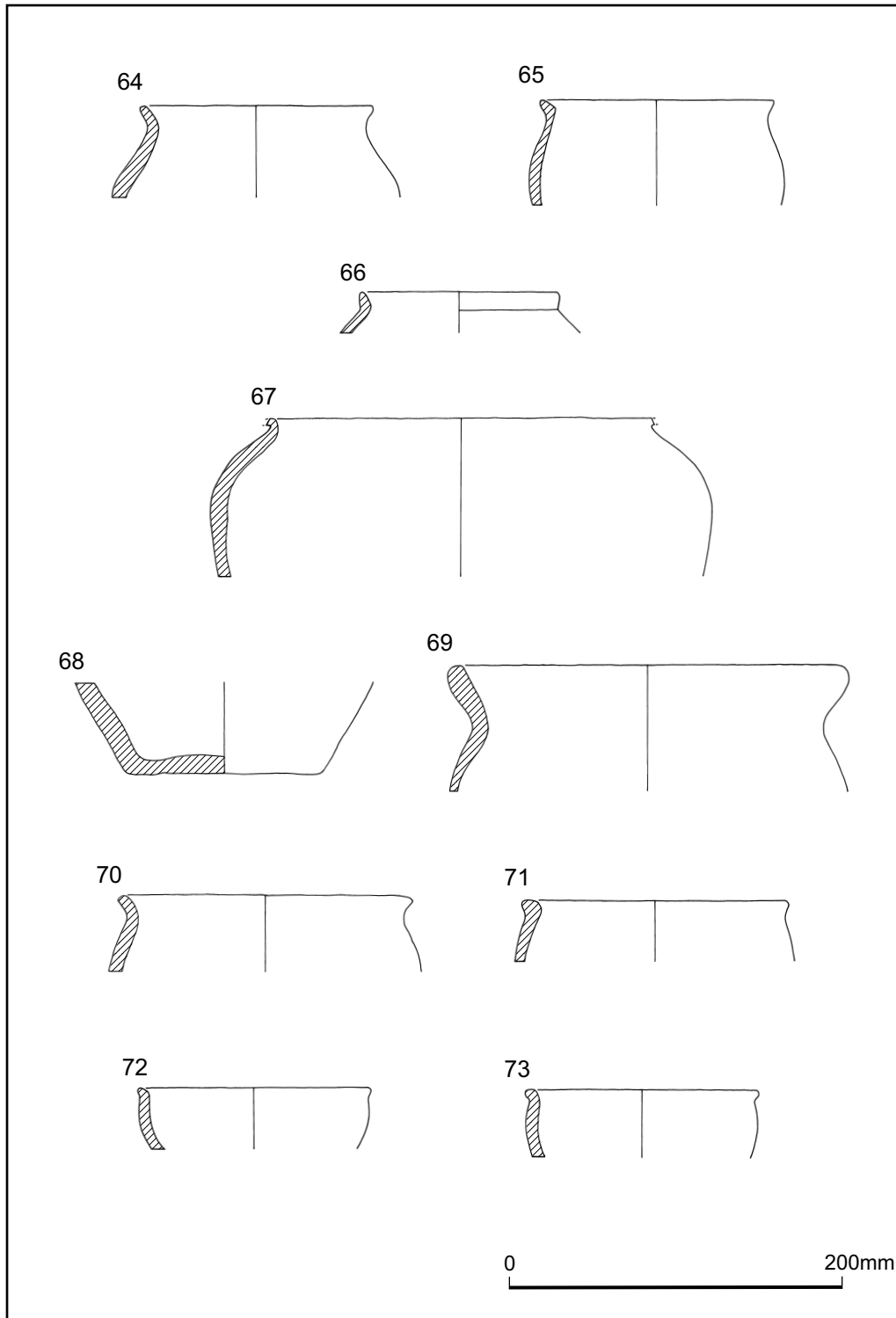


Fig. 31. Pottery illustrations 64-73

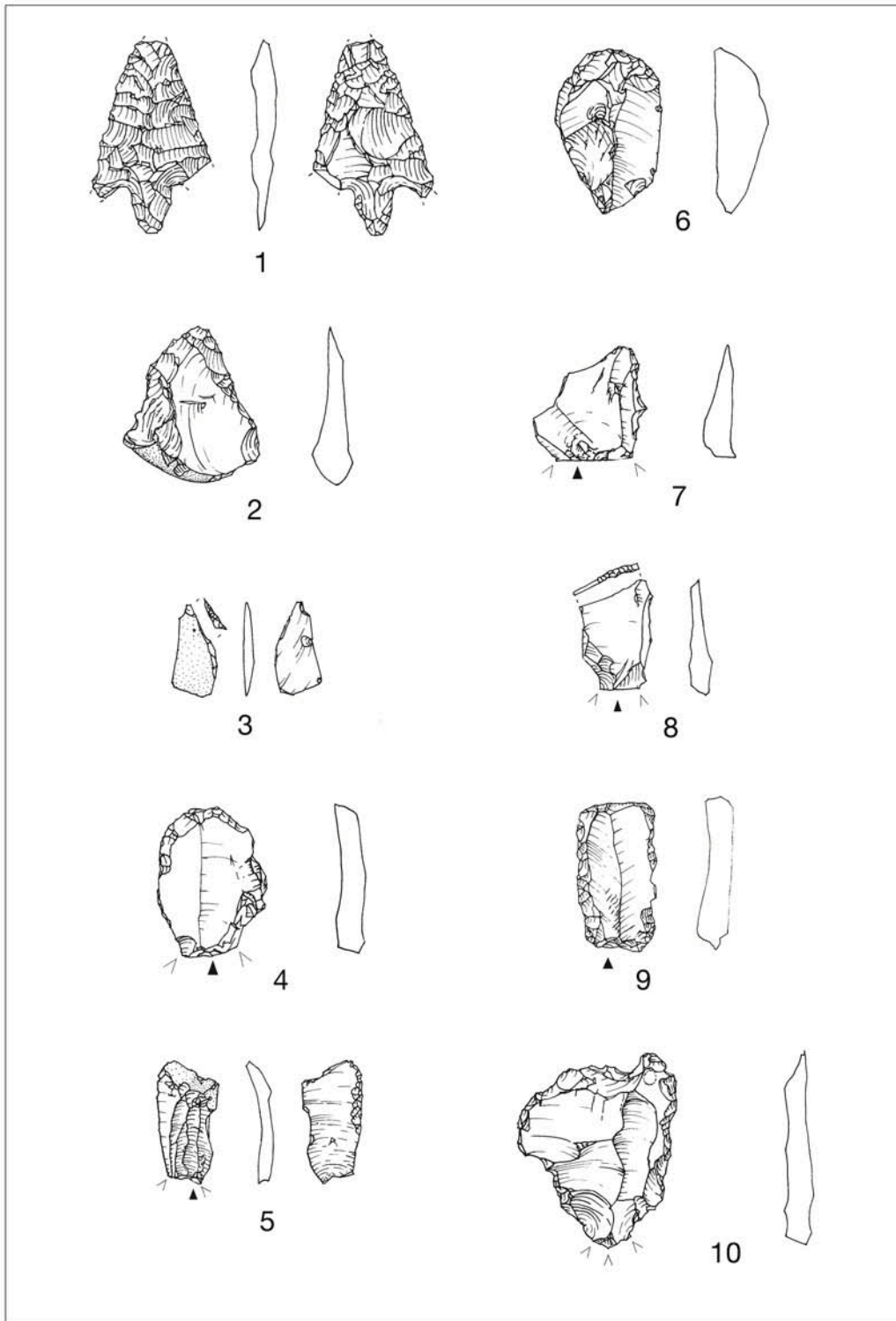


Fig. 32. Flint tools (no. 1 at 1:1, all others at 1:2)

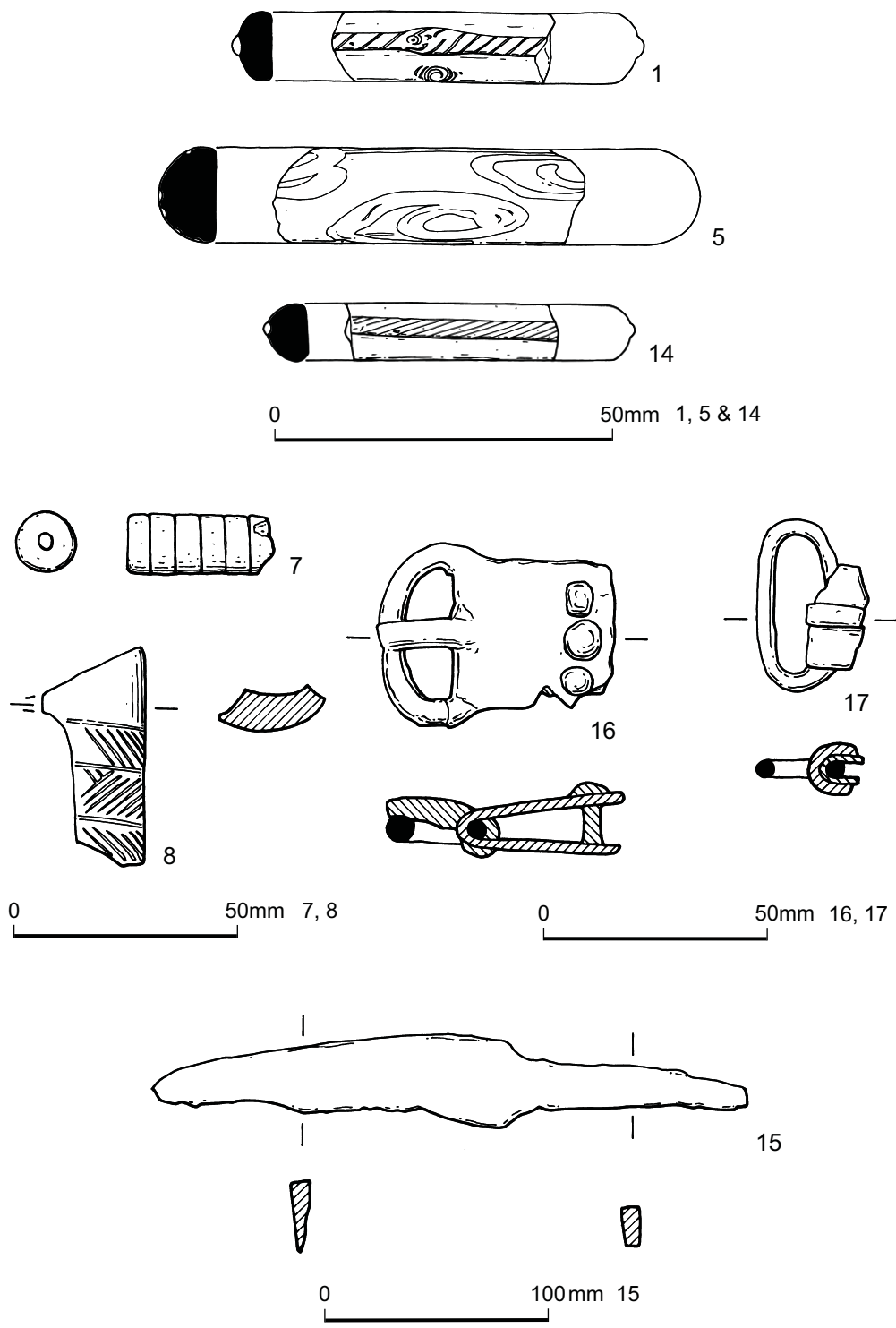


Fig. 33. Small finds 1, 5, 7-8 and 14-17

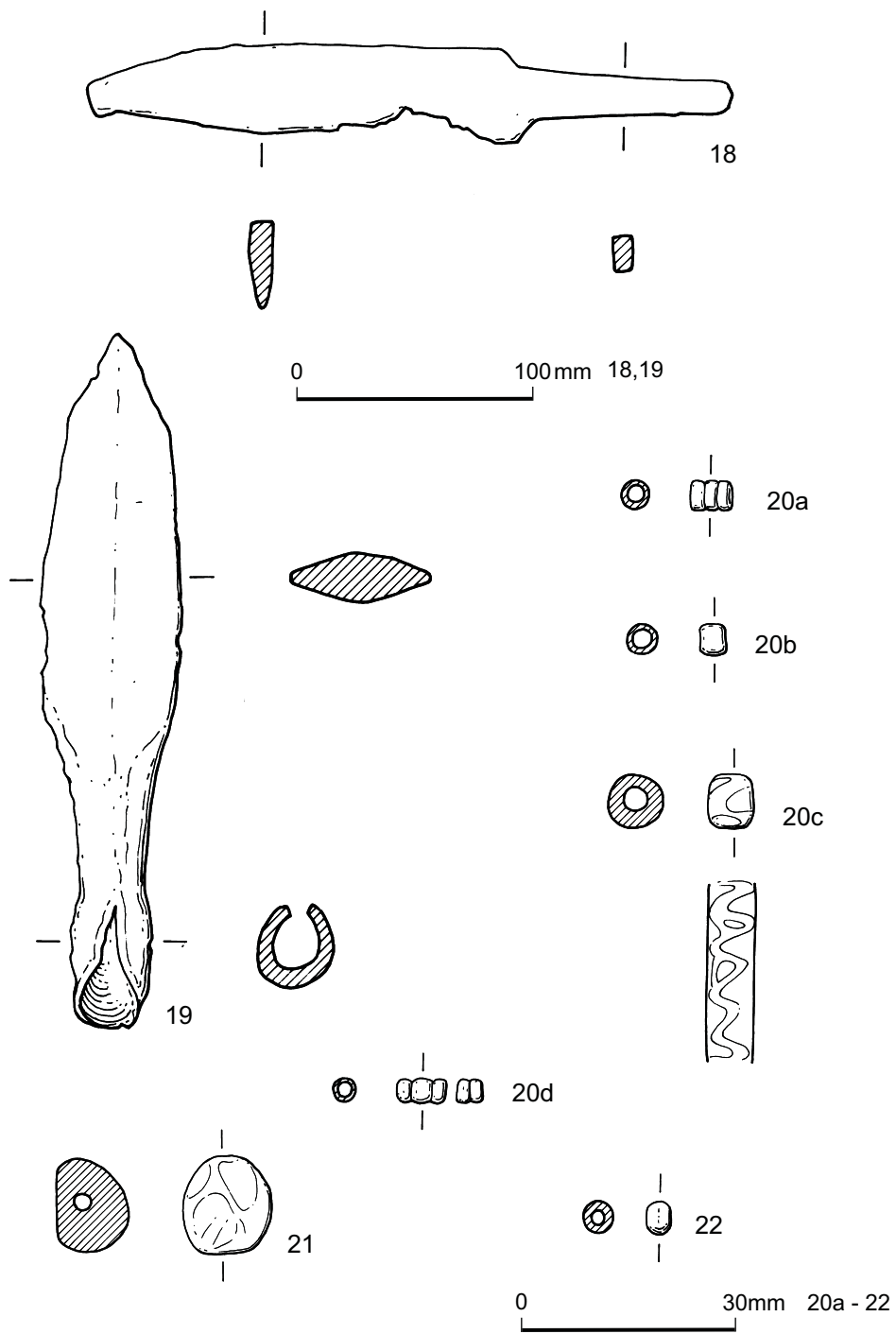


Fig. 34. Small finds 18-22

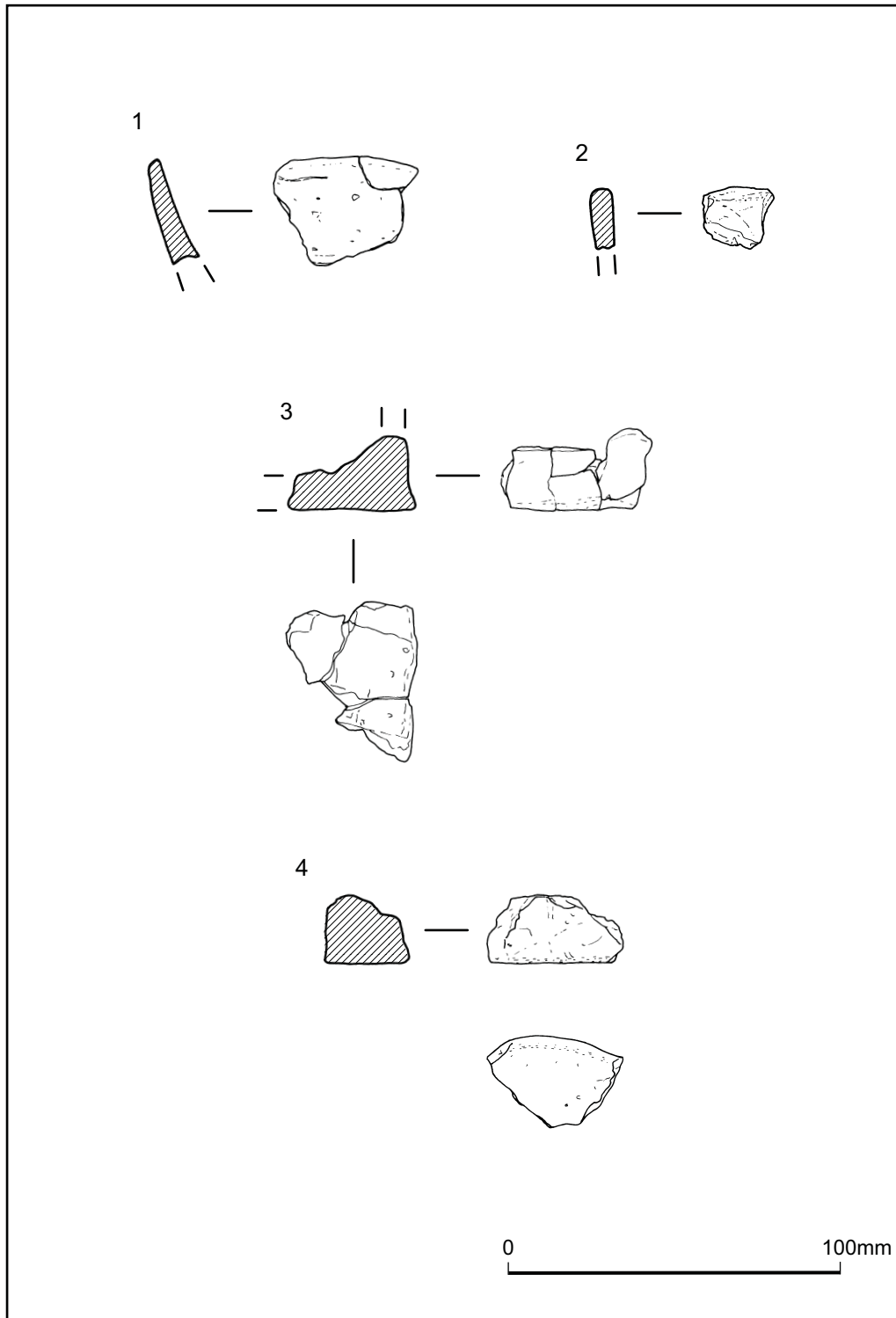
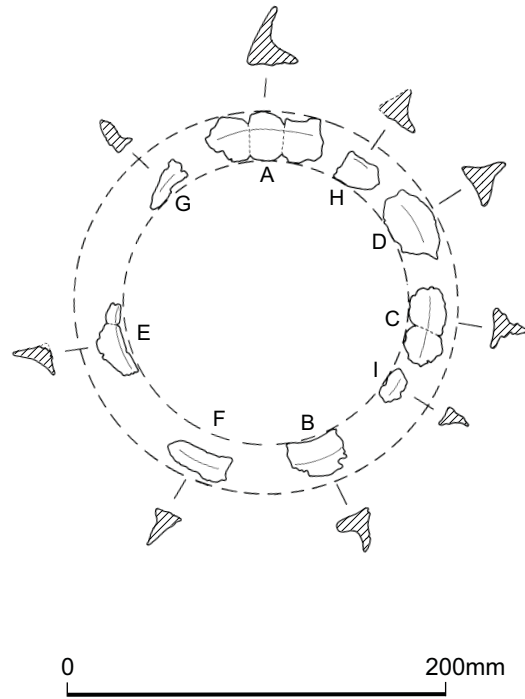


Fig. 35. Briquetage





*Fig. 36. Fired clay material*

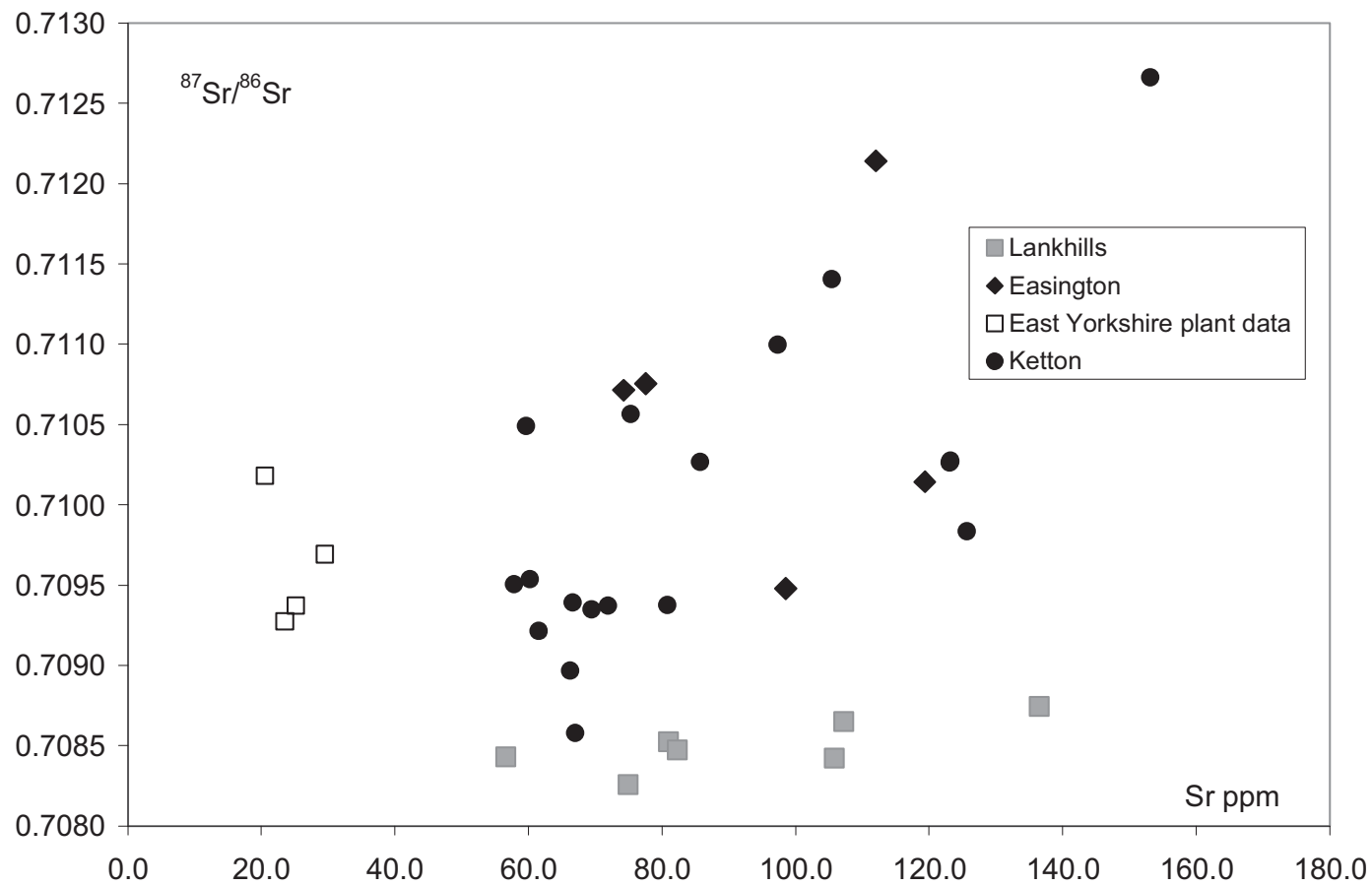


Fig. 37. A comparison of Sr concentration versus  $^{87}\text{Sr}/^{86}\text{Sr}$  isotope composition for the samples of this study with other data sets from Yorkshire, Leicestershire and Hampshire

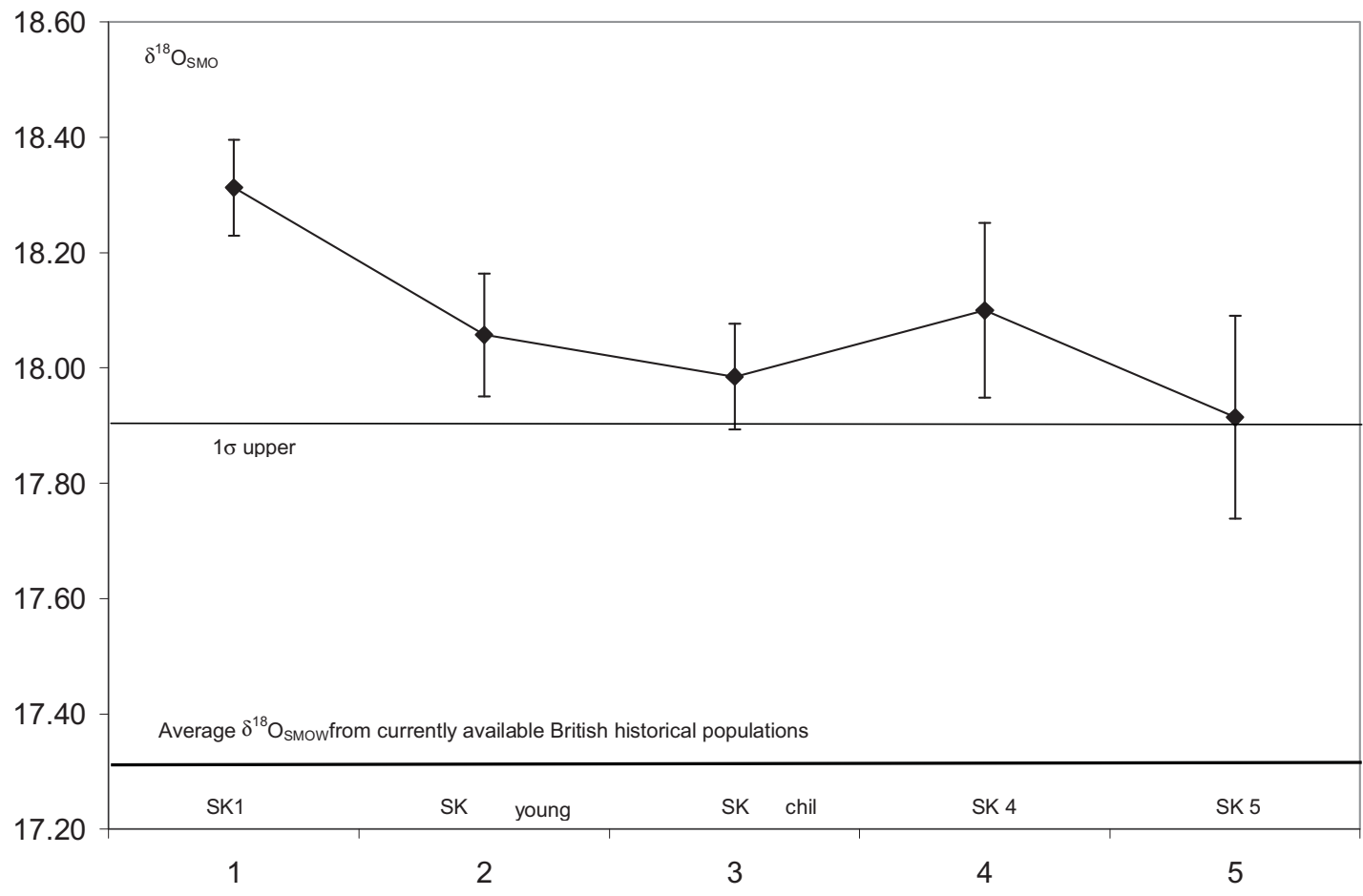


Fig. 38.  $\delta^{18}\text{O}_{\text{SMO}}$  values for tooth enamel from this study compared with tooth enamel (unpublished) from British archaeological populations ( $n=136$ )

Table 1. Results of the radiocarbon dating programme

| Lab. code          | Phase/<br>Context | Feature/group    | Material                 | Radiocarbon<br>Age BP | Calibrated Age<br>Range $\delta 1$     | Calibrated Age<br>Range $\delta 2$ | Delta 13C<br>rel. PDB<br>(‰) |
|--------------------|-------------------|------------------|--------------------------|-----------------------|--|------------------------------------|------------------------------|
| <i>Beta-217173</i> | <i>6/176</i>      | <i>Ditch 6</i>   | <i>Sheep/goat bone</i>   | <i>2180±40</i>        | <i>360-290 BC + 230-180 BC</i>         | <i>370-110 BC</i>                  | <i>-22.6</i>                 |
| Beta-217174        | 5/1019            | Cremation pit    | Human bone               | 1890±40               | AD 70-140                              | AD 40-230                          | -3.6                         |
| <i>Beta-217176</i> | <i>3/1038</i>     | <i>Trackway</i>  | <i>Cattle/horse bone</i> | <i>2160±40</i>        | <i>350-310 BC + 210-160 BC</i>         | <i>360-80 BC</i>                   | <i>-21.9</i>                 |
| <i>Beta-217178</i> | <i>3/1096</i>     | <i>Ditch 5</i>   | <i>Sheep/goat tooth</i>  | <i>1800±40</i>        | <i>AD 150-250</i>                      | <i>AD 120-340</i>                  | <i>-24.2</i>                 |
| Beta-217180        | 1/1127            | Cremation pit    | Quercus sp. charcoal     | 2800±40               | 1000-900 BC                            | 1030-840 BC                        | -24.3                        |
| Beta-217182        | 2/1140            | Cremation pit    | Human bone               | 2140±40               | 200-110 BC                             | 360-290 BC +<br>230-50 BC          | NA                           |
| Beta-217183        | 1/1148            | Cremation pit    | Quercus sp. charcoal     | 2830±40               | 1020-920 BC                            | 1100-900 BC                        | -24.3                        |
| Beta-217184        | 5/1185            | Kiln 1184        | Carbonised barley/wheat  | 1890±40               | AD 70-140                              | AD 40-230                          | -23.9                        |
| <i>Beta-217186</i> | <i>3/1238</i>     | <i>Ditch 1</i>   | <i>Horse tooth</i>       | <i>370±40</i>         | <i>AD 1460-1520 +<br/>AD 1580-1630</i> | <i>AD 1440-1640</i>                | <i>-23.2</i>                 |
| <i>Beta-217188</i> | <i>5/1344</i>     | <i>Grave SK4</i> | <i>Human bone</i>        | <i>1890±40</i>        | <i>AD 70-140</i>                       | <i>AD 40-230</i>                   | <i>-23.5</i>                 |
| <i>Beta-217189</i> | <i>5/1393</i>     | <i>B8</i>        | <i>Cattle/horse bone</i> | <i>1920±40</i>        | <i>AD 50-120</i>                       | <i>AD 10-150</i>                   | <i>-22.3</i>                 |
| Beta-217191        | 4/1523            | B2               | Carbonised barley/wheat  | 1990±40               | 40 BC-AD 60                            | 60 BC-AD 90                        | -22.7                        |
| Beta-217192        | 5/1546            | B4               | Animal bone              | 2140±40               | 200-110 BC                             | 360-290 BC +<br>230-50 BC          | -3.7                         |
| Beta-220457        | 5/1284            | Pit 1285         | Horse bone               | 1860±40               | AD 100-220                             | AD 70-240                          | -22.8                        |

The conventional radiocarbon ages are quoted in years BP (i.e. before AD 1950) and the errors are expressed at the one sigma level of confidence. Samples were measured and the calibrated age ranges were calculated by Beta Analytic Inc., Florida using INTCAL98 (Stuiver *et al.* 1998).

Table 2. Simplified fabric distribution (whole site assemblage)

| Fabric/period                | % no. (n = 4074) | % wt (n = 43596g) | ASW  |
|------------------------------|------------------|-------------------|------|
| Late Bronze Age?             | 0.04             | 0.01              | 3.5  |
| Iron Age hand-made tradition | 91.7             | 90.3              | 10.5 |
| Roman                        | 6.6              | 8.5               | 13.8 |
| Medieval and post-medieval   | 1.0              | 1.1               | 11.0 |
| Unattributed                 | 0.7              | 0.2               | 3.1  |
| TOTALS                       | 100.0            | 100.0             |      |

Table 3. Proportional distribution of Roman fabrics (whole site assemblage)

| Type   | % no. (n = 268) | % wt (n = 3579g) |
|--------|-----------------|------------------|
| RA     | 0.4             | 0.9              |
| RCC    | 0.4             | 0.4              |
| RDT    | 0.4             | 0.6              |
| RDW    | 3.7             | 4.9              |
| RG     | 84.3            | 84.8             |
| RGRUS  | 1.1             | 0.9              |
| RM     | 0.7             | 2.9              |
| RO     | 2.6             | 1.3              |
| RS     | 4.1             | 1.3              |
| RSHEL  | 1.9             | 1.9              |
| RW     | 0.4             | 0.02             |
| TOTALS | 100.0           | 100.1            |

Table 4. Phase 3 fabric distribution

| Fabric | % no. (n = 1225) | % wt (n = 11103g) |
|--------|------------------|-------------------|
| H1     | 0.4              | 1.5               |
| H2     | 94.4             | 92.3              |
| H3     | 0.1              | 0.01              |
| H4     | 1.3              | 0.4               |
| RG     | 2.6              | 3.5               |
| RO     | 0.2              | 0.1               |
| DW     | 0.8              | 1.6               |
| RSHEL  | 0.1              | 0.2               |
| MED    | 0.2              | 0.2               |
| TOTALS | 100.1            | 99.8              |

Table 5. Pottery from the ditch groups: spatial distribution

| Ditch  | No. | Wt (g) | % no. | % wt  | ASW (g) |
|--------|-----|--------|-------|-------|---------|
| 1      | 103 | 610    | 21.5  | 12.5  | 5.9     |
| 2      | 46  | 398    | 9.6   | 8.2   | 8.7     |
| 3      | 19  | 142    | 4.0   | 2.9   | 7.5     |
| 5      | 311 | 3716   | 64.9  | 76.4  | 11.9    |
| TOTALS | 479 | 4866   | 100.0 | 100.0 | (10.2)  |

Table 6. Pottery from the ditch groups: simplified fabric distribution

| Fabric       | % no. (n = 479) | % wt (n = 4866g) |
|--------------|-----------------|------------------|
| H1           | 1.0             | 3.5              |
| H2           | 85.8            | 83.0             |
| H3           | 0.2             | 0.04             |
| H4           | 3.1             | 0.9              |
| RB           | 8.8             | 12.1             |
| MED          | 0.4             | 0.5              |
| Unattributed | 0.6             | 0.1              |
| TOTALS       | 99.9            | 100.1            |

Table 7. Phase 4 fabric distribution

| Fabric       | % no. (n = 858) | % wt (n = 7523g) |
|--------------|-----------------|------------------|
| H2           | 71.3            | 74.3             |
| H2/RG        | 0.5             | 0.3              |
| H4           | 26.0            | 23.5             |
| RA           | 0.1             | 0.4              |
| RG           | 0.9             | 0.9              |
| RO           | 0.3             | 0.3              |
| RS           | 0.1             | 0.1              |
| RW?          | 0.1             | 0.01             |
| Unattributed | 0.6             | 0.2              |
| TOTALS       | 99.9            | 100.0            |

Table 8. Distribution of pottery from the Phase 4 roundhouses

| Structure | % no. (n = 539) | % wt (n = 5225g) |
|-----------|-----------------|------------------|
| B1        | 12.6            | 13.1             |
| B2        | 16.1            | 18.0             |
| B3        | 8.2             | 13.5             |
| B5        | 47.3            | 44.0             |
| B7        | 2.6             | 3.0              |
| B9        | 8.7             | 5.3              |
| B10       | 0.4             | 0.8              |
| B11       | 4.1             | 2.3              |
| TOTALS    | 100.0           | 100.0            |

Table 9. Phase 4 roundhouses. Fabric profile

| Structure | % no. (n = 539) | % wt (n = 5225g) |
|-----------|-----------------|------------------|
| H2        | 60.3            | 66.8             |
| H4        | 39.3            | 33.2             |
| Uncertain | 0.4             | 0.1              |
| TOTALS    | 100.0           | 100.1            |

Table 10. Phase 5 Enclosure B. Fabric profile

| Fabric    | % no. (n = 211) | % wt (n = 1641g) |
|-----------|-----------------|------------------|
| H2        | 48.3            | 60.3             |
| H4        | 45.5            | 39.0             |
| RG        | 0.5             | 0.1              |
| RS        | 0.5             | 0.4              |
| Uncertain | 5.2             | 0.2              |
| TOTALS    | 100.0           | 100.0            |

Table 11. Phase 5 Ditch 4. Fabric profile

| Fabric | % no. (n = 259) | % wt (n = 3190g) |
|--------|-----------------|------------------|
| H1     | 1.5             | 1.0              |
| H2     | 43.6            | 35.1             |
| H4     | 6.9             | 2.6              |
| RCC    | 0.4             | 0.5              |
| RG     | 44.0            | 55.7             |
| RM     | 0.8             | 3.3              |
| RS     | 1.2             | 0.6              |
| RSHEL  | 1.5             | 1.3              |
| TOTALS | 99.9            | 100.1            |

Table 12. Phase 5 Pit 101. Fabric profile

| Fabric    | % no. (n = 613) | % wt (n = 11283g) |
|-----------|-----------------|-------------------|
| H2        | 63.5            | 80.2              |
| H2 (fine) | 1.0             | 1.2               |
| H4        | 35.4            | 18.6              |
| Modern    | 0.2             | - (<0.01)         |
| TOTALS    | 100.1           | 100.0             |

Table 13. Phase 5 Pit 1184. Fabric profile

| Fabric | % no. (n = 226) | % wt (n = 3303g) |
|--------|-----------------|------------------|
| H2     | 75.2            | 86.2             |
| H3     | 1.3             | 1.0              |
| H4     | 10.2            | 5.1              |
| RG     | 12.4            | 7.5              |
| RO     | 0.9             | 0.3              |
| TOTALS | 100.0           | 100.1            |

Table 14. The incidence of beads with independently sexed adults at West Heselton (data from Haughton and Powlesland 1999b)

| Sex    | With beads | Without beads | Total |
|--------|------------|---------------|-------|
| Female | 19         | 10            | 29    |
| Male   | 0          | 18            | 18    |
| Total  | 19         | 28            | 47    |

Table 15. The incidence of spearheads with independently sexed adults at West Heselton (data from Haughton and Powlesland 1999b)

| Sex    | With spear | Without spear | Total |
|--------|------------|---------------|-------|
| Female | 3          | 26            | 29    |
| Male   | 7          | 11            | 18    |
| Total  | 10         | 37            | 47    |

Table 16. Summary of osteological and palaeopathological results of inhumations

| SK | Preservation | % Complete | Age          | Age Group     | Sex  | Position                     | Orientation | Pathology                       | Phase |
|----|--------------|------------|--------------|---------------|------|------------------------------|-------------|---------------------------------|-------|
| 1  | Very poor    | 18%        | 36-45        | OMA           | Male | Extended supine              | W-E         | Periodontitis                   | 6     |
| 2  | Very poor    | 15%        | 6-10 & 20-25 | Juvenile & YA | -    | Flexed on right side         | W-E         | -                               | 6     |
| 3  | Very poor    | 60%        | 9-10         | Juvenile      | -    | Flexed on right side         | N-S         | Bone excavations, calculus, DEH | 6     |
| 4  | Very poor    | 7%         | 26-35        | YMA           | -    | Probably flexed on left side | SE-NW       | -                               | 5     |

Table 17. Summary of the cremated assemblage preservation

| Context   | Feature Type | Bone State      | Preservation | Age      | Weight (g) | Phase | Inclusions  |
|-----------|--------------|-----------------|--------------|----------|------------|-------|---|
| 1019      | Pit          | White-dark grey | Good         | -        | 35.2g      | 5     | Animal bone, charcoal flecks  |
| 1108/1122 | Pit          | White           | Poor         | Adult    | 0.31g      | 3     | Urned, charcoal   |
| 1127      | Pit          | White           | Poor         | -        | 0.01g      | 1     | Pottery, charcoal (oak)   |
| 1140      | Pit          | White-dark grey | Poor         | Adult    | 15.8g      | 2     | Pottery, charcoal (oak)   |
| 1148      | Pit          | Light brown     | Poor         | -        | 1.3g       | 1     | Pottery, flint, charcoal (oak)  |
| 1443      | Pit          | Light brown     | Poor         | Juvenile | 5.0g       | 4-5   | Pottery, flint, charcoal (oak, blackthorn, birch, hazel), burnt layer |



Table 18. Results from the isotope analyses

| Sample                  | ppm   | $^{87}\text{Sr}/^{86}\text{Sr}$ | $\delta^{18}\text{O}_{\text{PO4}}$ | $\pm 1\sigma$ |       | $\pm 1\sigma$ | NIGL code bone sample | $\delta^{13}\text{C}\text{‰}$ (PDB) | $\pm 1\sigma$ |
|-------------------------|-------|---------------------------------|------------------------------------|---------------|-------|---------------|-----------------------|-------------------------------------|---------------|
| SK1 tooth               | 77.6  | 0.710755                        | 18.31                              | 0.08          | -5.41 | 0.18          | Morgan-8              | -23.66                              | 0.00          |
| SK2 (young adult) tooth | 74.2  | 0.710714                        | 18.06                              | 0.11          | -5.96 | 0.23          | Morgan-6              | -22.76                              | 0.07          |
| SK2 (juvenile) tooth    | 112.0 | 0.712142                        | 17.98                              | 0.09          | -6.12 | 0.20          | Morgan-6              | -22.76                              | 0.07          |
| SK3                     | 98.5  | 0.709479                        | 18.10                              | 0.15          | -5.87 | 0.33          | Morgan-7              | -24.12                              | 0.11          |
| SK4                     | 119.4 | 0.710144                        | 17.91                              | 0.18          | -6.27 | 0.38          | Morgan-9              | -23.72                              | 0.12          |

Table 19. Animal bones and shells by phase (number of zones in parentheses)

| Phase        | 2 | 3       | 4        | 5         | 4-5 | 6 |
|--------------|---|---------|----------|-----------|-----|---|
| Cattle       |   | (14) 64 | (26) 113 | (1) 90    |     |   |
| Horse        |   | (6) 12  | (3) 4    | (91) 2258 |     |   |
| Sheep        |   |         | (7) 9    |           |     |   |
| Sheep/goat   |   | (11) 67 | (13) 40  | (6) 38    |     |   |
| Pig          |   | 2       | (3) 10   | 2         |     |   |
| Dog          |   | (1) 2   | (3) 48   | 3         |     |   |
| Frog/toad    |   |         | (6) 6    |           |     |   |
| Mouse-size   |   |         | (3) 5    |           |     |   |
| Large mammal |   | (2) 232 | (1) 292  | 64        |     | 2 |
| Small mammal |   | (1) 49  | (2) 81   | (1) 47    | 1   | 1 |
| Undiagnostic | 3 | 244     | 271      | 389       |     |   |
| Bone total   | 3 | 672     | 879      | 2891      | 1   | 3 |
| Oyster       |   | (10) 28 | (44) 116 | (1) 1     |     | 3 |

Table 20. Carbonised plant remains from Phase 1 and Phase 2 features

|                             |               |           |           |           |           |
|-----------------------------|---------------|-----------|-----------|-----------|-----------|
|                             | Context       | 1127      | 1148      | 1148      | 1140      |
|                             | Sample        | 120       | 145       | 148       | 147       |
|                             | Feature       | Crem 1126 | Crem 1147 | Crem 1147 | Crem 1141 |
|                             | Phase         | 1         | 1         | 1         | 2         |
|                             | Total CV      | 5ml       | 5ml       | 10ml      | 5ml       |
|                             | Modern        | 15ml      | 20ml      | 0         | 10ml      |
| Carbonised Weeds            |               |           |           |           |           |
| cf. <i>Valerianella</i> sp. | cf. cornsalad |           | 1         |           |           |
| Charcoal                    |               |           |           |           |           |
| <i>Quercus</i>              | oak           | 2         |           | 10        | 1         |
| Wild Resources              |               |           |           |           |           |
| Carbonised rhizomes         |               | 1         |           |           |           |





Table 23. Carbonised plant remains from Phase 5 and Phase 4-5 features

|                                      |                 |      |      |       |       |      |      |      |       |      |      |      |
|--------------------------------------|-----------------|------|------|-------|-------|------|------|------|-------|------|------|------|
|                                      | Context         | 100  | 234  | 1054  | 1057  | 1185 | 1344 | 1393 | 1534  | 208  | 214  | 190  |
|                                      | Sample          | 1    | 21   | 109   | 108   | 184  | 196  | 209  | 219   | 1443 | 1455 | 1341 |
|                                      | Feature         | Pit  | Pit  | Ditch | Ditch | Pit  | 1345 | CB8  | Gully | Crem | Crem | Pit  |
|                                      |                 | 101  | 235  | 4     | 4     | 1184 | SK4  |      | 8     | 1442 | 1442 | 1339 |
|                                      | Phase           | 5    | 5    | 5     | 5     | 5    | 5    | 5    | 5     | 4-5  | 4-5  | 4-5  |
|                                      | Total CV        | <5ml | 5ml  | <5ml  | <5ml  | <5ml | <5ml | <5ml | <5ml  | 30ml | 5ml  | <5ml |
|                                      | Modern          | 5ml  | <5ml | <5ml  | <5ml  | 5ml  | 10ml | <5ml | 5ml   | 25ml | <5ml | <5ml |
| Carbonised Cereal Grain              | Common Name     |      |      |       |       |      |      |      |       |      |      |      |
| cf. <i>Triticum</i> sp.              | cf. wheat       |      |      |       |       |      |      |      |       | 1    |      |      |
| <i>Hordeum</i> / <i>Triticum</i> sp. | barley / wheat  |      |      |       |       | 7    |      |      |       |      |      |      |
| Indeterminate cereal (+embryo)       |                 | 1    |      |       |       | 3    |      |      |       | 1    |      |      |
| Carbonised Weeds                     |                 |      |      |       |       |      |      |      |       |      |      |      |
| <i>Ranunculus</i> sp.                | buttercups      | 1    |      |       |       |      |      |      |       |      |      |      |
| <i>Stellaria media</i>               | chickweed       |      |      |       |       | 2    |      | 1    |       |      |      |      |
| <i>Persicaria maculosa</i>           | redshank        |      |      |       |       |      |      |      |       |      |      |      |
| <i>Hypericum</i> sp.                 | St John's-worts | 1    |      |       |       |      |      |      |       |      |      |      |
| Small Poaceae                        | grass family    | 1    |      |       | 2     |      |      |      |       |      |      |      |
| Indeterminate weed                   |                 |      |      | 1     |       |      |      |      |       |      |      |      |
| Charcoal                             |                 |      |      |       |       |      |      |      |       |      |      |      |
| <i>Quercus</i>                       | oak             |      |      |       |       |      |      |      |       | 4    | 1    |      |
| <i>Corylus</i>                       | hazel           |      |      |       |       |      |      |      |       | 1    |      |      |
| <i>Betula</i>                        | birch           |      | 2    |       |       |      |      |      |       | 1    |      |      |
| <i>Prunus spinosa</i>                | blackthorn      |      |      |       |       |      |      |      |       | 4    | 1    |      |
| Indeterminate charcoal               |                 |      | <5ml |       |       |      | <5ml |      | <5ml  |      |      | <5ml |
| Wild Resources                       |                 |      |      |       |       |      |      |      |       |      |      |      |
| <i>Calluna</i> flower capsules       | heather flowers | 1    |      |       | 3     |      |      |      |       |      |      |      |
| Carbonised rhizomes                  |                 |      |      |       |       |      | 1    |      |       |      |      |      |

Table 24. Carbonised plant remains from Phase 6 features

|                             |               |      |      |      |      |      |      |      |
|-----------------------------|---------------|------|------|------|------|------|------|------|
|                             | Context       | 1104 | 1106 | 1132 | 1132 | 1204 | 1203 | 1284 |
|                             | Sample        | 158  | 127  | 142  | 146  | 172  | 175  | 192  |
|                             | Feature       | 1105 | 1107 | 1107 | 1107 | 1205 | 1205 | Pit  |
|                             |               | SK1  | SK2  | SK2  | SK2  | SK3  | SK3  | 1285 |
|                             | Total CV      | 5ml  | 5ml  | <5ml | <5ml | 5ml  | <5ml | <5ml |
|                             | Modern        | 70ml | 50ml | 0    | 0    | 10ml | 0    | <5ml |
| Carbonised Cereal Grain     | Common Name   |      |      |      |      |      |      |      |
| <i>Avena</i> sp.            | oat           | 1    |      |      |      |      |      |      |
| cf. <i>Triticum</i> sp.     | cf. wheat     |      | 1    |      |      |      |      |      |
| Carbonised Weeds            |               |      |      |      |      |      |      |      |
| Small Poaceae               | grass family  |      |      |      |      |      |      | 1    |
| cf. <i>Valerianella</i> sp. | cf. cornsalad |      | 1    |      |      |      |      |      |
| Indeterminate weed          |               | 1    |      |      |      |      |      |      |
| Charcoal                    |               |      |      |      |      |      |      |      |
| <i>Quercus</i>              | oak           |      | 6    | 3    | 2    |      | 1    |      |
| Indeterminate charcoal      |               | <5ml |      | <5ml |      | <5ml |      |      |
| Wild Resources              |               |      |      |      |      |      |      |      |
| Carbonised rhizomes         |               | 1    |      |      |      |      |      |      |

Table 25. Land snails recovered from context 200. Nomenclature and taxonomic order follows Kerney (1999). Key: MNI=minimum number of individuals represented

|   |           |  |
|---|-----------|--|
| Context/sample  | 200/11    |  |
| Sediment processed  | 10 litres |  |
| Flot size   | c.5 ml    |  |
| Taxon   | MNI       | Notes  |
| ? <i>Valvata cristata</i> Müller                              | 1         | apex fragment  |
| <i>Carychium minimum</i> Müller                               | 38        |  |
| <i>Carychium tridentatum</i> (Risso)                          | 5         |  |
| <i>Carychium</i> sp.  | 22        | apex fragments   |
| <i>Lymnaea ?truncatula</i> (Müller)                           | 3         | apices only  |
| <i>Anisus leucostoma</i> (Millet)                             | 20+       | There were very many (200+) apices of a tightly coiled planorbid, 20 of which could be positively identified as <i>A. leucostoma</i> , but it is likely that all of the other fragments were also of this same species |
| ? <i>Oxyloma pfeifferi</i> Rossmässler                        | 5         | apices only  |
| <i>P. muscorum</i> (L.)/ <i>Lauria cylindracea</i> (da Costa) | 10        |  |
| <i>Vallonia ?excentrica</i> Sterki                            | 5         |  |
| <i>Vitrea crystallina</i> (Müller)                            | 1         | shell fragment lost during recording   |